

MXES Immersion Training for IT

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MXES Immersion Training for IT

Rel. 6.0 09/2005

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MXES Curriculum for EAM

Current as of: September 2005

For updates on Training Info, Course Descriptions, and Course Availability, please contact:

E-mail: TrainSVC@mro.com
Fax: 781.280.2201
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Key



Instructor-Led Training



Virtual Classroom Training

Foundation

<u>Course #</u>	<u>Course Name</u>	<u>Length</u>	<u>Delivery Options</u>	<u>Prerequisites</u>
MED0138	MXES Navigation & Querying	½ day, or 3-hr virtual		None

Upgrade

<u>Course #</u>	<u>Course Name</u>	<u>Length</u>	<u>Delivery Options</u>	<u>Prerequisites</u>
MED0136	MXES for EAM - New Features	3 days		None (Note: for users upgrading from Maximo 5)

Implementation

<u>Course #</u>	<u>Course Name</u>	<u>Length</u>	<u>Delivery Options</u>	<u>Prerequisites</u>
MED0146	MXES Immersion Training for EAM	5 days		MXES Navigation & Querying

End-User / Functional

<u>Course #</u>	<u>Course Name</u>	<u>Length</u>	<u>Delivery Options</u>	<u>Prerequisites</u>
MED0137	System Administration for MXES	3 days		MXES Navigation & Querying
MED0139	Inventory Management Using MXES	3 days		MXES Navigation & Querying
MED0143	Work Management Using MXES	4 days		MXES Navigation & Querying
MED0148	EAM Workflow Management Using MXES	5 days		MXES Immersion Training for EAM (Note: Extensive hands-on Maximo experience preferred)
MED0150	Purchasing with MXES	2 days		MXES Navigation & Querying



MXES Curriculum for ITSM / ITAM

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Key



*Instructor-Led
Training*



*Virtual Classroom
Training*

Foundation

<u>Course #</u>	<u>Course Name</u>	<u>Length</u>	<u>Delivery Options</u>	<u>Prerequisites</u>
MED0138	MXES Navigation & Querying	½ day, or 3-hr virtual		None

Implementation

<u>Course #</u>	<u>Course Name</u>	<u>Length</u>	<u>Delivery Options</u>	<u>Prerequisites</u>
MED0149	MXES Immersion Training for IT	5 days		MXES Navigation & Querying
MED0145	Implementing ITIL with MXES	1 day		

End-User / Functional

<u>Course #</u>	<u>Course Name</u>	<u>Length</u>	<u>Delivery Options</u>	<u>Prerequisites</u>
MED0141	IT Service Management Using MXES	3 days		MXES Navigation & Querying
MED0142	IT Asset Configuration & Management in MXES	2 days		MXES Navigation & Querying
MED0137	System Administration for MXES	3 days		MXES Navigation & Querying
MED0150	Purchasing with MXES	2 days		MXES Navigation & Querying

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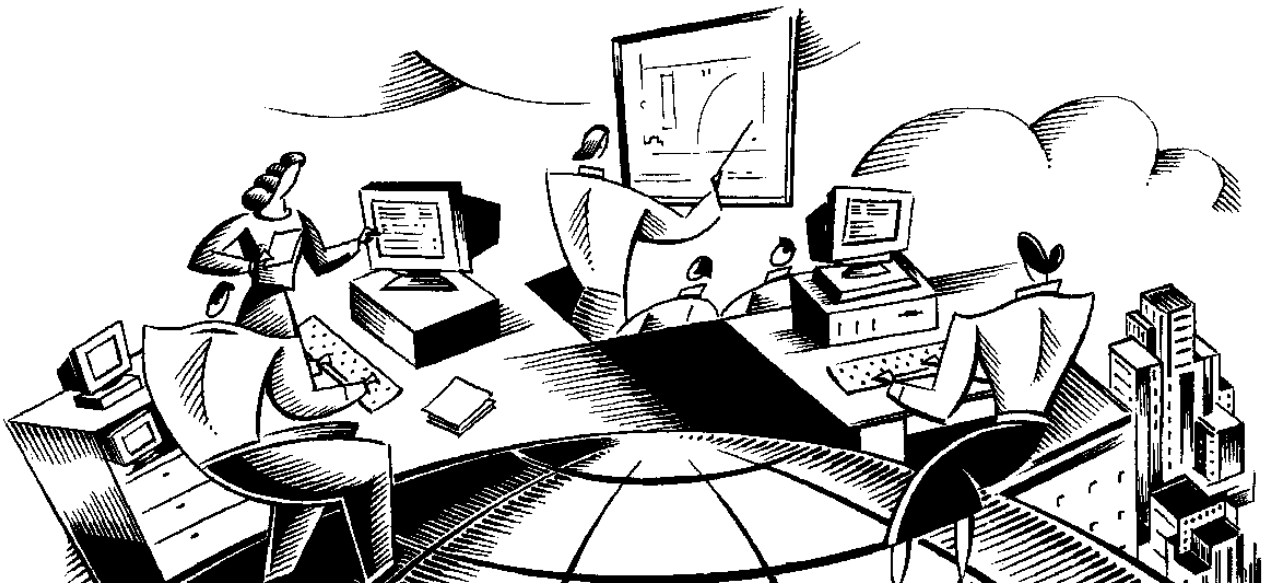
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MXES Immersion Training for IT

Unit 1: Course Overview



In This Unit

This unit contains the following chapters:

Chapter	Subject
1	Maximo Configuration and Implementation Overview
2	IT Service Management Processes with MXES

Unit Overview

Welcome

Welcome to *MXES Immersion Training for IT*. This course provides the basic knowledge and skills needed by implementation teams to implement the asset lifecycle, procurement, and service management capabilities of Maximo to maximize revenue generation and service availability, mitigate risks, and enhance legal compliance for your organization.

Unit Purpose

This unit introduces you to:

- the organization and design of this course,
 - the Maximo product structure and the applications that comprise it, and
 - IT Infrastructure Library (ITIL) concepts.
-

Unit Learning Objectives

When you have completed this unit, you should be able to:

- describe the objectives and outline of the course and match them to your learning objectives;
 - identify output and key performance indicators (KPIs) that support asset management processes for various business areas;
 - identify the structure and components of Maximo; and
 - discuss ITIL concepts and their relationship with Maximo.
-

Course Overview

**General
Description of
Maximo**

Maximo is an integrated software package that brings convenient, automated asset management activities to your desktop. This information helps you

- analyze costs, compliance, and asset status;
 - manage asset and labor resources; and
 - plan and execute service activities.
-

Course Goal

The goal of this course is to help you understand Maximo features and functionalities and to demonstrate what Maximo can do for your organization.

**Course
Objectives**

When you have completed this course, you should be able to:

- analyze business processes as they relate to IT asset management;
 - describe and use the different Maximo applications as they relate to various business processes;
 - describe the roles and responsibilities of each implementation team member; and
 - describe and discuss recommendations as they relate to:
 - tools and job aids,
 - best practices, and
 - philosophies and methodologies in asset, service, and procurement processes.
-

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Course Overview continued

Course Audience

This course is intended for people who will be implementing Maximo. Maximo implementation teams can include, but are not limited to, the following members:

- IT project manager
 - Maximo administrator
 - Service/help desk personnel
 - Procurement personnel
 - Lead report writer
 - Database administrator
 - Trainer
-

Course Prerequisites

You should be comfortable using a personal computer, the Microsoft Windows NT/2000 operating systems, and Internet Explorer 6.x or greater.

Knowledge of Maximo basic navigation, functionality, querying, and searching are also required.

Contact MRO Software Professional Services for more details.

continued on next page

Course Overview continued

Your Learning Objectives



We previously stated the basic objectives for this course; however, most important are the learning objectives *you* bring to the course. We want to be sure that these are clearly stated, mutually understood, and achieved.

List your objectives in the space below. We will conclude the course by asking you whether you have met your objectives. If you have not, we will then address your questions and unmet objectives.

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Course Structure

Introduction

In this section we will introduce you to the organization of this course. We will then list the units and chapters and briefly describe each one.

Teaching Units

This course has been organized into teaching units. A unit focuses on a theme and is comprised of chapters that support that theme. Each unit gives an overview of common terms, applications, and concepts used in each chapter.

Chapter Structure

Each chapter in this student guide is an individual teaching module, designed to provide an overview of its topic(s) and then provide in-depth instruction and practice.

Each chapter contains the following components:

- Subject matter overview and objectives

This component provides orientation and perspective for the chapter, along with learning objectives.

- Instruction in concepts and procedures

In this part of the chapter, the instructor and the text review relevant concepts, components, and procedures.

- Hands-on practice

You will practice most of the important procedures and concepts introduced by the instructor. You will have opportunities for brief hands-on practice during the body of the module and, in some cases, longer hands-on practice in a workshop at the end of the unit.

continued on next page

Course Structure continued

Class Activities

As you go through this course you will participate in four methods of instruction, usually in this order:

- The instructor will give a brief overview of the objectives and content of each chapter.
 - The instructor will introduce and demonstrate procedures and concepts.
 - You and the instructor will work through a procedure together, or you will work through a procedure on your own.
 - You and the instructor will briefly discuss how the procedure can be modified or enhanced to suit your business needs.
-

Case Scenarios

The exercises in this course allow you to practice using Maximo in the context of a series of hypothetical working case scenarios.

Typographical Conventions

Introduction

We use a number of typographical conventions and icons in our course books.

Conventions Used in the Course Materials

Here are some of the conventions you will see most frequently in the course materials:











Convention	Usage	Example
<i>Italics</i>	Introduces or emphasizes a term	A <i>system</i> is a single instance of a Maximo database.
Boldface	Indicates that the word or phrase names a menu item, field, button, or keyboard key	From the Go To drop-down menu, select Administration .
Arial font	Indicates that this is text you type into a field	Type ASSET_NDX8 in this field.
Courier font	Indicates programming code, a system message, or part of a screen display	Maximo displays the following message: <code>Work order 1000 status changed to APPR.</code>

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Typographical Conventions continued

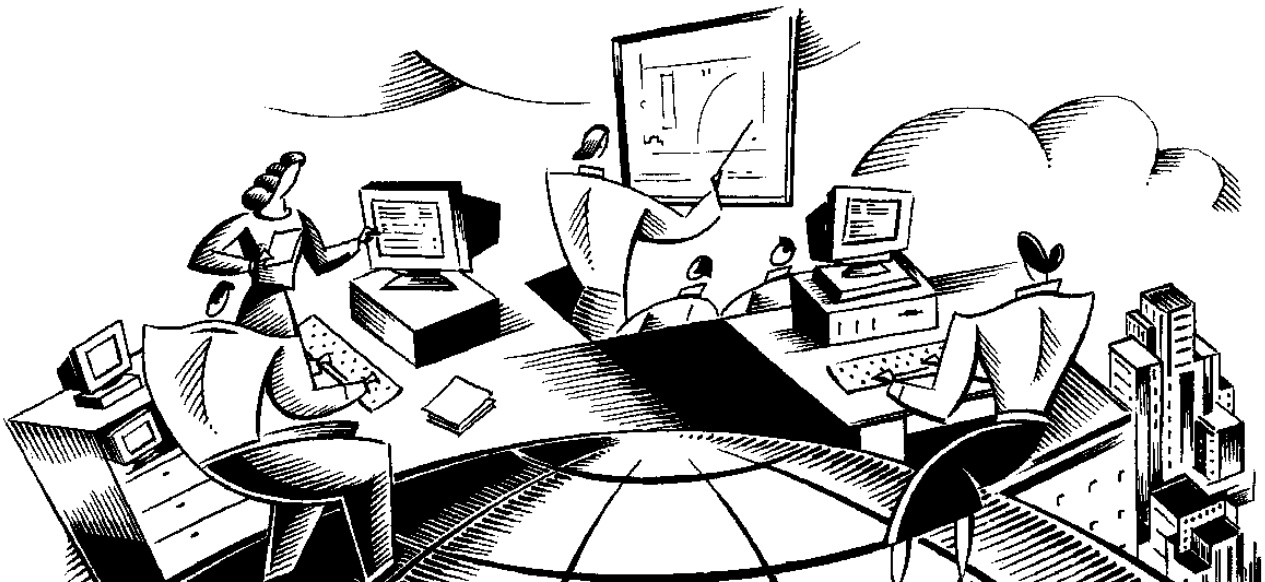
Icons

You will see several icons throughout this student guide. This table explains what they mean.

This icon...	Indicates...
	A procedure that you will practice on your own or with guidance from an instructor
	A paper-and-pencil exercise
	A special note or reminder
	A warning or cautionary note
	A question-and-answer session with the instructor, or a group discussion
	Your role in the next exercise is changing, e.g., from manager to user
	The data you are being asked to enter will be used in another exercise
	A challenge question or exercise
	An industry best practice, tip, or suggestion
	A recording that provides additional course content is available

MXES Immersion Training for IT

Chapter 1: Maximo Configuration and Implementation Overview



In This Chapter

This chapter contains the following topics:

Topic	See Page
Configuration Overview for Maximo	1-1
Implementation Methodology Overview	1-3
Overview of Key Roles	1-8

Configuration Overview for Maximo

Introduction

Maximo Enterprise Suite (MXES) is an *n-tier* application, meaning one or more tiers (servers) can be used. The focus of this section is to familiarize you with some of the standard hardware and software configuration needs for each tier. Maximo can run on either a single or multiple servers, depending on the number of concurrent users required and hardware used.

Configuration Overview

Maximo is a solution provider with several integral components: end-user applications, system administration applications, a relational database, and reports.

Maximo consists of Web-based user applications and database administration accessed through Internet Explorer.

Maximo stores and maintains data about your company's assets in a relational database. Maximo uses the data in the database to provide you with reports that help you analyze costs and assets' status, manage inventory and labor resources, and plan maintenance activities.

With each of the aforementioned components—end-user applications, system administration applications, database, and reports—there are system requirements. This section will help you understand these requirements.

Connectivity

Maximo allows some flexibility in the way software servers are used and connected.

In less complex situations, with a small number of users, one or two “boxes” might be all that are needed to run all the servers and software.

In more complex situations with a large number of users, more sophisticated strategies could be used, requiring that some servers and applications run on their own “box.” However, many configurations and tools can be used.

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Configuration Overview for Maximo continued

Hardware and Software Configuration

The following table presents current Maximo Enterprise Suite hardware and software considerations.

Note: Maximo Enterprise Suite will support additional configurations during the upcoming year. This document represents the requirements for General Availability release only.

Dedicated Servers	Hardware	Software
Client Workstation	<ul style="list-style-type: none"> 512 RAM or greater 	<ul style="list-style-type: none"> Microsoft Windows 2000 or XP Internet Explorer 6.0
Application Server BEA WebLogic and Maximo are installed on this server	<ul style="list-style-type: none"> 2-4 processors recommended 2 GB memory per processor 1.5 GB or greater disk space for Maximo Enterprise Suite and java/web server components 	<ul style="list-style-type: none"> Microsoft Windows 2000 or 2003 Server BEA WebLogic 8.1 SP3 bundled with Maximo Internet Explorer 6.0
Database Server This server contains and manages the Maximo Database.	<ul style="list-style-type: none"> Refer to vendor specifications for hardware requirements 	<ul style="list-style-type: none"> Oracle 9.2.0.6 or 10.1.0.3
Report Server	<ul style="list-style-type: none"> 1 GB RAM per processor 610 MB free disk space 	<ul style="list-style-type: none"> Microsoft Windows 2000 or 2003 Server Actuate iServer Release 8.0 bundled with Maximo
Administrative Workstation	<ul style="list-style-type: none"> Intel-based Pentium 1 GHz memory per processor 512 MB RAM or greater 	<ul style="list-style-type: none"> Windows 2000 or Windows XP Internet Explorer 6.0
V2 03/10/2005		

Implementation Methodology Overview

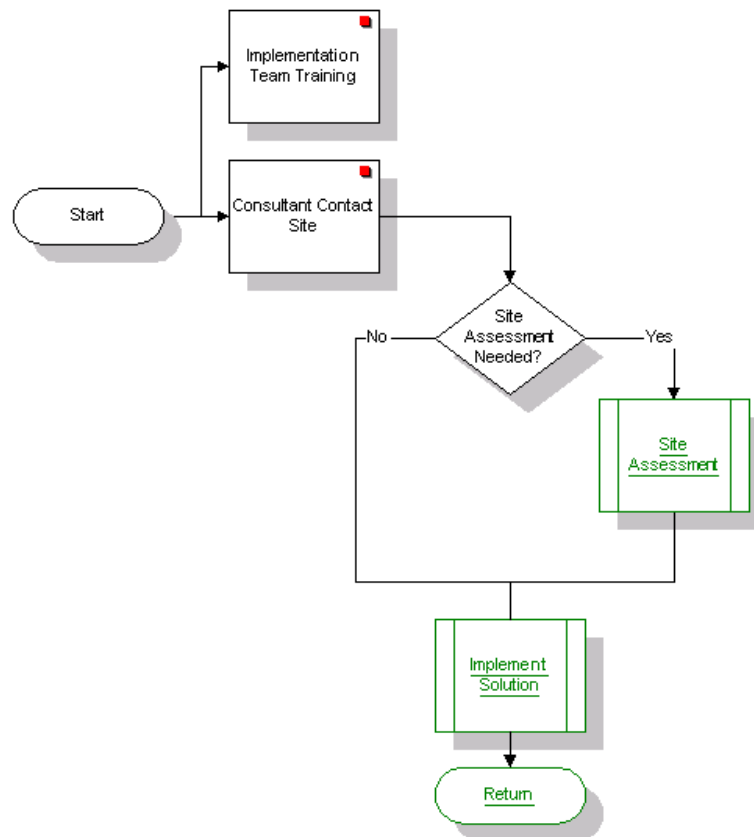
Introduction

MRO Software uses a standard operating procedure (SOP) to assure a consistent and quality implementation. However, the SOP is tailored to the specific needs of the various clients and situations.

The following diagrams provide overviews of the flow of the MRO Software SOP.

Implementation Workflow

A broad overview of the MRO Software implementation is presented below:



As indicated in the diagram, more complex situations often require a formal *Requirements Definition Workshop*. After the Requirements Definition Workshop is completed, if necessary, MRO Software consultants and the client team go to work on the implementation.

Implementation Methodology Overview continued

Requirements Definition Workshop

A Requirements Definition Workshop is a detailed review of existing maintenance management practices to determine a best-practice approach to maintenance and materials management and the system configuration required to support the maintenance environment.

Typically, MRO Software consultants conduct Requirements Definition Workshops. There are two basic phases: *Data Collection* and *Analysis and Reporting*.

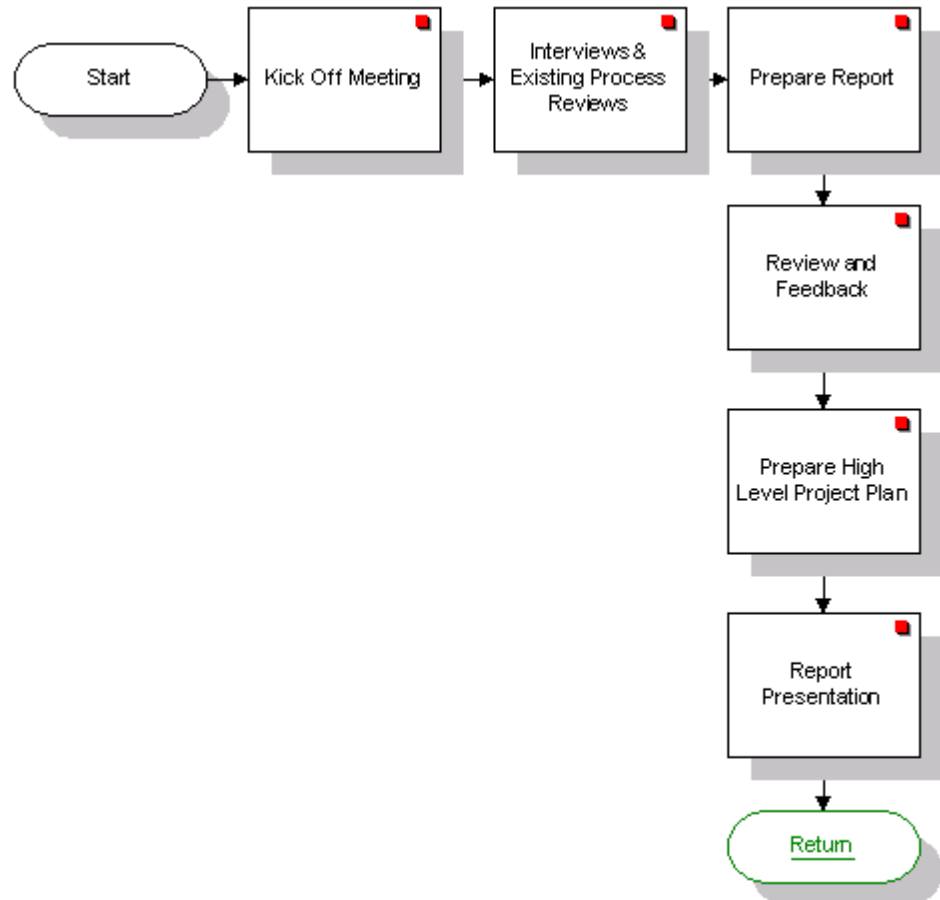
The *Data Collection* phase can last from a few days to a few months, depending on the size, magnitude, and complexity of the organization. Information about the organization's maintenance and materials management practices, procedures, and environment is gathered. Also, information concerning the information systems environment that will host Maximo is collected. During this phase, the consultant typically interviews people in several functional areas, such as maintenance, inventory control, accounting, purchasing, and IT. The consultant also examines current business practices, reviews existing documentation, tours facilities, and catalogs assets and locations to be maintained.

The *Analysis and Reporting* phase, typically shorter than the *Data Collection* phase, includes analysis of collected data and synthesis of this analysis into a final report. The Requirements Definition Workshop Report examines the organization's existing environment and business practices and provides detailed recommendations for improving and implementing those practices in Maximo.

Implementation Methodology Overview continued

Requirements Definition Workshop Process

A Requirements Definition Workshop typically follows the flow presented below.

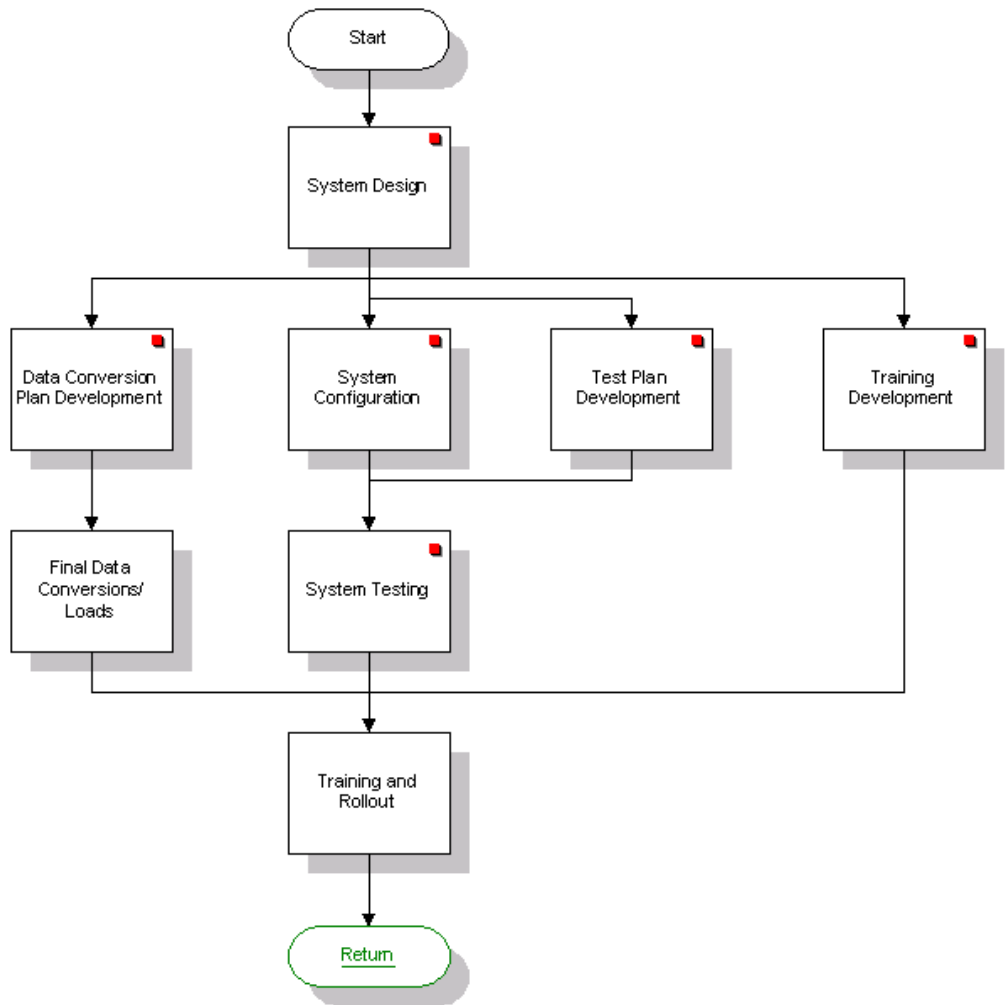


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Implementation Methodology Overview continued

Solution Implementation Process

After initial analyses are complete, the implementation process begins. The diagram below indicates the implementation process flow.



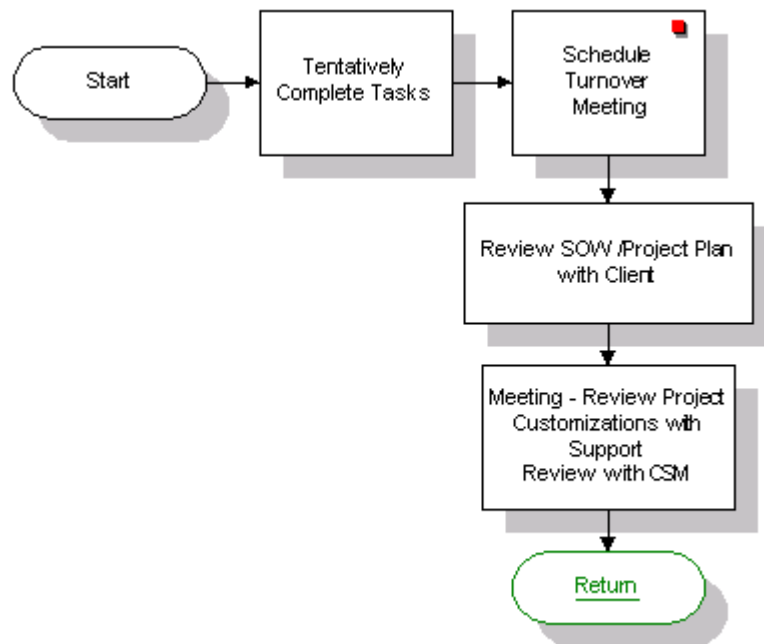
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Implementation Methodology Overview continued

Post-implementation Workflow

After the work is essentially completed, MRO Software consultants work with clients to review the completed project tasks, the *Statement of Work* (SOW), and the *Project Plan*.

This process ensures that all the work is done to the client's expectations. The following diagram illustrates the process.



Overview of Key Roles

Introduction

There are a number of key responsibilities in a typical Maximo implementation. In some organizations, a number of people will have more than one responsibility. In larger organizations, individuals might play a key role that fulfills only one responsibility.

This section describes the key roles and responsibilities of the people playing a part in the Maximo implementation.

Implementation Groups

There can be multiple teams involved with a Maximo implementation. The roles of these teams change from implementation to post-implementation.

The following table indicates the groups that are generally assembled for a Maximo implementation, along with the roles and responsibilities of each. Each organization will have its own variation on these groupings, depending on business processes, complexity of the implementation, available resources, and so forth.

Group	When to Meet	Roles/Responsibilities
Steering Committee	Monthly	<ul style="list-style-type: none"> • A very high-ranking oversight committee (a committee that oversees the project) • Responsible for decision-making • Obtains funding • Receives monthly or weekly status updates from the Core Team project manager • Provides overall guidance, vision for the future, and a corporate mission statement

continued on next page

Overview of Key Roles continued

Implementation Groups continued

Group	When to Meet	Roles/Responsibilities
Core Team	Weekly	<ul style="list-style-type: none">• Provides a sounding board for the Project Implementation Team• Represents users from respective teams and cross-sections of departments; ensures that the needs of the user community are met and proper business processes are implemented• Defines the detailed Maximo mission statement• Involved with Signature Security setup and process flow builds (data flowcharts)• The Core Team should include:<ul style="list-style-type: none">○ a report writer○ an Oracle/SQL server database person○ a trainer○ a procedure builder○ a documentation person for changes made to the system• Typically involved in setting up development and test instances

continued on next page

Overview of Key Roles continued

Implementation Groups continued

Group	When to Meet	Roles/Responsibilities
Project Team	Daily	<ul style="list-style-type: none"> • Most members are 100% dedicated to project • Attend all Core Team meetings • Can include outside contractors (other than MRO Software) • Includes the following positions and the percentage of time expected to spend on the project: <ul style="list-style-type: none"> ○ IT Project Manager–25% ○ Maximo Administrator–100% ○ Lead Report Writer–100% ○ Technical Expert (MRO consultant)–100% ○ JSP Editing Coordinator–100% ○ Database Configuration Coordinator–50% ○ ORACLE DBA–10% ○ Trainer–100% ○ Documenter–100%
Ongoing Support	Daily	<ul style="list-style-type: none"> • IT Help Desk–10% • Network Services

continued on next page

Overview of Key Roles continued

Implementation Groups continued

Group	When to Meet	Roles / Responsibilities
System Administration	Daily	<ul style="list-style-type: none">• Maximo Administrator performs the following functions–100%:<ul style="list-style-type: none">○ Makes future decisions on design changes (screen and database), priority of enhancements/product tailoring○ Controls and approves report alterations○ Reads Maximo User Forum to glean valuable peer information○ Attends annual User Group meeting○ Conducts problem resolution with software vendor○ Runs regular error checks○ Is responsible for overall data accuracy and integrity

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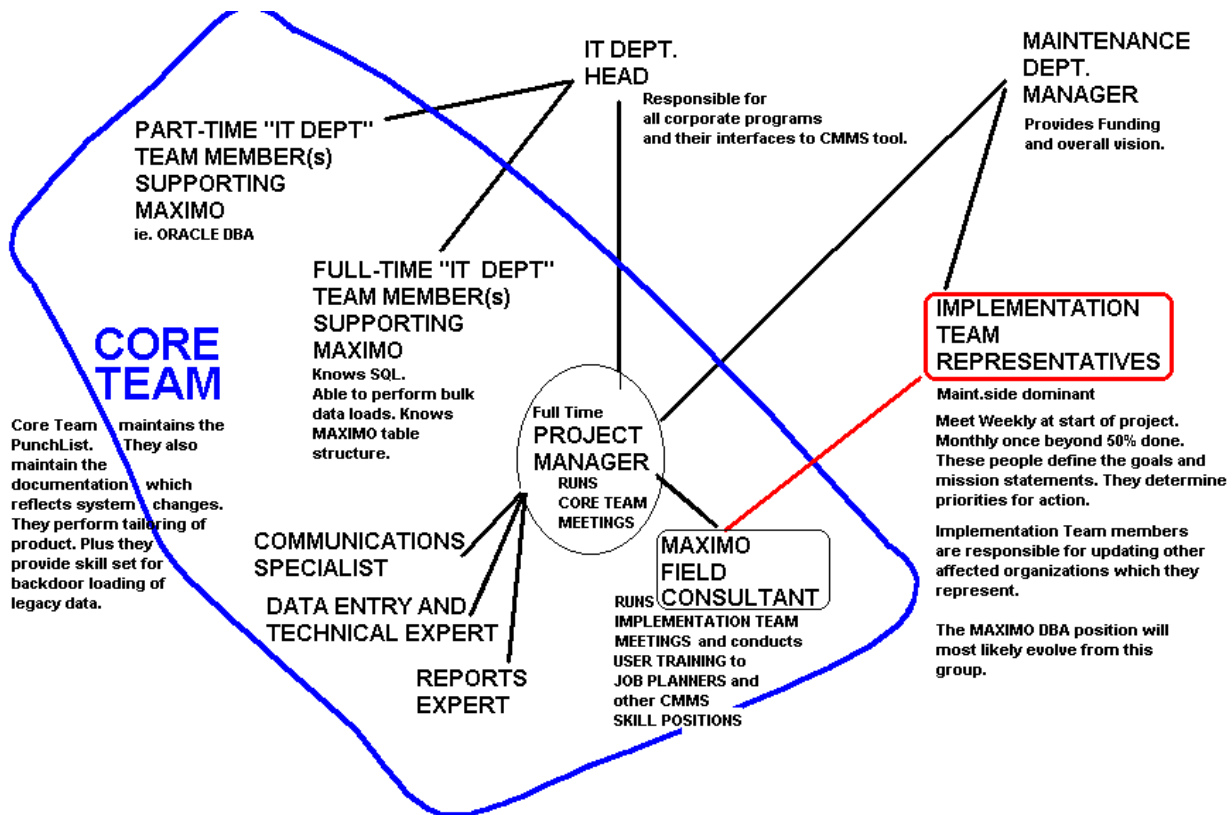
Overview of Key Roles continued

Core Team

Of all of the groups involved in a Maximo implementation, the Core Team is the closest to the project on a daily basis.

The following graphic provides some context for the relationship of the Core Team to the other players.

Although each situation will be unique, the graphic helps MRO Software clients begin thinking about responsibilities, roles, and interrelationships of the team.



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Overview of Key Roles continued

Class Questions

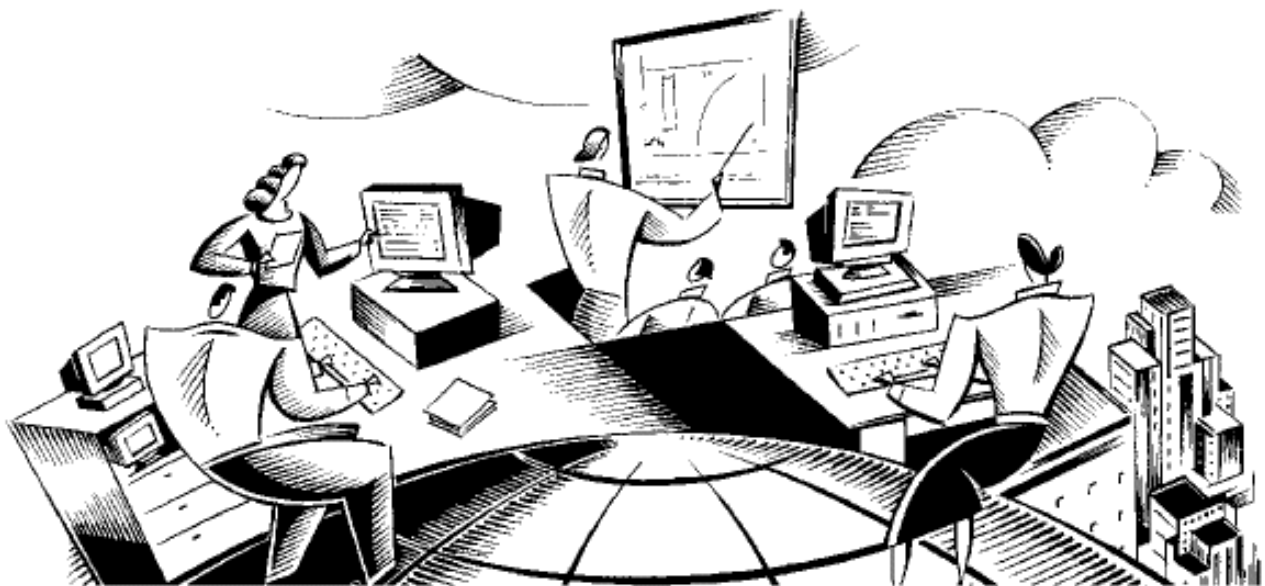


As a class and with the instructor, discuss the following questions:

- Why are you here?
 - Why are you on the implementation team?
 - Why did you purchase Maximo?
 - What are you expecting Maximo to do, as compared to what you are doing now?
-

MXES Immersion Training for IT

Chapter 2: IT Service Management Processes with MXES



In This Chapter

This chapter contains the following topics:

Topic	See Page
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ITIL Overview	2-7
ITSM Terminology	2-11
MXES and ITSM	2-15
MXES and Service Support	2-20
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Chapter Overview

Introduction

IT Service Management (ITSM) processes vary from business to business. The Enterprise IT functionality of the Maximo Enterprise Suite (MXES) is both flexible and robust enough to be configured to support your organization's particular ITSM processes.

MRO Software used the Information Technology Infrastructure Library (ITIL[®]) as the framework in the development of MXE/IT.

ITIL is a collection of volumes that outline a framework of best practices for ITSM processes. You can use Maximo to take full advantage of ITIL best practices.

Chapter Focus

This chapter:

- introduces the fundamental IT Service Management concepts and terminology,
 - reviews the ten ITSM processes and the Service Desk function in the ITIL framework, and
 - identifies the Maximo applications/functions that support ITSM processes.
-

Learning Objectives

When you have completed this chapter, you should be able to:

- Define IT Service Management (ITSM)
 - Discuss the origin and purposes of the Information Technology Infrastructure Library (ITIL)
 - Define key ITSM terminology
 - Explain ITSM fundamental concepts
 - Explain each of the ten ITSM processes, as well as the Service Desk function
 - Explain how Maximo supports each ITSM process
-

IT Service Management (ITSM) Overview

Introduction

IT Service Management (ITSM) is a systematic approach to the planning, development, implementation, delivery, and support of IT Services.

ITSM is a top-down, business-driven approach to the management of IT that addresses:

- the strategic business value generated by the IT organization, and
- delivery of the highest-quality IT service as defined by business needs.

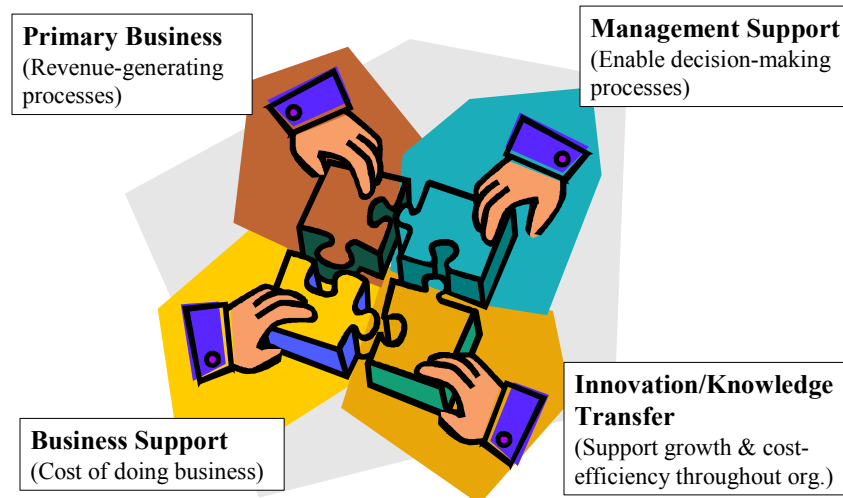
IT Service Management is designed to focus on the people, processes, and technology issues that IT organizations face, including:

- Focusing on customer's perception and experience of the service
 - Managing both customer and vendor relationships
 - Managing IT processes
-

Aligning the Business and Information Technology

The following diagram illustrates how ITSM enables business processes and objectives by aligning business needs and objectives with IT services and deliverables.

ITSM Puts the Pieces Together



continued on next page

IT Service Management (ITSM) Overview continued

Essential Characteristics of ITSM

The following characteristics are essential for quality, goal-focused IT Service Management:

A. Customer focus

- IT goals aligned with business goals
- With IT as an enabler of business processes

B. Process orientation

- With predictable outcomes
- With measurable operational excellence

C. Proactive Service Management

- IT organization guarantees and maintains mutually agreed service levels
- Strong *service delivery & service support*

D. Optimized cost/performance

- IT spending in line with business drivers, such as:
 - Optimizing business processes and procedures (controlling costs through increased efficiency)
 - Improving quality of product/service offering
 - Value-additions to business processes (e-commerce applications, bar coded asset tracking, POS systems)
 - Enabling growth and change (leveraging technology to expand into new markets or deepen existing markets)
 - Matching IT costs and business value
 - Justifying IT expenses

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IT Service Management (ITSM) Overview continued

Definition of an IT Service

An IT Service is whatever the customer (end-user) perceives it to be.

Most users perceive the service from end-to-end. Remember not to mistake an IT system for the whole IT Service.

An IT Service is often made up of many systems, processes, and people.

For example, say you provide e-mail as a service:

E-mail Service =

Systems > e-mail server > network service > WAN > LAN >
Internet access

+

People > technicians > service representatives > IT managers

+

Processes > functional requirements > maintenance > upgrades > how-to guidance > customer service



The customer only sees the E-mail service.

Note: If a network connection or DNS server is down, but the e-mail server is still running. To the customer, the service is *down*. Similarly, if they are on hold for so long with Service Desk that they abandon the call, to them the IT organization has *no* customer service.

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IT Service Management (ITSM) Overview continued

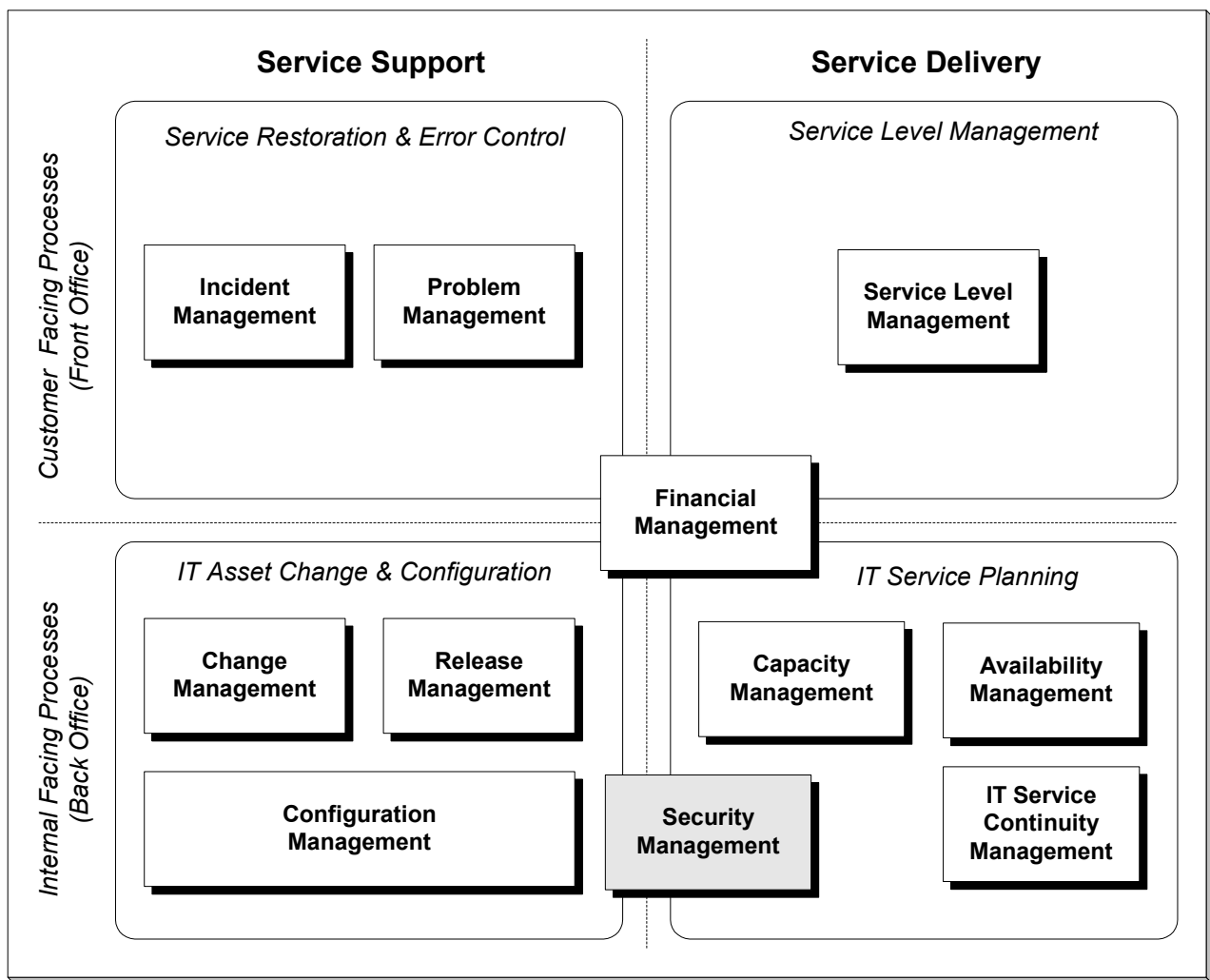
An ITSM Model

IT Service Management can be divided into two core areas:

- Service Support
- Service Delivery

The following diagram details the ITSM processes that fall within each of these two areas. Service Support and Service Delivery are further broken down into customer-facing (front office) and internal-facing (back office) processes.

Figure 1 - IT Service Support & Delivery Model



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IT Service Management (ITSM) Overview continued

IT Service Support and Delivery



Service Support processes are responsible for the day-to-day operation and support of IT Services.

Service Delivery processes are responsible for the long-term planning and improvement of IT service provision.

Notes:

Service Support and Delivery will be covered in detail later in this chapter.

Additionally, there is an ITIL publication regarding Security Management.

Security processes are implemented as far as possible into the other processes.

How MXES for IT Supports ITIL Processes

The Maximo Enterprise Suite for IT *directly* supports 7 of the 10 processes listed in the table below. (Those identified with a shaded background are supported, but not necessarily Maximo dependent.)

Specifics of how modules/applications within Maximo support each Service Support and Delivery process will be discussed in detail later in this chapter.

ITSM Processes Supported by MXES	
<i>Service Support</i>	<i>Service Delivery</i>
Service Desk*	
Incident Management	Availability Management
Problem Management	Service Level Management
Configuration Management	Financial Management for IT Services
Change Management	Capacity Management
Release Management	IT Service Continuity Management

* Remember that Service Desk is a function and not a process. The Service Desk functional unit owns the Incident Management process.



Notes:

Maximo Enterprise IT is Pink Elephant's *PinkVerify™ Enhanced* certified to support the above seven processes.

MXES provides some level of support for the remaining three processes. Maximo can be customized/configured through its Application Designer, DB Configuration, and Maximo Enterprise Adapter (MEA) functionality.

However, such discussion is beyond the scope of this course. Please contact your MRO Software Business Solutions Manager for more information.

ITIL Overview

What Is ITIL?

ITIL is the IT Infrastructure Library. ITIL[®] is a Registered Trade Mark and a Community Trade Mark of the United Kingdom's Office of Government Commerce (OGC.)

ITIL is a customizable framework of best practices for Information Technology Service Management (ITSM) processes to allow organizations to achieve quality IT service and overcome difficulties associated with the growth and ongoing management of IT systems.

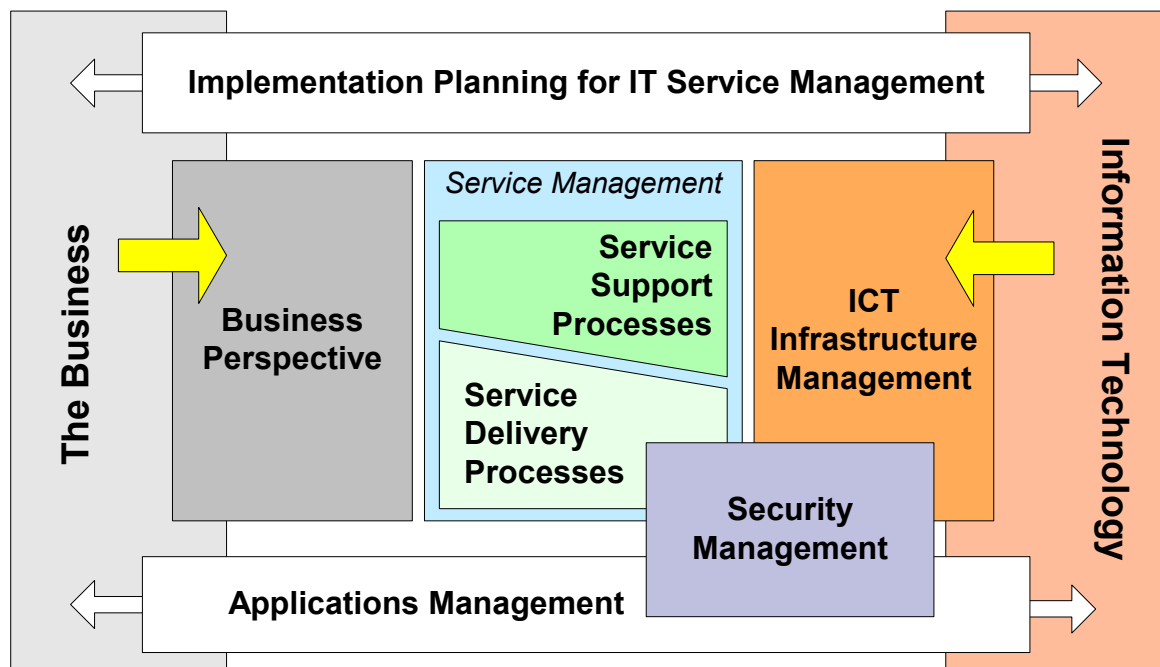
The Structure of ITIL

ITIL is organized into sets of published texts which are defined by related functions: service support, service delivery, managerial, software support, computer operations, security management, and environmental (facilities).

In addition to texts, ITIL services and products include training, guidance, qualifications, software tools, and user groups such as the IT Service Management Forum (*itSMF*.)

ITIL user groups and software tools are vendor neutral.

Figure 2 - The Structure of ITIL



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ITIL Overview continued

What ITIL Is Not

ITIL is *not*:

- a proscriptive standard,
- a methodology, or
- a step-by-step manual.

Implementation of ITSM will vary by organization. ITIL focuses on best practice; as such, it can and should be adapted and adopted in different ways according to each individual organization's needs.

History of ITIL

In the late 1980s, the United Kingdom's Central Computer and Telecommunications Agency (CCTA) created ITIL. By the mid 1990s, ITIL had become a worldwide de facto standard in Service Management. The popularity of ITIL has led it to become a scaleable public domain framework.

Very large organizations, very small organizations, and everything in between have implemented ITIL processes.

While owned by the CCTA since the mid-1980s, ITIL is currently maintained and developed by the Office of Government Commerce (OGC).

Why ITIL?

As businesses become more dependent on technology, the need to establish and follow best practices and standards has become increasingly important. ITIL was created in response to the growing dependence on Information Technology to meet business needs, goals, and objectives.

The ITIL framework addresses critical issues such as IT skill-sets, customer service, security requirements, service management, the range and frequency of IT changes, and the increasing need to share information between business units.

An objective third-party evaluation of best practices and standards can help ensure efficient use, management, and deployment of IT assets.

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ITIL Overview continued

Benefits of ITIL

ITIL provides a systematic and professional approach to the management of IT service provision. Adopting its guidance can provide such benefits as:

- Reduced costs and justifiable expenses
 - Improved IT services through the use of proven best practice processes
 - Improved customer satisfaction through more professional service delivery
 - Guidance in optimizing IT infrastructure
 - Improved productivity
 - Increased and/or more efficient use of skills and experience
 - Increased customer confidence in delivered services by using specifications of ITIL or BS15000 as a standard for procurement of services
-

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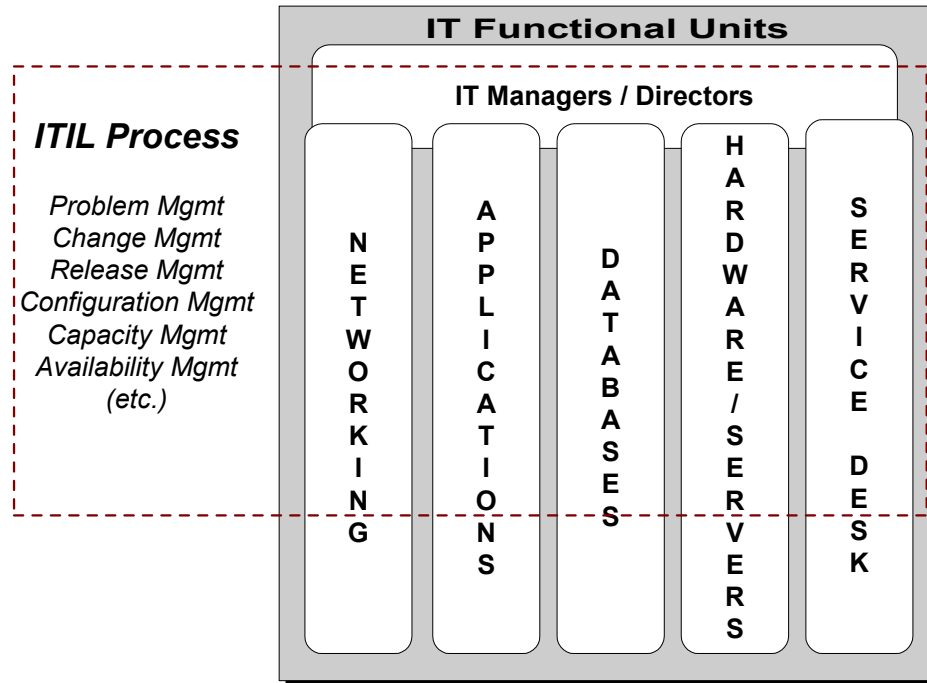
ITIL Overview continued

How ITIL Fits into IT Organizations

- IT organizations are often grouped into functional “silos” by skill set.
- ITIL processes span the functional units of an IT organization.

This is illustrated below.

Figure 3 - Common IT Organization Structure



- Example 1: *XYZ Service Provider* designates an Agent in its Service Desk group is classified as Level 1 customer support. Junior network services and/or hardware engineers are designated as Level 2 support, while senior engineers in various groups are designated Level 3 support. A user cannot get his office application to work properly (today, it's suddenly crashing his machine). The Service Desk agent cannot diagnose or correct the problem, so he/she escalates it to Level 2 support in the Applications group. Although they are in different units of the IT organization, both are operating in this case as part of Incident Management.
- Example 2: While changes are designed by a Change officer within IT at *XYZ Service Provider*, he/she relies on the expertise of engineers in all of the groups to provide input for the impact analysis and to coordinate pieces of the rollout. In fact, a member of each group sits on the Change Advisory Board. All groups are now part of Change Management.

ITSM Terminology

Terms


The following table presents the IT terminology used throughout this course.

Term	Definition
<i>Alert</i>	A warning, often automated, that an incident or failure has occurred.
<i>Asset</i>	Component of a business process. In Maximo, assets include such things as people, facilities, hardware, software, licenses, networks, and documentation.
<i>Audit Report</i>	A report whose purpose is inspection, verification, and correction. Audits are used to check the economy/efficiency/effectiveness of an activity or process to confirm that it is being carried out to a common standard.
<i>Availability</i>	Ability of a component or service to perform its required function at a stated instant or over a stated period of time. It is usually expressed as the <i>availability ratio</i> , or the proportion of time that the service is available for actual use by the customers within the agreed service times.
<i>Business Impact Analysis (BIA)</i>	The identification of critical business processes, and the potential damage or loss to the business that might be caused to the organization resulting from service or process disruption. Also, the identification of the form loss or damage will likely take; how that loss or damages escalates with time; minimum staffing, facilities, and services needed to enable processes to continue to operate at a minimum acceptable level; and the time within which they must be recovered (both partially and fully).
<i>Business Unit (Function)</i>	A segment of the business entity by which revenues are received and expenditures are caused or controlled, and to which both are measured or attributed.
<i>Change</i>	The addition, modification, or removal of approved, supported, or baselined configuration items. In Maximo, a change is a type of work order.
<i>Change Advisory Board (CAB)</i>	A group of people responsible for assessing from both a business and technical viewpoint all requests for change (RFCs). Advises on RPF priorities, maintains schedule of changes, and proposes resource/personnel requirements to implement changes.
<i>Charging</i>	The process of establishing charges in respect of business goals to recover costs of IT services.

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ITSM Terminology continued

Terms continued

Term	Definition
<i>Classification</i>	Formal identification of incidents, problems, and known errors by origin, symptom, and root cause.
<i>CMDB</i>	A database that contains all relevant details of each CI and details of the important relationships between CIs.
<i>Configuration item (CI)</i> 	A component of an infrastructure, or an item such as a request for change, associated with an infrastructure that is (or will be) under the control of Configuration Management. <u>Note:</u> Maximo refers to CIs as 'Assets.'
<i>Customer</i>	Recipient of the service. Usually the Customer management has responsibility for the funding of the service.
<i>Definitive Hardware Store (DHS)</i>	A library where all authorized hardware components are held in their definitive state.
<i>Definitive Software Library (DSL)</i>	A library where all quality-controlled versions of all software configuration items are held in their definitive, i.e., licensed, form.
<i>Delta release</i>	A release that contains only those items that have changed or been repaired since their last recorded version.
<i>Dependency</i>	Reliance of one process or activity, directly or indirectly, on another.
<i>Disaster Recovery (DR)</i>	Processes focused on the recovery of services primarily in response to physical disasters as defined by IT Service Continuity Management.
<i>Discovery Tool</i>	Software that scans and reports against an IT infrastructure for deployed assets.
<i>Error (or known error)</i>	A condition identified by the successful diagnosis of the root cause of a problem, indicating that an infrastructure component, i.e., CI, is at fault.
<i>Error control</i>	Identifying, recording, classifying and progressing known errors, up to and including resolution by successful replacement/change.
<i>Escalation</i>	Passing information to and/or requesting action from a more senior staff or specialist regarding an incident, problem, or change.

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ITSM Terminology continued

Terms continued

Term	Definition
<i>Failure</i>	The termination of the functional unit's ability to perform its required function.
<i>Full release</i>	A release that replaces all components of a release unit, regardless of whether or not they have changed since their last recorded version.
<i>ICT</i>	Information & Communications Technology. The convergence of IT, telecom, data, and networking technologies into a single technology.
<i>Incident</i>	Any event that is not part of the standard operation of a service and that causes, or might cause, an interruption to, or a reduction in, the quality of that service. In Maximo, an incident record is a type of service ticket.
<i>Knowledge-base</i>	Database that captures and ensures that the intellectual capabilities of an organization, such as solutions and workarounds, are shared, maintained and institutionalized.
<i>MACs</i>	An acronym for "Moves, adds and changes" that denotes activities in maintaining IT assets.
<i>Operating Level Agreement (OLA)</i>	An internal agreement covering the delivery of services that support the IT organization in their business-aligned delivery of services.
<i>Package release</i>	A combination of more than one delta or full release.
<i>Problem</i>	An unknown underlying cause of one or more incidents.
<i>Provider</i>	The unit responsible for the provision of IT services.
<i>Reconciliation</i>	Action that matches deployed IT assets to planned, or authorized, IT assets.
<i>Release</i>	A collection of new and/or changed CIs, which are tested and introduced into the production environment together. In Maximo, a release is a type of work order.

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ITSM Terminology continued

Terms continued

Term	Definition
<i>Service</i>	The deliverable of the IT Services organization as perceived by its customers (end-to-end). This can include several systems or services in combination.
<i>Service Catalog</i>	Written statement of agreed-upon IT services, default levels, and options.
<i>Service Desk</i>	Single point of contact for customers. Its aim is to restore service as quickly as possible for the user.
<i>Service Level Agreement (SLA)</i>	A formal negotiated document that defines in quantitative terms the service being offered to a customer by the service provider.
<i>Service ticket (or ticket)</i>	In Maximo, any one of the following: a Service Request (SR) that leads to creation of an Incident, Problem, or Release record.
<i>Solution</i>	A remedy to a known error, documented and provided through the knowledge base to the service desk or to users as a self-service option.
<i>Supplier</i>	A third party responsible for supplying or supporting underpinning elements of the IT services.
<i>Underpinning Contract (UC)</i>	A contract with an external supplier covering delivery of services that support the IT organization in its delivery of services.
<i>User</i>	The person using the service on a daily basis.
<i>Work-around</i>	Method of resolving an incident or avoiding a problem, either from implementing a temporary fix to restore service quickly, or because the customer no longer uses a particular component/aspect of the service known to have a problem.
<i>Work Order</i>	A work order specifies particular tasks to be accomplished, and the labor, materials, services, and tools needed to complete the work. Changes and Releases are types of work orders in Maximo. When you create a work order, Maximo captures a historical record of work requested and performed.
<i>Workflow Diagram</i>	A workflow diagram maps out the way the work is currently done, showing each step taken, the decision branches, time spent, distance traveled or people contacted. The Workflow functionality in MXES allows Maximo users to automate the process described in a workflow diagram.

MXES and ITSM

Introduction

Much has been said about the merits of looking at the “three Ps” (people, processes, and products) of IT service delivery independently.

In attempts to implement ITSM using the ITIL framework, many companies overlook the opportunity to use software (products) to improve parts of the service support processes—for example, automation via a Workflow tool—while they are describing and documenting the processes such software is to support.

How MXES Supports Current Industry Needs

MXES has been designed to meet current ITSM needs from both a business and a technical perspective.

Industry Need	How MXES Supports the Need
Establish and follow best practices and standards	Designed to take full advantage of the ITIL best practice framework using out of the box product functionality and product flexibility
Manage broad end-user/customer requests, changes, issues, etc.	<ul style="list-style-type: none"> • Different types of tickets/service requests/work requests to manage the different types of processes within any organization; not only IT, e.g., Facilities, Manufacturing, Aviation, etc. • Provides support for IT Outsource Service Provider who might have above types of clients.
Flexibility in implementation to meet customized processes/business needs	<ul style="list-style-type: none"> • J2EE Web architecture uses a purely XML front end for a high degree of customizability and configurability. • Supports SOA and Web Services • Built-in tools such as the Application Designer and DB Configuration allow customers to tailor and/or extend Maximo’s functionality to suit their needs

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MXES and ITSM continued

How MXES Supports Current Industry Needs continued

Industry Need	How Maximo Supports the Need
Manage IT services provided to the Business Units	<p>Extensible DB structure that allows:</p> <ul style="list-style-type: none"> • Tickets and Work Orders to be related to each other as well as related to CIs in the CMDB, service level agreements, and contracts. • Maximo functions as broad CMDB that provides the single point of contact to receive requests from end-users regardless of the nature of the issue or request • All Contracts, Requests for Quotations, Purchase Orders, Leases, Documentation, Training materials, and others can be stored and managed in Maximo as well as IT assets and service transactions • MACs, (Moves, Adds, and Changes) for all configuration items can be controlled and managed in Maximo. • Invoice and Billing can originate from Maximo.
Process automation	<ul style="list-style-type: none"> • Powerful and configurable Workflow, escalation, and notifications features provide the ability to adapt the system to business processes. No need for step-by-step manual process; workflow automatically drives users through the predefined processes. • Automated, action option based system allows administrators to manage the end-user product “experience” in support of a business process.
Manage and minimize IT costs	<ul style="list-style-type: none"> • Bulletin Board, Knowledge Base, Solutions Library to promote self-service and reduce calls to Service Desk. • Global issues – One parent ticket can manage many. • Ticket templates / job plans – reduce data entry. • Resource tracking – measure and manage how resources (people, material, tools, services, data, documents) are used.

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MXES and ITSM continued**How MXES
Supports Current
Industry Needs** continued

Industry Need	How Maximo Supports the Need
Wide integration capability	Maximo Enterprise Adapter allows straightforward integration with third-party systems, including: <ul style="list-style-type: none"> • Out of the box and expandable ERP system integrations • Financial applications • Discovery tools (Maximo provides its own tool but also aggregates data from other third party providers) • Distribution software tools • Procurement Systems • Service Desk or Help Desk Systems • Contract Systems • Asset Management Systems (MXES has its own tool but is still open to integrate to other systems)
User and Administrator Interface	<ul style="list-style-type: none"> • 100% Web browser, user-friendly • Administer users, security settings, are contained in single software package • Role and organization based security for Security Compliance.

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MXES and ITSM continued

How MXES Supports Current Industry Needs continued

Industry Need	How Maximo Supports the Need
Enhance business productivity and cost efficiency	<ul style="list-style-type: none"> • Reduce and predict IT Infrastructure downtime via controlled and planned, change, release, and configuration management • Auto-identify priorities based on service, asset, or user, contracts • Manage and capture costs associated with failures and remedies/solutions or workarounds • Integrated Service Level Management capability
Reporting Capability	<ul style="list-style-type: none"> • Easily configurable, front-end generated reporting via Actuate • Simple setup and display of key performance indicators (KPIs) via KPI Manager function to provide “at-a-glance” information • Web-based query tool designed to allow end-users of all levels of computing sophistication to issue ad-hoc queries without having to know the location or structure of the underlying data. • e.Report Designer/ e.Report Designer Professional. Reports created in e.Report Designer require no programming. Lets a report developer deliver any information in the database in a customized format. Present reports in any conceivable layout, regardless of complexity. • Maximo e.Spreadsheet Designer lets business users build reports rapidly, using a unique environment that closely resembles MS Excel.

MXES and ITSM continued

Service Delivery and Support Revisited

Recall our earlier IT Delivery and Support model in Figure 1 - IT Service Support & Delivery Model on page 2-5.

There are five processes in the *Service Support* area:

- Incident Management
- Problem Management
- Change Management
- Release Management
- Configuration Management

These five processes, along with the Service Desk function, are interrelated.

Additionally, there are five processes in the *Service Delivery* area:

- Service Level Management
- Availability Management
- Capacity Management
- IT Service Continuity Management
- Financial Management



Note: Additionally, there is an ITIL publication regarding Security Management. All of the Management Areas are interdependent and influenced by security. Security processes are implemented as far as possible into the other processes.

MXES and Service Support

Introduction

Service Support generally concentrates on the day-to-day operation and support of IT Services.

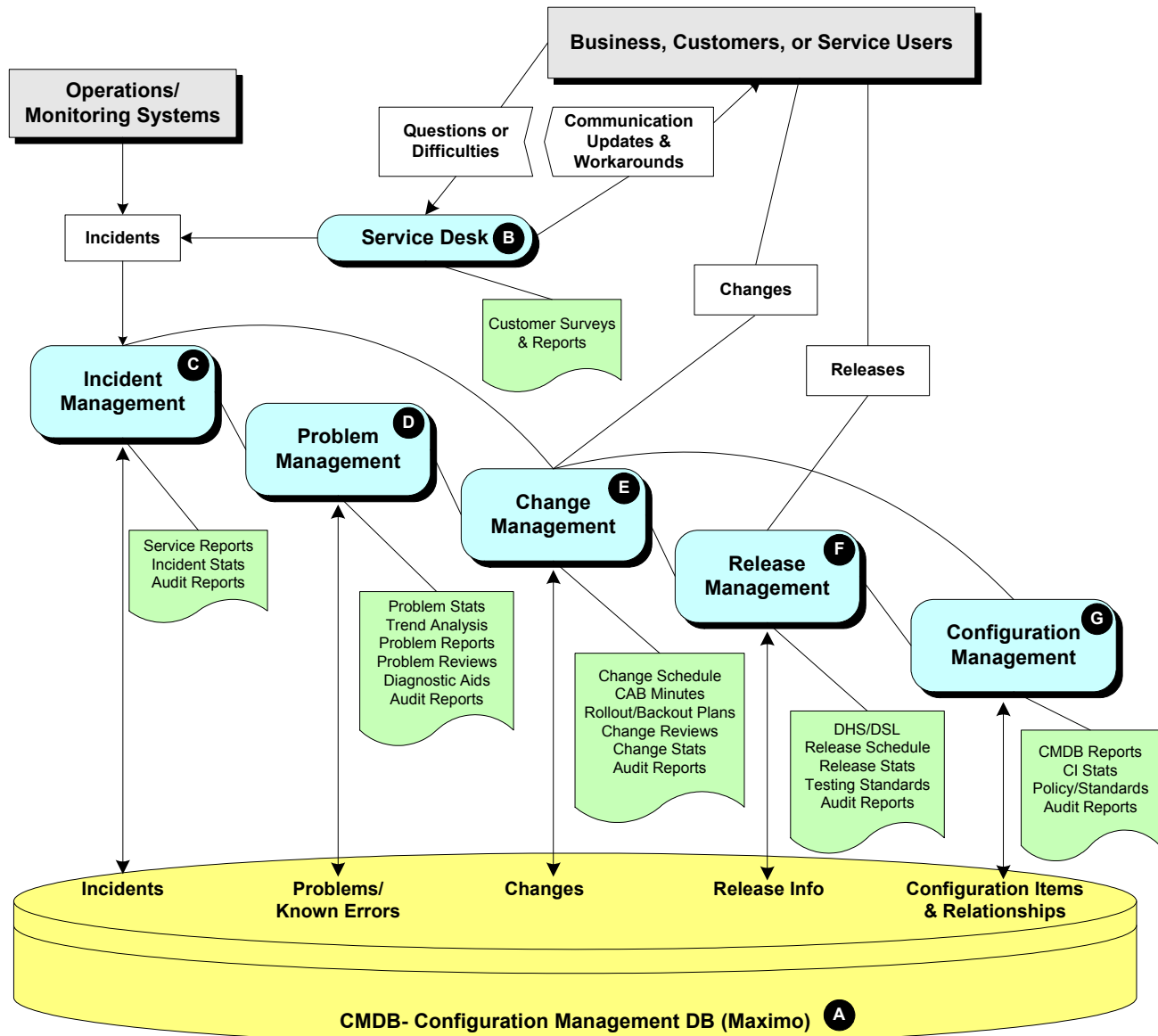
Service Support Process Map



Figure 4 illustrates the major interfaces and deliverables for these processes in *Service Support*. We will refer to this diagram when discussing Service Support processes in relation to MXES.

Note: This is a diagram of the relationships between the various Service Delivery processes. This is NOT INTENDED to be a process flow diagram.

Figure 4 - IT Service Support Map



MXES and Service Support continued

How Maximo Applications Act on the Database

Maximo applications function either to *build* or to *act on* the database (CMDB). Although many applications in a given ITSM process will build *or* act on the database, some applications can do both.

- Processes that primarily build the database create *transactional* data.
- Processes that primarily act on the database create *configuration/setup* data.

Relating Maximo Applications/ Functions to Service Support Processes

The following tables list the Service Support processes and functions from Figure 4 - IT Service Support Map on page 2-20 in relation to Maximo applications.

Each process or function corresponds to its letter designation on the Map.

Function	Description	Relevant Maximo Applications
<i>CMDB</i> <i>(Maximo)</i> A	Maximo functions as the CMDB. It collects data input from all the <i>transactional</i> processes as well as what was entered as part of <i>configuration/setup</i> , and outputs information for users functioning in all ten ITSM processes.	<ul style="list-style-type: none"> • The Maximo DB
<i>Service Desk</i> B	This function of Maximo owns the Incident Management process and operates as a single point of contact for customers and users who have inquiries or requests. <u>Type of Data Generated:</u> <i>Transactional</i>	<ul style="list-style-type: none"> • Service Desk module • Self-Service Module • Solutions library

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MXES and Service Support continued

Relating Maximo Applications/ Functions to Service Support Processes

continued

Process	Description	Relevant Maximo Applications
<p><i>Incident Management</i></p> <p>C</p>	<p><u>Goal:</u> to coordinate the rapid restoration of the expected level of service, even if the solution is a workaround. This process is owned by the Service Desk function.</p> <p>(<u>Note:</u> this process does <i>not</i> identify underlying root causes and fix errors, nor are incidents escalated into problems, although they may lead to the generation of a problem record.)</p> <p><u>Type of Data Generated:</u> <i>Transactional</i></p>	<ul style="list-style-type: none"> • Use <i>Incidents</i> to create and modify incident records. • Tickets entered via <i>Service Requests</i> may be converted to incidents, if desired. • <i>Workflow</i> and <i>Escalation Manager</i> can automate the flow of tickets through MXES. • <i>Global issues</i> allow one ticket to manage many. • Tie incidents to SLAs.
<p><i>Problem Management</i></p> <p>D</p>	<p><u>Goal:</u> to find the root cause of a problem, or potential problem, and effect the removal of the error from the infrastructure.</p> <p>Create a problem record to record an unknown, underlying root cause of one or more incidents.</p> <p><u>Type of Data Generated:</u> <i>Transactional</i></p>	<ul style="list-style-type: none"> • Use <i>Problems</i> to create and modify problem records. • Record <i>Logs</i> and <i>Failure Classes</i> to capture and track Known Errors. • Match <i>Problem</i> records to <i>Incidents</i>. • Tie problems to SLAs.

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MXES and Service Support continued

Relating Maximo Applications/ Functions to Service Support Processes

continued

Process	Description	Relevant Maximo Applications
<p><i>Change Management</i></p> <p>E</p>	<p><u>Goal:</u> to help maximize the benefits to the business of making changes to the IT infrastructure while minimizing the risks involved in making those changes.</p> <p><u>Type of Data Generated:</u> <i>Transactional</i></p>	<ul style="list-style-type: none"> • Use <i>Change Manager</i> to plan, review, communicate, and deploy changes to existing CIs (IT assets). • Create and maintain a Forward Schedule of Change report. • Also, changes can be created via <i>Work Orders</i>. • Tie changes to SLAs
<p><i>Release Management</i></p> <p>F</p>	<p><u>Goal:</u> to manage the release of authorized versions or configurations of assets into a production environment, for large or critical hardware rollouts, for major software rollouts, and for bundling related sets of changes. Releases detail the tasks, scheduling, and people or groups involved in the release.</p> <p><u>Type of Data Generated:</u> <i>Transactional</i></p>	<ul style="list-style-type: none"> • Use <i>Releases</i> to plan, review, and prepare for large batches of changes to assets. • Also, releases can be managed via <i>Work Orders</i>. • Tie releases to SLAs.
<p><i>Configuration Management</i></p> <p>G</p>	<p>Configuration Management is the process of identifying and defining CIs (a.k.a. Assets) in a system, recording and reporting the status of CIs and RFCs, and verifying the completeness and correctness of CIs.</p> <p><u>Type of Data Generated:</u> <i>Configuration/Setup</i> (Also supports, records, and reports on <i>Transactional</i> data generated by Change and Release Management)</p>	<ul style="list-style-type: none"> • Use Assets, Discovery, Item Master, Item Assemblies, Locations, Fusion, & Reconciliation applications to maintain your CMDB. • Apply SLAs to assets. • Attach assets to incidents, problems, changes, and releases.

MXES and Service Delivery

Introduction

Service Delivery processes are responsible for the long-term planning and improvement of IT service provision.

Service Delivery Process Map



Figure 5 illustrates interfaces and deliverables for processes within *Service Delivery*. We will refer to this diagram when discussing Service Delivery processes in relation to MXES.

Note: This is a diagram of the relationships between the various Service Delivery processes. This is NOT INTENDED to be a process flow diagram.

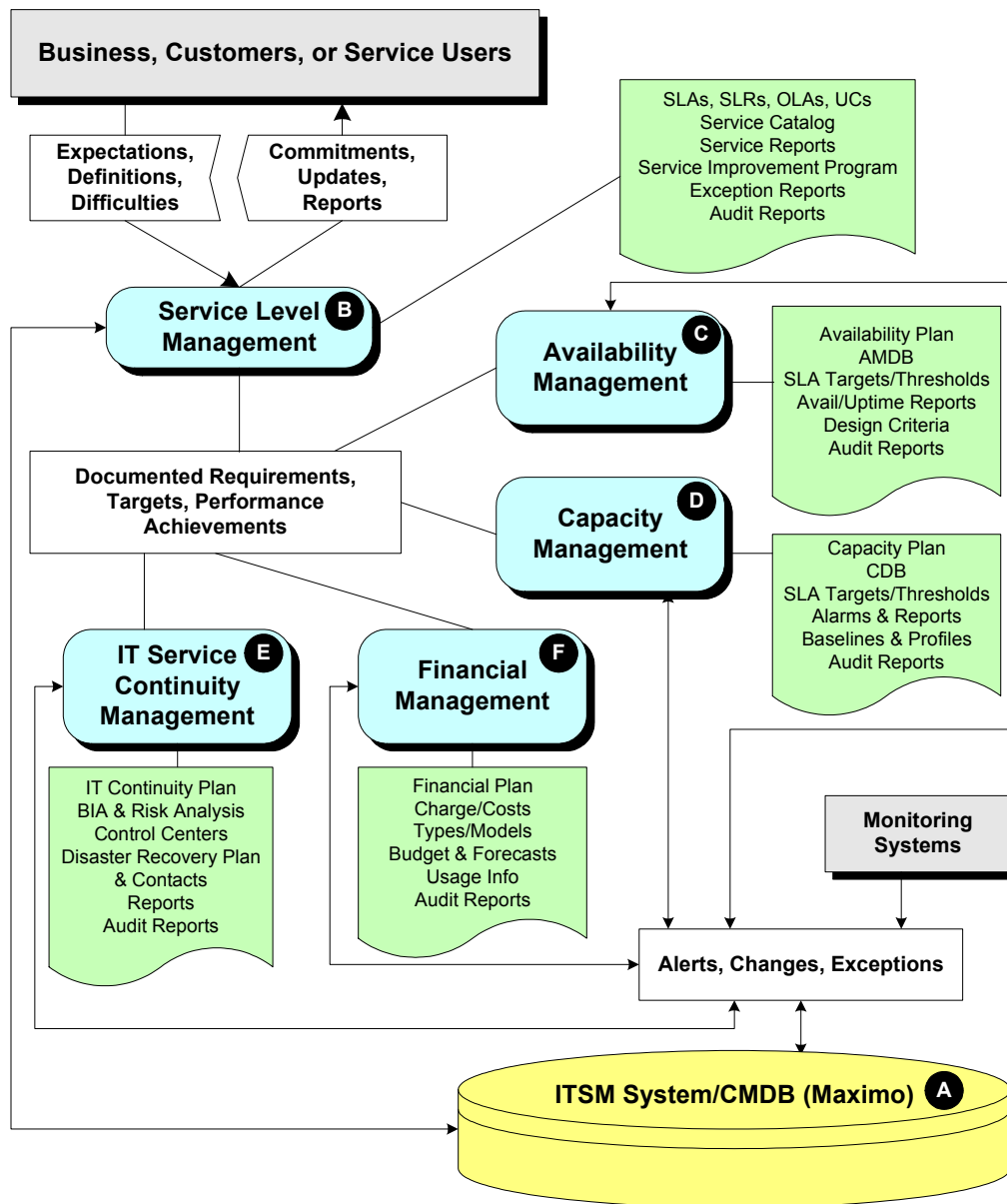


Figure 5 - IT Service Delivery Map

MXES and Service Delivery continued

Relating Maximo Applications/ Functions to Service Delivery Processes

The following tables list the Service Support processes and functions from Figure 5 - IT Service Delivery Map in relation to Maximo applications.

Each process or function corresponds to its letter designation on the Map.

Function	Description
<i>ITSM System/CMDB (Maximo)</i> A	<p>Maximo functions as both the CMDB and IT Service Management System. It collects data input from all the <i>transactional</i> support processes and also stores documentation such as plans, SLAs, targets, and so forth that was created during implementation and maintained as part of the Change Management process.</p> <p>Maximo then outputs performance such as reports and KPI information for users functioning in Service Delivery ITSM processes.</p>

Process	Description	Relevant Maximo Applications
<i>Service Level Management</i> B	<p><u>Goal:</u> to establish, maintain, review, and improve business-aligned IT service quality.</p>	<ul style="list-style-type: none"> • Use <i>SLAs</i> to create Service Level Agreements. • Publish and maintain a <i>Service Catalog</i> in Maximo. • SLAs can be applied to assets and transactions. • Use <i>Contracts</i> to set up UCs and OLAs.
<i>Availability Management</i> C	<p><u>Goal:</u> to optimize capabilities of the IT infrastructure and supporting IT organization to deliver a cost-effective, maintainable availability level that meets business objectives and SLAs.</p> <p>You create a problem record to record an unknown, underlying root cause of one or more incidents.</p>	<ul style="list-style-type: none"> • Use <i>KPI Manager</i> to create KPIs, <i>Reports</i> to create management audits such as uptime, downtime, and MTBF. • Attach availability plan & requirements docs to assets. • Use Maximo Discovery to view deployed assets. • Track Failure Classes & Codes and view affected Users & Assets to make Availability assessments.

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MXES and Service Delivery continued

Relating Maximo Applications/ Functions to Service Delivery Processes continued

Process	Description	Relevant Maximo Applications
<p><i>Capacity Management</i></p> <p>D</p>	<p><u>Goal:</u> to optimize the delivery of IT services by managing demand for services to resources.</p>	<ul style="list-style-type: none"> • Use <i>KPI Manager</i> to create KPIs, <i>Reports</i> to create asset, utilization, and procurement data, as well as to develop forecasts. • Work closely with Configuration, Change & Release Management. • <i>Inventory Procurement, Contracts, SLAs, and Reports</i> allow capacity manager to review costs against existing CIs or proposed additions. • Applied SLAs allow Capacity Manager to see current services and current systems available, linked to persons. • Problem, Incident and Change reports allow Capacity Manager to review MACs that impact capacity.

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MXES and Service Delivery continued

Relating Maximo Applications/
Functions to Service Delivery Processes

continued

Process	Description	Relevant Maximo Applications
<i>IT Continuity Management</i> E	<u>Goal:</u> to provide a systematic approach to the development of an IT Service Continuity Plan to ensure that IT services are protected or can be restored as quickly as possible after a disaster.	<ul style="list-style-type: none"> • Store baselines of production CIs in CMDB; update through Change Management. • Review baselines against SLAs to set priority for actions to restore services in appropriate order by priority to the business.
<i>Financial Management</i> F	<u>Goal:</u> to understand and control costs associated with the planning, development, delivery, and support of the IT infrastructure, and if necessary, to recover those costs from the users.	<ul style="list-style-type: none"> • Use <i>Assets, Deployed Assets, Contracts, Labor, and Invoices</i> • Use <i>Reconciliation and Reports</i> to track usage/cost for chargeback. • Integrate with third-party system via MEA. • Purchasing module shows Total Cost of Ownership of CI or Service. • Costing info such as Contracts, procurement and SLAs assist in budgeting for IT costs.

Chapter Summary

Course Overview

IT Service Management (ITSM) processes vary from business to business. The Maximo Enterprise IT suite (MXES) is both flexible and robust enough to be tailored to support your organization's particular ITSM processes.

This chapter:

- introduced the fundamental ITSM concepts and terminology,
 - reviewed the ten ITSM processes and the Service Desk function contained in the ITIL framework, as well as the security influence in each mgmt area, and
 - identified the Maximo applications/functions that support ITSM processes.
-

ITSM Overview

ITSM is a systematic approach to the planning, development, implementation, delivery, and support of IT Services.

ITSM is a top-down, business-driven approach to the management of IT that addresses:

- the strategic business value generated by the IT organization, and
- delivery of the highest-quality IT service as defined by business needs.

ITSM is designed to focus on the people, processes, and technology issues that IT organizations face, including:

- Managing both customer and vendor relationships
 - Managing IT processes
-

Essential Characteristics of ITSM

The following characteristics are essential for good IT Service Management:

- Customer focus
 - Process orientation
 - Proactive service management
 - Optimized cost/performance
-

Definition of an IT Service

An IT Service is whatever the customer (user) perceives it to be.

Remember not to mistake an IT system for the whole end-to-end IT Service. An IT Service is often made up of many systems, e.g., e-mail service > e-mail server > network service > WAN > LAN > Internet access.

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Chapter Summary continued

IT Service Support & Delivery

- IT Service Management can be divided into two core areas:
 - *Service Support* processes are responsible for the day-to-day operation and support of IT Services.
 - There are five processes in the *Service Support* area. These five processes along with the Service Desk function are interrelated:
 - Incident Management
 - Problem Management
 - Change Management
 - Release Management
 - Configuration Management
 - *Service Delivery* processes are responsible for the long-term planning and improvement of IT service provision.
 - There are five processes in the *Service Delivery* area:
 - Service Level Management
 - Availability Management
 - Capacity Management
 - IT Continuity Management
 - Financial Management
 - Additionally, there is an ITIL publication regarding Security Management.
 - All ITSM Processes are interdependent.
-

What Is ITIL?

ITIL is a customizable framework of best practices for Information Technology Service Management (ITSM) processes to allow organizations to achieve quality IT service and overcome difficulties associated with the growth and ongoing management of IT systems.

ITIL is organized into sets of texts defined by related functions: service support, service delivery, managerial, software support, computer operations, security management, and environmental (facilities).

What ITIL Is Not

ITIL is *not*:

- a proscriptive standard,
 - a methodology, or
 - a step-by-step manual.
-

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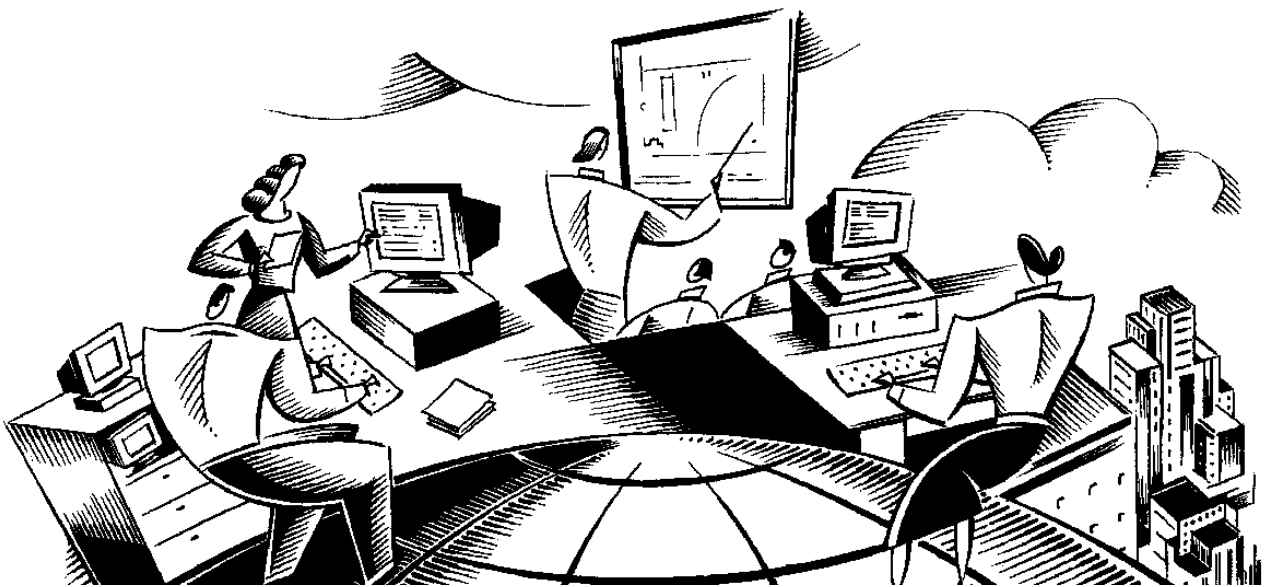
Chapter Summary continued

How ITIL Fits into IT Organizations

- ITIL processes span the functional units of an IT organization.
 - ITIL provides a continuous improvement plan/process for the organization to model against.
-

MXES Immersion Training for IT

Unit 2: Setting Up Core Data



In This Unit

This unit contains the following chapters:

Chapter	Subject
3	Setting Up Organizations and Sites with Sets and GL Accounts
4	Setting Up the Classification Structure
5	Creating Locations and Location Hierarchies
6	Entering Person Records and Registering Users
7	Planning: Setting Up Item and Asset Configurations

Unit Overview

Introduction

Before using Maximo, you must enter data into the database and determine and configure application setup options so that you can “act” on the database.

Unit Focus

In this unit, each chapter focuses on different aspects of entering records into the database and also provides an overview of the different application setup options available in Maximo. This unit focuses on using those applications that are primarily used to “build” or to “set up” the Maximo database.

Entering Supporting Data and Course Approach



Many Maximo applications serve principally to record data that is used by other applications. For example, commodity code records are entered so that they can be referenced on inventory items. With Maximo, supporting data is not required and can be entered over time. This approach benefits you almost immediately without requiring you to initially collect and enter substantial amounts of data. This course follows that convention.

Learning Objectives

When you have completed this unit, you should be able to:

- describe the various database relationships,
 - describe the applications primarily used to set up Maximo,
 - discuss considerations when organizing data,
 - discuss techniques and methods for determining your data requirements, and
 - describe the different application setup options available with Maximo.
-

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Unit Overview continued

Reporting and Performance Indicators

Setting up Maximo requires that you examine in detail your maintenance, inventory, and procurement processes. You must also examine and determine what your organization’s reporting needs are, as well as what performance indicators are to be analyzed. Knowing what is required to go into your database will help you get the most out of it.

The screenshot displays the Maximo KPI Manager interface. At the top, the title bar reads 'KPI Manager' and includes navigation options like 'Go To', 'List Reports', 'Start Center', 'Profile', 'Sign Out', and 'Help'. Below the title bar, there are tabs for 'List', 'KPI', and 'Historical Trends'. The main configuration area is titled 'KPI Name' and shows 'KPI-1' and 'Average Emergency Completion Time'. The 'Calculation Type' is set to 'DECIMAL'. The 'Query Details' section contains a 'Select' clause: 'select avg(actfinish-reportdate) from workorder' and a 'Where' clause: 'where worktype = 'EM' and istask=0'. The 'KPI Parameters' section includes fields for 'Target' (0.18), 'Caution At' (1.00), and 'Alert At' (3.00). It also has a 'Make Public?' checkbox (checked), 'Created By' field, and 'Created Date' (8/3/04 12:00 AM). The 'Graph Details' section shows 'Last Run: 8/3/04 12:00 AM' and an 'Update' button. Below this is a table with the following data:

Status	Actual	Last Reading	Target	Variance
↑	7.59	2.93	0.18	7.41

At the bottom, there is a 'Links' section with 'Link to KPI' and 'Link to Report' fields. To the right, a gauge chart titled 'Average Emergency Completion Time' shows a scale from 0 to 10. The needle points to approximately 7.59, which is in the red zone (above 6). The gauge is color-coded: green (0-2), yellow (2-4), and red (4-10).

Entering Data Overview

Introduction

As introduced in Unit 1, Maximo applications function to *build* or *act on* the database. Although many applications build *or* act on the database, some applications can do both. In this unit's corresponding chapters, we will focus on those applications that are primarily used to *build* a Maximo database.

Check-In



A *database* is a collection of data that is organized so that its contents can be easily accessed, managed, and updated. In Maximo, the data in the database consists of records that you or the system administrator enters.

Setting Up the Database

Overview of Primary Database Setup

The following list is a *general* overview of the different primary records needed for the *initial* setup of the Maximo database:

1. Create a superuser.
 2. Define and enter a currency.
 3. Define and enter company and item sets.
 4. Create an organization and enter sites for the organization.
 5. Create and enter GL account information:
 - a. Create the GL account configuration.
 - b. Set up the chart of accounts.
 6. Activate the organization and sites.
-

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Setting Up the Database continued

Overview of Secondary Database Setup



When your organization is implementing Maximo, note that the order of data entry will depend on what parts of Maximo are being implemented. For example:

- If you are going to classify your locations, then you need to enter the classification structure (2) before entering locations (3).
- The system requires that all users have one Start Center associated to them. Therefore, you need to define and create your Start Centers (5) before entering and registering users (7). Also, if you are going to associate users to locations, then you need to enter locations (3) and storerooms (4) before entering and registering users (7).

The following list shows *some* of the secondary records that could be set up in Maximo. They are in order, assuming that certain functionality in Maximo is used.

1. Enter units of measure.
 2. Define and create classifications.
 3. Create primary system location and enter operating locations.
 4. Create storerooms.
 5. Create Start Center templates.
 6. Enter calendars.
 7. Enter and register user groups and users.
 8. Create commodity groups and codes.
 9. Enter vendors (companies).
 10. Define and enter items.
 11. Define and enter assets.
 12. Enter solutions.
 13. Enter service level agreements.
-

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Setting Up the Database continued

Process Flow

For this unit, we will assume that setting up the Maximo database will follow the following flowchart.

Note: We will not be covering all records that possibly can be set up in the database. Please refer to the *Maximo User's Guide* for further information.

<p>Important Note: Before entering data into Maximo, you need to register the superuser who will be entering the data into the system.</p> <pre> graph TD 4[Enter people and register users] --> 3[Identify and enter locations hierarchies] 3 --> 2[Organize and enter classifications] 2 --> 1[Set up sets, organizations, and sites] </pre>	<p>Stage</p>	<p>Description</p>
	<p>1</p>	<p>Set up the organizations and sites using the Sets, Organizations, and GL Account applications.</p>
	<p>2</p>	<p>Enter classifications and attributes and then organize them into hierarchies using the Classifications application.</p>
	<p>3</p>	<p>Create locations and then organize them into a hierarchies and system using the Locations application.</p>
<p>4</p>	<p>Register users and enter labor using the Signature Security and Labor applications.</p>	

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Setting Up the Database continued

Smart Numbering vs. Automatic Numbering

It is important to understand what data is being added into the database, but it is equally important to know and understand how records are to be identified once in Maximo. While Maximo allows for automatic numbering, some organizations have their own internal identification system in place. There are use cases for smart numbering and automatic numbering; what needs to be discussed is when it makes sense to use one numbering format over the other.



If you are using the Discovery tool and reconciling (mapping) back into Maximo, you need to consider how you might want to ID your software and hardware assets. Please refer to the *MRO Reconciliation Implementation Guide* for additional details.

Class Discussion



- How does your organization currently identify its location, inventory, and asset records?
 - Are you using a Discovery tool?
 - How are assets tracked and reconciled in your organization?
 - Through class discussions, make a case for when and where automatic numbering would make sense and when smart numbering would make sense.
-

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Setting Up the Database continued

Create and Register a "Superuser"

While this course uses an established database, for a blank Maximo database setup you need to create a superuser having admin rights.

Generally, the tasks involved in creating a superuser are as follows:

1. Log in as maxadmin, maxadmin.
2. Create a superuser with full administrative privileges, which you can do by duplicating the MAXADMIN user.


(To protect the MAXADMIN security group, you can duplicate this group and then add your superuser to the newly created security group.)



For further information on Signature Security and user setup, please refer to the *System Administrator's Guide*.

Procedure: Inserting Records into the Database

The general procedure for inserting a record into the database is as follows:

Step	Action
1	Open the application from the Start Center modules or the Navigation Bar Go To drop-down menu.
2	Click the Insert Record toolbar button. 
3	Enter a value in the key field, and then type in a description for it.
4	Enter a value in each of the other required fields.
5	Click Save to save the record.

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Setting Up the Database continued

Unit Focus and Building the Database



Although this unit focuses on building the database, we enter only a few data items, because the intent of this course is to show you how the Maximo applications work together. However, in actuality, implementing Maximo involves mass loading and converting much data.

MRO Software Professional Services can help in this matter by providing their expertise.

MXES Immersion Training for IT

Chapter 3: Setting Up Organizations and Sites with Sets and GL Accounts



In This Chapter This chapter contains the following topics:

Topic	See Page
Chapter Overview	3-1
Overview of Multisite and Multiorganizational Strategy	3-4
Prerequisites for Setting Up Organizations: Currency and Sets	3-17
Setting Up Organizations and Sites	3-23
Organization Application Options Overview	3-41
GL Account and Organization/Site Activation	3-46
Deleting and Deactivating Organizations and Sites	3-65
Chapter Summary	3-68

Chapter Overview

Introduction

Maximo is structured to contain and use your asset and maintenance information in a strategy that uses multiple levels of organizations and sites. How Multisite strategy is implemented has a direct effect on the setup of the Maximo modules and applications.

Learning Objectives

When you have completed this chapter, you should be able to:

- describe the Multisite/Multiorganizational strategy,
 - describe the concept of item and company sets and use cases,
 - plan and create organization and site levels,
 - describe the functions of the Organization, Addresses, and Site tabs, and
 - identify applications that are affected by organizations.
-

Chapter Focus

This chapter will focus on the following activities, listed in order of operation, involved in the initial setup of organizations and sites:

1. Define and enter a currency.
 2. Define and enter company and item sets.
 3. Create an organization.
 4. Enter sites for the organization.
 5. Create and enter GL account information:
 - a. Create the GL account configuration.
 - b. Set up the chart of accounts.
 6. Activate the organization and sites.
-

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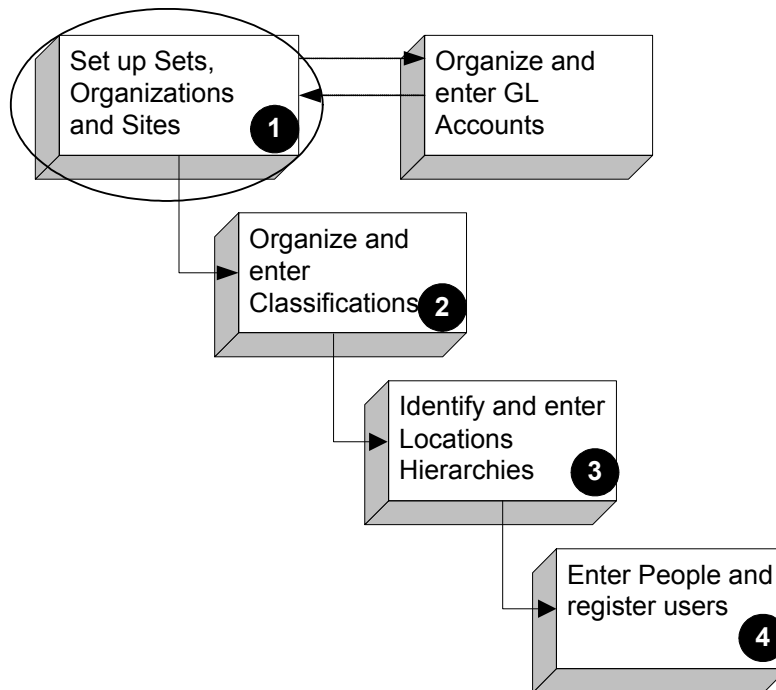
Chapter Overview continued

Users and Setup For purposes of this course, when accessing Maximo modules and applications in the Start Center, you should be signed in as:

Username: **wilson** and Password: **wilson**

Note: This user has universal access to data and functionality, so it should be used for most tasks in this course (except where otherwise designated).

We Are Here Set up your organizations and sites using the **Organizations** application.



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Chapter Overview continued

Implementation Considerations

When planning an organization setup, you must examine your business model and decide how to logically divide your company's locations and divisions into Maximo organization and sites. A highly organized data model creates a number of implications to consider:

- Which parts of the organization need to access data from other parts, and which parts of the organization will not have access to data from other parts of the organization?
 - Is integration with legacy systems and other systems required?
 - Will system administration need to be divided up between sites or organizations?
 - Who will have access to what sites?
 - Can one Maximo database meet all your asset management needs?
 - Are financial requirements the same or different from one entity to another?
 - Is more than one base currency being used within the business?
 - Are assets shared? Are assets fixed to a location or people?
 - Is purchasing a centralized system?
-

Overview of Multisite and Multiorganizational Strategy

Introduction

Multiorganization and Multisite is an implementation strategy of Maximo that lets different company sites share data from a single database, while keeping their operations separate. Rather than installing multiple instances of Maximo, a company can now install Maximo once, and multiple sites can access the same database.

Organization and Site Defined

The *organization* and *site* concepts are used in the Multisite environment.

- An **organization** is a major division of a company that contains one or more sites. Sites belonging to the same organization use the same currency and share the same options for work orders, assets, labor, and other types of data.
- A **site** is a subdivision of an organization that might track inventory and other data separately from other sites. Certain site information is unique to the site and is not visible to other sites even though they belong to the same organization and share the same database. Generally, sites will:
 - belong to the same organization,
 - use the same *currency*, and
 - share the same options for work orders, assets, labor, and other types of data.

Sites and organizations are logical divisions of a company determined by what types of operations are performed at certain locations, and what data can be shared by certain locations.

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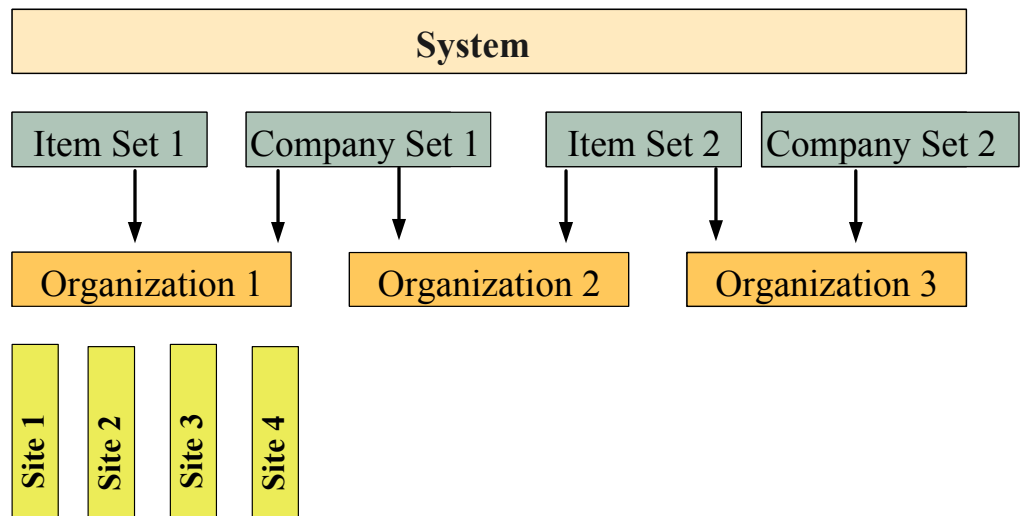
Overview of Multisite and Multiorganizational Strategy continued

Database Levels Overview

A multiorganization and multisite setup allows clients to organize data so that it divides data storage into three different levels:

- Some elements reside at the **System Database** level and are available for the entire company.
- Other elements reside at the **Organization** level and are available only to users within a particular organization.
- Finally, some data is available only to users at specific **Sites** within an organization.

The following illustration shows a multiorganization/multisite setup.



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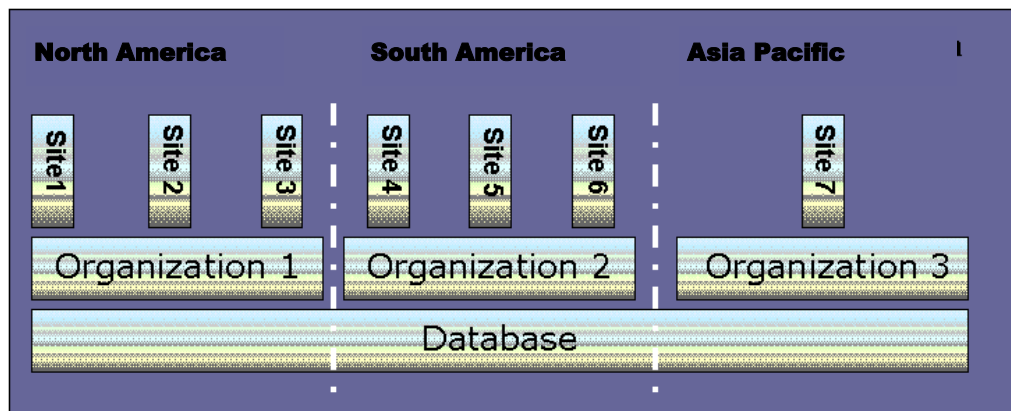
Overview of Multisite and Multiorganizational Strategy continued

Multiple Organization and Sites Illustration

Many customers install Maximo at several facilities globally. The following example illustrates how Maximo can be set up in such instances.

Example:

A software company operates several business units globally. The business practices among the units are similar, but the currency and financial reporting requirements are specific to the region from which the business units operate. Therefore because of the currency differences, Maximo was set up with several organizations, each having its own base currency.



If the software company's business units all had similar business practices and were using the same base currency, then the setup in Maximo could have been one organization representing the whole company and each site representing a business unit.

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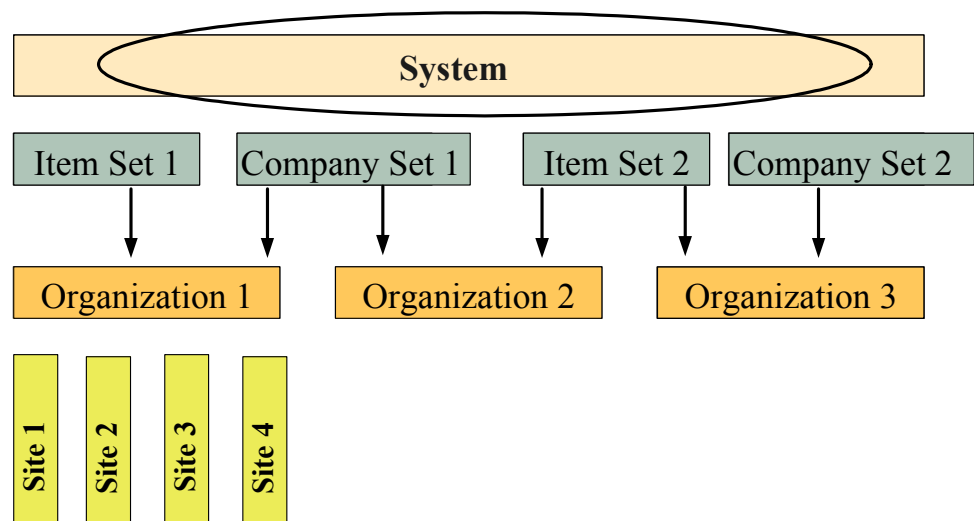
Overview of Multisite and Multiorganizational Strategy continued

Data Stored at the Database System Level

A *system* is a single instance of a Maximo database. A single system can contain many organizations and sites. Data stored at the *system* level:

- affects all applications in the *organization* and *site* level, and.
- is used across the entire enterprise.

For example, security controls are set at the system level. (These restrictions establish new user defaults, sign-in tracking, and password requirements.)



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Overview of Multisite and Multiorganizational Strategy continued

Applications at the System Level

The following Maximo applications and functions are managed at the **system** level:

- Attached Document Library
- Bulletin Board
- Classifications
- Communication Templates
- Computers
- Cron Task Setup
- Currency Codes
- Deployed Assets
- Escalations
- Incidents
- Job Plans
- KPIs
- Master PM
- Meter Groups
- Meters
- Network Devices
- Network Printers
- People
- Person Groups

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Overview of Multisite and Multiorganizational Strategy continued

Applications at the System Level

continued

- Problems
- Reconciliation
- Reports
- Security Groups
- Service Level Agreements
- Service Requests
- Solutions
- Ticket Templates
- Units of Measurement
- Users
- Workflow



The majority of the Administrative applications (documented in the *Maximo System Administrator's Guide*) are also at the system level.

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Overview of Multisite and Multiorganizational Strategy continued

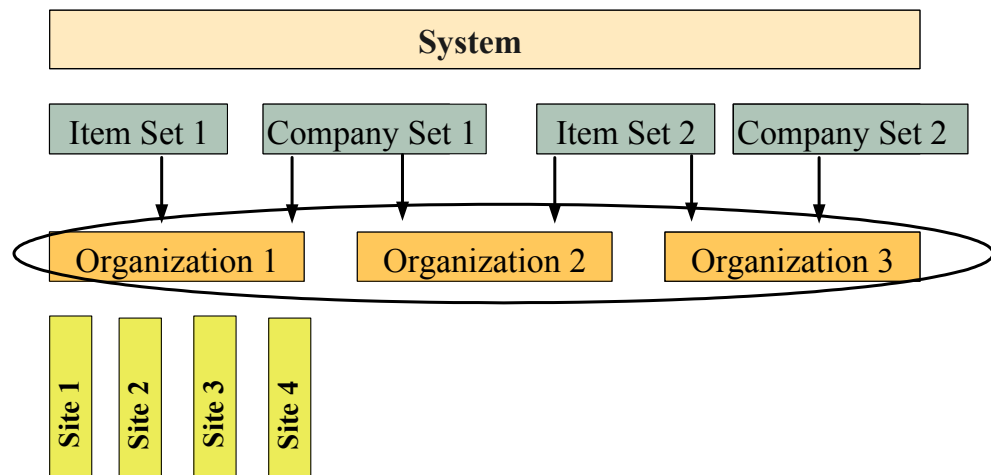
Data Stored at the Organization Level

An *organization* can be a legal or logical entity, depending on the setup of the business and its requirements, to which one or more sites can belong. Data stored at the *organization* level has the following characteristics:

- It is identified by an ORGID.
- The chart of accounts, base currency, and financial periods are defined at the organization level, and each individual site would inherit the same for its organization.
- Vendors, items, labor, and purchase agreements are defined at this level, so that the sites belonging to that organization can share this data.

Items, assets, and vendors (companies) at the organization level can be shared across organizations through sets. *Sets* are groupings of information that a number of organizations can mutually see and access, thereby allowing these organizations to share the data in the sets. Sets are covered in detail later in this chapter.

- It can have many organizations, and each organization can have one or many sites.
- Addresses for sites that are used to specify the Bill To and Ship To in the purchase orders (POs) are defined at this level with an address code.



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Overview of Multisite and Multiorganizational Strategy continued

Applications at the Organization Level

The following Maximo applications and functions are managed at the **organization** level:

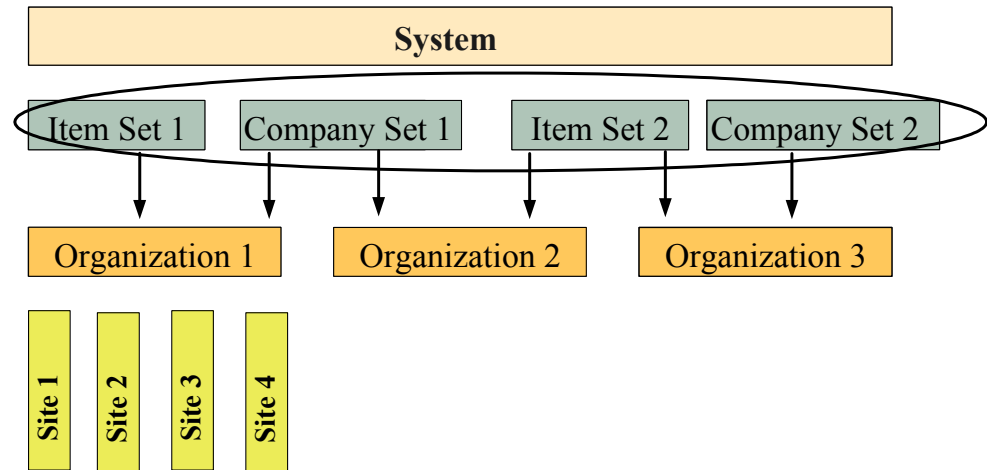
- Calendars
- Chart of Accounts (GL Account codes)
- Companies
- Crafts
- Exchange Rates
- Failure Codes
- Hazards
- Labor
- Labor Rate Contracts
- Labor Reporting
- Lease/Rental Contracts
- Master Contracts
- Purchase Contracts
- Qualifications
- Tax codes
- Terms and Conditions
- Warranty Contracts

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Overview of Multisite and Multiorganizational Strategy continued

Organizations Sharing Data: Sets

Maximo allows you to perform some types of transactions across organizations. These transactions might involve inventory item and asset moves across organizations or allow for centralized purchasing. In order to enable these organizational transactions, sets must be defined and set up before each organization is created in Maximo.



Applications Shared Across Organizations

The data in the following Maximo applications and functions is stored and shared as **sets**:

- Commodity Codes
- Companies
- Condition Codes
- Conversion values (Order Units/Issue Units)
- Item Master
- Service Catalog
- Service Items
- Tools

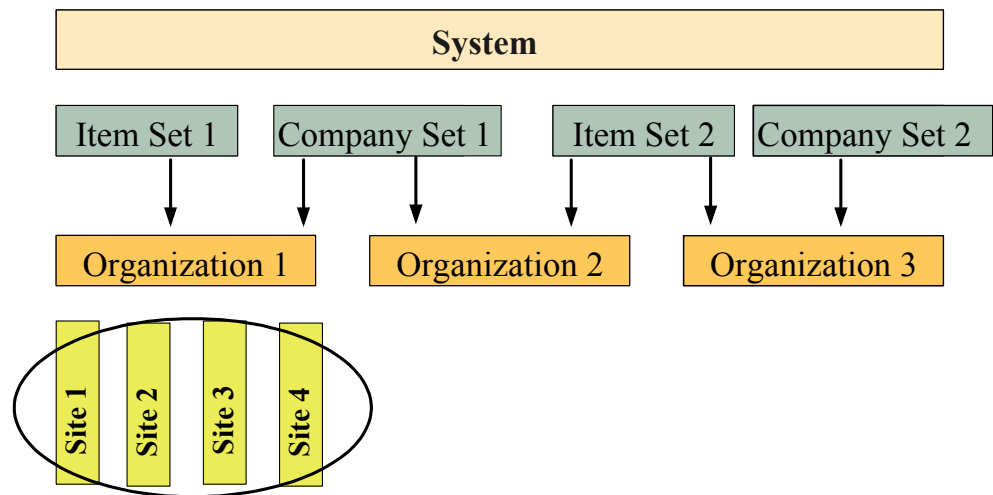
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Overview of Multisite and Multiorganizational Strategy continued

Data Stored at the Site Level

A *site* belongs to an organization. An organization can have more than one site. All asset management data, such as assets, locations, change work orders, release work orders, activities, incidents, and job plans, is defined at the site level. This means that each site has its own set of data that is not shared by other sites. Data stored at the *site* level has the following characteristics:

- It can identify a logical work location, such as a facility or office.
- A site belongs to an organization, and any data that pertains to a site is identified by a SITEID.
- All transactions are carried out within a site (i.e., work orders, PRs, POs, invoices, issues, and transfers).
- Assets and locations must be unique within a site.
- A Maximo user can be granted access to one or more sites within the organization.
- Transactions across sites include:
 - issues across sites,
 - centralized purchasing, and
 - asset moves, as long as each site has a unique asset number



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Overview of Multisite and Multiorganizational Strategy continued

Applications at the Site Level

The following Maximo user applications are managed at the **site** level:

- Activities
 - Assets
 - Assignment Manager
 - Changes
 - Condition Monitoring
 - Desktop Requisitions
 - Inventory
 - Invoices
 - Issues and Transfers
 - Labor Reporting
 - Locations
 - Lock Out/Tag Out
 - Precautions
 - Preventive Maintenance
 - Purchase Orders
 - Purchase Requisitions
 - Quick Reporting
 - Receiving
 - Releases
 - Request for Quotation
 - Routes
 - Safety Plans
 - Stocked Tools
 - Storerooms
 - Work Order Tracking
-

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Overview of Multisite and Multiorganizational Strategy continued

Record Identification and Numbering Considerations



Although assets are not shared, they can be moved from one site to another site. You need to consider the numbering format when you analyze your organization.

For example:

- If you want to move an asset from one site to another, the asset's number must be unique to perform the move. If there is already an asset with the same asset number at the site to which you want to move the selected asset, Maximo will not allow the asset to be moved.
 - If you want to move assets across organizations, sets must be the same.
-

Multi-Language

Language is independent of both organizations and sites. A base language is set up at installation. If multiple languages are desired, the language CDs are loaded and the user can choose at session time which language to use.

Implementation and Setup Prerequisites



There must be at least one organization and one site. In addition, you must determine and complete two other prerequisites before entering the first organization:

- One currency code must be entered. To do this, use the Currency Codes application.
 - One item set and one company set must be entered. To do this, use the Sets application.
-

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Overview of Multisite and Multiorganizational Strategy continued

What Does It Look Like in Maximo?

Maximo uses the following hierarchical format when referencing organizations, sites, locations, and assets. Right now we are focused on the organization and site levels. This organization, *Eagle, Inc. North America*, has five sites: McLean, Bedford, Hartford, Nashua, and Fleet. At the Bedford site, the Address 2001 location has several assets associated to it. One asset, 7001, is comprised of several components.

The diagram illustrates the hierarchy of Maximo data: Organization (top level) leads to Site (sub-level 1), which further branches into Top Location (sub-level 2) and Asset (sub-level 2). Top Location branches into Location (sub-level 3), and Asset branches into Subassembly (sub-level 3). Dashed lines indicate that both Location and Subassembly levels can be associated with an Asset.

The screenshots show the following data:

- Organization Screenshot:** Organization: EAGLENA, Name: EAGLE Inc. North America, Base Currency 1: USD, Base Currency 2: United States of America Dollar, Item Set: SET1, Company Set: COMPSET1, Clearing Account: 6100-300-000, Active?
- Sites Screenshot:** Organization: EAGLENA, Name: EAGLE Inc. North America. Table of sites:

Site	Description	Ship to Address Code	Bill to Address Code	Active?
MCLEAN	McLean IT Operations Center	MCLEAN	MCLEAN	<input checked="" type="checkbox"/>
BEDFORD	Bedford MA Site of EAGLE Inc. North America	BEDFORDMAN	BEDFORDMAN	<input checked="" type="checkbox"/>
HARTFORD	Hartford, CT Site of Eagle Inc. North America	HARTFORD	BEDFORDMAN	<input checked="" type="checkbox"/>
NASHUA	Nashua Site of Eagle Inc. North America	NASHUA	BEDFORDMAN	<input checked="" type="checkbox"/>
FLEET	Corporate Fleet Management of Eagle, Inc.			<input checked="" type="checkbox"/>
- Assets Screenshot:** Location: ADDR2001, Address Unit: #2001 Oak St. - W560, Status: OPERATING, Site: BEDFORD. Asset in Location: System: DEO, SANITARY. Asset list includes: ADDR2001: Address Unit #2001 Oak St. - W560.
- Assets Screenshot:** Asset: 7000, Name: Standard Laptop Computer, Location: ADDR2001, Address Unit: #2001 Oak St. - W560, Asset Up? , Rotating Item: D600, Site: BEDFORD. Asset list includes: 7000: Standard Laptop Computer, 7003: Laser printer (local), 7001: Windows XP Operating System, A0000: Standard Laptop Computer, 0097: PowerEdge 500SC Server, 20000: IT (UNSPSC), Computer_Equipment, Computer, Desktop, 96.00 MB, 4.00 GB, 266.00 PROSP.

Prerequisites for Setting Up Organizations: Currency and Sets

Introduction

As we discussed earlier, before entering organizations and sites into Maximo, the two main pieces of data that you need to enter into the system are:

- a currency code, and
- a set for company and item.

In this section we will be discussing this data requirement and the relationship to organization and site setup.

The Currency Codes Application

Before entering a currency code into the system, you should not only explore the business entity structure of your company, but also understand how financial transactions are processed at each entity. You use the **Currency Codes** application to define currency codes and to specify which codes can currently be used in Maximo.

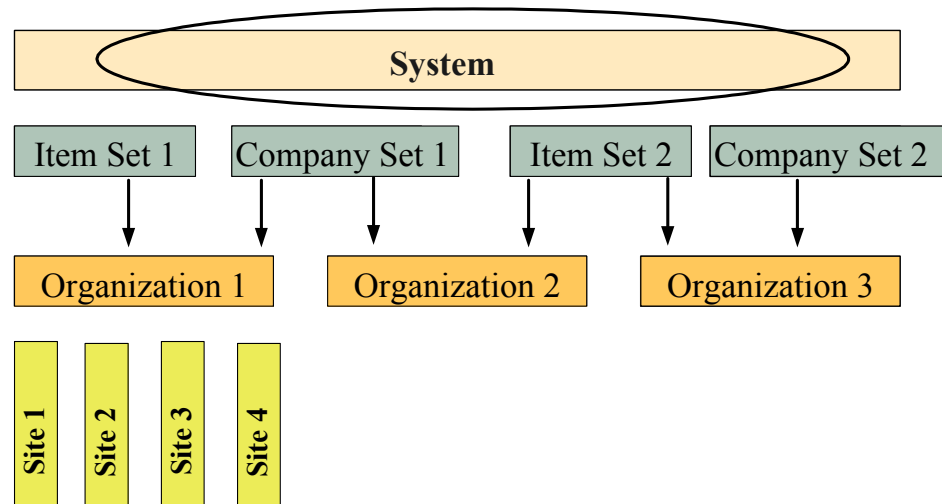
Currency	Description	Active?
GBP	British Pound Sterling	<input checked="" type="checkbox"/>
PESO	Chilean Pesos	<input checked="" type="checkbox"/>
YEN	Japanese Yen	<input checked="" type="checkbox"/>
DINAR	Kuwaiti Dinar	<input checked="" type="checkbox"/>
SND	Singapore Dollar	<input checked="" type="checkbox"/>
BOLIVAR	Venezuelan Bolivar	<input checked="" type="checkbox"/>
RAND	South African Rand	<input checked="" type="checkbox"/>
USD	United States of America Dollar	<input checked="" type="checkbox"/>
AUD	Australian Dollar	<input checked="" type="checkbox"/>
EUR	Euro	<input checked="" type="checkbox"/>
CAD	Canadian Dollar	<input checked="" type="checkbox"/>

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Prerequisites for Setting Up Organizations: Currency and Sets continued

Database (System) Level

Currency codes are stored at the system level, which means that all organizations can use them.



Base Currencies



The number of organizations you enter into Maximo will depend on the number of base currencies desired.

- How many of your company's business entities/units use their own currency?
- Do you know what they are? Would you know whom to ask?

Administration of Currency

While you use the **Currency Codes** application to define and set up currencies in the system, the following applications enable you to perform other aspects of currency administration:

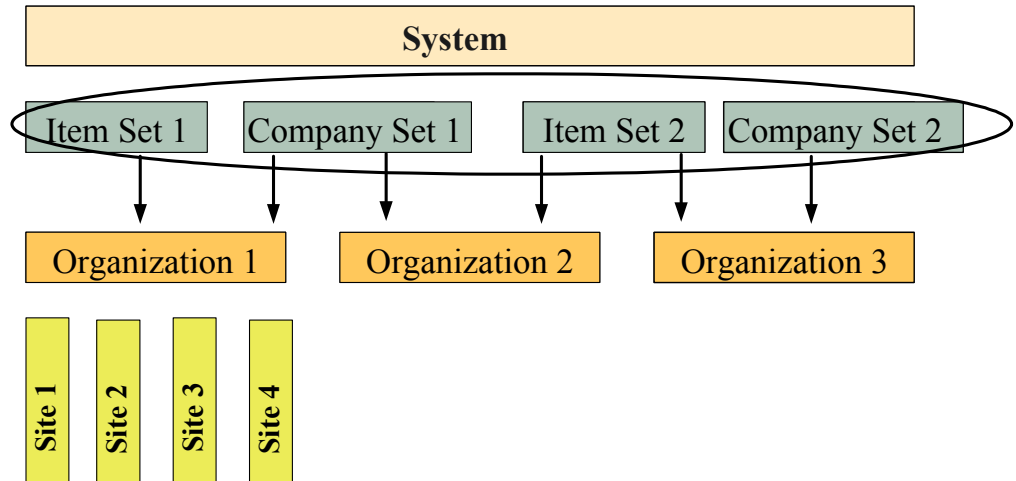
- Use **Organizations** to specify the base currency for an organization.
- Use **Exchange Rates** to set up exchange rates between currencies for defined periods.

continued on next page

Prerequisites for Setting Up Organizations: Currency and Sets continued

Sets

As introduced in the previous section, Maximo uses the concept of sets to help organizations share data between themselves. *Sets* are groupings of information that a number of organizations can mutually see and access, thereby allowing these organizations to share the data in the sets.



No Need to Share



Organizations do not have to share *both* items and companies. However, only the item and/or company sets that are mutually employed by each organization can be shared between organizations.

Prerequisites for Setting Up Organizations: Currency and Sets continued

Types of Sets

There are two types of sets used in Maximo:

- **Item set:** Maximo establishes items at the enterprise level so that multiple organizations can use them. Such things as costs and vendor information differ between the organizations, but the overall item definition list (Item Master application) can be shared among all business units. Therefore, items are created in an item set. An item set consists of an item set ID that groups items. Item numbers are unique within an item set. Grouping items into sets allows users to transfer items among sites within different organizations.
 - **Company set:** Maximo establishes items at the enterprise level so that multiple organizations can use them for vendors and other external business entities with which organizations do business. Grouping companies into sets ensures that all sites and organizations use consistent names for vendor companies. It also allows for a centralized purchasing function and accurate consolidated vendor reporting.
-

Interrelationships

Some considerations with the interrelationships between database, sets, organizations, and sites are as follows:

- As organizations are created, they must be associated with an item and company set.
 - Organizations that share sets of items and vendors can share assets and vendor-related transactions with each other.
 - Sites within these mutual organizations can, as a result, share information in the sets.
-

continued on next page

Prerequisites for Setting Up Organizations: Currency and Sets continued

The Sets Application

You use the Sets application to create a framework for sharing item and company (vendor) data across multiple organizations.

Maximo stores both item and company master records in sets. These sets exist above the organization level so that organizations can share the same data.

The screenshot shows the Maximo Sets application interface. It features a navigation bar at the top with options like 'Bullets: (2)', 'Go To', 'Reports', 'Start Center', 'Profile', 'Sign Out', and 'Help'. Below the navigation bar is a 'Select Action' dropdown menu. The main content area is divided into two sections. The first section, titled 'All Sets', displays a table with columns for 'Set', 'Description', and 'Type'. The second section, titled 'Organizations using COMPSET1', displays a table with columns for 'Organization' and 'Description'.

Set	Description	Type
COMPSET1	Company set 1	COMPANY
IT ITEMS	IT Items	ITEM
SET1	Item set for EAGLENA	ITEM
SET2	Item set for EAGLESA	ITEM

Organization	Description
EAGLENA	EAGLE Inc. North America
EAGLESA	Eagle South America, Inc.
EAGLEUK	European Headquarters of Eagle, Inc.
TEST	test

Sets and Organizations Setup

The following rules apply to sets and organizations:

- You can create as many item and company sets as your business practices require.
- You *must* associate each organization with one, and only one, company set.
- You *must* associate each organization with one, and only one, item set.
- The same item or company set can be used by multiple organizations.

continued on next page

Prerequisites for Setting Up Organizations: Currency and Sets continued

Automatically Creating Companies

The **Automatically Add Companies to Company Master?** check box specifies whether you want to automatically create a Company Master record when a user adds a company in the Companies application.

Automatically Add Companies to Company Master?

- If the check box is selected, a Company Master record will be created.
- If the check box is cleared (the default), a Company Master record will not be created, and users must add companies in the Company Master application.

This field applies only to sets of the type COMPANY.

Setting Up Organizations and Sites

Introduction

When planning a Multisite implementation, you must examine your business model and decide how to logically divide your company's locations and divisions into Maximo sites and organizations.

- At first glance you might decide to designate your Texas plant as an organization, with its four buildings as sites. Upon closer inspection, you might find that the four different buildings all share certain operations, storerooms, and personnel. It therefore might be more efficient to consider all four buildings collectively as one site.
- A software company might have an office in North America and another in Brazil that operate essentially the same. It might seem ideal to consider both locations as sites in the same organization. However, differences in currency and tax codes make it easier to treat each location as a different organization.

The Organizations Application

Use the Organizations application in the Administration module to create organizations and sites, and to create and change certain system defaults, such as the Ship To and Bill To addresses for POs.

The Organizations application enables you to do this by allowing specific data to be organized at one of the following levels:

- Organization
- Site

After an analysis of your company is done and the organization and site structure is determined, the **Organizations** application lets you enter, modify, and configure options for organizations and sites.

The screenshot shows the Maximo Organizations application interface. The main content area displays the configuration for an organization named 'EAGLENA'. The configuration is organized into several sections:

- Organization:** EAGLENA (with a dropdown arrow) and EAGLE Inc. North America (with a dropdown arrow)
- Base Currency 1:** USD (with a dropdown arrow) and United States of America Dollar (with a dropdown arrow)
- Base Currency 2:** (empty field with a dropdown arrow)
- Item Set:** SET1 (with a dropdown arrow) and Item set 1 (with a dropdown arrow)
- Company Set:** COMPSET1 (with a dropdown arrow) and Company set 1 (with a dropdown arrow)
- Clearing Account:** 6100-300-000 (with a dropdown arrow)
- Active?:**

The interface includes a navigation bar at the top with 'List', 'Organization', 'Addresses', and 'Sites' tabs. The 'Organization' tab is currently selected. The top of the window shows the Maximo logo and various system navigation options like 'Bullets: (2)', 'Go To', 'Reports', 'Start Center', 'Profile', 'Sign Out', and 'Help'.

continued on next page

Setting Up Organizations and Sites continued

Organizations Application Tabs

The Organizations application has four tabs:



Use this tab...	To...
List	Perform criterion-based searches for records in a way similar to that of the Maximo applications.
Organization	Define new organizations or modify existing ones.
Addresses	Specify shipping and billing addresses at the organization level.
Sites	Define new sites or modify existing ones.

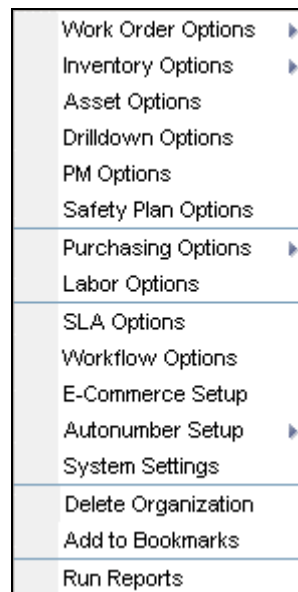
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Setting Up Organizations and Sites continued

Select Action Menu

The **Select Action** menu enables you to carry out a number of functions, including:

- changing/configuring application options,
- setting SLA options,
- setting up E-Commerce and Autonumber,
- deleting organizations,
- running reports, and
- adding bookmarks.



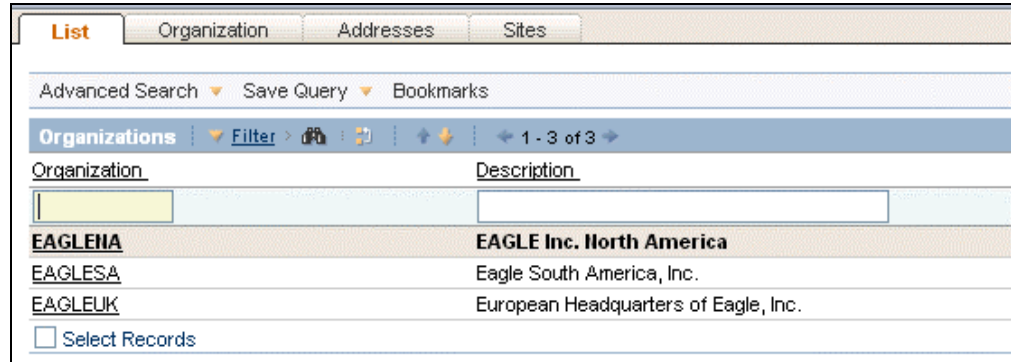
Note: Options for various applications will be covered in more detail in the application chapters later in this course.

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Setting Up Organizations and Sites continued

List Tab

You can view the organization lists from the **List** tab.



In this example, you can see that you have access to three organizations: EAGLENA, EAGLESA, and EAGLEUK.



Organizations can be composed of different *sites*, *users*, and *user groups* where Maximo applications can be applied.

continued on next page

Setting Up Organizations and Sites continued

Organization Tab You add, modify, deactivate, or enable organizations from the **Organization** tab.

List	Organization	Addresses	Sites
	Organization	EAGLENA	EAGLE Inc. North America
	Base Currency 1	USD	United States of America Dollar
	Base Currency 2		
	Item Set	SET1	Item set 1
	Company Set	COMPSET1	Company set 1
	Clearing Account	6100-300-000	
	Active?	<input checked="" type="checkbox"/>	

The **Organization** tab contains the following fields:

- Organization ID
- Description
- Base Currency 1
- Base Currency 2
- Item Set
- Company Set
- Clearing Account
- Active? (check box)

continued on next page

Setting Up Organizations and Sites continued

Addresses Tab

Addresses for sites and the Bill To and Ship To information for POs come from the **Addresses** tab.

Address Code	Address	City	State/Province
BEDFORDMAIN	100 Crosby Drive	Bedford	MA
HARTFORD	2450 Ridgeway Drive	Hartford	CT
LAREDO	200 E SANTORO	BUILDING 5	LAREDO
MCLEAN	7900 Westpark Drive	McLean	VA
NASHUA	1200 Portsmouth Road	2nd Floor	NH
TEXAS	4000 SOUTH WEST	SAN ANTONIO	TEXAS

The **Addresses** tab has two sections:

- One section shows the list of addresses that are currently defined under the selected organization.
- The other section is an expanded address displaying the table Row Details, which is used for editing and adding address information.

Address Code	Address	City	State/Province
BEDFORDMAIN	100 Crosby Drive	Bedford	MA
HARTFORD	2450 Ridgeway Drive	Hartford	CT
LAREDO	200 E SANTORO	BUILDING 5	LAREDO
MCLEAN	7900 Westpark Drive	McLean	VA
NASHUA	1200 Portsmouth Road	2nd Floor	NH
TEXAS	4000 SOUTH WEST	SAN ANTONIO	TEXAS

Details	
Address Code	TEXAS
Address	4000 SOUTH WEST
City	SAN ANTONIO
State/Province	TEXAS
ZIP/Postal Code	54365
Country	USA

continued on next page

Setting Up Organizations and Sites continued

Sites Tab

The **Sites** tab is used to define sites within an organization.

Site	Description	Ship to Address Code	Bill to Address Code	Active?
MCLEAN	McLean IT Operations Center	MCLEAN	MCLEAN	<input checked="" type="checkbox"/>
BEDFORD	Bedford MA Site of EAGLE Inc. North America	BEDFORDMAIN	BEDFORDMAIN	<input checked="" type="checkbox"/>
HARTFORD	Hartford, CT Site of Eagle Inc. North America	HARTFORD	BEDFORDMAIN	<input checked="" type="checkbox"/>
NASHUA	Nashua Site of Eagle Inc. North America	NASHUA	BEDFORDMAIN	<input checked="" type="checkbox"/>
FLEET	Corporate Fleet Management of Eagle, Inc.			<input checked="" type="checkbox"/>

The **Sites** tab has two sections:

- The first section shows the list of sites that are currently defined under the selected organizations.
- The other section is an expanded site record displaying the Row Details that can be used for editing or adding new sites.

Site	Description	Ship to Address Code	Bill to Address Code	Active?
MCLEAN	McLean IT Operations Center	MCLEAN	MCLEAN	<input checked="" type="checkbox"/>
BEDFORD	Bedford MA Site of EAGLE Inc. North America	BEDFORDMAIN	BEDFORDMAIN	<input checked="" type="checkbox"/>
HARTFORD	Hartford, CT Site of Eagle Inc. North America	HARTFORD	BEDFORDMAIN	<input checked="" type="checkbox"/>
NASHUA	Nashua Site of Eagle Inc. North America	NASHUA	BEDFORDMAIN	<input checked="" type="checkbox"/>
FLEET	Corporate Fleet Management of Eagle, Inc.			<input checked="" type="checkbox"/>

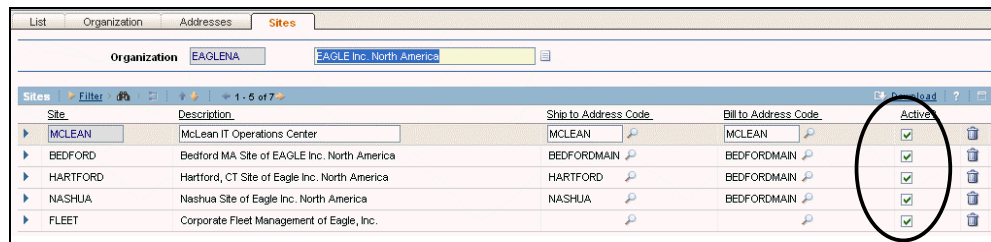
Details	
Site	MCLEAN
Ship to Contact	McLean IT Operations Center
Ship to Address Code	MCLEAN
Bill to Contact	IT only site
Bill to Address Code	ALLAN BALL
Site Contact	IT only site
Site Contact Group	Shawn Nepton
Active?	<input checked="" type="checkbox"/>

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Setting Up Organizations and Sites continued

Deleting and Deactivating a Site

You cannot delete an organization if any sites are associated with it. You also cannot delete a site once it is created, although you can deactivate it. If you want to keep an organization and some of its sites available but want to deactivate one or more of its other sites, select the appropriate **Active?** column check boxes to clear the sites.



Site	Description	Ship to Address Code	Bill to Address Code	Active?
MCLEAN	McLean IT Operations Center	MCLEAN	MCLEAN	<input checked="" type="checkbox"/>
BEDFORD	Bedford MA Site of EAGLE Inc. North America	BEDFORDMAIN	BEDFORDMAIN	<input checked="" type="checkbox"/>
HARTFORD	Hartford, CT Site of Eagle Inc. North America	HARTFORD	BEDFORDMAIN	<input checked="" type="checkbox"/>
NASHUA	Nashua Site of Eagle Inc. North America	NASHUA	BEDFORDMAIN	<input checked="" type="checkbox"/>
FLEET	Corporate Fleet Management of Eagle, Inc.			<input checked="" type="checkbox"/>

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Setting Up Organizations and Sites continued

Entering an Organization



In this exercise you set up Multisite for the XYZ Paper Company's (org) Paper division and its two plants (sites):

- Each plant is in a different state in the United States.
- One site is in Indiana and uses the same billing and shipping information as the organization.
- The other site is in Maine and requires different shipping information, but uses the same billing information.

Note: We are adding an organization and site into the system where other organizations and sites have already been added.

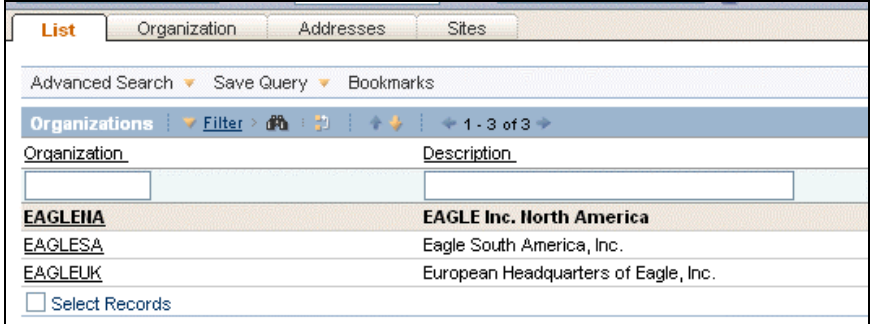

Step	Action
1	If you have not already done so, sign in to the system as: User: wilson Password: wilson <u>Note</u> : The password is case-sensitive.

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Setting Up Organizations and Sites continued

Entering an Organization

continued


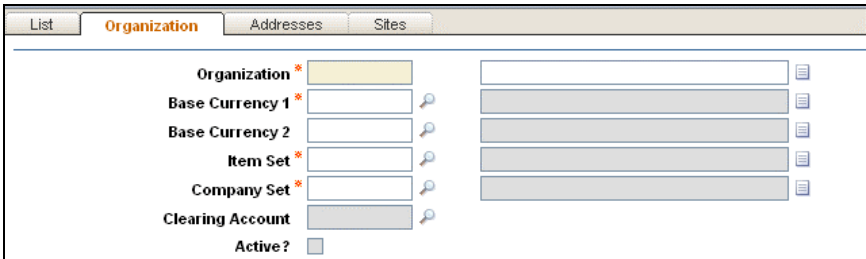
Step	Action
2	<p>In the Administration module, select Organizations.</p> <p><u>Result:</u> The Organizations application opens to the List tab.</p> 
3	<p>Click on the Organization tab.</p> <p><u>Result:</u> Maximo displays the Organization tab.</p> 

continued on next page

Setting Up Organizations and Sites continued

Entering an Organization

continued




Step	Action
4	<p>Click the New Organization button.</p>  <p><u>Result:</u> Maximo displays a blank Organization form that is ready for your input.</p> 

continued on next page

Setting Up Organizations and Sites continued

Entering an Organization

continued

Step	Action														
5	<p>Enter the following information for the new organization:</p> <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Organization</td> <td>PAPER</td> </tr> <tr> <td>Organization Description</td> <td>USA Paper Division</td> </tr> <tr> <td>Base Currency 1</td> <td>USD</td> </tr> <tr> <td>Base Currency 2</td> <td>CAD</td> </tr> <tr> <td>Item Set</td> <td>SET1</td> </tr> <tr> <td>Company Set</td> <td>COMPSET1</td> </tr> </tbody> </table> <p><u>Hint</u>: Use the Select Value buttons  to enter the data.</p> <p> <u>Note</u>: Remember, Maximo will require you to associate a <i>GL clearing account</i> to the organization before you can activate a new organization.</p>	<u>Field</u>	<u>Value</u>	Organization	PAPER	Organization Description	USA Paper Division	Base Currency 1	USD	Base Currency 2	CAD	Item Set	SET1	Company Set	COMPSET1
<u>Field</u>	<u>Value</u>														
Organization	PAPER														
Organization Description	USA Paper Division														
Base Currency 1	USD														
Base Currency 2	CAD														
Item Set	SET1														
Company Set	COMPSET1														
6	<p>Click the Save button.</p> <div style="text-align: center;">  </div> <p><u>Result</u>: The new organization is saved into the database.</p>														

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Setting Up Organizations and Sites continued

Adding Address Information



After adding an organization to the database, you must add address information. Specify shipping and billing addresses at the organization level. The sites attached to the organization will use these addresses for their POs and other relevant documents.

To include these key addresses, follow the steps below:

Step	Action																
1	In the Organizations application, click on the Addresses tab. <u>Result:</u> Maximo displays the Addresses tab.																
2	Click New Row to access the input form for a new address. <u>Result:</u> Maximo displays an Address Details row, as shown below. <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> </div>																
3	Enter the following shipping address information: <table border="0" style="margin-left: 20px;"> <thead> <tr> <th style="text-decoration: underline;">Field</th> <th style="text-decoration: underline;">Value</th> </tr> </thead> <tbody> <tr> <td>Address Code</td> <td>PAINSH</td> </tr> <tr> <td>Description</td> <td>Paper Div – IN Shipping</td> </tr> <tr> <td>Address</td> <td>2398 Emerald Drive</td> </tr> <tr> <td>City</td> <td>Kensington</td> </tr> <tr> <td>State/Province</td> <td>IN</td> </tr> <tr> <td>Zip/Postal Code</td> <td>46219</td> </tr> <tr> <td>Country</td> <td>USA</td> </tr> </tbody> </table>	Field	Value	Address Code	PAINSH	Description	Paper Div – IN Shipping	Address	2398 Emerald Drive	City	Kensington	State/Province	IN	Zip/Postal Code	46219	Country	USA
Field	Value																
Address Code	PAINSH																
Description	Paper Div – IN Shipping																
Address	2398 Emerald Drive																
City	Kensington																
State/Province	IN																
Zip/Postal Code	46219																
Country	USA																
4	Click New Row . <u>Result:</u> The new address will be stored, and a cleared form becomes available for an additional new address.																

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Setting Up Organizations and Sites continued

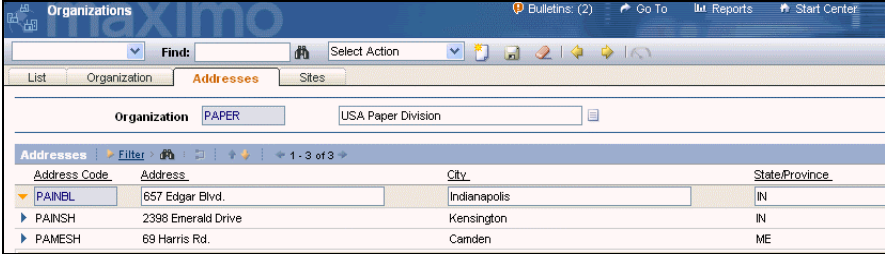
Adding Address Information continued

Step	Action																
5	Enter the following additional new address for billing information: <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Address Code</td> <td>PAINBL</td> </tr> <tr> <td>Description</td> <td>Paper Div – Billing</td> </tr> <tr> <td>Address</td> <td>657 Edgar Blvd.</td> </tr> <tr> <td>City</td> <td>Indianapolis</td> </tr> <tr> <td>State/Province</td> <td>IN</td> </tr> <tr> <td>Zip/Postal Code</td> <td>46216</td> </tr> <tr> <td>Country</td> <td>USA</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Address Code	PAINBL	Description	Paper Div – Billing	Address	657 Edgar Blvd.	City	Indianapolis	State/Province	IN	Zip/Postal Code	46216	Country	USA
<u>Field</u>	<u>Value</u>																
Address Code	PAINBL																
Description	Paper Div – Billing																
Address	657 Edgar Blvd.																
City	Indianapolis																
State/Province	IN																
Zip/Postal Code	46216																
Country	USA																
6	For the third site (Maine), enter the following information for shipping: <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Address Code</td> <td>PAMESH</td> </tr> <tr> <td>Description</td> <td>Paper Div – ME Shipping</td> </tr> <tr> <td>Address</td> <td>69 Harris Rd.</td> </tr> <tr> <td>City</td> <td>Camden</td> </tr> <tr> <td>State/Province</td> <td>ME</td> </tr> <tr> <td>Zip/Postal Code</td> <td>02150</td> </tr> <tr> <td>Country</td> <td>USA</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Address Code	PAMESH	Description	Paper Div – ME Shipping	Address	69 Harris Rd.	City	Camden	State/Province	ME	Zip/Postal Code	02150	Country	USA
<u>Field</u>	<u>Value</u>																
Address Code	PAMESH																
Description	Paper Div – ME Shipping																
Address	69 Harris Rd.																
City	Camden																
State/Province	ME																
Zip/Postal Code	02150																
Country	USA																

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Setting Up Organizations and Sites continued

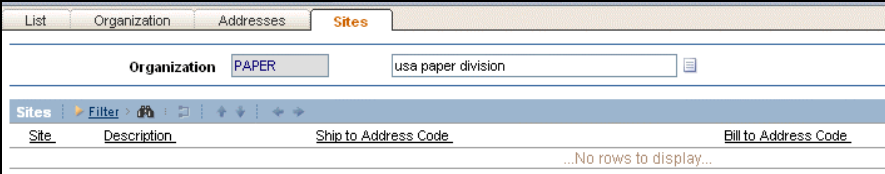
Adding Address Information continued

Step	Action
7	<p>Click the Save button.</p> <p><u>Result:</u> You now have three addresses in the PAPER organization from which to choose when setting up sites.</p> 

Adding Sites



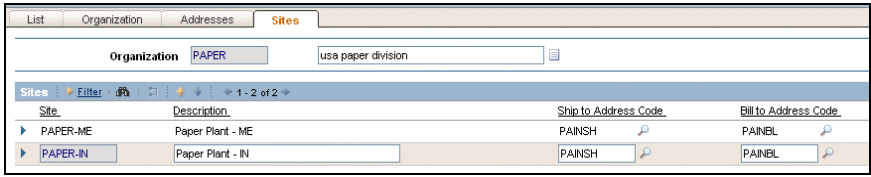
Follow the steps below to add the organization's sites.

Step	Action
1	<p>Access the Sites tab.</p> <p><u>Result:</u> Maximo displays the Sites tab.</p> 

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Setting Up Organizations and Sites continued

Adding Sites continued

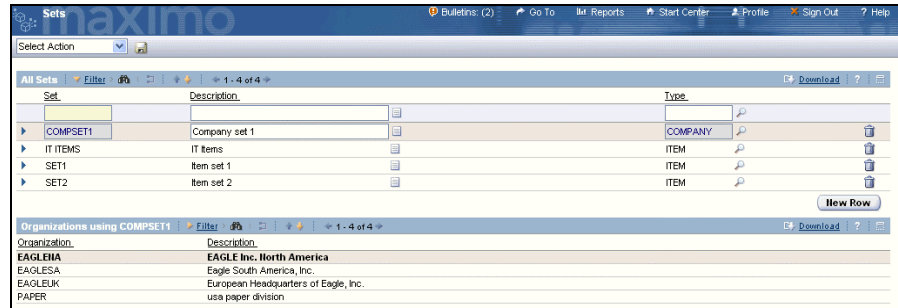
Step	Action						
2	<p>Click New Row and enter the following information:</p> <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Site</td> <td>PAPER-IN</td> </tr> <tr> <td>Description</td> <td>PAPER PLANT – IN</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Site	PAPER-IN	Description	PAPER PLANT – IN
<u>Field</u>	<u>Value</u>						
Site	PAPER-IN						
Description	PAPER PLANT – IN						
3	<p>Enter the information indicated below:</p> <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Ship To Address Code</td> <td>PAINSH</td> </tr> <tr> <td>Bill To Address Code</td> <td>PAINBL</td> </tr> </tbody> </table> <p><u>Hint</u>: Use the Select Value icon.</p>	<u>Field</u>	<u>Value</u>	Ship To Address Code	PAINSH	Bill To Address Code	PAINBL
<u>Field</u>	<u>Value</u>						
Ship To Address Code	PAINSH						
Bill To Address Code	PAINBL						
4	<p>Save the record.</p> <p><u>Result</u>: You now have created a site record for the Indiana paper plant.</p>						
5	<p>Insert a site for the paper plant in Maine. Copy the Shipping and Billing address codes you used for Indiana. Save your record.</p> <p><u>Result</u>: Two sites have been added to the Paper Division: Indiana and Maine.</p> 						

continued on next page

Setting Up Organizations and Sites continued

Sets Revisited

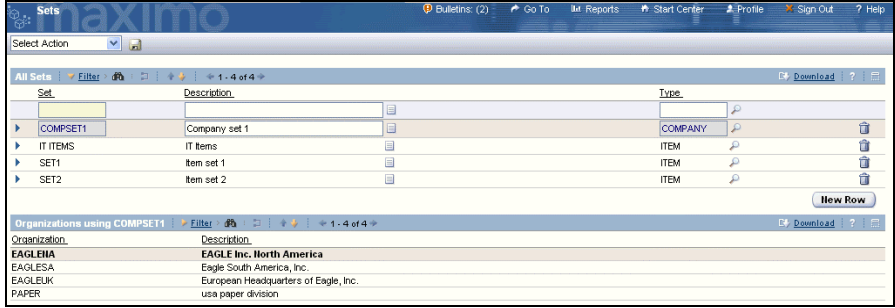
You use the Sets application to create a framework for sharing item and company (vendor) data across multiple organizations.



Viewing Sets



After creating a new organization, you can use the **Sets** application to view which organizations share the same item and company sets.

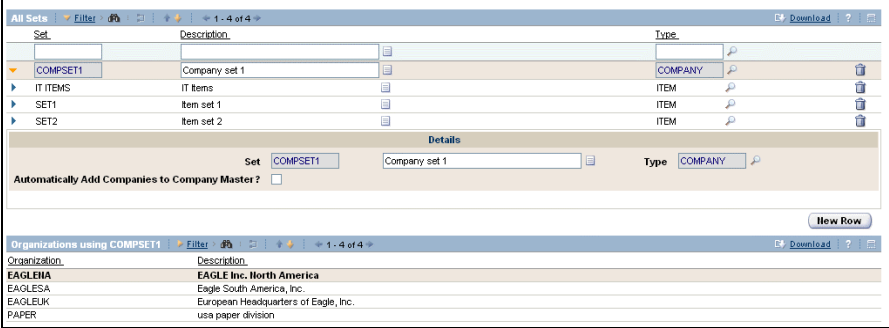
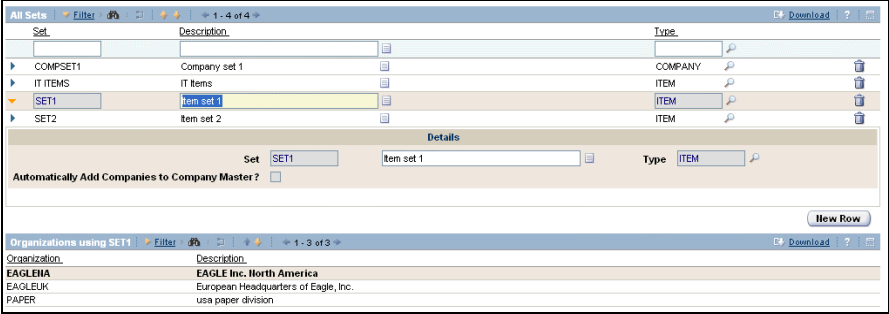
Step	Action
1	<p>Access the Sets application from the Administration module.</p> <p><u>Result:</u> Maximo displays the Sets application:</p> 

continued on next page

Setting Up Organizations and Sites continued

Viewing Sets

continued

Step	Action
2	<p>Click to highlight COMPSET1 to view the organizations using COMPSET1.</p> <p><u>Result:</u> Organizations using COMPSET1 are shown.</p>  <p><u>Note:</u> The PAPER organization you added can now share data access to organizations and sites associated with COMPSET1.</p>
3	<p>Click on SET1 to view the organizations using SET1.</p> <p><u>Result:</u> Organizations using SET1 are shown.</p> <p><u>Note:</u> The PAPER organization you added can now share data access to organizations and sites associated with SET1.</p> 

Organization Application Options Overview

Introduction

This section gives a more detailed overview of application setup options available at the organization and site levels. More detailed use of these options is covered in subsequent chapters as they relate to a specific business function.

Organization Options



When setting organization-level options, remember the following considerations:

- Options defined at the organization level apply to all sites in that organization.
 - Sites in the same organization can share data, whereas sites in different organizations cannot unless they belong to the same set.
-

Organization-Level Settings

The following application options contain organization-level settings:

- Work Order Options
 - Inventory Options
 - Assets Options
 - Drilldown Options
 - PO Options
 - Invoice Options
 - Labor Options
 - SLA Options
 - Approval Limits
 - Autonumber
-

continued on next page

Organization Application Options Overview continued

Description of Organization-Level Options

The following table describes options available at the organization level. Remember, options set at the organization level will pertain to all of the organization's sites.

This organization-level option...	Allows you to...
Work Order	<ul style="list-style-type: none"> • Define, edit, add new work types, or modify existing work • Set edit rules to specify which work order properties can be edited for a given work order • Display dialog boxes and work order prompts • Set actual start date
Inventory	<ul style="list-style-type: none"> • Configure inventory orders • Set ABC breakpoint options, negative availability, and negative current balances • Specify whether Maximo creates an approved or unapproved purchase requisition (PR) or purchase order (PO) when a reorder request is generated
Assets	Determine which asset status changes to record and set the default meter reading weight factor
Drilldown	Determine whether the Drilldown for the Assets field opens to the Asset hierarchy or the Location hierarchy

continued on next page

Organization Application Options Overview continued

Description of Organization-Level Options continued

This organization-level option...	Allows you to...
PO	<ul style="list-style-type: none"> • Require users to get approval to convert PRs to POs • Have Maximo change the PR status to CLOSED automatically after all PR lines have been copied to POs • Have Maximo add standard service costs to direct-issue items only • Have Maximo create an approved PO automatically from an agreement type PO when the PR is approved • Have Maximo automatically close POs on invoice approval
Invoice	<ul style="list-style-type: none"> • Set tolerances by user group for how closely an invoice must match a PO to be accepted in automatic invoice matching • Set the upper and lower amounts and percentages columns, and enter the amounts and/or percentages by which an invoice and PO can differ and still be matched • Set variance limits for tax charges
Labor	<ul style="list-style-type: none"> • Automatically approve inside and/or outside labor • Indicate whether outside labor will require a PO by default
SLA	Set single or multiple service level agreements
Autonumber	Set automatic numbering for system, organization, set, and site levels

continued on next page

Organization Application Options Overview continued

Site Options



When setting site options, keep the following considerations in mind:

- Certain data options are set individually from site to site.
- Settings for one site do not affect data in other sites, even if they belong to the same organization.

Site-level Settings

You can set site-level data options for the following types of information:

- Inventory Options
- Work Order Options
- Workflow Options
- PM Options
- E-commerce

Description of Site-level Options

Below are descriptions of options available at the site level. Remember, options set at the site level are set individually and settings for one site do not affect data in other sites.

This site-level option...	Allows you to...
Work Order	<ul style="list-style-type: none"> • Set site-level work order task ID numbering • Generate work orders without running Maximo using the WOKEN cron task
Inventory	Specify the default issue and order costs you want Maximo to use
Workflow	Specify whether Maximo will automatically enter records into Workflow when they are created
PM	<ul style="list-style-type: none"> • Have Maximo evaluate the selected records to determine which PMs are due to generate work orders • Generate work orders for the selected master PMs (and its children if applicable) and PMs that are not master PMs

continued on next page

Organization Application Options Overview continued

Class Discussion



Sweet Stuff, Inc. has two operations approximately 120 miles apart under its Massachusetts (MA) division: one in Waltham (WM) and another in Peabody (PB). WM has two warehouses and PB has one. Two separate IT groups maintain the IT networks and assets at WM and PB independently. However, one branch (WM) handles procurement inventory requirements for both operations.

By setting up the WM and PB branches as separate sites, what does this allow them to do regarding:

- Inventory management?
- Procurement?
- Other benefits?

Discussion Considerations



While the solutions/considerations offered below are not the only ones, they can serve to facilitate discussion in the class.

Setting up the WM and PB branches as separate sites allows the following benefits:

- **Regarding inventory management**

Setting up MA as an organization and WM and PB as sites will allow those sites to view each other's warehouses. This will enable the sharing of inventory and allow inventory levels at each site to be lowered, which will reduce costs.

- **Regarding procurement**

With arrangement of having one site handle the procurement, orders for the two sites are separate, but can use the same purchase agreement to buy parts, resulting in a volume discount.

GL Account and Organization/Site Activation

Introduction

As we discussed earlier, after a new organization is created in the system, it is not yet activated. You cannot activate it until you have:

- Specified GL account formats, and
 - Created GL accounts.
-

Section Focus

This section is a *brief* overview of the formatting and creation of GL account data. For more in-depth information on this topic, please refer to the *System Administrator's Guide* or the *Finance Manager's Guide*.

continued on next page

GL Account and Organization/Site Activation continued

GL Account Configuration

You use the **Database Configuration** application to not only create and specify GL account formats, but also to create or modify the objects and attributes used by Maximo applications, which can include:

- Changing column definitions
- Attaching domains to columns
- Creating new user-defined objects
- Adding new columns to existing objects
- Creating and dropping indexes
- Create views to look at data from a single object or multiple objects
- Specifying GL account formats
- Setting the Amount field format
- Updating statistics on indexes to improve database performance
- Configuring Maximo with multiple languages
- Setting up electronic signatures and electronic audit records

The screenshot displays the 'Database Configuration' application window. The main area is titled 'Object' and shows configuration for 'The ASSET Table'. The 'Details' section includes fields for Service (ASSET), Description (Asset), Entity (ASSET), Class (psdi.app.asset.AssetSet), and Level (SITE). It also features checkboxes for Main Object?, Persistent?, User Defined?, Imported?, and Internal?. Storage Partition is set to MAXIMO, Unique Column is ASSETUID, and Language Column is LANGCODE. Other options include Add Rowstamp?, Is Language Table?, Is Audit Table?, Text Search Enabled?, and Restore Data (N). The 'View' section has View?, View Where, Join to Object, View Select, Automatically Select?, and View From. The 'Audit' section includes Audit Enabled? (checked), Audit Table (A_ASSET), E-audit Filter, and E-signature Filter.

continued on next page

GL Account and Organization/Site Activation continued

Account Components

Each general ledger account code consists of a number of distinct components (also called *segments*). In Database Configuration, you define the account code format using the **GL Account Configuration** action.

The screenshot shows the 'GL Account Configuration' window. It contains a table with the following data:

Component	Length	Type	Required?	Screen Delimiter
COST CENTER	4	INTEGER	<input checked="" type="checkbox"/>	-
ACTIVITY	3	ALN	<input checked="" type="checkbox"/>	-
RESOURCE	3	ALN	<input checked="" type="checkbox"/>	-
ELEMENT	10	ALN	<input type="checkbox"/>	

Below the table is a 'Details' section for the selected 'ELEMENT' component:

Component *	ELEMENT	Required?	<input type="checkbox"/>
Length *	10	Screen Delimiter	
Type *	ALN	GL Order	3

Buttons at the bottom include 'New Row', 'OK', and 'Cancel'.

Account Code

For any account code, you can:

- Define up to 20 components.
- Include up to 254 characters/digits, not including delimiters (unless you choose to include the delimiters as part of the account code).

continued on next page

GL Account and Organization/Site Activation continued

Implementation Consideration



When specifying your GL accounts, use delimiters to separate components when they are displayed on the screen. For example, you might use hyphens to separate components: 6100-400-SAF.

Note: By default, Maximo writes account strings to the database in a concatenated format, without delimiters.

GL Order and Component Sequence

The GL account components are displayed in a sequential format, with the leftmost component in the string representing the highest level. For example, in the MAXDEMO database, four component levels are defined:

- Component 1 = Cost Center
- Component 2 = Activity
- Component 3 = Resource
- Component 4 = Element

The **GL Order** field indicates component sequence. When entering the GL order, start with 0 to represent the highest level.

Details	
Component *	COST CENTER
Length *	4
Type *	INTEGER
Required?	<input checked="" type="checkbox"/>
Screen Delimiter	-
GL Order	0

continued on next page

GL Account and Organization/Site Activation continued

Required Field

Within an account code, a component can be required or optional, but optional components must come at the end of the sequence. For example, you cannot have the second component optional and the third component required. If you do, you will receive an error message when you save. To indicate that the component is required, select the **Required?** field.

The screenshot shows a 'Details' form with the following fields:

Component *	COST CENTER	Required?	<input checked="" type="checkbox"/>
Length *	4	Screen Delimiter	-
Type *	INTEGER	GL Order	0

The 'Required?' checkbox is circled in the original image.

continued on next page

GL Account and Organization/Site Activation continued

GL Accounts and Organizations

Maximo stores GL accounts at the organization level. Therefore, each organization must have its own chart of accounts system, and GL accounts cannot be shared across organizations.

Chart of Accounts

In Chart of Accounts, you specify which components are valid for use in Maximo. You use the **Chart of Accounts** application to perform the following actions:

- Create, view, and modify general ledger account codes and components.
- Set up financial periods.
- Set up a number of default GL accounts, including an organization account, company-related accounts, and external labor control accounts.
- Define resource codes.
- Specify GL validation options.

The screenshot shows the 'Chart of Accounts' application interface. It features a top navigation bar with 'Select Action' and various utility icons. Below the navigation bar, there are two main data tables. The first table, titled 'Organizations', lists four organizations: EAGLENA (EAGLE Inc. North America), EAGLESA (Eagle South America, Inc.), EAGLEUK (European Headquarters of Eagle, Inc.), and PAPER (USA Paper Division). The second table, titled 'GL Accounts for EAGLENA', lists 10 GL accounts with columns for GL Account, Description, Type, and Active? status. A 'New Row' button is visible at the bottom right of the table.

Organization	Description	Active?
EAGLENA	EAGLE Inc. North America	Y
EAGLESA	Eagle South America, Inc.	Y
EAGLEUK	European Headquarters of Eagle, Inc.	Y
PAPER	USA Paper Division	N

GL Account	Description	Type	Active?
6000-200-000	Environ+Needham+General	EXP	<input checked="" type="checkbox"/>
6000-200-200	Environ+Needham+Item	EXP	<input checked="" type="checkbox"/>
6000-200-300	Environ+Needham+Labor	EXP	<input checked="" type="checkbox"/>
6000-200-350	Environ+Needham+Contract Labor	EXP	<input checked="" type="checkbox"/>
6000-200-400	Environ+Needham+Tool	EXP	<input checked="" type="checkbox"/>
6000-200-450	Environ+Needham+Leased Tool	EXP	<input checked="" type="checkbox"/>
6000-200-SAF	Environ+Needham+Safety	EXP	<input checked="" type="checkbox"/>
6000-200-SUP	Environ+Needham+Supervisor	EXP	<input checked="" type="checkbox"/>
6000-229-000	Noise Reduction+Needham+General	EXP	<input checked="" type="checkbox"/>
6000-229-200	Noise Reduction+Needham+Item	EXP	<input checked="" type="checkbox"/>

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GL Account and Organization/Site Activation continued

**Reminder:
Minimum
Requirements**



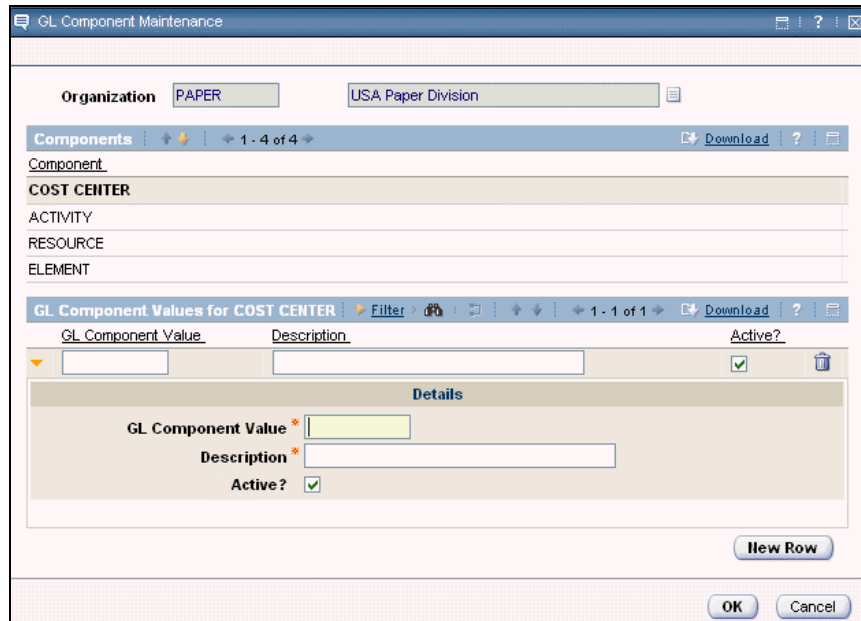
As discussed, an organization must have a GL clearing account before you can make it active. Therefore, after you create an organization, you must, at minimum, have one chart of accounts to create a clearing account for the organization. You can create or download other accounts as well.

continued on next page

GL Account and Organization/Site Activation continued

Defining the GL Component Code

Before you can create the GL account codes for an organization, you have to define them for the organization. You access the **GL Component Maintenance** dialog box from the **Select Action** menu to enter and edit component codes.



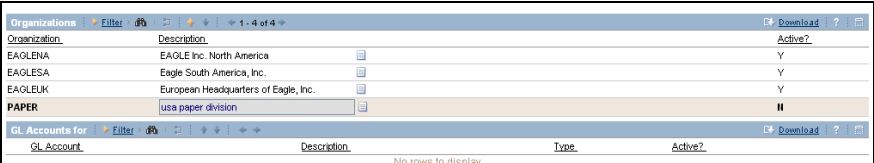
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GL Account and Organization/Site Activation continued

Defining GL Account Components



Follow the steps below to define the components codes for the PAPER organization.

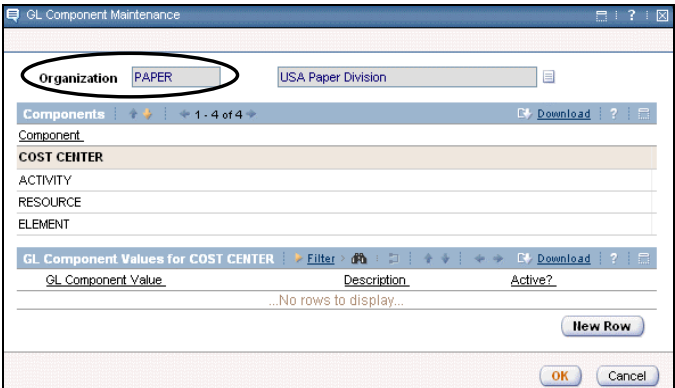
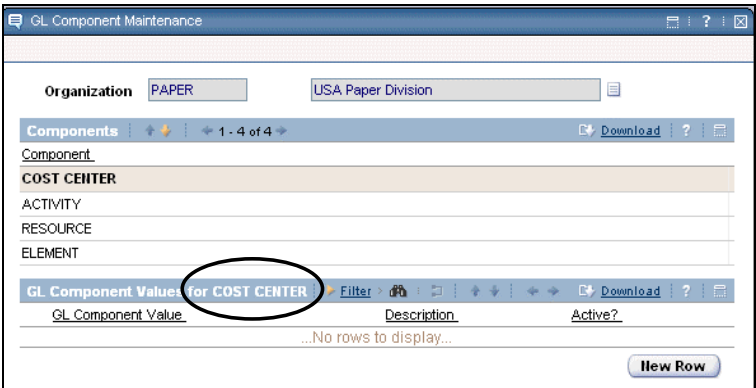
Step	Action
1	From the Financial module, select the Chart of Accounts application.
2	<p>From the Organizations list in the Chart of Accounts application, click on the PAPER organization.</p> <p><u>Result:</u> The PAPER organization is highlighted and the GL Accounts for table window should contain no GL accounts.</p> 

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GL Account and Organization/Site Activation continued

Defining GL Account Components

continued

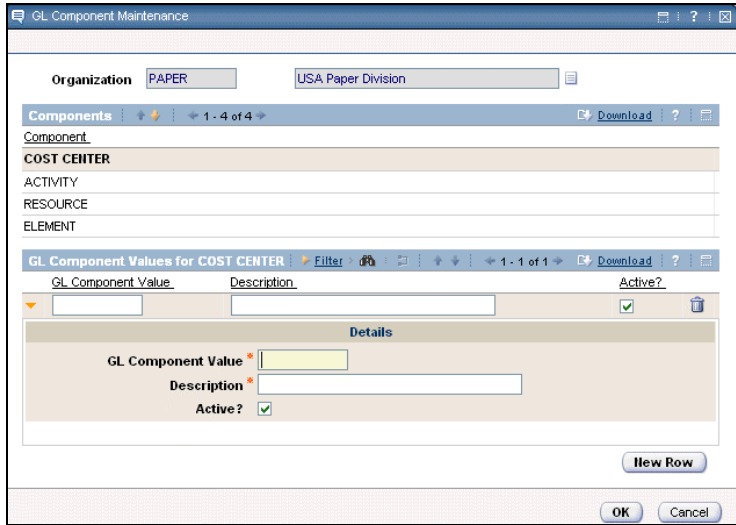
Step	Action
3	<p>From the Select Action menu, select GL Component Maintenance.</p> <p><u>Result:</u> The GL Component Maintenance dialog box opens. The Components table window lists the names of the components in the selected organization, PAPER.</p> 
4	<p>In the Components table window, click on the COST CENTER component.</p> <p><u>Result:</u> The GL Component Values for table window indicates the COST CENTER component.</p> 

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GL Account and Organization/Site Activation continued

Defining
GL Account
Components

continued



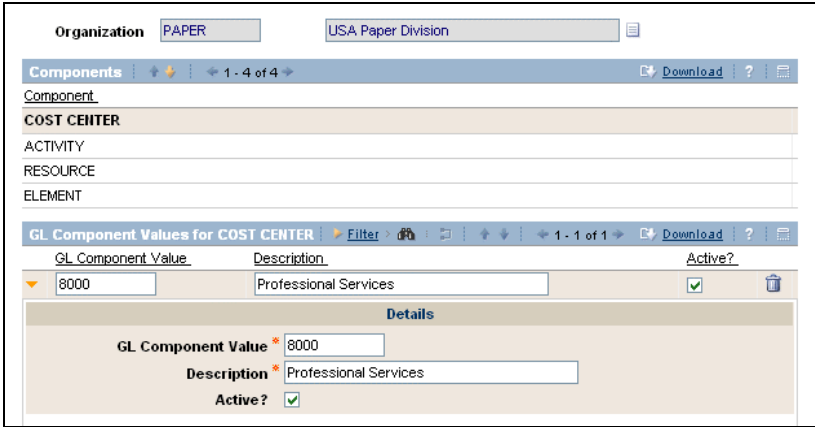
Step	Action
5	<p>Click the New Row button.</p> <p><u>Result:</u> The Details row opens.</p> 

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GL Account and Organization/Site Activation continued

Defining GL Account Components

continued

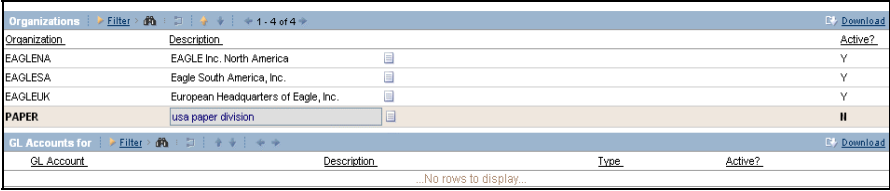
Step	Action
<p>6</p>  	<p>Enter 8000 in the GL Component Value field, then enter Professional Services in the Description field.</p> <p><u>Note:</u> Remember, you format the GL account codes using the GL Account Configuration action in the Database Configuration application.</p> <div style="border: 1px solid black; padding: 5px;">  </div> <p><u>Note:</u> The Active? check box is selected by default. Users will be able to select this component value when they use the Select GL Account dialog box.</p> <p>To make the component value inactive, you would clear the Active? check box. In that case, the value would not appear in the Select GL Account dialog box.</p> <p><i>For these exercises, we will leave the Active? check box selected.</i></p>
<p>7</p>	<p>Highlight the ACTIVITY component and then click New Row. Enter 100 in the GL Component Value field, and then enter Education in the Description field.</p>

continued on next page

GL Account and Organization/Site Activation continued

Defining GL Account Components

continued

Step	Action
8	Highlight the RESOURCE component and then click New Row . Enter 001 in the GL Component Value field, and then enter General in the Description field.
9	<p>Click OK.</p> <p><u>Result:</u> You are brought back to the Chart of Accounts screen.</p> 

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GL Account and Organization/Site Activation continued

Creating GL Accounts

After the component codes are defined for an organization, you can create the GL accounts for the organization. GL account codes are created by linking together the previously established component values.

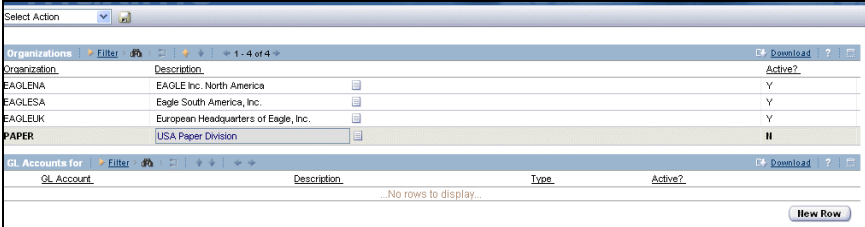
Type

The **Type** field is a user-defined code to signify the kind of account. For example, your company might use account type codes to represent expense accounts, capital accounts, shrinkage accounts, and so forth.

Creating GL Accounts for Organizations



Follow the steps below to create a GL account for the PAPER organization.

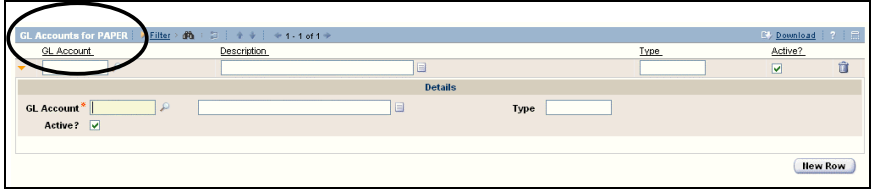
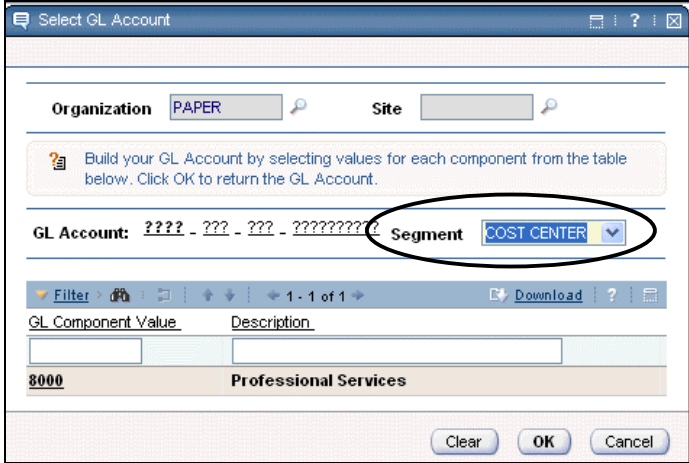
Step	Action
1	<p>In the Organizations table window, select the PAPER organization by clicking on it to highlight it.</p> <p><u>Result:</u> The PAPER organization is highlighted.</p> 

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GL Account and Organization/Site Activation continued

Creating GL Accounts for Organizations

continued

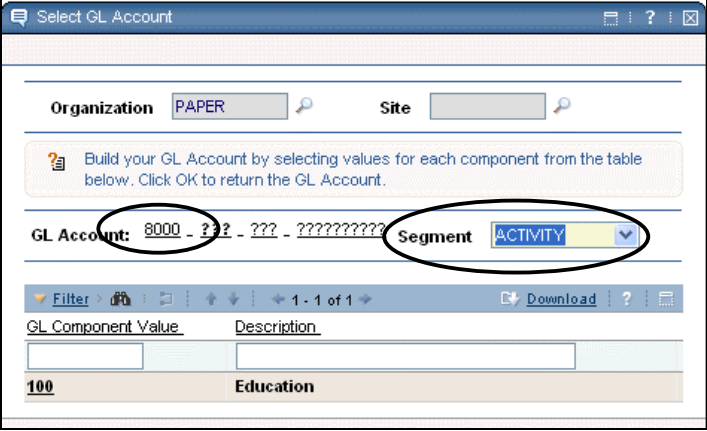
Step	Action
2	<p>Click the New Row button.</p> <p><u>Result:</u> The GL Accounts for table window indicates PAPER.</p> 
3	<p>Click the GL Account field Select Value button.</p> <p><u>Result:</u> The Select GL Account dialog box opens. Because we defined only one component code value (8000) for the COST CENTER segment, only one is displayed.</p> 

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GL Account and Organization/Site Activation continued

Creating GL Accounts for Organizations

continued

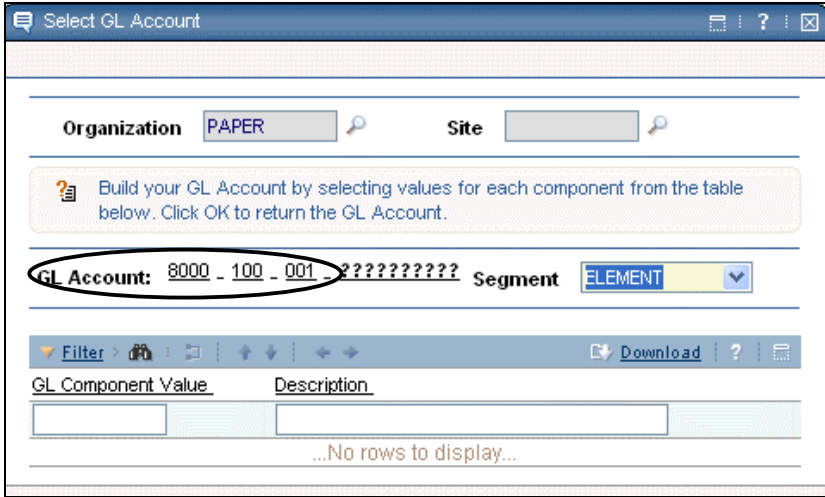
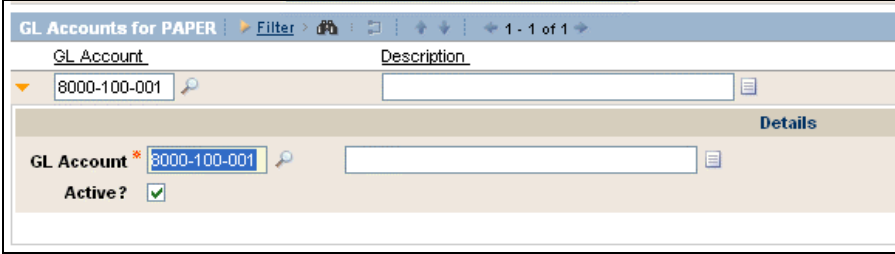
Step	Action
4	<p>Click on 8000.</p> <p><u>Result:</u> 8000 is the first segment and ACTIVITY now populates the Segment field.</p> 

continued on next page

GL Account and Organization/Site Activation continued

Creating GL Accounts for Organizations

continued

Step	Action
5	<p>For each segment, enter the defined value. (Remember, there will be only one per component because that's all that we entered.)</p> <p><u>Result:</u> When finished, your GL account should look like the one below.</p> 
6	<p>Click OK and then Save.</p> <p><u>Result:</u> You are returned to the GL Accounts screen and your GL Account field should read 8000-100-001.</p> 

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GL Account and Organization/Site Activation continued

Activating the Organizations and Sites



After a GL account has been established for an organization, you can activate it. Follow the steps below to activate the PAPER organization.

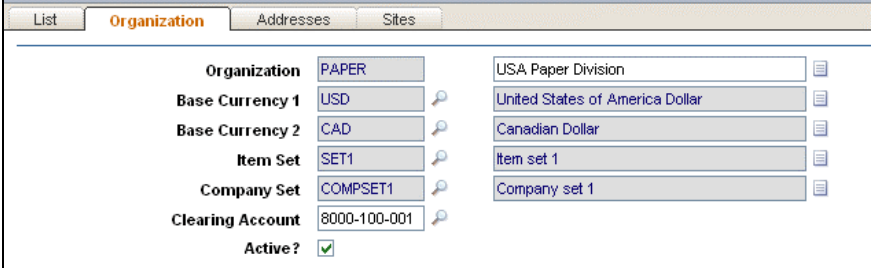
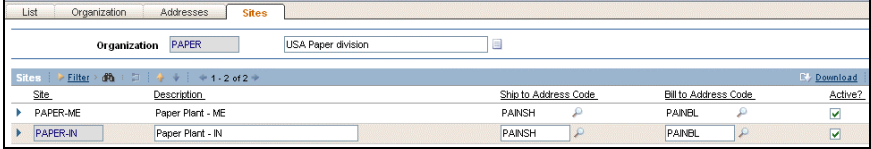
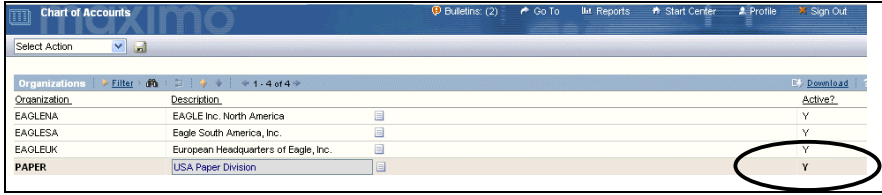
Step	Action
1	Go to the Organizations application.
2	<p>Retrieve PAPER.</p> <p><u>Result:</u> Your screen should look like the one below. Notice that PAPER is not activated.</p> <div style="border: 1px solid black; padding: 5px;"> <p>The screenshot shows the 'Organization' tab selected. Fields include: Organization (PAPER), Base Currency 1 (USD), Base Currency 2 (CAD), Item Set (SET1), Company Set (COMPSET1), and Clearing Account (empty). A list of related items is shown on the right: USA Paper Division, United States of America Dollar, Canadian Dollar, Item set 1, and Company set 1. The 'Active?' checkbox at the bottom is unchecked.</p> </div>
3	<p>In the Clearing Account field, click the Select Value button and then select the GL account components for this organization.</p> <p><u>Hint:</u> Remember, we defined and created only one component per segment.</p> <p><u>Result:</u> Your screen should look like the one below.</p> <div style="border: 1px solid black; padding: 5px;"> <p>The screenshot is identical to the previous one, but the 'Clearing Account' field now contains the value '8000-100-001' and is circled in black. The 'Active?' checkbox remains unchecked.</p> </div>

continued on next page

GL Account and Organization/Site Activation continued

Activating the Organizations and Sites

continued

Step	Action
4	<p>To activate this organization, click to select the Active? check box and then Save the record.</p> <p><u>Result:</u> Your screen should look like the one below.</p> 
5	<p>To activate the sites, click on the Sites tab, select the Maine and Indiana sites by clicking the Active? check box, and then Save your record.</p> <p><u>Result:</u> Your screen should look like the one below.</p> 
6	<p>To check that it is an active GL account, go to the Chart of Accounts application.</p> <p><u>Result:</u> The PAPER organization is Active.</p> 

Deleting and Deactivating Organizations and Sites

Introduction

After records in most applications are created and used, Maximo limits:

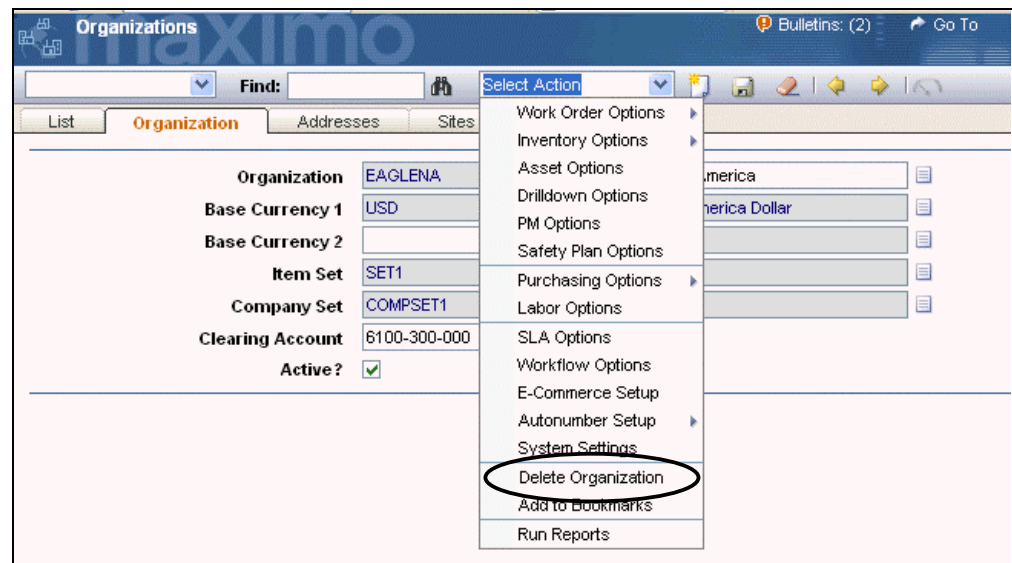
- which records can be permanently removed (deleted),
- when they can be deleted, and
- by whom they can be deleted.

These limitations help safeguard database integrity. Without your having to delete this information from the database, Maximo allows records to be *deactivated*. Deactivating instead of deleting allows the information to remain in the database, but it is flagged as unavailable for use.

Deleting an Organization

You can delete an organization from the system *only if there are no sites associated with it*. When you delete an organization, the record is removed from the database table organization.

To delete an organization, access the organization from the **Organization** tab and select **Delete Organization** from the **Select Action** menu. This removes the organization and all its information from the database.



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Deleting and Deactivating Organizations and Sites continued

Deactivating an Organization

As opposed to deletion, an organization can be deactivated whether or not it has sites. You always have the option to reactivate a deactivated organization. Note the following facts about deactivated organizations:

- Users cannot access or make entries into the deactivated organization.
- Users cannot sign in to sites at that organization.
- Records that refer to the deactivated organization are not affected.

To deactivate an organization, access the organization from the **Organization** tab, clear the **Active?** check box, and then click **Save**.

After you deactivate an organization, the **Active?** column on the **Sites** tab shows all sites as being inactive (cleared).

continued on next page

Deleting and Deactivating Organizations and Sites continued

The Active? Check Box



To activate an organization, check the **Active?** check box. Sites attached to the organization are not automatically activated. You must activate each site *manually* by *checking* the **Active?** check box..

Deactivating a Site Within an Organization

You can deactivate a site at any time. Deactivating a site prevents users from accessing the site, but does not remove records that refer to the site from the database. If you want to keep an organization active and want to deactivate one or more of its other sites, follow these steps:

1. From the **Sites** tab, select the line for the site you want to deactivate.
2. Clear the **Active?** check box.
3. Click the **Save** icon.

The screenshot shows a web-based application interface. At the top, there's a navigation bar with tabs for 'List', 'Organization', 'Addresses', and 'Sites'. The 'Sites' tab is active. Below the tabs, the organization is set to 'EAGLENA' (EAGLE Inc. North America). A table lists several sites. The 'HARTFORD' site is highlighted, and its 'Active?' checkbox is unchecked. A callout box with the text 'Site is deactivated' points to this checkbox. Below the table, the details for the 'HARTFORD' site are shown, including fields for 'Ship to Contact', 'Ship to Address Code', 'Bill to Contact', 'Bill to Address Code', 'Site Contact', and 'Site Contact Group'. The 'Active?' checkbox at the bottom of this form is also unchecked.

Site	Description	Ship to Address Code	Bill to Address Code	Active?
MCLEAN	McLean IT Operations Center	MCLEAN	MCLEAN	<input checked="" type="checkbox"/>
BEDFORD	Bedford MA Site of EAGLE Inc. North America	BEDFORDMAIN	BEDFORDMAIN	<input checked="" type="checkbox"/>
HARTFORD	Hartford, CT Site of Eagle Inc. North America	HARTFORD	BEDFORDMAIN	<input type="checkbox"/>
NASHUA	Nashua Site of Eagle Inc. North America	NASHUA	BEDFORDMAIN	<input checked="" type="checkbox"/>
FLEET	Corporate Fleet Management of Eagle, Inc.			<input checked="" type="checkbox"/>

Chapter Summary

Organization and Site Defined

The *organization* and *site* concepts are used in the Multisite environment.

- An **organization** is a major division of a company that contains one or more sites. Sites belonging to the same organization use the same currency and share the same options for work orders, assets, labor, and other types of data.
- A **site** is a subdivision of an organization that might track inventory and other data separately from other sites. Certain site information is unique to the site and is not visible to other sites even though they belong to the same organization and share the same database. Generally, sites will:
 - belong to the same organization,
 - use the same *currency*, and
 - share the same options for work orders, assets, labor, and other types of data.

Sites and organizations are logical divisions of a company determined by what types of operations are performed at certain locations, and what data can be shared by certain locations.

The Organizations Application

After an analysis of your company is done and the organization and site structure is determined, you can set up your sites using the Organizations application. This application lets you enter, modify, and configure options for organizations and sites.

Three Levels

The Maximo database and Organizations specifically allow clients to organize their data to more closely match their logical (organizational) structure.

- Some elements reside at the database or system level and are available for the entire company.
 - Other elements reside at the organization level and are available only to users in a particular organization.
 - Finally, some data is available only to users at specific *sites* in an organization.
-

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Chapter Summary continued

The Sets Application

You use the Sets application to create a framework for sharing item and company (vendor) data across multiple organizations.

Maximo stores both item and company master records in sets. These sets exist above the organization level so that organizations can share the same data.

Types of Sets

There are two types of sets used in Maximo:

- **Item** sets are for assets.
- **Company** sets are for vendors and other external business entities with which organizations do business.

Each organization can use only one item set and company set, so only organizations that share these same sets can share data.

However, only the item and/or company sets that are mutually employed can be shared between organizations.

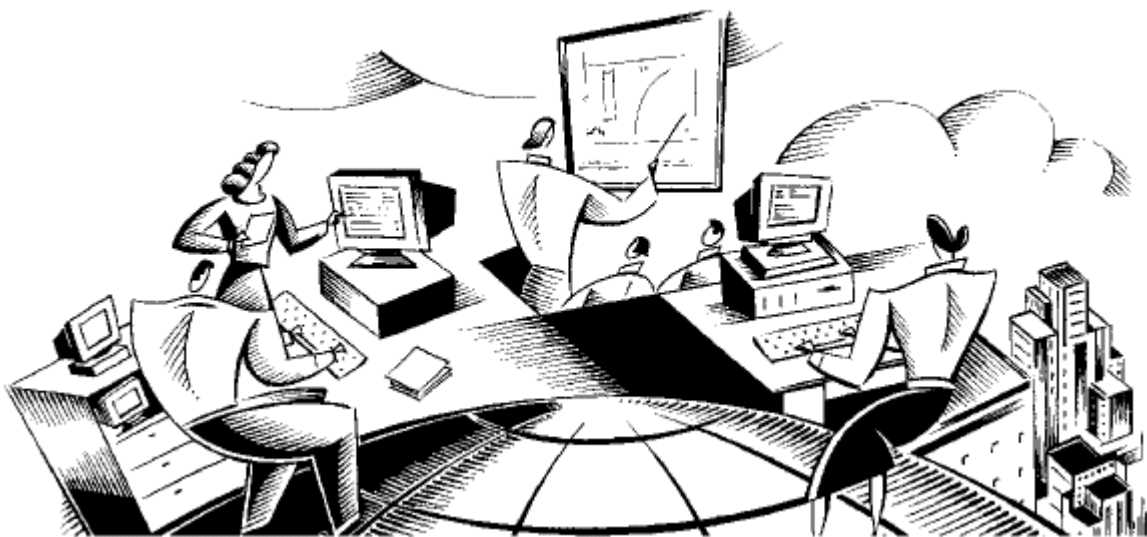
Sets and Organizations

The following rules apply to sets and organizations:

- You can create as many item and company sets as your business practices require.
- You *must* associate each organization with one, *and only one*, company set.
- You *must* associate each organization with one, *and only one*, item set.
- The same item or company set can be used by multiple organizations.

Note: You must create at least one item set and one company set before you can create *any* organization.

Chapter 4: Setting Up the Classification Structure



In This Chapter

This chapter contains the following topics:

Topic	See Page
Chapter Overview	4-1
Classifications Setup	4-7
Classifications and Specification Attributes	4-24
The Connection: Attributes and Reconciliation	4-29
Assigning Attributes and Classifications	4-38
Chapter Summary	4-43
Review Questions	4-44

Chapter Overview

Introduction

Maximo includes functionality called *classifications* to help companies keep track of their increasingly complex list of assets.

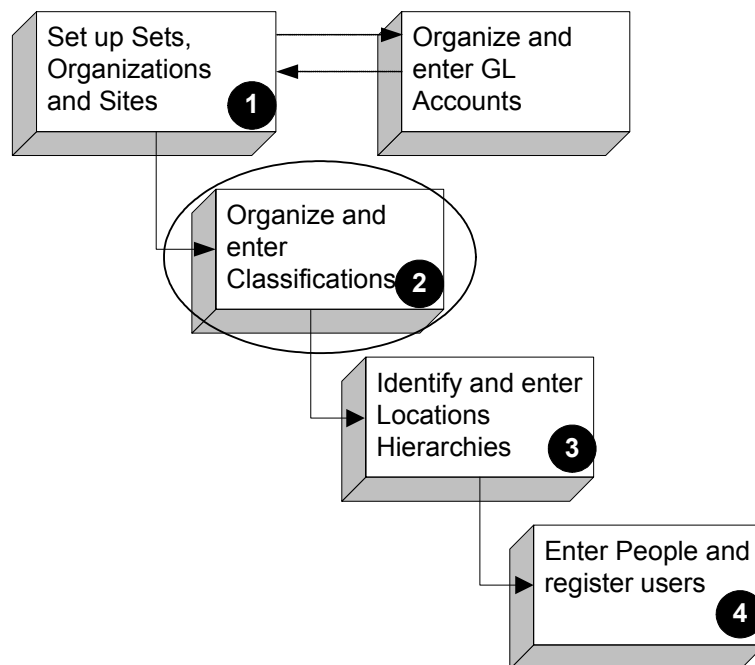
Learning Objectives

When you have completed this chapter, you should be able to:

- define classifications and their role in Maximo,
 - create a classification,
 - associate specification attributes to classifications,
 - identify the two distinct sets of IT asset data that Maximo captures in the Assets application and the Deployed Assets module, and
 - discuss the attribute relationship between authorized assets and deployed assets in Maximo.
-

We Are Here

Define and develop your classification structures.



continued on next page

Chapter Overview continued

Implementation Considerations

Some implementation questions regarding classifications are as follows:

- Do you use a discovery agent to audit your organization's assets?
 - Is a formal definition of asset classes employed?
 - Is a formal definition of inventory items classes employed?
 - Are assets identified by the United Nations Standard Products and Services Code[®] (UNSPSC[®])?
 - Are service tickets, changes, and release orders classified?
 - If classifications are employed, how is this information used? Where is it used?
 - Who manages the classification structure?
-

Why Classify?

Classifying products, assets, or services brings a single, uniform view of all expenditures in a company, and enables more efficient management and reporting of data.

continued on next page

Chapter Overview continued

Overview: IT Asset Data in Maximo

Maximo maintains two distinct sets of IT asset data in two Maximo modules: the **Assets** module and the **Deployed Assets** module.

- Maximo maintains asset records for purchased or leased IT assets in the **Assets** application.

The screenshot shows the 'Assets' application interface. At the top, there's a navigation bar with 'List', 'Asset', 'Spare Parts', 'Safety', 'Meters', and 'Specifications' tabs. The main area displays details for asset 1234, which is an IT (UNSPSC) Computer Equipment. The status is 'NOT READY' and the site is 'BEDFORD'. Below this, there are sections for 'Details', 'Purchase Information', and 'Downtime'. The 'Details' section includes fields for Parent, Location, Bin, Rotating Item (DT66), Condition Code, Meter Group, Usage, Calendar, Shift, Priority, Serial #, Failure Class, Item Type (ITEM), and Tool Rate. The 'Purchase Information' section includes Vendor, Manufacturer, Installation Date, Purchase Price (0.00), and Replacement Cost (0.00). The 'Downtime' section shows 'Asset Up?' checked, 'Last Changed Date' as 8/9/05 1:56 PM, and 'Total Downtime' as 0.00. The 'Modified' section shows 'Changed By' as WILSON and 'Changed Date' as 8/9/05 1:56 PM.

You create these records in the **Assets** application or when you use the **Receive Rotating Items** action in the **Receiving** application. Classifications for asset records created in this application will use classifications and attributes set up in the **Classifications** application.

The screenshot shows the 'Classifications' application interface. At the top, there's a navigation bar with 'List', 'Classifications', and 'Specifications' tabs. The main area displays details for classification 'CENTRFGL'. The 'Classification Path' is 'PUMP \ CENTRFGL' and the 'Parent Classification' is 'PUMP'. The 'Description' is 'Centrifugal Pump'. Below this, there are sections for 'Description Generation Details' and 'Attributes'. The 'Description Generation Details' section includes checkboxes for 'Generate Description?' (unchecked), 'Use Classification?' (checked), and 'Use With' (Assets, Locations, Changes, Releases, Incidents, Service Requests, Items, Work Orders, Activities, Problems, Solutions). The 'Attributes' section is a table with columns for Attribute, Description, Section, Domain, Data Type, and Unit of Measure. The attributes listed are CAPACITY (Capacity, NUMERIC), DRIVER (Driver, ALN), NPSH (NPSH, ALN), SIZE (Size, NUMERIC), and SPEED (Speed, NUMERIC, RPM). There are 'New Row' buttons at the bottom of the table.

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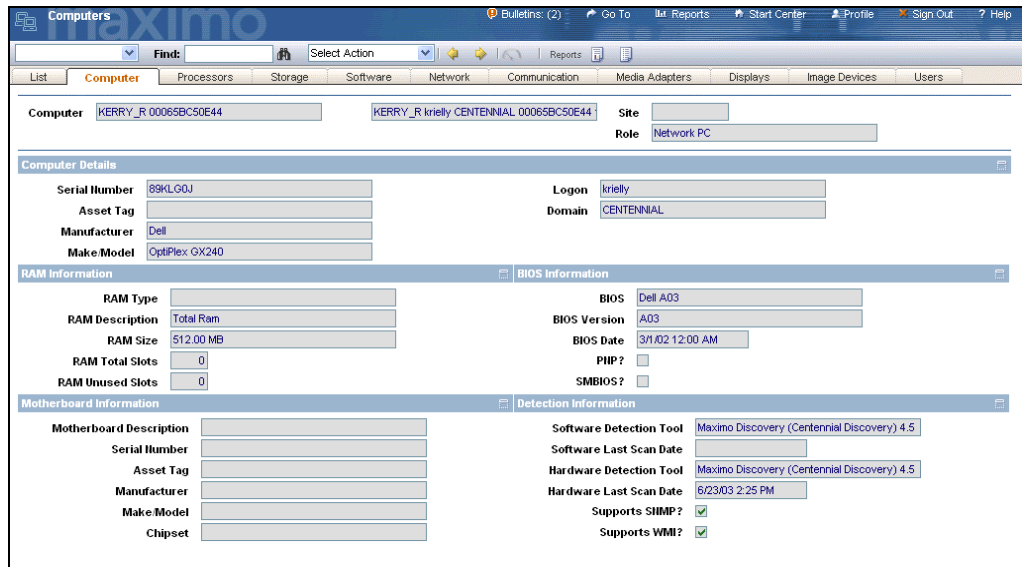
Chapter Overview continued

Overview: IT Asset Data in Maximo

continued

- The Maximo **Deployed Assets** module applications maintain data collected directly from assets actually installed in your enterprise. To gather this data, asset discovery tools (Maximo Discovery or another tool, such as SMS or Tivoli Inventory) scan computers, network devices, and network printers deployed in your enterprise and record information about the hardware and software installed on those assets. Deployed Assets application records are the data pulled in from the Discovery agent. Therefore, Deployed Assets applications do not use the Classifications set up in Maximo.

The following example shows the Computers application in the Deployed Assets module.



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Chapter Overview continued

Terminology

The following table defines the terms specific to the Maximo use of classifications.

Term	Definition
<i>Attribute</i>	A means of grouping characteristics of a classification. It allows you to logically group similar characteristics. For example, for a classification path of PROBLEM \ COMPUTER you might have an attribute of MEMORY SIZE. An attribute's name can be either numeric or alphanumeric.
<i>Children</i>	Classifications that fall under the parent classification.
<i>Classification</i>	A means of identifying something. For example, truck, valve, request, ticket, computer, and 1021 can each be a classification. A classification is a word, a number, or an alphanumeric.
<i>Classification level</i>	The hierarchical position of a classification.
<i>Classification path</i>	The structure from the top-level parent to the child.
<i>Parent</i>	The highest level of the classification.

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Chapter Overview continued

Implementation Tip: UNSPSC Codes

While you can create your own classification structure in Maximo, you can also use the United Nations Standard Products and Services Code (UNSPSC). The UNSPSC provides an open, standard coding system to classify both products and services for use throughout the global marketplace. It is not a product code (describing the product and specifications), but rather a hierarchical classification system consisting of five levels. An organization can use as much or as little of the hierarchy levels as desired. Using the codes can provide a more efficient way to organize and define your classification structure.

Hierarchy	Category Number and Name
<i>Segment</i>	44 Office Equipment, Accessories and Supplies
<i>Family</i>	12 Office supplies
<i>Class</i>	19 Ink and lead refills
<i>Commodity</i>	03 Pen refills
Pen refills = UNSPSC classification 44-12-19-03	

Codes are free and are available at <http://www.unspsc.org>.

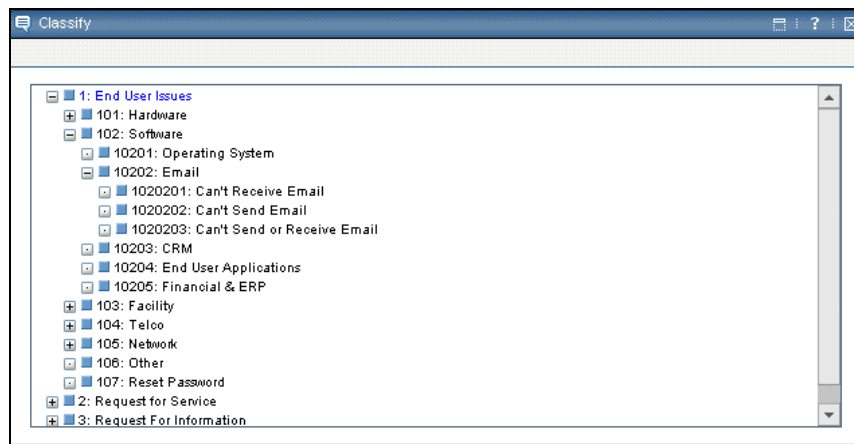
Classifications Setup

Introduction

Classifications in Maximo provide a way to logically store information. You can classify almost anything and conduct a search for those things that have been classified.



A classification can stand alone, or you can group it with other classifications.



Classifications can be used on the following:

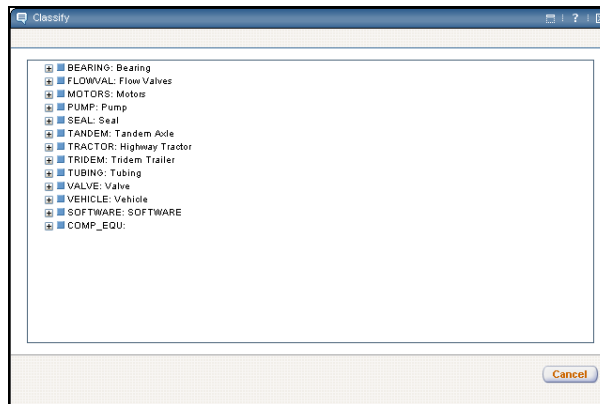


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Classifications Setup continued

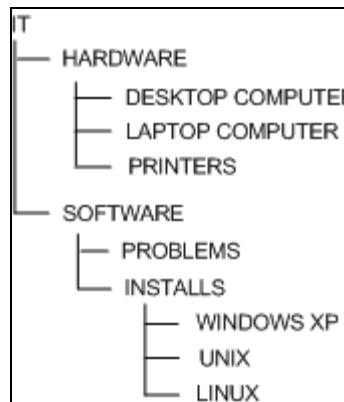
Classification Structures

Classification structures are similar to directory structures in both construction and the way in which they are displayed. You build a classification structure from the top down in parent-child relationships. First you create a parent (a classification), then you add its children (each is also a classification). Each child can then become a parent and have its own children. This can go on indefinitely.



Example

A user contacts the service desk to request a Windows XP installation. A service requisition and change ticket are created, and the ticket has a classification path of: IT \ SOFTWARE \ INSTALLS \ WINDOWS XP. Ten minutes later, the service desk takes a printer-related call. The same classification structure used to categorize the earlier change is used to classify the printer incident ticket.

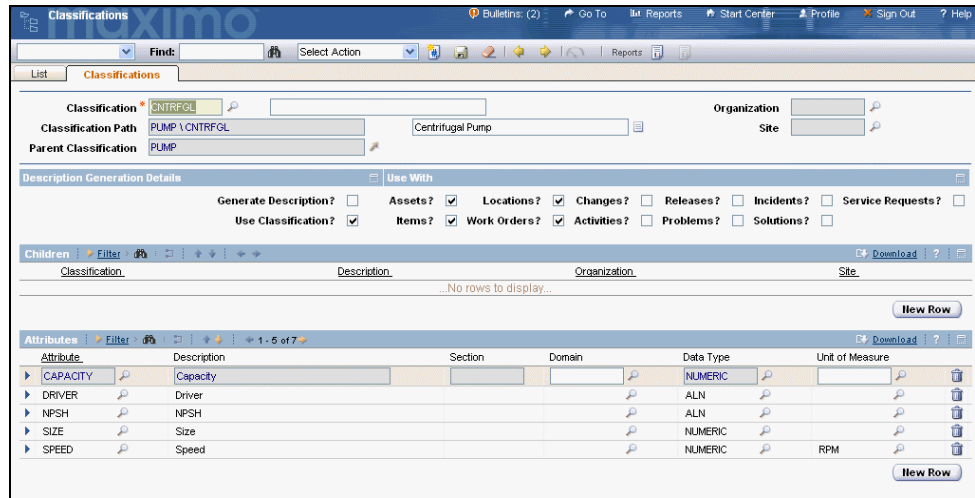


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Classifications Setup continued

Classifications Tab

You use the **Classifications** tab to add, modify, duplicate, or delete classifications.



The following table describes some of the fields and check boxes on the Classifications tab.

Field/Check Box	Description
Classification	The name of the classification.
Description	A description of the classification.
Organization	The organization to which the classification belongs. The Organization and Site fields are null by default, but when a node is for a specific organization, it can be defined with that organization in the Organization field. Any time a node is defined for an organization, all of its children must be for the same organization. The same goes for sites. After a site is defined, everything under it must be for the same site.
Classification Path	Lists the name of the classification, along with parent and children classifications.

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Classifications Setup continued

Classifications continued
Tab

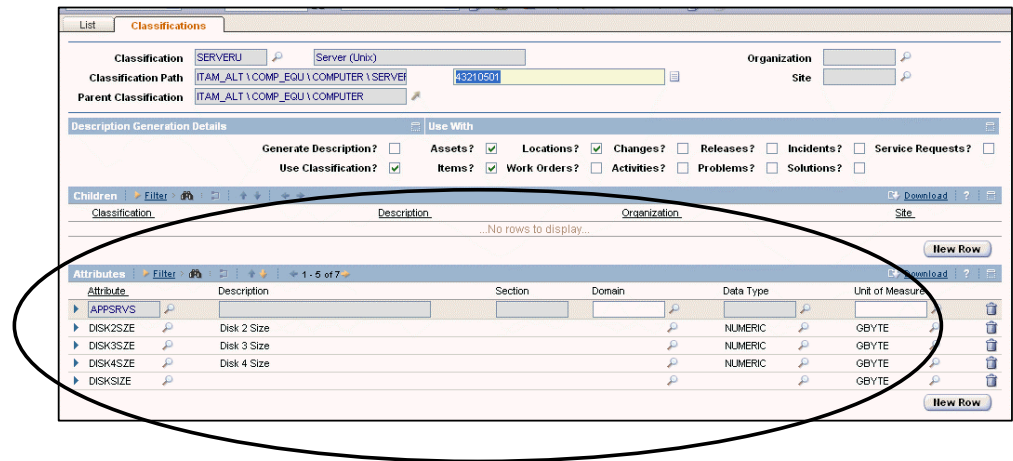
Field/Check Box	Description
Site	The site to which you want to apply the classification. The Classification structure exists at the system level but allows optional organization/site definition.
Parent Classification	The name of the parent of the current classification.
Generate Description?	When checked, this check box will automatically generate descriptions for assets, items, and locations that are linked with the classification.
Use Classification?	When checked, this check box uses the classification in generated descriptions.
Use With check boxes	Indicate what the classification path can be used with. This allows you to create one classification path that can be enabled for multiple uses, such as assets, locations, and solutions. For example, when classifying a location, the lookup will only display and allow classifications with the Use With set to Y. A classification use case that is set to N must have all of its children set to N as well. A Y can have a child of N, but an N cannot have a child of Y.

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Classifications Setup continued

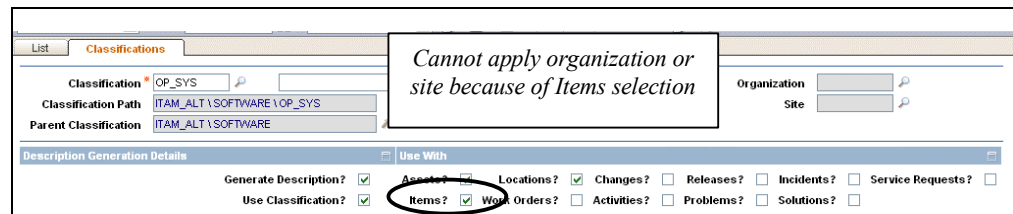
Attributes

Attributes are characteristics of assets that are kept in common and can be applied to any classifications. For the Attribute, Domain, Data Type, and Unit of Measure fields you can either use the Select Value button to select from existing values, or you can create new values, just as with the Classification fields. The Section field indicates which section the attribute is for. The Domain field allows you to indicate the possible values for the attribute.



Organizations and Sites

With the exception of items, you can apply classifications to an organization or to a site level. You can apply a classification to items only at the system level. This includes rotating items. If the Items box is checked, the default system will not let you enter a site or organization. This is because items in the same item set can be shared across organizations.



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Classifications Setup continued

Example

Below are two examples of a Classification structure associated or used on applications.

- This classification is used on a service request to identify and categorize the service ticket.

The screenshot shows a 'Service Request' form. The 'Classification' field is circled in red, displaying the value '1 \ 102 \ 10202' and the description 'End User Issue \ Software \ Email'. Other fields include 'Reported By' (MILLER), 'Affected Person' (MILLER), 'Name' (Steve Miller), 'Phone' ((617) 923-8734), 'E-mail' (steve.miller@helwig.com), 'Summary' (Can't log in to my email.), 'Details' (Can't log in to my email, it started hanging this morning.), 'Asset', 'Location', 'GL Account', 'Asset Site' (BEDFORD), 'Internal Priority' (1), 'Service Group', 'Service', 'Vendor', 'Site', and 'SLA Applied?' (checkbox).

- This classification with specifications is used on an item record in the Item Master application. When associated to an item, it is used as part of building the Specifications tab.

The screenshot shows the 'Item Master' application with the 'Specifications' tab selected. The 'Item' is 'D650' and the 'Classification' is 'ITAM_ALT \ COMP_EQU \ COMPUTER \ NOTEBK'. The 'Specifications' table is circled in red and contains the following data:

Attribute	Description	Data Type	Alphanumeric Value	Numeric Value	Unit of Measure	Section
PROSPEED	PROCESSOR SPEED	NUMERIC		1,395.00	MHZ	
RAMSIZE	MEMORY SIZE	NUMERIC		1,024.00	MBYTE	
DISKSIZE	DISK SIZE	NUMERIC		80.00	GBYTE	

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Classifications Setup continued

Implementation Considerations

If you are not using standardized coding, such as UNSPSC, before entering and building your classification hierarchy into Maximo, diagram out what you want your hierarchy to look like and build it in Maximo in phases. When you are building classification structures, consider these questions:

- How many levels deep do I want to go?
- What constitutes the highest level?
- What parts of the organization will be using classifications? For what purpose?
- What is the business case for classification levels?
- At each level, where do I want the classification applicable?
- Do I indicate organizations? Sites?
- At what level do I want to narrow it to only organizations and sites?
- At what classification level do I want attributes?
- What attributes should I include?
- What is the business case for including attributes?
- Do I have attribute information available?
- If using a discovery agent, what attributes are identified for my audits?

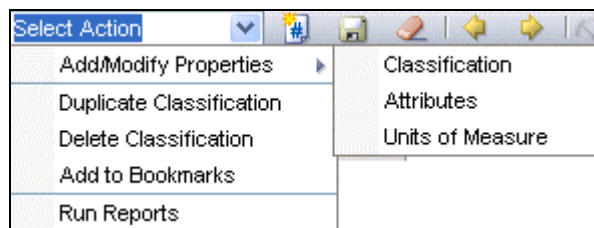
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Classifications Setup continued

Add/Modify Select Action

As you work with the Classifications application, you will use some of the Select Action menu options. The Select Action menu has a list of Add/Modify Properties that open Add/Modify dialog boxes for:

- Classifications
- Attributes
- Units of measure



Use these options to work directly with the entire list for a chosen field.

Creating Classification Hierarchies

There are two approaches to building classification hierarchies manually into the database:

- Create classifications and then associate the branches (children) to the top level (parent).
 - Create the top-level (parent) classification and then add its children.
-

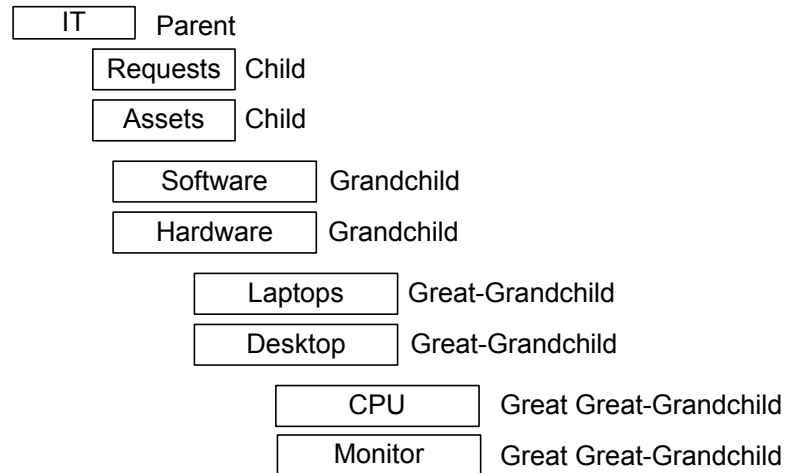
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Classifications Setup continued

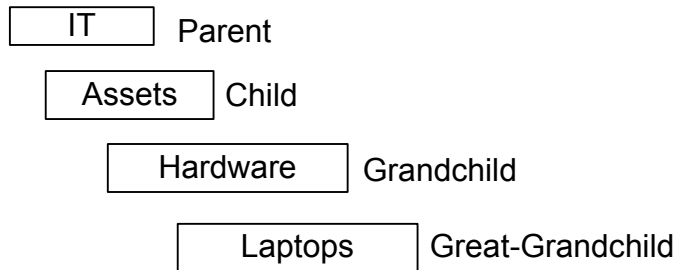
Classification Building



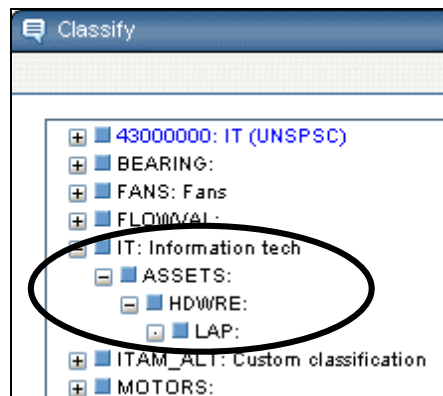
Our initial hierarchical structure looks like this:



However, for this exercise we will be building these branches of the structure:



The structure will look like this in Maximo when finished:



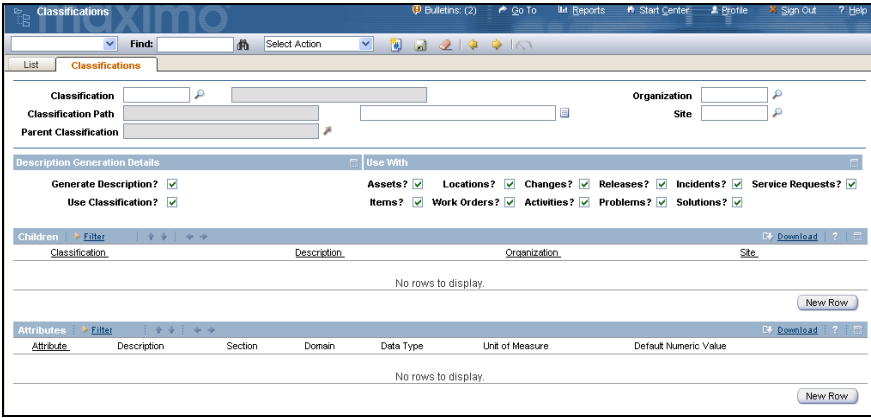
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Classifications Setup continued

Creating a Classification Hierarchy



Follow these steps to add classifications to partially build a classification structure for IT, assets, laptops.

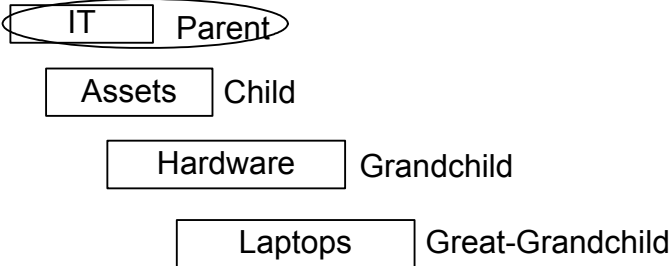
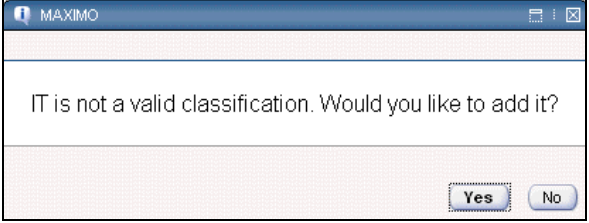
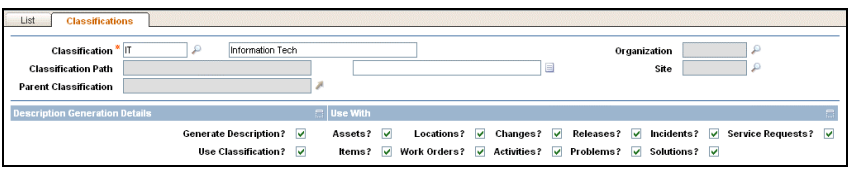
Step	Action
1	Access the Classifications application from the Administration module.
2	<p>Click the New Classification icon.</p> <p><u>Result:</u> Maximo opens the new classification screen.</p> 

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Classifications Setup continued

Creating a Classification Hierarchy

continued

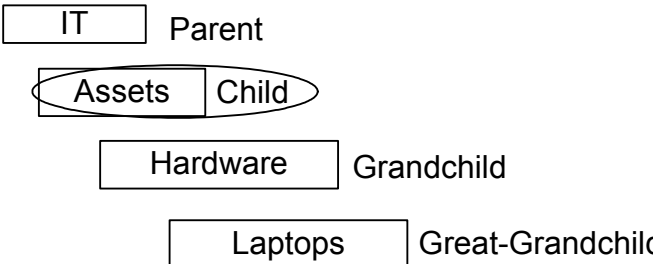
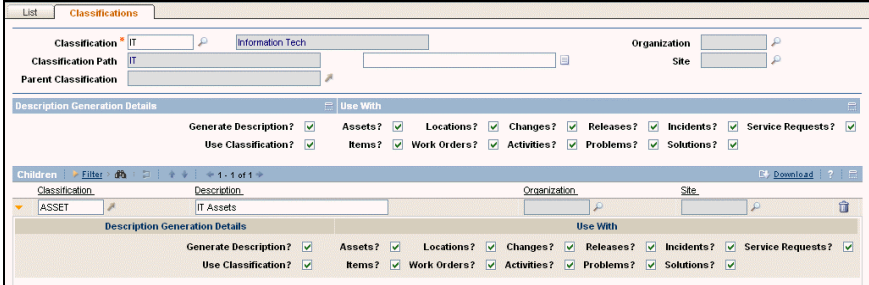
Step	Action
3	<p>In this step we will build the first branch (Parent) of the classification hierarchy.</p> <div style="text-align: center;">  </div> <p>Enter IT in the Classification field, and then press Tab. <u>Result:</u> You receive the following message:</p> <div style="text-align: center;">  </div>
4	<p>Click Yes and enter Information Tech for the new classification description.</p>
5	<p>In the Use With table window, keep the default check box selections.</p> <p><u>Result:</u> Your screen should look similar to this example.</p> <div style="text-align: center;">  </div>

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Classifications Setup continued

Creating a Classification Hierarchy

continued

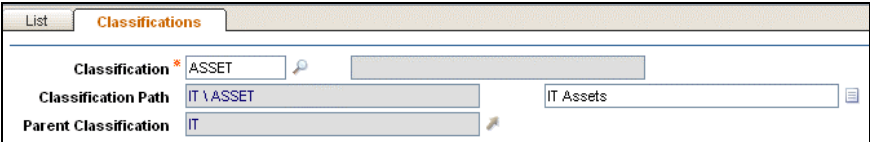
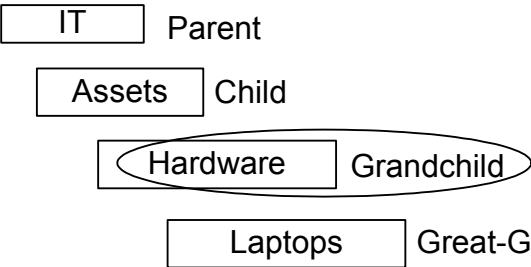
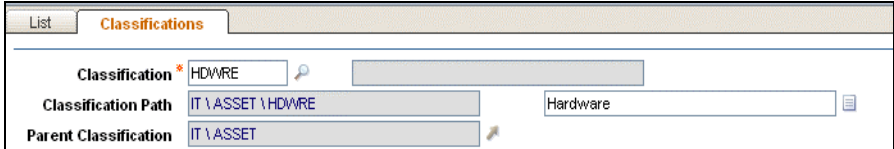
Step	Action
6	<p>In this step we will build the second branch (Child) of the classification hierarchy.</p> <div style="text-align: center;">  <pre> graph TD IT[IT] --- Parent[Parent] Assets[Assets] --- Child[Child] Hardware[Hardware] --- Grandchild[Grandchild] Laptops[Laptops] --- GreatGrandchild[Great-Grandchild] </pre> </div> <p>In the Children table window, add the Child level by clicking New Row. Enter ASSET in the Classification field, and then enter IT Assets in the Description field.</p> <p>Keep the Use With check boxes as they are.</p> <p><u>Note:</u> Children levels will default with the parent settings. This can be changed accordingly.</p>
7	<p>Click Save to save the record.</p> <p><u>Result:</u> Your screen should look similar to this one.</p> 

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Classifications Setup continued

Creating a Classification Hierarchy

continued

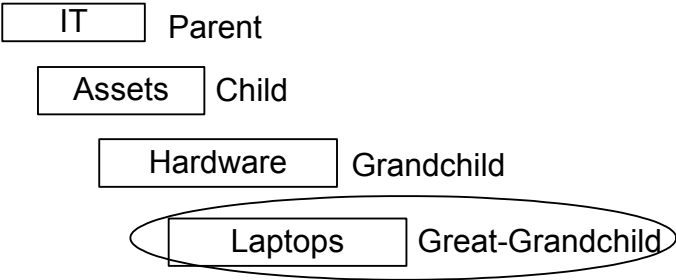
Step	Action
8	<p>Click the ASSET Detail Menu button and select Move to ASSETS.</p> <p><u>Result:</u> Your asset is moved to the top-level Classification field, and IT is moved to the Parent Classification field.</p> <p><u>Note:</u> The system is building the Classification Path string, IT\ASSET.</p> 
9	<p>With ASSET as the top level, we can now add its children, which would be the grandchildren of IT.</p> <div style="text-align: center;">  <pre> graph TD IT[IT] --> Assets[Assets] Assets --> Hardware[Hardware] Assets --> Laptops[Laptops] style Hardware stroke:#f00,stroke-width:2px </pre> </div> <p>Click New Row in the Children section to add the Hardware (HDWRE) level and a description. Remember to Save your record.</p>
10	<p>Move this level up the hierarchy to the Classification field.</p> <p><u>Result:</u> Your screen should look similar to this one.</p> 

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Classifications Setup continued

Creating a Classification Hierarchy

continued

Step	Action
11	<p>Add the Laptop (LAP) child of hardware, which would be the great-grandchild of IT.</p>  <pre>graph TD; IT[IT] --- Parent[Parent]; Assets[Assets] --- Child[Child]; Hardware[Hardware] --- Grandchild[Grandchild]; Laptops[Laptops] --- GreatGrandchild[Great-Grandchild];</pre> <p>Remember to Save your record.</p>

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Classifications Setup continued

Viewing the Drilldown Structure of a Classification Hierarchy

To view the drilldown structure of a classification hierarchy:


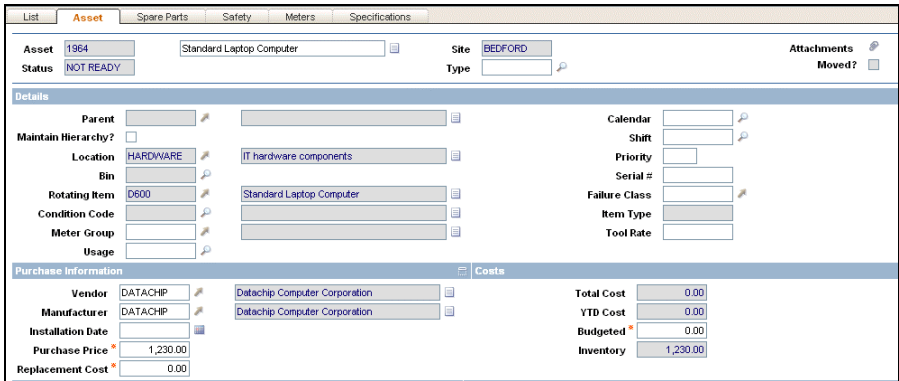
- Click on the **Parent** field **Detail Menu** button and select **Classify**.
- Go to any application indicated by selections indicated on the **Use With** section.

Use With							
Assets?	<input checked="" type="checkbox"/>	Locations?	<input checked="" type="checkbox"/>	Changes?	<input checked="" type="checkbox"/>	Releases?	<input checked="" type="checkbox"/>
Incidents?	<input checked="" type="checkbox"/>	Service Requests?	<input checked="" type="checkbox"/>	Items?	<input checked="" type="checkbox"/>	Work Orders?	<input checked="" type="checkbox"/>
Activities?	<input checked="" type="checkbox"/>	Problems?	<input checked="" type="checkbox"/>	Solutions?	<input checked="" type="checkbox"/>		

Viewing a Classification Hierarchy



Follow the steps below to view the classification hierarchy using the Assets application.

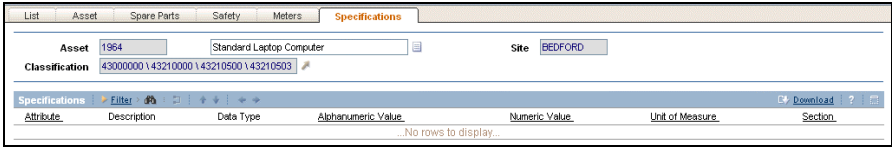

Step	Action
1	<p>To view the drilldown structure of this classification hierarchy, go to the Assets application. Enter 1964 in the Find field, and then click Find:</p> <div style="text-align: center;">  </div> <p><u>Result</u>: Your screen should look similar to this one.</p> 

continued on next page

Classifications Setup continued

Viewing a Classification Hierarchy

continued

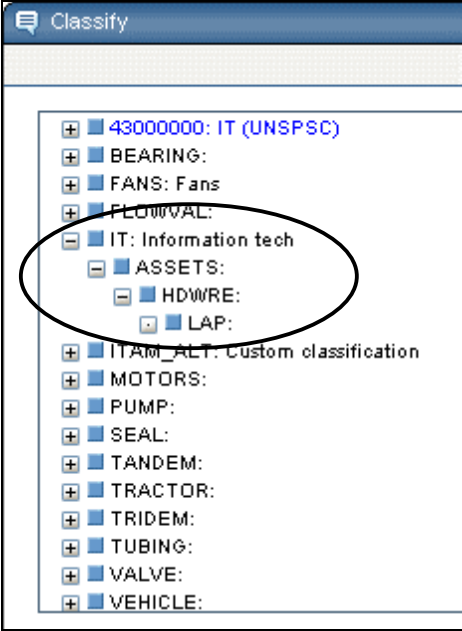
Step	Action
2	<p>Click on the Specifications tab.</p> <p><u>Note:</u> Because we are not creating a new asset at this point in the course, but are retrieving an already created asset, this asset already has a classification associated to it. After an asset is classified, you can change or delete the classification from the asset record.</p> 
3	<p>In the Classification field, click the Detail Menu button and select Classify.</p> <p><u>Result:</u> Maximo displays the Classify hierarchy for assets.</p> 

continued on next page

Classifications Setup continued

Viewing a Classification Hierarchy

continued

Step	Action
4	<p>Expand the IT (parent) branch to the lowest branch by clicking on the + icon.</p> <p><u>Result:</u> Your screen should look similar to this one.</p> 
5	Click Cancel to return to the Assets application.

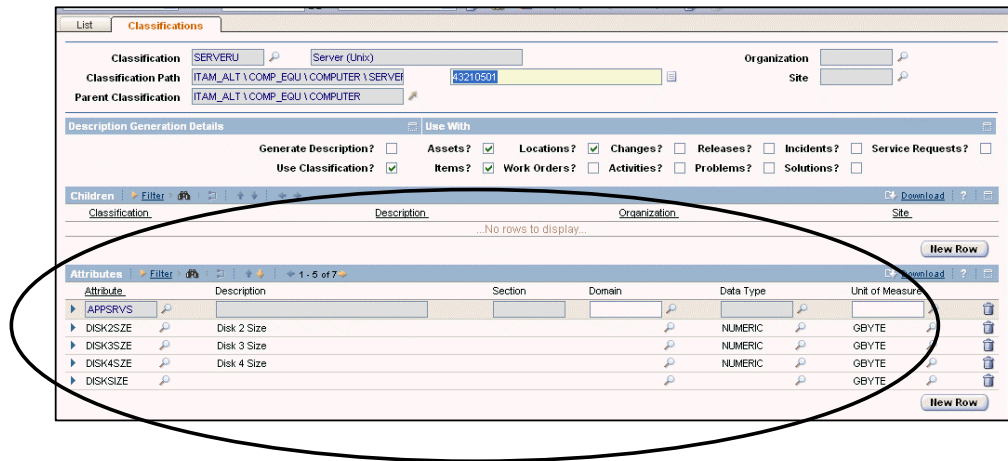
Classifications and Specification Attributes

Introduction

After you have created a classification, you might want to set up attributes for it. The Attributes section of the Classifications tab allows you to easily enter attributes with a description, measure unit, domain, and so forth.

Attributes Setup Revisited

As mentioned earlier, *attributes* are characteristics of assets that are kept in common and can be applied to any classifications. For the Attribute, Domain, Data Type, and Unit of Measure fields you can either use the Select Value button to select from existing values, or you can create new values, just as with the Classification fields. The Domain field allows you to indicate the possible values for the attribute. The Section field indicates which section the attribute is for.



continued on next page

Classifications and Specification Attributes continued

Attributes and Organizations and Sites

As with Classifications, you can indicate whether you want attributes available for use at the system, organization, or site level.

Attributes Sequences

When defining your attribute details, you can indicate the sequence (order) in which you want the attributes to be displayed.

Item Details	Asset Details	Location Details
Item Sequence * <input type="text" value="1"/>	Asset Sequence * <input type="text" value="1"/>	Location Sequence * <input type="text" value="1"/>

The following example indicates the attributes order for the Item Sequence.

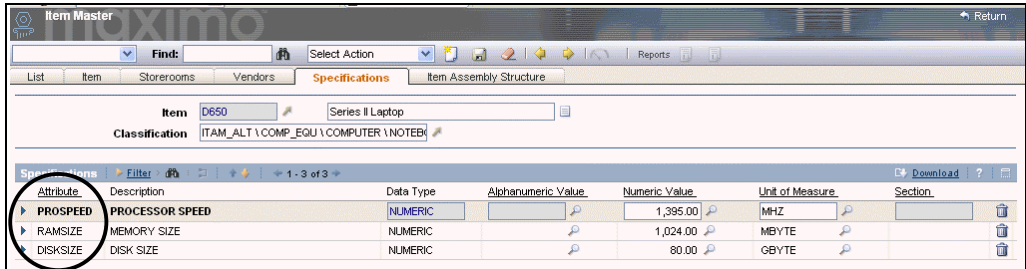
Attribute	Description	Data Type	Alphanumeric Value	Numeric Value	Unit of Measure	Section
PROSPEED	PROCESSOR SPEED	NUMERIC		1,395.00	MHZ	
RAMSIZE	MEMORY SIZE	NUMERIC		1,024.00	MBYTE	
DISKSIZE	DISK SIZE	NUMERIC		80.00	GBYTE	

continued on next page

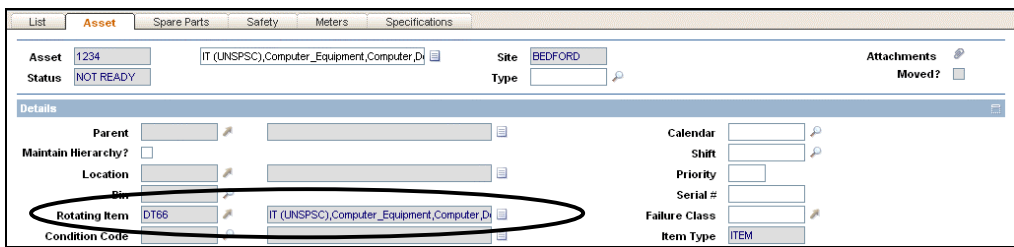
Classifications and Specification Attributes continued

**How Used:
Attributes, Item
Master Record,
and Assets**

When you associate an **Item Master** record that has Specifications Attributes...



...to an asset record as a **Rotating Item**...



those specifications/attributes will carry over to the asset record in the Asset application in the following three places:

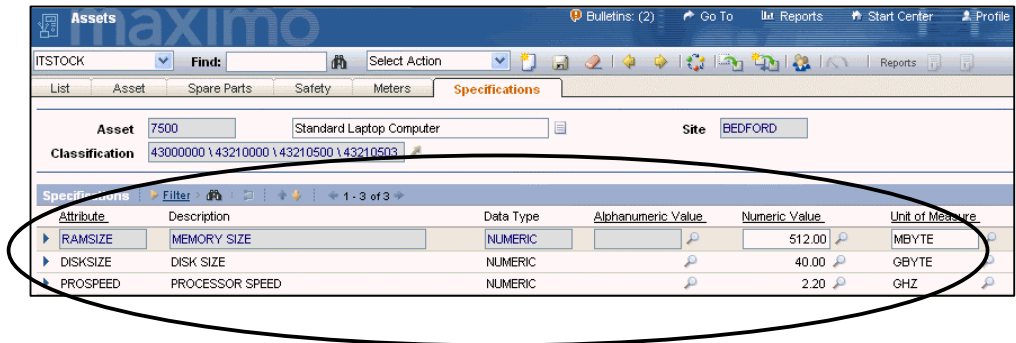
continued on next page

Classifications and Specification Attributes continued

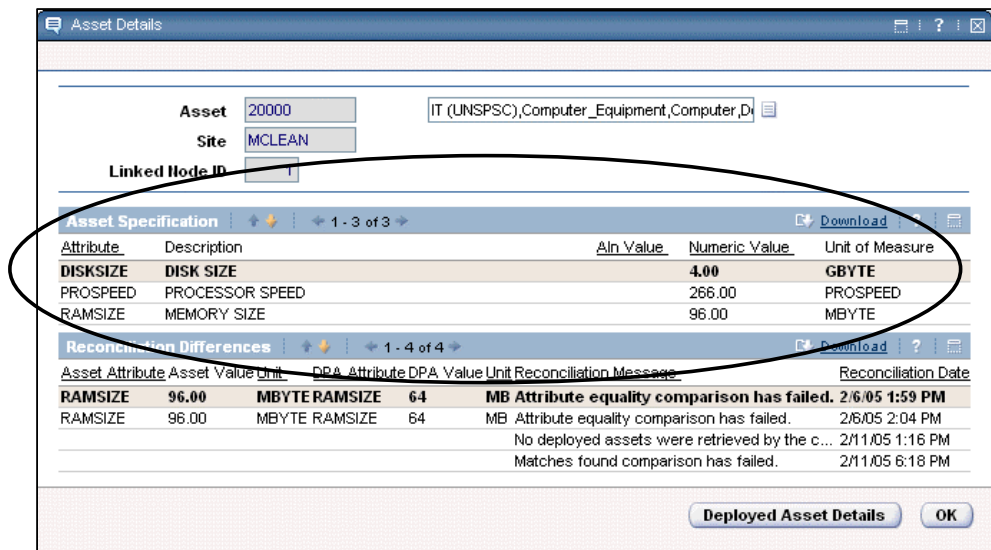
**How Used:
Attributes, Item
Master Record,
and Assets**

continued

- The Specifications tab:



- The Asset Details Asset Specification window:



continued on next page

Classifications and Specification Attributes continued

How Used:
Attributes, Item
Master Record,
and Assets

continued

- The Asset Details **Reconciliation Differences** window:

Asset: 20000
Site: MCLEAN
Linked Node ID: 1

IT (UNSPSC),Computer_Equipment,Computer_Dr

Attribute	Description	Alt Value	Numeric Value	Unit of Measure
DISKSIZE	DISK SIZE		4.00	GBYTE
PROSPEED	PROCESSOR SPEED		266.00	PROSPEED
RAMSIZE	MEMORY SIZE		96.00	MBYTE

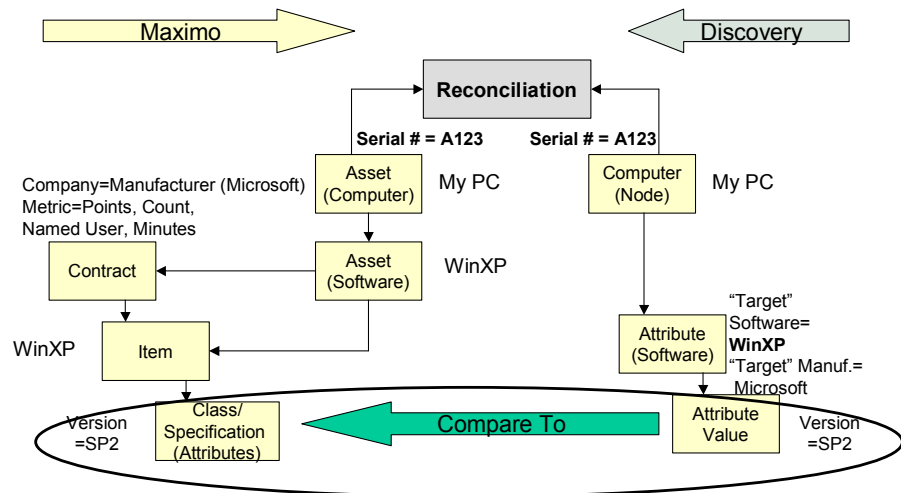
Asset Attribute	Asset Value	Unit	DPA Attribute	DPA Value	Unit	Reconciliation Message	Reconciliation Date
RAMSIZE	96.00	MBYTE	RAMSIZE	64	MB	Attribute equality comparison has failed.	2/6/05 1:59 PM
RAMSIZE	96.00	MBYTE	RAMSIZE	64	MB	Attribute equality comparison has failed.	2/6/05 2:04 PM
						No deployed assets were retrieved by the c...	2/11/05 1:16 PM
						Matches found comparison has failed.	2/11/05 6:18 PM

Buttons: Deployed Asset Details, OK

The Connection: Attributes and Reconciliation

Introduction

In Maximo, you can reconcile “discovered” assets defined as attributes in the Deployed Assets application against the “authorized” assets attributes in the Assets application. Maximo uses attributes as the common reconciliation data point between your discovered and deployed assets. The reconciliation process identifies matches between IT assets and deployed asset attributes, as well as discrepancies and variances between the two sets of records.



continued on next page

The Connection: Attributes and Reconciliation continued

Reconciliation and Application Overview

The **Reconciliation** module contains six applications that let you configure a behind-the-scenes process:

- Reconciliation Tasks
- Task Filters
- Link Rules
- Comparison Rules
- Link Results
- Reconciliation Results

This reconciles the IT asset information maintained in the **Assets** applications (Maximo) and on the **Specifications** tab...

Attribute	Description	Data Type	Alphanumeric Value	Numeric Value	Unit of Measure	Section
RAMSIZE	MEMORY SIZE	NUMERIC		96.00	MBYTE	
DISKSIZE	DISK SIZE	NUMERIC		4.00	OBYTE	
PROSPEED	PROCESSOR SPEED	NUMERIC		266.00	MHZ	

...against the **deployed** asset data maintained in the **Deployed Assets** applications (the following example is the Computers application).

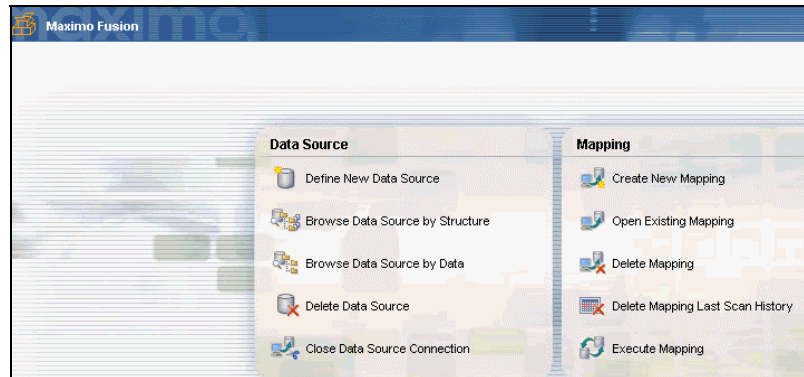
Computer Details	
Serial Number	HMLN341
Asset Tag	
Manufacturer	Dell
Make/Model	Latitude D600
Logon	Beth_Collins
Domain	HMLN341
RAM Information	
RAM Type	
RAM Description	Total Ram
RAM Size	1,024.00 MBYTE
RAM Total Slots	0
RAM Unused Slots	0
BIOS Information	
BIOS	Dell A08
BIOS Version	A08
BIOS Date	10/29/03 12:00 AM
PHP?	<input type="checkbox"/>
SMBIOS?	<input type="checkbox"/>
Motherboard Information	
Motherboard Description	
Serial Number	
Asset Tag	
Manufacturer	
Make/Model	
Chipset	
Detection Information	
Software Detection Tool	Maximo Discovery (Centennial Discovery) 4.5
Software Last Scan Date	
Hardware Detection Tool	Maximo Discovery (Centennial Discovery) 4.5
Hardware Last Scan Date	5/11/05 12:00 AM
Supports SHMP?	<input checked="" type="checkbox"/>
Supports WMI?	<input checked="" type="checkbox"/>

continued on next page

The Connection: Attributes and Reconciliation continued

Getting “Discovered” Information into Maximo: Deployed Asset and Fusion

Deployed Asset information comes from the Discovery agent and is pulled (mapped) into Maximo via the **Fusion** application.



continued on next page

The Connection: Attributes and Reconciliation continued

Assets Module: Deployed Assets

The **Deployed Assets** module in the **Assets** module consists of applications that allow you to view and query data from third-party HW/SW inventory collection tools that has been transformed, imported, and aggregated via the Maximo **Fusion** application. The Deployed Assets module contains three applications:

- The **Computers** application displays data about specific computers deployed at your company.
- The **Network Devices** application displays information about deployed network devices such as routers, switches, and hubs.
- The **Network Printers** application displays information about deployed network printers.

The following example is from the **Computers** application.

continued on next page

The Connection: Attributes and Reconciliation continued

View Assets Reconciliations

After the reconciliation process has been initiated, you can run reports to view and manage your result set. For individual assets, you can use the **Asset Details** selection action in the Assets application to see what the reconciliation differences were for the asset.

“Authorized” data is pulled from the Asset Specifications Attribute information indicated in the Asset application. It is then compared (reconciled) to “discovered” deployed attribute information in the Deployed Assets module.

The screenshot shows the 'Asset Details' window for asset ID 20000. The asset is located at 'MCLEAN' and has a linked node ID of 1. Below this, there is a table for 'Asset Specification' with 3 rows. The first row is circled in red.

Attribute	Description	Alt Value	Numeric Value	Unit of Measure
DISKSIZE	DISK SIZE		4.00	GBYTE
PROSPEED	PROCESSOR SPEED		266.00	PROSPEED
RAMSIZE	MEMORY SIZE		96.00	MBYTE

The screenshot shows the 'Reconciliation Differences' window. It contains a table comparing 'Asset Attribute' and 'DPA Attribute'. The first row is circled in red.

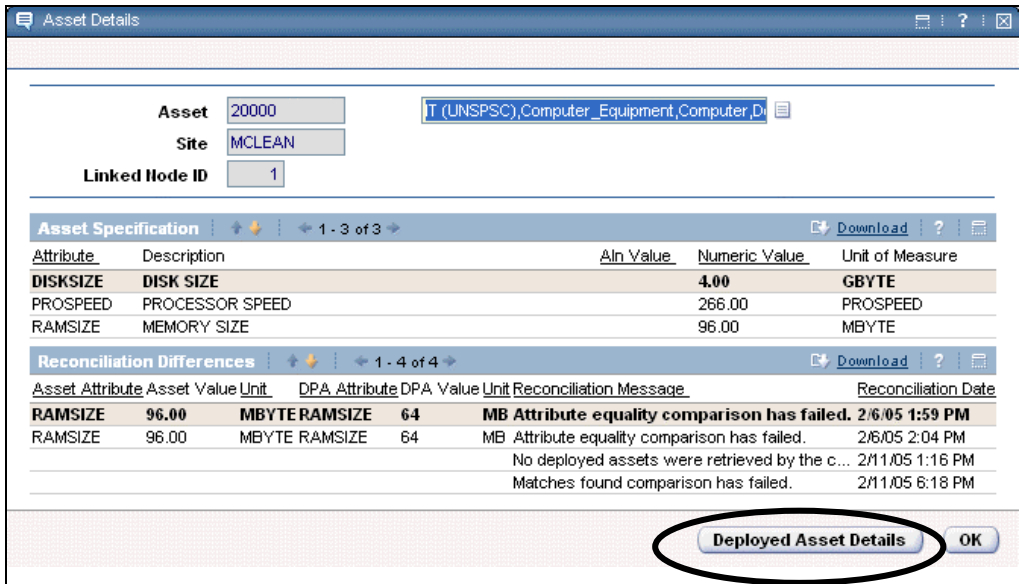
Asset Attribute	Asset Value	Unit	DPA Attribute	DPA Value	Unit	Reconciliation Message	Reconciliation Date
RAMSIZE	96.00	MBYTE	RAMSIZE	64	MB	MB Attribute equality comparison has failed.	2/6/05 1:59 PM
RAMSIZE	96.00	MBYTE	RAMSIZE	84	MB	MB Attribute equality comparison has failed.	2/6/05 2:04 PM
						No deployed assets were retrieved by the c...	2/11/05 1:16 PM
						Matches found comparison has failed.	2/11/05 6:18 PM

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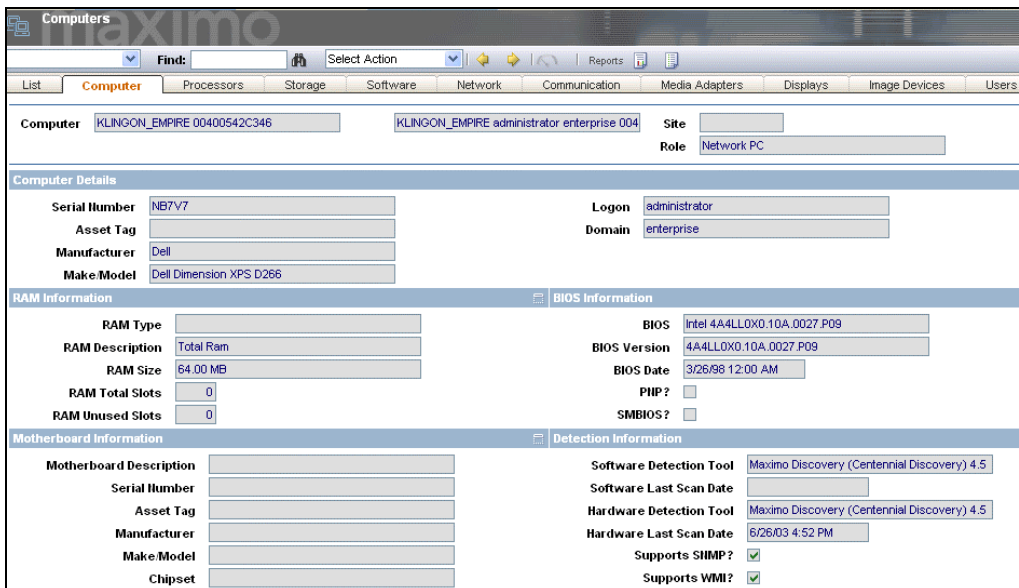
The Connection: Attributes and Reconciliation continued

Asset Details and Deployed Asset Viewing

In the **Asset Details** window, you can view the deployed (discovered) data for the asset by clicking **Deployed Asset Details**.



This will take you to one of the **Deployed Assets** applications.



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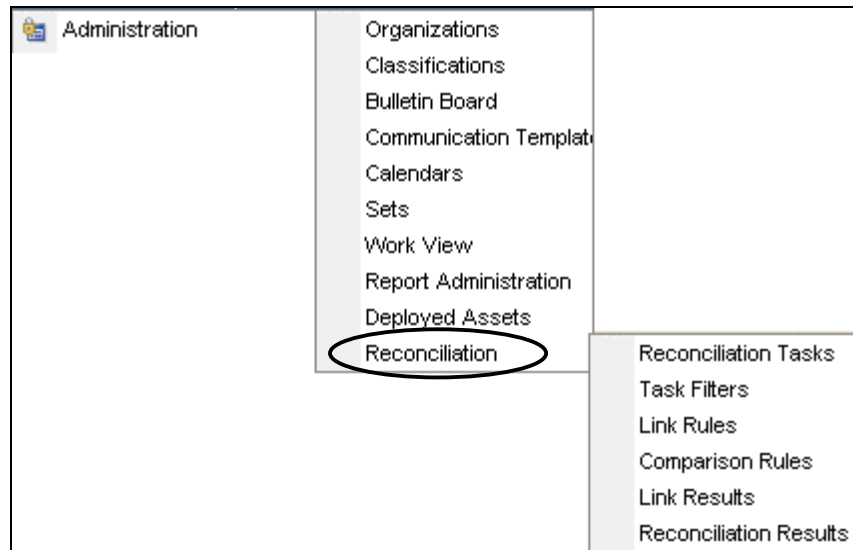
The Connection: Attributes and Reconciliation continued

**Not Covered:
Deployed Asset,
Fusion, and
Reconciliation
Administration**



Several administration applications are required to support the functionality of the Deployed Asset, Fusion, and Reconciliation applications. This course does not cover the following topics:

- Maximo Discovery installation and configuration setup. Please refer to the *Discovery Administrator Guide* for further information.
- Fusion installation and mapping setup. Please refer to the *Fusion Administrator Guide* for further information.
- The configuration and administration of the Reconciliation applications. Please refer to the *Maximo Reconciliation Module Implementation Guide* for further information.



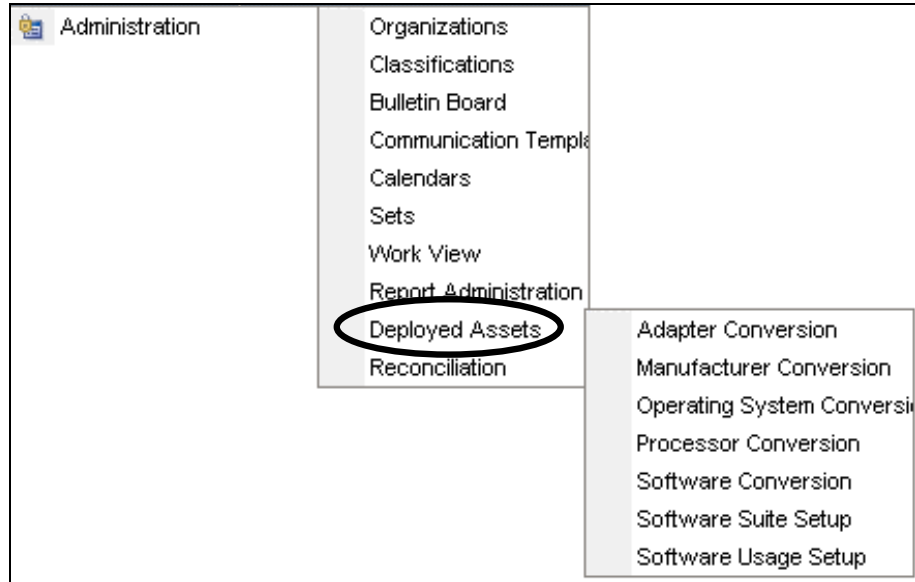
continued on next page

The Connection: Attributes and Reconciliation continued

**Not Covered:
Deployed Asset,
Fusion, and
Reconciliation
Administration**

continued

- The administration and configuration of Deployed Assets applications.



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The Connection: Attributes and Reconciliation continued

Implementation Consideration: Attributes and Reconciliation



Understanding where and how classification and specifications attributes are used in Maximo is important, because if you audit with a Discovery Agent and want to reconcile against discovered deployed assets and the authorized assets in Maximo, you need to determine what attributes you want to reconcile back into Maximo. Setting up your Maximo database will be dictated by what you want to report on and the level of details you are looking for.

Implementation Consideration: Software Management



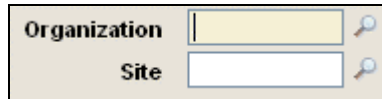
For your implementation, you will need to decide how software licenses are to be managed. Software can be managed as an asset or as an attribute.

Assigning Attributes and Classifications

Introduction

Recall that when setting up classifications with attributes, you can indicate the following conditions:

- Whether you want attributes available for use at the system, organization, or site level



A screenshot of a form with two input fields. The top field is labeled 'Organization' and the bottom field is labeled 'Site'. Both fields have a magnifying glass icon to their right, indicating a search function.

- The sequence (order) in which you want the attributes to be displayed



Item Details	Asset Details	Location Details
Item Sequence * 1	Asset Sequence * 1	Location Sequence * 1

Attribute Restriction



The Signature Security setup provides the option of restricting users from entering new attributes into the system.

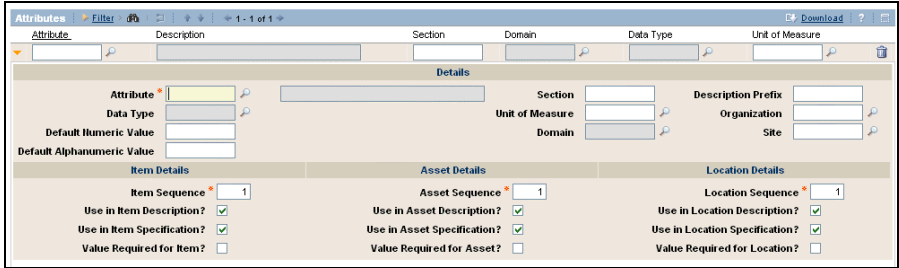
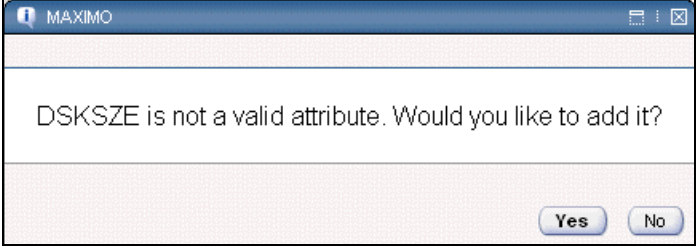
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Assigning Attributes and Classifications continued

Assigning Attributes



In this exercise, we will add attributes for a laptop (disk size, processor speed, and memory size). Follow these steps to assign these attributes to the Laptop classification.

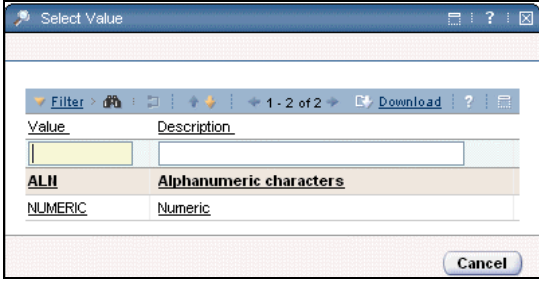
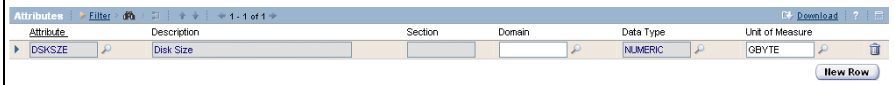
Step	Action
1	<p>Open the Classifications application. On the Classifications tab, in the Attributes table window, click New Row.</p> <p><u>Result:</u> Maximo creates a new row.</p> 
2	<p>In the Attribute field, enter DSKSZE and then press the Tab key.</p> <p><u>Result:</u> Because this attribute does not exist, Maximo displays a dialog box asking if you want to add it to the database.</p> <p><u>Note:</u> Signature Security provides the option of restricting a user from adding an attribute into the system.</p> 
3	Click Yes .
4	Enter Disk Size in the Description field.

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Assigning Attributes and Classifications continued

Assigning Attributes

continued


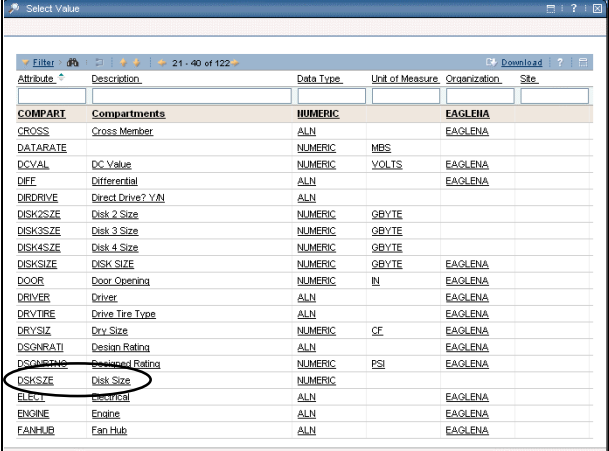
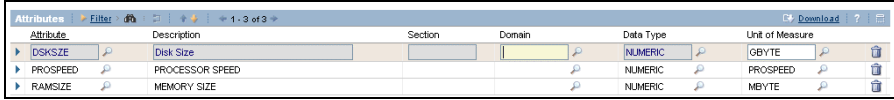
Step	Action
5	<p>In the Data Type field, click the Select Value button.</p> <p><u>Result:</u> The Select Value dialog box opens.</p> 
6	<p>Click on NUMERIC.</p> <p><u>Result:</u> You are returned to the Data Type field.</p>
7	<p>In the Unit of Measure field, use the Select Value button to select GBYTE.</p>
8	<p>Save the record.</p> <p><u>Result:</u> Your screen should look similar to the one below.</p> 

continued on next page

Assigning Attributes and Classifications continued

Assigning Attributes

continued

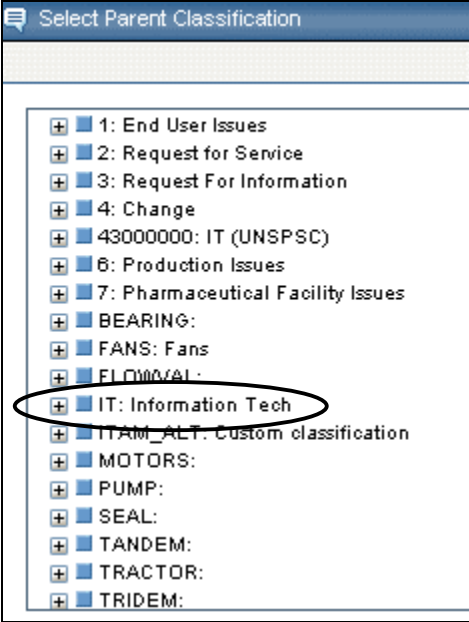
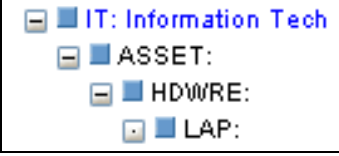
Step	Action
	<p>After you save the record, the attribute is added to the Attribute Select Value list.</p> 
<p>9</p>	<p>Click New Row to add the PROSPEED and RAMSIZE attributes. We will accept the default sequence in this step, but you can change it, as attribute sequence is particular to the classification.</p> <p><u>Hint:</u> These attributes are not new to the system. You can use Select Value to choose from the list.</p>
<p>10</p>	<p>Save your record.</p> <p><u>Result:</u> Your screen should look similar to this one.</p> 

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Assigning Attributes and Classifications continued

Assigning Attributes

continued

Step	Action
11	<p>To view this classification in the entire classification hierarchy, click the Parent Classification field Detail Menu button, and select Select Parent Classification.</p> <p><u>Result:</u> The Select Parent Classification dialog box opens. The classification tree should include your classification.</p> 
12	<p>Click on the plus sign (+) and expand the IT branch to the lowest level.</p> <p><u>Result:</u> Your classification path levels should look like this.</p> 
13	Click Cancel to return to the Classifications application.

Chapter Summary

Classifications Defined

Classifications are used to logically store detailed information about assets, locations, items, work orders, tickets, and solutions defined in Maximo.

Classification Hierarchies

By clicking the Detail Menu button next to the Parent Classification field and selecting the Select Parent Classification option, you can view the drilldown of the various classification hierarchies.

Creating Classifications

You can create a new classification by clicking New Classification in the Classifications application. When you enter the name of the new classification in the Classification field, you will receive a prompt asking you if you want to create a new classification.

Assigning Attributes to Classifications

Attributes are characteristics of assets that are kept in common and can be applied to any classifications. When you enter the name of an attribute that does not exist in the Attribute field, you will receive a prompt asking you if you want to create a new attribute.

Review Questions

Review Questions



1. How do you look at the tree directory structure for the classification?
 2. How do you ensure that a classification description you create is used for assets, items, and locations that are linked with the classification?
-

Chapter 5: Creating Locations and Location Hierarchies



In This Chapter

This chapter contains the following topics:

Topic	See Page
Chapter Overview	5-1
Locations and Systems Overview	5-5
Building Location Structures Overview	5-10
Creating Locations	5-13
Location Hierarchy and System Setup	5-27
Chapter Summary	5-40

Chapter Overview

Introduction

One of the principal benefits of using Maximo is the ability to track maintenance costs against your various assets and operating locations. To track and monitor work and costs by location, you first need to create the location where the asset is to be based.

Chapter Focus

The focus of this chapter is to familiarize you with locations and systems as defined in Maximo.

Learning Objectives

When you have completed this chapter, you should be able to:

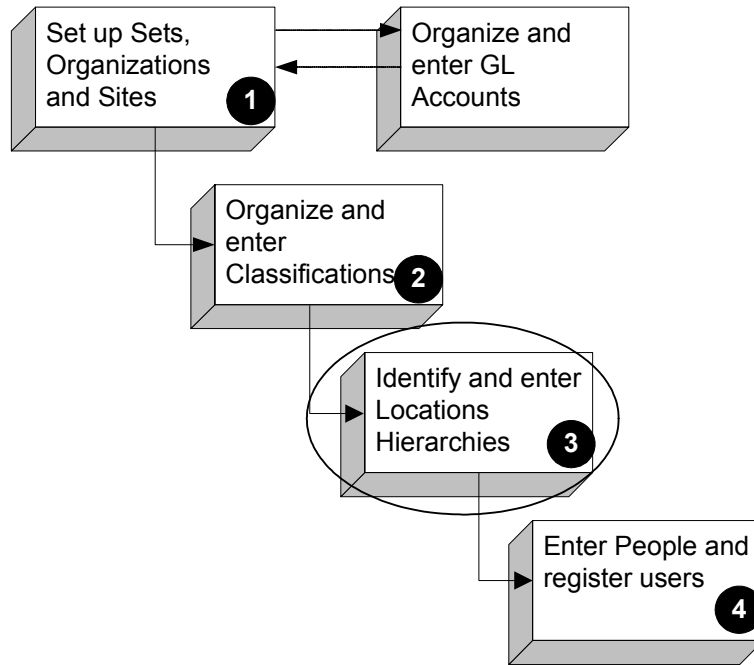
- describe a location and location hierarchy,
 - describe a system and system hierarchy,
 - describe the advantages of implementing a system hierarchy,
 - navigate the Locations application,
 - create a location and a location hierarchy, and
 - associate locations with systems to create a system hierarchy.
-

continued on next page

Chapter Overview continued

We Are Here

Create locations and then organize them into a hierarchy and system using the Locations application.



continued on next page

Chapter Overview continued

Implementation Questions to Consider

- Do you have a layout indicating the overall dimensions of your organization/site (can also indicate assets, departmental boundaries, workstations, offices, and so forth)?
 - Is the location naming convention standardized?
 - Are the critical high-priority locations identified?
 - What are the base criteria in choosing your critical locations?
 - Do you have designated receiving locations?
 - Do you have stockrooms?
 - How do you record “retired” or end-of-life asset locations?
 - How do you identify or associate assets? Are they to people? Location? GL account? Business unit?
-

Implementation Tips



- Identify high-priority operating locations and enter them first. Low-priority locations can be phased in later.
 - Creating and using location hierarchies lets you track work and costs individually, as well as rolling up costs hierarchically.
 - Creating location hierarchies and systems will enable users to easily find locations, as well as any associated assets.
 - Create virtual locations to indicate locations that are not necessarily physical.
 - Have a predefined formatting and identification procedure in place. The documentation should be graphically laid out well for your location hierarchy. This documentation can act as a map as you identify and enter locations and systems into Maximo.
 - Make a diagram of your business processes for services and asset management. Identify the locations (physical and virtual) that are required to process and track service calls and asset movement.
-

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Chapter Overview continued

Implementation Consideration for GL Accounts

If you are tracking records and transactions by general ledger (GL) account codes, you should consider how you will be using GL accounts when you are creating your location and asset records and their hierarchies and systems.

It is possible to assign GL accounts to location records, to asset records, or to both. On records or transactions for which you specify a location and an asset identifier (a work order, for example), the GL accounts of the asset and the location will be merged if you have GL accounts for both records.

For more information, refer to the *Maximo Financial Manager's Guide*.

Benefits to Users

Properly designed Maximo locations and systems enable you to:

- easily locate the who and what;
 - look at the history of the asset and see where it has been located in the company;
 - look at the cost of the location, in comparison to other locations, to see the trends;
 - easily find assets for change/release work orders;
 - look at the costs from a more detailed level;
 - look at the costs from a corporate level;
 - forecast and budget accurately; and
 - pinpoint the problem areas within a system.
-

Locations and Systems Overview

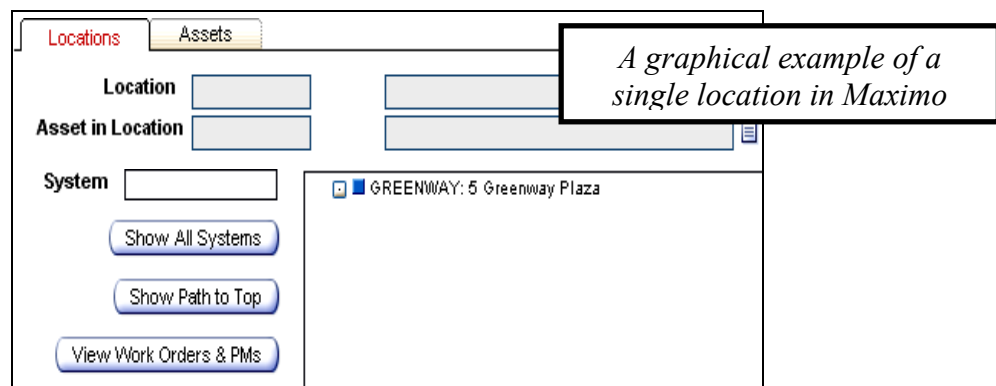
Introduction

Location and system hierarchies should be an integral piece of a site implementation—they are the backbone of the system. A well-planned hierarchical design makes it easier to track assets and costs as they relate to locations.

In addition, the time and thought you invest in planning the locations and systems creates a more strategic approach in navigating the Assets/Location Drilldown menus.

Locations

Locations are like addresses; for example, if you live at *5 Greenway Plaza*, you might start out in a tent, then a trailer, then a building. But even though the structure you are in changes, the address remains 5 Greenway Plaza. If you apply the same logic to locations and assets, locations normally do not change; however, the assets and people that reside at the location might change.



Virtual Locations



Locations do *not* have to represent a physical location, such as an address. Locations could also be represented *virtually*.

For example, you might have field users that have laptop computers assigned to them. Although you might want to track the laptops that are out in the field location, you wouldn't want to identify a particular user in Maximo as a location. Therefore, you could create a location in Maximo to represent the virtual location of Field User.

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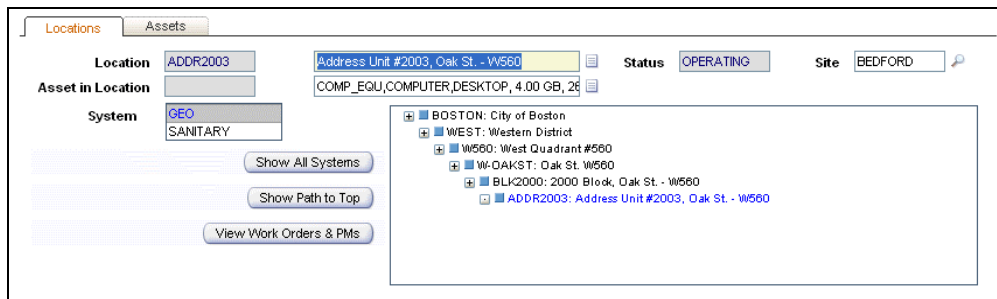
Locations and Systems Overview continued



Discuss where *virtual* locations might be identified at your company.

Location Hierarchy

In Maximo you can build a hierarchical location structure. Maximo location hierarchy uses a parent-child design. With this design, the parent is assumed to be one level up from the current location.



The following table describes the fields and buttons on this screen:

Field/Button	Description
Location	The name of the location.
Status	The status (DECOMMISSIONED, NOT READY, or OPERATING) of the location.
Site	The site to which this location belongs.
Asset in Location	Indicates if there is at least one asset at this location. Click on the Assets tab to display all assets currently at this location.
System	The system(s) associated with this location. Maximo identifies location hierarchies as <i>systems</i> .
Show All Systems	Click to display a value list of all the systems currently in the database.
Show Path to Top	Click to view the parent hierarchy of the highlighted location or asset.
View Work Orders & PMs	Click to view work orders and preventive maintenance records for the selected location or asset.

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Locations and Systems Overview continued

Systems

With Location hierarchies you not only can define a location layout of your organization, but you can also group assets and locations into areas of responsibilities. Maximo identifies location hierarchies as *systems*. In Maximo, a *system* is an identifier or reference consisting of locations associated with a particular focus or responsibility. In most cases, a system functions to identify *location hierarchies* or *location networks*.

- Location *hierarchies* have a parent–child branching relationship.
- Location *networks* can have multiple parents and have no defined branching relationship.
- Locations can belong to multiple *systems*.

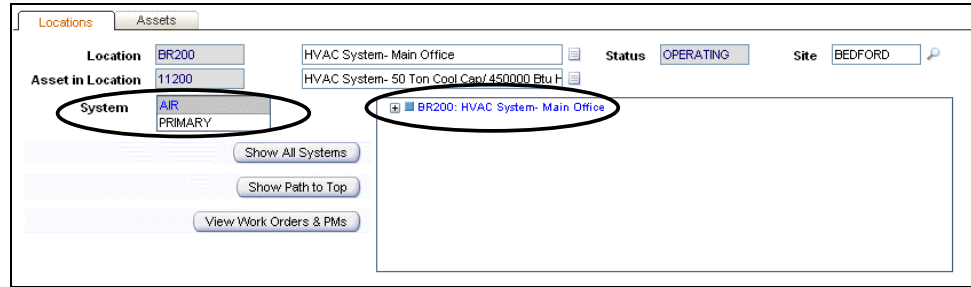
Locations	
Location	<input type="text"/>
Asset in Location	<input type="text"/>
System	MTS10010 LEASEEND AIR ELECTRIC HEATING PRIMARY GEO STORM SANITARY LAN

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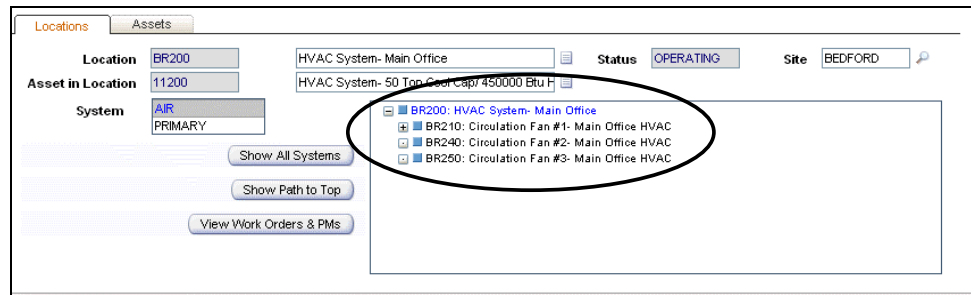
Locations and Systems Overview continued

System Example

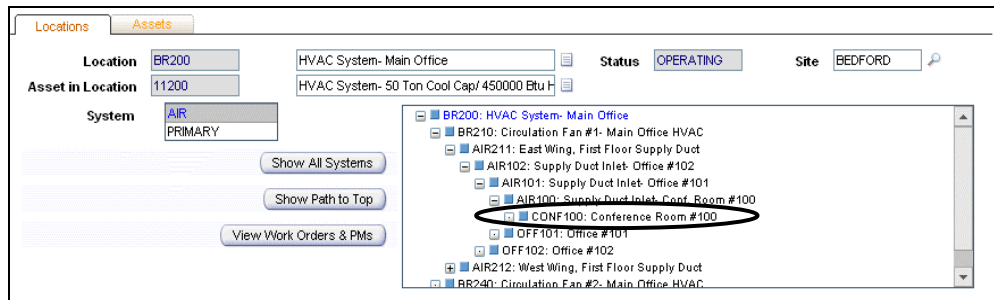
In this example, the location, BR200, is part of two systems: *Air* and *Primary*. In the Air system, it is the top level of this location hierarchy.



Its location hierarchy has been defined to represent the physical location of its circulation fans.



The location structure of one of these fans is further defined down to the room location.



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Locations and Systems Overview continued

Implementation Tip

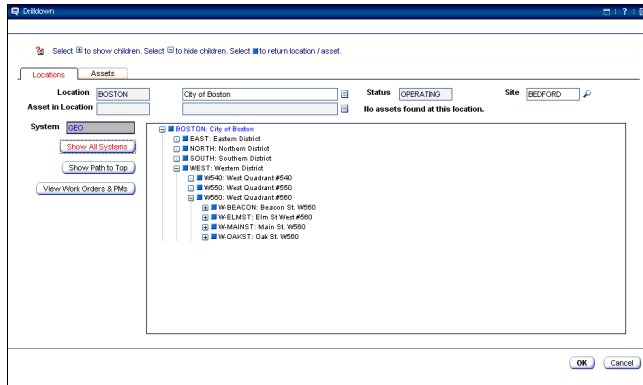


When creating systems, identify your first system as “Primary” and make it the system to which all your operating locations belong. Having all your operating locations tied together under one complete system provides a solid foundation for using locations and systems. It might be the only system your site needs for tracking assets.

Building Location Structures Overview

Introduction

Depending on your needs, you might have one system or multiple systems. This section offers some approaches and considerations when setting up location hierarchies and systems in Maximo.



Field Examples: Setup Approaches



The following examples come from the field. Both are different approaches companies have taken when implementing system and location structures in Maximo. Company names have been changed, and dialog was edited.

Note: These examples are meant to act as a springboard for discussion facilitation and thought generation only. They are not meant to imply that one approach is any better than another.

Example #1: To meet the corporate and site reporting needs, our company made a business decision that we would start with one primary system and locations would have the following format: First the major site would be identified, then the site location, the building, the floor, the room, and assets location. After the room level, it would then be up to that particular site location to create the specific location for assets.

Our location identification translated into this format:

BO1-1-B25-F1-R101D-COMP01

Our location hierarchy translated into this format:

BO1- (Major site)

1- (Site location)

B25- (Building)

F1- (Floor)

R101D- (Room)

COMP01 (Assets location)

continued on next page

Building Location Structures Overview continued

Field Examples: continued
Setup Approaches

Example #2: Over the years we have come to realize that the best approach is to keep it simple. Here is what we have done:

I. **Company**

A. **Country**

1. **Site**

a. **Building**

1) **Function** (e.g., HVAC, B&G, landscape, electrical—things that belong to a building)

b. **System** (i.e., things that tend to span buildings)

1) **Function** (e.g., steam, water, gas, electrical distribution, landscaping, parking, fire systems)

We then attach assets and their subassemblies to the function location and write work orders against the assets.

This type of location hierarchy requires almost zero maintenance because seldom is there any change (i.e., companies, sites, buildings, systems, and functions rarely move). When you start adding details like rooms, and then creating systems for different views, you add to the maintenance requirements, and the maintenance grows exponentially with systems.

One Last Suggestion from the Field

Start building your location hierarchy with *one system*—a geographical (i.e., “helicopter view”) works well. Do *not* allow anyone to create additional systems until your primary hierarchy works for you. You will save yourself endless hassles. Wait several months before cutting additional systems, which is the same as tagging existing locations from your primary hierarchy to say: “You also belong to this other system.”

When you are comfortable with the above, then you can start building new standalone systems in their own hierarchies.

We tend to place all levels of the asset hierarchy at the same location, which makes reporting by location easy to do (e.g., the bottom level of the location hierarchy is the top of the asset hierarchy).

continued on next page

Building Location Structures Overview continued

Location Hierarchy Performance Considerations



Depending on the *shape* of the location hierarchy design, a large number of locations and/or assets records could affect the performance of the drilldown display when there is a large number of children (greater than 200) for any given parent.

For example, if the shape of the hierarchy follows a perfectly symmetrical structure of 10 children for each parent, a five-level hierarchy could have 100,000 records within the five levels and have very good performance.

On the other hand, if the shape of the hierarchy were asymmetrical, and a single parent had 2,500 children, the performance would be less than satisfactory even with fewer records in the hierarchy.

The cause of this performance issue is not with Maximo or the database, but with how the browser handles the JavaScript reading the drilldown.

Initial System Setup Parameters

When setting up the initial database, keep these criteria requirements and parameters in mind:

1. Each organization's site must have one system identified as the primary system.
 2. Before creating the first system, you must create one location.
-

Building Location Structures

Follow these steps to build location structures in Maximo:

1. Initial organization's site location hierarchy setup – create a location.
 2. Create a system.
 3. Create locations.
 4. Associate a system to a location or associate a location to a system.
-

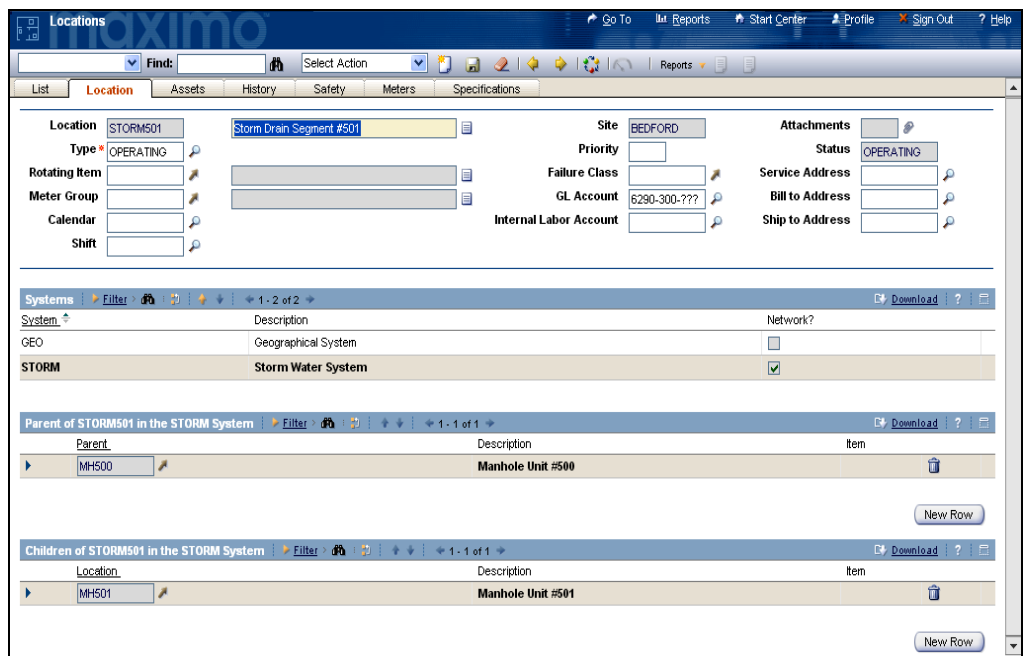
Creating Locations

Introduction

In this section we will focus on creating a new location and associating it to an already existing system.

The Locations Application

The **Locations** application lets you enter and maintain operating locations for assets and organize these locations into a logical hierarchy. The **Locations** application is accessed from the **Assets** module in the Start Center.



continued on next page

Creating Locations continued

Locations Tabs The Locations application is comprised of seven tabs.



Use this tab...	To...
List	Enter and save searches.
Location	Enter or view detailed information specific to a location.
Assets	Display the assets, if any, at the selected location.
History	Display the history of the assets movement transactions into and out of the location.
Safety	View, add, or delete safety records associated with the selected location.
Meters	View, add, or modify meter records associated with a location.
Specifications	Enter or view specifications for the location as recorded in the Classifications application.

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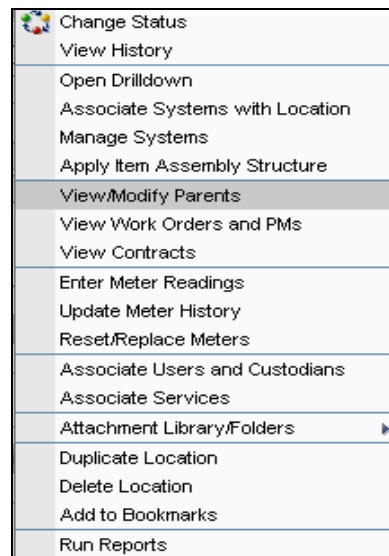
Creating Locations continued

Locations Select Action Menu

The **Select Action** menu contains specific actions associated with the **Locations** application. The following list describes some of the actions you can perform with this menu:

- Selecting a status of a location (DECOMMISSIONED, NOT READY, or OPERATING)
- Viewing the location and system hierarchy (Open Drilldown)
- Managing and associating systems with a location
- Changing or modifying location parents
- Viewing work orders, PMs, and routes
- Editing and updating meters associated in a location
- Managing contracts, users, and services associated in a location

Some of these actions will be explained in this chapter, but for a detailed explanation of this menu, consult the *Maximo User's Guide*.



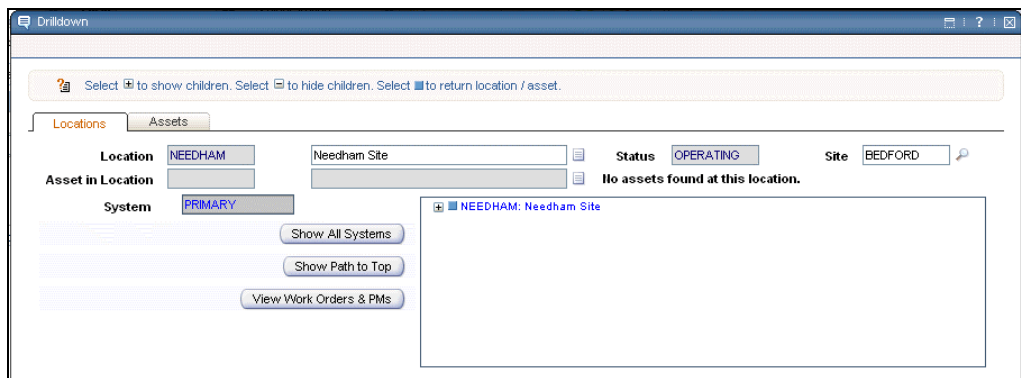
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Creating Locations continued

Review: Open Drilldown

The **Open Drilldown** action allows you to view the complete hierarchy of locations and assets. The Location/Assets Drilldown is a standard lookup that lets you find a location or asset by navigating a graphical hierarchical tree. The Drilldown displays systems created in the **Locations** application and item assembly structures built in the **Assets** application. You can:

- switch back and forth between Locations and Assets by selecting the appropriate tab on the Drilldown;
- select a location, and then switch views to see assets at that location;
- drill down to an asset, then switch views to see its location and the system(s) that location belongs to; and
- show all the systems available for a particular site.



Child Display Limits



For any given parent, a limit can be set on the number of child location/asset records displayed in the hierarchy. When the limit has been reached, Maximo displays a message.

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Creating Locations continued

Location Types

For tracking and accounting purposes, there are several types of locations defined in an out-of-the-box Maximo implementation.




Note: Only operating types can be part of a system.

Location Type	Description
Courier	Used to track assets that a courier is holding until they are received into another location.
Holding	Generally used to identify areas where assets are temporarily stored prior to tracking procedures such as serialization and inspection.
Labor	Associated as location records so that you can track assets and inventory issued to specific individuals.
Operating	Generally used to identify the spaces where your assets operate.
Repair	Used to track asset when they have been removed from an operating location for repair.
Salvage	Used to track assets as they move to a salvage location.
Vendor	Used to track assets as they move to a vendor location.

Modifying Location Types

You can add/modify location types using **Application Designer**, found in the **Configuration** module. For more information on how to do this, refer to the *Maximo System Administrator's Guide*.

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Creating Locations continued

**Better Practice
Tip: Priority
Field**

Identifying a priority scheme for locations allows you to focus on location assets that are critical to the organization's operations.



Priority <input type="text" value="1"/>
--

Priority ranking in Maximo is 1 (low) to 999 (high). You can create and associate a value list on most of the priority fields to limit the choice. For more information on how to do this, refer to the *Maximo System Administrator's Guide*.

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Creating Locations continued

Exercise Scenario: Creating the Location

In the classroom demo database, our Bedford site’s primary system is Needham. The Needham system encompasses all of its locations. In this scenario, we are going to create a new location to represent field users and then associate it to Needham.


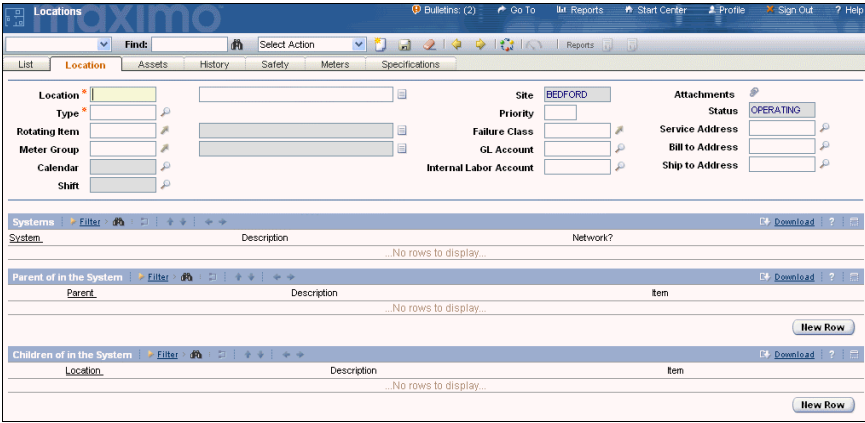
Creating a Location



To add a new location, follow the steps below.

Note: You must be logged in to the Bedford site.

Hint: Check your profile.

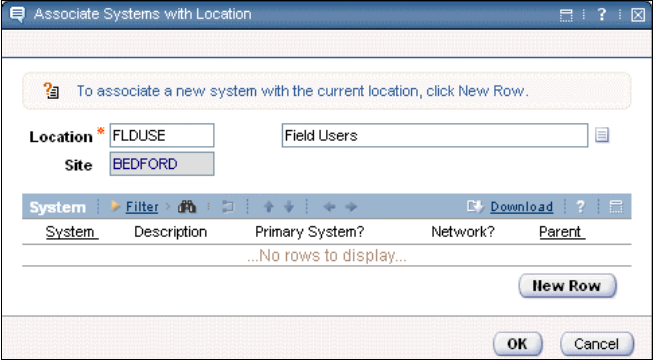
Step	Action
1	Open the Locations application in the Assets module.
2	<p>Create a new location record by clicking the New Location button:</p>  <p><u>Result</u>: Maximo displays the Location tab, ready for you to enter a new location.</p> 

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Creating Locations continued

Creating a Location

continued

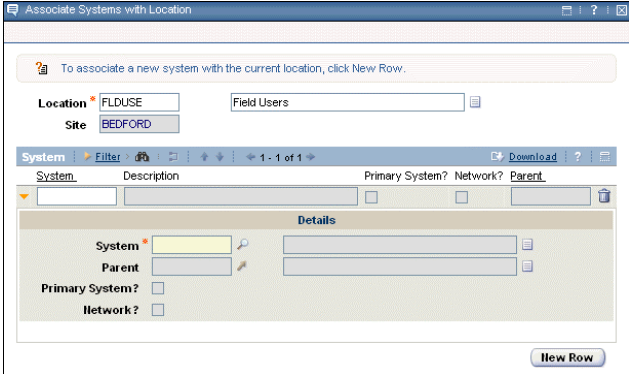
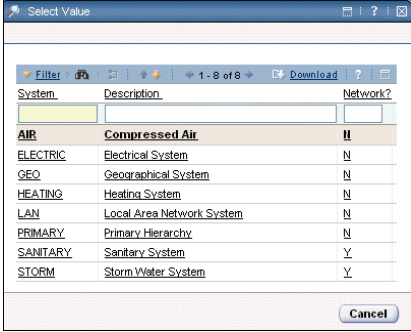
Step	Action								
3	Enter the following information: <table border="0"> <tr> <td><u>Field</u></td> <td><u>Value</u></td> </tr> <tr> <td>Location</td> <td>FLDUSE</td> </tr> <tr> <td>Description</td> <td>Field Users</td> </tr> <tr> <td>Type</td> <td>Operating</td> </tr> </table> <p><u>Hint</u>: Use the Select Value icon where applicable.</p>	<u>Field</u>	<u>Value</u>	Location	FLDUSE	Description	Field Users	Type	Operating
<u>Field</u>	<u>Value</u>								
Location	FLDUSE								
Description	Field Users								
Type	Operating								
4	From the Select ACTION menu, choose Associate Systems with Location . <u>Result</u> : The Associate Systems with Location dialog box opens. 								

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Creating Locations continued

Creating a Location

continued

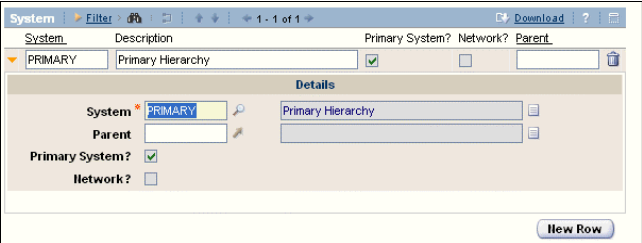
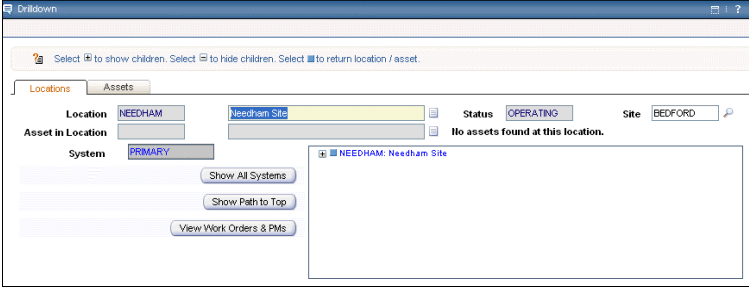
Step	Action
5	<p>Click New Row.</p> <p><u>Result</u>: Maximo displays the system's row details.</p> 
6	<p>In the System field, click Select Value.</p> <p><u>Result</u>: Maximo displays the Select Value dialog box.</p> 

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Creating Locations continued

Creating a Location

continued

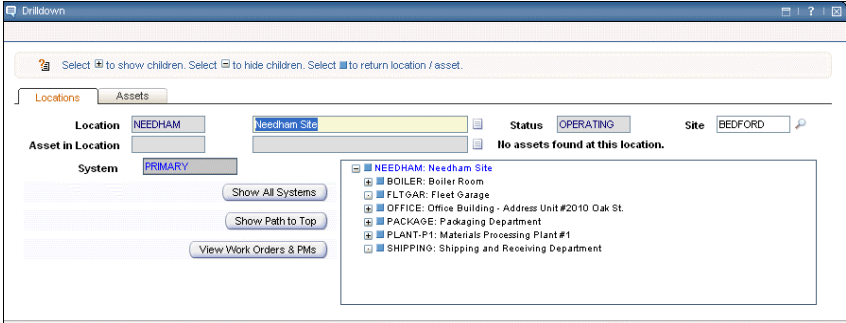
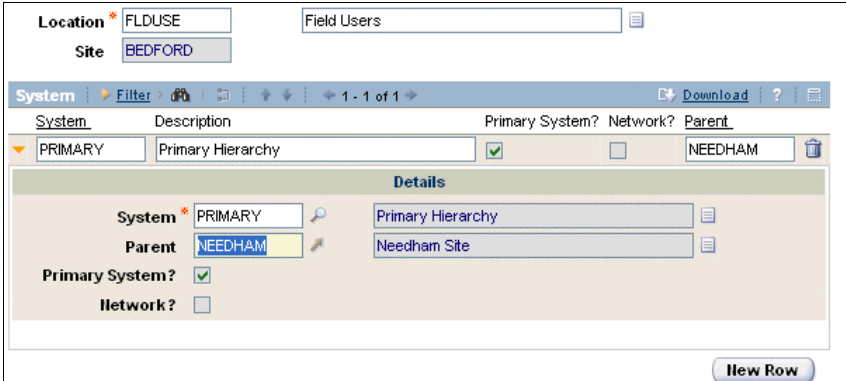
Step	Action
7	<p>Select PRIMARY.</p> <p><u>Result:</u> You are brought back to the System field.</p> 
8	<p>In the Parent field, click the Detail Menu button and select Open Drilldown.</p> <p><u>Result:</u> Maximo displays the Drilldown.</p> 

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Creating Locations continued

Creating a Location

continued

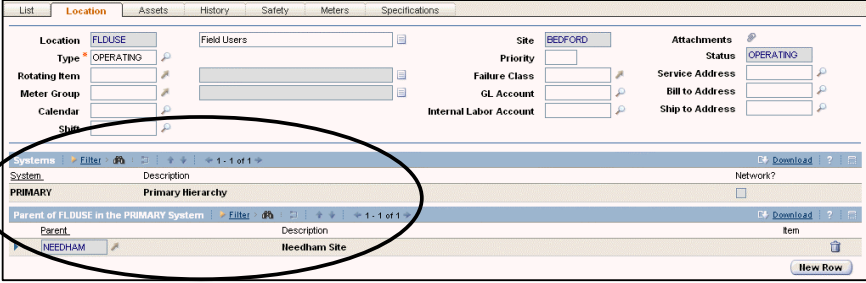
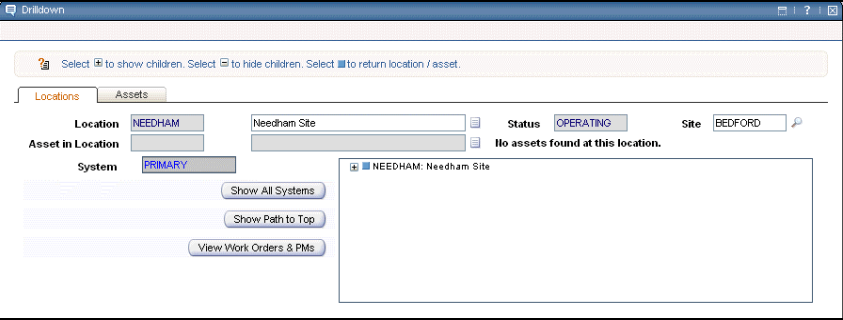
Step	Action
9	<p>Expand NEEDHAM. <u>Result:</u> Maximo displays NEEDHAM's location hierarchy.</p> 
10	<p>Because our field users have laptops and can be at any place at any time, we have decided to indicate that Needham is the parent. Click on the NEEDHAM blue box.</p> <p><u>Result:</u> NEEDHAM is identified at the parent level of the Field Users location.</p> 

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Creating Locations continued

Creating a Location

continued


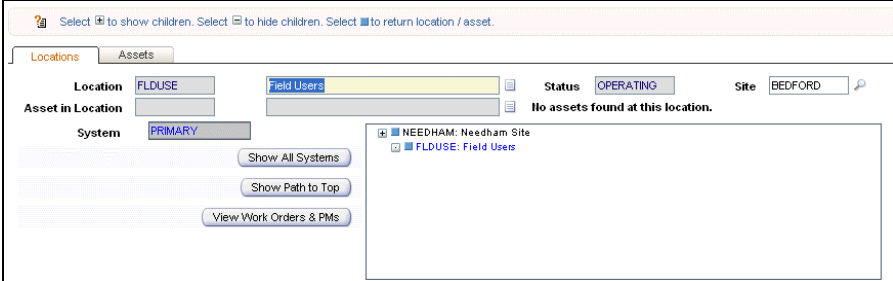
Step	Action
<p>11</p>	<p>Click OK.</p> <p><u>Result:</u> You are returned to the Locations tab and FLDUSE is identified as belonging to the PRIMARY system and as Child location to NEEDHAM.</p> 
<p>12</p>	<p>To view the drilldown from its parent perspective, click on the NEEDHAM field Detail Menu button and choose Open Drilldown.</p> <p><u>Result:</u> The Drilldown opens.</p> 

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Creating Locations continued

Creating a Location

continued

Step	Action
13	<p>Expand the Needham branch by clicking on the plus sign (+). <u>Result:</u> FLDUSE - Field Users is now a location of Needham.</p> 
14	<p>Click Cancel to return to the Locations application.</p>
15	<p>To view the drilldown, use the Open Drilldown action. <u>Result:</u> The Drilldown opens. Notice that the system is PRIMARY.</p> 
16	<p>Click Cancel. <u>Result:</u> You are brought back to the Locations tab.</p>

continued on next page

Creating Locations continued

Discussion



- Within your organization, what would your location structures look like?
 - Do you associate assets to locations? If so, which ones? How deep would you most likely go?
 - Would creating virtual locations make sense for your organization? Why or why not?
-

Location Hierarchy and System Setup

Introduction

In this section we will focus on the creation and building of systems and location hierarchies.

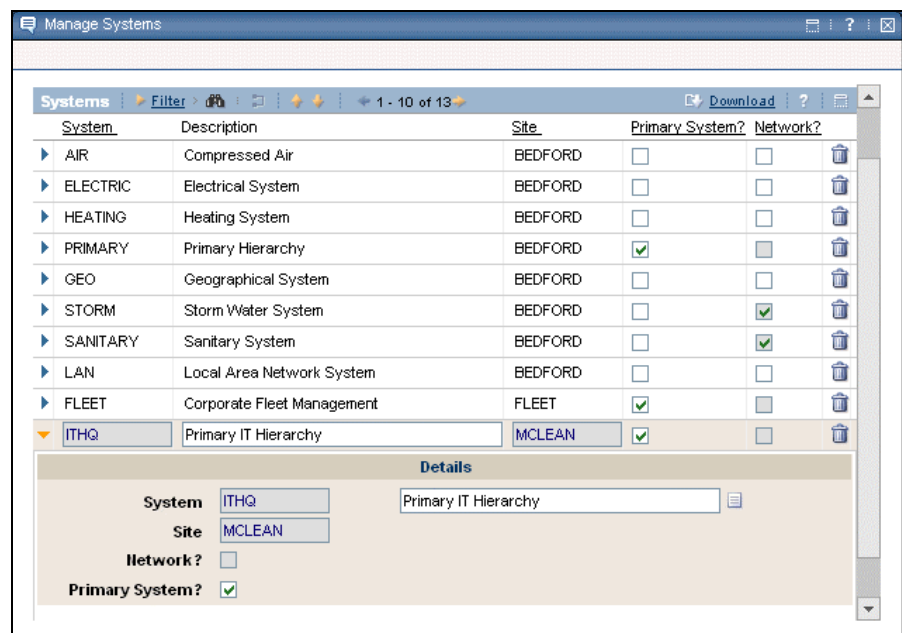
Revisit: Systems

Recall that in Maximo, a *system* is defined as an identifier or grouping of locations and location hierarchies.

Creating and Managing Systems

Use the **Manage Systems** action to perform the following actions:

- Add a new system
- Select a system to be the primary system
- Change a hierarchical system to a network system



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Location Hierarchy and System Setup continued

Hierarchical System Creation



When setting up the initial database, keep in mind these criteria requirements and parameters:

- Before creating the first system, you must create one location. The first location you create or associate to a new system becomes the top-level location in the system. You cannot change this. For every location you add to the system after that, you will have to specify a parent location.
- For each organization's site, you must have one system identified as the primary system.

System	Description	Site	Primary System?	Network?
AIR	Compressed Air	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>
ELECTRIC	Electrical System	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>
FLEET	Corporate Fleet Management	FLEET	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GEO	Geographical System	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>
HEATING	Heating System	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>
ITHQ	Primary IT Hierarchy	MCLEAN	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LAN	Local Area Network System	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>
MAIN	Main Manufacturing Hierarchy	TEXAS	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MOBILE	Mobile Users	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>

- You can change the primary system for any organization site after other systems are created.
- Only operating location types can be part of a system.

Building Location Structures

The steps to building location structures in Maximo are as follows:

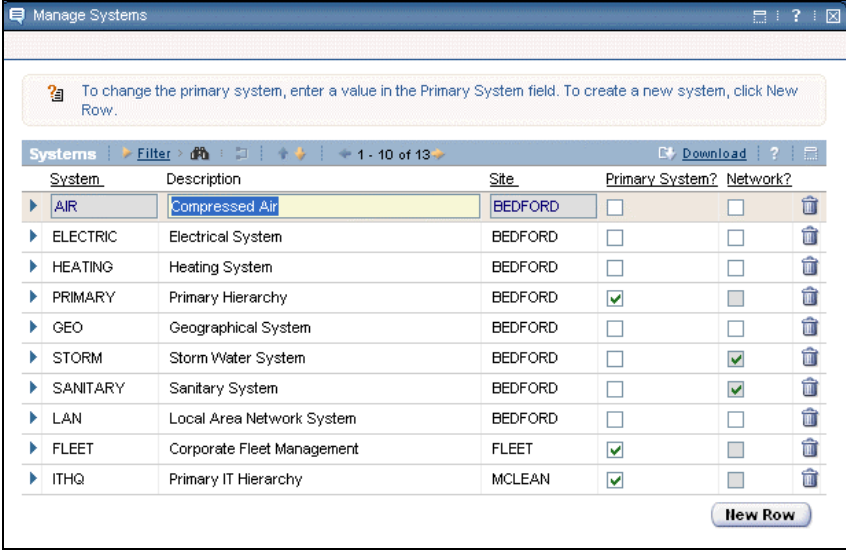
1. Initial organization's site location structure setup – create a location.
2. Create a system.
3. Create locations.
4. Associate a system with a location or associate a location to a system.

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Location Hierarchy and System Setup continued

Creating a System and Building a Location Hierarchy

In this exercise we will create a new system for our fields users, and then build a location hierarchy to represent the field users by department.

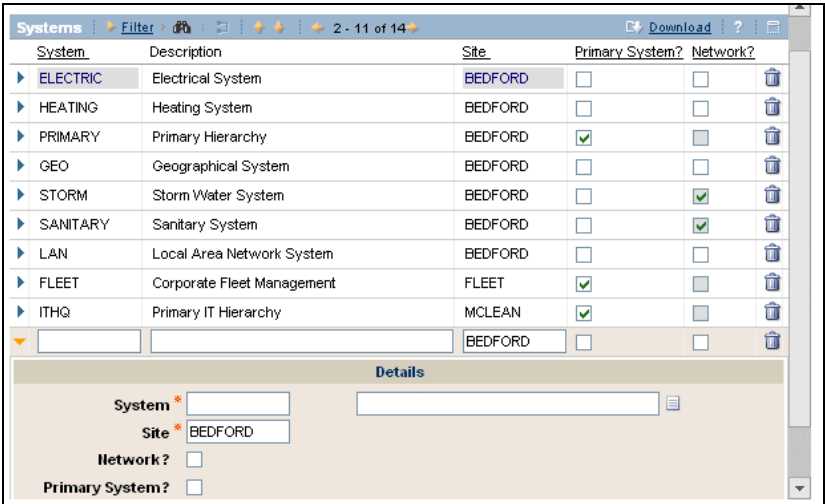
Step	Action																																																							
1	<p>From the Select Action menu, select Manage Systems. <u>Result:</u> The Manage Systems dialog box opens.</p>  <p>The screenshot shows a 'Manage Systems' dialog box with a table of systems. The table has columns for System, Description, Site, Primary System?, and Network?. The 'AIR' system is selected, and its description 'Compressed Air' is highlighted. The 'PRIMARY' system is marked as the primary system with a green checkmark. The 'FLEET' and 'ITHQ' systems are also marked as primary systems. A 'New Row' button is visible at the bottom right of the table.</p> <table border="1"> <thead> <tr> <th>System</th> <th>Description</th> <th>Site</th> <th>Primary System?</th> <th>Network?</th> </tr> </thead> <tbody> <tr> <td>AIR</td> <td>Compressed Air</td> <td>BEDFORD</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>ELECTRIC</td> <td>Electrical System</td> <td>BEDFORD</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>HEATING</td> <td>Heating System</td> <td>BEDFORD</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>PRIMARY</td> <td>Primary Hierarchy</td> <td>BEDFORD</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>GEO</td> <td>Geographical System</td> <td>BEDFORD</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>STORM</td> <td>Storm Water System</td> <td>BEDFORD</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>SANITARY</td> <td>Sanitary System</td> <td>BEDFORD</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>LAN</td> <td>Local Area Network System</td> <td>BEDFORD</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>FLEET</td> <td>Corporate Fleet Management</td> <td>FLEET</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>ITHQ</td> <td>Primary IT Hierarchy</td> <td>MCLEAN</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	System	Description	Site	Primary System?	Network?	AIR	Compressed Air	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>	ELECTRIC	Electrical System	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>	HEATING	Heating System	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>	PRIMARY	Primary Hierarchy	BEDFORD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GEO	Geographical System	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>	STORM	Storm Water System	BEDFORD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SANITARY	Sanitary System	BEDFORD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	LAN	Local Area Network System	BEDFORD	<input type="checkbox"/>	<input type="checkbox"/>	FLEET	Corporate Fleet Management	FLEET	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ITHQ	Primary IT Hierarchy	MCLEAN	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Location Hierarchy and System Setup continued

Creating a System and Building a Location Hierarchy

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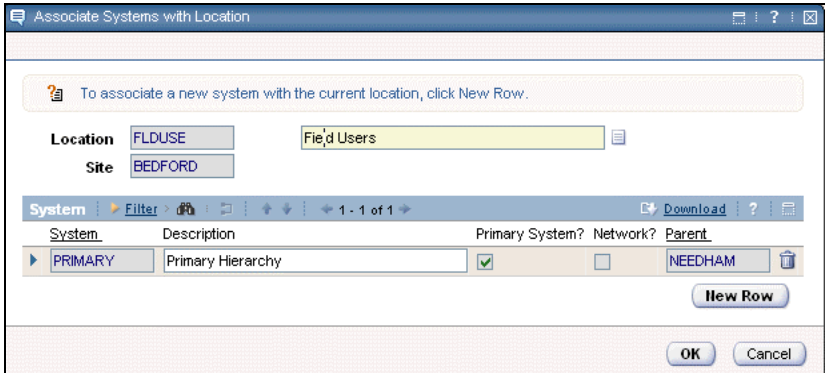
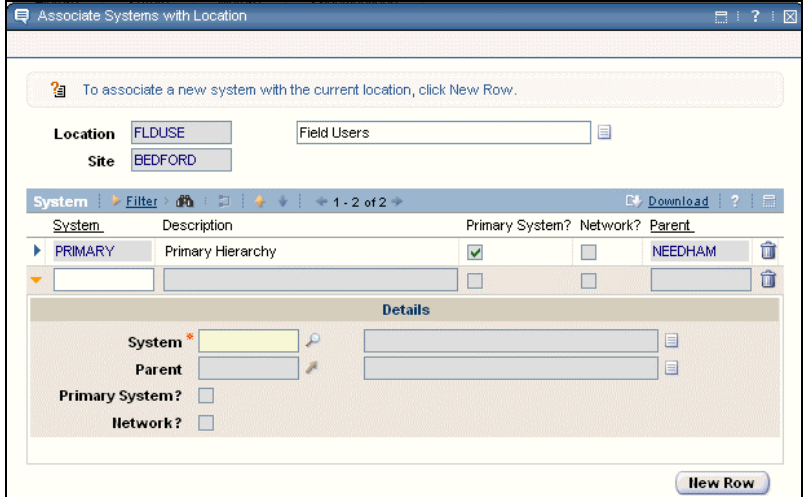
Step	Action
2	<p>Click New Row.</p> <p><u>Result:</u> The Details table opens.</p> 
3	<p>In the System field, type FIELD. In the description field, type Field User Structure.</p>
4	<p>Click OK.</p> <p><u>Result:</u> The Details table closes and you are returned to the Location tab.</p>

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Location Hierarchy and System Setup continued

Creating a System and Building a Location Hierarchy

continued

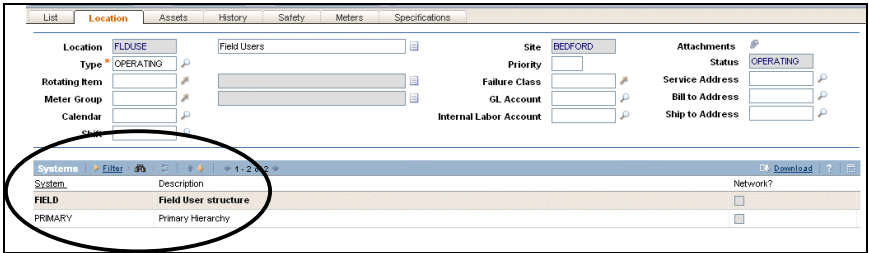
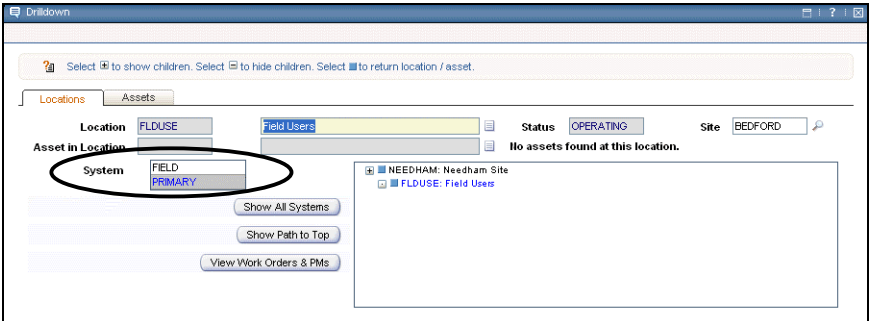
Step	Action
5	<p>From the Select Action menu, select Associate Systems with Location.</p> <p><u>Result</u>: The Associate Systems with Location page opens.</p> 
6	<p>Click New Row.</p> <p><u>Result</u>: The Details table opens.</p> 

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Location Hierarchy and System Setup continued

Creating a System and Building a Location Hierarchy

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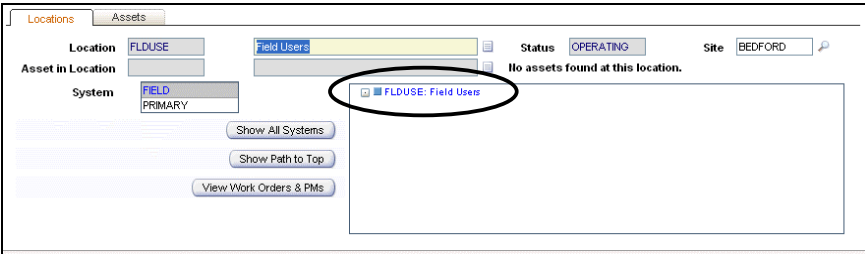
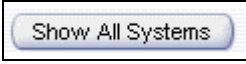
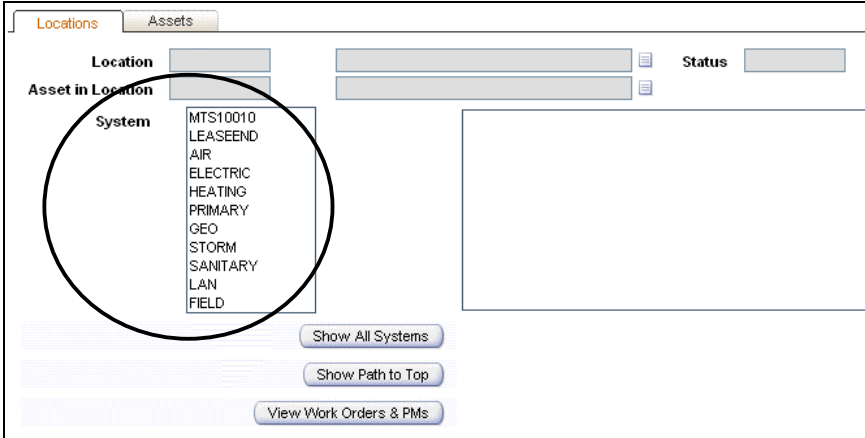
Step	Action
7	<p>In the System field, enter Field and then tab out of the field.</p> <p><u>Result:</u> The system description populates the description field.</p>
8	<p>Click OK.</p> <p><u>Result:</u> The Details table closes and you are brought back to the Location tab page. The Field User location is now part of the Field system.</p>  <p>The screenshot shows the 'Location' details page for 'FLDUSE'. The 'Systems' table at the bottom is circled, showing two entries: 'FIELD' with description 'Field User structure' and 'PRIMARY' with description 'Primary Hierarchy'.</p>
9	<p>From the Select Action menu, select Open Drilldown.</p> <p><u>Result:</u> FIELD is added to the system and the screen shows that the FLDUSE location belongs to two systems: FIELD and PRIMARY.</p>  <p>The screenshot shows the 'Drilldown' window. The 'System' field is circled, showing 'FIELD' and 'PRIMARY' as selected options. The 'Asset in Location' section shows 'FIELD Users' and 'PRIMARY'.</p>

continued on next page

Location Hierarchy and System Setup continued

Creating a System and Building a Location Hierarchy

continued

Step	Action
10	<p>In the System field, select FIELD.</p> <p><u>Result:</u> Your location structure for Field Users, which is part of the FIELD system, consists of only one level.</p> 
11	<p>To view all systems that are currently created in Maximo, click Show All Systems.</p>  <p><u>Result:</u> All systems in Maximo are displayed.</p> 
12	<p>Click Cancel to return to the Location tab.</p>

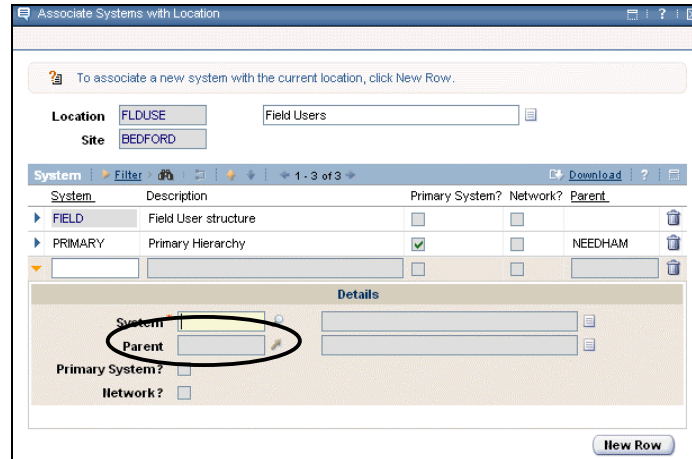
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Location Hierarchy and System Setup continued

Adding Children Level

There are essentially two ways to add child children levels and build a location hierarchy:

- You can build from the bottom up by using the **Associate Systems to Locations** select action, which allows you to associate the parent when associating the system.



- You can build top down by creating locations in the system and, as you create the parent level, associating it with its children.

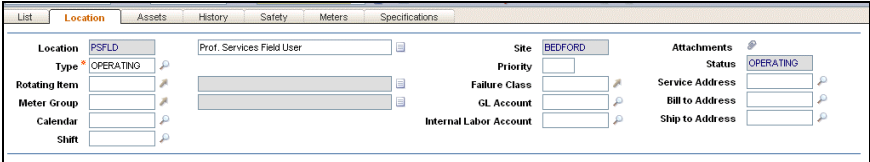
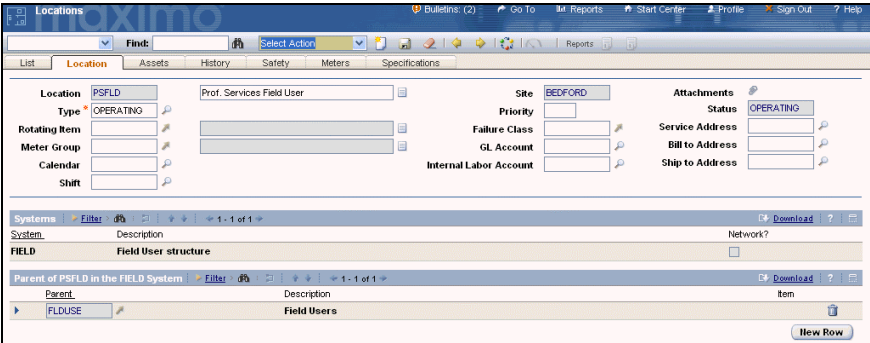
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Location Hierarchy and System Setup continued

Exercise #1: Adding Children Levels



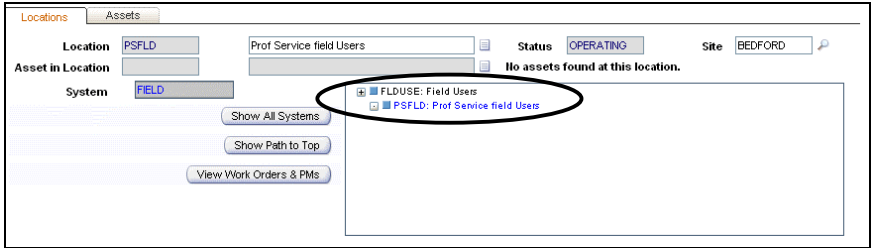
We are going to further detail our virtual location by adding another child-level location that identifies field users by department—Sales and Professional Services. For this exercise, we will use **Associate the System to the Location** to build the hierarchy.

Step	Action								
1	<p>Create a new location using the following information:</p> <table border="0"> <tr> <td>Field</td> <td>Value</td> </tr> <tr> <td>Location</td> <td>PSFLD</td> </tr> <tr> <td>Description</td> <td>Prof. Service Field Users</td> </tr> <tr> <td>Type</td> <td>OPERATING</td> </tr> </table> <p><u>Result:</u> Your screen should look like the one below.</p> 	Field	Value	Location	PSFLD	Description	Prof. Service Field Users	Type	OPERATING
Field	Value								
Location	PSFLD								
Description	Prof. Service Field Users								
Type	OPERATING								
2	<p>Save the record and then associate this location to the FIELD system. Identify the parent as FLDUSE.</p> <p><u>Result:</u> Your screen should look like the one below.</p> 								

continued on next page

Location Hierarchy and System Setup continued

Exercise #1: continued
Adding Children Levels

Step	Action
3	<p>Open the Drilldown action to view the location hierarchy.</p> <p><u>Result:</u> The child level, Professional Service, is added to the location structure.</p> 

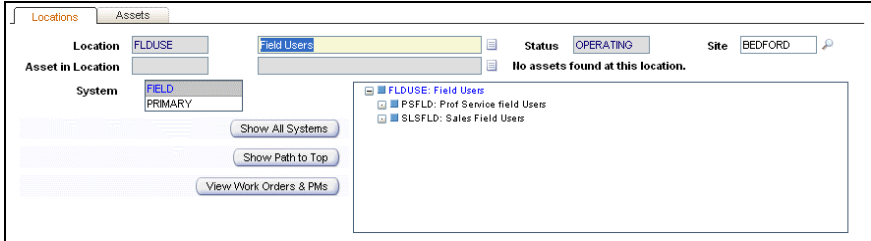
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Location Hierarchy and System Setup continued

Exercise #2: Adding Children Levels



For this exercise we will create the location and then associate it to its parent.

Step	Action												
1	Create a new location by clicking New Location .												
2	<p>Enter the following information:</p> <table border="0"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Location</td> <td>SLSFLD</td> </tr> <tr> <td>Description</td> <td>Sales Field Users</td> </tr> <tr> <td>Type</td> <td>OPERATING</td> </tr> <tr> <td>System</td> <td>FIELD</td> </tr> <tr> <td>Parent</td> <td>FLDUSE</td> </tr> </tbody> </table> <p><u>Result</u>: Your drilldown should look like the one below.</p> <p><u>Hint</u>: You might have to expand the parent branch.</p> 	<u>Field</u>	<u>Value</u>	Location	SLSFLD	Description	Sales Field Users	Type	OPERATING	System	FIELD	Parent	FLDUSE
<u>Field</u>	<u>Value</u>												
Location	SLSFLD												
Description	Sales Field Users												
Type	OPERATING												
System	FIELD												
Parent	FLDUSE												

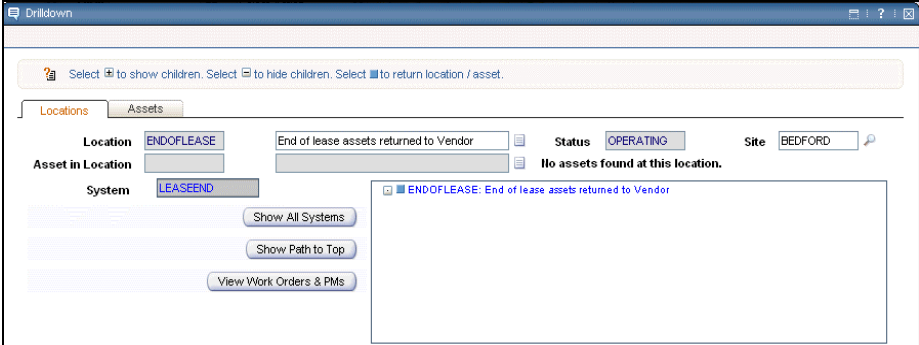
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Location Hierarchy and System Setup continued

Exercise #3: Putting It Together

In this exercise you will represent a virtual location for end-of-lease assets returned to vendors.

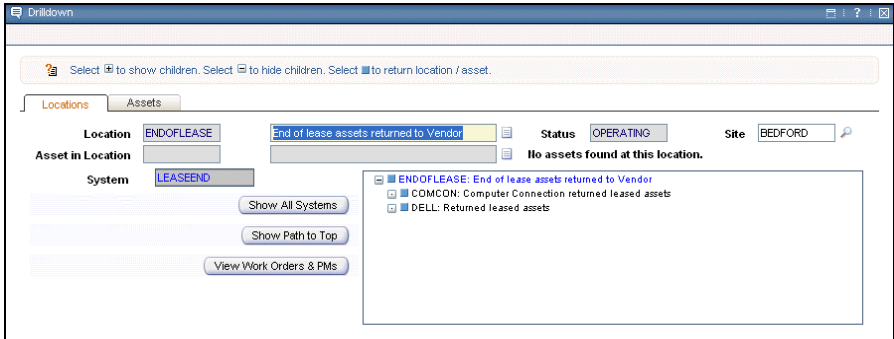


Step	Action										
1	<p>Create a new location and new system with the following data:</p> <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Location</td> <td>ENDOFLEASE (this will be the parent)</td> </tr> <tr> <td>Description</td> <td>End of lease assets returned to Vendor</td> </tr> <tr> <td>Type</td> <td>Operating</td> </tr> <tr> <td>System</td> <td>LEASEEND</td> </tr> </tbody> </table> <p><u>Result:</u> Your drilldown should look like the one below.</p> 	<u>Field</u>	<u>Value</u>	Location	ENDOFLEASE (this will be the parent)	Description	End of lease assets returned to Vendor	Type	Operating	System	LEASEEND
<u>Field</u>	<u>Value</u>										
Location	ENDOFLEASE (this will be the parent)										
Description	End of lease assets returned to Vendor										
Type	Operating										
System	LEASEEND										

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Location Hierarchy and System Setup continued

Exercise #3: continued
Putting It Together

Step	Action
2	<p>Create the following children OPERATING locations for this parent ENDOFLEASE location, LEASEEND system:</p> <ul style="list-style-type: none"> • Dell end-of-lease returns • Computer Connection end-of-lease returns <p><u>Result:</u> Your drilldown should look similar to the one below.</p> 

Chapter Summary

Location and System

Location and system hierarchies should be an integral piece of a site implementation—they are the backbone of the system. A well-planned hierarchical design makes it easier to track assets and costs as they relate to locations.

In addition, the time and thought you invest in planning the locations and systems creates a more strategic approach in navigating the Assets/Location Drilldown menus.

Locations

Locations are like addresses; for example, if you live at *5 Greenway Plaza*, you might start out in a tent, then a trailer, then a building. But even though the structure you are in changes, the address remains *5 Greenway Plaza*. If you apply the same logic to locations and assets, locations normally do not change; however, the assets and people that reside at the location might change.

Systems

In Maximo, a *system* is an identifier or reference consisting of locations associated with a particular focus or responsibility. In most cases, a system functions to identify *location hierarchies* or *location networks*.

- Location *hierarchies* have a parent–child branching relationship.
 - Location *networks* can have multiple parents and have no defined branching relationship.
-

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Chapter Summary continued

Locations Select Action Menu

The **Select Action** menu contains specific actions associated with the **Locations** application. The following list describes some of the actions you can perform with this menu:

- Selecting a status of a location (DECOMMISSIONED, NOT READY, or OPERATING)
- Viewing the location and system hierarchy (Open Drilldown)
- Managing and associating systems with a location
- Changing or modifying location parents
- Viewing work orders, PMs, and routes
- Editing and updating meters associated in a location
- Managing contracts, users, and services associated in a location

For a detailed explanation of this menu, consult the *Maximo User's Guide*.

Using the Location/Assets Open Drilldown Menu

The **Open Drilldown** action allows you to view the complete hierarchy of locations and assets. The Location/Assets Drilldown is a standard lookup that lets you find a location or asset by navigating a graphical hierarchical tree. The Drilldown displays systems created in the **Locations** application and item assembly structures built in the **Assets** application. You can:

- switch back and forth between Locations and Assets by selecting the appropriate tab on the Drilldown;
 - select a location, and then switch views to see assets at that location;
 - drill down to an asset, then switch views to see its location and the system(s) that location belongs to; and
 - show all the systems available for a particular site.
-

MXES Immersion Training for IT

Chapter 6: Entering Person Records and Registering Users



In This Chapter

This chapter contains the following topics:

Topic	See Page
Chapter Overview	6-1
Security Overview	6-5
Person Records	6-10
Setting Up People	6-12
Creating Security Groups and Registering Users	6-17
Labor and Craft Records	6-44
Chapter Summary	6-56

Chapter Overview

Introduction

The next step in setting up Maximo is to add and register the users.

Learning Objectives

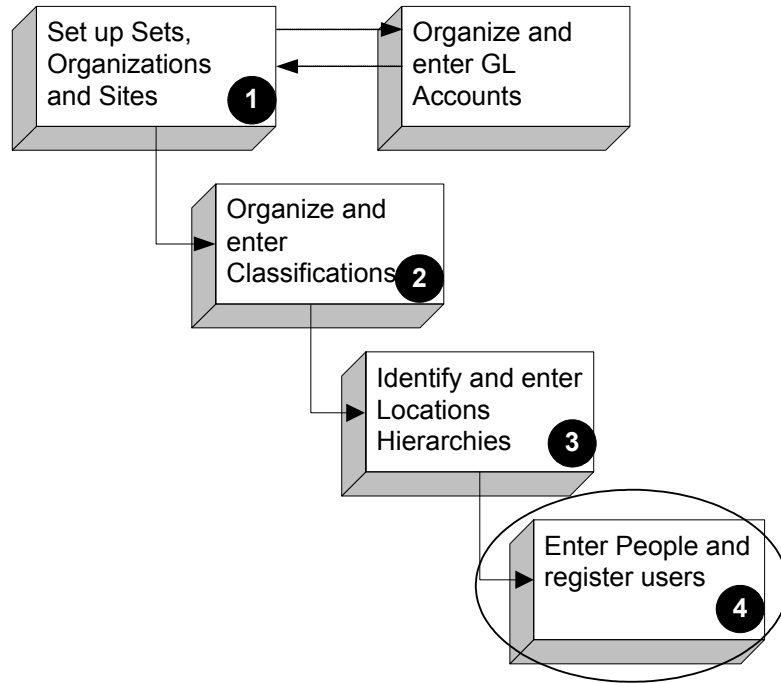
When you have completed this chapter, you should be able to:

- insert people, labor, and craft records;
 - describe Maximo security groups and users strategy;
 - create security groups and users; and
 - register users.
-

Chapter Overview continued

We Are Here

Enter person records using the **People**, **Labor**, and **Craft** applications, and register users with the **Security** application.



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Chapter Overview continued

Implementation Questions to Consider

- How will new users be entered and registered in the system?
 - Are you implementing LDAP?
 - What identification conventions will be used?
 - What application privileges should user groups have?
 - What are the working relationships between the service desk, IT operations, purchasing, and contracts personnel?
 - Are your job descriptions well defined?
 - Do you have crafts?
 - Are your authorization processes documented for:
 - Work orders?
 - Purchase requests?
 - Storeroom access?
 - Asset movement and tracking?
 - Service level management?
 - Inventory management?
 - Purchasing/leasing?
 - How will your labor records be entered into the system?
-

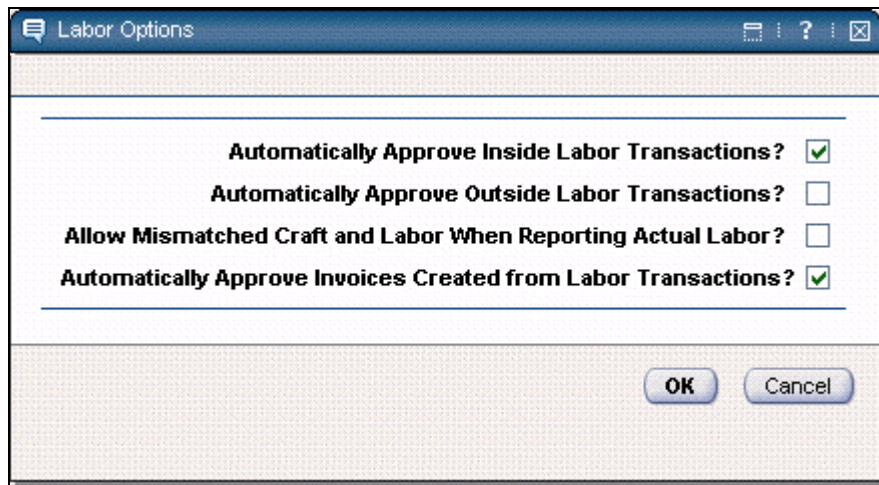
Chapter Overview continued

Organizations Application Options Revisited: Setting Labor Options

The following setup options for labor are available in the **Organizations** application.

You can select labor options for all sites at the selected organization.

You can *clear* the check boxes to determine whether Maximo automatically approves inside and/or outside labor.



Implementation Tips



- Identify user group profiles that fit the user groups in your organization.
 - Create a spreadsheet that identifies your user groups and identify what application privileges those groups will have.
 - Use the default signature security strategy provided in the Maximo database as a template to create your own set of authorization profiles.
-

Security Overview

Introduction

The following three applications are key to security in Maximo:

- **People** application (**Resources** module)
 - **Users** application (**Security** module)
 - **Security Groups** application (**Security** module)
-

The People Application

The **People** application captures common personal information:

- Labor
 - Users
 - Asset custodians
 - Asset owners
 - Help desk callers
-

The Users Application

The **Users** application identifies Maximo users and has the following features:

- Status with history
 - Forced password expiration
 - Single step to update settings for multiple users (Groups, Default Site, Default Storeroom)
-

The Security Groups Application

The **Security Groups** application is a *single* point of contact for group-dependent settings:

- Sites
 - Application authorizations
 - Purchasing limits
 - Invoice tolerances
 - Start Centers
 - GL component authorizations
 - Labor authorizations
 - Storeroom authorizations
 - Group restrictions
-

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Security Overview continued

Users and Security Groups

Some of the Maximo security features are as follows:

- All security access to Maximo is based on security groups.
 - When setting up a security group, you define access capabilities to applications and their menus.
 - A description can be seen after you insert a new group.
 - One group's setting can be independent of other groups' settings.
 - A user can be a member of multiple groups.
 - Any user can have administrative rights in a group.
 - Any Maximo user can be assigned as a system administrator.
 - A system administrator can add users to, or delete users from, a security group at any time.
 - "My Profile" has been added for users.
 - Maximo is Government FIPS 140-2 compliant.
 - Maximo is also Sarbanes-Oxley issues compliant.
-

Default Values

There are no default Start Centers for new groups. The **Start Center** field is not a required field. With out-of-the-box Maximo, create at least one new group that includes a Start Center template.

Out-of-the-box Maximo includes a default user: **MAXADMIN**. Use this user *only* to sign in to Maximo for the first time; then create new users and new groups, and thereafter use one of the new users to sign in.

Warning: Do not change any settings for the MAXADMIN user!



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Security Overview continued

How Access Is Determined

When a user tries to access an application, the security objects will check to see what the maximum access is, based on the combination of the user's roles:

- Application access types
- Read
- Insert
- Save
- Delete

In addition, the user's access to options (actions) will be checked. Access always has a site component, as follows:

- All sites
- Specified sites
- No sites specified

Organization access is derived from the site access, not specified.

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Security Overview continued

LDAP, SSO, PKI, and PKE

Maximo supports the following features by leveraging these application servers' authentication mechanisms:

LDAP: Lightweight Directory Access Protocol

- Authentication via a central directory for all applications in an organization.
- The Microsoft brand is Active Directory.

SSO: Single Sign-On

- User authenticates (provides user name and password) once and is granted access to all applications (OS, e-mail, Maximo) without providing credentials to an additional sign-in screen.
- SSO is often implemented in conjunction with LDAP.

PKI: Public Key Infrastructure

The U.S. Government has set up an infrastructure for issuing public digital certificates to authenticate the identity of people and providers.

PKE: Public Key Encryption

Encryption and decryption of information, usually using the combination of a public and private key or digital certificate to authenticate a user or provider.



Note: If you are using LDAP with Microsoft Active Directory, both users and security groups *must* be unique to each other.

What This Means

What this means to you:

- Maximo has very robust security features.
 - Maximo is an extremely flexible security architecture to meet a wide range of requirements.
 - There are three scenarios for implementation:
 - *Simple:* one site, one group per user, sites, applications, and so forth all in one group.
 - *Moderate:* multiple sites, single organization, can have multiple groups per user and site administration.
 - *Complex:* multiple organizations, multiple groups, functionality divided among groups, multiple levels of administration, multiple asset classes managed.
-

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Security Overview continued

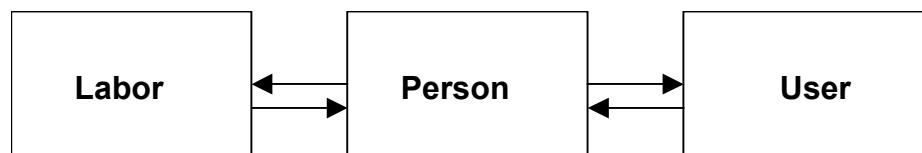
Labor and Users Are Persons

All labor and Maximo users must be associated with a person record.

Because a person can have more than one relationship with Maximo, that person could be a user and/ or a labor.

Whether you create a user with the **Users** application or a labor record with the **Labor** application, Maximo will enforce that there is a person record associated with these records.

The following graphic presents this concept visually.



Person Records

Introduction

Maximo can manage person records in your organization with the **People**, **Crafts**, **Labor**, **Users**, and **Security Groups** applications in the **Resources** and **Security** modules.

Definitions

The following terms are used in Maximo to manage person records:

Term	Description
<i>People/person</i>	In Maximo, you use the People application to contain person records of all people associated with Maximo as users or labor, or groups who might be involved in other ways, such as part of a work or owner group.
<i>Labor</i>	In Maximo, labor is any employee or contractor specified on records and transactions in any of the work-related Maximo applications, such as work orders. Labor is identified by labor codes.
<i>Person group</i>	A person group consists of two or more persons who can be designated as a single entity on work orders as a work group or owner group, or on tickets as an owner group. The individuals in the group might or might not be users or labor.
<i>User</i>	A Maximo user is anyone who signs in to Maximo. Some people may only view information in Maximo, but they are still users. Users are identified by user names.

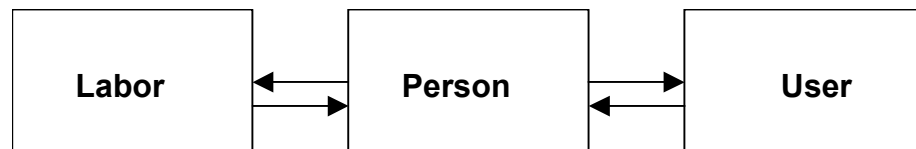
Revisit: Labor and Users Are Persons

All labor and Maximo users must be associated with a person record.

Because a person can have more than one relationship with Maximo, that person could be a **User** and/ or a **Laborer**.

Whether you create a user with the **Users** application or a labor record with the **Labor** application, Maximo will enforce that there is a person record associated with these records.

The graphic below presents this concept visually.



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Person Records continued

People and Users at System Level

People and **user** records are at the *system* level, so more than one labor can be associated with a person or user record as long as each labor record is in a different organization.



Note: No more than one labor and/or user from each organization can be associated with a person record.

Relationships

The following relationships exist between people, person group, users, and labor:

- All users, labor, and members of person groups must be people: they must be associated with records in the People application.
 - A person in the People application does not have to be a user, labor, or member of a person group.
 - A user record can be associated with only one person record, and a person record can be associated with only one user record.
 - Within one organization, a labor record can be associated with only one person record.
 - A person record can be associated with multiple labor records if each labor record is in a different organization.
 - A user and labor can be associated with the same person record.
-

Setting Up People

Introduction

Person records are maintained using the **People** application in the **Resources** module.

Every person who has a relationship with Maximo is entered as a person record using the **People** application. These relationships include:

- Labor personnel
- Users of Maximo
- Primary owners of assets
- Custodians of assets
- Users of assets (as opposed to Maximo users)
- Vendor contacts

Person	First Name	Last Name	Display Name	Title	Department	Person's Location	Person's Site	Organization	Status
<u>KELLY</u>	Howard	Kelly	Howard Kelly						ACTIVE
GORMLEY	Jim	Gormley	Jim Gormley						ACTIVE
<u>MXINTADM</u>							BEDFORD	EAGLENA	ACTIVE
<u>JDAVIES</u>	Jeff	Davies	Jeff Davies				BEDFORD	EAGLENA	ACTIVE
<u>NALBA</u>	Nancy	Albadri	Nancy Albadri				BEDFORD	EAGLENA	ACTIVE
<u>PETERM</u>	Peter	McKinley	Peter McKinley				BEDFORD	EAGLENA	ACTIVE
<u>KATHYB</u>	Kathy	Buckner	Kathy Buckner				BEDFORD	EAGLENA	ACTIVE



A person might have one or more of these relationships with Maximo. The bottom line is that they are people records first, no matter what their relationship with Maximo.

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Setting Up People continued

People Application Fields

The People application is fairly intuitive. However, the following table provides some basic information.

Section/Field	Description
VIP field	This field allows you to enter a priority code for this person. The code is useful when providing service, because it allows Maximo to prioritize work in the queue by the individual who needs something done.
Status field	Person records are statusable. A status simplifies the process of deactivating the person and deactivating any labor or user records associated with the person.
Workflow and Work Order Information section	This section of the Person tab helps to clarify some default information that is considered when this person is involved with a workflow process in Maximo.

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Setting Up People continued

User Self-Registration



When person self-registers in Maximo, a people record will be created automatically for them.

The screenshot shows the 'User Self Registration' form in the Maximo application. The form is divided into three sections: 'Required Information', 'Personal Information', and 'Additional Information'. The 'Required Information' section contains fields for First Name (James), Last Name (Mogavero), User ID (JMOGAVERO), Password (masked with asterisks), Confirm Password (masked with asterisks), and Primary Email (xxxx@yahoo.com). The 'Personal Information' section includes fields for Supervisor, Default Insert Site, Default Store room, Primary Phone, Language, Locale, and Time Zone. The 'Additional Information' section is currently empty.

Below the registration form, the 'Person' record is displayed. The record shows the following details:

- Person:** JMOGAVERO
- First Name:** James
- Last Name:** Mogavero
- Display Name:** James Mogavero
- Primary Phone:** [Empty]
- Primary E-mail:** xxxx@yahoo.com
- Address:** [Empty]
- City:** [Empty]
- State/Province:** [Empty]
- ZIP/Postal Code:** [Empty]
- Country:** [Empty]
- Attachments:** [Empty]
- Status:** ACTIVE
- VIP:** [Empty]
- Calendar Organization:** [Empty]
- Primary Calendar:** [Empty]
- Primary Shift:** [Empty]

The record also includes sections for 'Employee Information' and 'Workplace Information', both of which are currently empty.

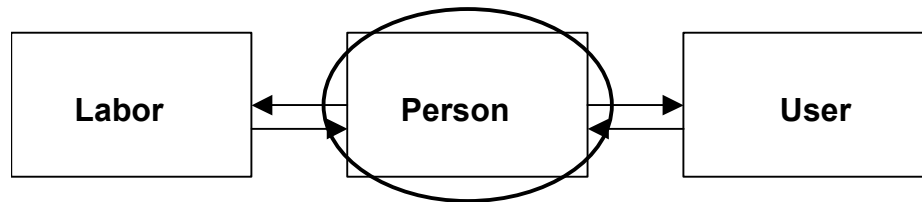
From this point, the system administrator undertakes approval and user registration tasks.

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Setting Up People continued

We Are Here

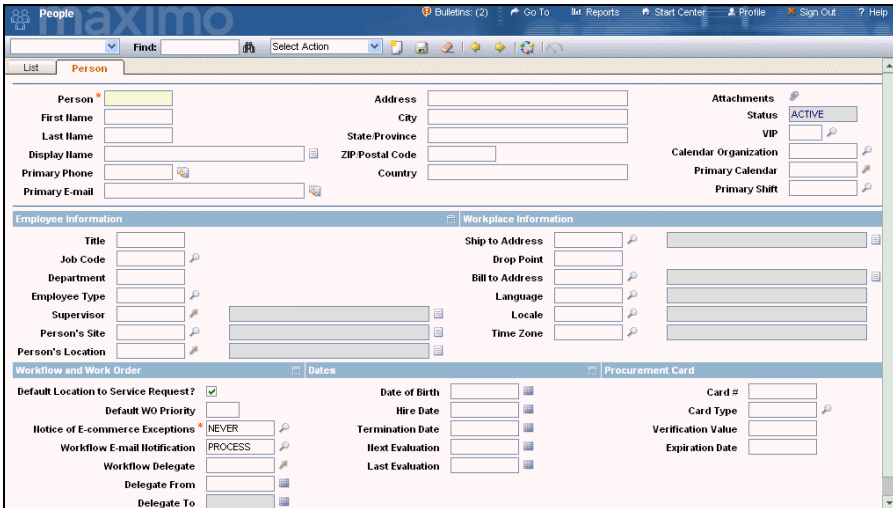
We are going to first create a person record using the **People** application.



Entering People Records



For our Bedford site, we are going to add a person using the **People** application.

Step	Action
1	In the Resources module, go to the People application. <u>Result:</u> The People application opens.
2	Click New Person . <u>Result:</u> The People application displays a blank record, ready for editing. 

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Setting Up People continued

Entering People Records continued

Step	Action														
3	<p>Enter the following information:</p> <table><thead><tr><th><u>Field</u></th><th><u>Value</u></th></tr></thead><tbody><tr><td>Person</td><td>[Your FI & your last name]</td></tr><tr><td></td><td>Ex.: Jane Doe = JDoe</td></tr><tr><td>First Name</td><td>[Your first name]</td></tr><tr><td>Last Name</td><td>[Your last name]</td></tr><tr><td>Display Name</td><td>[Any desired display name]</td></tr><tr><td></td><td>or keep the default</td></tr></tbody></table> <p>You can fill in any other optional information, such as Address, etc.</p>	<u>Field</u>	<u>Value</u>	Person	[Your FI & your last name]		Ex.: Jane Doe = JDoe	First Name	[Your first name]	Last Name	[Your last name]	Display Name	[Any desired display name]		or keep the default
<u>Field</u>	<u>Value</u>														
Person	[Your FI & your last name]														
	Ex.: Jane Doe = JDoe														
First Name	[Your first name]														
Last Name	[Your last name]														
Display Name	[Any desired display name]														
	or keep the default														
4	Save your record.														

Creating Security Groups and Registering Users

Introduction

People and labor records can also be identified as Maximo users by assigning them to security groups and registering them using the applications in the **Security** module. The primary purpose of the Security module is to establish and maintain *user groups* and identify *users* in the system. This identifies which users have access and specifies privileges to establish application and database securities.

Groups

Users of Maximo are assigned to a group. When setting up a group, you define its access capabilities to applications and menus. Any user assigned to that group inherits those access capabilities for as long as that user is a member of the group or until the access capabilities are changed for that group.

Users

When creating a new Maximo user, you need to associate the following information with the user in order to assign privileges:

- User name (sign-in name)
 - Password
 - Security group
 - Default insert site (not mandatory, but *STRONGLY* suggested for proper Maximo usage)
-

continued on next page

Creating Security Groups and Registering Users continued

Users and Security Groups Features

Some of the Maximo features of users and security groups are as follows:

- All security access to Maximo is based on security groups.
 - When setting up a security group, you define access capabilities to applications and their menus.
 - A description can be seen after inserting a new group.
 - One group's setting can be independent of other groups' settings.
 - A user can be a member of multiple groups.
 - Any user can have administrative rights within a group.
 - Any Maximo user can be assigned as a system administrator.
 - A system administrator can add or delete users in a security group at any time.
 - "My Profile" has been added for users.
 - Maximo is Government FIPS 140-2 compliant.
 - Maximo is Sarbanes-Oxley issues compliant.
-

Virtual Profile

Security groups are a key component in the Maximo security architecture. They provide system administrators with a flexible, robust way to manage user authorization and access. A security group allows you to set up access rights to sites, applications, menus, storerooms, labor, and GL components.

Each *security user* can belong to one or more security groups, with each security group having different levels of access. By combining security groups, you have the ability to create a "virtual profile" that is flexible enough to meet the security needs of almost any organization.

continued on next page

Creating Security Groups and Registering Users continued

Security Group



The following statements refer to security groups:

- You can have multiple security groups assigned to each Maximo user.
 - Use security groups to define privileges.
 - Privileges can be independent or cumulative.
 - Privileges are controlled by a user with administrative privileges.
-

Implementation Questions to Consider

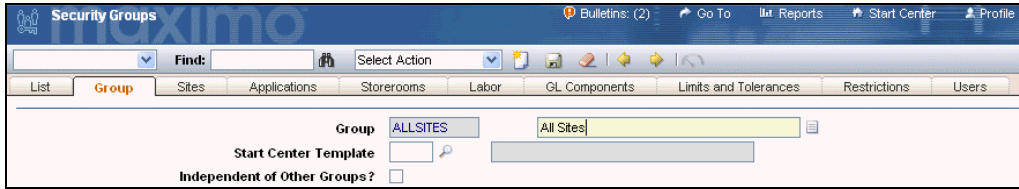
- How will new users be entered and registered in the system?
 - What are the processes established for new-hire registrations?
 - What happens when people leave the company? How is information communicated to the IT department?
 - What identification conventions will be used?
 - What application privileges should user groups have?
 - How will initial user registration be processed?
 - Is there, or will there be, a one-entry system, such as LDAP?
-

continued on next page

Creating Security Groups and Registering Users continued

The Security Groups Application

The primary purpose of the **Security Groups** application is to establish and maintain *user groups* and identify *users* in the system.



Tabs

The following table describes each tab of the Security Groups application. See the *System Administrator's Guide* for more information.

This tab...	Displays...
List	A list of security groups created for your system
Group	The selected security group name, description, and a Y/N flag indicating whether the attributes of this security group can be combined
Sites	Whether the security group is active; if it is, the Sites tab displays the names of all active sites
Applications	The applications that have been assigned to this security group and the appropriate level of access for each application: Read, Insert, Save, and Delete
Storerooms	The storerooms that have been assigned to this security group, including the storeroom name, description, and site location
Labor	The labor authorizations
GL Components	A list of GL component types that the security group has the authorization to change: Cost Center, Activity, Element, and Resource
Limits and Tolerances	Approval limits and tolerances for members of the security group at the organizational level
Restrictions	Restrictions in the form of SQL statements that let you further grant or restrict access to Maximo features, functions, and data
Users	The users who are members of the security group

continued on next page

Creating Security Groups and Registering Users continued

Groups and Profiles

In Maximo, you set up security privileges by group by using the **Security Groups** application. You then specify group privileges for applications and options, and you specify several limits and restrictions for group members.

You grant users security rights by assigning them membership in one or multiple groups. You can assign users to groups from both the **Security Groups** and **Users** applications:

- In the **Security Groups** application, you assign users to groups.
- In the **Users** application, you assign groups to users.

The combination of groups to which a user belongs determines an individual user's security privileges. You can view a user's security privileges graphically on the **Security Profile** tab in the **Users** application.

DEFLTREG



When you first implement Maximo, the Security Groups application has only one group, DEFLTREG, which allows a user to change his or her password if it expires. It contains no other rights. You must create additional groups, with different sets of rights, to be able to assign users different sets of privileges. The DEFLTREG group is usually assigned to new users, although you can specify a different group after you have created it.

continued on next page

Creating Security Groups and Registering Users continued

Independence vs. Dependence

Security groups can be *dependent* or *independent*. This feature is determined by checking or clearing the **Independent of Other Groups?** check box.

Independent of Other Groups?

Checking this box indicates that the setting on this group will apply to sites on other non-discrete groups and vice versa. By default, Maximo has this check box cleared, meaning the group is **non-independent** and that you combine privileges when you combine groups. If you select the check box, Maximo will not combine privileges; the group is **independent**.

continued on next page

Creating Security Groups and Registering Users continued

Profile Building Example 1: Two Independent Groups

As we have mentioned, groups can be independent or dependent. If they are independent, then their rights are not cumulative. If they are dependent, then their rights are cumulative.

Let's take a look at a graphical example of adding a user to two *independent* (non-combinable) groups.

In the following graphic, the *independent* (non-combinable) Nashua Supervisor group has access to some functions in the Nashua site.

For example, this group provides the ability to read, insert, save, delete, and change status on work order records in the Nashua site only.

Group 1: Nashua Supervisor



Nashua Supervisor (Do not Combine)	
<input type="checkbox"/>	Sites
<input type="checkbox"/>	Nashua
<input type="checkbox"/>	Applications
<input type="checkbox"/>	Work Order
<input type="checkbox"/>	Read
<input type="checkbox"/>	Insert
<input type="checkbox"/>	Save
<input type="checkbox"/>	Delete
<input type="checkbox"/>	Change Status
<input type="checkbox"/>	Equipment
<input type="checkbox"/>	Read
<input type="checkbox"/>	PR
<input type="checkbox"/>	Read
<input type="checkbox"/>	Insert
<input type="checkbox"/>	Save
<input type="checkbox"/>	Change Status
<input type="checkbox"/>	Approval Limits
<input type="checkbox"/>	PR
<input type="checkbox"/>	\$5000

The following graphic shows that the *independent* (non-combinable) Bedford Read Only group has read-only access to two applications in the Bedford site.

Group 2: Bedford Read Only



Bedford Read Only (Do not Combine)	
<input type="checkbox"/>	Sites
<input type="checkbox"/>	Bedford
<input type="checkbox"/>	Applications
<input type="checkbox"/>	Work Order
<input type="checkbox"/>	Read
<input type="checkbox"/>	Equipment
<input type="checkbox"/>	Read

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Creating Security Groups and Registering Users continued

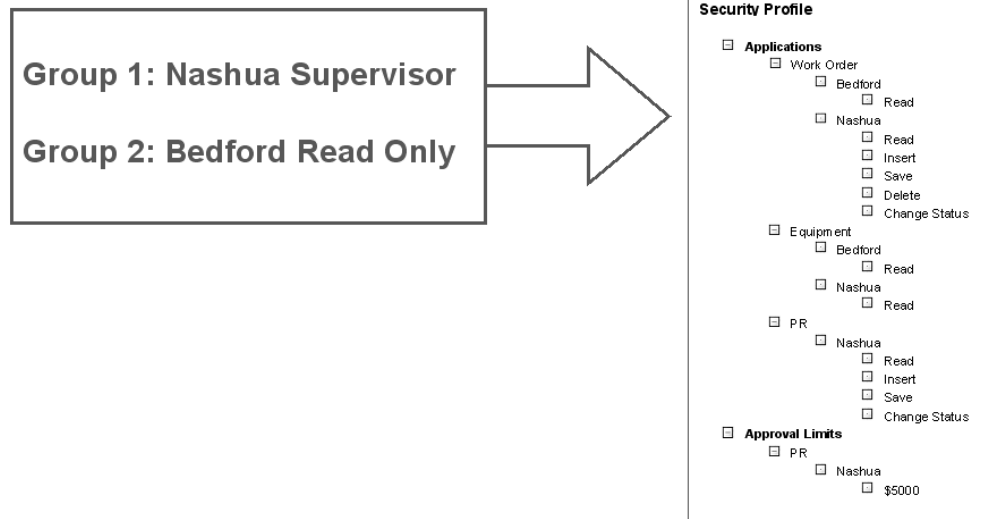
Profile Building Example 1: Two Independent Groups

continued

The following graphic shows the security profile of a user who has been associated with both the Nashua Supervisor and the Bedford Read Only groups.

There has been no addition of rights. For example, the user has the right to read and insert work orders for the Nashua site, but still can only read work orders from Bedford.

There was no *synergistic* gain in rights due to associating the user with both groups.



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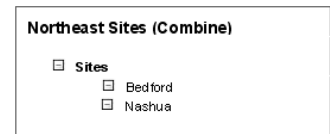
Creating Security Groups and Registering Users continued

**Profile Building
Example 2:
Three
Dependent
Groups**

In this example we will associate a user with three *dependent* (combinable) groups and see the results.

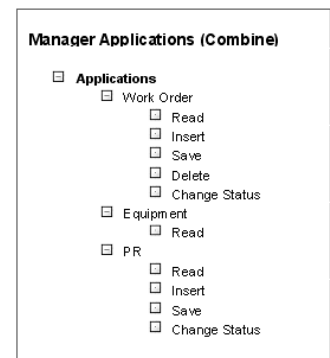
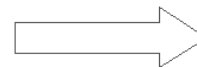
In the following graphic we see that the Northeast Sites group provides data access to both the Bedford and the Nashua sites. This group is *dependent*, therefore combinable with others.

Group 1: Northeast Sites



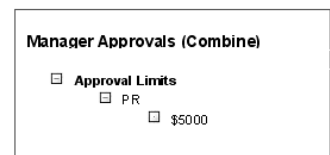
In the next graphic we see that the *dependent* Manager Applications group provides varying levels of access to three different applications.

Group 2: Manager Apps



The next graphic shows that the *dependent* (combinable) Manager Approvals group provides approval limits of \$5000 on purchase requests.

Group 3: Manager Approvals



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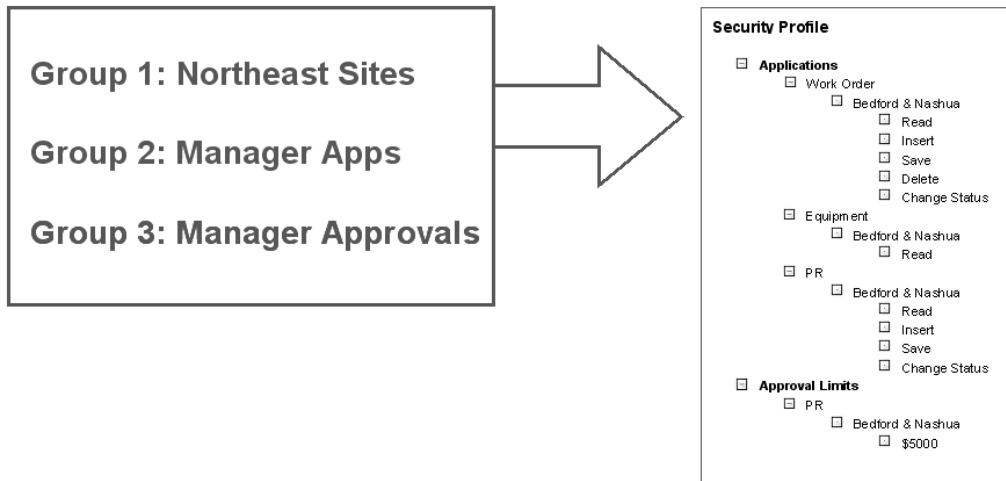
Creating Security Groups and Registering Users continued

Profile Building Example 2: Three Dependent Groups

continued

In the final graphic we see the collective rights as they look when given to a single user.

Because the user belongs to the combinable Northeast Sites group and the other two combinable groups, she now has the access rights from the second two groups on the two sites from the Northeast Sites group.



Profile Building: Summary

We could show you many kinds of combinations of independent and dependent groups given to a user.

The main point that you need to remember is that *the combination of groups is an important thing to consider when you set up security groups.*

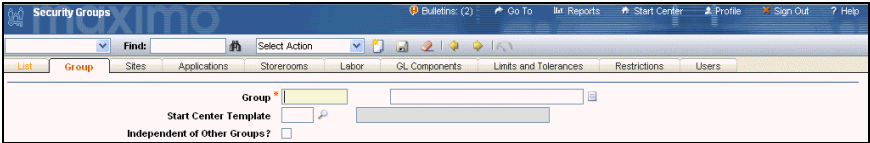
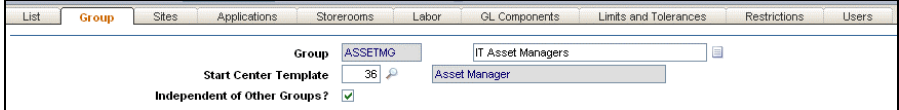
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Creating Security Groups and Registering Users continued

Creating a Security Group



In this section you will create a new security group.

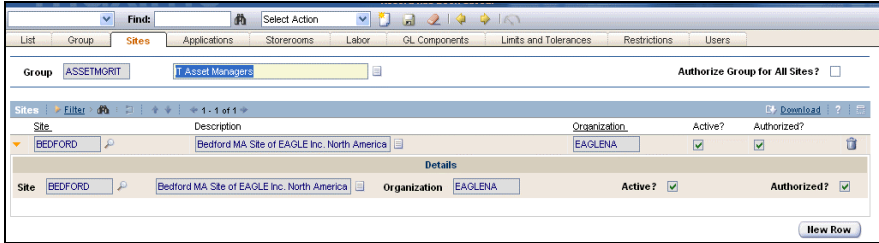
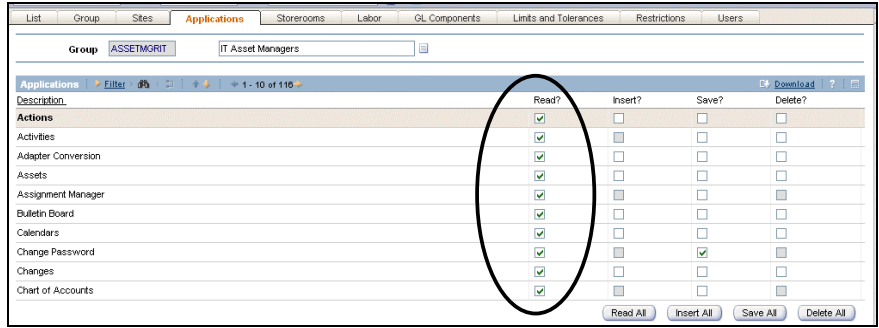
Step	Action										
1	Open the Security Groups application from the Security module.										
2	Click New Group . <u>Result:</u> The Group tab opens ready for editing. 										
3	Enter the following data: <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Field</u></th> <th style="text-align: left;"><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Group</td> <td>ASSTMG</td> </tr> <tr> <td>Description</td> <td>IT Asset Managers</td> </tr> <tr> <td>Start Center Template</td> <td>(36) Asset Manager</td> </tr> <tr> <td>Independent of Other Groups?</td> <td>[<i>Checked</i>] <input checked="" type="checkbox"/></td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Group	ASSTMG	Description	IT Asset Managers	Start Center Template	(36) Asset Manager	Independent of Other Groups?	[<i>Checked</i>] <input checked="" type="checkbox"/>
<u>Field</u>	<u>Value</u>										
Group	ASSTMG										
Description	IT Asset Managers										
Start Center Template	(36) Asset Manager										
Independent of Other Groups?	[<i>Checked</i>] <input checked="" type="checkbox"/>										
4	Save your record. <u>Result:</u> Your screen should look like the one below. 										
5	Click to select the Sites tab.										

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Creating Security Groups and Registering Users continued

Creating a Security Group

continued

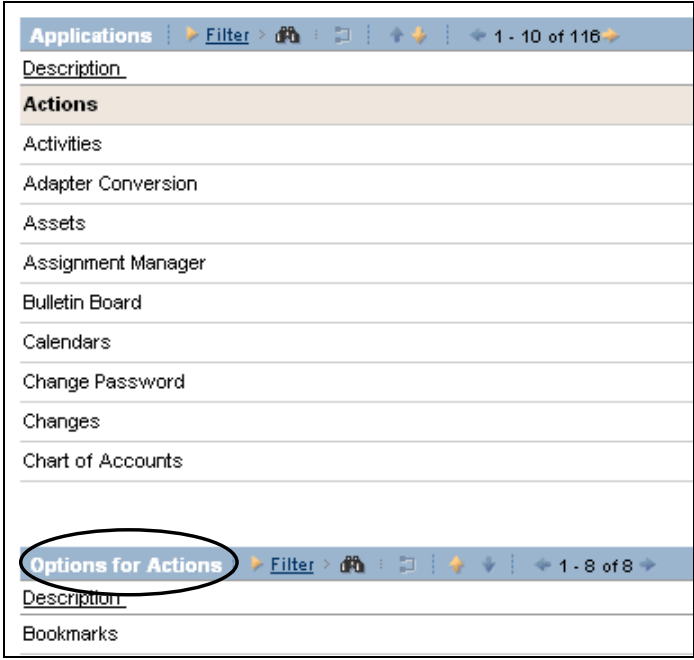
Step	Action				
6	<p>Click New Row, enter the following value, and then Save your record:</p> <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Site</td> <td>Bedford</td> </tr> </tbody> </table> <p><u>Result:</u> Your screen should look similar to the one below.</p> 	<u>Field</u>	<u>Value</u>	Site	Bedford
<u>Field</u>	<u>Value</u>				
Site	Bedford				
7	<p>Click on the Applications tab.</p>				
8	<p>In the Applications section, click Read All.</p> <div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p>Read All</p> </div> <p><u>Result:</u> All appropriate check boxes in the Read? column are selected.</p> 				

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Creating Security Groups and Registering Users continued

Creating a Security Group

continued

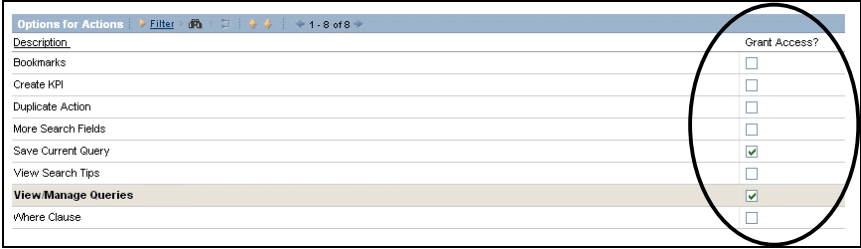
Step	Action
9	<p>Save your record. Ensure that in the Applications table window, the Actions application is highlighted and the Options table window indicates “Options for Actions.”</p> <p><u>Result:</u> Your screen should look like the one below.</p> 

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Creating Security Groups and Registering Users continued

Creating a Security Group

continued

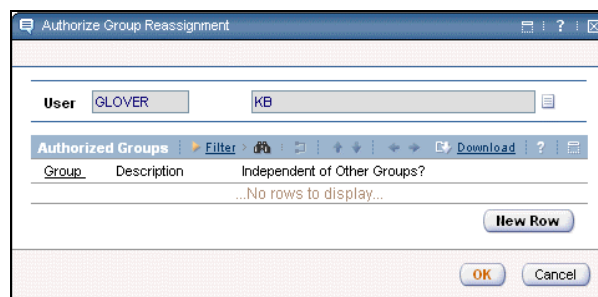
Step	Action
10	<p>In the Options table window, select the Grant Access? check box for the following options:</p> <ul style="list-style-type: none"> • Save Current Query • View/Manage Queries <p><u>Result:</u> Your table window should look like the one below.</p> 
11	<p>Save your record.</p>

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Creating Security Groups and Registering Users continued

Assignment Privileges and Groups

After a group is created, you need to give your administrators rights to reassign and assign users to groups. Being signed in as an administrator and creating a group does not automatically give an administrator user assignment privileges. The **Authorize Group Reassignment** dialog box in the **Users** application allows the system administrator to grant authority to certain existing users to enable them to reassign new users, or existing users, to other groups. You use this dialog box to grant authority to supervisory personnel.



continued on next page

Creating Security Groups and Registering Users continued

Users Setup

When creating a new Maximo user, you need to associate the following information with them:

- Password
- Group
- Labor
- Group Site
- Start Center Template
- Group Authorization

Group and Users Setup

Users of Maximo are registered to a group. When setting up a group, you define its access capabilities to applications and menus. Any user assigned to that group inherits those access capabilities for as long as that user is a member of the group or until the access capabilities are changed for that group.

The Users Application

The Users application, in the Security module, allows system administrators to add and manage Maximo users. System administrators can manage access rights and passwords, and display a hierarchical view of each Maximo user's security profile.

The screenshot displays the Maximo 'Users' application interface. At the top, there is a navigation bar with 'Users' and 'maximo' logos, and a menu with 'List', 'User', 'Groups', and 'Security Profile'. Below this, the user 'ADAMS' is selected, with 'Status' set to 'ACTIVE' and 'Type' set to 'PRIMARY'. The interface is divided into several sections:

- Login Information:** Includes 'User Name' (adams), 'Password', and 'Confirm Password' fields.
- Personal:** Includes 'Person' (ADAMS), 'Status' (ACTIVE), 'Display Name' (Hank Adams), 'Address' (100 Bedford Road), 'City' (Burlington), 'State/Province' (MA), 'ZIP Postal Code' (01730), 'First Name' (Hank), 'Last Name' (Adams), 'Primary E-mail' (hanky14@hotmail.com), 'Workflow Delegate', and 'Memo'.
- User Settings:** Includes 'Default Insert Site' (BEDFORD), 'Default Storeroom', 'Language' (EN), 'Locale', 'Time Zone', 'Bedford MA Site of EAGLE Inc. North America', 'Use Default Insert Site as a Display Filter?' (checked), 'System Account?' (unchecked), and 'Password Expiration Date'.

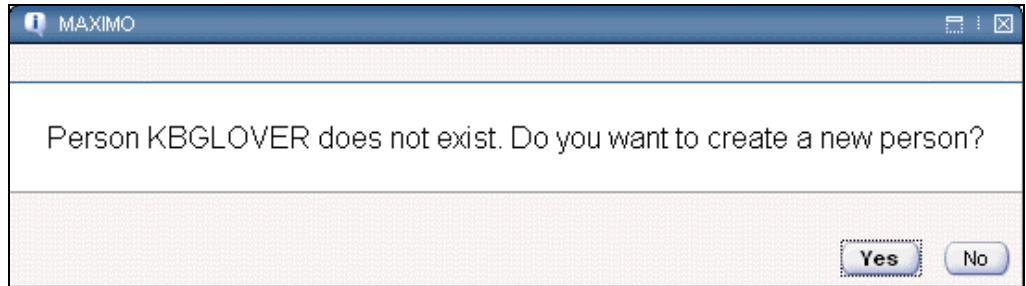
At the bottom, there is a 'Purchasing' section with a 'Filter' button and a table with one row: 'Organization' with the value 'GL Account'. A 'Download' button and a 'New Row' button are also visible.

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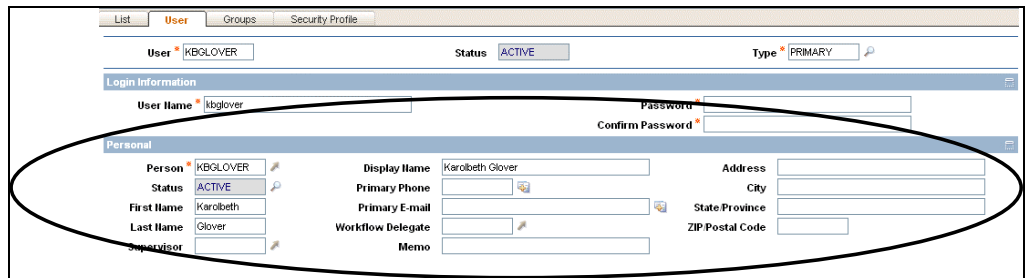
Creating Security Groups and Registering Users continued

**An Option:
People Record
Creation**

When creating a new user, you can create the person/people record for the new user at the same time. You can do this by clicking **Yes** on the message dialog box...



...and then populating the fields in the **Personal** table window of the **Users** application.



**Login ID and
User ID**

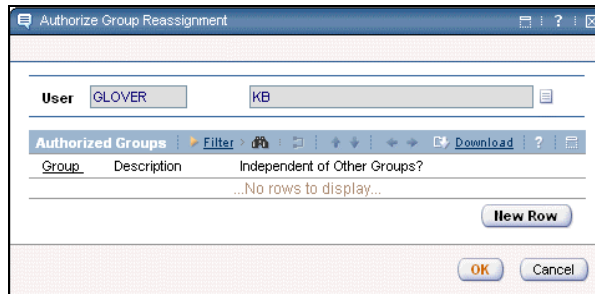
The *login ID* for a new user, which defaults to the newly created *user ID*, is the name the user will use when signing in to Maximo. A user's login ID can be their employee number, their e-mail address, or some other identification according to your business practices.

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Creating Security Groups and Registering Users continued

Revisiting: Authorizing Group Reassignment

The **Authorize Group Reassignment** dialog box allows the system administrator to grant authority to certain existing users to enable them to reassign new users, or existing users, to other groups. You use this dialog box to grant authority to supervisory personnel.



If a group has been created and does not show up in an administrator’s list, the group might have not been given authority privileges via the **Authorize Group Reassignment** action.

Authorizing a Group



In this exercise we will give Wilson grant authorities to the ASSTMG group.

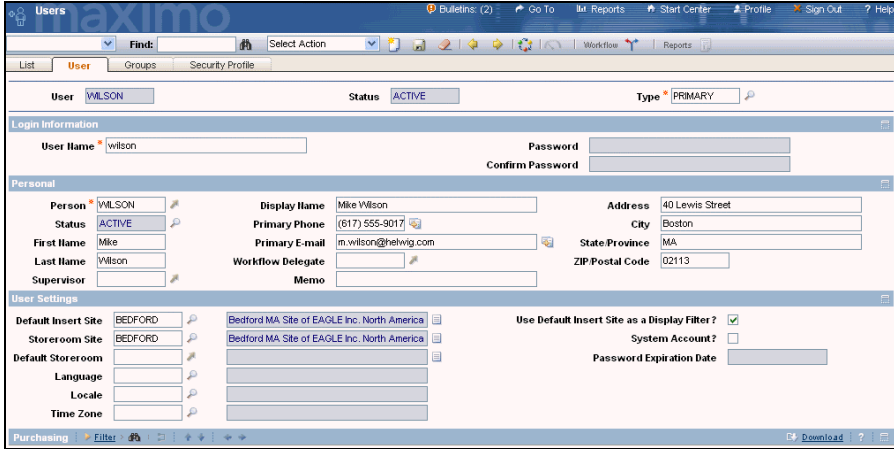
Step	Action
1	Open the Users application in the Security module. <u>Result:</u> The Users application opens.

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Creating Security Groups and Registering Users continued

Authorizing a Group

continued

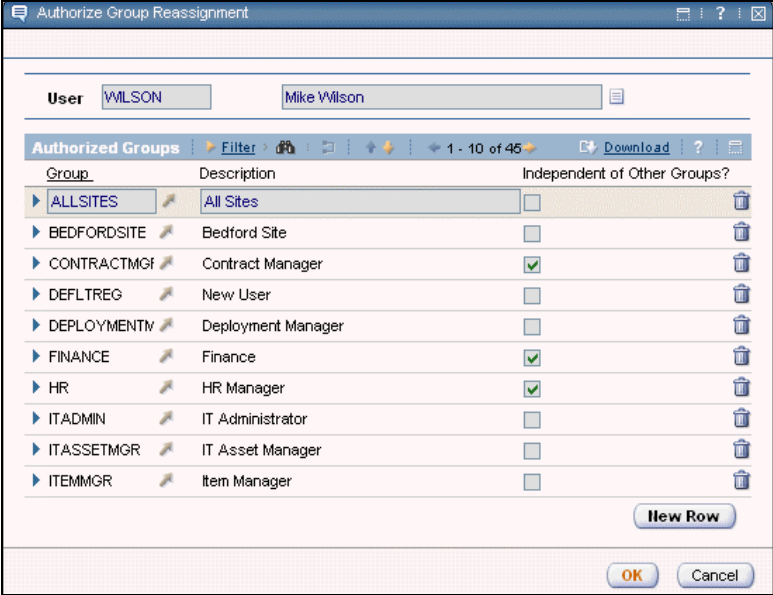
Step	Action
2	<p>Search for and retrieve Wilson.</p> <p><u>Result:</u> Maximo displays Wilson's user record.</p>  <p>The screenshot shows the Maximo 'Users' page for user 'WILSON'. The user is active and has a primary status. The 'Personal' section includes fields for Person (WILSON), Display Name (Mike Wilson), Address (40 Lewis Street), City (Boston), State/Province (MA), and ZIP-Postal Code (02113). The 'User Settings' section shows Default Insert Site (BEDFORD) and Default Storeroom (BEDFORD). The 'Login Information' section shows User Name (wilson) and Password fields.</p>

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Creating Security Groups and Registering Users continued

Authorizing a Group

continued

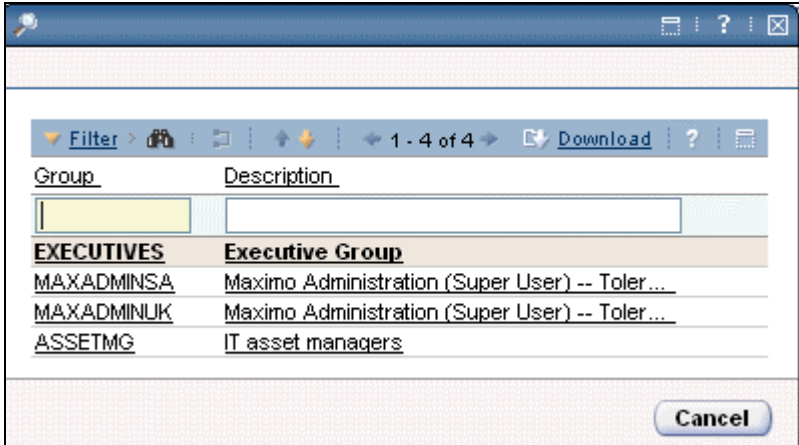
Step	Action																																	
3	<p>From the Select Action menu, select Authorize Group Reassignment.</p> <p><u>Result:</u> The Authorize Group Reassignment dialog box displays. At the moment Wilson only has privileges to authorize and grant user privileges for the groups on this list.</p>  <table border="1"> <thead> <tr> <th>Group</th> <th>Description</th> <th>Independent of Other Groups?</th> </tr> </thead> <tbody> <tr> <td>ALLSITES</td> <td>All Sites</td> <td><input type="checkbox"/></td> </tr> <tr> <td>BEDFORDSITE</td> <td>Bedford Site</td> <td><input type="checkbox"/></td> </tr> <tr> <td>CONTRACTMGR</td> <td>Contract Manager</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>DEFLTREG</td> <td>New User</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DEPLOYMENTM</td> <td>Deployment Manager</td> <td><input type="checkbox"/></td> </tr> <tr> <td>FINANCE</td> <td>Finance</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>HR</td> <td>HR Manager</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>ITADMIN</td> <td>IT Administrator</td> <td><input type="checkbox"/></td> </tr> <tr> <td>ITASSETMGR</td> <td>IT Asset Manager</td> <td><input type="checkbox"/></td> </tr> <tr> <td>ITEMMGR</td> <td>Item Manager</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Group	Description	Independent of Other Groups?	ALLSITES	All Sites	<input type="checkbox"/>	BEDFORDSITE	Bedford Site	<input type="checkbox"/>	CONTRACTMGR	Contract Manager	<input checked="" type="checkbox"/>	DEFLTREG	New User	<input type="checkbox"/>	DEPLOYMENTM	Deployment Manager	<input type="checkbox"/>	FINANCE	Finance	<input checked="" type="checkbox"/>	HR	HR Manager	<input checked="" type="checkbox"/>	ITADMIN	IT Administrator	<input type="checkbox"/>	ITASSETMGR	IT Asset Manager	<input type="checkbox"/>	ITEMMGR	Item Manager	<input type="checkbox"/>
Group	Description	Independent of Other Groups?																																
ALLSITES	All Sites	<input type="checkbox"/>																																
BEDFORDSITE	Bedford Site	<input type="checkbox"/>																																
CONTRACTMGR	Contract Manager	<input checked="" type="checkbox"/>																																
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DEPLOYMENTM	Deployment Manager	<input type="checkbox"/>																																
FINANCE	Finance	<input checked="" type="checkbox"/>																																
HR	HR Manager	<input checked="" type="checkbox"/>																																
ITADMIN	IT Administrator	<input type="checkbox"/>																																
ITASSETMGR	IT Asset Manager	<input type="checkbox"/>																																
ITEMMGR	Item Manager	<input type="checkbox"/>																																
4	Click New Row .																																	

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Creating Security Groups and Registering Users continued

Authorizing a Group

continued

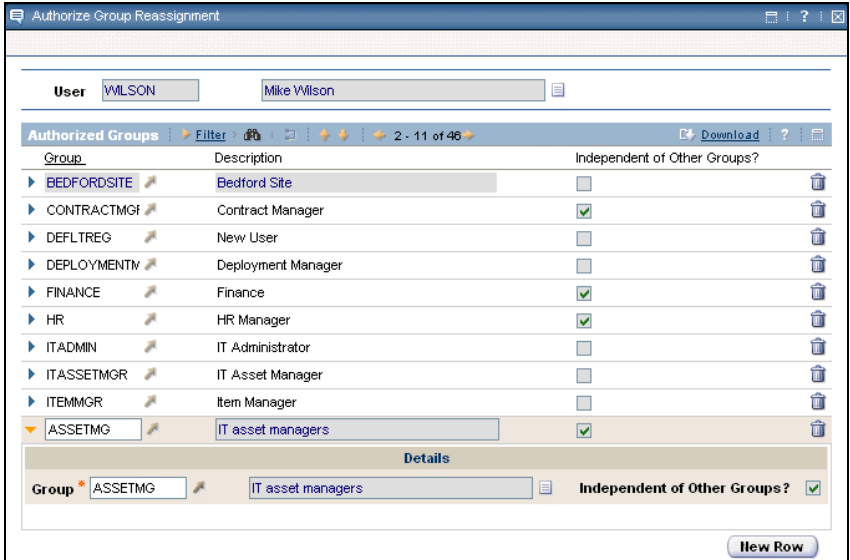
Step	Action
5	<p>In the Group field, click Detail Menu and choose Select Value. <u>Result</u>: Maximo displays groups for which Wilson has not been given authorization privileges.</p> 

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Creating Security Groups and Registering Users continued

Authorizing a Group

continued

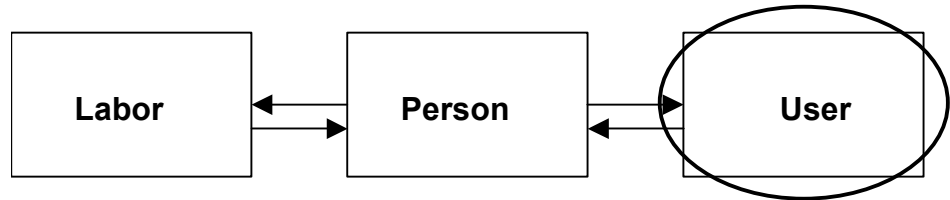
Step	Action
6	<p>Click to select ASSETMG.</p> <p><u>Result:</u> Your screen should look similar to the one below.</p> 
7	<p>Click OK.</p> <p><u>Result:</u> Wilson now has authority to administer users and privileges for this group.</p>

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Creating Security Groups and Registering Users continued

We Are Here

We are first going to create a user record using the **Users** application.

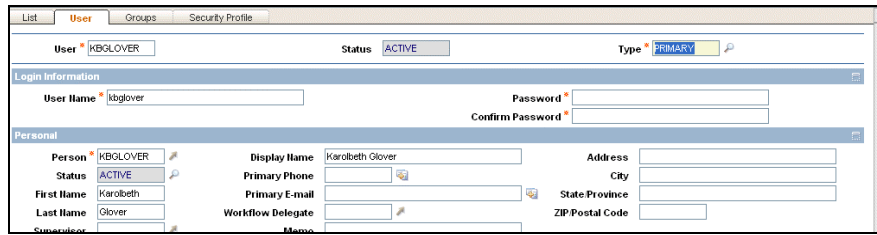


Creating a New User



Use the following steps to create a new Maximo user in the **Users** application.

Step	Action
1	Click New User .
2	In the User field, enter your person record data and then tab out of the field. <u>Result:</u> Information from the person record is carried into the user record.



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Creating Security Groups and Registering Users continued

Creating a New User continued

Step	Action								
3	In the Password field, enter a password and confirm it.								
4	In the User Settings table, enter the following data: <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Default Insert Site</td> <td>Bedford</td> </tr> <tr> <td>Storeroom Site</td> <td>Bedford</td> </tr> <tr> <td>Default Storeroom</td> <td>Central</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Default Insert Site	Bedford	Storeroom Site	Bedford	Default Storeroom	Central
<u>Field</u>	<u>Value</u>								
Default Insert Site	Bedford								
Storeroom Site	Bedford								
Default Storeroom	Central								
5	Save your record.								

Registering a User

The next step is to register the new user to a user group. You have two ways to register a user in Maximo:

- In the Administration Start Center template
 - In the Security module with the Users application
-

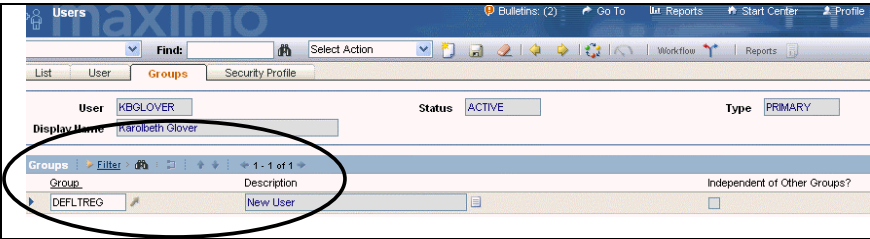
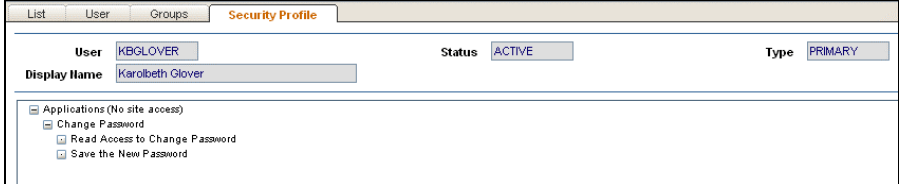
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Creating Security Groups and Registering Users continued

Assigning a New User to a Group



We will continue to use the **Users** application to register and set up this user record.

Step	Action
1	<p>Click the Groups tab.</p> <p><u>Result:</u> In the Groups table window is DEFLTREG, which is the default security group when creating the people record.</p> 
2	<p>Click on the Security Profile tab. You might have to expand the Applications (No site access) branch.</p> <p><u>Result:</u> At the moment these are the only applications that this user can access.</p> 

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Creating Security Groups and Registering Users continued

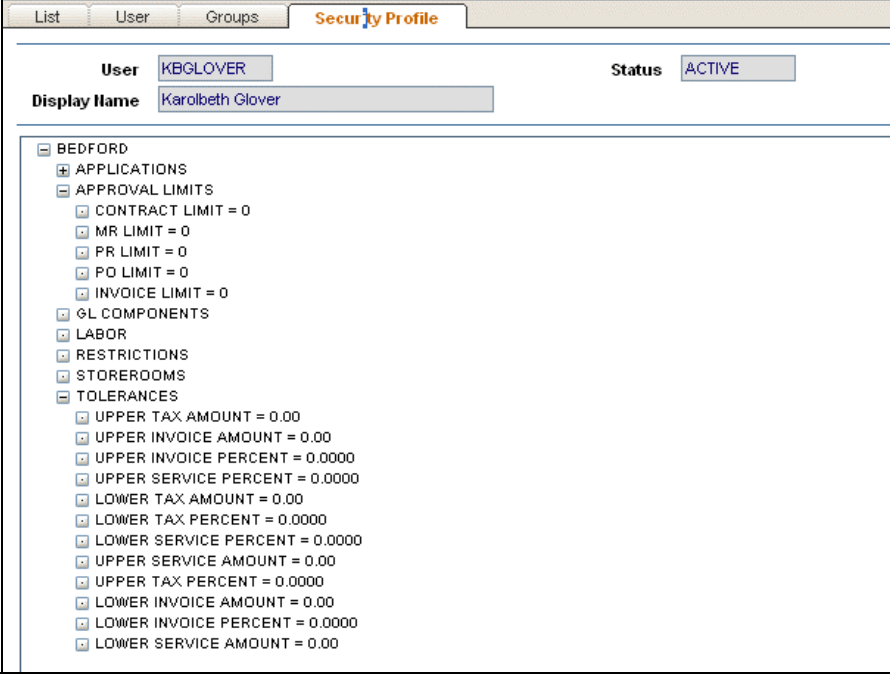
Assigning a New User to a Group continued

Step	Action
3	Click on the Groups tab.
4	<p>Click New Row. Using the Group field Detail Menu, choose Select Value.</p> <div> <p>The screenshot shows a window with a table of groups. The table has two columns: 'Group' and 'Description'. The first row is highlighted in yellow and has 'DEFLTREG' in the 'Group' column and 'New User' in the 'Description' column. Below this row, there is a list of other groups with their descriptions: SELFSERVICE (Self Service), STOREROOMMGR (Storeroom Manager), ITEMGR (Item Manager), STDSVCMGR (Standard Service Manager), TOOLMGR (Tool Manager), SDMGR (Service Desk Manager), SDREP1 (Service Desk Rep (Tier 1)), PURCHASING (Purchasing), REPORTADMIN (Report Administrator), PURCHREQ (Purchase Requestor), SRVREQ (Service Requestor), PLANNING (Planning), PLANNINGVIEW (Planning (view)), SCHEDULING (Scheduling), MAXADMIN (Maximo Administration (Super User)), MCLEANSITE (McLean Site (IT)), TEXASSITE (Texas Site), NESITES (Northeast Sites), and NASHUASITE (Nashua Site). At the bottom right of the window is a 'Cancel' button.</p> </div> <p><u>Result:</u> Because Wilson was given the Authority privileges to this ASSETMG group it is part of the value list. If we had not, this group would not be available for selection.</p>

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Creating Security Groups and Registering Users continued

Assigning a New User to a Group continued

Step	Action
5	Search for and select the ASSETMG group.
6	<p>Click on the Security Profile tab.</p> <p><u>Result:</u> Maximo displays privileges for this user. You might have to expand the branches.</p> 
7	Save the record.

Labor and Craft Records

Introduction

Labor and craft records are useful not only for labor tracking and analysis, but also for recovering labor costs associated with assets or parts under warranty.

Labor Records

Labor records (including both inside and outside labor) in the Labor application provide personal as well as work-related information about a labor, such as the labor code's type of work, location of work, and procurement card information.

Revisiting: Labor, Person, and User Records

Person records are at the system level, so more than one labor or user can be associated with each person record as long as the labor and users are in different organizations.



Each person record might or might not be a Maximo user or labor in Maximo.

- Person records can stand by themselves.
 - Each Maximo user must have a corresponding person record.
 - Each labor in Maximo must have a corresponding person record.
 - A labor record and a Maximo user can have the same person record.
-

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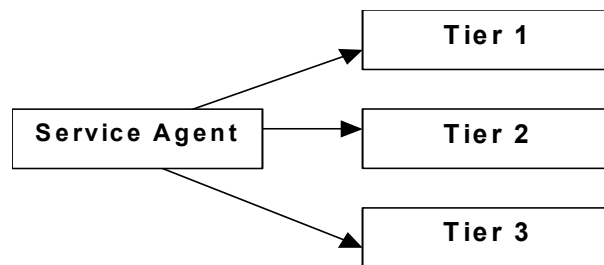
Labor and Craft Records continued

Craft Records

Crafts are used to identify the skill levels, standard rates, and premium pay codes for crafts for forecasting budget requirements. With crafts in place, you can create job plans identifying the skill type required for each task. This will help you in planning, scheduling, and assigning work.

Multiple Skill Levels for Crafts

Maximo allows a more granular approach to using crafts. Levels can be defined, and these levels can be applied to crafts.



The benefits of this approach are as follows:

- This functionality allows work orders and other types of records to call for more specific skills.
 - It allows Maximo to track the various costs of crafts at different levels.
 - With an accurately designed implementation, there would be no need to adjust rates when recording actuals.
 - The right craft could be requested for the job and the appropriate pay rate would automatically be in the cost structure.
 - With the ability to ask for specific levels of crafts, you can avoid having the master electrician show up to do a simple job, thus more accurately controlling costs.
-

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Labor and Craft Records continued

Crafts Note



Multiple skill levels can be specified for each craft. For example, to make a distinction between a *Tier 1 service agent* and a *Tier 2 service agent*, you do not need to create two separate craft records. You can create a single craft record of SAGENT and set up skill levels of TIER 1 and TIER 2 service agent within the SAGENT craft. Each skill level in the SAGENT craft could have different standard rates.

The Crafts Application

You use the **Crafts** application to create and work with craft records. The Crafts application also enables you to associate labor records with crafts and skill levels.

The screenshot shows the Maximo Crafts application interface. It includes a search bar, navigation tabs (List, Craft, Associated Labor), and three data tables:

- Skill Levels:** A table with columns for Skill Level, Description, Skill Level Rank, and Standard Rate. It lists levels like APPRENTICE, FIRSTCLASS, and SECONDCCLASS.
- Outside Rates:** A table with columns for Skill Level, Vendor, Description, Contract, Revision, Status, Start Date, End Date, and Standard Rate. It lists rates for various vendors like CMC and EMI.
- Premium Pay:** A table with columns for Premium Pay Code, Description, Rate, Rate Type, and Inherit?. It lists codes like OT1 and OT2.

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Labor and Craft Records continued

Tabs

The Crafts application consists of these tabs:



Use this tab...	To...
List	Search Maximo for craft records.
Craft	Create, modify, view, and delete craft records. You can also specify standard rates and skill levels for each craft record. You can associate premium pay codes with crafts and define premium pay rates for each craft.
Associated Labor	Associate labor codes with crafts. You can also use this tab to disassociate a labor code from a craft.

Craft Tab

The following table describes the Craft tab sections.

Section	Description
Skill Levels	Defines the skill levels available for this craft, along with associated costs. <u>Note:</u> The Skill Level Rank field is especially important because it allows the Assignment Manager application to choose skill levels at the desired rank and higher when finding labor for work.
Outside Rates	Describes the outside vendors who might also provide labor for this craft. It shows the vendors, craft levels, and contract numbers, where applicable.
Premium Pay	Shows the premium pay categories available for this craft. Existing premium categories can be added by clicking New Row . New categories can be added by selecting Manage Premium Pay Codes from the Select Action menu, then adding the new code to the craft record.

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Labor and Craft Records continued

Inheritance in Pay Codes

Inheritance will use values for a selected premium pay code, which will move through the system.

Inherit Rate from Craft?

Clearing the **Inherit Rate From Craft?** check box will apply the premium pay code rate to only that craft.

So, if Inherit Rate From Craft? is cleared and the rate is changed, that rate applies only to the selected craft, not to all crafts using this premium pay code.

To change the inherited rate for all crafts that use this premium pay code, you use the Manage Premium Pay Codes dialog box and keep Inherit Rate from Craft? checked.

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Labor and Craft Records continued

The Labor Application

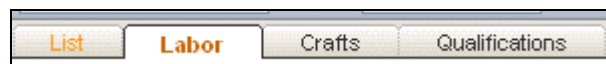
You use the **Labor** application to create, modify, view, and delete labor (employees and contractors) records. You can provide personal as well as work-related information about a labor, such as the labor code's type of work, location of work, procurement card information, and overtime refused by the labor code.

The screenshot shows the Maximo Labor application interface. At the top, there is a navigation bar with tabs for 'List', 'Labor', 'Crafts', and 'Qualifications'. The 'Labor' tab is selected. Below the navigation bar, there are several sections of data entry fields:

- Labor Section:** Includes fields for Labor (ADAMS), Person (ADAMS), Work Site, Work Location, Labor Inventory Site, Labor Inventory Location, Organization (EAGLENA), Status (ACTIVE), Work Type, Crew, and Supervisor.
- Personal Section:** Includes fields for First Name (Hank), Last Name (Adams), Display Name (Hank Adams), Address (100 Bedford Road), City (Burlington), State/Province (MA), ZIP-Postal Code (01730), Primary Phone (781-335-9267), Primary E-mail (hanky14@hotmail.com), Workflow E-mail Notification (PROCESS), Notice of E-commerce Exceptions (NEVER), Workflow Delegate, Default Location to Service Request? (checked), Calendar, Shift, Language (EN), Locale, and Time Zone.
- Default Section:** Includes fields for Craft (TIER2), Skill Level, Vendor, Regular Hours (0:00), Premium Hours (0:00), Overtime Refused* (0:00), Procurement Card #, Card Type, Verification Value, and Expiration Date.

Tab

The Labor application has four tabs.



Use this tab...	To...
List	Search Maximo for labor records.
Labor	Create, modify, view, and delete labor records.
Crafts	View crafts associated to that labor.
Qualifications	Add, update, and view qualifications for a labor record. You can also extend or renew existing qualifications, and change their status. After saving a qualification, you cannot delete it.

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Labor and Craft Records continued

Labor and People Record Considerations

The Labor application interacts with the People application for person records associated with each labor record. Information pertaining to a person record is accessed from the People application.

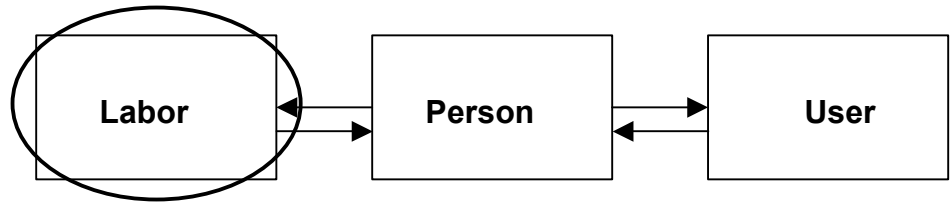
- A labor record cannot exist without a corresponding person record in the People application.
 - When a labor record is created, Maximo looks in the People application for a corresponding person record. If the corresponding person record does not exist, Maximo notifies you. You can then choose to either create a person record directly on the Labor application screen, select an existing person record (from the Select Value option), or use the Go To option to open the People application and create a person record.
 - A person record is unique within Maximo. A labor record is unique within an organization, but only one labor record in an organization can reference the same person record. Basically, a person can be a labor in multiple organizations, but only one person can be associated with one labor record per organization.
 - After a labor record has been created, personal information of the associated person record can be updated from within the Labor application.
-

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Labor and Craft Records continued

We Are Here

After creating a craft record, we are going to create a labor record using the Labor application.



Entering Craft and Labor Records



For our Bedford site, we are going to add an IT Asset Manager craft. Then we will create a labor record and associate it to that craft.

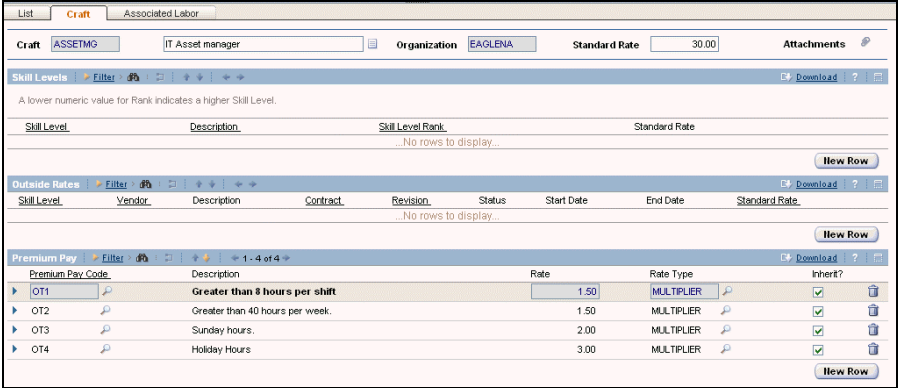
Step	Action								
1	In the Resources module, go to the Crafts application. <u>Result:</u> The Crafts application opens.								
2	Click New Craft .								
3	Insert a new record with the following data: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Craft</td> <td>ASSETMG</td> </tr> <tr> <td>Description</td> <td>IT Asset Manager</td> </tr> <tr> <td>Standard Rate</td> <td>30.00</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Craft	ASSETMG	Description	IT Asset Manager	Standard Rate	30.00
<u>Field</u>	<u>Value</u>								
Craft	ASSETMG								
Description	IT Asset Manager								
Standard Rate	30.00								

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Labor and Craft Records continued

Entering Craft and Labor Records

continued

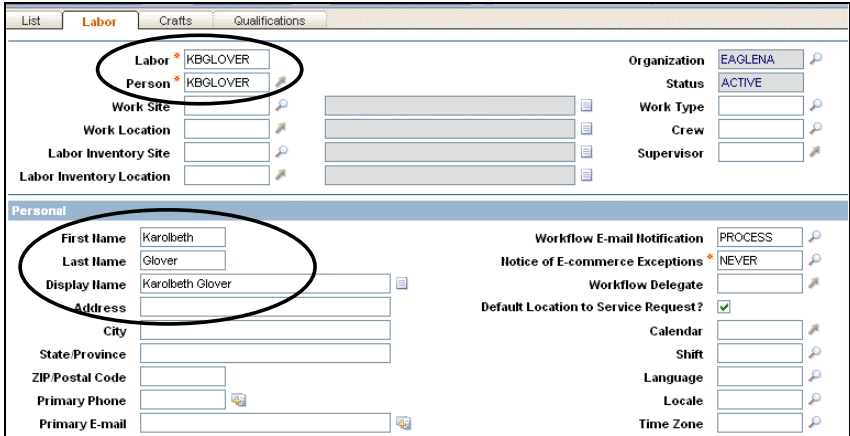
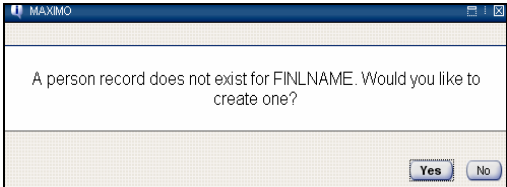
Step	Action
4	<p>Save your record.</p> <p><u>Result:</u> Your screen should look similar to the example below.</p> 
5	<p>At this point, we cannot associate you as labor because the record has to be entered. From the Go To link, select the Labor application from the Resources module.</p> <p><u>Result:</u> The Labor application opens.</p>

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Labor and Craft Records continued

Entering Craft and Labor Records

continued

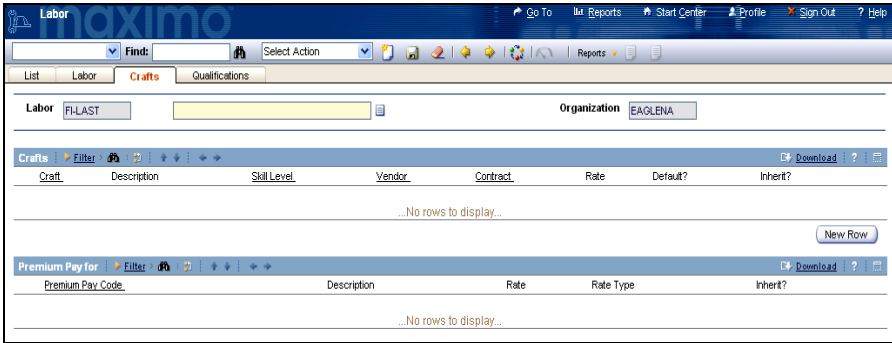
Step	Action				
6	Click Insert Record .				
7	<p>Enter the following data in the Labor field and then tab out of the field:</p> <table border="0"> <tr> <td><u>Field</u></td> <td><u>Value</u></td> </tr> <tr> <td>Labor</td> <td>[What your person record ID is] [First initial + last name]</td> </tr> </table> <p><u>Result:</u> Your information from the person record is carried over.</p>  <p><u>Note:</u> If you had not created a person record, your first initial and last name would have been entered automatically in the Person field and Maximo would have prompted you to create a person record.</p> 	<u>Field</u>	<u>Value</u>	Labor	[What your person record ID is] [First initial + last name]
<u>Field</u>	<u>Value</u>				
Labor	[What your person record ID is] [First initial + last name]				

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Labor and Craft Records continued

Entering Craft and Labor Records

continued

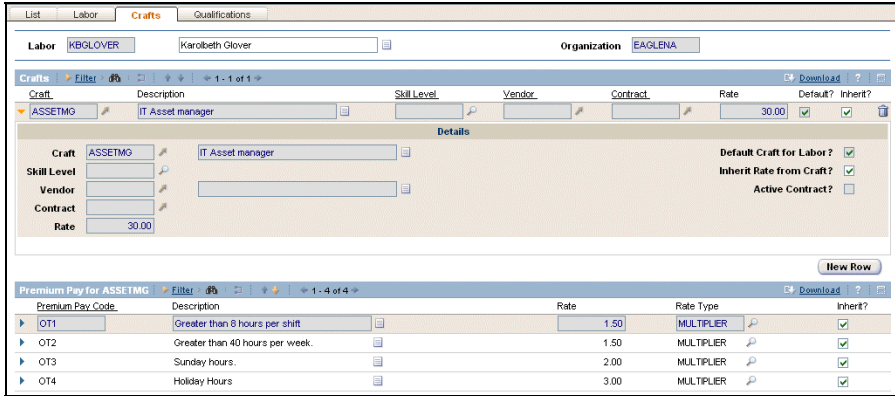
Step	Action						
8	<p>Save the record and then click the Crafts tab.</p> <p><u>Result:</u> The Crafts tab opens.</p> 						
9	<p>Click New Row and enter the following record:</p> <table border="0"> <tr> <td><u>Field</u></td> <td><u>Value</u></td> </tr> <tr> <td>Craft</td> <td>ASSETMG</td> </tr> <tr> <td>Inherit Rate from Craft?</td> <td>[Checked]</td> </tr> </table>	<u>Field</u>	<u>Value</u>	Craft	ASSETMG	Inherit Rate from Craft?	[Checked]
<u>Field</u>	<u>Value</u>						
Craft	ASSETMG						
Inherit Rate from Craft?	[Checked]						

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Labor and Craft Records continued

Entering Craft and Labor Records

continued

Step	Action
10	<p>Save the record.</p> <p><u>Result:</u> Records in the Premium Pay for ASSETMG table are automatically entered.</p> 
11	<p>Go to the Crafts application and select ASSETMG, then click on the Associated Labor tab.</p> <p><u>Result:</u> Your labor code has been associated to the craft record.</p>

Chapter Summary

Groups

Users of Maximo are assigned to a group. When setting up a group, you define its access capabilities to applications and menus. Any user assigned to that group inherits those access capabilities for as long as that user is a member of the group, or until the access capabilities are changed for that group.

Users

When you create a new Maximo user, associate the following information with them:

- Password
 - Group
 - Labor
 - Group site
 - Start Center template
-

Users and Security Groups

Some of the Maximo features of users and security groups are as follows:

- All security access to Maximo is based on security groups.
 - When setting up a security group, you define access capabilities to applications and their menus.
 - A description can be seen after inserting a new group.
 - One group's setting can be independent of other groups' settings.
 - A user can be a member of multiple groups.
 - Any user can have administrative rights within a group.
 - Any Maximo user can be assigned as a system administrator.
 - A system administrator can add or delete users in a security group at any time.
 - "My Profile" has been added for users.
 - Maximo is Government FIPS 140-2 compliant.
 - Maximo is Sarbanes-Oxley issues compliant.
-

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Chapter Summary continued

Registering Users

Every user must be registered to at least one user group with the Security module.

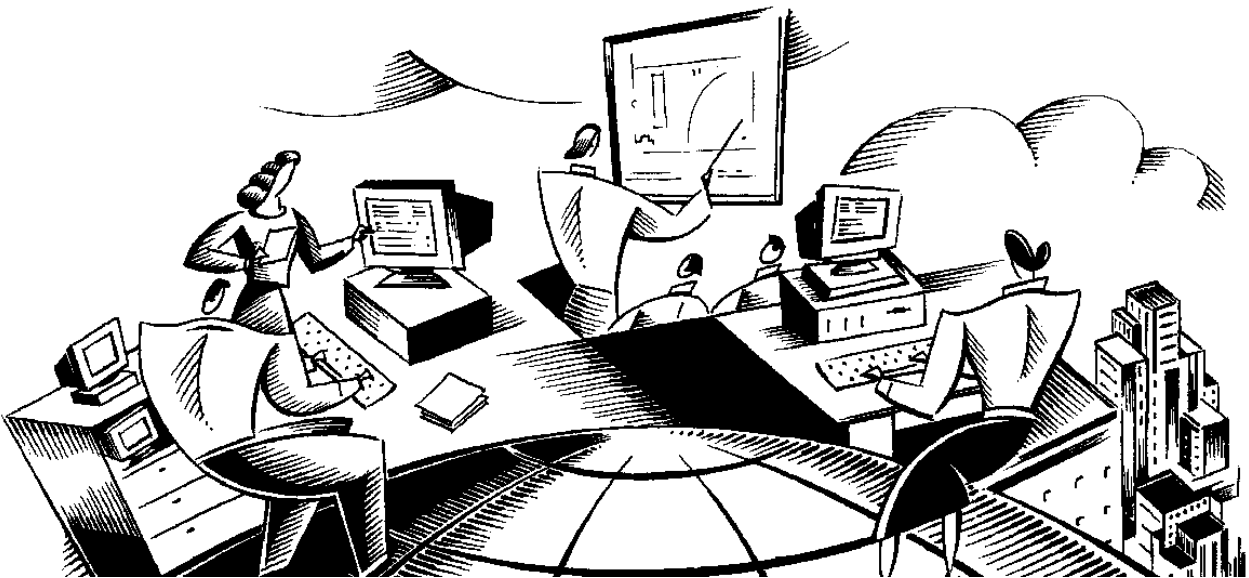
Note: New users are automatically registered to the DEFLTREG user group.

You have two ways to register a user in Maximo:

- In the Administration Start Center template
 - In the Security module using the Users application
-

MXES Immersion Training for IT

Chapter 7: Planning: Setting Up Item and Asset Configurations



In This Chapter This chapter contains the following topics:

Topic	See Page
Chapter Overview	7-1
Inventory and Asset Setup Overview	7-6
Company Setup	7-9
Entering Company Master Records	7-11
Entering Company Records	7-16
Defining and Creating Item Master Records	7-23
Inventory Records	7-46
Setting Up Assets	7-56
Lease/Rental and Software License Contracts Overview	7-86
Lease/Rental Contracts Application Overview	7-88
Software License Contracts	7-97
Chapter Summary	7-99

Chapter Overview

Introduction

Determining and configuring your assets is critical for mapping infrastructure components to applications and then to services delivered to users. This chapter will focus on setting up items and asset configurations.

Learning Objectives

When you have completed this chapter, you should be able to:

- insert inventory records,
 - set up rotating items,
 - discuss the relationship between the inventory and assets applications, and
 - define other information related to the item, such as vendors that carry the item, item specifications, and item assembly structures (IAS).
-

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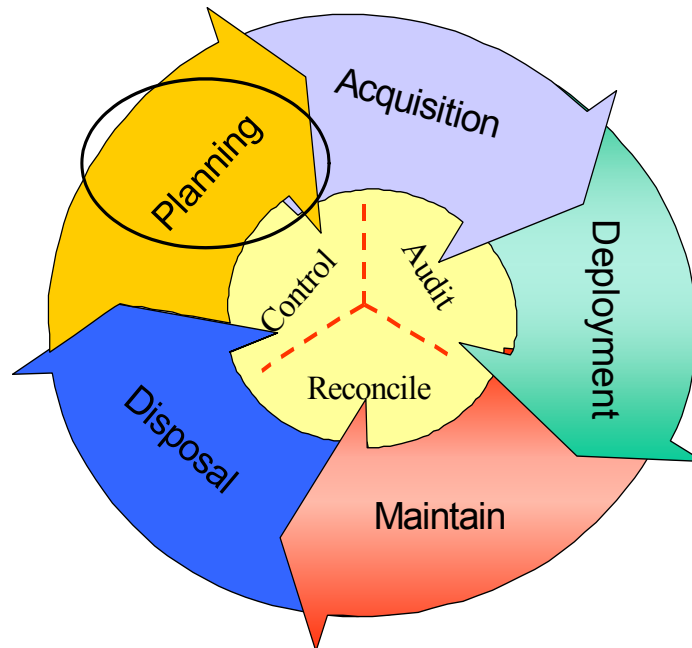
Chapter Overview continued

Chapter Focus: Planning

In the asset lifecycle Planning stage, you make decisions regarding:

- how you want to set up your asset,
- how to define your asset structures, and
- what you are planning to purchase, and the standards, vendors, and the contracting vehicles you will use.

In this chapter we will cover how Maximo can be used for these components in the Planning stage.



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Chapter Overview continued

Chapter Focus: continued
Planning

You can use the following applications to help you in your planning tasks:

Use these applications...	To...
Contracts and Companies	Specify and define purchase requirements, vendors, and contract agreements
Item Master, Inventory, and Assets	Set up and configure your asset structures
Job Plans	Define IT work activity templates that can be used on work orders to define task, labor, materials, and tool requirements
Solutions	Build a knowledge base of service desk resolutions and questions and answers

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Chapter Overview continued

Key Definitions A number of key terms used in this section are defined in the following table.

Term	Definition
<i>Item</i>	Identification of an asset or spare part.
<i>Rotating item</i>	An inventory item, with a generic item number and a current balance (which can be greater than one), multiple instances of which can be used in multiple locations
<i>Non-rotating item</i>	An item that is consumable with a current balance
<i>Rotating asset</i>	An individual instance of a rotating item, identified by an individual asset number
<i>Location</i>	A functional identification where assets can reside.
<i>Asset equipment</i>	Assets for which you want to keep a repair history, but will not be stored in inventory
<i>Alternate item</i>	An item/part that can be used interchangeably with other inventory items

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Chapter Overview continued

Implementation Questions to Consider

- To what level are your asset configurations being defined?
 - What attribute levels do you capture on the discovery side?
 - Do you track component movement? If so, how?
 - Are asset configurations documented? How? Where?
 - How many stockrooms do you have at each site?
 - How are assets identified?
 - Are they classified?
 - Are they prioritized?
 - Are there standardized configurations throughout the company?
 - Where is your software library? Who maintains it?
 - How do you track issued software licenses? How is this information captured? By whom?
-

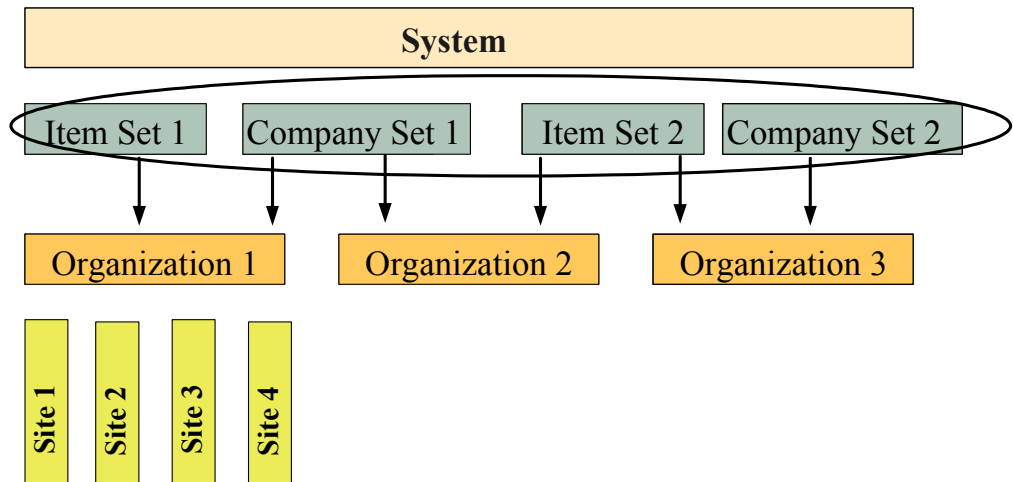
Inventory and Asset Setup Overview

Introduction

The first part of this chapter will focus on the topics and activities that pertain to identifying the pieces that your item and asset structures can be comprised of. We will also discuss using Maximo applications to create the structures in the system.

Sets Revisited

Items and companies at the organization level can be shared across organizations through sets. *Sets* are groupings of information that a number of organizations can mutually see and access, thereby allowing these organizations to share the data in the sets.



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Inventory and Asset Setup Overview continued

Setting Up Inventory in Maximo

The following steps list the major components of inventory setup in Maximo:

1. Define your stockrooms.
 2. Determine, and then enter, who your vendors are and what agreements and contracts you currently have in place or anticipate.
 3. Define inventory “consumable” items to be stocked and those needing to be tracked as configurable assets, and define your assembly structure configuration.
 4. Enter item specifications.
 5. Enter asset structures and item configurations.
-

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Inventory and Asset Setup Overview continued

Storeroom and Inventory Management

While creating and managing storerooms in Maximo is not fully covered in this course, it is important to note that you can use the Security Groups application to grant a user access to specific storerooms for inventory processing functions. Storeroom access pertains to functions that affect inventory items and balances, such as reordering items, issuing items, transferring items, making balance and cost adjustments, and adding items to a location.

Section Focus

The following section sets up items using the Item Master and Inventory applications. Creating a storeroom will not be covered. Please refer to the *Maximo User's Guide* for more information.

Implementation Consideration

For an implementation setup, defining your asset lifecycle flow will help determine what storerooms (stockrooms) you will need. As we saw when setting up locations, a location does not have to reflect a physical space. For instance, you might decide to capture all the end-of-lease assets sent back to vendors to be represented in a virtual storeroom location; while physically there is no room that holds these assets, virtually it represents those assets sent back to a vendor. This allows you to track asset move histories to the very end of the assets' life.

Implementation



For your implementation, if you are using a Discovery tool and will be reconciling with Maximo, it is very important that you have determined what criteria will be tracked and audited and what will be reconciled back into Maximo. This is important, because setting up your Maximo database will be dictated by what you want to report on and the level of detail you want.

Company Setup

Introduction

In order to effectively manage and support the inventory and acquisition business functions, vendors need to be established and entered into the system. This is not required to manage assets; however, if you are planning to purchase, lease, or manage vendor contracts, then you need to establish company records in Maximo before the other modules, such as Inventory or Purchasing, can access them.

Company and Vendor Fields

Generally, when a **Company** or **Vendor** field appears on a Maximo record, the value in the field represents a company record created in the **Companies** application.

Company Sets and Company Master Records

Company sets are similar to item sets in that they allow companies to be shared across organizations. All Company Master records in Maximo belong to a company set. You define the company set in the Sets application.

The screenshot shows two tables from the Maximo application. The top table, titled 'All Sets', lists various sets with columns for Set, Description, and Type. The bottom table, titled 'Organizations using COMPSET1', lists organizations associated with the 'COMPSET1' set.

Set	Description	Type
COMPSET1	Company set 1	COMPANY
IT ITEMS	IT Items	ITEM
SET1	Item set 1	ITEM
SET2	Item set 2	ITEM
ST:4386	Smoke Test Sets	ITEM

Organization	Description
EAGLENA	EAGLE Inc. North America
EAGLESA	Eagle South America, Inc.
EAGLEUK	European Headquarters of Eagle, Inc.
MTS6407	MTS Organization: MTS6407
PAPER	Usa Paper Division

When creating a company set, you can specify whether a company record should create a company master.

The screenshot shows the 'Details' form for a company set. The 'Set' field is 'COMPSET1', the 'Description' is 'Company set 1', and the 'Type' is 'COMPANY'. The checkbox 'Automatically Add Companies to Company Master?' is circled in red.

If you do not, then you must use the Company Master application to create a company master record.

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Company Setup continued

Company Master Records vs. Company Records

Company Master records:

- define the records that belong to a company set; and
- represent a vendor from whom you purchase goods or services, asset manufacturers, and other companies with whom you do business.

Company records define the records that contain organization-specific information about a vendor, such as contact names and addresses.

Two-Step Process

If you do not specify that the company set should automatically create a company master record when you create a company record, then you must follow these steps:

1. Create the company master record in the Company Master application.
 2. Search for the Company Master record in the Companies application and supply the contact and address information.
-

Company Types

For searching and reporting purposes, you can group companies into one of three types:

- *Courier*—transit company
 - *Manufacturer*—manufacturer of items or assets
 - *Vendor*—vendor of items or assets
-

Entering Company Master Records

Introduction

Company master records maintain detailed information about companies that belong to a particular company set. Company master records contain information such as contact information, purchasing details, e-commerce details, and payment details of the company. After you have created a company master record, you need to add the record to one or more organizations.

The Company Master Application

You use the Company Master application to create company master records that belong to a particular company set.

The screenshot displays the Maximo 'Company Master' application interface. At the top, there is a navigation bar with 'List', 'Company Master', 'Contacts', and 'Addresses' tabs. Below this, the 'Company' field is set to 'KENNEDY' and the 'Company Set' is 'COMPSET1'. The 'Company Type' is set to 'V'. The 'Purchasing Details' section includes fields for 'Currency' (USD), 'Tax Exempt Code', 'Tax Exempt Number', 'Disqualified Vendor?' (checkbox), 'Freight Terms', 'FOB Point', 'Ship Via', 'Registration #', and 'Inspection on Receipt?' (checkbox). The 'Payment Details' section includes 'Bank', 'Bank Reference #', 'DUNS #' (178192480-X.T), 'Pay To', and 'Payment Terms'. The 'E-commerce Details' section includes 'E-commerce Enabled?' (checked), 'Punchout Enabled?' (checked), 'E-commerce Supplier' (1000000941), 'Catalog' (KENNEDY), 'E-commerce Supplier Location', 'Automatically Approve Receipt on ASN?' (checked), 'Vendor Sends Order Status?' (checked), 'Send Vendor Transaction on PO Cancel?' (checked), 'Vendor Sends ASN?' (checked), 'Vendor Sends Invoice?' (checked), 'Automatically Approve Invoice?' (checked), and 'Default Warehouse'.

continued on next page

Entering Company Master Records continued

Tabs

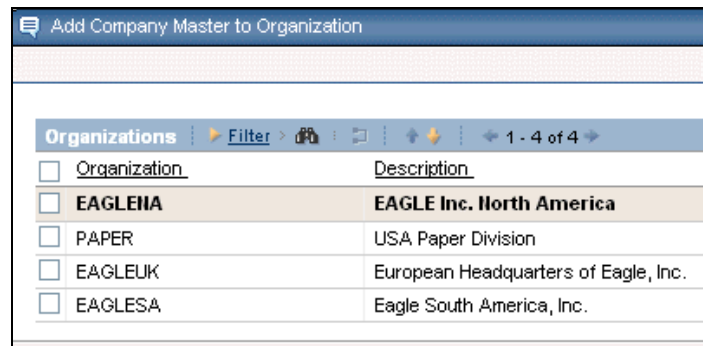
The Company Master application has four tabs.



Use this tab...	To...
List	Search the database using any combination of available fields
Company Master	Create, view, modify, and delete company master records that belong to a company set
Contacts	Display contact information for people within that company
Addresses	Add and modify a company's General and Remit To contact information

Add Company Master to Organization Action

The **Add Company Master to Organization** action displays a table window with all the organizations that use the company set and that are accessible by the current user. You can select all or a few organizations and Maximo will add the company master record to the selected organization(s).



All company master records need to belong to at least one organization.

continued on next page

Entering Company Master Records continued

Update Related Companies

When selected, the **Update Related Companies?** check box indicates that a change in the Company Master record should propagate to the corresponding records in the Companies application. This field is not stored in the database, so you should explicitly select it when updating the Company Master record. A disqualified vendor affects only those records created *after* you disqualify the vendor.

Update Related Companies?

If the check box is cleared, modifying the Company Master record will not affect the corresponding record in the Companies application.

Disqualified Vendor

When selected, the **Disqualified Vendor?** check box indicates that this vendor is no longer an active vendor in the system. Therefore, you will not be able to use this company.

Disqualified Vendor?

Inspection on Receipt

When selected, the **Inspection on Receipt?** check box indicates that items ordered from this company need to be inspected on receipt.

Inspection on Receipt?

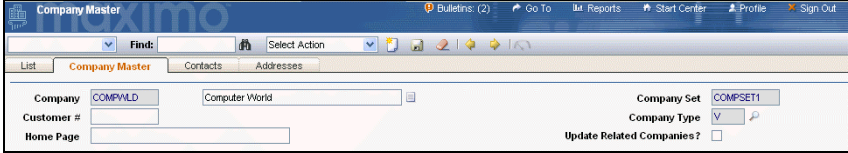
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Entering Company Master Records continued

Creating a Company Master Record



Follow the steps below to create a Company Master record.

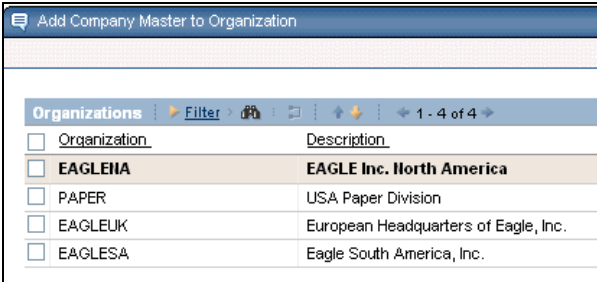
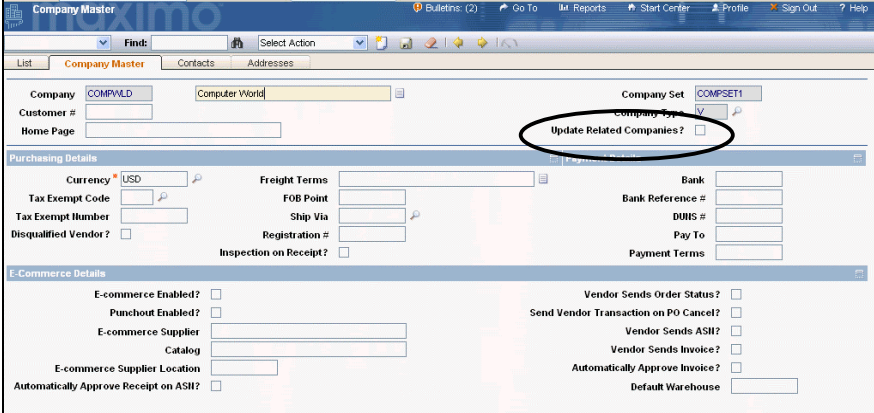
Step	Action
1	Open the Company Master application (Purchasing module).
2	Insert a new Company Master record.
3	Enter COMPWLD in the Company field.
4	Enter Computer World in the Description field.
5	In the Company Type field, use the Select Value button to select Vendor .
6	<p>Save the record.</p> <p><u>Result:</u> Your screen should look like the one below.</p> 

continued on next page

Entering Company Master Records continued

Creating a Company Master Record

continued

Step	Action
7	<p>From the Select Action menu, select Add Company Master to Organization.</p> <p><u>Result:</u> The Add Company Master to Organization dialog box opens.</p> 
8	<p>Select the EAGLENA check box and click OK.</p> <p><u>Result:</u> Maximo displays a message indicating that the company was created and added to the selected organization.</p>
9	<p>Click OK to close the message box.</p> <p><u>Note:</u> If we had selected Update Related Companies, all company records would have default data from this record until the check box was cleared.</p> 

Entering Company Records

Introduction

The Companies application maintains detailed information on vendors, manufacturers, and other companies.

Company Master and Company Records Revisited

In order to use a company record in an organization, you must add the company master record to the organization. This adds the company master record to the Companies application. Company Master records contain information such as vendor currency and contacts, and they are copied to the company record as default data when the Company Master record is added to organizations. If you need to change the default information in a company record, then you can use the Companies application to modify the record.

The Companies Application

The **Companies** application maintains detailed information about vendors, manufacturers, and other companies. Vendors can have parent companies or multiple vendor locations for a single company.

The screenshot displays the Maximo 'Companies' application interface. The main window shows a form for editing a company record. The 'Company' field is set to 'ALMAR' and 'Almar Petroleum'. The 'Parent' field is empty. The 'Customer #' is '3390214' and the 'Home Page' is 'www.almar.com'. The 'Organization' is 'EAOLENA'. The 'Company Type' is 'M'. The 'Use Parent Remit To?' checkbox is unchecked. The 'Attachments' field is empty. The 'Purchasing Details' section includes 'Currency' (USD), 'Tax Code' (NJ), 'Tax Exempt Code', 'Tax Exempt Number', 'Pay Tax to Vendor?' (checked), and 'Disqualified Vendor?' (unchecked). The 'Freight Terms' section includes 'FOB Point' (PRINCETON, NJ), 'Ship Via' (UPS-GR), 'Registration #', 'Inspection Required?' (unchecked), 'Payment on Receipt?' (unchecked), and 'Expiration Date of Insurance'. The 'Payment Details' section includes 'Bank', 'Bank Reference #', 'DUNS #', 'Pay To', 'Payment Terms' (NET 30), 'AP Control Account' (6800-910-610), 'RBN Account' (6800-930-610), 'Suspense Account' (6800-920-610), and 'Tool Control Account'. The 'E-Commerce Details' section includes 'E-commerce Enabled?' (unchecked), 'Punchout Enabled?' (unchecked), 'E-commerce Supplier', 'Catalog', 'E-commerce Supplier Location', 'Automatically Approve Receipt on ASN?' (unchecked), 'Vendor Sends Order Status?' (unchecked), 'Send Vendor Transaction on PO Cancel?' (unchecked), 'Vendor Sends ASN?' (unchecked), 'Vendor Sends Invoice?' (unchecked), 'Automatically Approve Invoice?' (unchecked), and 'Default Warehouse'.

continued on next page

Entering Company Records continued

Tabs

The Companies application consists of the following five tabs:

Use this tab...	To...
List	Search the database using any combination of available fields
Company	Add, view, modify, or delete a company record
Contacts	Add, view, modify, or delete the contacts for a company record
Addresses	View and modify a company's general and Remit To contact information
Branches	Create, view, or modify the company and company branch (parent-child) relationships

Vendors

Vendors can have parent companies or multiple vendor locations for a single company.

Branches

Your company might purchase products or services through a national vendor with local offices. You might have locations in different cities, each of which purchases from the local office of the vendor. Maximo allows you to create branch records for a vendor company and track purchasing either at the branch level or with the vendor as a whole.

For example, each plant location might purchase office supplies at the local office of a national chain, and do their shipping with the local office of an international shipping company. By entering company branches in Maximo, you can track purchases for each plant location via its branch record, as well as the total purchases for all plant locations via the parent vendor record.

Branch Hierarchy

The branch hierarchy can be only one level deep, with a parent company record and child branch records. Child records cannot be parents of other records and parent records cannot be children of other records.

continued on next page

Entering Company Records continued

Use Parent Remit To

When selected, the **Use Parent Remit To?** check box on the Company tab allows users to purchase from a local branch office...

Use Parent Remit To?

...while still submitting invoices to the parent company's Remit To address.

Remit To Information	
Contact	ANTHONY D RHODES
Address	3600 PAMMEL CREEK RD
City	LACROSSE
State/Province	WI
ZIP/Postal Code	54601

Creating a Company Record



Follow these steps to create a company record in the **Companies** application.

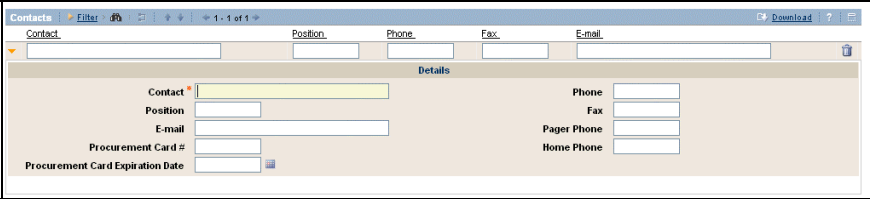
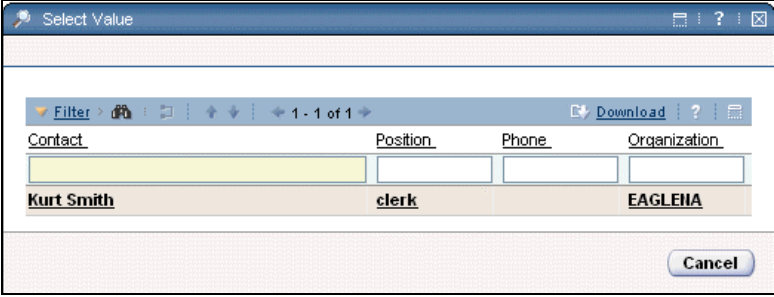
Step	Action
1	Open the Companies application.
2	<p>Search for the Company Master record Computer World.</p> <p><u>Result:</u> The Company Master record was created as a Companies record.</p>

continued on next page

Entering Company Records continued

Creating a Company Record

continued

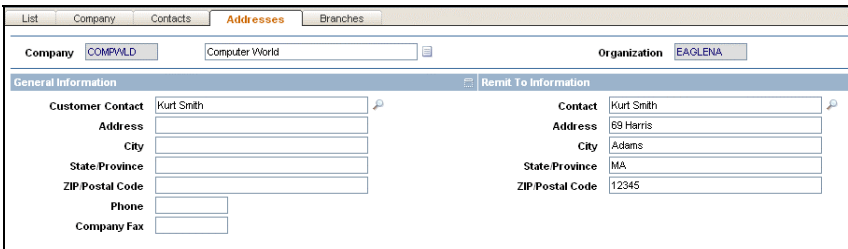
Step	Action						
3	<p>Click on the Contacts tab and then click New Row.</p> <p><u>Result</u>: The Contacts Details table opens.</p> 						
4	<p>Enter the following data and then Save your record when finished.</p> <table border="0"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Contact</td> <td>Kurt Smith</td> </tr> <tr> <td>Position</td> <td>Clerk</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Contact	Kurt Smith	Position	Clerk
<u>Field</u>	<u>Value</u>						
Contact	Kurt Smith						
Position	Clerk						
5	<p>Click on the Addresses tab.</p>						
6	<p>Click the Select Value button in the Customer Contact field.</p> <p><u>Result</u>: Kurt Smith has been added to the system.</p> 						
7	<p>Click on Kurt Smith.</p> <p><u>Result</u>: You are returned to the Addresses tab.</p>						

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Entering Company Records continued

Creating a Company Record

continued

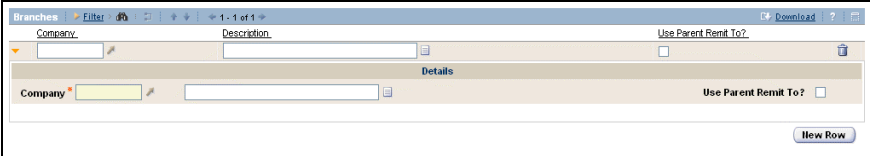
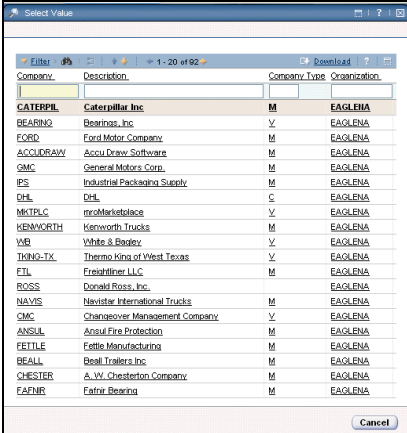
Step	Action										
8	<p>Add Kurt Smith as the contact on the Remit to Information section and enter the following information:</p> <table border="0"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Address</td> <td>69 Harris St.</td> </tr> <tr> <td>City</td> <td>Adams</td> </tr> <tr> <td>State</td> <td>MA</td> </tr> <tr> <td>Zip</td> <td>12345</td> </tr> </tbody> </table> <p><u>Result:</u> Your Address tab should look similar to the one below.</p> 	<u>Field</u>	<u>Value</u>	Address	69 Harris St.	City	Adams	State	MA	Zip	12345
<u>Field</u>	<u>Value</u>										
Address	69 Harris St.										
City	Adams										
State	MA										
Zip	12345										
9	Save your record.										
10	Click on the Branches tab.										

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Entering Company Records continued

Creating a Company Record

continued

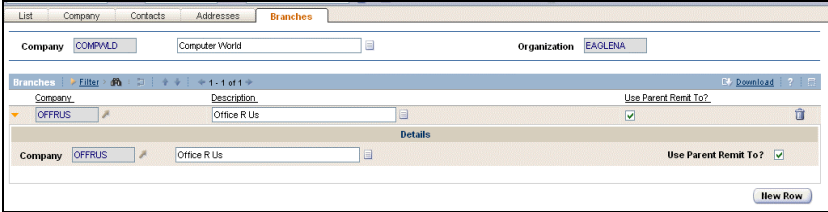
Step	Action
11	<p>Click New Row.</p> <p><u>Result:</u> The Row Details table opens.</p> 
12	<p>In the Company field, click the Detail Menu button and choose Select Value.</p> <p><u>Result:</u> The Select Value screen shows all available companies.</p> 

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Entering Company Records continued

Creating a Company Record

continued

Step	Action
13	Search for and select Office R Us .
14	<p>Select the Use Parent Remit To? check box and then Save your record.</p> <p><u>Result:</u> Office R Us is now the child (a branch) of the parent company, Computer World, and all invoices will be sent to its Remit To address indicated on the Address tab.</p> 

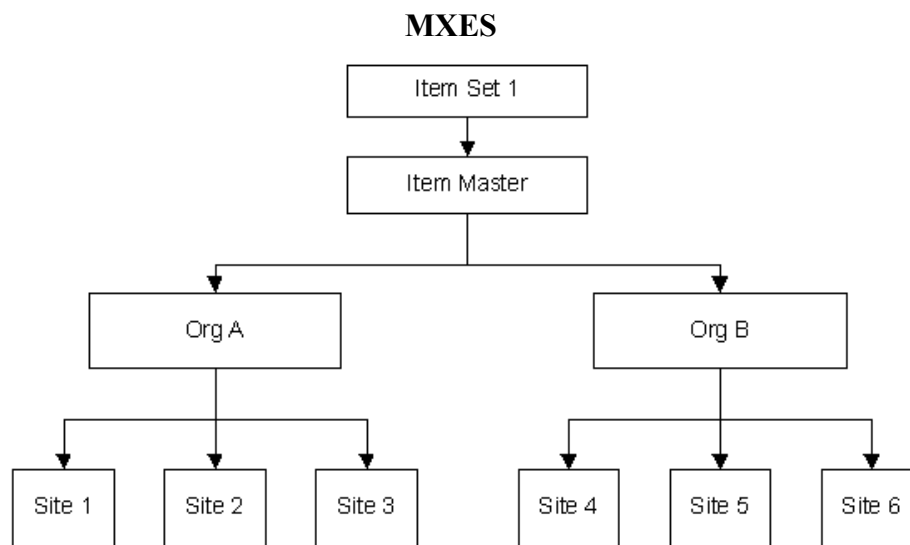
Defining and Creating Item Master Records

Introduction

Item Master records define items that will be stocked in your storerooms. You group these items in an item set, which can then be shared by the organizations using the same item set. Item Master records can be either rotating or non-rotating items.

Item Sets and Item Master

The following graphic shows how the item master works within a single item set. Organizations that use the same item set also use the same item master. Therefore, they can share items across organizations and sites.



Implementation Consideration



Before entering inventory records into Maximo, determine and establish in the system all possible combinations of units of measure and their conversion values before you create item master records.

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Defining and Creating Item Master Records continued

Implementation Questions

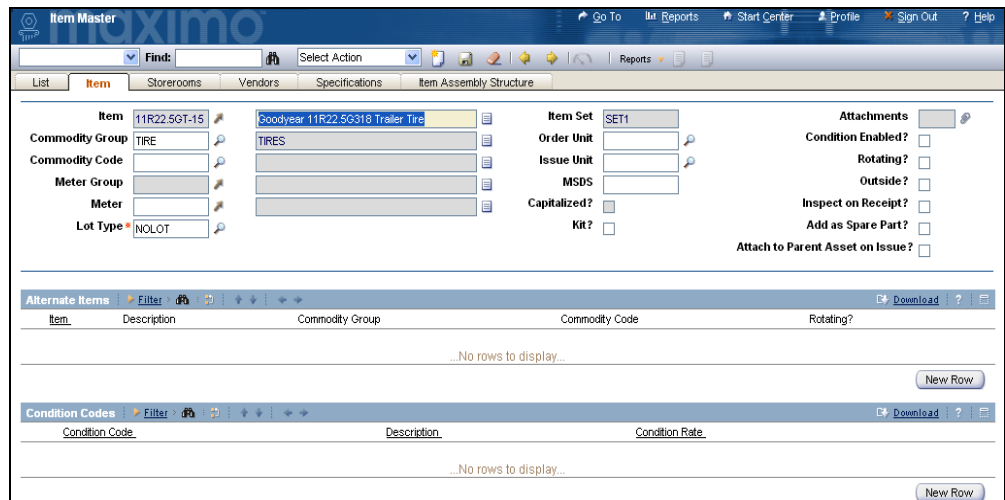
- How are assets defined?
 - Are assets registered in electronic format? Who maintains?
 - How are assets moved and modifications tracked?
 - Is there an electronic format listing of assets? How are these established? Maintained? Checked for accuracy and compliance?
 - Do you have inventory stockrooms?
 - How are inventories managed?
 - Are physical inventories audited? How? What is the schedule?
 - How are IMACs managed and tracked?
-

continued on next page

Defining and Creating Item Master Records continued

The Item Master Application

You use the Item Master application to define items that will be stocked in your storerooms and to specify what items are designated as rotating. When you create an item record, you define the main attributes of the item (such as commodity codes, classifications, and order and issue units), along with any alternate items that you can use in the item's place.

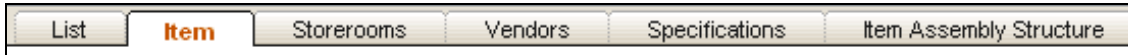


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Defining and Creating Item Master Records continued

Tabs

The Item Master application has six tabs.



Use this tab...	To...
List	Search the database using any combination of available fields
Item	Enter, view, or modify items and specify alternate items that your organizations use and that you stock in storerooms
Storerooms	View a read-only list of information about storerooms that stock the item
Vendors	Enter, view, or modify vendor-specific information, such as lead time, last price, last order data, catalog, and order unit view; also manage a list of vendor companies that supply the item
Specifications	Enter, view, or modify specification templates associated with the classification you choose
Item Assembly Structure	Enter, view, or modify an IAS, which is a list of the individual parts and subassemblies that are required components of an item

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Defining and Creating Item Master Records continued

Functionality

When you create an item record, you can:

- define the stock type of the item;
 - define whether an item has an expiration date (Lot or No Lot);
 - define the item as a rotating asset;
 - identify alternative items that can be used as substitutes for the item;
 - create condition-enabled items to track the value of an item as its condition changes;
 - create item kits, which are collections of items that you issue as a single unit;
 - add the item to one or more storerooms; and
 - define other information related to the item, such as vendors that carry the item, specifications for the item, and other parts needed to build the item (item assembly structure).
-

Rotating Assets

You designate an item as rotating because it shares properties of both items and assets. A rotating item can have inventory value and issue cost, like an item. However, a rotating item cannot be consumed; rather, it is maintained as an asset. After creating an item and adding it to a storeroom, you can either use the Assets application to create the asset records for an item you want to track, or create a purchase order for the rotating item and serialize it when you receive it.

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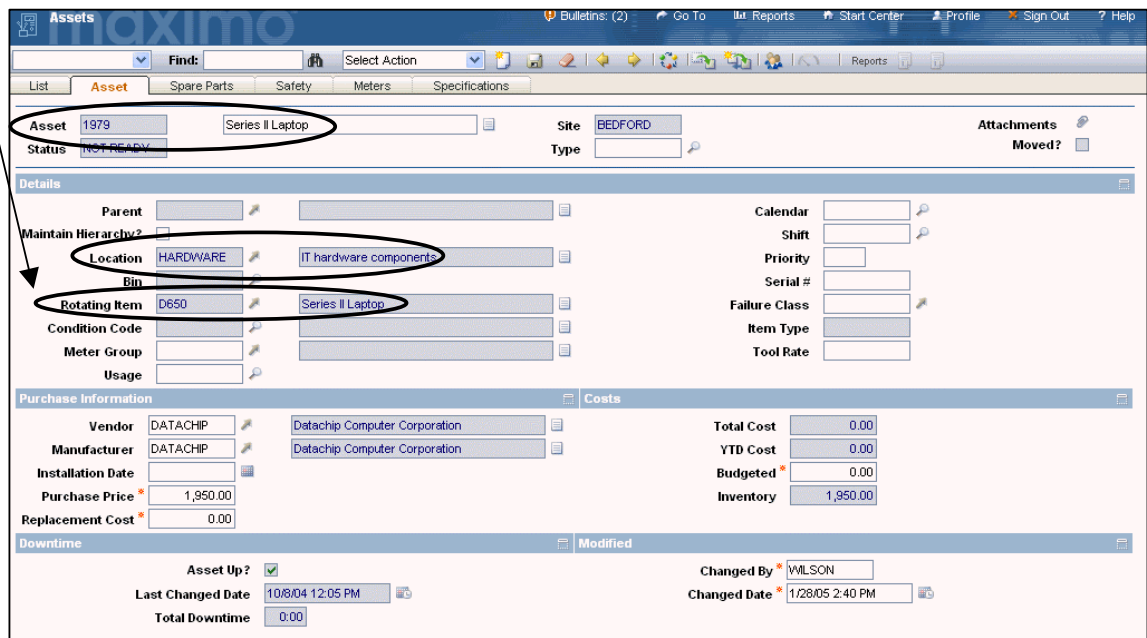
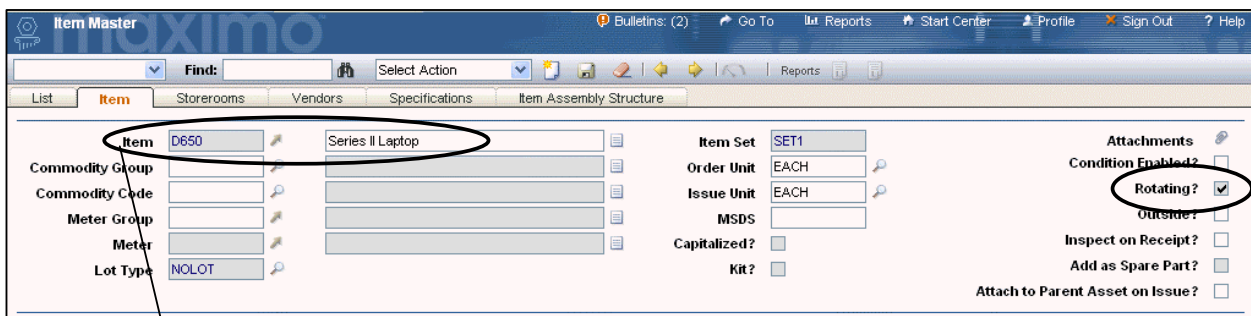
Defining and Creating Item Master Records continued

Rotating Item and Asset Setup

The **Rotating?** check box specifies whether the item is a rotating asset.

Rotating?

If the check box is selected, as with the example below, the item becomes an asset tracked (HARDWARE storeroom location) by item number (D650), and individual asset number (1979) in the Assets application.



continued on next page

Defining and Creating Item Master Records continued

Example

The following example shows rotating items in the training database. We have 30 laptops of the same model that share the same attributes and that have been given the common item ID of D650. However, because we wanted to be able to track each of our laptops as a separate asset, we set them up on the Item Master record as rotating.

The screenshot shows the 'Item Master' configuration page for item 'D650' (Series II Laptop). The 'Rotating?' checkbox is checked and circled in red. Other visible fields include 'Item Set' (SET1), 'Order Unit' (EACH), 'Issue Unit' (EACH), and 'Lot Type' (NOLOT).

The screenshot shows the 'Storerooms' table for item 'D650'. The 'Current Balance' column is circled in red. The table contains one row of data for the 'HARDWARE' storeroom.

Storeroom	Stock Category	Standard Cost	Average Cost	Last Receipt Cost	Current Balance	Default Bin	Site
HARDWARE	STK	1,929.00	975.04	1,950.00	30.00	G-9-3	BEDFORD

continued on next page

Defining and Creating Item Master Records continued

Inventory Stockroom Tracking

When you have associated an asset to a rotating item, Maximo can display and track balances for this item in the **Inventory** application on the **Rotating Assets** tab.

Asset	Location	Description	Location Type	Bin	Inventory Cost	Site
1979	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1980	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1981	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1982	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1983	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1984	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1985	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1986	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1987	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1988	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1989	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1990	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1991	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD
1992	HARDWARE	IT hardware components	STOREROOM		1,950.00	BEDFORD

Associating and Viewing Contracts

After you have created an **Item Master** record, you can associate the item number to a contract to indicate that all asset configurations created with this item number are under a contract. After this association is made, you can use the **View Contracts** action to display all contracts for that Item Master record.

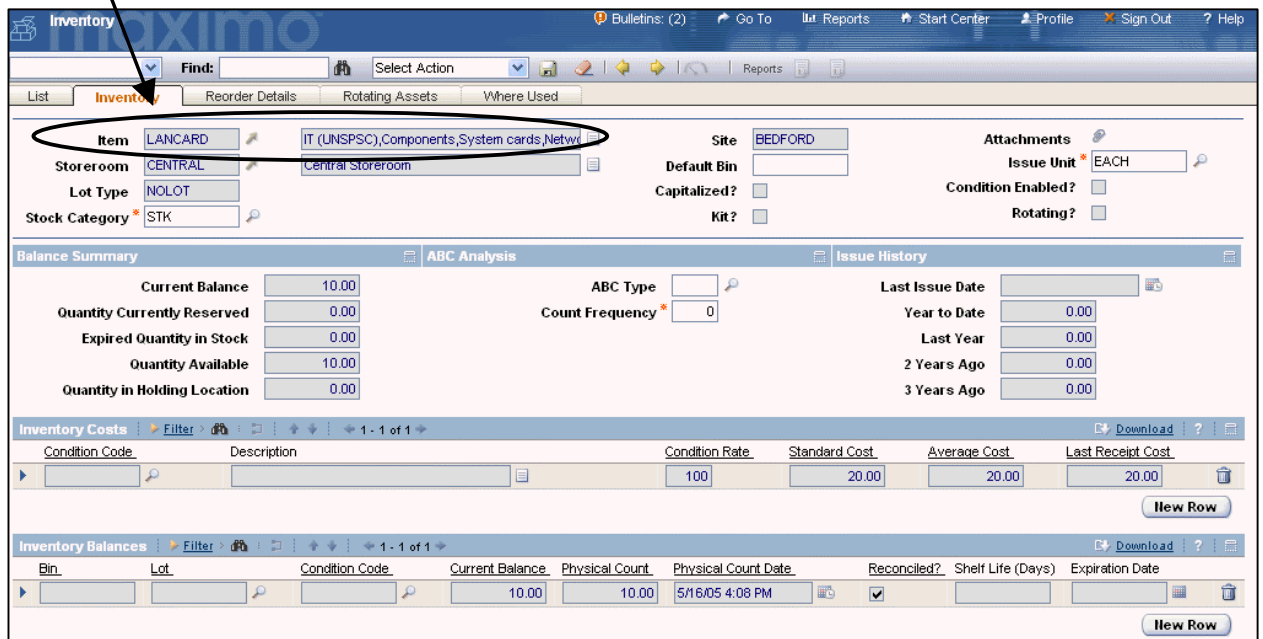
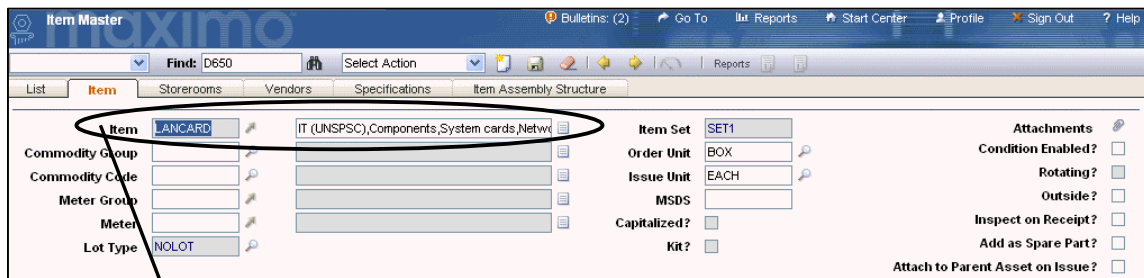
Contract	Revision	Description	Contract Type	Status	Vendor	Description
1014	0	Notebook Lease Contract	LEASE	APPR	DATACHIP	Datchip Computer Corporation

continued on next page

Defining and Creating Item Master Records continued

Inventory Items (Non-rotating) "Consumables"

If the **Rotating?** check box is cleared (the default), the item is not tracked as an individual asset, but is considered a consumable inventory item and tracked in the **Inventory** application.



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Defining and Creating Item Master Records continued

Add Spare Parts

In Maximo you can specify whether the item will be added as a spare part to the asset when issued, if the item is not already a spare part. If the check box is selected, the item can be added as a spare part.

Add as Spare Part?

There are several ways to associate spare parts to assets, including the following methods:

- Use the **Item Assembly Structure** application to build and apply spare parts to an asset or an item. You can also apply an IAS upon receiving an asset or item.
- On the **Assets** application's **Spare Parts** tab, associate those items as spare parts to the selected asset.
- In the **Item Master** application, select the **Add Spare Parts** check box to indicate the item will be added as an additional spare part for the asset when issued, if the item is not already a spare part.

Before you associate spare parts, items must be recorded in the Inventory database table.

Once an asset has spare parts associated to it, you can use the Spare Parts button to display a short list of items associated with the asset.

Rotating vs Non-rotating Items

To further differentiate between a rotating and non-rotating item, remember the following points:

- *Rotating* will set up the item in the **Item Master** application and use the **Assets** application to track, execute actions, and contain asset detail information.
 - *Non-rotating* will set up the item in the **Item Master** application and use the **Inventory** application to track, execute actions, and contain item detail information.
-

Tip: Physical Counts



To start off your tracking with an accurate, current balance, do a physical audit when new item records are entered into the system.

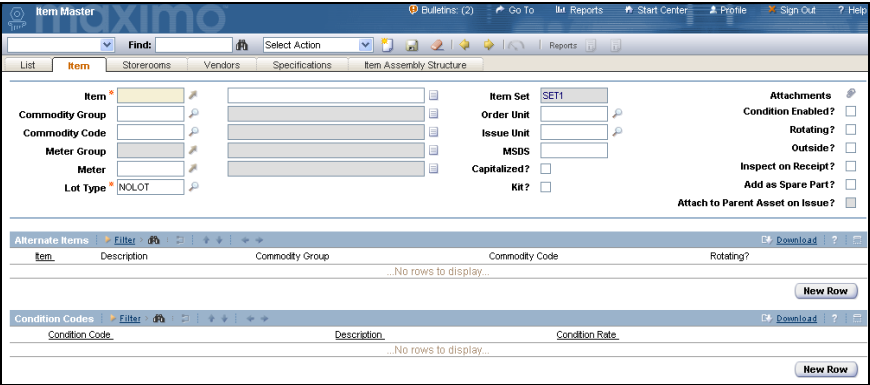
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Defining and Creating Item Master Records continued

Inserting an Item Master Record for Non-rotating Assets



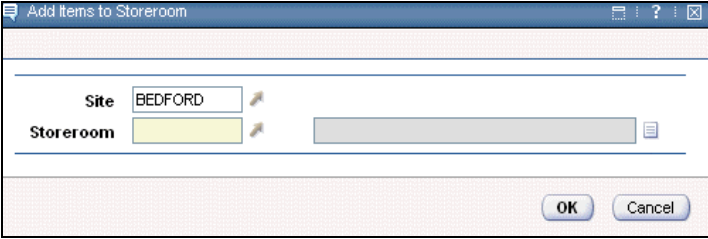

In this exercise we will insert a non-rotating “consumable” item record, Fast Ethernet Switch, into the Hardware stockroom.

Step	Action
1	<p>Open the Item Master application in the Inventory module, and click New Item.</p> <p><u>Result:</u> A new record opens on the Item tab.</p> 
2	<p>In the Item field, enter ETHSW. In the Description field, enter Fast Ethernet Switch.</p>
3	<p>Enter EACH in the Order Unit and Issue Unit fields.</p>

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Defining and Creating Item Master Records continued

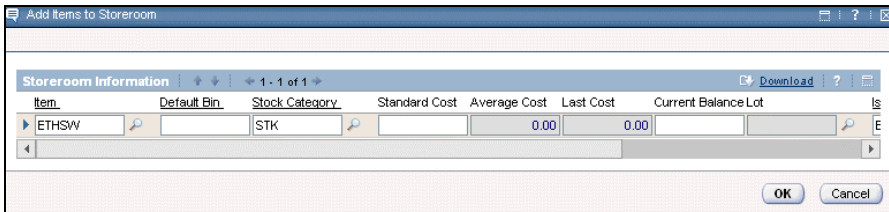
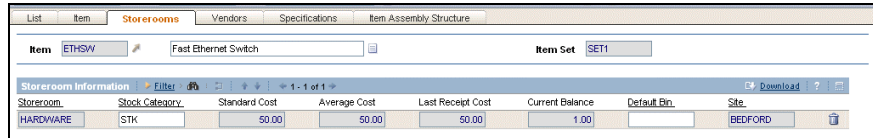
Inserting an Item Master Record for Non-rotating Assets continued

Step	Action
4	Click on the Storerooms tab.
5	<p>To associate this item being stocked in a storeroom and to indicate a current physical balance in the stockroom, from the Select Action menu, select Add Items to Storeroom.</p> <p><u>Result:</u> The Add Items to Storeroom dialog box opens.</p> 
6	<p>In the Storeroom field, click the Detail Menu button, click on Select Value, and select Hardware.</p> <p><u>Result:</u> Your screen should look like the one below.</p> 

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Defining and Creating Item Master Records continued

Inserting an Item Master Record for Non-rotating Assets continued

Step	Action						
7	<p>Click OK.</p> <p><u>Result</u>: The Add Items to Storeroom dialog box appears.</p> 						
8	<p>Enter the following information:</p> <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Standard Cost</td> <td>50.00</td> </tr> <tr> <td>Current Balance</td> <td>1</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Standard Cost	50.00	Current Balance	1
<u>Field</u>	<u>Value</u>						
Standard Cost	50.00						
Current Balance	1						
9	<p>Click OK.</p> <p><u>Result</u>: The Ethernet Switch has been added to the HARDWARE storeroom.</p> 						
10	<p>Save your record.</p>						

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Defining and Creating Item Master Records continued

Definitions Revisited

- A *rotating item* is an inventory item with a generic item number and a current balance (which can be greater than one) in the Item Master application. Multiple instances of rotating items can be used in multiple locations.
 - A *rotating asset* is an individual instance of a rotating item, identified by an individual asset number in the Assets application. Rotating items become rotating assets when the asset is received into the stockroom or when an item assembly structure is applied to an asset.
-

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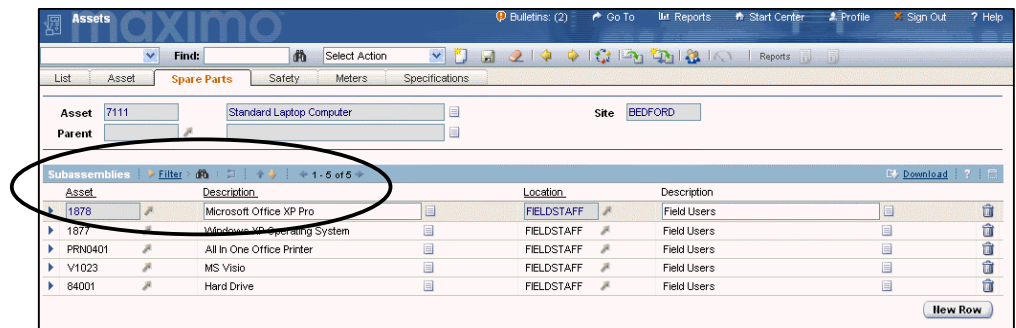
Defining and Creating Item Master Records continued

Attach to Parent Asset on Issue

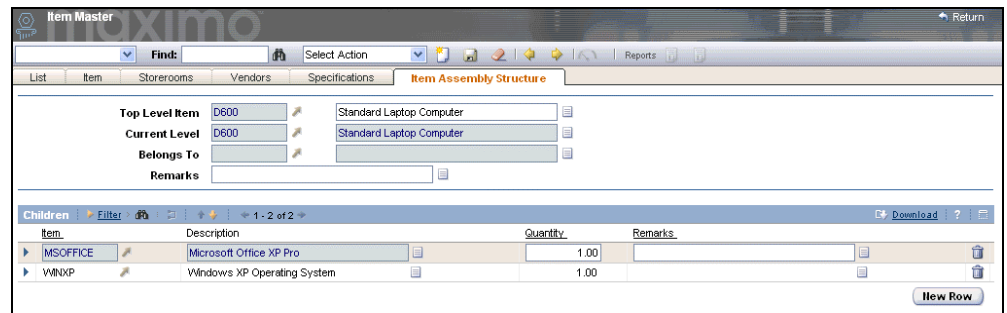
The **Attach to Parent Asset on Issue?** check box specifies whether to attach the rotating item to the parent asset when the item is issued. This assumes that this rotating item will become a child of another rotating asset. If the check box is selected, the rotating item becomes a subassembly (component) of the parent asset upon issue.



Example: Some software is purchased and is tracked as a rotating item. When the software is issued to a computer, it will automatically update the asset's structure in Maximo...



...but not the **Item Master** assembly structure.



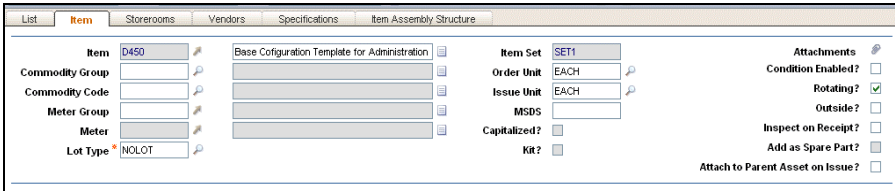
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Defining and Creating Item Master Records continued

Creating a Rotating Item Configuration



Follow the steps below to create a rotating item **Item Master** record.

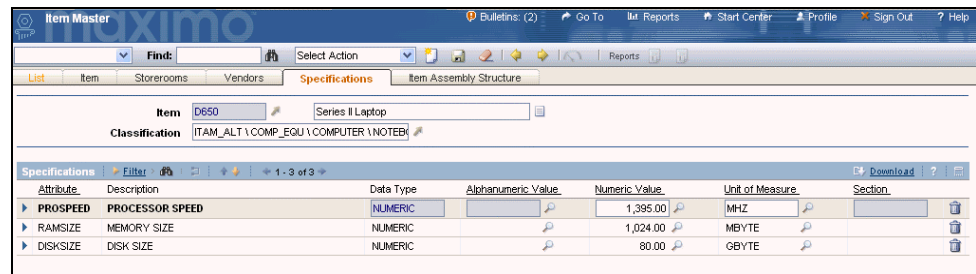
Step	Action														
1	Insert a New Item .														
2	<p>Enter the following information:</p> <table border="0"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Item</td> <td>D450</td> </tr> <tr> <td>Description</td> <td>Base Configuration Template for Administration</td> </tr> <tr> <td>Order Unit</td> <td>Each</td> </tr> <tr> <td>Issue Unit</td> <td>Each</td> </tr> <tr> <td>Rotating ?</td> <td>[Checked]</td> </tr> <tr> <td>Inspect on Receipt?</td> <td>[Checked]</td> </tr> </tbody> </table> <p><u>Result:</u> Your screen should look similar to the one below.</p> 	<u>Field</u>	<u>Value</u>	Item	D450	Description	Base Configuration Template for Administration	Order Unit	Each	Issue Unit	Each	Rotating ?	[Checked]	Inspect on Receipt?	[Checked]
<u>Field</u>	<u>Value</u>														
Item	D450														
Description	Base Configuration Template for Administration														
Order Unit	Each														
Issue Unit	Each														
Rotating ?	[Checked]														
Inspect on Receipt?	[Checked]														
3	Add this item to the HARDWARE storeroom.														
4	Save your record.														

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Defining and Creating Item Master Records continued

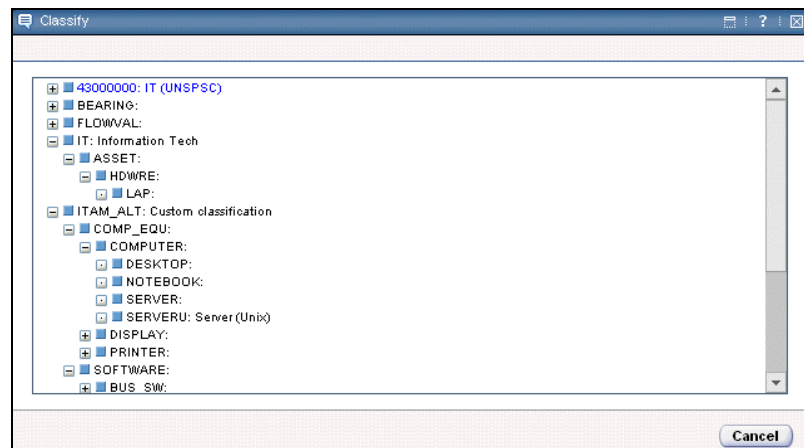
Item Specifications and Attributes

Recall that specification templates contain attributes about an item, such as its size, speed, material, and capacity. You can use these attributes to define specific information about the item, therefore making it easier to distinguish it from other similar items. On the **Specifications** tab you apply the specification template that is associated with the classification you choose. After you choose a classification path for an item, the **Specifications** section displays the predefined list of attributes, and you can enter values specific to the item.



Example

If you want to create an item record for a PC, you can view the classifications that exist for PCs. You then choose an existing classification that meets your needs: HARDWARE > PCs > Fermion > T23. The **Classify** dialog box also lists the items that have been classified with that description.



continued on next page

Defining and Creating Item Master Records continued

Specification



If the classification record was set up to include the description, and you create an Item Master record and populate values for specification attributes, the description of the classification will override the item description field when you save the record.

Applying a Classification and Specifications



In this exercise we will classify this desktop, which will define the specifications for the desktop.

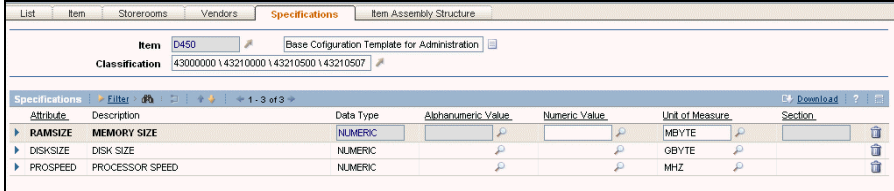
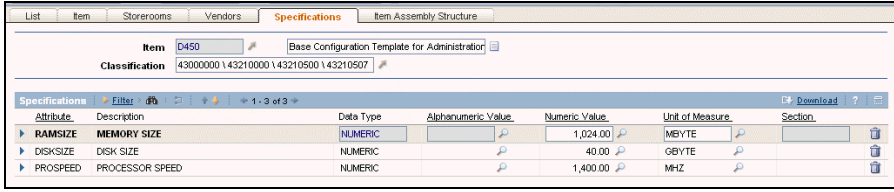
Step	Action
1	Click on the Specifications tab.
2	<p>Click the Detail Menu button in the Classification field and select Classify.</p> <p><u>Result:</u> The Classify dialog box opens.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>The screenshot shows a dialog box titled 'Classify' with a list of classification categories. Each category has a small square icon with a plus sign to its left, indicating it is expandable. The categories listed are:</p> <ul style="list-style-type: none"> 43000000: IT (UNSPSC) BEARING: FLOWVAL: IT: Information Tech ITAM_ALT: Custom classification MOTORS: PUMP: SEAL: TANDEM: TRACTOR: TRIDEM: TUBING: VALVE: VEHICLE: </div>

continued on next page

Defining and Creating Item Master Records continued

Applying a Classification and Specifications

continued

Step	Action								
3	<p>Use the drilldown and select the follow classification path: 43000000 \ 43210000 \ 43210500 \ 43210507</p> <p><u>Result:</u> Your Classification tab should look like the one below.</p> 								
4	<p>In the Specifications table window, enter the following data:</p> <table border="1"> <thead> <tr> <th><u>Attribute</u></th> <th><u>Numeric Value</u></th> </tr> </thead> <tbody> <tr> <td>RAMSIZE</td> <td>1024</td> </tr> <tr> <td>DISKSIZE</td> <td>40</td> </tr> <tr> <td>PROSPEED</td> <td>1400</td> </tr> </tbody> </table>	<u>Attribute</u>	<u>Numeric Value</u>	RAMSIZE	1024	DISKSIZE	40	PROSPEED	1400
<u>Attribute</u>	<u>Numeric Value</u>								
RAMSIZE	1024								
DISKSIZE	40								
PROSPEED	1400								
5	<p>Save your record.</p> <p><u>Result:</u> The Specifications tab should look like the one below.</p> 								

continued on next page

Defining and Creating Item Master Records continued

Item Assembly Structure (IAS)

An *item assembly structure* (IAS) is a hierarchically arranged list of rotating items, subassemblies, and spare parts that is identified by the top-level item in the structure. An IAS is a generic structure that can be used to build multiple asset assembly structures and their related location systems. Essentially, it is a configuration template that can be applied to a location or asset.

The screenshot shows the 'Apply Item Assembly Structure' dialog box. At the top, there is a help message: 'To generate asset numbers for the whole hierarchy in the Item Assembly Structure, click Autonumber All. Alternatively, enter the asset numbers for the first level in the hierarchy in the Asset Hierarchy table. To move to the second level in the hierarchy, click the detail button next to the item field in the table and select Move To.' Below this, there are input fields for 'Asset' (2078), 'Rotating Item' (D600), and 'Item' (Standard Laptop Computer). There is also an 'Item Hierarchy' section with similar fields. At the bottom, there is a table titled 'Asset Hierarchy' with columns: Asset, Description, Item, GL Account, and Rotating Suspense Account. The table contains two rows: 'Windows XP Operating System' with item 'WINXP' and 'Microsoft Office XP Pro' with item 'MSOFFICE'. At the bottom right, there are buttons for 'Autonumber All', 'OK', and 'Cancel'.

Configuration Template



The template typically includes software titles or hardware components that are delivered/loaded with the asset. Software specific to the site that will be added later by IT staff should not be part of the IAS, as it will already have a unique identifier and will be dispensed from a software license pool.

Configuration Template Library

When you create an IAS for an Item Master record and then save it, it is saved to the database. It then becomes available for use on Item Master records or an asset, essentially building a configuration template library.

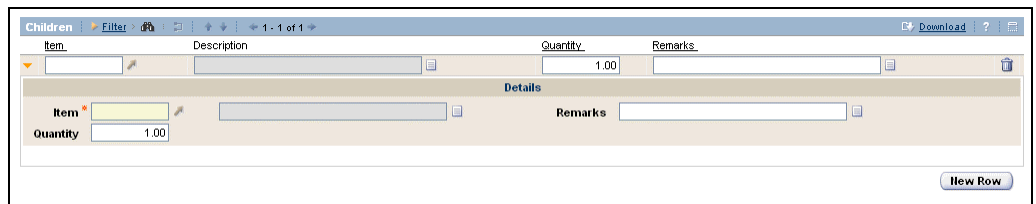
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Defining and Creating Item Master Records continued

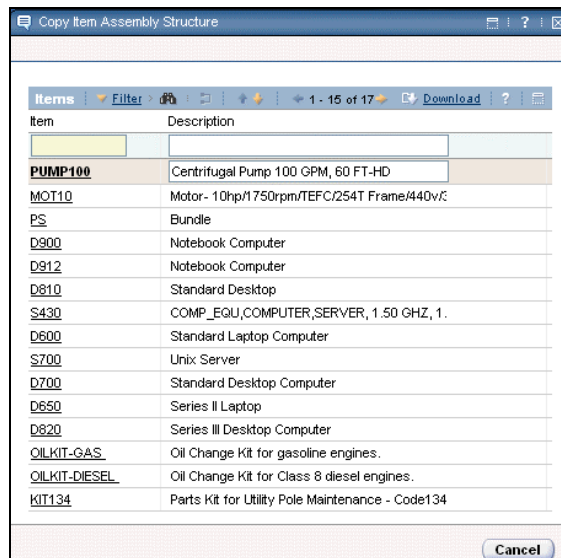
Ways to Create an IAS

There are two ways to create an IAS:

- On the **Item Assembly Structure** tab, use the **New Row** button to add children levels.



- Use the **Copy the Item Assembly Structure** action if structures have already been created in the system.



continued on next page

Defining and Creating Item Master Records continued

IAS Rules

When you create an IAS for an item or asset, the following rules apply:

- If the parent item is a rotating item (asset), you can add either rotating or non-rotating items to the IAS.
- If the parent item is a non-rotating item, you can add only other non-rotating items to the IAS. Rotating items cannot be added to the IAS if the parent item is not a rotating item.

Applying an IAS

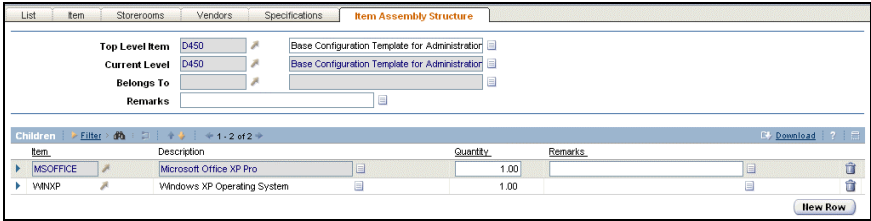
After creating an item and adding it to a location, you can use either of the following methods to apply an IAS:

- Use the **Assets** application **Apply IAS** action to create the asset records for an item you want to track.
- Create a purchase order for the rotating item and use the **Apply IAS** button when receiving it.

Building the IAS

In this exercise we will build the IAS.

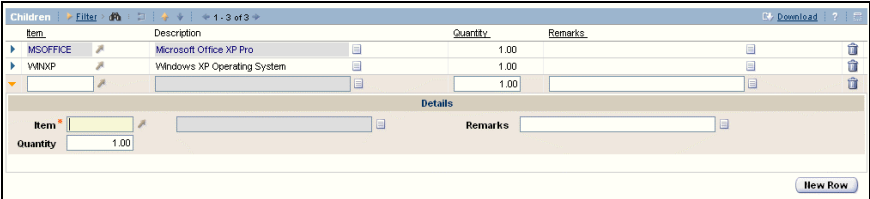
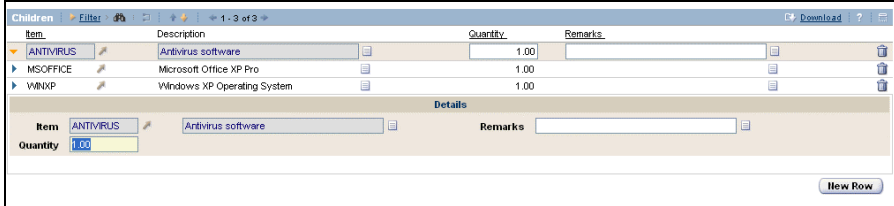


Step	Action
1	Click on the Item Assembly Structure tab.
2	<p>From the Select Action menu, select Copy Item Assembly Structure and then select D810.</p> <p><u>Result:</u> The IAS for D810 is copied to the item you created.</p> 

continued on next page

Defining and Creating Item Master Records continued

Building the IAS continued

Step	Action
3	<p>To add to this configuration, click New Row.</p> <p><u>Result:</u> The Details table opens.</p> 
4	<p>In the Item field, enter ANTIVIRUS.</p>
5	<p>Save your record.</p> <p><u>Result:</u> The Item Assembly Structure should look like the one below.</p> 

Inventory Records

Introduction

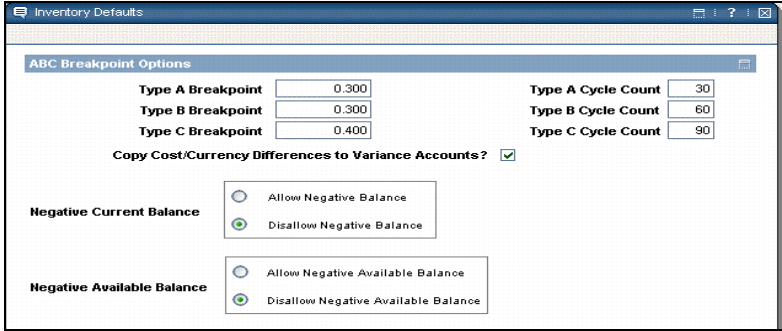
Inventory is a crucial piece for managing the movement of assets (hardware and software). Having one inventory system allows you to view, manage, and report on what your current asset structure consists of, as well as tracking and keeping in compliance with software license usage.

Revisiting: Item Sets

Items are created in an item set. An item set consists of an item set ID that groups the items. Item numbers are unique within an item set. Many organizations can use the same item set. However, some attributes need to be defined based on organization-specific requirements and tax codes. After you create an item, you can assign it the attributes that are maintained at the organizational level using the Item/Organization Details action.

Organizations Application Options Revisited

The following setup options for inventory are available in the **Organizations** application:

Tab	Description
Inventory Defaults	<p>Use the Inventory Defaults tab to set options for:</p> <ul style="list-style-type: none"> • ABC Breakpoints • Negative Current Balance • Negative Available Balance  <p>The screenshot shows the 'Inventory Defaults' window with the following settings:</p> <ul style="list-style-type: none"> ABC Breakpoint Options: <ul style="list-style-type: none"> Type A Breakpoint: 0.300 Type B Breakpoint: 0.300 Type C Breakpoint: 0.400 Type A Cycle Count: 30 Type B Cycle Count: 60 Type C Cycle Count: 90 Copy Cost/Currency Differences to Variance Accounts? <input checked="" type="checkbox"/> Negative Current Balance: <ul style="list-style-type: none"> <input type="radio"/> Allow Negative Balance <input checked="" type="radio"/> Disallow Negative Balance Negative Available Balance: <ul style="list-style-type: none"> <input type="radio"/> Allow Negative Available Balance <input checked="" type="radio"/> Disallow Negative Available Balance

continued on next page

Inventory Records continued

Organizations continued
Application
Options
Revisited

Tab	Description
<p>Inventory Reorder</p>	<p>Use this tab to specify whether Maximo creates an approved or unapproved <i>purchase requisition</i> or <i>purchase order</i> when a reorder request is generated. You set the default separately for reorder requests directed at external vendors and internal supply rooms.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> </div>

continued on next page

Inventory Records continued

Organizations continued
Application
Options
Revisited

Tab	Description
<p>Inventory Costs</p>	<p>On this tab you can choose inventory cost options for the selected site. These settings will not affect other sites.</p> <div style="text-align: center;"> </div> <p>The sections of this screen are described in the table below.</p>

Screen Section	Description
<p>Issue Cost</p>	<ul style="list-style-type: none"> • <i>Issue cost</i> is the cost assigned to the item when it is used. • By default, the issue cost is based on average cost. • To base issue cost on standard cost, select the Standard Cost option.
<p>Non Capitalized Rotating</p>	<ul style="list-style-type: none"> • By default, costs for non-capitalized rotating items and assets are based on the setting for issue cost. • To base non-capitalized rotating costs on assets cost, select the Asset Cost option.

continued on next page

Inventory Records continued

Stocked, Non-Stocked, and Special Order Items

There are three categories of inventory items in Maximo: stocked, non-stocked, and special order items.

Category	Description
Stocked Items	Those that you always need to have on hand because they have a regular turnover rate and are frequently needed. Stocked items have reorder criteria specific to each storeroom location.
Non-Stocked Items	Items you need only occasionally and do not want to maintain in inventory throughout the year. Non-stocked items are not automatically reordered. However, you do want to keep records for non-stocked items in the database because you are likely to order these items again at some point.
Special Order Items	Typically items that are ordered only once, often for unexpected needs or for a one-time work order. These items are not kept in stock, and you do not need a permanent record of them in your database.

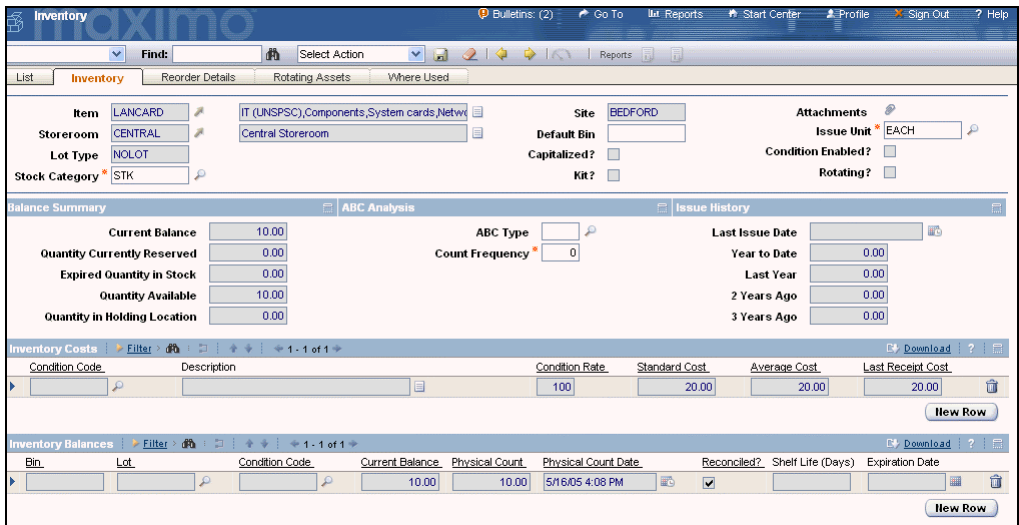
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Inventory Records continued

Inventory Application

Use the **Inventory** application to view or modify item balances, costs, balances, bins, and lots, and to view master inventories and items at specific storeroom locations where items are stocked.

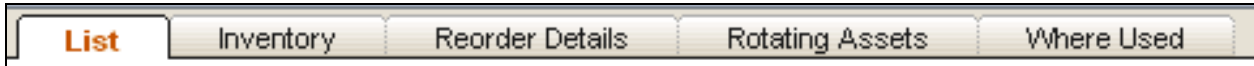
You can also keep track of items (stocked, non-stocked, and special order) by checking storeroom balances. When stock falls below a specified reorder point, the balances let you know when and what quantities to reorder.



continued on next page

Inventory Records continued

Inventory Tabs The **Inventory** application has five tabs.



Use this tab...	To...
List	Search for inventory records.
Inventory	Enter, display, and update inventory information. Alternate or interchangeable items can also be entered or viewed.
Reorder Details	Enter or view reorder details, such as: <ul style="list-style-type: none"> • Reorder point • Lead time • Issue units In addition, you can enter or view information about one or more vendors for an item, as well as information about multiple manufacturers or models for each vendor.
Rotating Assets	Identify and track rotating assets—interchangeable assets that can be identified with a single item number.
Where Used	List all assets on which an item is listed as a spare part.

Functionality The **Inventory** application also enables you to:

- keep track of item vendors,
- keep track of the storeroom locations where an item can be found,
- track vendors that supply an item, and
- manage stock levels and reorder items.

continued on next page

Inventory Records continued

Reordering Items



Depending on your business and how you keep inventory, you might use the Maximo reorder routine regularly to reorder inventory items. In Maximo, there are two actions that allow you to reorder items:

- The **Reorder Items** action allows you to order items when stock balances fall to a predefined reorder point.

- The **Reorder for Direct Issue Items** action allows you to order items that are direct issue to a work order, location, GL account, or location, and that are not received into a storeroom.

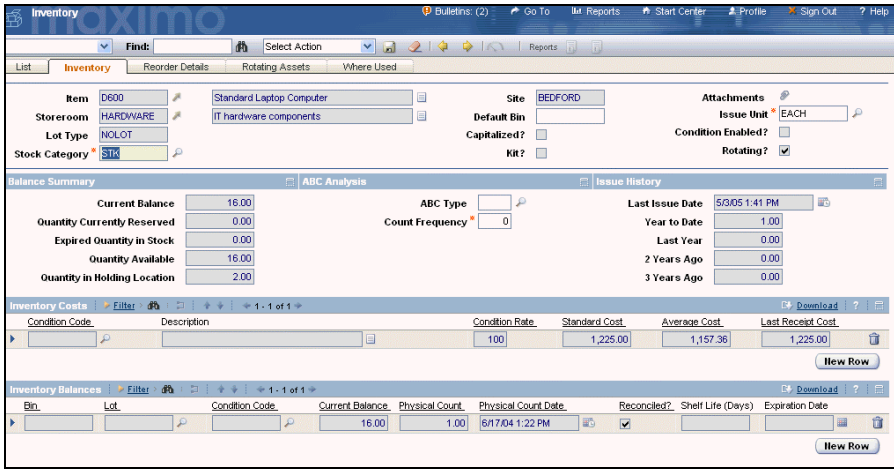
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Inventory Records continued

Viewing Item Records



Follow these steps to view rotating items and non-rotating items (“consumables,” “spare parts”).

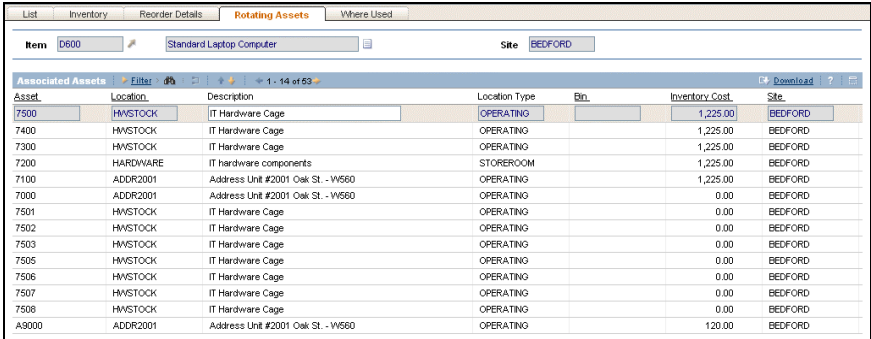
Step	Action
1	Open the Inventory application.
2	<p>On the List tab, search for and retrieve item D600.</p> <p><u>Result:</u> D600 is displayed on the Inventory tab with balance and cost information.</p> 

continued on next page

Inventory Records continued

Viewing Item Records

continued

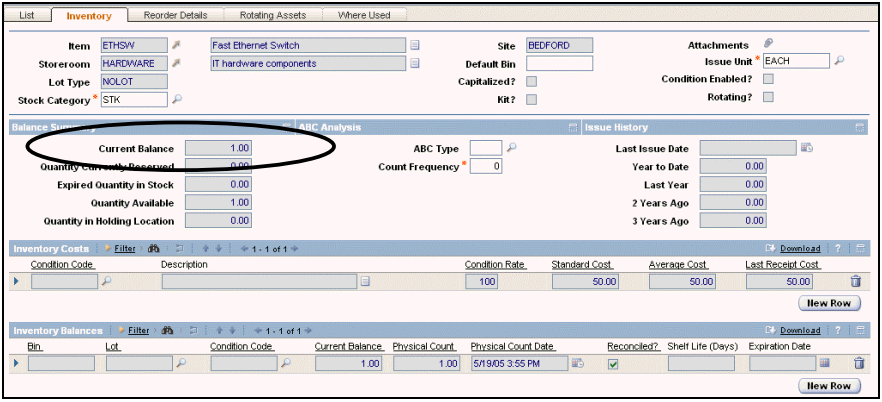
Step	Action																																																																																																									
3	<p>Click on the Rotating Assets tab.</p> <p><u>Result:</u> The Rotating Assets tab displays a list of all assets and their current locations.</p>  <table border="1"> <thead> <tr> <th>Asset</th> <th>Location</th> <th>Description</th> <th>Location Type</th> <th>Bin</th> <th>Inventory Cost</th> <th>Site</th> </tr> </thead> <tbody> <tr> <td>7500</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>1,225.00</td> <td>BEDFORD</td> </tr> <tr> <td>7400</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>1,225.00</td> <td>BEDFORD</td> </tr> <tr> <td>7300</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>1,225.00</td> <td>BEDFORD</td> </tr> <tr> <td>7200</td> <td>HARDWARE</td> <td>IT hardware components</td> <td>STOREROOM</td> <td></td> <td>1,225.00</td> <td>BEDFORD</td> </tr> <tr> <td>7100</td> <td>ADDR2001</td> <td>Address Unit #2001 Oak St. - W560</td> <td>OPERATING</td> <td></td> <td>1,225.00</td> <td>BEDFORD</td> </tr> <tr> <td>7000</td> <td>ADDR2001</td> <td>Address Unit #2001 Oak St. - W560</td> <td>OPERATING</td> <td></td> <td>0.00</td> <td>BEDFORD</td> </tr> <tr> <td>7501</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>0.00</td> <td>BEDFORD</td> </tr> <tr> <td>7502</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>0.00</td> <td>BEDFORD</td> </tr> <tr> <td>7503</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>0.00</td> <td>BEDFORD</td> </tr> <tr> <td>7505</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>0.00</td> <td>BEDFORD</td> </tr> <tr> <td>7506</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>0.00</td> <td>BEDFORD</td> </tr> <tr> <td>7507</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>0.00</td> <td>BEDFORD</td> </tr> <tr> <td>7508</td> <td>HWSTOCK</td> <td>IT Hardware Cage</td> <td>OPERATING</td> <td></td> <td>0.00</td> <td>BEDFORD</td> </tr> <tr> <td>A9000</td> <td>ADDR2001</td> <td>Address Unit #2001 Oak St. - W560</td> <td>OPERATING</td> <td></td> <td>120.00</td> <td>BEDFORD</td> </tr> </tbody> </table>	Asset	Location	Description	Location Type	Bin	Inventory Cost	Site	7500	HWSTOCK	IT Hardware Cage	OPERATING		1,225.00	BEDFORD	7400	HWSTOCK	IT Hardware Cage	OPERATING		1,225.00	BEDFORD	7300	HWSTOCK	IT Hardware Cage	OPERATING		1,225.00	BEDFORD	7200	HARDWARE	IT hardware components	STOREROOM		1,225.00	BEDFORD	7100	ADDR2001	Address Unit #2001 Oak St. - W560	OPERATING		1,225.00	BEDFORD	7000	ADDR2001	Address Unit #2001 Oak St. - W560	OPERATING		0.00	BEDFORD	7501	HWSTOCK	IT Hardware Cage	OPERATING		0.00	BEDFORD	7502	HWSTOCK	IT Hardware Cage	OPERATING		0.00	BEDFORD	7503	HWSTOCK	IT Hardware Cage	OPERATING		0.00	BEDFORD	7505	HWSTOCK	IT Hardware Cage	OPERATING		0.00	BEDFORD	7506	HWSTOCK	IT Hardware Cage	OPERATING		0.00	BEDFORD	7507	HWSTOCK	IT Hardware Cage	OPERATING		0.00	BEDFORD	7508	HWSTOCK	IT Hardware Cage	OPERATING		0.00	BEDFORD	A9000	ADDR2001	Address Unit #2001 Oak St. - W560	OPERATING		120.00	BEDFORD
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7508	HWSTOCK	IT Hardware Cage	OPERATING		0.00	BEDFORD																																																																																																				
A9000	ADDR2001	Address Unit #2001 Oak St. - W560	OPERATING		120.00	BEDFORD																																																																																																				
4	<p>Click on the Where Used tab.</p> <p><u>Result:</u> No items are listed because this asset is rotating. You cannot use this tab to provide “where used” information for items that are defined as rotating assets.</p>																																																																																																									

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Inventory Records continued

Viewing Item Records

continued

Step	Action
5	<p>Click on the List tab, then search for and retrieve ETHSW.</p> <p><u>Result:</u> We have a balance because this is a non-rotating asset for which, when we created the Item Master record, we indicated a storeroom location and the balance.</p> 

Setting Up Assets

Introduction

While assets will normally be purchased and received into the system, thus creating an asset record in the Assets application, there might be occasions where manual input is required. There are two ways to create asset records in Maximo:

- Purchasing or leasing a rotating item and receiving it
 - Direct entry by using the Assets application
-

Section Focus



While this chapter is focused on planning asset configurations for acquisitions, we will create an asset structure by direct entry using the Assets application as a way of putting together the concepts of inventory master rotating items, IAS, and inventory.

In Chapter 8, “Acquisitions: Purchasing and Leasing,” we will create an asset in the system by using the purchasing and receiving applications.

continued on next page

Setting Up Assets continued

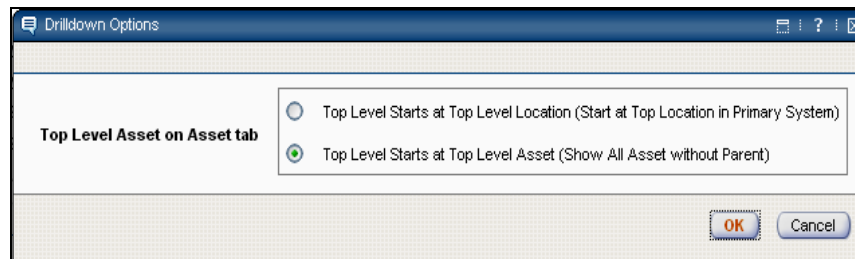
Organization Setup Options Revisited: Setting Drilldown Options



If the Assets field and Location field on a record are both empty, this option determines whether the Drilldown for the **Assets** field opens to the asset hierarchy or to the location hierarchy by default.

The table below describes the details for each option on the screen.

Note: This setting affects applications at all sites in the selected organization.



This option...	Does the following...
<p>Top Level Starts at Top Level Location</p>	<p>Causes Maximo to display the Location tab on the drilldown by default when the Location and Assets fields are empty.</p> <ul style="list-style-type: none"> • This option can be useful for organizations with a large number of asset records that use a location hierarchy to organize these records. • The display would begin with the top-level location of the primary system, rather than displaying all assets in Maximo without a parent.
<p>Top Level Starts at Top Level Assets</p>	<p>Causes Maximo to display the Assets tab on the drilldown to display by default when the Location and Assets fields are empty.</p> <ul style="list-style-type: none"> • This option can be useful if the asset records are organized into a hierarchy with a few top-level asset records. • If the organization has a large number of top-level asset records, selecting this option can cause slower performance when displaying the records.

continued on next page

Setting Up Assets continued

Asset Records In Maximo, an asset record is any equipment, machinery, or technology that your company owns or leases that you will be managing and maintaining using Maximo.

Asset Groups In Maximo, assets can be categorized into two groups: rotating or non-rotating.

- A *rotating* asset might start its lifecycle as a stocked item in a storeroom, then be issued and transferred. Rotating assets can be tracked in inventory.
- A *non-rotating* asset starts its lifecycle at a location. Non-rotating assets do not move into and out of storerooms and are not tracked in inventory.

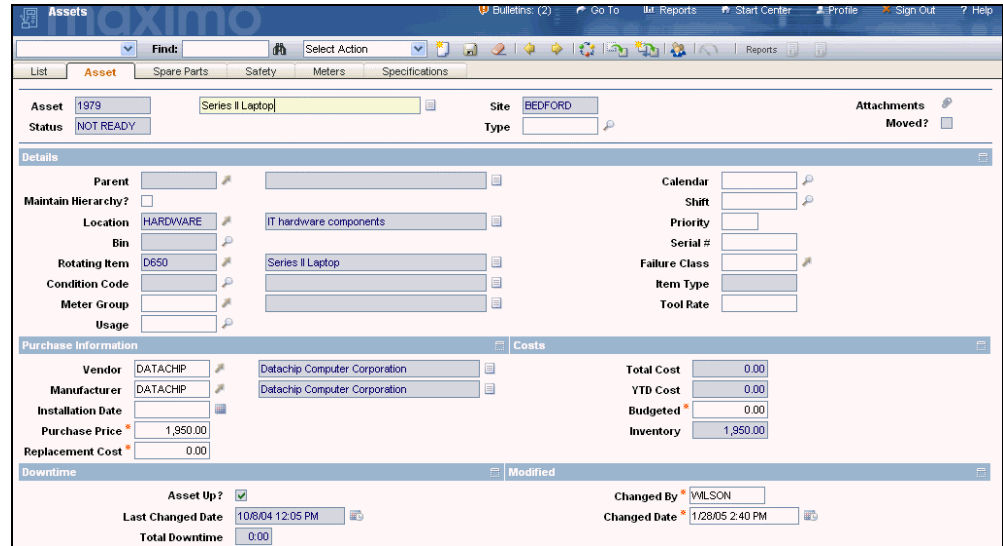
Rotating Assets As discussed, interchangeable assets that are moved into and out of service as needed are called *rotating assets*. You can also set up items as rotating assets that are not necessarily moved into and out of service, such as a network server or a copier. Identifying and tracking them allows you to monitor item performance, track the lifecycle costs, audit lifecycle movement, and analyze the impact of locations on the items.

continued on next page

Setting Up Assets continued

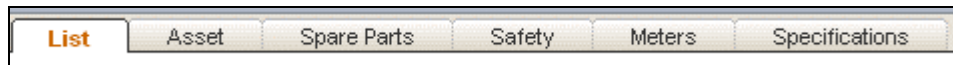
The Assets Application

The **Assets** application enables you to keep and update the records of all of your assets and operating locations. Use the **Assets** application to add new assets to the database and define relationships among these assets.



Tabs

The **Assets** application has six tabs.



Use this tab...	To...
List	Search for assets
Asset	View, modify, add, or delete the main record or a serialized part/component for assets
Spare Parts	Create the asset hierarchy and view the subassemblies and parts for assets
Safety	View, add, or delete safety records for assets
Meters	View or add metering information for assets
Specifications	Classify and apply the specification template that is associated with the classification you used

continued on next page

Setting Up Assets continued

Asset Type Field

If you are using Maximo to track a variety of assets, the Asset Type field allows you to categorize assets. For example:

- **Production:** motors, pumps, winches, presses
- **Facilities:** plumbing, lighting, fire extinguishers
- **Fleet:** forklifts, trucks, buses, trains, aircraft
- **IT:** computers, routers, hubs, servers



Note: You can create and use synonyms for these types. However, we will not be discussing this in this course.

Asset Status



The **Status** field indicates the status of an asset. There are three status levels:

- **Not Ready:** The default status for new asset records. Asset records can be created before assets have been received, installed, configured, inspected, or otherwise approved for their intended use.
- **Decommissioned:** The asset has been retired from service and moved to scrap or salvage.
- **Operating:** The asset has been received, installed, configured, inspected, or otherwise approved for use or operation.

Some additional points on asset status are as follows:

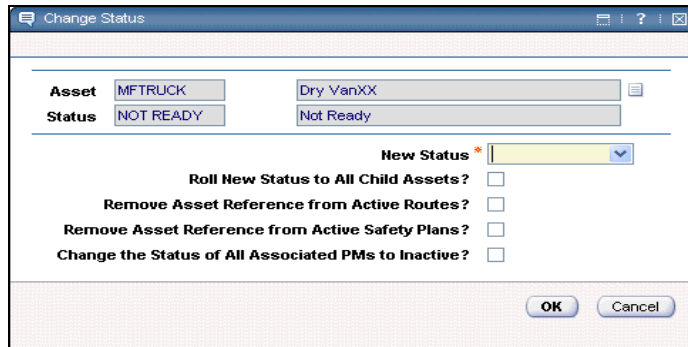
- Maximo defaults to a Not Ready status upon initial entry of an asset record.
 - When an asset has a status of Decommissioned, it cannot be viewed from other applications, such as Work Order Tracking, but can be viewed with the Assets application.
-

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Setting Up Assets continued

Status Change Options

When the asset status is changed, there are check box options available to help in the management of the asset and its relationship with other applications and, if applicable, with its subassemblies (children). The list below describes the purpose of each option.



Option	Purpose
Roll New Status to All Child Assets?	Select this check box to specify that all children of the asset whose status you are changing also will have their status changed to the same new status. This option can be selected for any status change.
Remove Asset Reference from Active Routes?	Select this check box to specify that the asset should no longer be referenced on active routes while the asset is in the new status. For example, if you set an asset's status to Decommissioned, you might want the asset removed from inspection routes. This option can be selected only when the status of the asset is Decommissioned.
Remove Asset Reference from Active Safety Plans?	Select this check box to specify that the asset should no longer be referenced on active safety plans while the asset is in the new status. This option can be selected only when the status of the asset is Decommissioned.
Change the Status of All Associated PMs to Inactive?	Select this check box to specify that any PMs associated with the asset should be set to Inactive while the asset is in the new status. This option can be selected only when the status of the asset is Decommissioned.

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Setting Up Assets continued

**Every Asset
Within a Site
Must Have a
Unique Identifier**



If you want to move an asset from one site to another, the asset's number must be unique to perform the move. If there is already an asset with the same asset number at the site to which you want to move, Maximo will not allow the asset to be moved unless the asset identifier is renamed. Maximo will prompt you to assign a new asset identifier to the asset you are moving.

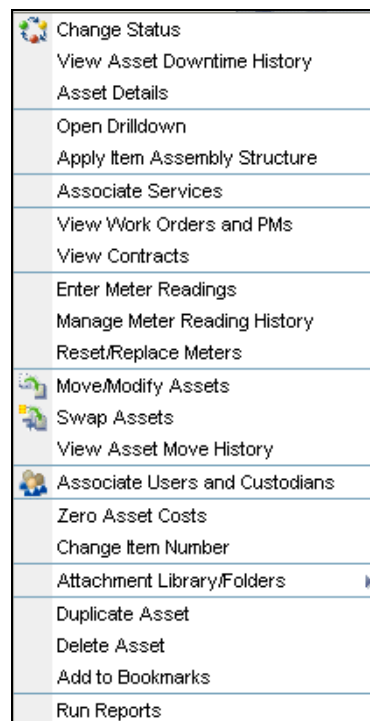
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Setting Up Assets continued

Select Action Menu

The **Select Action** menu contains specific actions associated with the **Assets** application. The actions you can perform with this menu include:

- viewing the location and asset hierarchy (Open Drilldown),
- moving or associating an asset to a different rotating item number,
- associating services,
- viewing contracts,
- attaching an item assembly structure, and
- viewing work orders and PMs for the asset.



Some of these actions will be explained in this chapter and used in exercises in this course, but for a detailed explanation of this menu, consult the *Maximo User's Guide*.

continued on next page

Setting Up Assets continued

Asset Transactions Revisited

As we have learned, some common asset transactions are:

- **Moves:** Assets are moved from one location to another, one site to another, or even one location to another via the Move Asset action from the Assets application or work order's application.
- **Swaps:** Assets can be swapped from one asset to another via a Swap Asset action from the Assets application.
- **Issues:** Assets are issued from a storeroom to a location, person, GL account, or work order via the Issues and Transfers application.
- **Transfers:** Assets are transferred from one storeroom to another storeroom via the Issues and Transfers application.
- **Returns:** Assets can be returned to a vendor via the Receiving application.

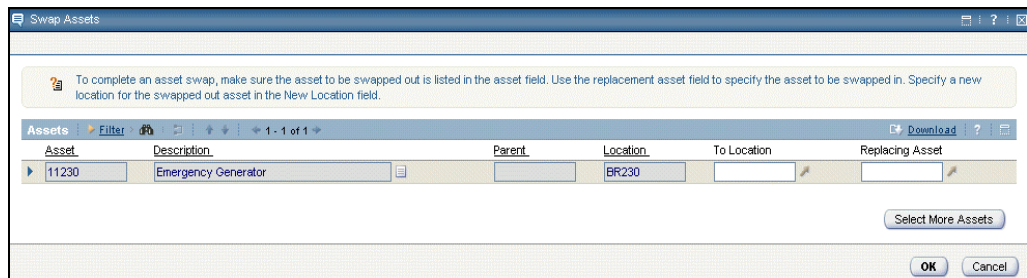
Moves and Swaps

In the Assets application there are two ways to capture asset movement:

- Swaps
- Moves

Swap Assets Action

You use the **Swap Assets** action to replace one asset with another, and to specify a location for the asset you swap out. You can swap any number of assets at once by clicking the **Select More Assets** button. You *cannot* use the **Swap Assets** action to move rotating assets from inventory locations; you must issue or transfer rotating assets using the Inventory module's **Issues and Transfers** application.



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Setting Up Assets continued

Move/Modify Assets Action

You use the **Move/Modify Assets** action to move an asset from a non-inventory location to another non-inventory location or a storeroom. You can move assets within your current site, to another site within your organization, or to a site in a different organization. You *cannot* use the **Move/Modify Assets** action to move rotating assets from inventory locations; you must issue or transfer rotating assets using the inventory **Issues and Transfers** application.

You can also do mass moves, where multiple assets can be moved at one time by selecting more assets, and then applying these assets in one of the fields indicated in the **Mass Move** window.

Moves vs. Transfers

The type (Operating or Storeroom) of the asset's location will dictate what action and application you can use to relocate an asset from one location to another. The following list summarizes location types and what actions you would use.

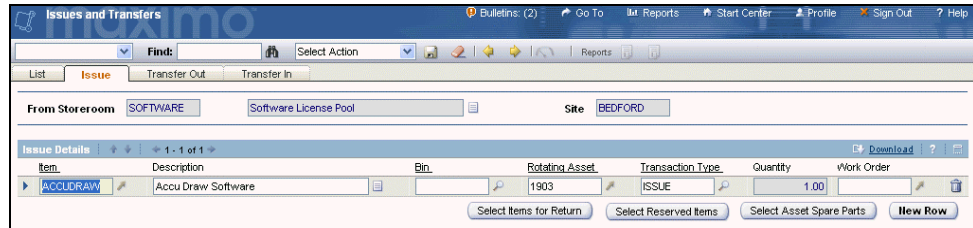
- **Operating location to Operating location:** Move/Modify or Swap action using the Assets application.
- **Storeroom to Storeroom:** Transfer action using the Issues and Transfers action.
- **Storeroom to Operating location:** Issue action using the Issues and Transfers action.

continued on next page

Setting Up Assets continued

Restrictions

You *cannot* use the **Swap Assets** or the **Move/Modify Assets** action to move rotating assets from inventory locations. You must issue or transfer rotating assets using the Inventory module's **Issues and Transfers** application.

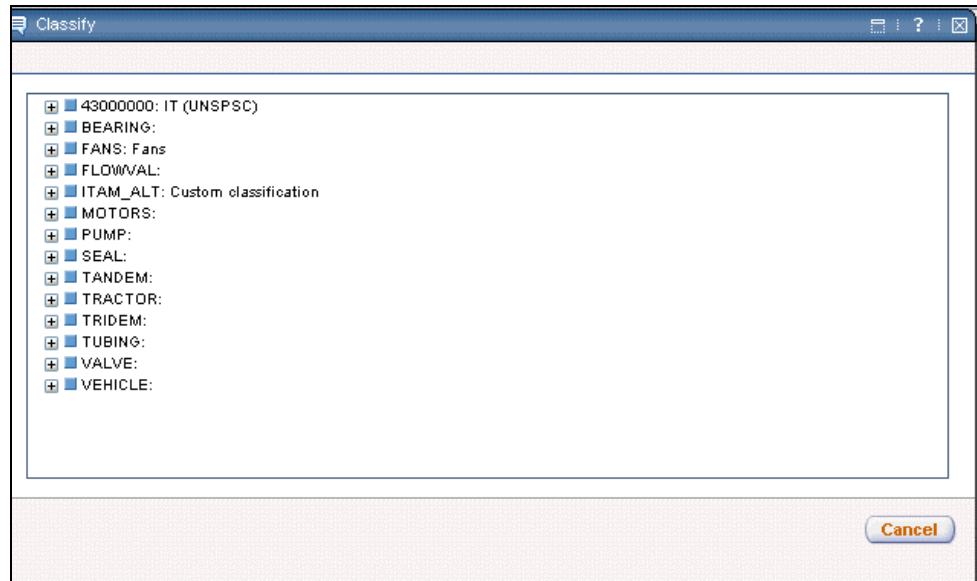


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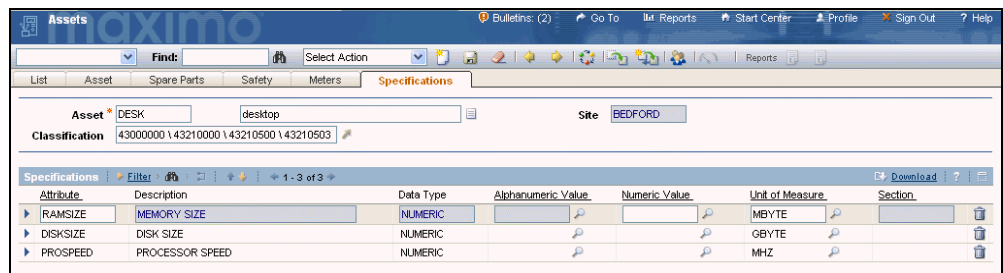
Setting Up Assets continued

Specifications and Classifications Revisited

When you define specifications for an asset, you use the classification hierarchy that is comprised of specification templates. These templates contain attributes about an asset, such as its size, speed, material, or capacity, from which you can choose to define specific information about the asset.



After you have chosen a classification path for an asset, Maximo displays the predefined list of attributes on the Specifications tab and allows you to input values specific to the asset.

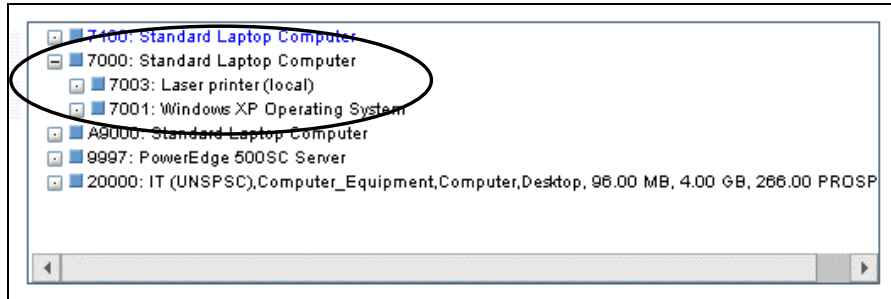


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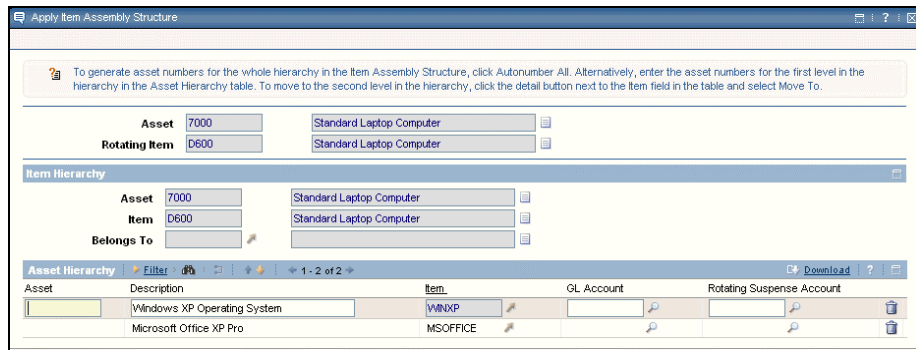
Setting Up Assets continued

Building an Asset Hierarchy

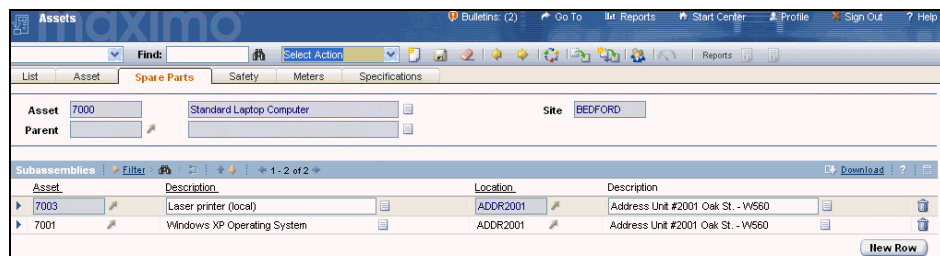
In the Assets application, there are several ways to build an asset's configuration hierarchy.



- You can use the Apply Item Assembly Structure (IAS) action.



- You can use the Spare Parts tab to enter asset subassemblies and spare parts.



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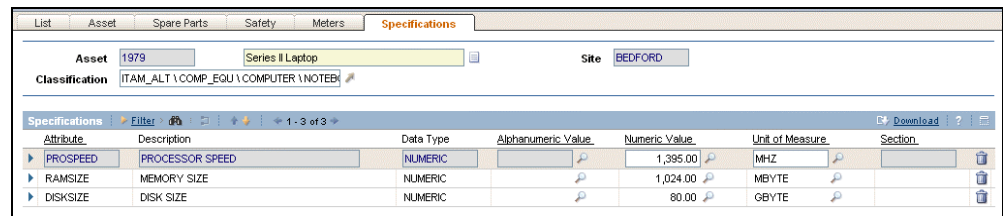
Setting Up Assets continued

Non-rotating vs. Rotating Assets

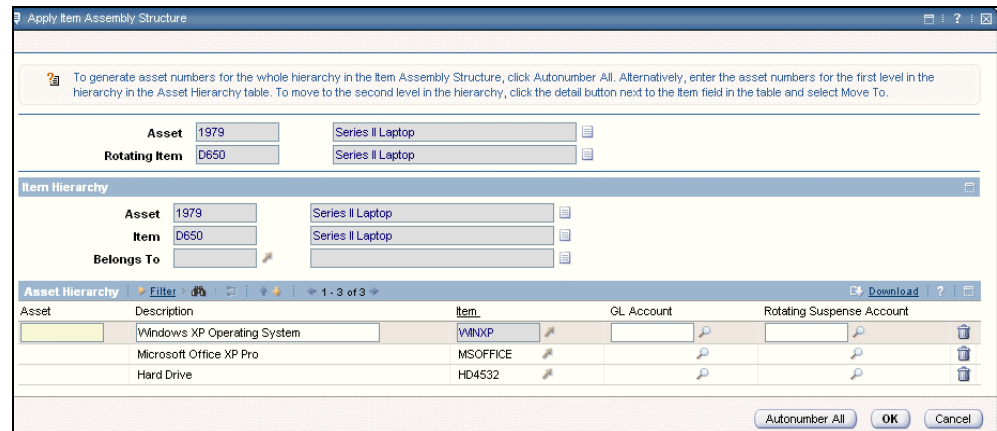
Remember that what distinguishes a rotating asset record from a non-rotating one is the **Rotating Item** number. If you manually enter an asset into the system and apply a Rotating Item number, the asset is then considered to be “rotating.”



It therefore inherits the specifications from the Item Master application’s Specifications tab.



It also has the Select Action option of applying an IAS that was defined on the Item Master application’s Item Assembly Structure tab.



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Setting Up Assets continued

Non-Rotating Asset

A non-rotating asset can still have a configuration structure entered into the Assets application. You would use the Spare Parts tab to build it.

Maintain Hierarchy? Check Box

The **Maintain Hierarchy?** check box on the Asset tab is used to *bundle* assets to indicate in Maximo that the parent and children asset structure should always be kept together. While you can add to the asset subassembly structure, you cannot move an assembly component from the parent asset. To do this, you must clear this check box.

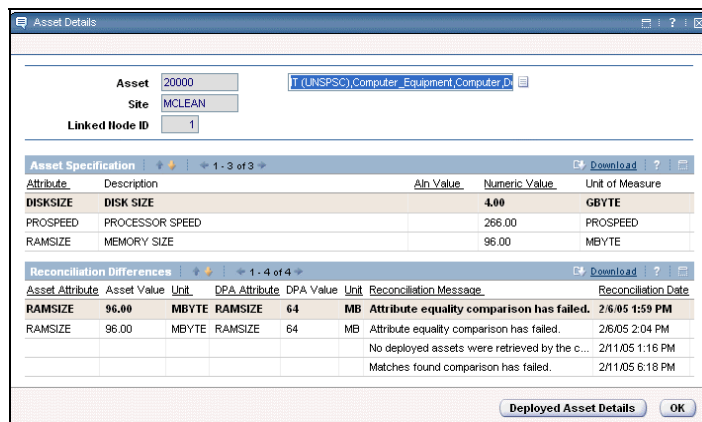
Maintain Hierarchy?

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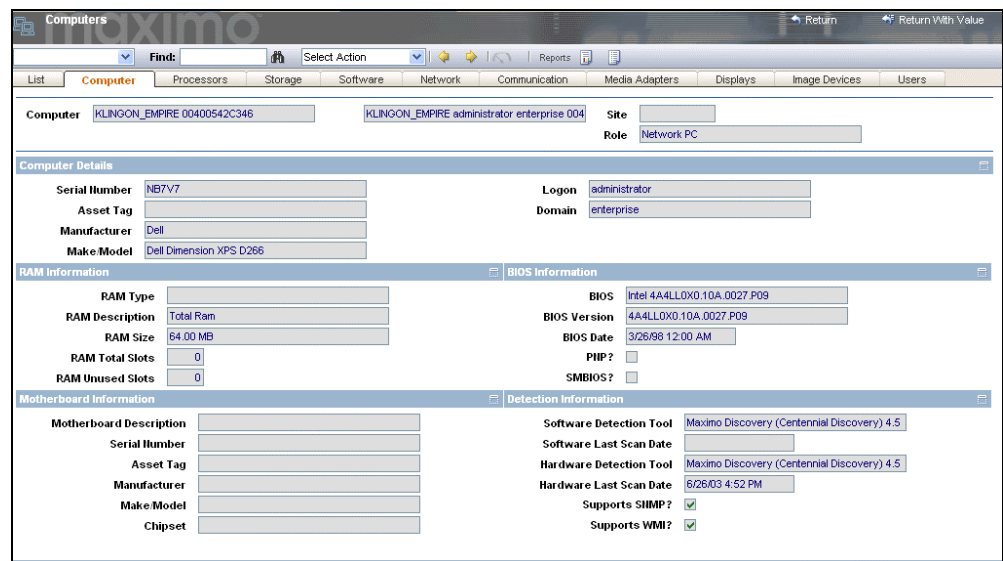
Setting Up Assets continued

Viewing Asset Details

If your organization has a Discovery tool, you can use the **Asset Details** action to view the reconciliation differences between the Asset Specification that was entered into Maximo against the Discovered configuration (Deployed Asset).



The **Deployed Asset Details** button opens the **Computers** application, which provides further details on what was discovered on the asset.



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Setting Up Assets continued

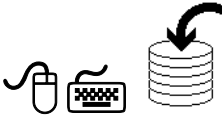
Implementation Consideration

When determining your reconciliation data points between records in the **Deployed Assets** and **Assets** applications, you can use the **Serial #** field in the **Assets** application.

Serial #	<input type="text"/>
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Inserting Rotating Asset Record

In this exercise we will enter a rotating asset record.



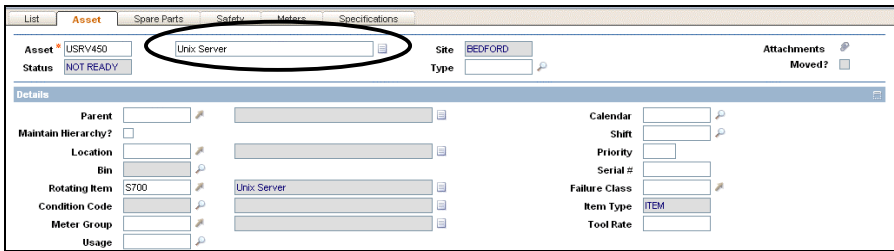
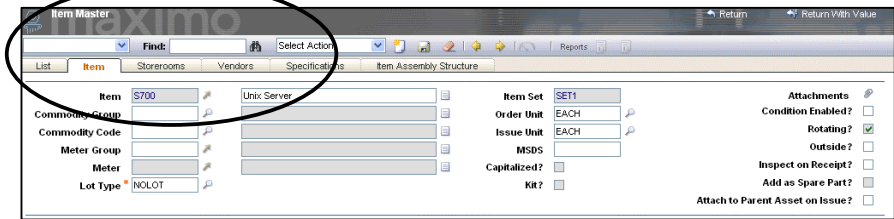
Step	Action
1	Go the Assets application and insert a new asset record.

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Setting Up Assets continued

Inserting Rotating Asset Record

continued

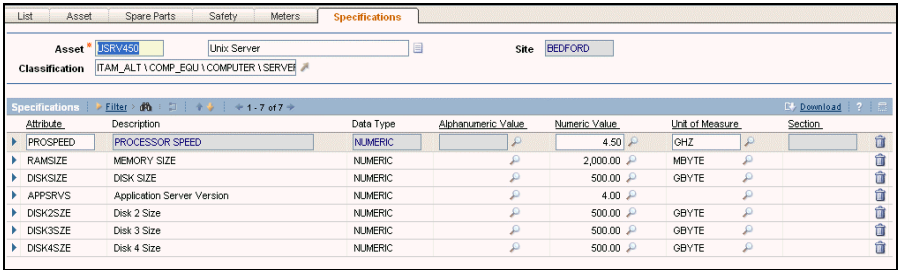
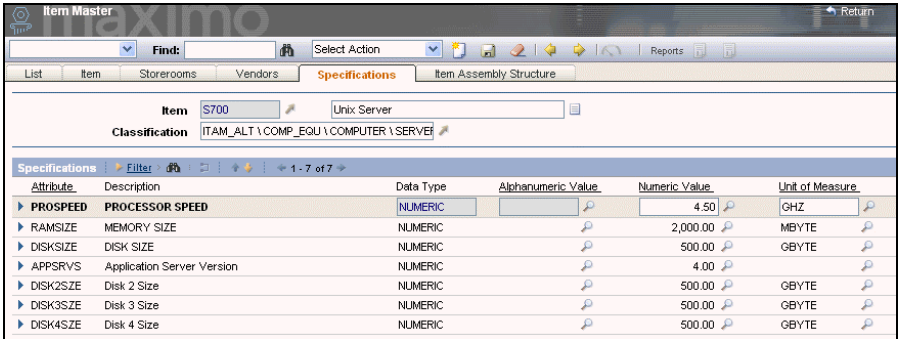
Step	Action										
2	<p>Enter the following data:</p> <table border="0"> <tr> <td><u>Field</u></td> <td><u>Value</u></td> </tr> <tr> <td>Asset</td> <td>USRV450</td> </tr> <tr> <td>Description</td> <td><i>[Leave blank for now]</i></td> </tr> <tr> <td>Type</td> <td>IT</td> </tr> <tr> <td>Rotating Item</td> <td>S700</td> </tr> </table> <p>Result: Notice that the Asset description...</p>  <p>...defaults to the Item description that was set up in the Item Master application.</p> 	<u>Field</u>	<u>Value</u>	Asset	USRV450	Description	<i>[Leave blank for now]</i>	Type	IT	Rotating Item	S700
<u>Field</u>	<u>Value</u>										
Asset	USRV450										
Description	<i>[Leave blank for now]</i>										
Type	IT										
Rotating Item	S700										

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Setting Up Assets continued

Inserting Rotating Asset Record

continued

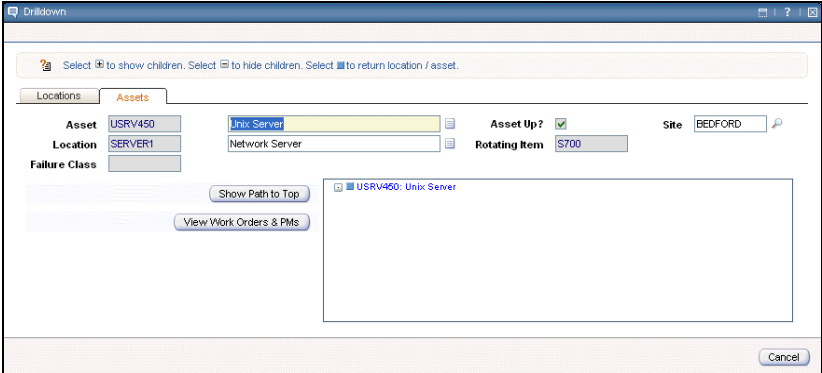
Step	Action
3	<p>Click on the Specification tab.</p> <p><u>Result:</u> Maximo displays the specification attributes for this server.</p>  <p>These specifications were carried over from the Item Master application's Specifications tab defined for this rotating item.</p> 

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Setting Up Assets continued

Inserting Rotating Asset Record

continued

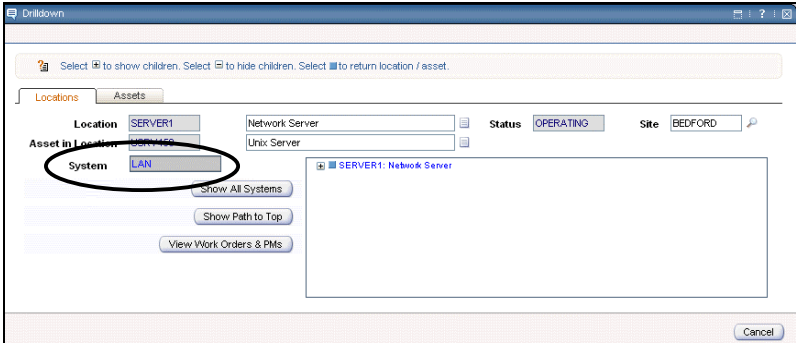
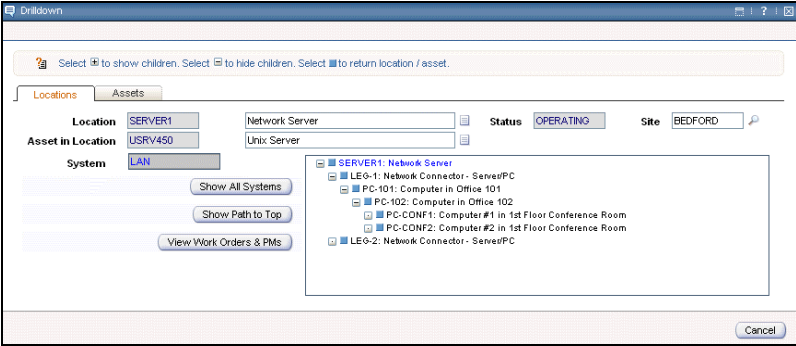
Step	Action
4	Go back to the Asset tab and enter SERVER1 in the Location field.
5	<p>Save the record and choose Open Drilldown from the Select Action menu.</p> <p><u>Result:</u> The Drilldown opens to the Assets tab.</p> 

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Setting Up Assets continued

Inserting
Rotating Asset
Record

continued

Step	Action
6	<p>Click on the Locations tab.</p> <p><u>Result:</u> The location of this asset—the UNIX Server—is displayed. Notice that it is part of the LAN system.</p> 
7	<p>Expand the SERVER1 branch to view its entire location structure.</p> <p><u>Result:</u> Your location hierarchy should look similar to this example.</p> 
8	<p>Click Cancel to return to the Assets application.</p>

Setting Up Assets continued

Building and Associating Asset Subassemblies Revisited

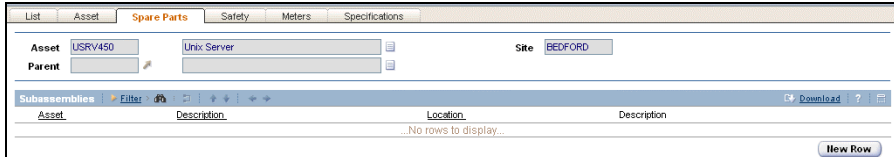
In Maximo you can build and associate asset assembly structures in the following ways:

- Use the **Item Assembly Structure** application to build and apply assembly structures to an asset or to an item.
- On the **Assets** application's **Spare Parts** tab, associate subassemblies to the selected asset. (The subassembly must be recorded in the Assets database table to list it here.)

Applying IAS



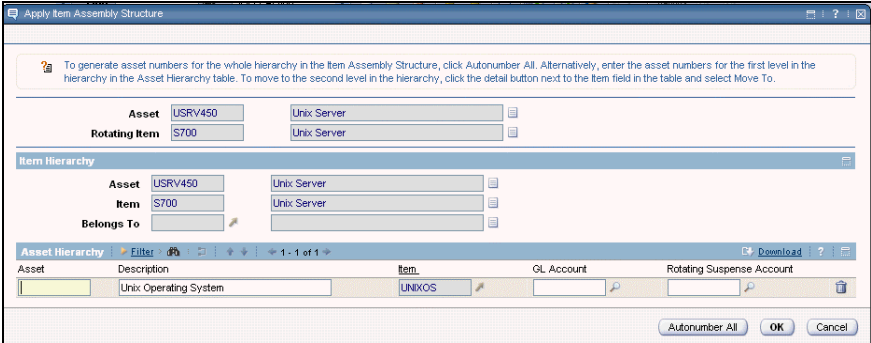
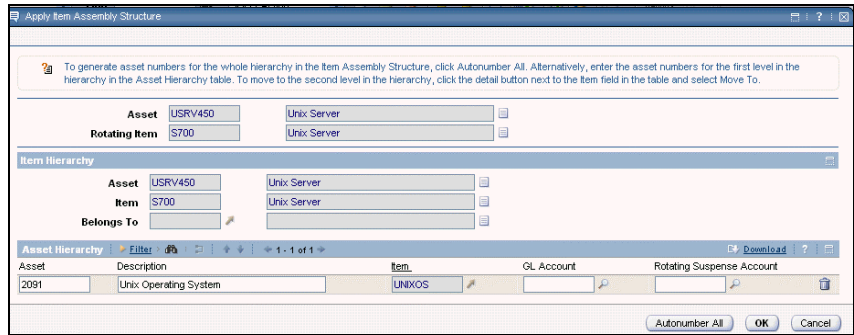
In this exercise we will apply an item assembly structure to the server.

Step	Action
1	<p>Click on the Spare Parts tab.</p> <p><u>Result:</u> At this time there are no subassemblies (components) associated to this server.</p> 

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Setting Up Assets continued

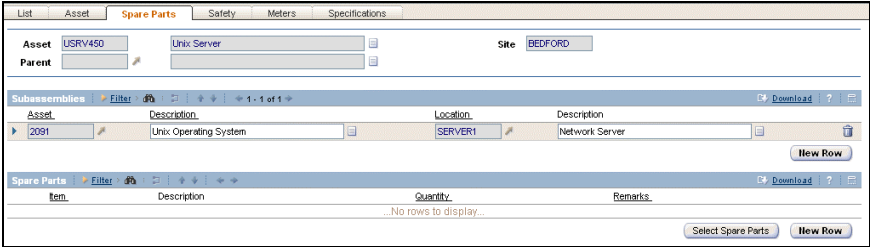

Applying IAS continued

Step	Action
2	<p>To add a subassembly structure, from the Select Action menu select Apply Item Assembly Structure.</p> <p><u>Result:</u> The Apply Item Assembly Structure dialog box opens with the UNIX operating system. This happens because in the Item Master this item was identified as a rotating item and as a child asset to the server.</p> 
3	<p>Click Autonumber All.</p> <p><u>Result:</u> Maximo assigns an asset number to the child asset: UNIX Operating System.</p> <p><u>Note:</u> You could have also manually entered a number.</p> 

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Setting Up Assets continued

Applying IAS continued

Step	Action
4	<p>Click OK.</p> <p><u>Result:</u> The Asset's subassembly (child) component record is associated to it. If the IAS had spare parts associated to it, those would be indicated in the Spare Parts table window.</p> 
5	<p>To view the asset hierarchy, from the Select Action menu, select Open Drilldown. On the Assets tab in the Drilldown dialog box, click on the + on the USRV450 branch to expand it.</p> <p><u>Result:</u> The child asset is part of the structure.</p> 
6	<p>Click Cancel to return to the Spare Parts tab.</p>

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Setting Up Assets continued

Viewing Rotating Asset Records in Inventory



Follow these steps to view the inventory balances and current locations of rotating assets:

1. Open the Inventory application.
2. Search for the rotating asset by its rotating item number.
3. Click on the Rotating Assets tab to view all the rotating assets that are associated to the rotating item and to see where they are currently physically located.

Result: Your Rotating Assets tab should look like the one below.

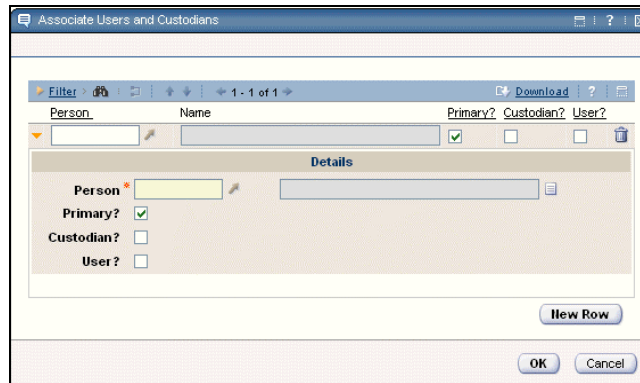
List Inventory Reorder Details Rotating Assets Where Used						
Item: S700		Unix Server		Site: BEDFORD		
Associated Assets Filter 1 - 6 of 6 Download ?						
Asset	Location	Description	Location Type	Bin.	Inventory Cost	Site
A8004	COMP310	Main Office 3rd Floor Computer Room	OPERATING		0.00	BEDFORD
A8005	COMPLAB	3rd Floor Computer Lab	OPERATING		0.00	BEDFORD
A8006	COMP310	Main Office 3rd Floor Computer Room	OPERATING		0.00	BEDFORD
A8007	COMP310	Main Office 3rd Floor Computer Room	OPERATING		0.00	BEDFORD
A8008	COMP310	Main Office 3rd Floor Computer Room	OPERATING		0.00	BEDFORD
USRV450	SERVER1	Network Server	OPERATING		0.00	BEDFORD

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Setting Up Assets continued

Associating People to Assets

Maximo enables you to identify one or more people who are associated with an asset in some way.



Asset Associations

The following table describes the three types of associations between people and assets in Maximo.

Asset Association	Description
Primary	This person has ultimate responsibility for the asset. The first person associated with an asset must be the primary owner. If other people are associated with the asset, primary ownership can be moved to someone other than the first person.
Custodian	This person has the next level of responsibility for an asset. This person might work directly with the user of the asset, but does not directly access the asset.
User	This person has direct access to and usage of the asset. If someone were to search for a mobile asset, they would probably want to find out where the user was located.

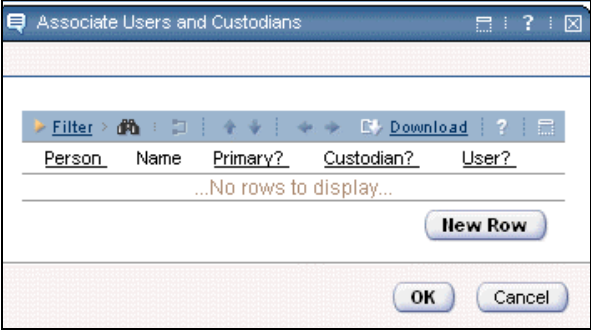
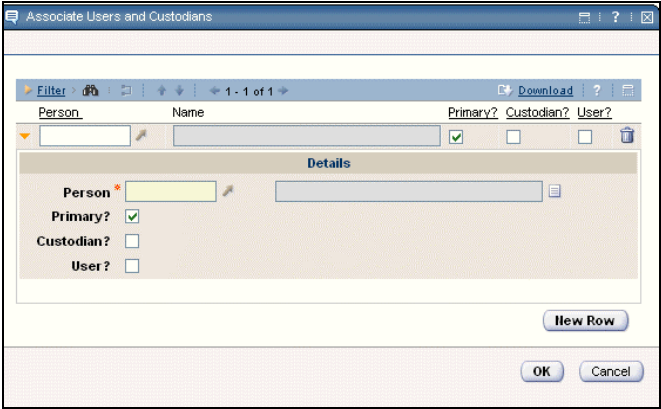
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Setting Up Assets continued

Creating Associations



The following exercise shows you how to create associations between people and assets.

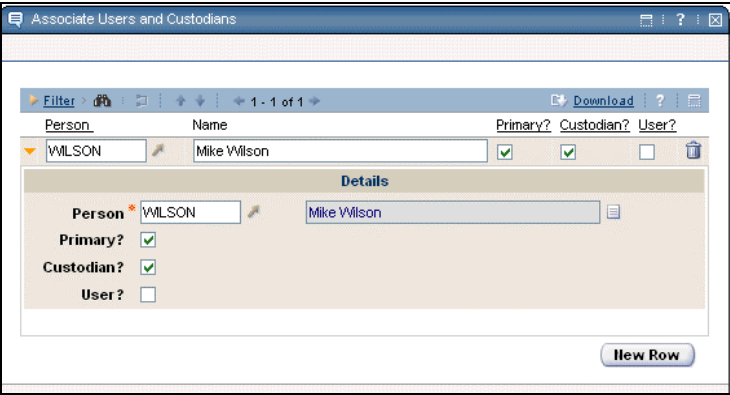

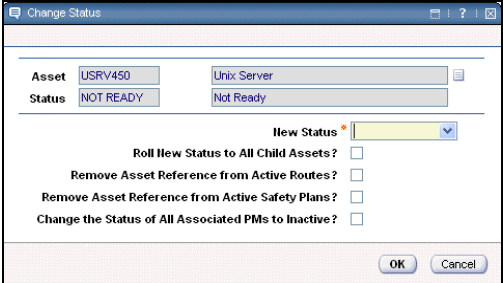
Step	Action
1	<p>Open the Assets application and retrieve the UNIX server you created in the previous exercise. From the Select ACTION menu, select Associate Users and Custodians</p> <p><u>Result:</u> The Associate Users and Custodians dialog box opens.</p> 
2	<p>Click New Row.</p> <p><u>Result:</u> The Details table opens.</p> <p><u>Note:</u> The first association must always be Primary. Because you are creating the first association with this asset, the Primary check box is selected by default.</p> 

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Setting Up Assets continued

Creating Associations

continued

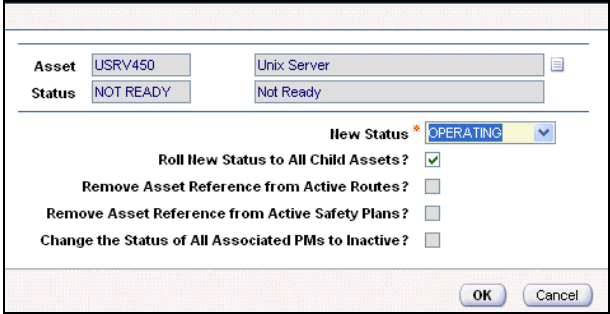
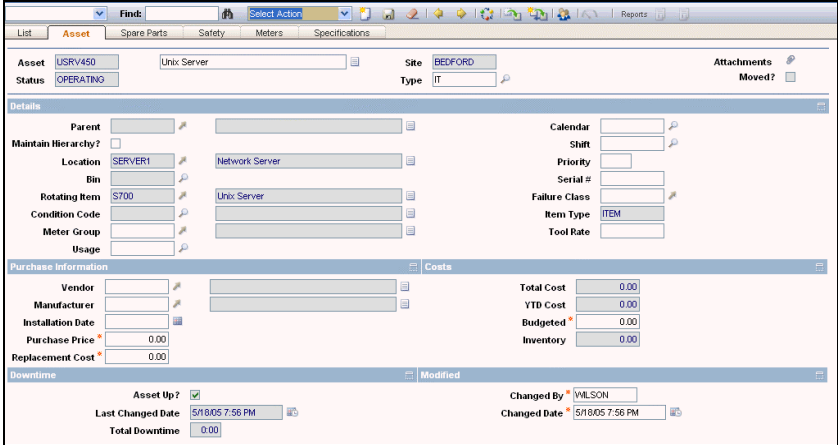
Step	Action
3	<p>Using the Person field Detail Menu button, select Wilson and then select the Custodian? check box.</p> <p><u>Result:</u> Your screen should look like the one below.</p> 
4	<p>Click OK and then Save.</p> <p><u>Result:</u> The Associate Users and Custodians dialog box closes and the associations are registered between this person (or persons) and the asset in Maximo.</p>
5	<p>To indicate that this asset is ready for operation, click the Change Status toolbar button.</p>  <p><u>Result:</u> Maximo displays the Change Status dialog box.</p> 

continued on next page

Setting Up Assets continued

Creating Associations

continued

Step	Action
6	<p>In the New Status field, use the drop-down menu to select Operating. Because we have a child asset associated to this asset, select the Roll New Status to All Child Assets? check box.</p> <p><u>Result:</u> Your screen should look like the one below.</p> 
7	<p>Click OK.</p> <p><u>Result:</u> Your asset is considered to be in production mode.</p> 


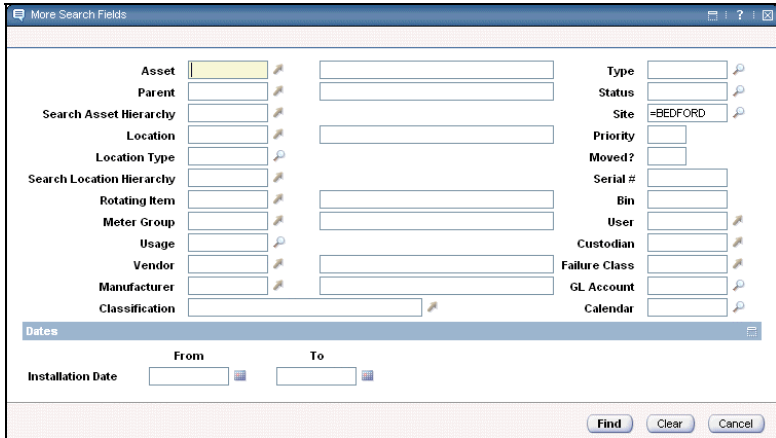
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Setting Up Assets continued

Search Using Associations



Now that we have created associations between a person and an asset, the **Advanced Search** allows you to find assets associated with people. Follow the steps below to conduct the search.

Step	Action
1	Click on the List tab.
2	Ensure that the filter fields are cleared.  <u>Note:</u> Although this is not required, clearing the filter fields is a best practice to follow when doing searches.
3	Click the Advanced Search link.  <u>Result:</u> Maximo displays the More Search Fields dialog box.
4	In the Custodian field, enter Wilson.
5	Click Find . <u>Result:</u> Maximo displays the assets for which Mike Wilson is the custodian.

Lease/Rental and Software License Contracts Overview

Introduction

While contracts are normally set up before creating an asset in the Assets application, we are introducing this topic at this point to put into context how records created in the Item Master and Assets application can be used on contract records.

Note



We will not be creating contracts in this course, but will instead modify one already created in the system. This section is intended to give you an overview of the more commonly used contracts for hardware and software assets. For further information, refer to the *Maximo User's Guide*.

Master Contracts

In order to capture contract details in Maximo, you can create a master contract that details the vendor and terms and conditions that will be applied to every transaction. Every time a new payment schedule or lease agreement is received, you can either create a new lease contract under the master agreement with one or more lines of payment details, or add a new payment schedule line to an existing lease contract.

Lease/Rental Contracts

A lease/rental contract records defines the overall terms and conditions of the agreement between a vendor and a customer regarding one or more rotating assets. A rotating asset is an asset that is interchangeable; for example, laptop computers. Rotating assets have both an asset number and an inventory item number. You use the rotating item number to track contracts against an asset.

Software License Contracts

A software license contract specifies the terms of the license agreement for computer software use, including named users, license keys, maintenance fees, and whether the software is transferable. Software contracts are created in the Purchase Orders application.

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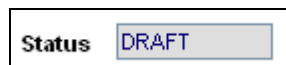
Lease/Rental and Software License Contracts Overview continued

Implementation Questions

- Do you lease or rent assets?
- How are software licenses managed?
- What processes are in place to make sure you are compliant?
- Do you have a warranty recovery process in place?
- Is there one central repository for contracts?
- What contracts are currently managed in your organization?
- Are contracts and related information in electronic form?
- How are contracts managed in your organization?
- How are contract-ends and renewals handled?
- Are there service level agreements tied to contracts?

Contract Status

Every contract has a status value that indicates its position in its lifecycle. The Status field is part of the whole contract and can be used on the line level.



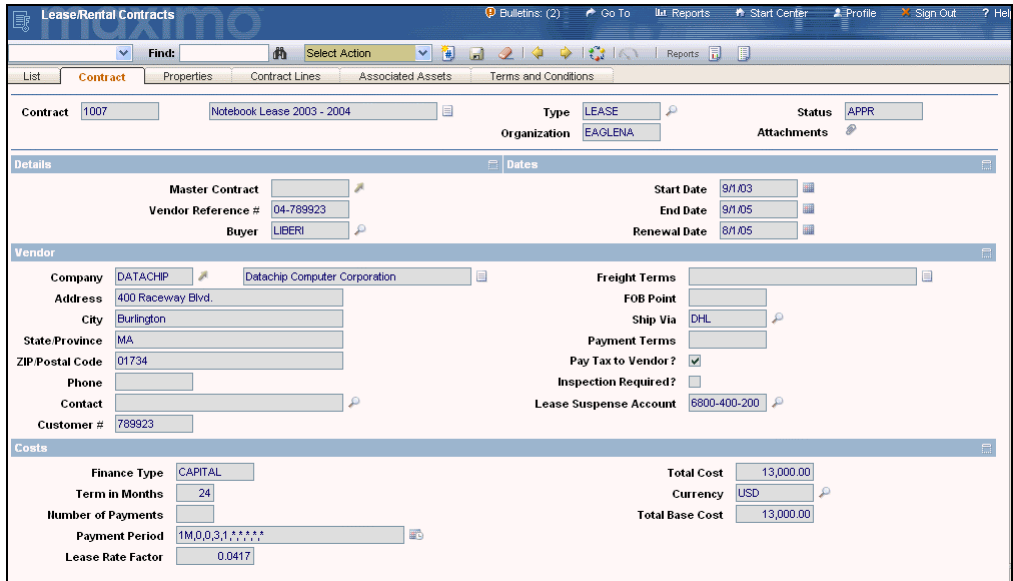
The following table lists and describes each status.

Status	Description
DRAFT	Default status when inserting a new contract
APPR	Approval has been given and contract is ready for use
CAN	Cancellation of the contract
CLOSE	Contract has ended

Lease/Rental Contracts Application Overview

Introduction

The **Lease/Rental Contracts** application enables you to define the terms and conditions and payment information for lease or rental agreements, as well as the assets or locations to be leased or rented.



Tabs

The Lease/Rental Contracts application has six tabs.

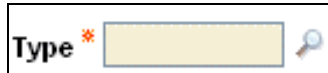
Use this tab...	To...
List	Search Maximo for contract records
Contract	Create, view, or modify contract records
Properties	Enable or disable properties for the contract
Contract Lines	Create, view, modify, or delete line items listed on a contract
Associated Assets	Add, modify, or delete asset records associated with a lease or rental contract
Terms and Conditions	Add, view, or delete terms and conditions that have been associated with the contract

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Lease/Rental Contracts Application Overview continued

Type

In Maximo, you must specify a lease or rental contract type when creating a contract.



Payment Information

The Contract tab on a lease/rental type contract includes important payment-related information that Maximo uses when creating the payment schedule.

Field	Description
Payment Period	This value indicates when the payment is due; for example, on the first of every month. The Set Schedule button next to the field takes you to a Set Schedule page on which you can specify when payments will be made. This populates the field with a string representing the selected schedule.
Lease Rate Factor	This value indicates the lease rate factor that will be applied to all of the schedules. The lease rate factor will be calculated as 1/Number of payments. The lease rate factor is multiplied by the cost of the contract to calculate the periodic payment amount.
Term in Months	This value indicates the overall term of the contract, or the length of time in months that an individual asset will be leased. This field must be filled in before the contract can be approved.
Number of Payments	This value indicates how many payments will be made during the term. For example, if the term is 24 months and the payment schedule is quarterly, the number of payments would be 8. This value is used to determine the estimated lease rate factor for the contract.

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Lease/Rental Contracts Application Overview continued

Properties Tab

You use the **Properties** tab to enable or disable fields pertaining to an individual contract.

The following table details the significance of these fields.

Field	Description
PO Required?	Checking this box indicates that a purchase order is required when requesting items associated with a lease or rental contract.
Payment Schedule?	Checking this box indicates that there is a defined payment schedule.
Extendable?	Checking this box indicates that the contract is extendable.
Extension Period	If the contract is extendable, this field indicates the auto-extend period in days.
Conditions for Extension	Details any conditions that might exist for an extension.
Acceptance Loss?	Checking this box indicates that you are liable for acceptance loss.
Shipping Loss?	Checking this box indicates that you are liable for shipping loss.

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Lease/Rental Contracts Application Overview continued

Properties Tab continued

Field	Description
Vendor Termination Allowed?	Checking this box indicates that early termination by the vendor is allowed.
Vendor Notification Period	If early termination is allowed by the vendor, this indicates the number of days' notice required.
Customer Termination Allowed?.	Checking this box indicates that early termination by the customer is allowed.
Customer Notification Period	If early termination is allowed by the customer, this indicates the number of days' notice required.

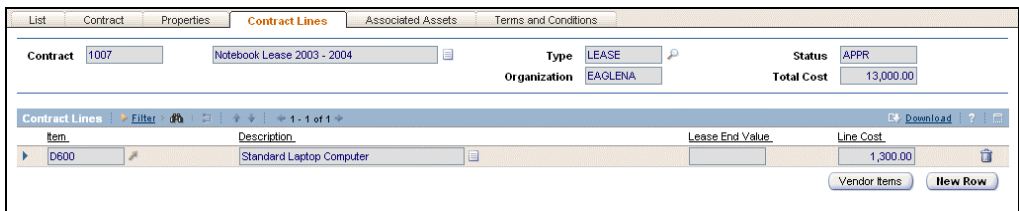
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Lease/Rental Contracts Application Overview continued

Contract Lines Tab

The **Contract Lines** tab is where you can optionally list rotating items that will be covered by the lease or rental. A rotating item can be listed only once on the Contract Lines page. When receipts occur for those rotating items and they are serialized, they are associated with an existing contract. You do not have to specify rotating item numbers here; you can instead specify the individual assets on the Associated Assets tab.

The lease end value and line cost are used as the default when any serialized assets from this rotating line are associated with the contract either by using the New Row button or at the time of receipt. The line cost associated with this rotating item will be used when this item is requisitioned or ordered. When these lines are received, the serialized assets that are created are automatically associated with the contract on the Associated Assets tab.



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Lease/Rental Contracts Application Overview continued

Associated Assets Tab

The **Associated Assets** tab contains a list of all locations or assets that are associated with a contract. In addition, it displays the asset's current location, user, custodian, and status. You can associate assets or locations manually by using the New Row button, or add multiple records by using the Select Asset button. You can also determine if an asset is currently associated with a payment schedule. If the asset is currently associated with a schedule, Maximo presents the Lease End date. If you order and receive items that are specified on the Contract Lines tab, the serialized assets are automatically associated with the contract.

The screenshot shows the 'Associated Assets' tab in the Maximo application. At the top, there is a search bar with 'Find:' and a 'Select Action' dropdown. Below this are navigation tabs: 'List', 'Contract', 'Properties', 'Contract Lines', 'Associated Assets' (selected), and 'Terms and Conditions'. The main area displays contract details: Contract 1007, Notebook Lease 2003 - 2004, Type LEASE, Status APPR, Organization EAGLENA, and Total Cost 13,000.00. Below the details is a table of associated assets with columns: Line, Asset, Description, Location, Start Date, End Date, Status, and Payment Schedule?.

Line	Asset	Description	Location	Start Date	End Date	Status	Payment Schedule?
1	7220	Standard Laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>
2	7119	Standard laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>
3	7118	Standard Laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>
4	7117	Standard Laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>
5	7116	Standard Laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>
6	7115	Standard Laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>
7	7114	Standard Laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>
8	7113	Standard Laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>
9	7112	Standard Laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>
10	7111	Standard Laptop Computer	FIELDSTAFF	10/1/04	10/1/06	OPERATING	<input type="checkbox"/>

At the bottom of the table, there are buttons for 'Select Assets' and 'New Row'.

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Lease/Rental Contracts Application Overview continued

Terms and Conditions Tab

The **Terms and Conditions** tab enables you to associate terms and conditions with a contract. These terms can contain information such as liability concerns, shipping and handling details, or delivery time expectations.

The screenshot shows the 'Terms and Conditions' tab for contract 1017, which is a 'Server Lease' of type 'LEASE' with a status of 'APPR' and a total cost of 19,600.00. The interface includes a table with the following data:

Sequence	Term	Description	Send to Vendor?
10	ACKNGMNTAC	ACKNOWLEDGMENT AND ACCEPTANCE OF O	<input checked="" type="checkbox"/>
20	FORCEMAJEUR	DELIVERY/FORCE MAJEURE	<input checked="" type="checkbox"/>
30	PRICETAXES	PRICE/TAXES	<input checked="" type="checkbox"/>
40	WARRANTIES	WARRANTIES	<input checked="" type="checkbox"/>
50	CANCELLATION	CANCELLATIONS	<input checked="" type="checkbox"/>
60	INVOICING	INVOICING/PAYMENTS/SET-OFFS	<input checked="" type="checkbox"/>
70	INSURANCE	INSURANCE AND STATUTORY OBLIGATIONS	<input checked="" type="checkbox"/>
80	CONTRCTLAW	LAW OF THE CONTRACT	<input checked="" type="checkbox"/>

You can add the terms and conditions from the library to a contract, or create a term that applies only to the current contract. You can also modify those already listed in the library if they are indicated as editable. You can do this from the Terms and Conditions application.

The screenshot shows the 'Terms and Conditions' library for organization 'EAGLENA'. It lists various terms with their descriptions, types, and whether they are editable or default on PO. The data is as follows:

Term	Description	Type	Editable?	Default on PO?
ACKNGMNTAC	ACKNOWLEDGMENT AND ACCEPTANCE OF O	PURCH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ASSIGNMNTSU	ASSIGNMENT/SUBCONTRACTING	PURCH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BUYERSPROPE	BUYER'S PROPERTY IN SELLER'S POSSESSIO	PURCH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CANCELLATION	CANCELLATIONS	PURCH	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CHANGES	CHANGES/AMENDMENTS	PURCH	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COMPLIANOVML	COMPLIANCE WITH LAWS	PURCH	<input type="checkbox"/>	<input checked="" type="checkbox"/>

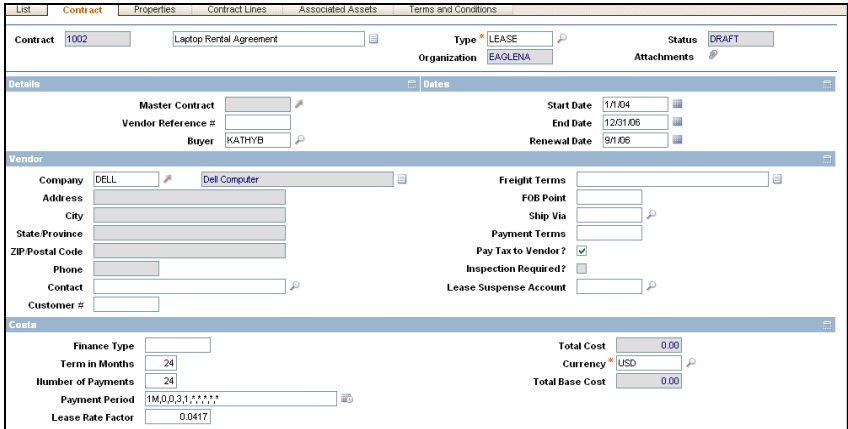
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Lease/Rental Contracts Application Overview continued

Modifying a Lease Contract



In this exercise we will modify an existing lease contract.

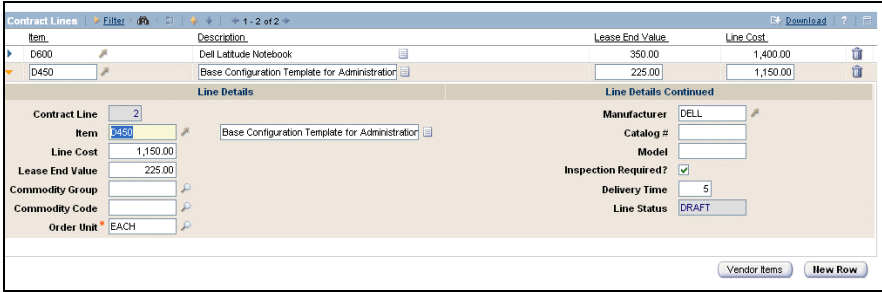
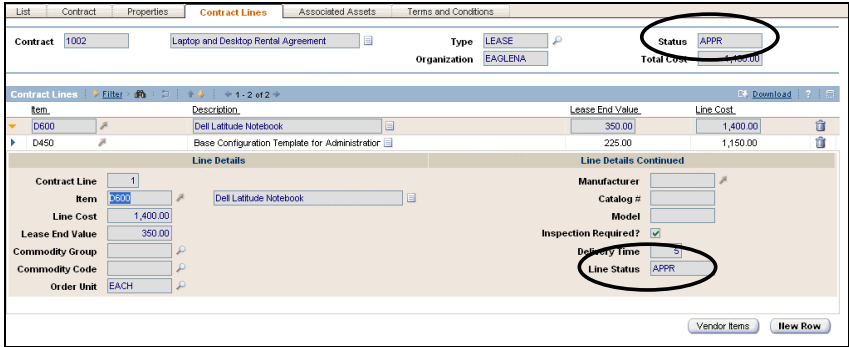
Step	Action
1	<p>Open the Lease/Rental Contracts application in the Contracts module and retrieve contract 1002.</p> <p><u>Result:</u> Maximo displays contract 1002.</p> 
2	<p>In the Description field, modify the description to read: Laptop and Desktop Rental Agreement.</p>
3	<p>In the Company field, enter DATACHIP.</p>
4	<p>Click on the Contract Lines tab and then click New Row.</p> <p><u>Result:</u> The Details table opens.</p>

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Lease/Rental Contracts Application Overview continued

Modifying a Lease Contract

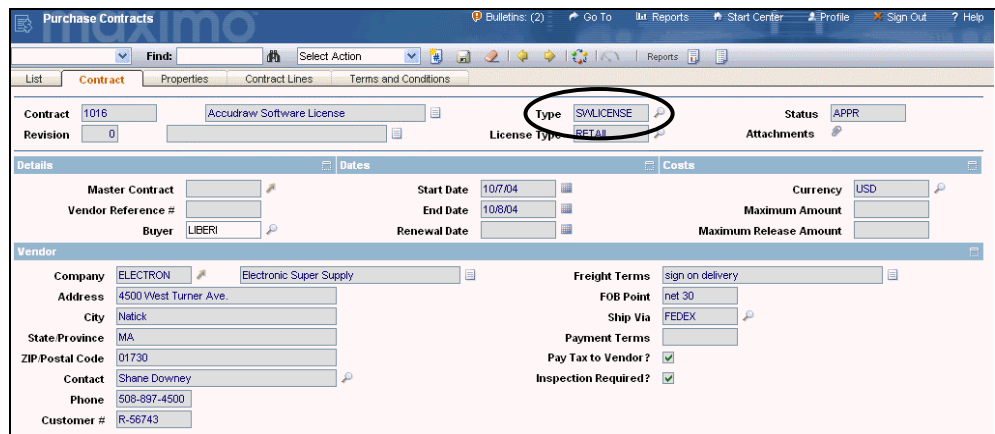
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Step	Action																
5	<p>Enter the following information:</p> <table border="0"> <tr> <td><u>Field</u></td> <td><u>Value</u></td> </tr> <tr> <td>Item</td> <td>D450</td> </tr> <tr> <td>Line Cost</td> <td>1150</td> </tr> <tr> <td>Lease End Value</td> <td>225</td> </tr> <tr> <td>Order Unit</td> <td>EACH</td> </tr> <tr> <td>Manufacturer</td> <td>DELL</td> </tr> <tr> <td>Inspection Required?</td> <td>[Checked]</td> </tr> <tr> <td>Delivery Time</td> <td>5</td> </tr> </table> <p><u>Result:</u> Your contract line should look like the example below.</p> 	<u>Field</u>	<u>Value</u>	Item	D450	Line Cost	1150	Lease End Value	225	Order Unit	EACH	Manufacturer	DELL	Inspection Required?	[Checked]	Delivery Time	5
<u>Field</u>	<u>Value</u>																
Item	D450																
Line Cost	1150																
Lease End Value	225																
Order Unit	EACH																
Manufacturer	DELL																
Inspection Required?	[Checked]																
Delivery Time	5																
6	<p>Change the status to Approved.</p> <p><u>Result:</u> Your contract and line status are APPR.</p> 																

Software License Contracts

Introduction

A software license contract specifies the terms of the license agreement for computer software use, including named users, license keys, maintenance fees, and whether the software is transferable. It is always assumed that the acquisition of software will occur outside of a software license as a purchase contract. You use the Purchase Orders application to create a PO software contract by indicating a type.



Section Focus

This section discusses where software licenses are set up in Maximo. Because software contracts are created in the Purchasing module, we will create a software license contract in Chapter 8, “Acquisition: Purchasing and Leasing.”

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Software License Contracts continued

License Type

You use the Software License contract type to create and maintain one of seven types of licenses available in the Purchase Contracts application.



Each determines what metric is used to measure the use of the software. The business rules for each of the software license types are suggestions for how you should set up your line-level information for each license type. You can change these values; however, they become read-only after the contract is approved.

Type	Order Unit	Description
Select	Points	A volume agreement to use in the organization. Suites use a points measure of distribution to the users.
Retail	Instances	Single or limited multiuser licenses (similar to Select).
Concurrent	Instances	A usage model that allows open distribution but is limited to a volume of concurrent license instances.
Enterprise	Instances	Right to unlimited use across organization (i.e., entitlement).
Named User	List of users	This license is limited to use by a named set of users. This license cannot be transferred to users not on the agreed list.
Subscription	Minutes	Online use of a licensed program based on authorized user logins.
OEM	Instances	Embedded licenses that come bundled with a computer. Usually these licenses are limited to use on the computer on which they were supplied, and cannot be reused.

Chapter Summary

The Item Master Application

The **Item Master** application is in the Maximo **Inventory** module. It is used to define items at the organization level that will be stocked in your storerooms, which are at the site level.

The Inventory Application

The **Inventory** application is in the Maximo **Inventory** module. Use this application to enter, display, and update information on each inventory item. It also allows you to track inventory transactions and move items into or out of inventory or from one location to another.

Asset Records

Entering an asset's records and associating its subassemblies and spare parts with it not only allows the performance of each subassembly and spare part to be monitored on an independent basis, but also allows for all of the ownership to be captured.

The Assets Application

The **Assets** application enables you to keep and update the records of all of your assets and operating locations. Use the Assets application to add new assets to the database and define relationships among assets.

Asset Subassemblies

There are several ways to associate and build asset assembly structures in Maximo, including the following methods:

- Use the **Item Assembly Structure** application to build and apply assembly structures to assets or to an item. You can also apply an IAS when receiving an asset or item.
 - On the **Assets** application's **Spare Parts** tab, associate subassemblies to the selected assets. (The subassembly must be recorded in the Assets database table to list it here.)
-

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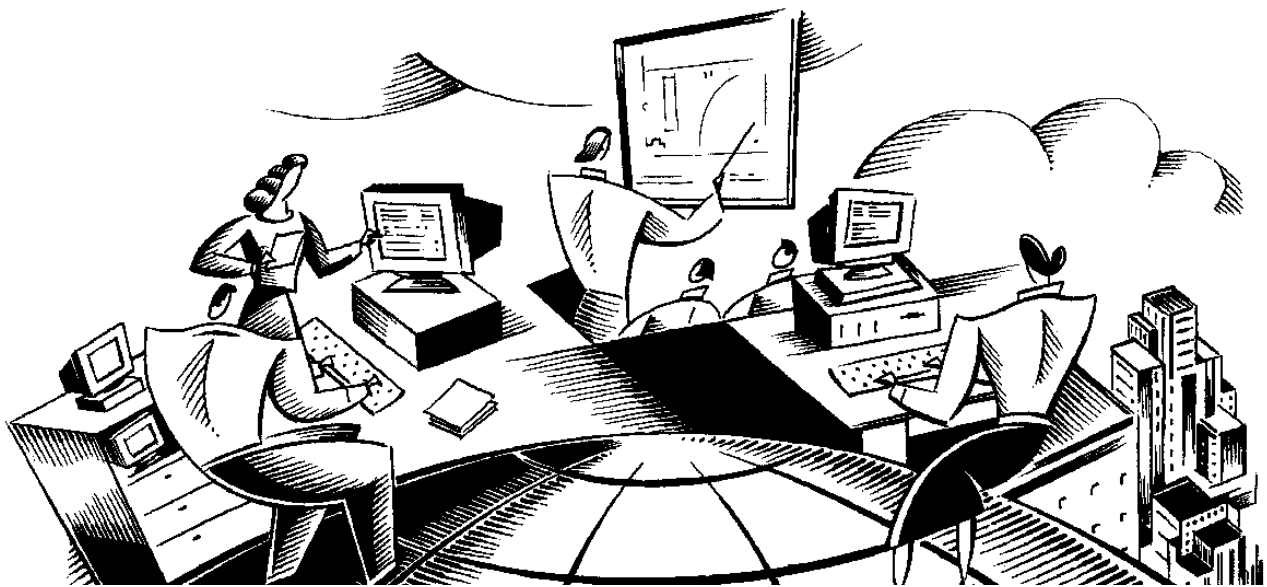
Chapter Summary continued

Rotating Assets Rotating assets are interchangeable and have both a unique asset number and a rotating item number.

Associating Assets and People Maximo provides the ability to identify one or more people who are associated with an asset in some way. This capability is essential to managing and tracking IT assets, but it could also provide some benefit to those using Maximo for traditional enterprise asset management.

MXES Immersion Training for IT

Unit 3: Asset Management



In This Unit

This unit contains the following chapters:

Chapter	Subject
8	Acquisition: Purchasing and Leasing
9	Deployment
10	Maintain: Assets and Service Activities
11	Disposal

Unit Overview

Introduction

In this unit, each chapter focuses on different aspects of entering and processing assets through their lifecycle.

Learning Objectives

When you have completed this unit, you should be able to:

- plan and set up hardware and software configurations;
 - request quotations and award contracts;
 - purchase assets;
 - receive assets;
 - configure assets;
 - perform install, move, add, and change (IMAC) activities;
 - execute the asset discovery tool to audit assets in a network;
 - compare discovered data with authorized data;
 - enter and process service tickets and work orders through completion; and
 - decommission assets and reconcile financial transactions with GL accounts and vendors.
-

Asset Lifecycle Overview

Introduction

Because this unit focuses on assets, this section provides an overview of the following topics:

- The asset lifecycle and what applications can be used to process it through its lifecycle
- Activities and actions occurring from these applications
- Common terms used when processing an asset through its lifecycle

Chapters in this unit will provide more in-depth information, as well as hands-on exercises, to carry out the functionality and actions in each application.

Asset Records

In Maximo, an asset record is any equipment, machinery, or technology that your company owns or leases that you will be managing and maintaining using Maximo.

Asset Management

An asset management system can monitor every element that is or can be associated with an asset. These include procurement policies, corporate hardware and software standards, acquisition decisions, physical inventory, IMACs, help/service desk, budgeting and forecasting, and disposal. Asset tracking is a subset of asset management.

Asset Tracking

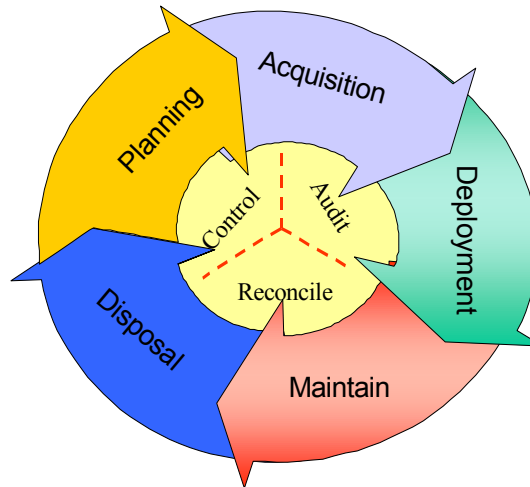
Asset tracking involves tracking, controlling, and reporting on the assets for a given organization. This provides the processes, procedures, and work instructions to identify what assets are where, who has them, and what is happening against them.

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Asset Lifecycle Overview continued

Asset Lifecycle and Maximo

An asset lifecycle consists of five broad stages:



Maximo has applications that support the activities and processes for each stage of the asset lifecycle and the supporting business functions that are in the asset lifecycle's core (Control, Audit, Reconcile). The table on the following page describes some of them.

continued on next page

Asset Lifecycle Overview continued

Asset Lifecycle and Maximo continued

At this stage...	You can use the...
Planning	<ul style="list-style-type: none"> • Contracts and Company applications to specify and define purchase requirements, vendors, and contract agreements. • Item Master, Inventory, and Assets applications to set up and configure your asset structures. • Reconciliation module's applications to map out and configure the process Maximo will use to compare and reconcile IT asset information. • Job Plans application to define IT work activities templates that can be used on work orders to define task, labor, materials, and tool requirements. • Solutions application to build a knowledge base of service desk resolutions and questions and answers. • Ticket Templates application to build templates for commonly executed tickets.
Acquisition	<ul style="list-style-type: none"> • Purchasing Requisition, Purchase Order, Request for Quotation, Receiving, and Invoices applications to facilitate the processing activities for asset acquisitions and financial reconciliation with vendors.

continued on next page

Asset Lifecycle Overview continued

Asset Lifecycle and Maximo

continued

At this stage ..	You can use the ...
Deployment	<ul style="list-style-type: none"> • Assets, Changes, Issues and Transfers, and Work Order Tracking applications to activate and execute install, move, add, and change (IMAC) transactions against assets. • Maximo Discovery application to audit and take a snapshot of the organization's assets. • Deployed Assets module to report on and manage discovered asset details. • Reconciliation application to reconcile discovered assets with those in the Maximo database. • View Asset Details action to view Maximo asset details against the reconciled findings.
Maintain	<ul style="list-style-type: none"> • Work Order Tracking, Service Requests, Incidents, Problems, Changes, and Release applications to manage service desk activities. Activities can range from taking the call, to finding the solution, to fixing the problem, to IMAC activities that might be undertaken. • Assignment Manager application to schedule and assign work requirements to staff. • Labor Reporting application to report and capture actual labor hours and costs for work-related activities against assets.
Disposal	<ul style="list-style-type: none"> • Assets application to retire and decommission an asset. • Inventory Issues and Return application to return end-of-lease assets to vendors.

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Asset Lifecycle Overview continued

IMAC Process

The IMAC process your company uses will vary, based on the needs of your business. In this course, when you are performing common IMAC activities, Maximo will execute the activities under this IMAC definition:

- **Install:** Installing new hardware, software, printers and so forth (including configuration); for example, when a new employee is hired
- **Move:** Physically relocating hardware; for example, when an employee is transferred from one building to another
- **Add:** Installing new hardware and software; for example, when an employee needs additional memory or new software
- **Change:** Upgrading existing hardware and software, reconfiguring existing hardware or software, and physically moving and redeploying hardware or software.

IMAC activities can be executed in any of the five lifecycle stages and will be demonstrated throughout this unit.

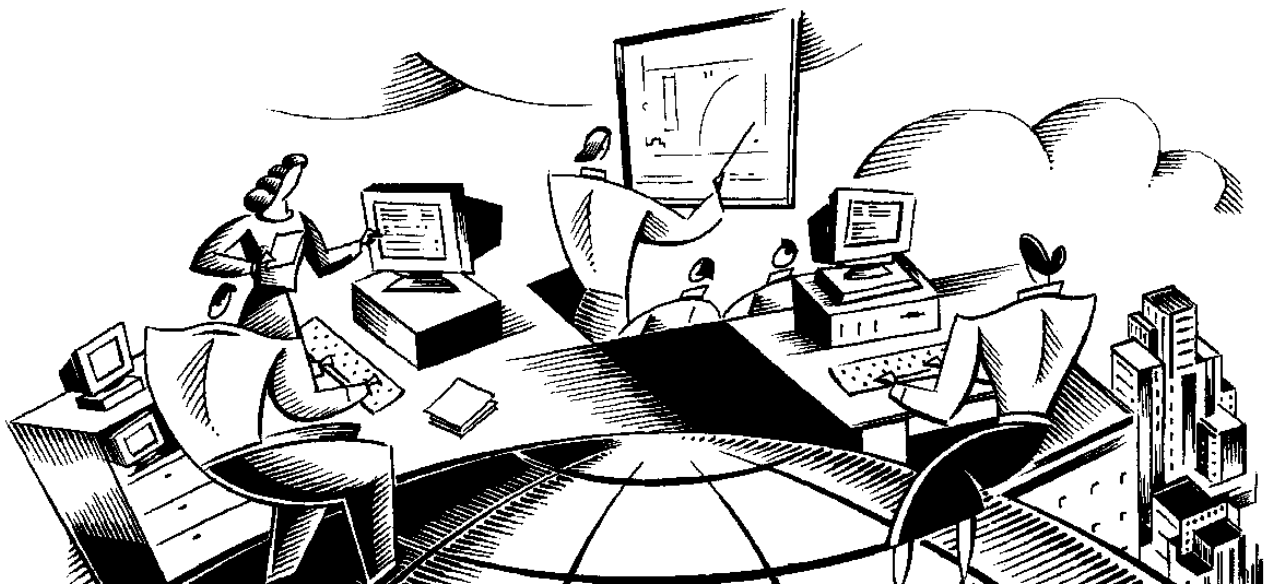
Asset Transactions

In Maximo, some common asset transactions are:

- **Moves** – Assets are moved from one location to another, one site to another, or even one location to another via the Move Asset action from the Assets application or a Work Orders application (Changes, Releases, Work Order Tracking).
- **Swaps** – Assets can be swapped from one asset to another via a Swap Asset action from the Assets application.
- **Issues** – Assets are issued from a storeroom to a location, person, GL account, or work order via the Issues and Transfers application.
- **Transfers** – Assets are transferred from one storeroom to another storeroom via the Issues and Transfers application.
- **Returns** – Assets can be returned to inventory stockrooms via the Issues and Transfers application.

Each of these transactions will be discussed in further detail relevant to the applications in which they occur.

Chapter 8: Acquisition: Purchasing and Leasing



In This Chapter

This chapter contains the following topics:

Topic	See Page
Chapter Overview	8-1
Purchasing Overview	8-4
Creating a Purchase Requisition	8-11
Request for Quotations	8-22
Purchase Order Overview	8-34
Creating Purchase Orders	8-38
Receiving	8-45
Inspections	8-55
Receiving and Asset Configuration	8-57
Invoice Reconciliation	8-68
Chapter Summary	8-78

Chapter Overview

Introduction

Requesting equipment, material, service, and technology items to replenish supplies or acquire materials for new work activities are essential in maintaining your day-to-day operation.

With the applications in the Purchasing module, Maximo enables you to track the requisitioning process as it progresses.

Learning Objectives

When you have completed this chapter, you should be able to:

- create a purchase requisition,
 - approve a purchase requisition,
 - create a purchase order to obtain parts and service,
 - record items as having been received into the storeroom, and
 - reconcile invoices.
-

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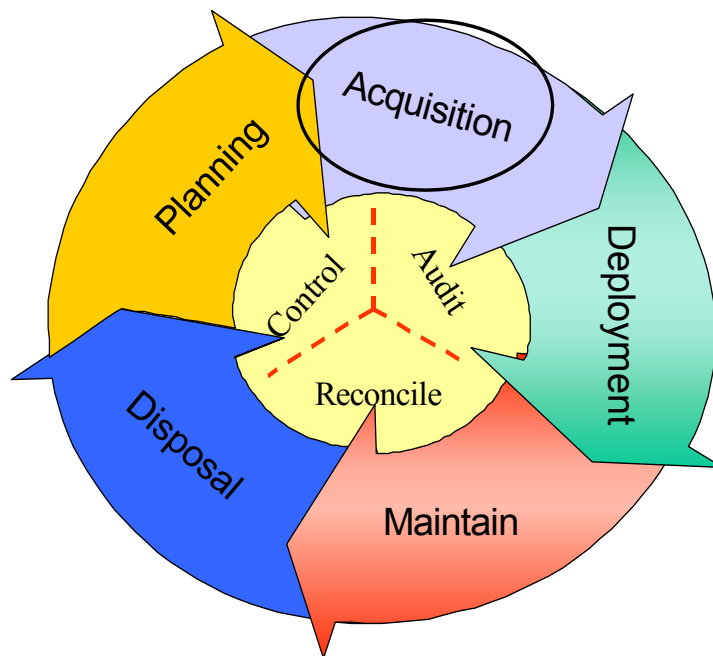
Chapter Overview continued

Chapter Focus: Planning

The Acquisition stage is where you make decisions regarding:

- IT asset purchasing and leasing,
- obtaining quotations,
- financial reconciliation internally and with vendors, and
- service and asset receiving.

In this chapter we will cover how Maximo can be used for these components in the Acquisition stage.



You can use the following applications to facilitate the processing activities for asset acquisitions and financial reconciliation with vendors:

- **Purchase Requisitions**
- **Purchase Orders**
- **Request for Quotations**
- **Receiving**
- **Invoices**

continued on next page

Chapter Overview continued

Definitions

We will use the following terms in this chapter:

Term	Definition
<i>Purchase requisition (PR)</i>	A request issued internally to a purchasing department to order materials or services from a vendor
<i>Purchase order (PO)</i>	An order request for materials or services from a vendor
<i>Line items</i>	Individual items, materials, or services on a purchase requisition
<i>Receipt</i>	A type of transaction in Maximo that indicates that a vendor has delivered materials or performed a service

Implementation Questions to Consider

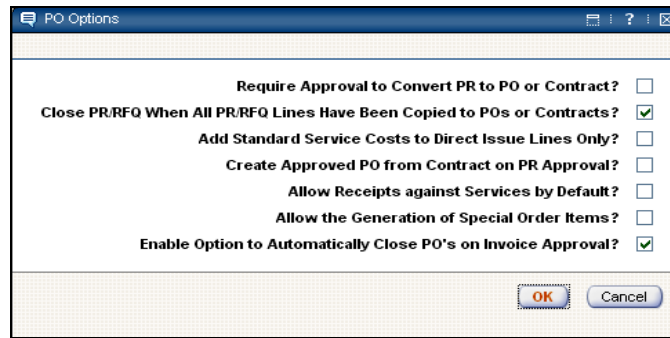
- How are contracts managed in your company?
 - Do you have a central repository containing contract information?
 - How are warranties managed?
 - How do you manage software licenses?
 - What criteria do you use to select vendors?
 - What criteria do you use to measure vendor performance?
 - Do you track vendor performance?
 - How does your company communicate purchase orders to vendors (e.g., mail, fax)?
 - Do you use electronic routing to approve purchase orders?
 - What are the dollar approval limits for purchasing personnel?
-

Purchasing Overview

Introduction This section provides an overview of the Purchasing functionality in Maximo.

Organizations Application Setup Options Revisited: The following setup options for purchasing are available in the Organizations application.

Purchase Order Options To set purchase order options, use the **Select Action** menu to select **PO Options** to display the **PO Options** screen.



The following table describes each of these options and their function.

continued on next page

Purchasing Overview continued

Organizations continued
 Application
 Setup Options
 Revisited:
 Purchase Order
 Options

Option	Function
Require Approval to Convert PR to PO or Contract?	Check this box to require users to get approval before converting purchase requisitions into purchase orders.
Close PR/ RFQ When All PR/RFQ Lines Have Been Copied to POs or Contracts?	Check this box to automatically change the PR or RFQ status to CLOSED when all PR/RFQ lines have been copied to POs.
Add Standard Service Costs to Direct Issue Lines Only?	Check this box to add the standard service costs only to direct issue lines. If the check box is cleared (default), Maximo adds the costs to all issue lines.
Create Approved PO from Contract on PR Approval?	Check this box to automatically create an approved PO from a contract when the PR is approved. If the check box is cleared, the PO must be created manually.
Allow Receipts Against Services by Default?	Check this box to automatically allow receipts for services rendered.
Allow the Generation of Special Order Items?	Check this box to allow special order inventory items to be generated when a user orders items from vendors that are not currently in the inventory system.
Enable Option to Automatically Close POs on Invoice Approval?	Check this box to automatically close the PO when the invoice status changes to APPROVED.

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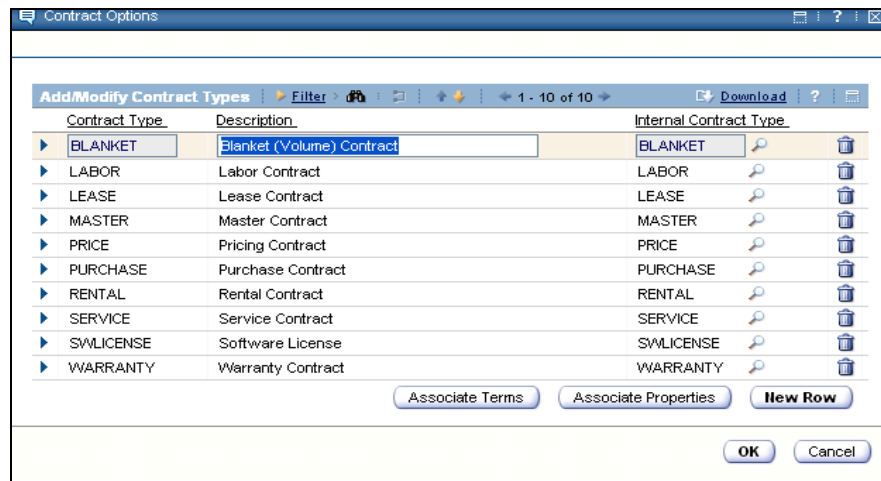
Purchasing Overview continued

Organizations Application Setup Options Revisited:

Contract Options

The following setup options for contract management are available in the **Organizations** application.

To configure contract options, select **Contract Options** from the **Select Action** menu to display the **Contract Options** dialog box.



You use the **Contract Options** dialog box to associate *Terms and Conditions* with *Contract Types*.

continued on next page

Purchasing Overview continued

Organizations Application Setup Options Revisited: Tax Options

The following setup options for taxes are available in the **Organizations** application.

To configure tax options, select **Tax Options** from the **Select Action** menu to display the **Tax Options** dialog box.

Tax Code	Description	Tax Rate	Effective Date
AR09		4.50	7/1/94
CA11		6.25	9/14/94
CO78		3.00	8/30/88
CT		6.00	12/1/94
GA73		4.00	5/31/92

Use the **Tax Options** dialog box to specify default tax GL accounts and to define tax codes for Maximo to use in calculating the amount of tax due on a PR, RFQ, PO, or invoice.

Organizations Application Setup Options Revisited: PO Labor Options

The following setup options for PO labor are available in the **Organizations** application.

To configure PO labor options, select **PO Labor Options** from the **Select Action** menu to display the **PO Labor Options** dialog box.

Use the **PO Labor Options** dialog box to set defaults for outside and inside labor.

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Purchasing Overview continued

Conversion Factor and Order and Issue Units

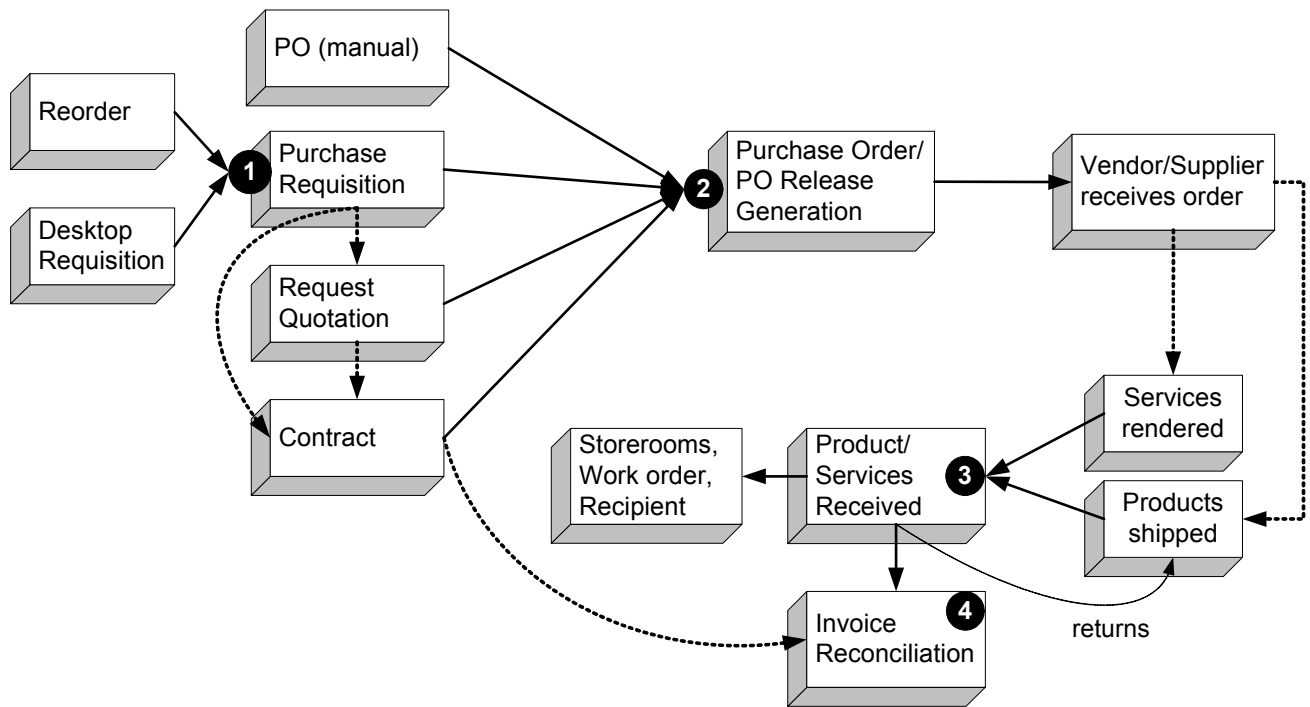
The conversion factor is used to convert the order unit to the issue unit, and vice versa. If you specify an order unit in the **Order Unit** field, Maximo enters the corresponding conversion value in this field. If you have not specified an order unit, Maximo sets the conversion factor to 1.00, indicating that the order unit is the same as the issue unit. To determine a conversion factor, divide the order quantity by the issue quantity. You can edit this field, unless the line item is a service. For service line items, this field is read-only and always set to 1.00.

continued on next page

Purchasing Overview continued

Purchasing Lifecycle

The following high-level diagram illustrates how Maximo applications are used to generate and process a purchase order through a lifecycle.



continued on next page

Purchasing Overview continued

Purchasing Lifecycle

continued

The numbers in the following table correspond to the numbers in the diagram.

Stage	Description
1	<p>A purchase requisition (PR) is created in one of the following ways:</p> <ul style="list-style-type: none"> • Reordering for a storeroom replenishment or direct issue using the Reordering action in the Inventory application. • Requisitioning for materials and services using the Desktop Requisitions application • Using the Purchase Requisitions application.
2	<p>A purchase order (PO) or a release PO is then created in one of the following ways:</p> <ul style="list-style-type: none"> • Manual creation using the Purchase Orders application • From a PR using the Purchase Requisitions application • From a request for a quotation that has been awarded using the Request for Quotations application. Line items on a RFQ can be derived from a PR. • From a purchasing contract that has been approved using the Purchase Contracts application. Lines items on a contract can be derived from an RFQ, PR, or PO. <p>Upon PO approval, the order is submitted to the vendor.</p>
3	<p>Services are rendered and materials are received and processed using the Receiving application. If applicable, inspections are performed and, if necessary, returns are made. Ordered items are then moved to storerooms, work locations, recipients, etc.</p>
4	<p>Vendor invoices are reconciled using the Invoices application.</p> <p>A reconcilable invoice can also be created from an approved service contract or labor contract.</p>

Creating a Purchase Requisition

Introduction

A PR is a written request issued internally to a purchasing department to order items or services. Use the **Purchase Requisitions** application to create PRs for items, supplies, and services.

maximo Purchase Requisition Details Report						
Purchase Requisition Number: 1009				Requisition Date: 9/26/2003		
Vendor:				Ship To:		
Helwig Company 8900 W. TOWER AVE BELLEVUE, WA 98004 Phone: (414) 555-2411 Fax: (414) 555-2411 Contact: JAMES GRUNDIG				Main addr Bedford MA Site of EAGLE Inc. NA 100 Crosby Drive Bedford, MA 01730 Attention: Roland Smith Main addr Bedford MA Site of EAGLE Inc. NA 100 Crosby Drive Bedford, MA 01730 Attention: Will Smith		
Requested By: MAXIMO				Date Required:		
Qty	Units	Item	Description	Tax	Unit Cost	Line Cost
1	EACH	11463	Seal, Mechanical, Self Aligning- 1 In ID	9.03 USD	139.00 USD	139.00 USD
1	EACH	217214	Shaft, Steel- .750 In Dia, 7 In Long	0.16 USD	2.50 USD	2.50 USD
Total Line Cost:						141.50 USD
PR Total Cost:						150.69 USD
Purpose:						
Approved By: _____ Date: _____						
For Purchasing Use Only						
Vendor Info: _____			P.O. Number: _____			
_____			Order Date: _____			
_____			Exp. Delivery Date: _____			
Contact/Phone: _____			Ordered By: _____			

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Creating a Purchase Requisition continued

We Are Here

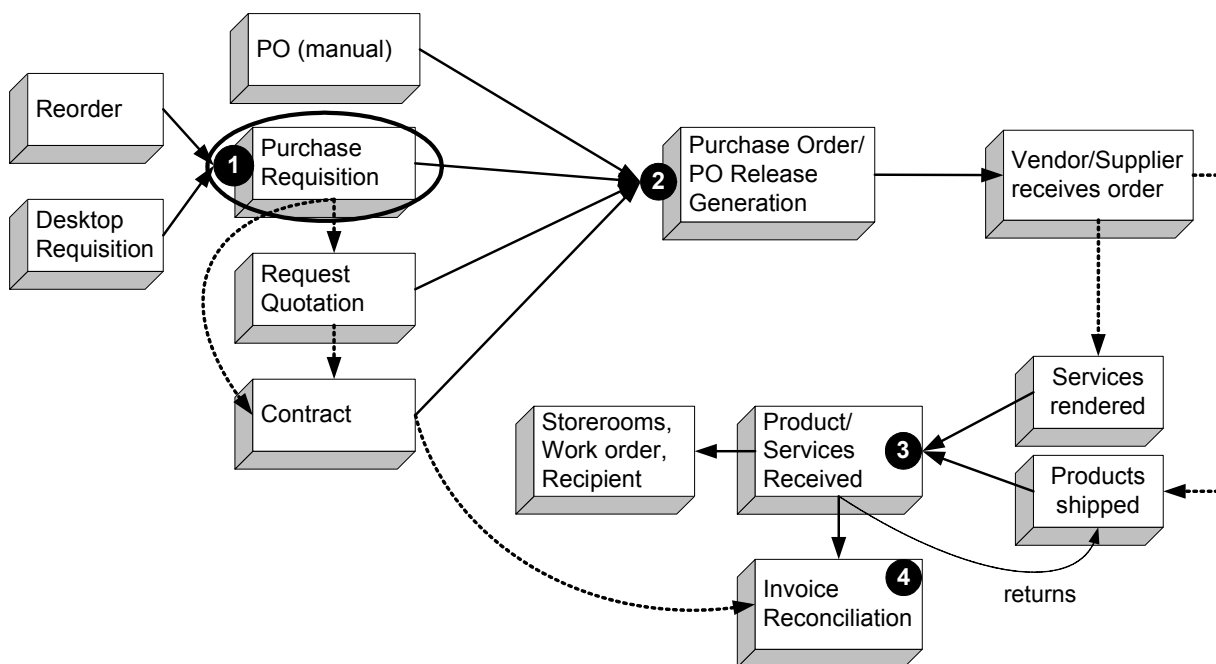
A PR is created in one of the following ways:

- *Requisitioning* for materials and services using the **Desktop Requisitions** or **Purchase Requisitions** applications

OR

- *Reordering* for a storeroom replenishment or direct issue material using only the **Reordering** action in the **Inventory** application

The scenario for this chapter will be to use the **Purchase Requisitions** application to generate a purchase request for *material items* and then process it through the procurement lifecycle.



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Creating a Purchase Requisition continued

Types of PRs

In Maximo, there are two types of PRs:

- **Internal PRs** request the transfer of materials from another company storeroom.
- **External PRs** request the purchase of the necessary materials from an outside vendor. You can specify the vendor, if known.



Note: In this chapter we will be creating an external PR.

The Purchase Requisitions Application

A PR is a request issued internally to a purchasing department to order items or services. You can use the **Purchase Requisitions** application to create PRs for items, supplies, and services, or to create a PO from a PR.

continued on next page

Creating a Purchase Requisition continued

PR Tabs

The Purchase Requisitions application has five tabs.



Use this tab...	To...
List	Search for PR records.
PR	Create, view, and modify purchase requisitions.
PR Lines	Store line items for a PR. Each line item has information such as item number, quantity, unit cost, required date, or category for the item.
Ship To/Bill To	View, enter, and modify shipping and billing addresses associated with the purchase requisition.
Terms and Conditions	Associate new or existing information, such as liability concerns, shipping and handling details, or delivery time expectations with PRs.

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Creating a Purchase Requisition continued

PR Lines Tab

After the initial PR records are entered, the next step is to specify the individual items or services that you need. You use the **PR Lines** tab for this task.

A PR line can be for any of the following types:

- **ITEM** – items from inventory
- **MATERIAL** – items not from inventory
- **TOOL** – items belonging to the TOOLS commodity group
- **SERVICE** – services not associated in service items
- **STANDARD SERVICE** – services associated in service items



Note: On the PR Lines tab, you must populate a **Quantity**, **Unit Cost**, **Storeroom**, **Work Order**, **Location**, **Asset**, or **GL Debit Account** field prior to PO approval if your organization requires GL account validation for transactions.

continued on next page

Creating a Purchase Requisition continued

Lines to POs

After the purchase requisition has been approved, you can assign its line items to one or more purchase orders. A purchase requisition can be closed when all of its line items have been assigned to a purchase order.

PR Lines Type Required Fields

The following fields must be populated when you enter records on the PR Lines tab:

Line Type	Required Field
Item or Tool	Item
Material	<ul style="list-style-type: none"> • Description • Quantity • Unit Cost
Service	<ul style="list-style-type: none"> • Description • Quantity and Unit Cost, or Line Cost
Standard Service	<ul style="list-style-type: none"> • Description • Quantity and Unit Cost, or Line Cost

Purchase Requisition Status

Every PR has a status value that indicates its position in the PO processing cycle.

Status

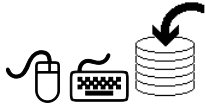
The following table describes each status:

Status	Description
WAPPR	Waiting for Approval is the assigned status for new PR records.
APPR	Approved is available only if your business rules require approvals. The default Maximo configuration does not require approvals for PRs and PR line items that you transfer to POs.
CLOSE	Close indicates that all of the PR's line items have been assigned to one or more POs. All fields are read-only, and the record can no longer be modified.
CAN	Canceled status is available if the current PR status is Approved (APPR) and none of its line items have been assigned to a purchase order. All fields are read-only, and a record can no longer be modified.

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Creating a Purchase Requisition continued

Creating a Purchase Requisition #1



Follow these steps to create a requisition for desktop computers.


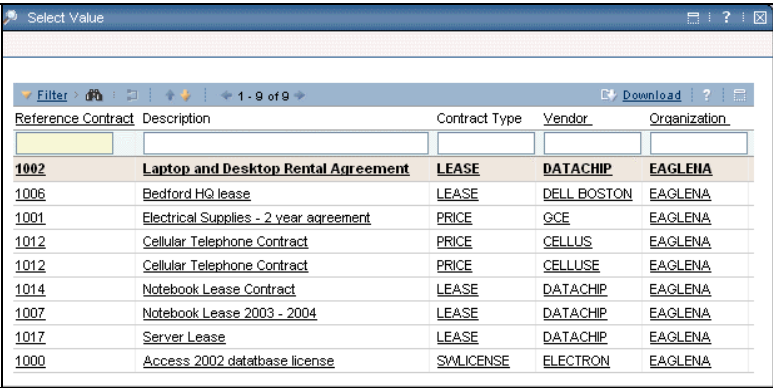
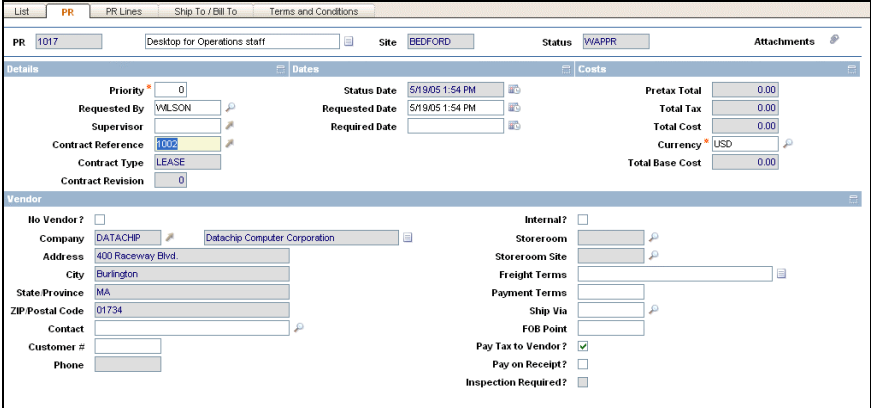
Step	Action				
1	Go to the Purchase Requisitions application (in the Purchasing module). <u>Result:</u> The Purchase Requisitions application opens to the List tab.				
2	Click New Purchase Requisition . <u>Result:</u> The PR record is generated with an automatically assigned number. Record your PR number here: _____				
3	On the PR screen, enter the following information. <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Description</td> <td>Desktop replacement for Operations Staff</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Description	Desktop replacement for Operations Staff
<u>Field</u>	<u>Value</u>				
Description	Desktop replacement for Operations Staff				

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Creating a Purchase Requisition continued

Creating a Purchase Requisition #1

continued

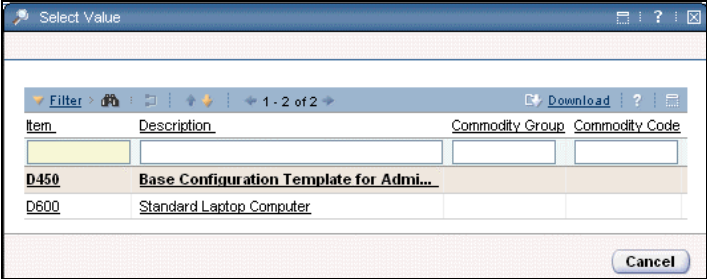
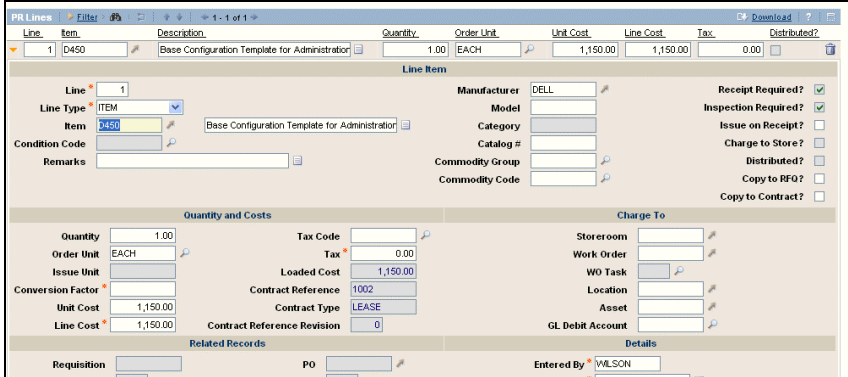
Step	Action
<p>4</p> 	<p>Click the Detail Menu button in the Contract Reference field and choose Select Value.</p> <p><u>Result:</u> The Select Value list displays all vendors associated with a lease/rental contract.</p> <p><u>Note:</u> Contract Reference allows you to take advantage of prearranged pricing with a specific vendor. Referencing a contract will automatically populate the Vendor information.</p> 
<p>5</p>	<p>Select Laptop and Desktop Rental Agreement.</p> <p><u>Result:</u> Vendor information is automatically populated.</p> 

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Creating a Purchase Requisition continued

Creating a Purchase Requisition #1

continued


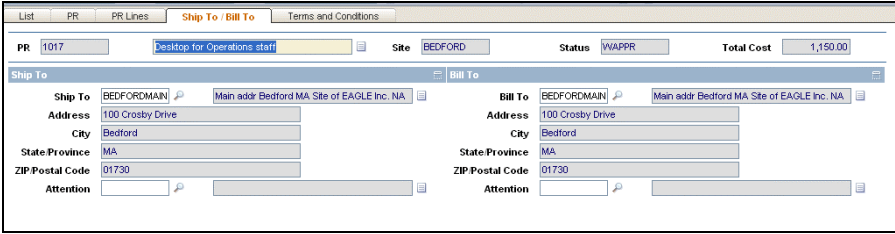
Step	Action
6	Click on the PR Lines tab.
7	Click New Row . <u>Result:</u> The Line Item details table opens.
8	In the Item field, click on the Detail Menu button and choose Select Value . <u>Result:</u> A value list displays all the items under this contract. 
9	Select D450 . <u>Result:</u> The line item and supporting details are added to the PR. 

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Creating a Purchase Requisition continued

Creating a Purchase Requisition #1

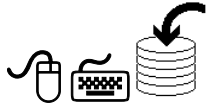
continued

Step	Action						
<p>10</p> 	<p>In the Quantity field, enter 12. In the Conversion Factor field, enter 1.</p> <p><u>Note:</u> The conversion factor is used to convert the order unit to the issue unit, and vice versa. If you specify an order unit in the Order Unit field, Maximo enters the corresponding conversion value in this field. If you have not specified an order unit, Maximo sets the conversion factor to 1.00, indicating that the order unit is the same as the issue unit. To determine a conversion factor, divide the order quantity by the issue quantity. You can edit this field, unless the line item is a service. For service line items, this field is read-only and always set to 1.00.</p>						
<p>11</p>	<p>Enter additional information in the following fields:</p> <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Tax Code</td> <td>MA</td> </tr> <tr> <td>Storeroom</td> <td>HARDWARE</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Tax Code	MA	Storeroom	HARDWARE
<u>Field</u>	<u>Value</u>						
Tax Code	MA						
Storeroom	HARDWARE						
<p>12</p>	<p>Click on the ShipTo/Bill To tab.</p> <p><u>Result:</u> Address and contact information populates the field because this is the information set up in the Organizations application, specific to the Bedford site.</p> 						
<p>13</p>	<p>Change the status to Approved and click OK.</p>						
<p>14</p>	<p>Save the record.</p>						

continued on next page

Creating a Purchase Requisition continued

Creating a Purchase Requisition #2



Create a purchase requisition with the following information:

<u>Field</u>	<u>Value</u>
Description	Ethernet hubs for MRO World
Vendor	COMPDEP
Line Type	ITEM
Item	ETHSW
Quantity	20
Order Unit	EACH
Conversion Factor	1
Unit Cost	50.00
Storeroom	HARDWARE
Status	APPR

Record your PR number here: _____

Result: Your PR Lines tab should look like the one below.

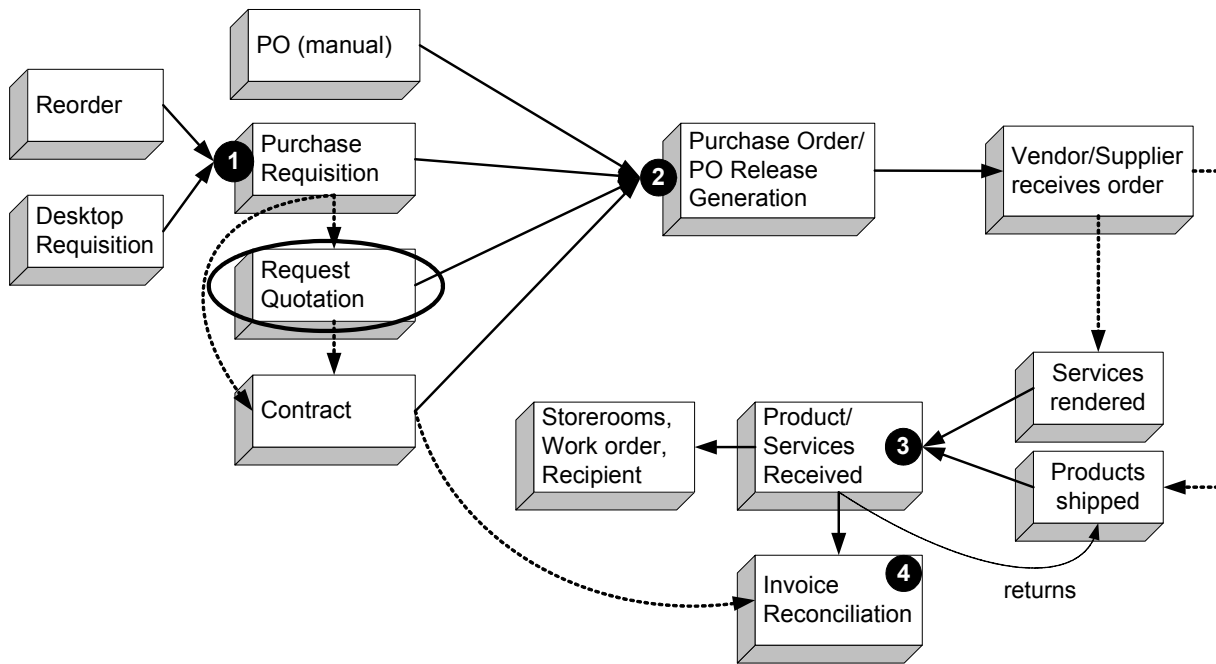
Request for Quotations

Introduction

A new purchase or lease requires that you send out requests for quotations to several vendors to compare pricing, delivery commitments, and other factors to determine the new supplier of these goods.

We Are Here

Create a request for quotation (RFQ) using the **RFQ** application.



continued on next page

Request for Quotations continued

The Request for Quotations Application

You use the **Request for Quotations** application to create requests for quotations and to store the quotations so that you can assess which vendor best meets your needs. In the RFQ application, you can specify line items, required delivery dates, and other conditions you want the vendor to meet for the delivery of an item or service. To add a vendor to the RFQ, it must first be created in the **Companies** application.

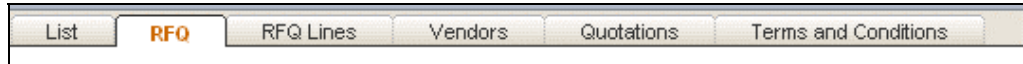
The screenshot displays the 'Request for Quotations' application interface. The main window title is 'Request for Quotations'. The interface includes a navigation bar with 'List', 'RFQ', 'RFQ Lines', 'Vendors', 'Quotations', and 'Terms and Conditions'. The current view shows details for RFQ 1001, titled 'Annual commodity bearing bid', located at 'BEDFORD'. The status is 'INPRG'. The interface is divided into several sections: 'Details', 'Dates', 'Terms', 'Ship To', and 'Reply To'. The 'Details' section includes fields for 'Requested By' (MILLER), 'Buyer' (NANKIN), 'Priority' (0), and 'Entered By' (LIBERI). The 'Dates' section includes 'Required Date' (8/31/01 5:00 PM), 'Reply Date' (8/1/01), 'Printed Date', 'Close Date' (8/31/01), and 'Status Date' (3/29/01 5:21 PM). The 'Terms' section includes 'Freight Terms', 'Ship Via' (DHL), 'Payment Terms' (2% 10 NET 30), and 'FOB Point' (DOCK #4). The 'Ship To' and 'Reply To' sections include fields for 'Ship To' (QR), 'Address', 'City', 'State/Province', 'ZIP/Postal Code', and 'Attention'.

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Request for Quotations continued

Tabs

The Request for Quotations application has six tabs:



Use this tab...	To...
List	Search the database using any combination of available fields
RFQ	Enter general “header” information about the RFQ, and to view existing RFQs and check or change their status
RFQ Lines	Enter the items or services that require quotations from one or more vendors
Vendors	Enter the vendors to whom the request for quotation is to be sent, as well as terms and conditions received from each vendor
Quotations	Enter quotation information from the vendors responding to your RFQ
Terms and Conditions	Associate new or existing terms with an RFQ

continued on next page

Request for Quotations continued

Status

There are six possible statuses for an RFQ. The following table describes the statuses.

Status	Description
In Progress (INPRG)	This is the default when you create an RFQ. You should not change this status until you have entered all the information and lines. When in this status, you can edit most fields on the RFQ, with the exception of the Quotation Lines table. The RFQ must be saved as INPRG prior to changing to another status. The status INPRG is always available (except in COMPLETE and CLOSED status) to allow you to edit the RFQ.
Ready to Be Sent (READY)	An RFQ in this status is ready to be sent out to the vendors. In this status, you cannot change the RFQ. All fields are read-only.
Sent to the Vendor (SENT)	An RFQ in this status has been sent to vendors. In this status, the fields on the RFQ and RFQ Lines tabs are read-only, while fields on the Vendors, Quotations, and Terms and Conditions tabs can be modified.
Completed (COMP)	This status indicates that all quotations have been received from vendors. In this status, all fields except those on the Quotation Lines and Terms and Conditions tabs are read-only.
Cancelled (CANCEL)	Use the CANCEL status to cancel a current or a selected set of RFQs. You can cancel an RFQ only if there have not been any quotations awarded (i.e., the CANCEL status is not available after a quotation has been converted to a PO). A canceled RFQ is stored as a history record and cannot be modified.
Closed (CLOSE)	This status indicates that the quotation lines have been awarded. After an RFQ is closed, it is stored as a history record and cannot be modified.

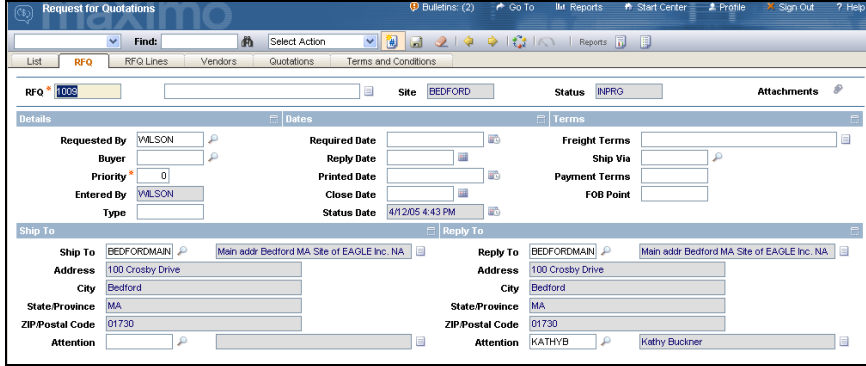
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Request for Quotations continued

Creating an RFQ

Follow these steps to create an RFQ for a UNIX Server.

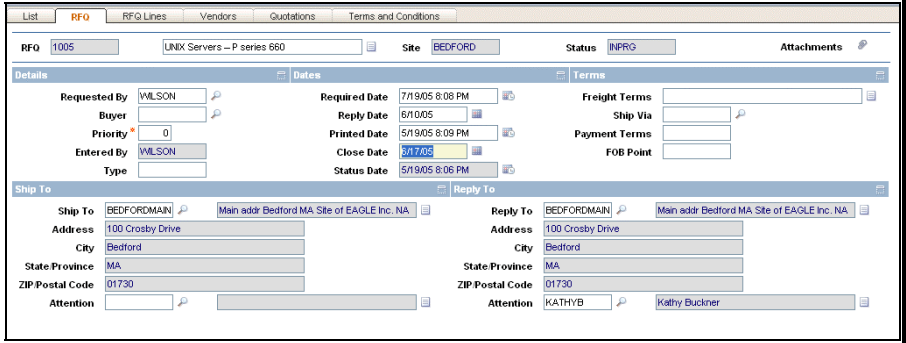


Step	Action
1	Open the Request for Quotations application (in the Purchasing module).
2	<p>Click New RFQ.</p> <p>Record your number here: _____</p> <p><u>Result:</u> A new RFQ is created with a status of INPRG.</p> 
3	In the Description field, enter UNIX Servers – P series 660.
4	Enter [<i>8 weeks from today's date</i>] in the Required Date field to indicate the date when the line items are needed.

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Request for Quotations continued

Creating an RFQ continued

Step	Action
5	Enter [<i>2 week from today's date</i>] in the Reply Date field to indicate the date by which the vendor should reply.
6	Enter [<i>today's date</i>] in the Printed Date field to indicate the date on which the RFQ was sent to the vendor.
7	Enter [<i>3 weeks from today's date</i>] in the Close Date field to indicate the date when no further quotations will be accepted from vendors.
8	<p>Save the record.</p> <p><u>Result:</u> Your screen should look similar to the example below.</p> 

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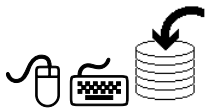
Request for Quotations continued

Line Insertion


There are two ways you can insert lines:

- Insert line items on the **RFQ Lines** tab manually by clicking **New Row**.
- Copy lines from a PR using the **Copy PR Line Items to RFQ** action.

Adding RFQ Lines and Vendors



To add RFQ lines and vendors, follow these steps.

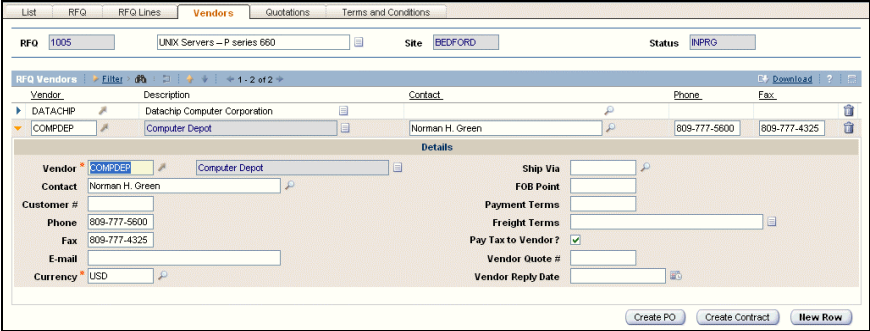
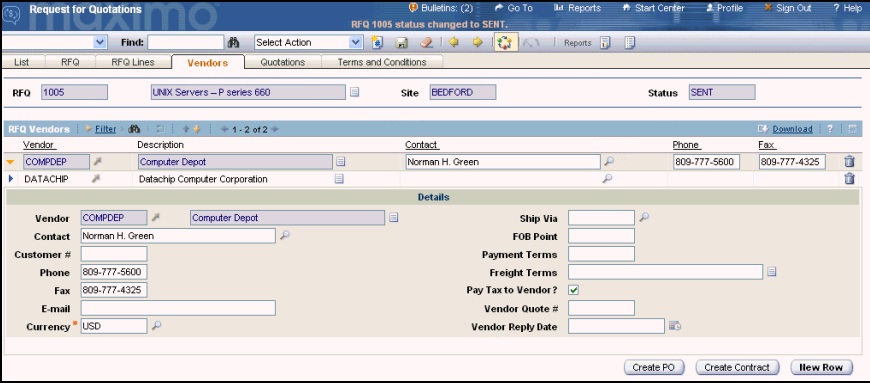
Step	Action
1	Click on the RFQ Lines tab.
2	Click New Row .
3	In the Item field, enter S700, and in the Quantity field, enter 2.
4	In the Order Unit field, enter EACH, and in the Conversion Factor field, enter 1.
5	In the Storeroom field, enter HARDWARE.  Note: For demonstration purposes, do not select the Inspect on Receipt? field. In the next section we will demonstrate a receiving scenario where inspection is not required on an asset.
6	Click on the Vendors tab and click New Row .
7	In the Vendor field, enter DATACHIP.

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Request for Quotations continued

Adding RFQ Lines and Vendors

continued

Step	Action
8	<p>Repeat the previous steps to enter COMPDEP as a vendor. <u>Result:</u> Your Vendors tab should look like the example below.</p> 
9	<p>Change the status to Sent to the Vendor. <u>Result:</u> Your screen should look like the example below.</p> 
10	<p>Save the record.</p>

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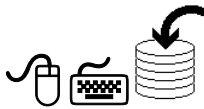
Request for Quotations continued

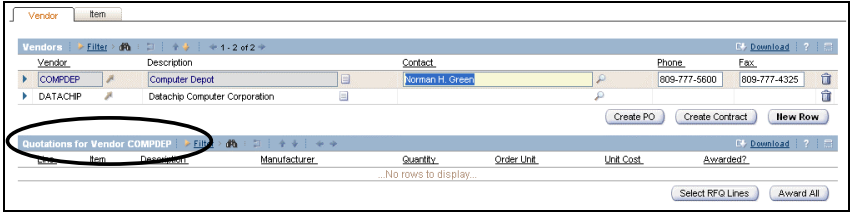
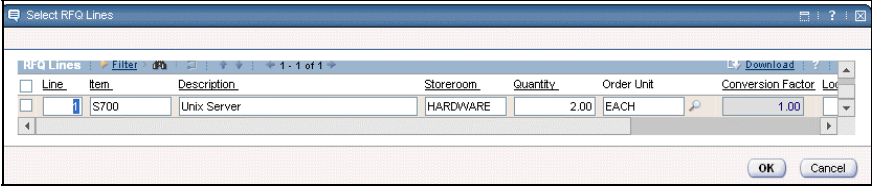
Receiving Quotations

After you receive the quotations, you can enter them on the **Quotations** tab in order to have a complete record of the quotations. After you enter all the quotations, you can compare them and award the lines based on the comparison.

Adding Vendor Responses

To add vendors' responses, follow the steps below.

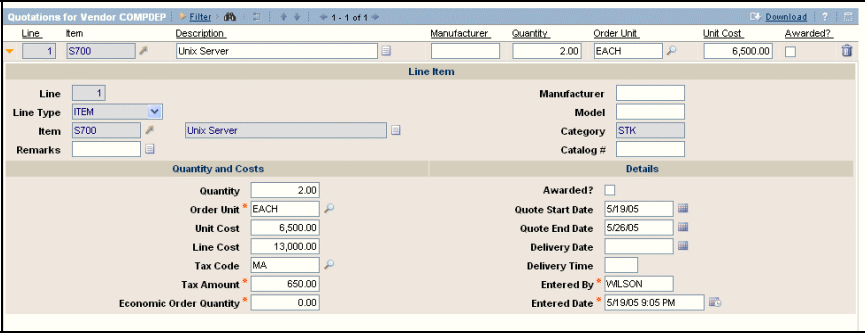


Step	Action
1	Click on the Quotations tab.
2	<p>Select COMPDEP by highlighting the row.</p> <p><u>Result:</u> The Quotations for table window should indicate COMPDEP.</p> 
3	<p>Click Select RFQ Lines.</p> <p><u>Result:</u> The Select RFQ Lines dialog box opens.</p> 
4	<p>Click in the check box next to the line item to select it, and then click OK.</p> <p><u>Result:</u> The line items are copied to the RFQ.</p>

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Request for Quotations continued

Adding Vendor Responses continued

Step	Action												
5	Click the View Details button next to the line.												
6	<p>Enter the following details:</p> <table border="0"> <tr> <td><u>Field</u></td> <td><u>Value</u></td> </tr> <tr> <td>Order Unit</td> <td>EACH</td> </tr> <tr> <td>Unit Cost</td> <td>6500</td> </tr> <tr> <td>Tax Code</td> <td>MA</td> </tr> <tr> <td>Quote Start Date</td> <td>[Today's date]</td> </tr> <tr> <td>Quote End Date</td> <td>[One week from today]</td> </tr> </table> <p><u>Result:</u> The COMPDEP quotation line should look like the one below.</p> 	<u>Field</u>	<u>Value</u>	Order Unit	EACH	Unit Cost	6500	Tax Code	MA	Quote Start Date	[Today's date]	Quote End Date	[One week from today]
<u>Field</u>	<u>Value</u>												
Order Unit	EACH												
Unit Cost	6500												
Tax Code	MA												
Quote Start Date	[Today's date]												
Quote End Date	[One week from today]												
7	Save the record.												

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Request for Quotations continued

Adding Vendor Responses continued

Step	Action												
8	<p>Enter the following details for DATACHIP:</p> <table border="0"> <tr> <td><u>Field</u></td> <td><u>Value</u></td> </tr> <tr> <td>Order Unit</td> <td>EACH</td> </tr> <tr> <td>Unit Cost</td> <td>6820</td> </tr> <tr> <td>Tax Code</td> <td>MA</td> </tr> <tr> <td>Quote Start Date</td> <td>[Today's date]</td> </tr> <tr> <td>Quote End Date</td> <td>[One week from today]</td> </tr> </table> <p><u>Result:</u> The DATACHIP quotation line should look like the one below.</p>	<u>Field</u>	<u>Value</u>	Order Unit	EACH	Unit Cost	6820	Tax Code	MA	Quote Start Date	[Today's date]	Quote End Date	[One week from today]
<u>Field</u>	<u>Value</u>												
Order Unit	EACH												
Unit Cost	6820												
Tax Code	MA												
Quote Start Date	[Today's date]												
Quote End Date	[One week from today]												
9	<p>Save the record.</p>												
10	<p>To compare the vendors' costs for this item, click on the Item subtab.</p> <p><u>Result:</u> Your screen should look similar to the one below.</p>												

continued on next page

Request for Quotations continued

Awarding Quotation Lines

You can award quotation lines to a vendor on the **Quotations** tab in the **RFQ** application. You can award individual line items to different vendors, or you can award all quoted line items to a single vendor.

Awarding Quotation Lines



To award a contract to a vendor, complete the following steps:

Step	Action
1	Click on the Quotations tab.
2	On the Vendor subtab, click on COMDEP .
3	In the Quotations for Vendor COMPDEP section, click in the Awarded? check box for the line item.
4	<p>Save the record.</p> <p><u>Result</u>: The quotation is awarded to COMPDEP.</p>

Quotations for Vendor COMPDEP Filter db 1 - 1 of 1

Line	Item	Description	Manufacturer	Quantity	Order Unit	Unit Cost	Awarded?
1	S700	Unix Server		2.00	EACH	6,500.00	<input checked="" type="checkbox"/>

[Line Item](#)

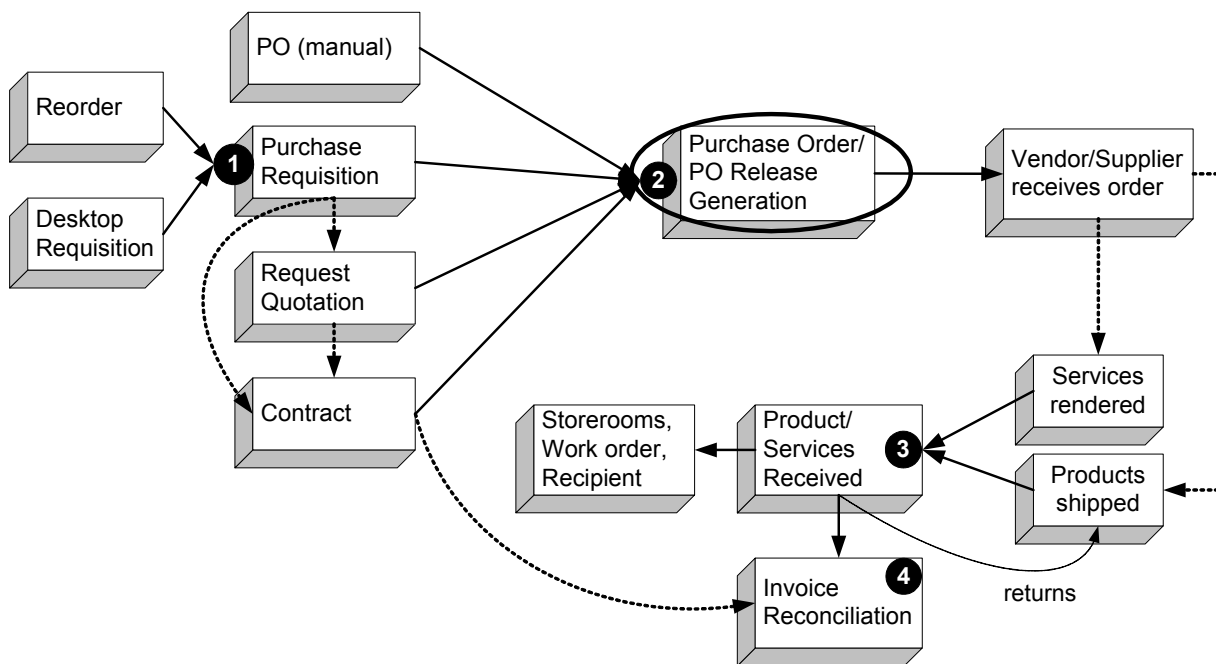
Purchase Order Overview

Introduction

In this section we will look at the various methods you can use to create purchase orders.

We Are Here

A PO is created from Requisitions, the Reordering function, Request for Quotations, Purchase Contracts, or manually. It then goes through an approval process.



continued on next page

Purchase Order Overview continued

Purchase Orders

A PO is an authorized order from a purchasing agent or department to an internal supplier or external vendor. You can use the Purchase Orders application to create purchase orders from PRs, desktop requisitions, requests for quotations (RFQs), contracts, or manually—using the PO itself.

The screenshot displays the 'Purchase Orders' application interface. At the top, there is a navigation bar with 'Find', 'Select Action', and 'Reports' options. Below this, a breadcrumb trail shows 'List' > 'PO' > 'PO Lines' > 'Ship To / Bill To' > 'Terms and Conditions'. The main header area contains fields for 'PO 1000', 'Store Replenishment', 'Site BEDFORD', 'Status APPR', and 'Attachments'. The interface is divided into three main sections: 'Details', 'Dates', and 'Costs'.
 - **Details:** Includes fields for Type (STD), Original PO, Buyer Company, Buyer (NANKIN), Priority (0), Receipts (COMPLETE), Contract Reference, Contract Type, Contract Revision, and Release #.
 - **Dates:** Includes Status Date (4/14/97 7:58 PM), Ordered Date (12/8/97 5:27 PM), Required Date, Follow-up Date, and Vendor Date.
 - **Costs:** Includes Pretax Total (1,204.00), Total Tax (60.20), Total Cost (1,264.20), Currency (USD), and Total Base Cost (1,264.20).
 Below these sections is the 'Vendor' information for 'ATI Atlantic Trading, Inc.', including address (39 MAPLE AVE, SOMERVILLE, MA 02144), contact (BRIAN ARENA), and phone number ((617) 555-8462). Additional vendor details include 'Internal?' (checkbox), 'Storeroom', 'Storeroom Site', 'Freight Terms', 'Payment Terms (NET 30)', 'Ship Via (UPS-GR)', 'FOB Point (SOMERVILLE, MA)', 'Pay Tax to Vendor?' (checked), and 'Pay on Receipt?' (checkbox).

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Purchase Order Overview continued

PO Tabs

The Purchase Orders application has five tabs:



Use this tab...	To...
List	Search for PO records.
PO	Create, view, and modify POs, either from PRs or from scratch.
PO Lines	Enter line items on the PO. This tab also contains summary information from the Material Receipts and Service Receipts tabs.
Ship To/Bill To	Specify shipping information that will be used as a default on each PO line, and billing information for the entire order.
Terms and Conditions	View terms associated with the PO from the contract, PR, RFQ, or as a default.

Internal POs

The Purchase Orders application also allows you to generate an internal PO against another storeroom. You can think of a storeroom-to-storeroom purchase as a “transfer order” or an “internal PO,” because Maximo uses the Purchase Orders and Issues and Transfers applications to track these types of item movements.

continued on next page

Purchase Order Overview continued

Purchase Order Status

Every PO has a status value that indicates its position in the purchase order processing cycle.

The following table describes each status:

Status	Description
WAPPR	Waiting for approval is the status assigned to a PO when it is created. Some default fields are read-only.
INPRG	In Progress status indicates that a PO still needs to be modified before it can be approved.
APPR	Approved status is available only if the current PO status is WAPPR or INPRG. All fields are read-only. To approve a PO, you must have a monetary approval limit equal to or greater than the total cost of the PO. After a PO has been approved, you cannot edit any of its fields.
CAN	Canceled status is available if the current PO status is APPR. You cannot cancel an approved PO if one or more PO line items have been received.
CLOSE	Closed status indicates that all of the PO line items have been received. After a PO is closed, it is stored as a history record and cannot be modified.

Approving POs

To approve a PO, you must have a monetary approval limit equal to or greater than the total cost of the PO. In the Security Groups application, your system administrator sets monetary limits for each user. Also, your system administrator can specify that PRs be approved before any of their items can be assigned to POs. This is done in the Organizations application. After a PO has been approved, you cannot edit any of its fields.

Creating POs

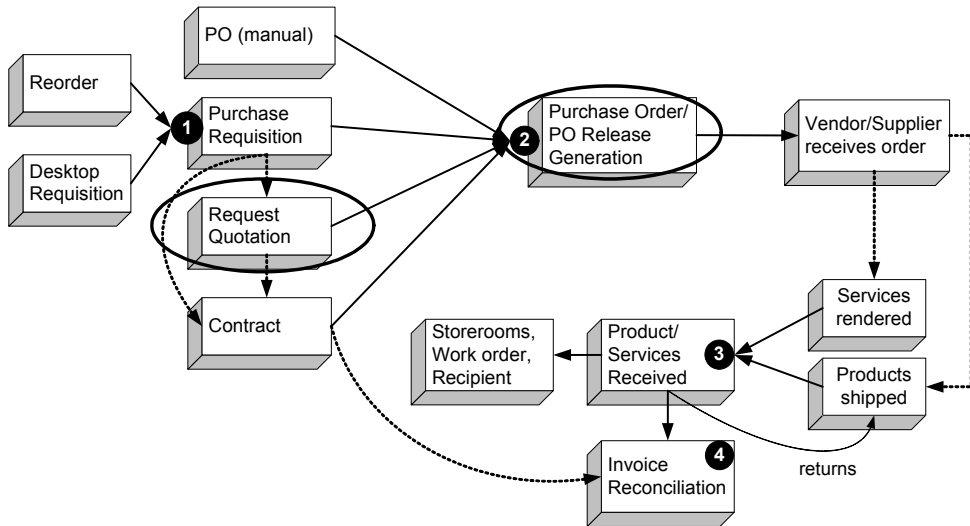


Multiple purchase requisitions can be combined to create a single purchase order in the Purchase Orders application. This reduces the number of purchase orders that must be processed as part of a site's procurement system, while still delivering the same procurement performance. This ultimately reduces the cost per purchase order for the site.

Creating Purchase Orders

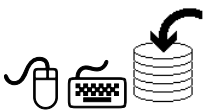
PO from RFQ Generation

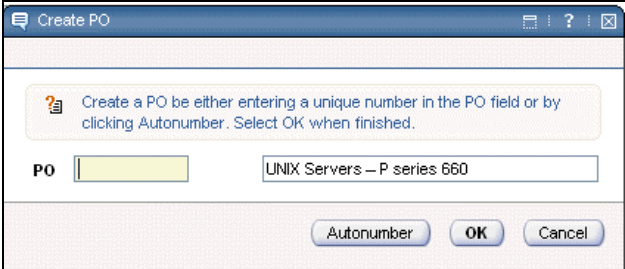
A PO is created from a request for quotation.



Creating a PO from the RFQ

Follow the steps to below to create a purchase order from the RFQ.



Step	Action
1	<p>With the Request for Quotations application still open on the Quotations tab, click Create PO.</p> <p><u>Result:</u> The Create PO dialog box opens.</p> 

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Creating Purchase Orders continued

Creating a PO from the RFQ

continued

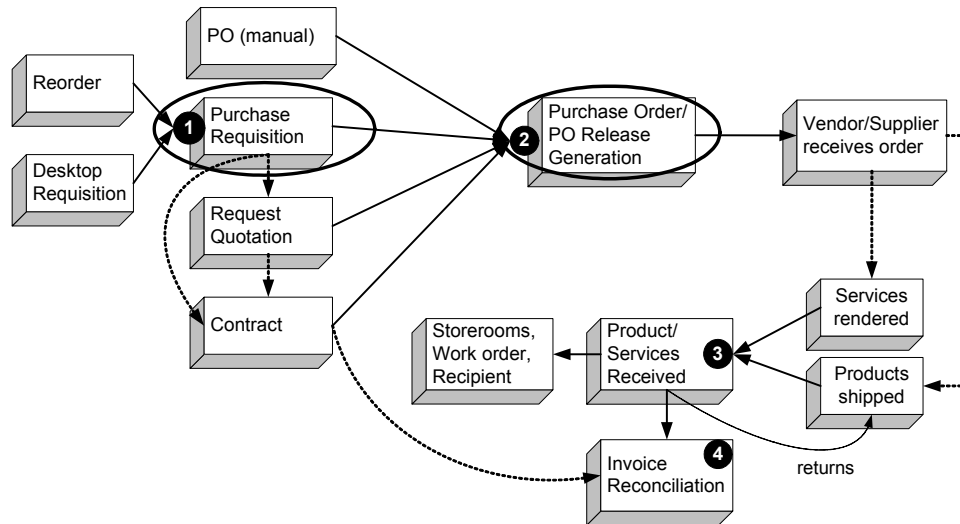
Step	Action
2	<p>Click Autonumber.</p> <p><u>Result</u>: The PO record is generated with an automatically assigned number.</p> <p>Record your PO number here: _____</p>
3	Click OK .
4	<p>If you expand the Line Item row on the RFQ Lines tab, the purchase order number populates the PO field.</p> <p><u>Note</u>: If line items were drawn from a purchase requisition, the PR field would reflect the PR number.</p>

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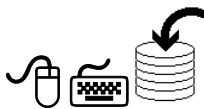
Creating Purchase Orders continued

PO from PR Generation

A PO is created from a purchase requisition (PR).



Creating a PO from a PR



Follow the steps to below to create a purchase order from the purchase requisition.

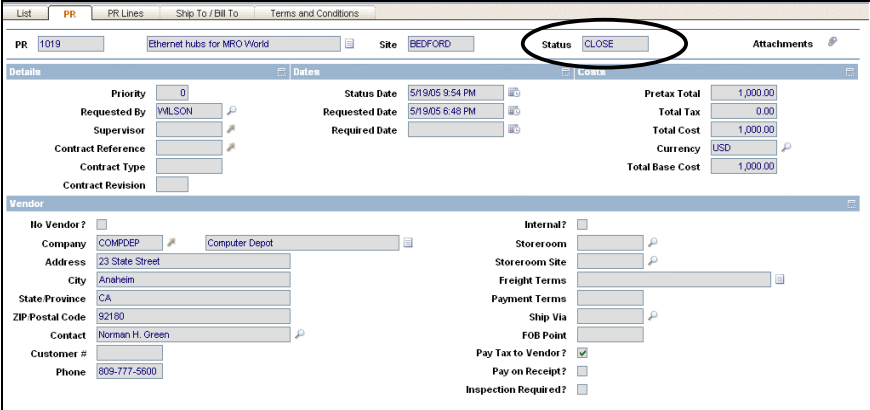
Step	Action
1	In the Purchase Requisitions application, search for and retrieve the PR for Ethernet Hubs for MRO World .
2	From the Select Action menu, select Create PO . <u>Result:</u> The Create PO dialog box opens.

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Creating Purchase Orders continued

Creating a PO
from a PR

continued


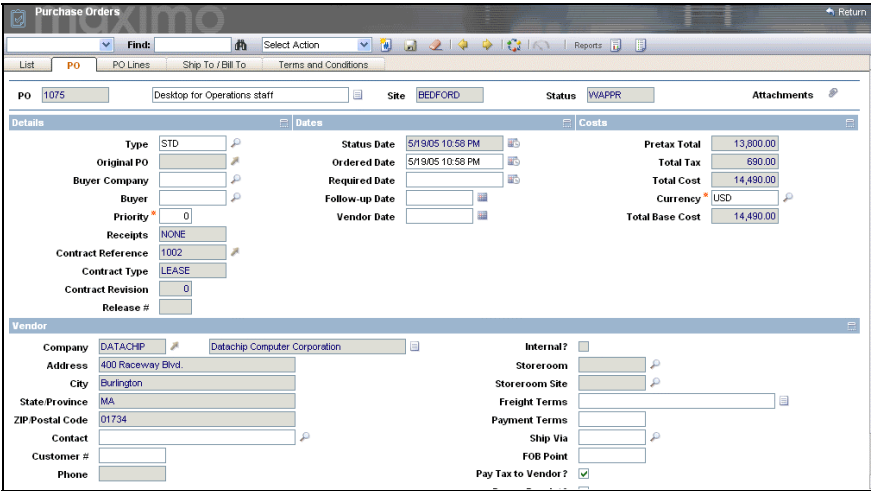
Step	Action
3	<p>Click Autonumber.</p> <p><u>Result</u>: The PO record is generated with an automatically assigned number.</p> <p>Record your PO number here: _____</p>
4	<p>Click OK.</p> <p><u>Result</u>: The PO record is created and the PR is closed.</p>  <p>The screenshot shows a software window with a 'PR' record. The 'Status' field is set to 'CLOSE' and is circled in red. The 'Details' section shows: Priority 0, Requested By WILSON, Status Date 5/19/05 9:54 PM, Requested Date 5/19/05 6:48 PM, Pretax Total 1,000.00, Total Tax 0.00, Total Cost 1,000.00, Currency USD, Total Base Cost 1,000.00. The 'Vendor' section shows: No Vendor? [], Company COMPDEP Computer Depot, Address 23 State Street, City Anaheim, State/Province CA, ZIP Postal Code 92180, Contact Norman H. Green, Customer #, Phone 809-777-5600. Other fields include Internal? [], Storeroom, Storeroom Site, Freight Terms, Payment Terms, Ship Via, FOB Point, Pay Tax to Vendor? [checked], Pay on Receipt? [], and Inspection Required? [].</p>

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Creating Purchase Orders continued

Creating a PO from a PR

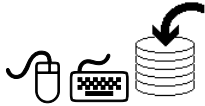
continued

Step	Action
5	Repeat steps 1 through 4 for the Desktop replacement for Operations Staff PR . <u>Result:</u> In this situation you will receive a message indicating the PO is created.
6	Click OK .
7	Click on the PR Lines tab and expand the line item. <u>Result:</u> Your PO number is indicated in the Related Records table window.
	
8	Click the PO field Detail Menu button and open the Purchase Orders application. <u>Result:</u> Maximo displays the Purchase Orders application.
	

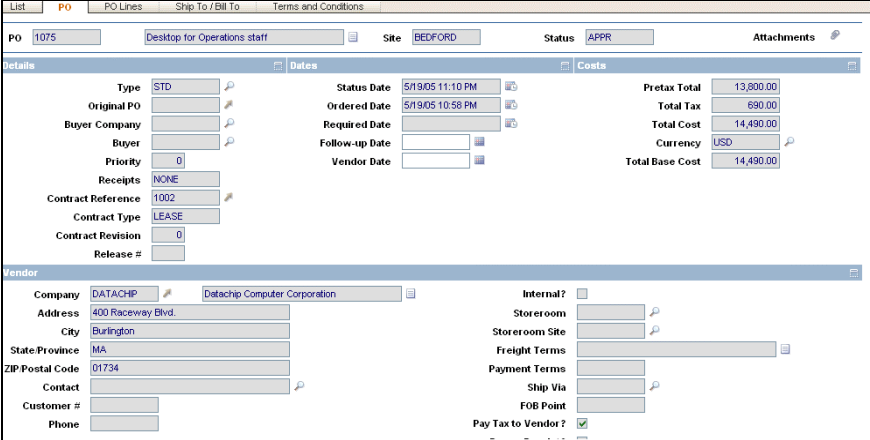
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Creating Purchase Orders continued

Approving the PO



Follow these steps to approve the PO.

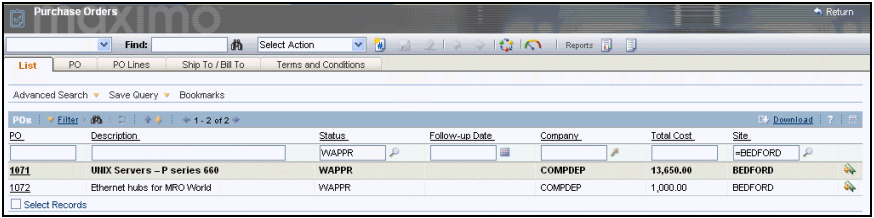
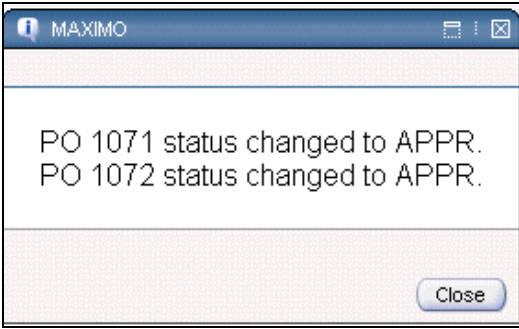
Step	Action
1	<p>Click the Change Status button and change the status to APPR. <u>Result:</u> The PO is approved.</p> 

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Creating Purchase Orders continued

Approving the PO

continued

Step	Action
2	<p>Use Advanced Search and search for POs for the HARDWARE storeroom with a WAPPR status.</p> <p><u>Result:</u> The List tab displays your POs.</p> 
3	<p>From the Select Action menu, select Change Status and change the status to APPR.</p> <p><u>Result:</u> Both POs are approved.</p> 
4	<p>Click Close and Return to the PR application.</p>

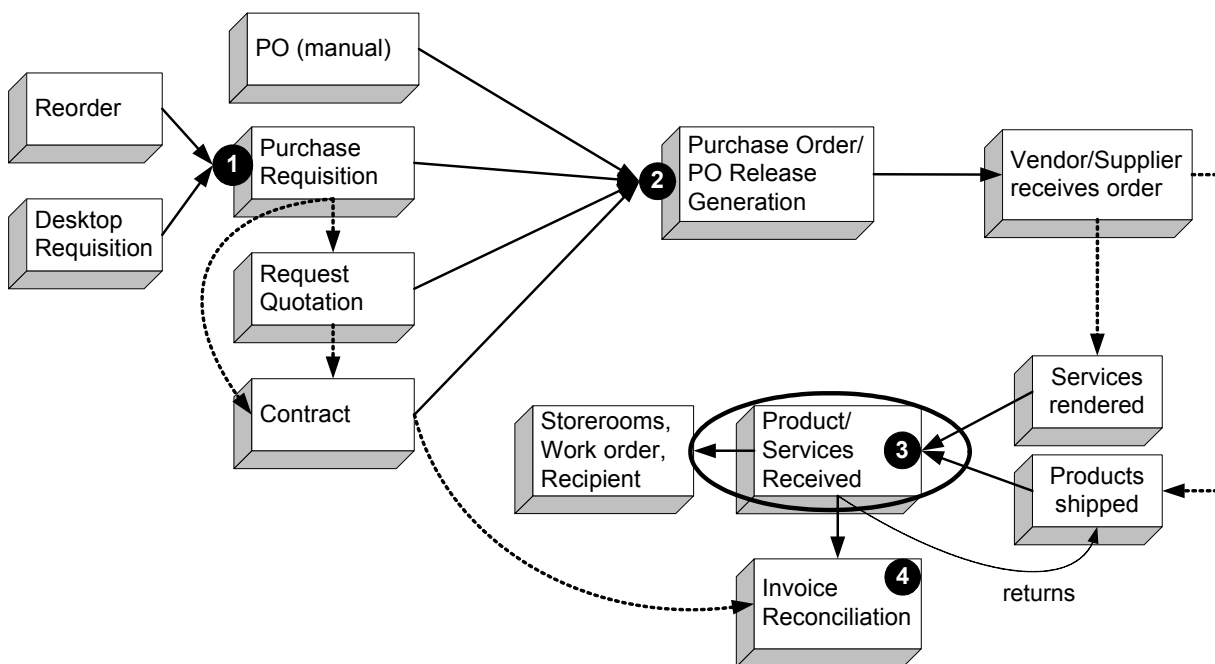
Receiving

Introduction

IT assets are ordered as items. Items are not serialized or uniquely identified until they are received into Maximo. As they are received, Maximo will serialize them, and they will then be uniquely identified by asset numbers. Some assets have assemblies or software configurations that will need to be recognized and respected as the asset is prepared for deployment. Maximo enables you to simply apply these configurations as the assets are received. This chapter discusses the receipt, serialization, and configuration of assets.

We Are Here

Services are rendered and materials are received using the **Receiving** application. If applicable, inspections are performed and, if necessary, returns are made. Ordered items are moved to storerooms, work locations, recipients, and so forth.



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Receiving continued

Definition: Receipt

A *receipt* is a type of transaction in Maximo that indicates that a vendor has delivered materials or performed a service. A receipt transaction affects more than one application in Maximo.

For example, a standard receipt of material for a storeroom affects the PO that called for the order of the material in the Purchase Orders application and the item balances in the Inventory Control application.

Two Types of Receipts

In Maximo there are two kinds of receipts:

- *Material receipts* refer to data associated with items used for work done on site by your company's employees; for example, quantities and lot numbers. When inventory items are received against a PO, the quantities in Inventory are updated, and an inventory transaction is generated.
- *Service receipts* refer to data associated with any service provided by a vendor or contractor, such as asset repairs. The service can be performed on site or off site. You specify service purchases in terms of a quantity and a unit cost, or as a single lump-sum amount.

The Receiving Application

Use the **Receiving** application to receive materials and services from purchase orders. You can search for and receive existing PO line items from the Select Ordered Items and the Select Ordered Services pages, accessible from the Material Receipts and Service Receipts tabs, or you can manually enter received items on the Receipts tabs.

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Receiving continued

Tabs

The **Receiving** application has three tabs:



Use this tab...	To...
List	Search for receipt records
Material Receipts	Record receipt of any materials, including stocked items, special order items, and material for direct issue to a work order
Service Receipts	Record the receipt of any services ordered on a PO

Receiving Materials or Service Items



Before a material or service item is **Received**, the PO status should be **APPROVED**.

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Receiving continued

Material Receipts Tab

When you receive items on an approved PO, you will enter them on the **Material Receipts** tab. If you have received the entire order, you can copy all the PO line items to the Material Receipts tab. If you receive only part of the order, you can enter partial receipts. You can also note any discrepancies between what was ordered and what was received, and/or what was rejected.

The screenshot shows the Maximo Receiving interface. At the top, there is a search bar and navigation tabs: List, Material Receipts (selected), and Service Receipts. Below the tabs, there are several input fields for PO details: PO (1061), Company (DATACHIP), Attention, Site (BEDFORD), Pretax Total (47,700.00), Received Cost (47,700.00), PO Status (APPR), Receipts (COMPLETE), and Ordered Date (10/8/04 12:00 AM). Below these fields is a table titled 'Material Receipts' with columns: PO Line, Item, Description, Quantity, Order Unit, Type, Insp. Status, and Actual Date. The table contains three rows of data:

PO Line	Item	Description	Quantity	Order Unit	Type	Insp. Status	Actual Date
1	D600	Standard Laptop Computer	15.00	EACH	RECEIPT	COMP	10/8/04 12:00 AM
2	D650	Series II Laptop	15.00	EACH	RECEIPT	COMP	10/8/04 12:00 AM
2	D650	Series II Laptop	15.00	EACH	TRANSFER	COMP	10/8/04 12:00 AM

At the bottom of the table, there are buttons for 'Select Items for Return', 'Select Ordered Items', and 'New Row'.

When you enter an item receipt, Maximo creates an inventory transaction for that item. Maximo increases the balance of the item at its primary location by the quantity of the receipt and decreases the quantity on order by the quantity received.

After you save the receipt, the fields on the Material Receipts tab become read-only.

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Receiving continued

Service Receipts Tab

When you receive a service on an approved PO, you enter it on the **Service Receipts** tab. As with materials, you can receive all the items or enter partial receipts.

The recording of service receipts can occur when a contractor or vendor submits a claim. Then, someone at your company who has the authority to check the cost of services approves the receipt.

PO Line	Description	Quantity	Type	Transaction Date	Received By	Work Order	Insp. Status
1	Lotus Notes Training	1.00	RECEIPT	4/22/05 9:47 AM	WILSON		COMP

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Receiving continued

Receipts

For a PO to be complete, all of the PO lines must be complete.

The **PO Lines** tab in the **Purchase Orders** application has a **Receipts** field, which indicates whether the material or services for the PO line have been received.

Details		Dates
Type	STD	
Original PO		
Buyer Company		
Buyer		
Priority	1	
Receipts	COMPLETE	
Contract Reference		
Contract Type		
Contract Revision		
Release #		

The value in the **Receipts** field of the **Purchase Orders** application correlates to the **Receipt Status** field in the **Receiving** application.

Receipts	COMPLETE
-----------------	----------

- Before any receipts have been made, these fields indicate **NONE**.
- When some items have not been received, the fields indicate **PARTIAL**.
- When some items have not been received but the purchase order receipts are manually complete, the fields indicate **COMPLETE**.


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Receiving continued

Insp. Status Field

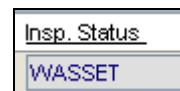
When an item is considered “rotating” (indicated in a set using the Item Master application) and/or an item inspection is required upon receipt of an item or service, the following statuses describe where the line item is in the process:

Waiting for Inspection (WINSP) status indicates that the line item is in the process of being received, but has not yet been entered into inventory. The line item is currently in a holding location, where it will stay until an inspection is completed. When an inspection has been completed, the line item will go to either WASSET or COMP status, depending on whether it is a rotating item.




A screenshot of a software interface showing a dropdown menu for the 'Insp. Status' field. The menu is open, and the option 'WINSP' is selected and highlighted in blue.

Waiting for Asset (WASSET) status indicates that the line item is a rotating item that is waiting to have an asset number assigned to it. If the line item requires inspection, the inspection has already taken place if its status is WASSET. The item is still in the holding location, and has not yet been sent to its appropriate storeroom or direct issue location. After the item has been serialized via the Receive Rotating Items dialog box, its status will be COMP.



A screenshot of a software interface showing a dropdown menu for the 'Insp. Status' field. The menu is open, and the option 'WASSET' is selected and highlighted in blue.

Complete (COMP) status indicates that the line item has been received and, if necessary, inspected and/or serialized. When Maximo changes the status of the line item to COMP, it also creates a transfer transaction, which transfers the item to its appropriate storeroom or direct issue location. If the line item is not rotating and does not require inspection, the status goes directly to COMP upon receipt.



A screenshot of a software interface showing a dropdown menu for the 'Insp. Status' field. The menu is open, and the option 'COMP' is selected and highlighted in blue.

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Receiving continued

Inspecting Items and Receipt Completion

When a material or a service receipt status is **Complete**, the inspection status automatically changes to COMPLETE and cannot be changed.

Service Receipts



Remember the following points regarding service receipts:

- The terms you use on the service PO must be the same on the corresponding receipt transaction, which you record on the Service Receipts tab.
- A service always requires approval. Generally, this is done after the service has been inspected and deemed satisfactory.

Rotating Items Transactions

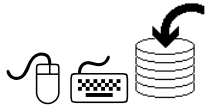
When a rotating item is received into Maximo, the system creates a transfer transaction, transferring the item from the holding location to its storeroom (or direct issue location). This marks the beginning of tracking the asset's lifecycle.

PO Line	Item	Description	Quantity	Order Unit	Type	Insp. Status	Actual Date
1	S700	Unix Server	2.00	EACH	TRANSFER	COMP	5/21/05 11:34 AM
1	S700	Unix Server	2.00	EACH	RECEIPT	COMP	5/20/05 10:56 AM

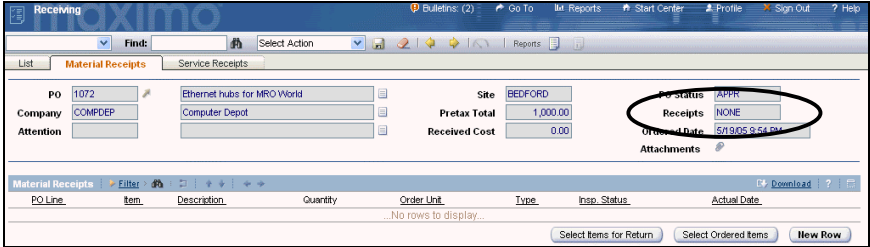
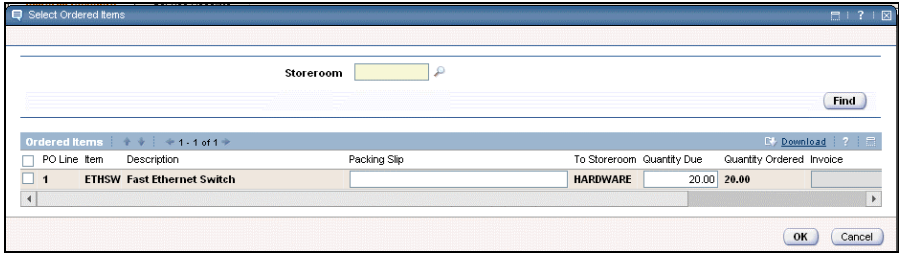
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Receiving continued

Receiving an Item



In this exercise you will indicate that you have received all of the materials ordered on the PO.

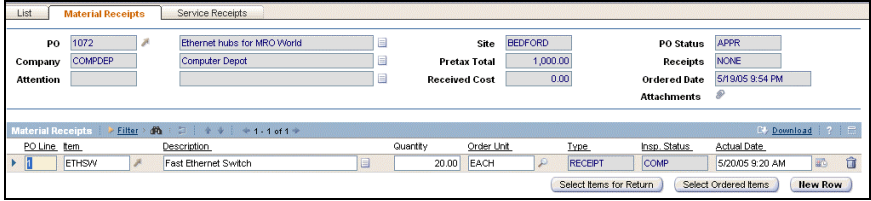
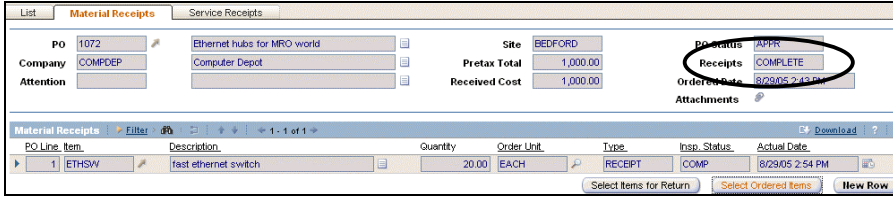
Step	Action
1	Open the Receiving application.
2	<p>Retrieve the purchase order for the Ethernet Hubs.</p> <p><u>Result:</u> The purchase order is displayed on the Material Receipts tab and the Receipts status field displays the value NONE.</p> 
3	<p>To copy the list of PO line items that we ordered, click Select Ordered Items.</p> <p><u>Result:</u> The Select Ordered Items dialog box opens.</p> 

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Receiving continued

Receiving an Item

continued

Step	Action
4	<p>Click to select the Ethernet PO check box and then click OK. <u>Result:</u> Line items are copied over to the Materials Receipts tab.</p> 
5	<p>Save the record. <u>Result:</u> The Receipts status is COMPLETE.</p> 

Inspections

Introduction

Recall that, at various points throughout the use of Maximo, you had the option of indicating whether inspections were required against an item or asset at the time of receipt.

The screenshot shows the Maximo Item Master form for item 'ALLRH' (All In One Office Printer). The 'Inspection' section is highlighted with a red circle, showing the 'Inspect on Receipt?' checkbox checked. Other fields include 'Commodity Group' (43212100), 'Commodity Code', 'Meter Group', 'Meter', 'Lot Type' (NOLOT), 'Item Set' (SET1), 'Order Unit' (EACH), 'Issue Unit' (EACH), 'MSDS', 'Capitalized?', and 'Kit?'. The 'Attachments' section includes 'Condition Enabled?', 'Rotating?' (checked), 'Inspect on Receipt?' (checked), 'Add as Spare Part?', and 'Attach to Parent Asset on Issue?'.

You could have indicated these inspection requirements on the:

- Item Master record,
- purchase requisition,
- purchase order,
- contract, or
- request for quotations (RFQ).

WINSP Status Revisited

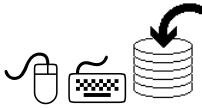
Waiting for Inspection (WINSP) status indicates that the line item is in the process of being received, but has not yet been entered into inventory. The line item is currently in a holding location, where it will stay until an inspection is completed. When an inspection has been completed, the line item will go to either WASSET or COMP status, depending on whether it is a rotating item.

The screenshot shows a dropdown menu for 'Insp. Status' with 'WINSP' selected.


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Inspections continued

Receiving and Inspecting



In this exercise you will indicate that you have received all of the materials ordered on the PO.

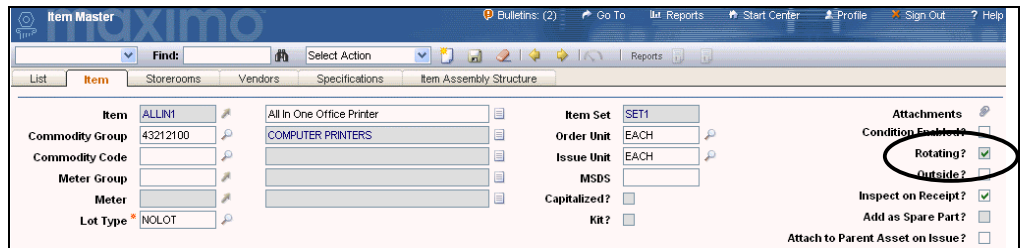
Step	Action
1	<p>Retrieve the purchase order for Desktop for Operations.</p> <p><u>Result:</u> The purchase order is displayed on the Material Receipts tab and the Receipts status field displays the value NONE.</p>
2	<p>Select the Desktop line item to the Material Receipts tab.</p> <p><u>Result:</u> The Insp. Status field should be WINSP.</p> <div> </div>
3	<p>Save your record.</p>
4	<p>From the Select ACTION menu, select Change Inspection Status.</p> <p><u>Result:</u> The Change Inspection Status dialog box opens.</p> <div> </div> <p> <u>Note:</u> On this screen you can accept or reject any number of the items received.</p>
5	<p>Select the line item and then click OK.</p> <p><u>Result:</u> The inspection status is changed to WASSET, indicating that this a rotating item waiting to be assigned an asset number.</p> <div> </div>

Receiving and Asset Configuration

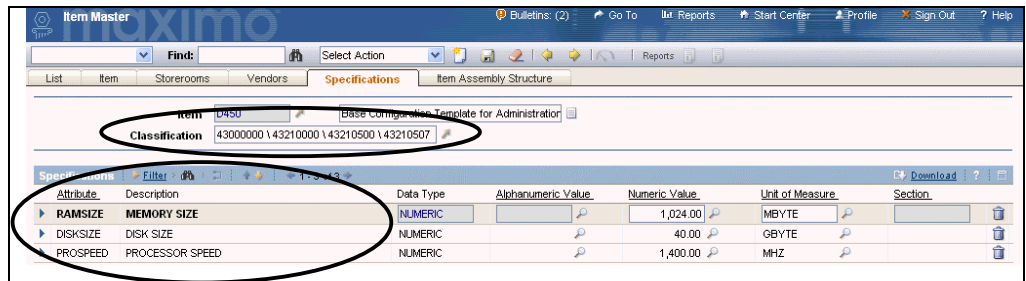
Introduction

Recall that when you set up your Item Master records you were essentially building the different asset configurations that your company wanted to track and manage. To indicate this, there were several things that you did:

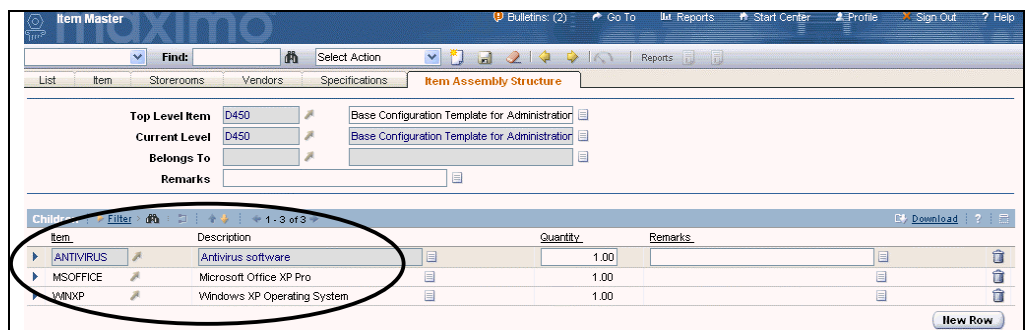
- You indicated that the item was *rotating*.



- You associated it to a classification and defined its attributes.



- You defined its components and subassemblies, thus building an item assembly structure that becomes part of a library of template configurations.

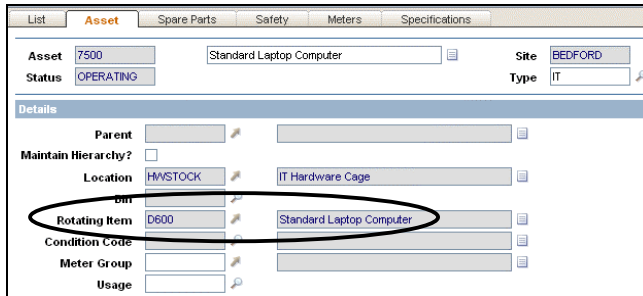


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Receiving and Asset Configuration continued

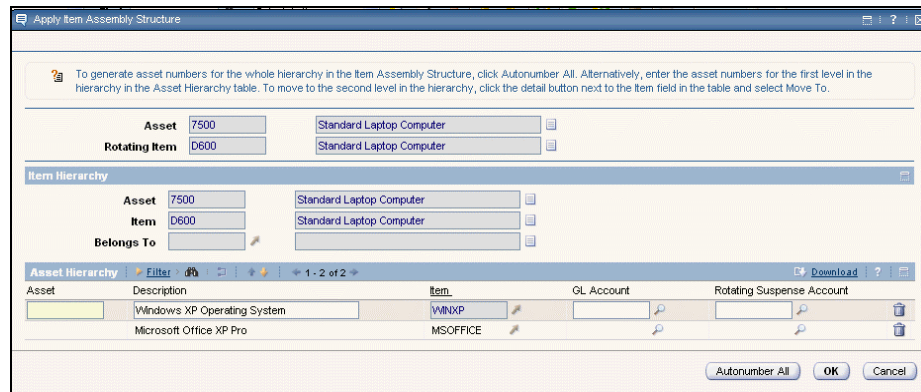
Rotating Item to an Asset

Recall that the **Rotating Item** number on an asset record...

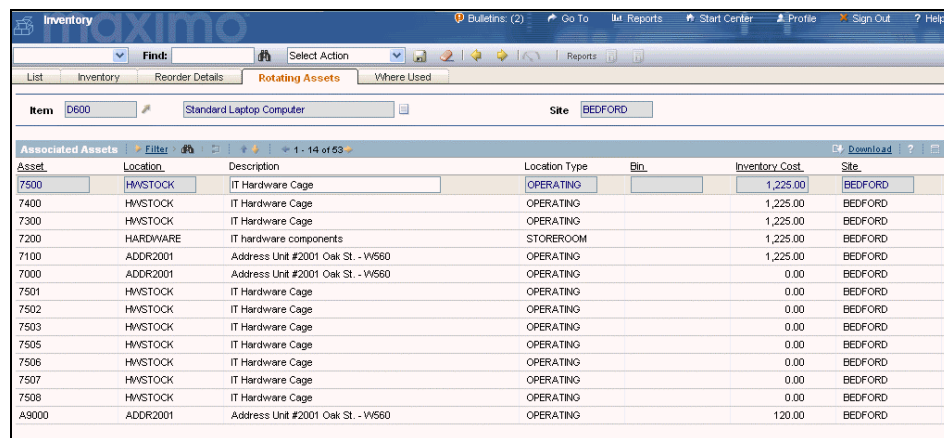


...allows you to:

- Apply an IAS to it.



- Track and manage the asset (and its subassemblies if applicable) as it moves from the time it's newly received into the organization, to the user, to its end-of-life location (vendor, employee purchase, etc.), as well as its costs.



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Receiving and Asset Configuration continued

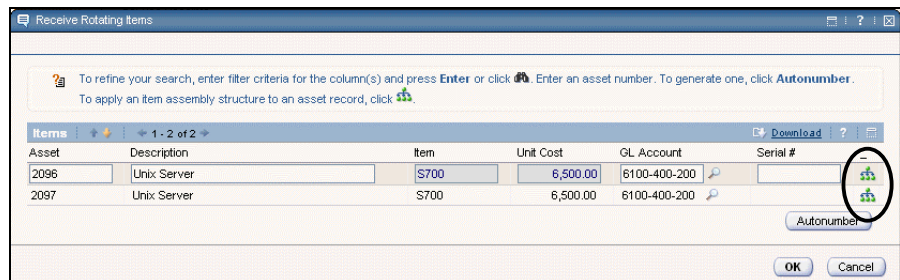
WASSET Revisited

Waiting for Asset (WASSET) status indicates that the line item is a *rotating item* that is waiting to have an asset number assigned to it. If the line item requires inspection, the inspection has already taken place if its status is WASSET. The item is still located in the holding location, and has not yet been sent to its appropriate storeroom or direct issue location. After the item has been serialized via the Receive Rotating Items dialog box, its status will be COMP.



Receiving and IAS

When receiving an asset into your organization, you use the **Receive Rotating Item** action to indicate the receipt of the asset. When this action is executed, you are creating an asset record in Maximo and recording a move transaction. At this time, you can apply an item assembly structure to the asset by clicking **Apply IAS**.



As we learned in an earlier chapter with our manual asset record entry into the Assets application, if the IAS has children assets, those assets records are also given asset numbers and created in the system.

continued on next page

Receiving and Asset Configuration continued

Configuring the Asset

By applying an item assembly structure, the receiver (or asset manager) can apply a configuration template against the asset in one step. The template would typically include software titles or hardware components that are delivered/loaded with the asset. Software specific to the site that will be added later by IT staff should not be part of the IAS, as this will already have a unique identifier and will be dispensed from a software license pool.

Receiving and Serialization

When receiving a rotating item, you also have the option of indicating a serial number.

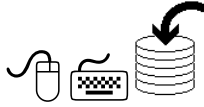
Asset	Description	Item	Unit Cost	GL Account	Serial #
2096	Unix Server	S700	6,500.00	6100-400-200	
2097	Unix Server	S700	6,500.00	6100-400-200	

While not a requirement, serial numbers entered at this point will be indicated on the asset record.

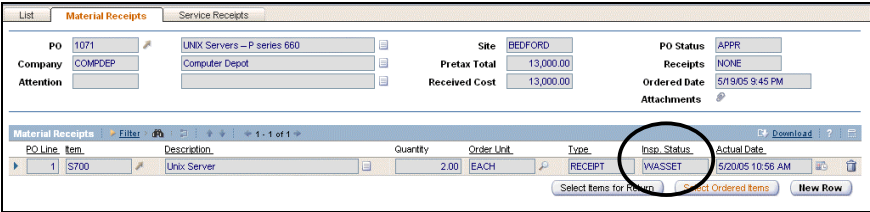

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Receiving and Asset Configuration continued

Receiving and Configuring Rotating Items



In this exercise you will indicate that you have received all of the UNIX Servers ordered and will enter the serial numbers for each asset.


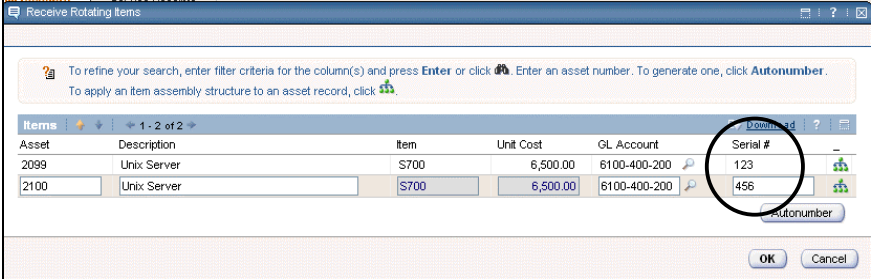
Step	Action
1	<p>Retrieve the purchase order for the UNIX Servers.</p> <p><u>Result:</u> The Receipts status field should be NONE.</p>
2	Select the ordered UNIX Servers.
3	<p>Save the record.</p> <p><u>Result:</u> Your Inspect Status is WASSET, which indicates that this asset is considered a rotating item.</p> 
4	<p>From the Select Action menu, select Receive Rotating Items.</p> <p><u>Result:</u> The Receive Rotating Items dialog box opens.</p> 

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Receiving and Asset Configuration continued

Receiving and Configuring Rotating Items

continued


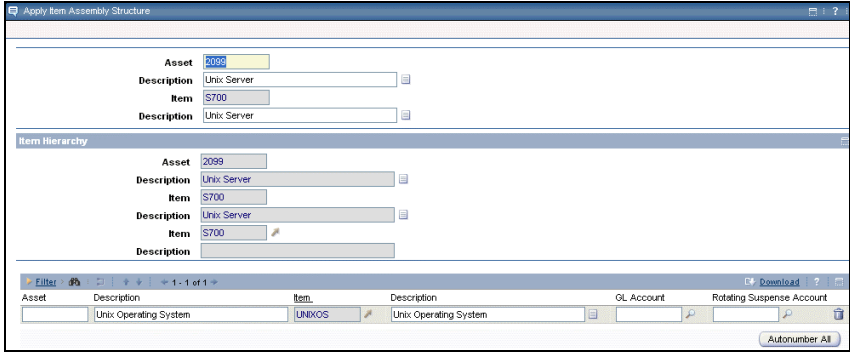
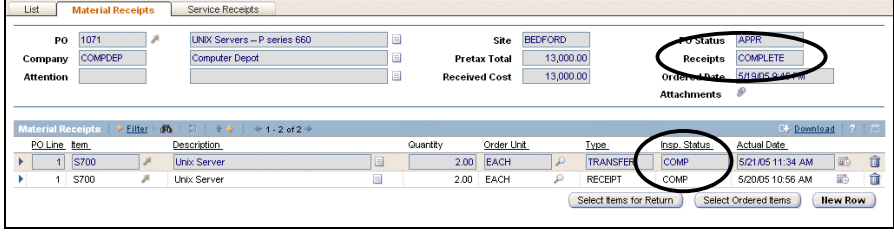
Step	Action
<p>5</p>	<p>Click Autonumber.</p> <p><u>Result:</u> Asset numbers are given to each server.</p>  <p>Record your asset numbers here: Server #1 _____ Server #2 _____</p>
<p>6</p>	<p>In the Serial # field, for each asset, enter the following data:</p> <ul style="list-style-type: none"> • UNIX Server #1: 123 • UNIX Server #2: 456 <p><u>Result:</u> Your screen should look like the one below.</p> 

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Receiving and Asset Configuration continued

Receiving and Configuring Rotating Items

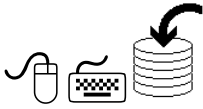
continued

Step	Action
7	<p>For the first asset, click Apply IAS.</p>  <p><u>Result:</u> Maximo displays the Apply Item Assembly Structure dialog box.</p> 
8	<p>Click Autonumber All. Record the asset number here: _____</p>
9	<p>Click OK. <u>Result:</u> You are brought back to the Receive Rotating Items dialog box.</p>
10	<p>Click OK. <u>Result:</u> You are brought back to the Material Receipts tab. The Receipts status is COMPLETE and Insp. Status is COMP.</p> 

continued on next page

Receiving and Asset Configuration continued

Receiving and Configuring Rotating Items



Complete the receiving process for the **Desktop for Operations Staff PO**.

1. Retrieve the PO.
2. Receive the rotating item.
3. Use Autonumber for all 12 computers.
4. Record two asset numbers:

Desktop asset #1: _____

Desktop asset #2: _____

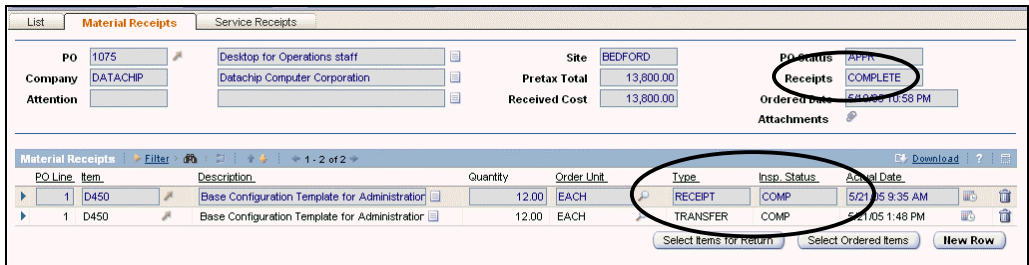
5. Enter the following serial numbers:

Desktop asset #1: 4VDH811

Desktop asset #2: [*Your computer's service tag #*] (usually located on the hard drive)

6. Apply the IAS to the two assets recorded above (use Autonumber for the child assets).

Result: When finished, your Receipts should be COMPLETE, Insp. Status should be COMP, and a RECEIPT and TRANSFER transaction should be indicated in the Type field.



continued on next page

Receiving and Asset Configuration continued

Viewing Assets Under Contract, Exercise #1



Open contract 1002 for these leased/rental assets and then go to the Associated Assets tab.

Result: All twelve of the desktop computers for the operations staff that were purchased and received should be reflected on this tab with a start date and end date.

Line	Asset	Description	Location	Start Date	End Date	Status	Payment Schedule?
1	2112	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2113	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2114	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2115	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2116	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2117	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2118	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2119	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2120	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2121	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2122	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	
1	2123	Base Configuration template for administration	HARDWARE	8/29/05	8/28/07	NOT READY	

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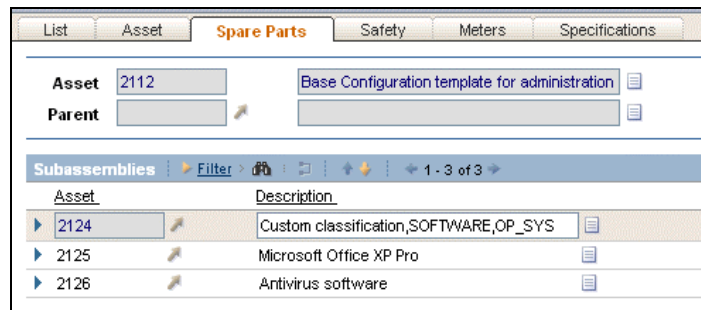
Receiving and Asset Configuration continued

Viewing Assets Under Contract, Exercise #2

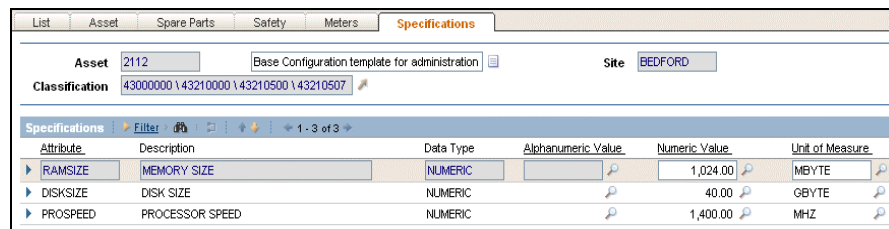


With the Associated Assets tab open, click the Detail Menu button for the Asset field. Select Desktop Asset #1, then open the Assets application and verify the following items:

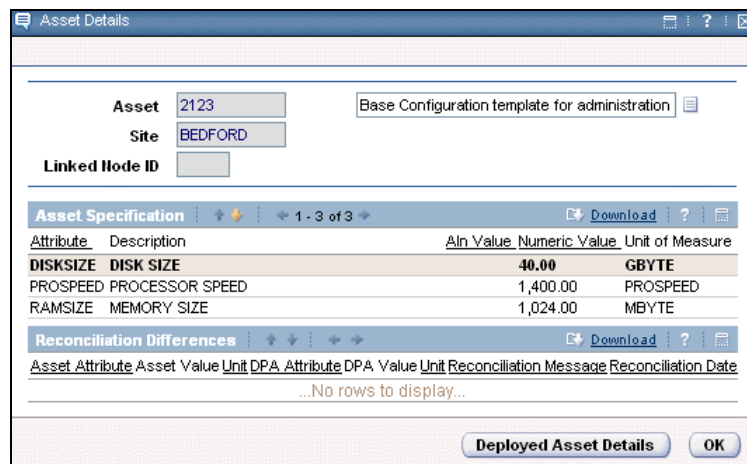
- The serial numbers carried over.
- The item assembly structure was applied.



- Classification and Specification attributes were applied on the Specifications tab.



- Specification attributes are viewable on the Asset Details action.



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Receiving and Asset Configuration continued

Viewing and Searching, #1



Go to the Inventory application and search for the Fast Ethernet Switch.

1. What is your current balance?
 2. Where are they located?
-

Viewing and Searching, #2



Search for the UNIX Server.

1. What is the current balance?
 2. How many rotating assets are there?
 3. Why is there a discrepancy between the two?
-

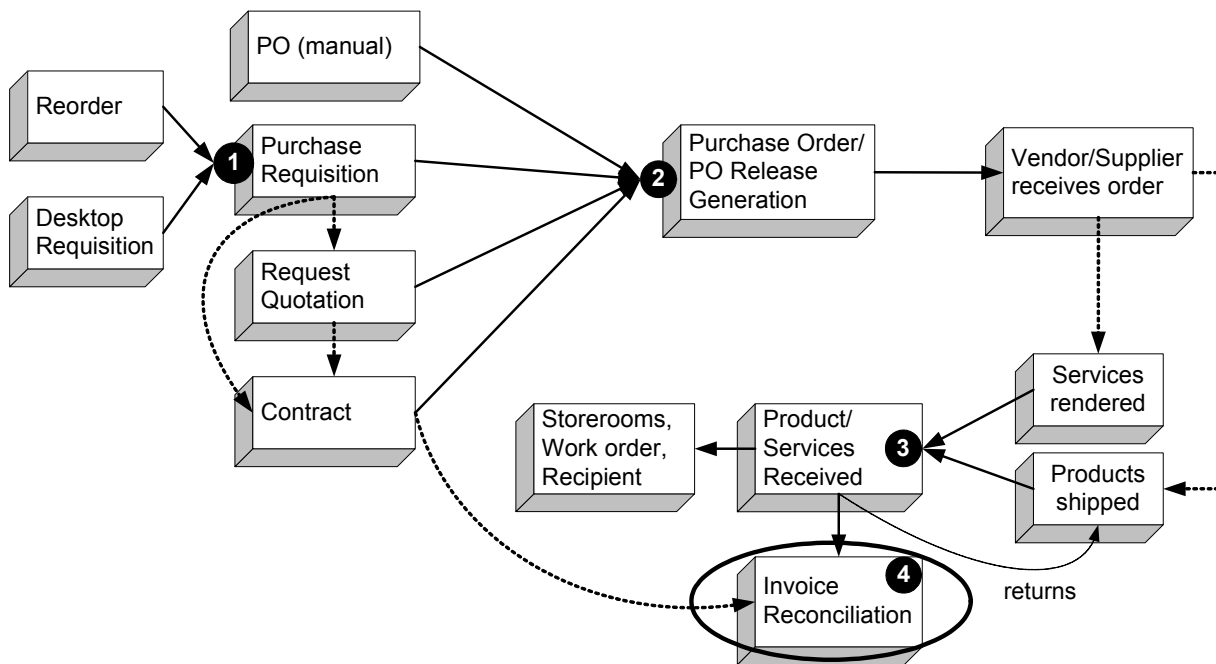
Invoice Reconciliation

Introduction

As a result of purchasing materials and services, your company receives invoices from vendors. Maximo allows you to enter vendor invoice information, match that information against the PO and receipt of materials and services, and then approve the invoice so it can be passed on to your accounts payable system.

We Are Here

Receive invoices from vendors for items and services that you have received.



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Invoice Reconciliation continued

Key Terms

We will use the following key terms in this section:

- An *invoice* is a bill from a vendor for delivered materials or services.
- A *3-1 match* is a match of a line item on a purchase order, a receipt, and an invoice; used when the **Receipts Required** field on the PO is “Y.”

The Invoices Application

An *invoice* is a bill from a vendor for delivered products or services. The **Invoices** application lets you record invoices as well as debit and credit notes from vendors, and match invoice details against POs and receipts. It also lets you create invoices for which there are no receipts.

The screenshot displays the 'Invoices' application interface. At the top, there is a navigation bar with 'Invoices' and a search bar. Below this, the main header shows 'Invoice 1045', 'PAYMENT FOR CONTRACT 1017', 'Site BEDFORD', 'Type SCHED', and 'Status SCHED'. The interface is divided into several sections: 'Invoice Details', 'PO Details', 'Dates', 'Remit To', and 'Costs'. The 'Invoice Details' section includes fields for Original Invoice, Vendor Invoice, Approval #, and Entered By (WILSON). The 'PO Details' section includes PO, Buyer, Receipts, Total Cost, and Uninvoiced Total. The 'Dates' section includes Contract Reference (1017), Contract Type (LEASE), Contract Reference Revision (0), Payment Schedule (1), Entered Date (1/28/05 5:10 PM), Invoice Date, Due Date (6/1/06), and Paid Date. The 'Remit To' section includes Company (DATACHIP), Address, Contact, Payment Terms, and Check Code. The 'Costs' section includes Check #, Bank, Bank Reference #, Phone, Pay Tax to Vendor? (checked), Pretax Total (817.32), Total Tax (0.00), Invoice Total (817.32), Currency (USD), and Total Base Cost (817.32).

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Invoice Reconciliation continued

Invoices Tabs The **Receiving** application has four tabs:



Use this tab...	To...
List	Search for invoice records.
Invoices	Enter general “header” information about the invoice. This includes an optional description of the invoice, the status, and the PO number and/or vendor (the Remit To company).
Invoice Lines	Enter or view the line items for materials and services for which you have been invoiced. You can enter the line items manually, or use the Copy PO Lines button.
Terms and Conditions	Associate new or existing terms with a purchase order.

Three Types of Invoices

The invoice you create in Maximo represents one of these invoice types:

Invoice Type	Description
Single PO	An invoice related to a single purchase order—you enter information such as the invoice number, corresponding PO number, any receipts recorded for the PO, and information specific to the invoice.
Multi POs	An invoice related to many purchase orders—you enter general invoice data on the Invoice tab, then list the related POs on the Invoice Lines tab.
No PO	An invoice without a related purchase order—typically, such an invoice represents a bill for which there is no purchase requisition or purchase order. Invoice-specific information is entered into the application.

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Invoice Reconciliation continued

Invoice Status The following table describes the different statuses that an invoice can have.

Status	Description
Entered (ENTERED)	The default status when you create an invoice. A newly entered invoice has some fields filled in by default; some of these are read-only. An invoice with the status of Entered can be edited.
Scheduled (SCHED)	Indicates that the invoice is part of a payment schedule, set up for a specific contract. Invoices with this status can be created only from the Contracts applications. An invoice with a status of Scheduled can be changed to any status except Entered.
Waiting for Approval (WAPPR)	This status is available only if the current invoice status is Entered or Hold. Use this status to indicate that invoice information has been entered and the invoice is now ready for review and approval by the appropriate level of staff. An invoice waiting for approval can be edited.
Approved (APPR)	This status is available only if the current invoice status is Entered, Waiting for Approval, or Hold. If you change the status directly to Paid without first approving the invoice, Maximo automatically validates the invoice for approval criteria. An approved invoice is stored as a history record; for invoices in history, you can change only the Check Code, Check Number, and Paid fields.
Hold (HOLD)	This status is available only if the current invoice status is Entered or Waiting for Approval (WAPPR). You can change the invoice to Hold status if the invoice should not yet be approved or paid.

continued on next page

Invoice Reconciliation continued

Invoice Status continued

Status	Description
Paid (PAID)	This status is available only if the current invoice status is Entered, Waiting for Approval, Approved, or Hold. If you change the status directly to Paid without first approving the invoice, Maximo automatically approves the invoice. A paid invoice is stored as a history record and cannot be modified.
Cancel (CANCEL)	This status is available only on the Change Status dialog box if the current invoice status is Entered, Waiting for Approval, or Hold. You cannot cancel an approved invoice. A canceled invoice is stored as a history record and cannot be modified.

3-1 Match

A *3-1 match* is a match of a line item on a purchase order, a receipt, and an invoice. It is used when the **Receipt Required?** field on the PO line item is selected.

Receipt Required?

Basic Process for Invoice Reconciliation

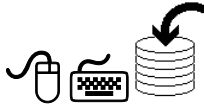
The basic invoice process consists of four steps. Step 1 starts the process, but *your work in Maximo consists of steps 2, 3, and 4.*

1. Receive the invoice from the vendor.
2. Create/enter vendor invoice information into Maximo.
3. Match the vendor invoice to the POs so that it can be approved and routed to accounts payable.
4. Approve the invoice and route it to accounts payable.

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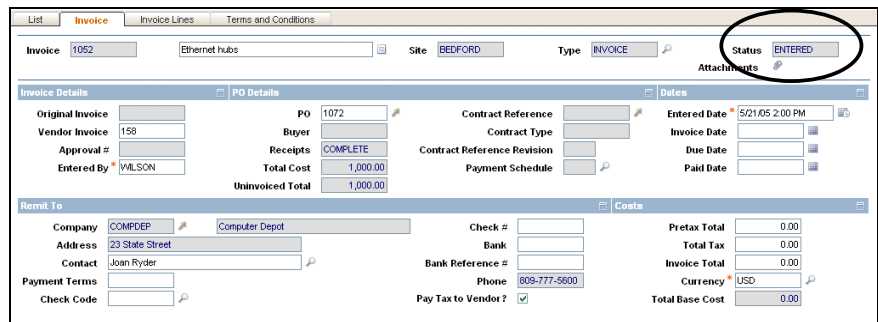
Invoice Reconciliation continued

Creating the Invoice: Step 2



In this exercise you will reconcile the vendor's invoice using the **Invoice** tab.

Step	Action								
1	Open the Invoices application. <u>Result:</u> The Invoices application opens on the List tab.								
2	Insert a New Invoice . <u>Result:</u> Maximo displays the Invoice tab for your input.								
3	Enter the following information: <table border="0"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Description</td> <td>Ethernet Hub</td> </tr> <tr> <td>Vendor Invoice</td> <td>158</td> </tr> <tr> <td>PO</td> <td>[Find the PO you created for the Ethernet hubs for MRO World]</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Description	Ethernet Hub	Vendor Invoice	158	PO	[Find the PO you created for the Ethernet hubs for MRO World]
<u>Field</u>	<u>Value</u>								
Description	Ethernet Hub								
Vendor Invoice	158								
PO	[Find the PO you created for the Ethernet hubs for MRO World]								
4	Save the record. <u>Result:</u> The invoice status is ENTERED.								

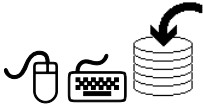


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Invoice Reconciliation continued

**Step 3:
Entering Invoice
Line Items:
Performing a 3-1
Match**

In this part of the exercise, you will use the **Copy PO Lines to Invoice** dialog box to perform a 3-1 match on the invoice.

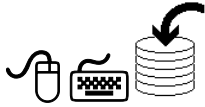


Step	Action
5	Click on the Invoice Lines tab. <u>Result:</u> The Invoice Lines tab opens.
6	Click Copy PO Lines . <u>Result:</u> The Copy PO Lines dialog box opens. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> </div>
7	Select all the PO Lines box and then click OK to copy the matching line from the PO to the Invoice Lines tab. <u>Result:</u> The Invoice Lines tab should look like the one below. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> </div>
8	Save the record. Our next exercise will begin at this point.

continued on next page

Invoice Reconciliation continued

Step 4: Approving the Invoice



In this part of the exercise, you will assume that the invoice has gone to the appropriate person, who has given the invoice approval for payment. Approving an invoice is like approving a PR or PO. In this exercise, you will approve the invoice. You will also check that the PO is closed and the invoice is entered for each PO line item.

Step	Action												
9	Change the status to APPR and clear the Close PO? field. Click OK . <u>Result:</u> The invoice status is now APPR.												
10	Click on the Invoice tab. <u>Result:</u> In the Costs section, notice that Maximo automatically calculates the values for the Pretax Total, Total Tax, and Invoice Total fields. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <table border="1"> <thead> <tr> <th colspan="2" style="background-color: #e0e0e0;">Costs</th> </tr> </thead> <tbody> <tr> <td>Pretax Total</td> <td style="text-align: right;">1,000.00</td> </tr> <tr> <td>Total Tax</td> <td style="text-align: right;">0.00</td> </tr> <tr> <td>Invoice Total</td> <td style="text-align: right;">1,000.00</td> </tr> <tr> <td>Currency</td> <td style="text-align: right;">USD</td> </tr> <tr> <td>Total Base Cost</td> <td style="text-align: right;">1,000.00</td> </tr> </tbody> </table> </div> <div style="float: left; margin-right: 10px;"> </div> Remember that the Conversion Factor value we entered in the PO record is 1.00. For multi-currency transactions, the conversion factor varies, and if PRs are approved, Maximo will automatically calculate and convert the Total Base Cost value. You will have different values.	Costs		Pretax Total	1,000.00	Total Tax	0.00	Invoice Total	1,000.00	Currency	USD	Total Base Cost	1,000.00
Costs													
Pretax Total	1,000.00												
Total Tax	0.00												
Invoice Total	1,000.00												
Currency	USD												
Total Base Cost	1,000.00												

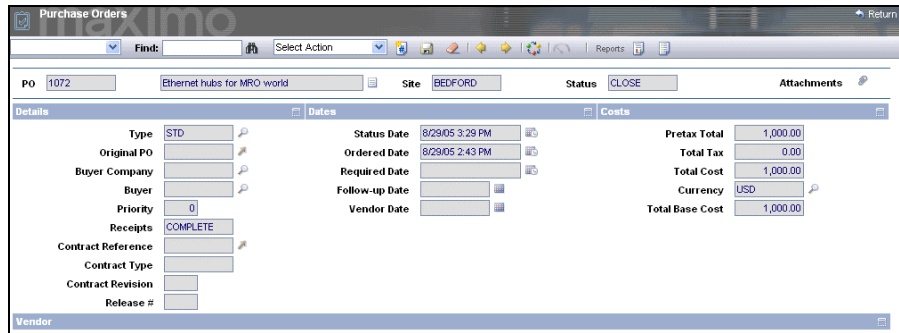
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Invoice Reconciliation continued

Step 4: Approving the Invoice

continued

Step	Action
11	Change the status to PAID and click OK . <u>Result:</u> The transaction date populates the Paid Date field.
12	Click the Detail Menu button in the PO field and select Go To Purchase Orders . <u>Result:</u> Maximo displays the purchase order record. Notice that the status is CLOSE .



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Invoice Reconciliation continued

Receiving and Configuring Rotating Items



For the Desktop for Operations Staff computers and the UNIX Servers POs, complete the invoice reconciliation processes.

1. Create an invoice.
 2. Associate the PO to the invoice record.
 3. Approve the invoice.
 4. Indicate that this invoice is paid.
 5. Go to the purchase order and verify that the status is Complete.
-

Chapter Summary

Purchase Requisitions

A purchase requisition (PR) is a written request issued internally to a purchasing department to order items or services.

You can create a PR by reordering for a storeroom replenishment or direct issue through the Inventory application, or requisitioning for materials and services through the Create Requisition or Purchase Requisitions applications.

After a purchase requisition has been approved, you can assign its line items to one or more purchase orders. A purchase requisition can be closed after all its line items are assigned to a purchase order. A single purchase requisition can list items or services for several vendors, as vendors are not required to be specified on a PR.

The Create Requisition Application

You use the Create Requisition application to create and submit a purchase requisition. The requisition contains the requisition description, shipping information, charge information, and requisition lines.

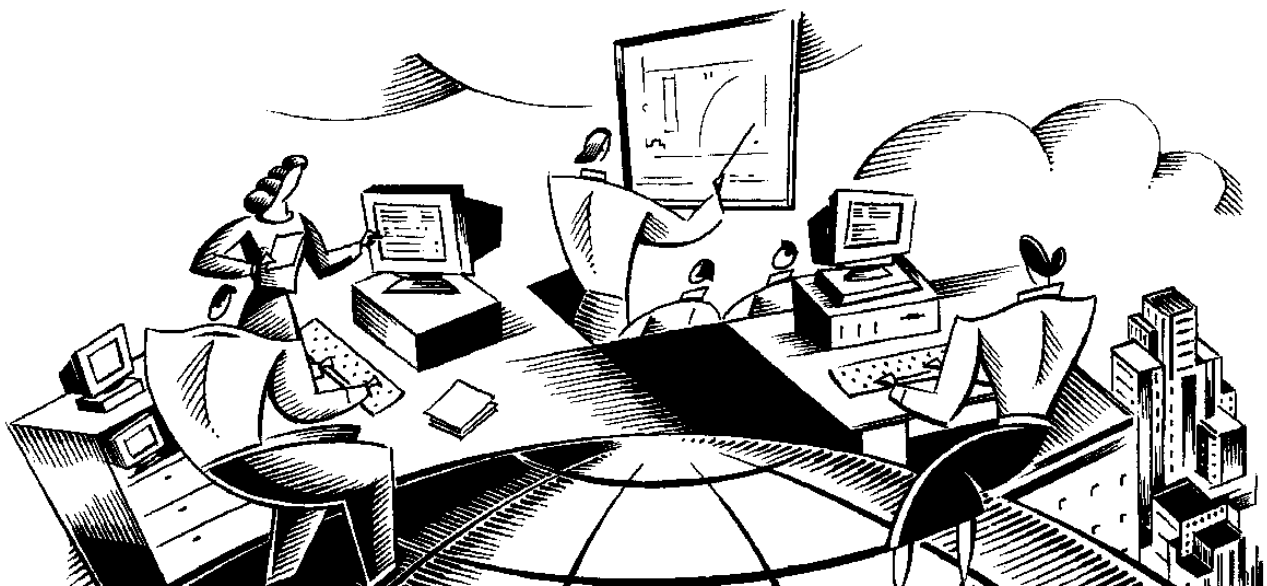
The Purchase Requisitions Application

You use the Purchase Requisitions application to create purchase requisitions for items, supplies, and services.

NOTES:

NOTES:

Chapter 9: Deployment



In This Chapter

This chapter contains the following topics:

Topic	See Page
Chapter Overview	9-1
Authorizing and Executing	9-4
Auditing and Reconciling of IT Assets Overview	9-9
Auditing: Maximo Discovery	9-14
Migrating and Viewing Data: Fusion and Deployed Assets	9-31
Deployed Assets	9-37
Reconciliation	9-41
Chapter Summary	9-47

Chapter Overview

Introduction

In order to take full advantage of procurement policies, software licenses, lease contracts, and more, organizations must have the tools to discover what is deployed out on their network, and be able to compare their findings with what theoretically should be found out on the network.

Learning Objectives

When you have completed this chapter, you should be able to:

- use the Issues and Transfers application to transfer assets to operating locations,
 - use the Discovery tool, and
 - discuss the reconciliation process and why it is important to have defined and established audit data points.
-

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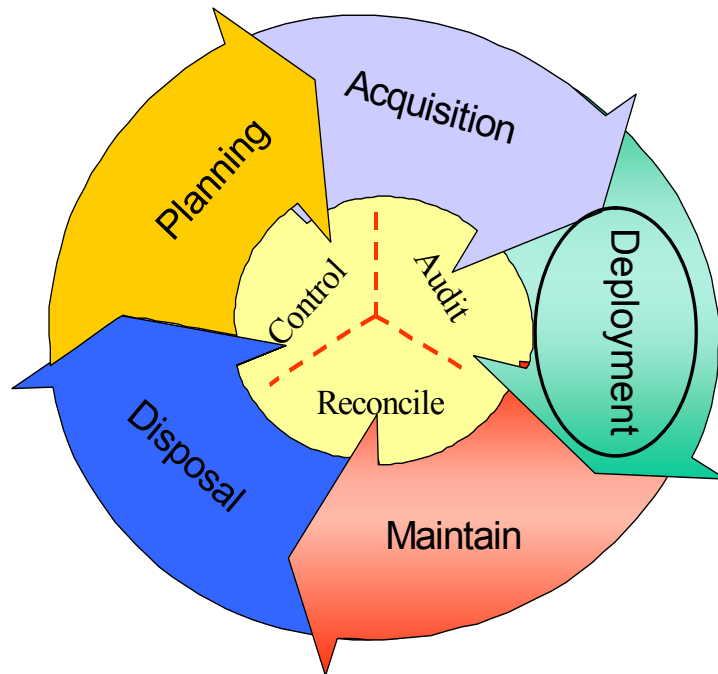
Chapter Overview continued

Chapter Focus: Deployment

In the asset lifecycle Deployment stage you carry out activities related to:

- the deployment of assets to staff,
- the discovery and auditing of assets out on the organization's network, and
- the reconciliation between what you have (authorized) and what has been discovered.

This chapter will cover how you can use Maximo for these components in the Deployment stage.



continued on next page

Chapter Overview continued

Chapter Focus: continued
Deployment

Use these applications...	To...
Assets, Changes, Issues and Transfers, and Work Order Tracking	Activate and execute install, move, add, and change (IMAC) transactions against assets
Maximo Discovery	Audit and take a snapshot of the organization's assets
Deployed Assets module	Report on and manage discovered asset details
Reconciliation	Reconcile discovered assets with those "authorized" in Maximo
View Asset Details action	View Maximo asset details against the reconciled findings

Authorizing and Executing

Introduction

After an asset has been received into the organization, the IT staff must physically conduct activities that set up and put the asset into operation, and then electronically indicate that the asset is in operation by entry into Maximo.

Section Focus

In this section we will use Maximo to conduct these activities to indicate the following information:

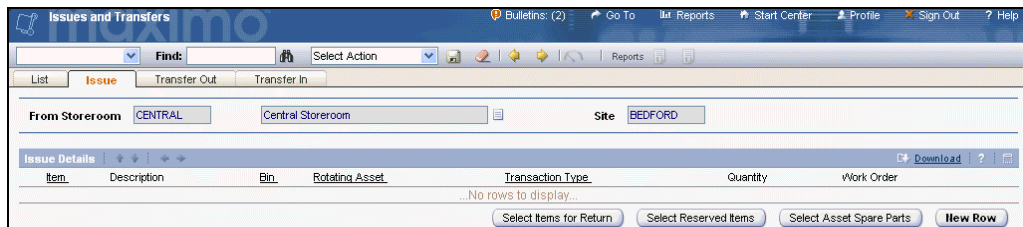
- What, if anything, has been added to the base configuration using the Issues and Transfers application
 - Where the asset is located by using the Issues and Transfers application
 - Who the asset is for by using the Assets application
-

Issuing

You use the Issues and Transfers application to transfer assets and items from the storeroom to:

- Assets
- Locations
- Work orders
- GL accounts

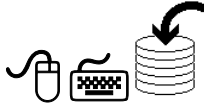
When you issue an inventory item from any one of these applications, Maximo decreases the inventory balance for that item.



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Authorizing and Executing continued

Issuing Assets



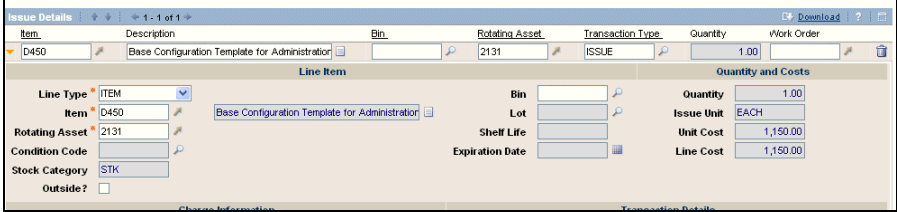
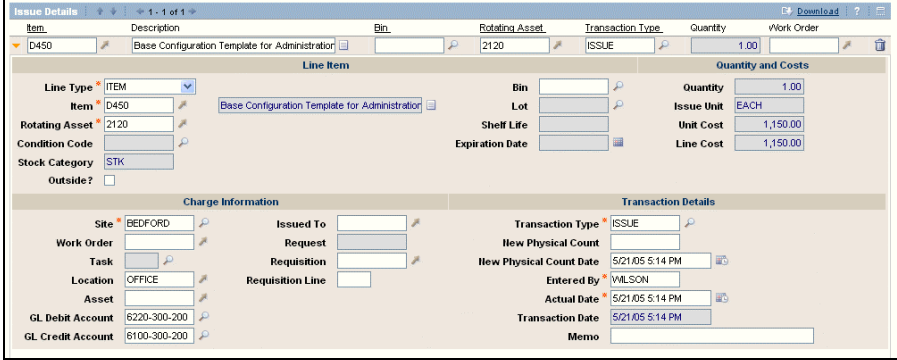
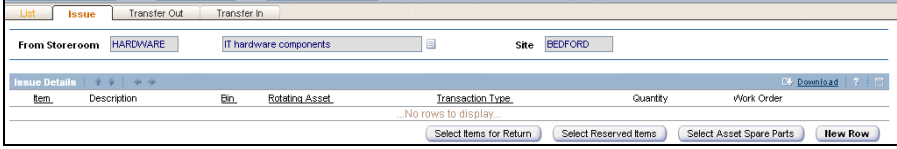
Follow these steps to issue an asset to a location.

Step	Action
1	Open the Issues and Transfers application.
2	Search for Hardware in the Location field and retrieve the record.
3	Click on the Issues tab. <u>Result:</u> Maximo opens the Issues tab.
4	Click New Row .
5	Enter D450 in the Item field.
6	In the Rotating Asset field, click the Detail Menu button and choose Select Value . <u>Result:</u> Maximo displays a list of the Desktop computers.

continued on next page

Authorizing and Executing continued

Issuing Assets continued

Step	Action
7	<p>Click on the asset designated as Asset #1 in the previous chapter's exercise (page 8-64).</p> <p>Record your asset number here: _____</p> <p><u>Result:</u> You are brought back to the Issues tab.</p> 
8	<p>In the Location field, enter OFFICE to indicate where this asset is going and who is being charged.</p>
9	<p>In the GL Debit Account field, enter 200 on the ??? components.</p> <p><u>Result:</u> Your Item Details table window should look like this.</p> 
10	<p>Save the record.</p> <p><u>Result:</u> The asset is issued to the location.</p> 

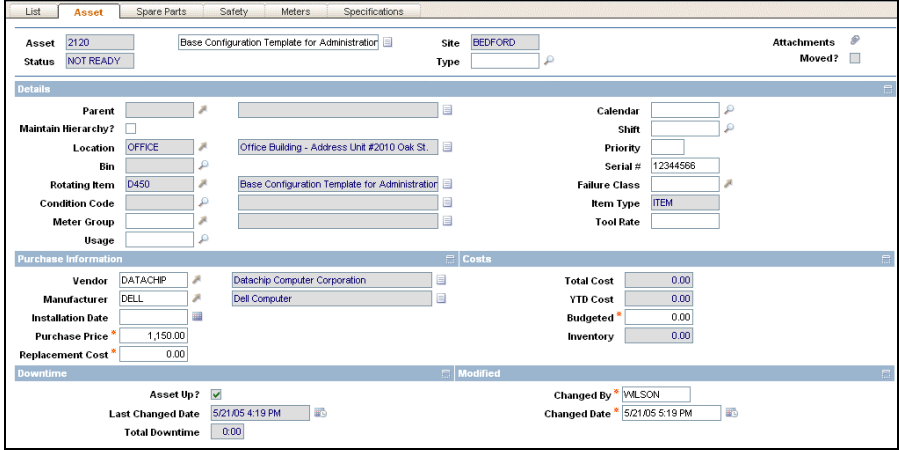
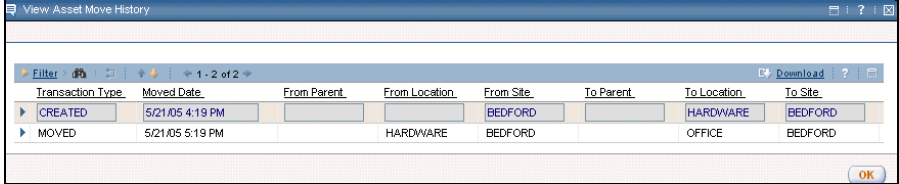
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Authorizing and Executing continued

Viewing an Asset's Current State



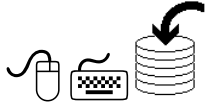
To view the transactions undertaken against the desktop computer to date, follow these steps.

Step	Action
1	<p>Go to the Assets application and retrieve the asset you just transferred to the OFFICE location.</p> <p><u>Result:</u> Your Asset tab screen should look similar to the one below. The asset's current location should be OFFICE.</p> 
2	<p>To view its Asset Move history, from the Select Action menu, select View Asset Move History. When you are finished viewing the history, click OK to return to the Asset tab.</p> <p><u>Result:</u> Your Asset Move History window should look like this.</p> 

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Authorizing and Executing continued

Associate Users



Complete the following steps to complete the administrative details with setting up this asset.

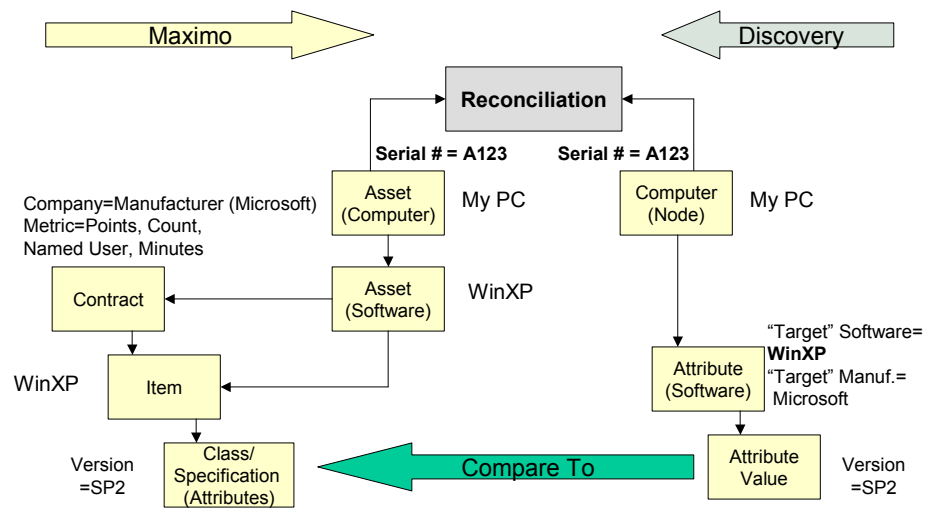
1. Associate Allan Ball as the Primary and the User of this asset.
 2. Ensure that this asset is under contract 1002.
 3. Change the status to OPERATING. Ensure that this status rolls down to its children.
-

Auditing and Reconciling of IT Assets Overview

Introduction

In order to take full advantage of procurement policies, software licenses, lease contracts, and more, organizations have the tools to discover what is deployed out on their network and to compare their findings with what theoretically should be found out on the network. Maximo supports the discovery or audit of your organization's assets and configurations using **Maximo Discovery** (a third-party tool) or another audit tool, and the **Reconciliation** application to reconcile against your authorized assets, that is, those assets and attributes created in the **Assets** application.

Discovery and Reconciliation Overview



continued on next page

Auditing and Reconciling of IT Assets Overview continued

Revisiting: IT Asset Data in Maximo

Recall that Maximo maintains two distinct sets of IT asset data in two modules: the **Assets** module and the **Deployed Assets** module.

- Maximo maintains asset records for purchased or leased IT assets in the **Assets** application. You create these records in the **Assets** application or when you use the **Receive Rotating Items** action in the **Receiving** application.

The screenshot displays the Maximo 'Assets' application interface. At the top, there is a navigation bar with 'Assets' and 'maximo' logos, and a menu with 'Bullets: (2)', 'Go To', 'List Reports', 'Start Center', 'Profile', 'Sign Out', and 'Help'. Below this is a search bar with 'Find:' and a 'Select Action' dropdown. A toolbar contains icons for 'List', 'Asset', 'Spare Parts', 'Safety', 'Meters', and 'Specifications'. The main content area shows details for asset 1234, with status 'NOT READY' and site 'BEDFORD'. The 'Details' section includes fields for Parent, Location, Bin, Rotating Item (DT66), Condition Code, Meter Group, Usage, Calendar, Shift, Priority, Serial #, Failure Class, and Item Type (ITEM). The 'Purchase Information' section includes Vendor, Manufacturer, Installation Date, Purchase Price (0.00), and Replacement Cost (0.00). The 'Costs' section shows Total Cost (0.00), YTD Cost (0.00), Budgeted (0.00), and Inventory (0.00). The 'Downtime' section has 'Asset Up?' checked, 'Last Changed Date' 8/9/05 1:56 PM, and 'Total Downtime' 0.00. The 'Modified' section shows 'Changed By' WILSON and 'Changed Date' 8/9/05 1:56 PM.

continued on next page

Auditing and Reconciling of IT Assets Overview continued

Revisiting: IT Asset Data in Maximo

continued

- The **Deployed Assets** module applications maintain data collected directly from assets actually installed in your enterprise. To gather this data, asset discovery tools (Maximo Discovery or another tool, such as SMS or Tivoli Inventory) scan computers, network devices, and network printers deployed in your enterprise and record information about the hardware and software installed on those assets.

The following example shows the **Computer** application in the **Deployed Assets** module.

The screenshot displays the Maximo 'Computers' application interface. The main window shows the 'Computer' application with the following details:

- Computer ID:** KERRY_R_00065BC50E44
- Asset Tag:** KERRY_R_krielly CENTENNIAL 00065BC50E44
- Site:** [Empty]
- Role:** Network PC

The 'Computer Details' section includes:

- Serial Number:** 89KLG0J
- Asset Tag:** [Empty]
- Manufacturer:** Dell
- Make/Model:** OptiPlex GX240
- Logon:** krielly
- Domain:** CENTENNIAL

The 'RAM Information' section includes:

- RAM Type:** [Empty]
- RAM Description:** Total Ram
- RAM Size:** 512.00 MB
- RAM Total Slots:** 0
- RAM Unused Slots:** 0

The 'BIOS Information' section includes:

- BIOS:** Dell A03
- BIOS Version:** A03
- BIOS Date:** 3/1/02 12:00 AM
- PIHP?:**
- SMBIOS?:**

The 'Motherboard Information' section includes:

- Motherboard Description:** [Empty]
- Serial Number:** [Empty]
- Asset Tag:** [Empty]
- Manufacturer:** [Empty]
- Make/Model:** [Empty]
- Chipset:** [Empty]

The 'Detection Information' section includes:

- Software Detection Tool:** Maximo Discovery (Centennial Discovery) 4.5
- Software Last Scan Date:** [Empty]
- Hardware Detection Tool:** Maximo Discovery (Centennial Discovery) 4.5
- Hardware Last Scan Date:** 6/23/03 2:25 PM
- Supports SHMP?:**
- Supports WMI?:**

continued on next page

Auditing and Reconciling of IT Assets Overview continued

Revisiting: Reconciliation and Application Overview

The **Reconciliation** module contains six applications.

- Reconciliation Tasks
- Task Filters
- Link Rules
- Comparison Rules
- Link Results
- Reconciliation Results

These applications enable you to configure a behind-the-scenes process that reconciles the IT asset information maintained in the **Assets** applications and on the **Specifications** tab...

The screenshot shows the 'Specifications' tab with a search filter for 'Asset: 20000' and 'Site: MCLEAN'. Below the search bar is a table of specifications:

Attribute	Description	Data Type	Alphanumeric Value	Numeric Value	Unit of Measure	Section
▶ RAMSIZE	MEMORY SIZE	NUMERIC		96.00	MBYTE	
▶ DISKSIZE	DISK SIZE	NUMERIC		4.00	GBYTE	
▶ PROSPEED	PROCESSOR SPEED	NUMERIC		266.00	MHZ	

...against the deployed asset data maintained in the **Deployed Assets** module applications (the example below is the **Computers** application).

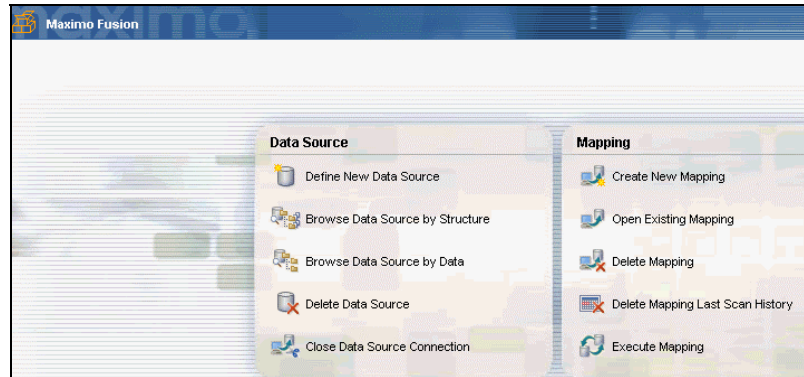
The screenshot shows the 'Computers' application interface. The top navigation bar includes 'List', 'Computer', 'Processors', 'Storage', 'Software', 'Network', 'Communication', 'Media Adapters', 'Displays', 'Image Devices', and 'Users'. The main content area displays details for a computer with ID 'HMLN341 000D567AC440' and 'HMLN341 Beth_Collins HMLN341 000D567AC'. The 'Computer Details' section includes fields for Serial Number, Asset Tag, Manufacturer (Dell), Make/Model (Latitude D600), Logon (Beth_Collins), and Domain (HMLN341). The 'RAM Information' section shows RAM Type, Description (Total Ram), Size (1,024.00 MBYTE), Total Slots (0), and Unused Slots (0). The 'BIOS Information' section shows BIOS (Dell A08), Version (A08), and Date (10/29/03 12:00 AM). The 'Motherboard Information' section includes fields for Description, Serial Number, Asset Tag, Manufacturer, Make/Model, and Chipset. The 'Detection Information' section shows Software Detection Tool (Maximo Discovery (Centennial Discovery) 4.5), Software Last Scan Date, Hardware Detection Tool (Maximo Discovery (Centennial Discovery) 4.5), Hardware Last Scan Date (5/11/05 12:00 AM), and checkboxes for Supports SHMP? and Supports VMI?.

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Auditing and Reconciling of IT Assets Overview continued

Getting “Discovered” Information into Maximo: Deployed Asset and Fusion

Deployed asset information comes from the Discovery agent and is pulled (mapped) into Maximo via the **Fusion** application.



Not Covered



This course does not cover the following material:

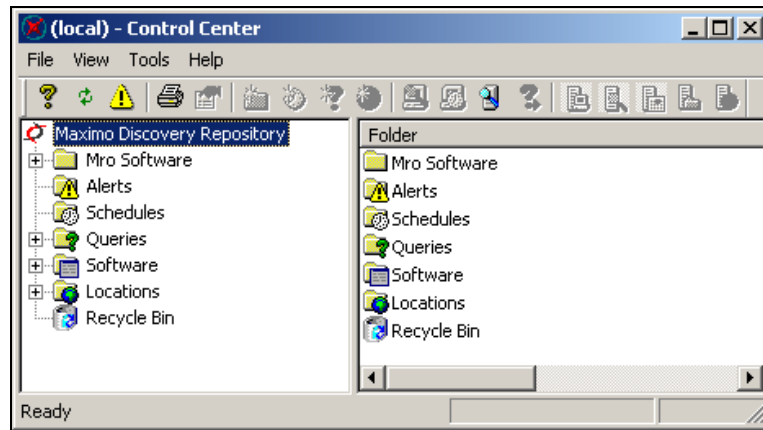
- Reconciliation setup. Please refer to the *Maximo Reconciliation Module Implementation Guide* for further information.
 - Maximo Discovery installation and setup. Please refer to the *Discovery Administrator Guide* for further information.
-

Auditing: Maximo Discovery

Introduction

A large part of managing a dynamic IT department is knowing where your assets are, as well as their current configuration. It is important to know what changes have taken place over time with the asset configuration (for example, memory has been increased or a higher capacity hard drive was installed).

This process has multiple steps. The first step is to “discover” how the assets are currently configured out on the network or in the field. Maximo Discovery is the tool that gathers the configuration details.



Maximo Discovery



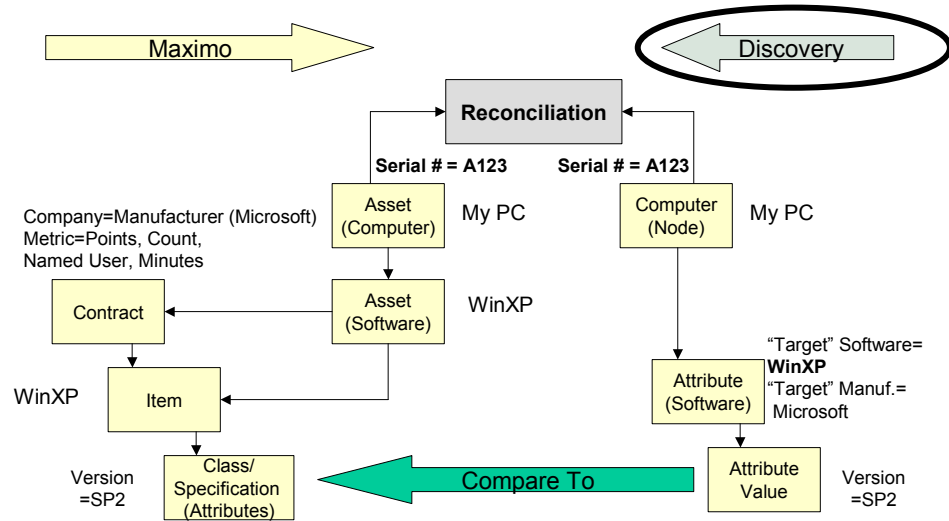
Maximo Discovery is a third-party tool. This section provides a general description and a basic demonstration of how you can use this tool in IT asset management when using Maximo. For further information, please refer to the *Discovery Administrator* guide.

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Auditing: Maximo Discovery continued

We Are Here

This section focuses on using the **Maximo Discovery** application to discover IT assets.

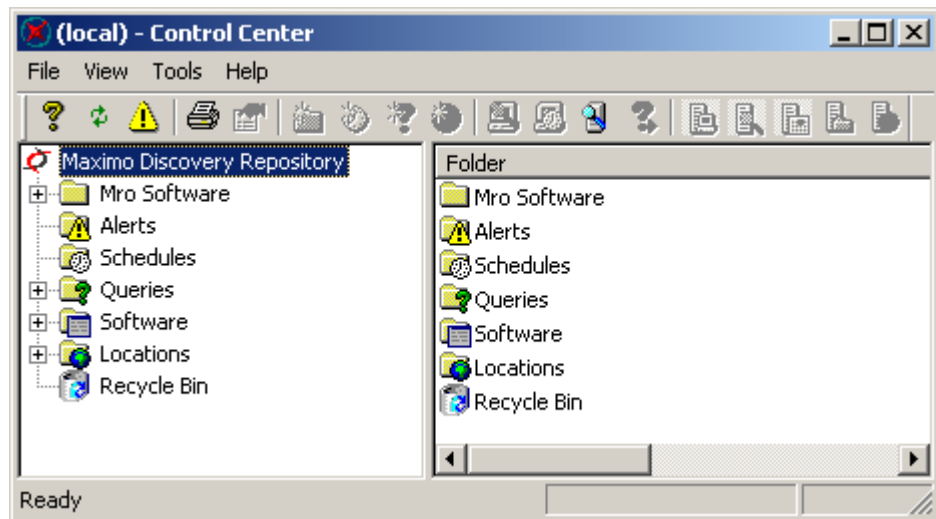


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Auditing: Maximo Discovery continued

The Discovery Control Center

The Control Center controls the Discovery processes. The Control Center screen is divided into two panes: Tree Control is on the left and the Contents Window is on the right. The Control Center issues messages to the Client Agent, which performs the auditing. Messages from the Client Agent are returned to the Server Agent, which updates the Repository.



Audits

An audit provides information about the servers and computers in your organization. The results of an audit are stored in the Repository and viewed in the Discovery Control Center. As you perform more audits, the results build up as an audit history, so that you have a picture of changes over a period of time.

Classroom Setup



Some classroom environments might not be set up to do the exercises in this section. In this case the instructor will instead demonstrate or discuss the auditing and reconciliation process.

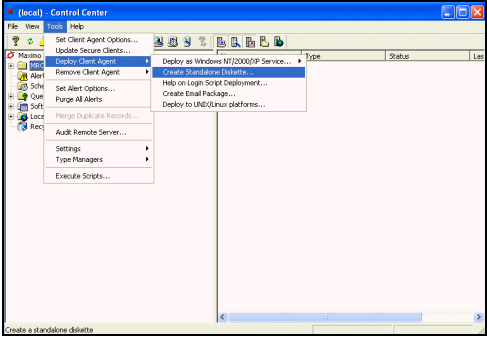
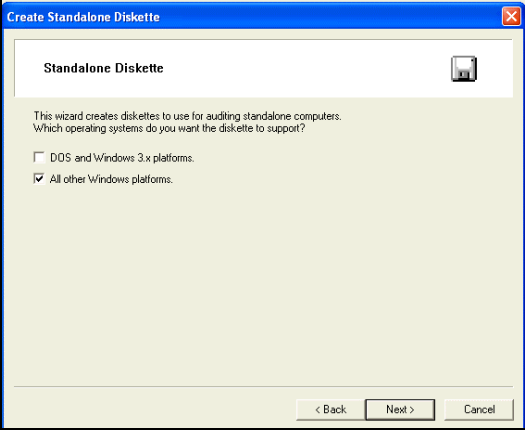
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Auditing: Maximo Discovery continued

Computer Audit



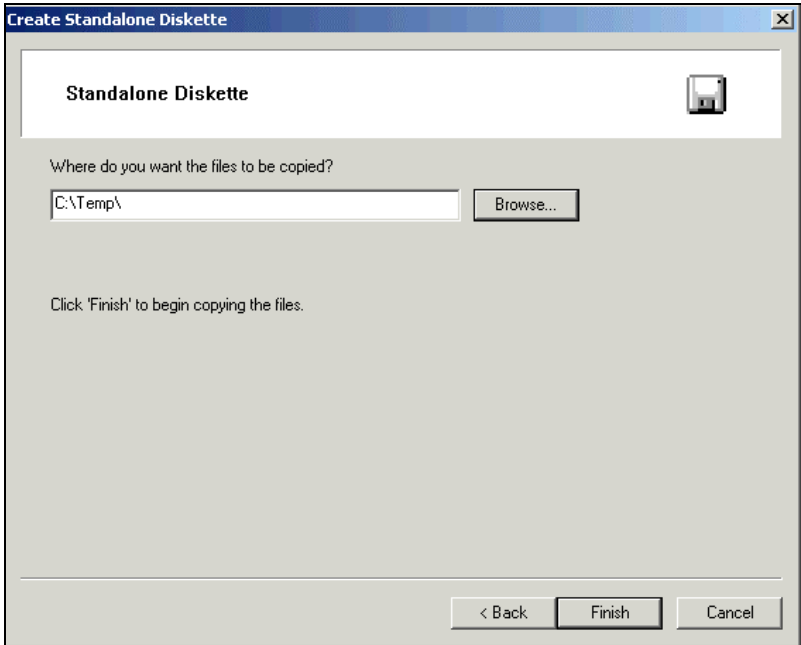
In this exercise we are going to conduct a very basic manual audit of your computer.

Step	Action
1	<p>From the toolbar, select Tools > Deploy Client Agent > Create Standalone Diskette.</p>  <p><u>Result:</u> The Create Standalone Diskette dialog box opens.</p> 

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Auditing: Maximo Discovery continued

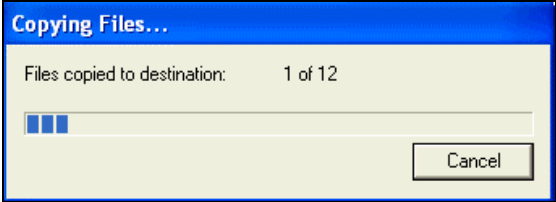

Computer Audit continued

Step	Action
2	<p>Click Next.</p> <p><u>Result</u>: Maximo displays a message asking where you want to copy the files.</p>
3	<p>Click the Browse button, and browse to the C:\Temp folder.</p> <p><u>Result</u>: Your dialog box should look like the one below.</p> 

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Auditing: Maximo Discovery continued

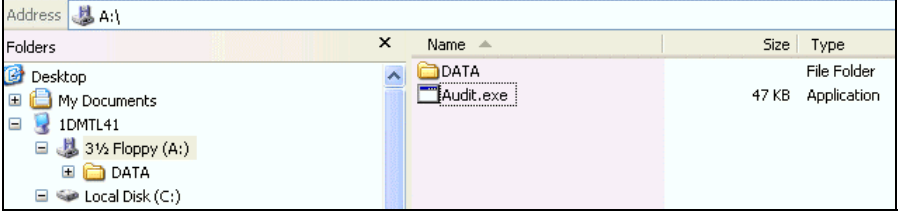
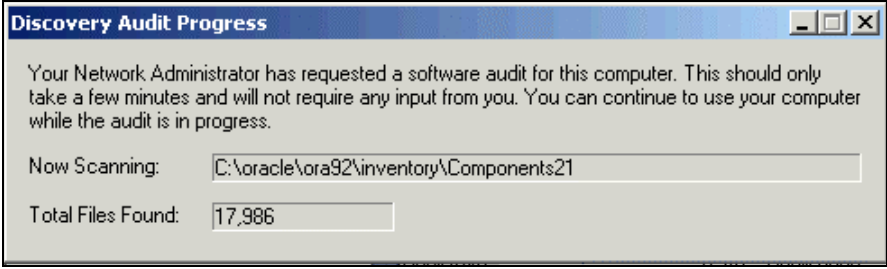
Computer Audit continued

Step	Action
4	<p>Click Finish.</p> <p><u>Result</u>: Discovery starts to create the discovery agent.</p>  
5	Click OK when Maximo indicates that the diskette has been created.

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Auditing: Maximo Discovery continued

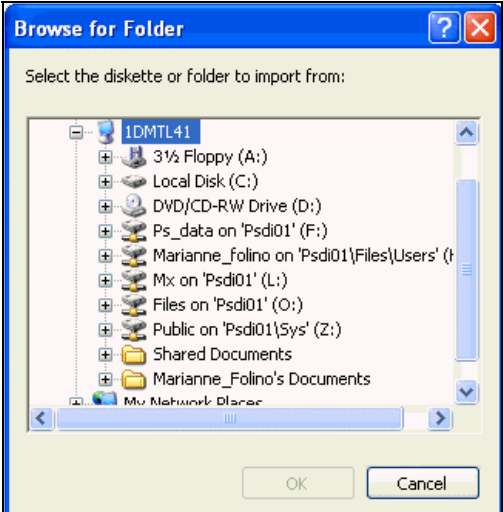
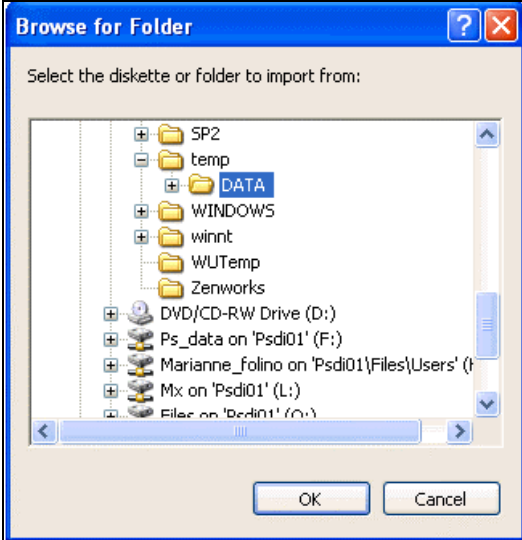
Computer Audit continued

Step	Action
6	<p>Using Windows Explorer, go to your C:\Temp folder.</p> 
7	<p>Double-click on Audit.exe.</p> <p><u>Result:</u> The agent starts to audit your computer. It might take a few minutes.</p>  <p>When the audit of your computer is complete, this dialog box will close.</p>

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Auditing: Maximo Discovery continued

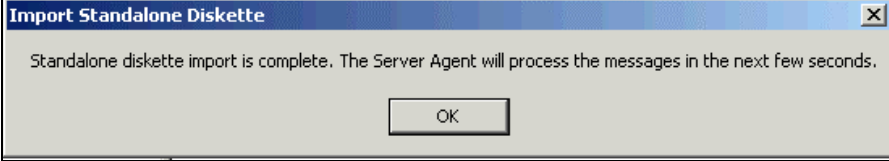
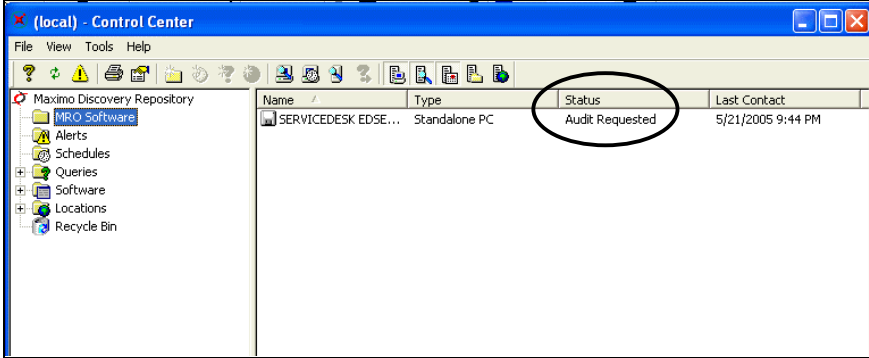
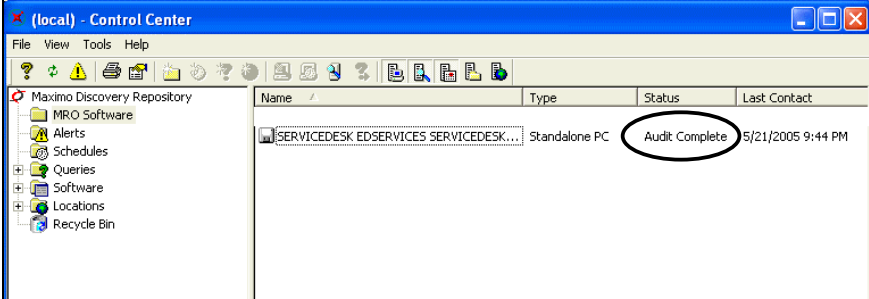
Computer Audit continued

Step	Action
8	<p>After the dialog box closes, select Import > Standalone Diskette from the Discovery application File toolbar.</p> <p><u>Result:</u> The Browse for Folder dialog box opens.</p> 
9	<p>Browse to the C:\Temp folder and highlight the DATA folder.</p> 

continued on next page

Auditing: Maximo Discovery continued

Computer Audit continued

Step	Action								
10	<p>Click OK.</p> <p><u>Result:</u> The importing of the discovered files begins.</p>  <p>The screenshot shows a dialog box titled "Import Standalone Diskette" with a close button (X) in the top right corner. The text inside the dialog box reads: "Standalone diskette import is complete. The Server Agent will process the messages in the next few seconds." At the bottom center of the dialog box is an "OK" button.</p>								
11	<p>Click OK. In the left pane, click on MRO Software.</p> <p><u>Result:</u> The audit computer name appears in the left pane and the status indicates Audit Requested.</p>  <p>The screenshot shows the "Control Center" window. On the left is a tree view under "Maximo Discovery Repository" with "MRO Software" selected. The main pane shows a table with the following data:</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Status</th> <th>Last Contact</th> </tr> </thead> <tbody> <tr> <td>SERVICEDESK EDSE...</td> <td>Standalone PC</td> <td>Audit Requested</td> <td>5/21/2005 9:44 PM</td> </tr> </tbody> </table> <p>The "Status" column value "Audit Requested" is circled in the screenshot.</p>	Name	Type	Status	Last Contact	SERVICEDESK EDSE...	Standalone PC	Audit Requested	5/21/2005 9:44 PM
Name	Type	Status	Last Contact						
SERVICEDESK EDSE...	Standalone PC	Audit Requested	5/21/2005 9:44 PM						
12	<p>After a few minutes, from the View toolbar menu, select Refresh.</p> <p><u>Result:</u> The status indicates Audit Complete, which means that all the data has been brought into Discovery.</p>  <p>The screenshot shows the "Control Center" window after a refresh. The table in the main pane now shows:</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Status</th> <th>Last Contact</th> </tr> </thead> <tbody> <tr> <td>SERVICEDESK EDSE... SERVICEDESK...</td> <td>Standalone PC</td> <td>Audit Complete</td> <td>5/21/2005 9:44 PM</td> </tr> </tbody> </table> <p>The "Status" column value "Audit Complete" is circled in the screenshot.</p>	Name	Type	Status	Last Contact	SERVICEDESK EDSE... SERVICEDESK...	Standalone PC	Audit Complete	5/21/2005 9:44 PM
Name	Type	Status	Last Contact						
SERVICEDESK EDSE... SERVICEDESK...	Standalone PC	Audit Complete	5/21/2005 9:44 PM						

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Auditing: Maximo Discovery continued

Viewing the Results of an Audit



After you have run an audit, you might want to view the results. Complete the following steps to view the results of the audit you just ran on your computer.

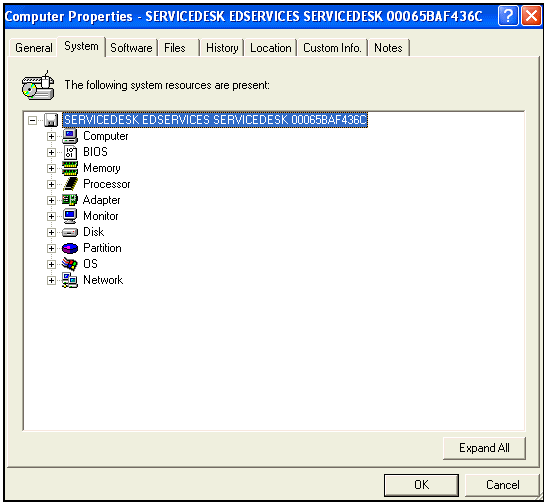

Step	Action
1	<p>In the left pane, double-click on the computer name.</p> <p><u>Result:</u> The General tab opens.</p> <div> </div> <p>This tab provides information on the name given to the computer by the user or administrator; the type of computer; the organizational unit (OU) in which the computer resides; the status; the unique number (ID) for the computer to distinguish it from the other computers audited on the network; the date the last message was received from the computer (Last Contact Date); the audit schedule attached to this computer (Audit Schedule); the Discovery internal, unique ID for the computer (Client Address); the method by which the Control Center communicates with the client computer (Comms. Method); the MAC address of the computer; and the current IP address of the computer.</p>

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Auditing: Maximo Discovery continued

Viewing the Results of an Audit

continued

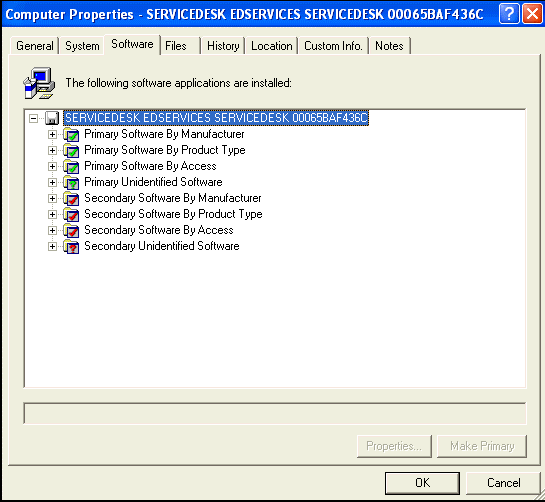
Step	Action
2	<p>Click on the System tab.</p> <p><u>Result:</u> The System tab opens.</p>  <p>The System tab displays hardware and network details for the selected computer. You can click on each of the plus  icons or click the Expand All button to view the details next to each of the categories.</p>

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Auditing: Maximo Discovery continued

Viewing the Results of an Audit

continued

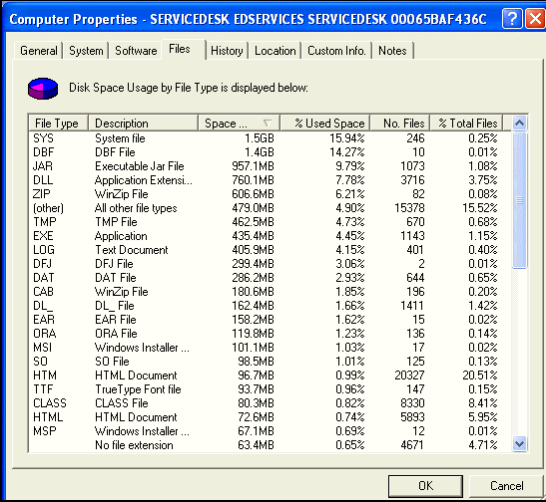
Step	Action
3	<p>Click on the Software tab.</p> <p><u>Result:</u> The Software tab opens.</p>  <p>The Software tab is divided into primary and secondary software. <i>Primary</i> software is software that a computer is set up to use. <i>Secondary</i> software is all the other software discovered on that computer.</p>

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Auditing: Maximo Discovery continued

Viewing the Results of an Audit

continued

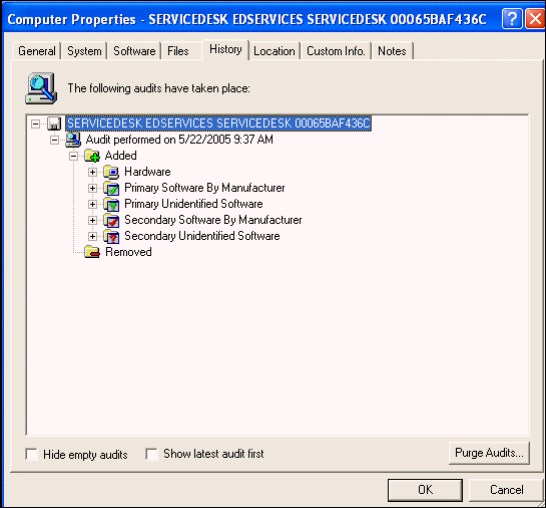

Step	Action
4	<p>Click on the Files tab.</p> <p><u>Result:</u> The Files tab opens.</p>  <p>The Files tab displays a summary of disk space usage by file type extension. This is the total usage across all hard disks. By default, the list is in order of decreasing space used, but you can reorder the page by clicking on the column titles. In addition, by default, the top 50 file types (in terms of disk space usage) are shown. All other file types are grouped under All Other File Types.</p>

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Auditing: Maximo Discovery continued

Viewing the Results of an Audit

continued

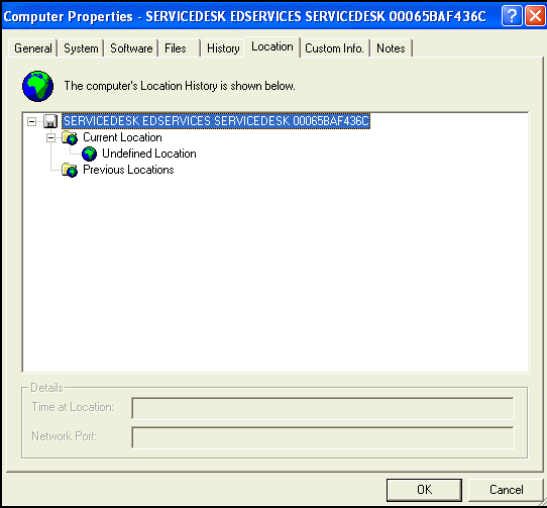
Step	Action
5	<p>Click on the History tab.</p> <p><u>Result:</u> The History tab opens.</p>  <p>The History page lists the audits performed on a particular computer. For each audit, you can display details of the hardware and software added and removed. You can also delete the audit history of a computer.</p> <p>The first time that a computer is audited, all of the hardware and software discovered on the computer is included in the Added folder. (The Added folder is visible when you click on the plus  icons next to the audits.)</p>

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Auditing: Maximo Discovery continued

Viewing the Results of an Audit

continued

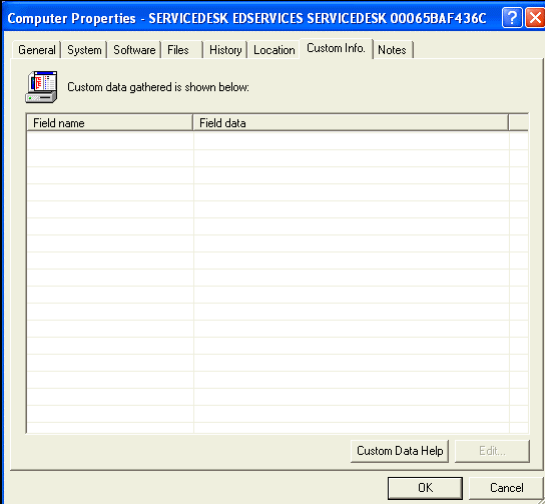
Step	Action
6	<p>Click on the Location tab.</p> <p><u>Result:</u> The Location tab opens.</p>  <p>The Location tab lists the current and previous locations for the selected computer.</p>

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Auditing: Maximo Discovery continued

Viewing the Results of an Audit

continued

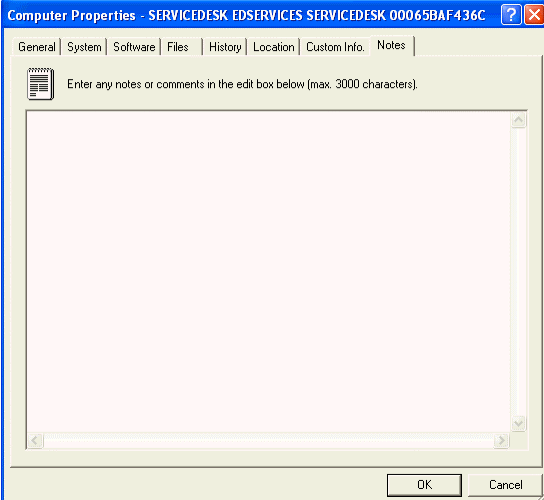
Step	Action
7	<p>Click on the Custom Info. tab.</p> <p><u>Result:</u> The Custom Info. tab opens.</p>  <p>The Custom Information tab displays the information entered by users when the Client Agent is first installed on their computer or at subsequent audits. You can customize the user input dialog box and the information users are prompted to enter.</p>

continued on next page

Auditing: Maximo Discovery continued

Viewing the Results of an Audit

continued

Step	Action
8	<p>Click on the Notes tab.</p> <p><u>Result:</u> The Notes tab opens.</p>  <p>The Notes tab is a free-form page in which you can enter text relating to a computer. For example, you might want to use it as a reminder of things you need to do or have done on a computer, such as “Changed hard disk on 15/1/2005.” Notes are limited to 3000 characters.</p>
9	<p>Click OK, and in the left-hand corner of the screen, click on the X to exit from Maximo Discovery.</p>

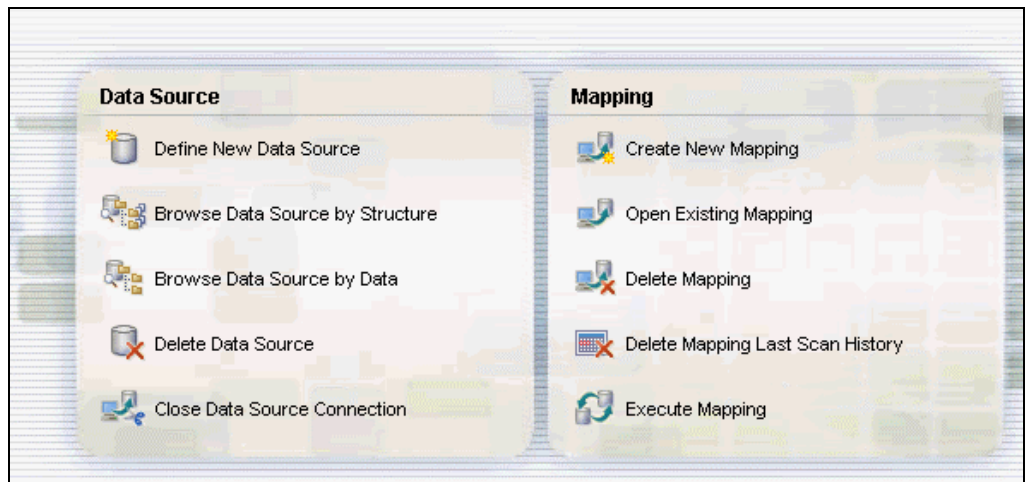
Migrating and Viewing Data: Fusion and Deployed Assets

Introduction

After an audit is completed, the data needs to be migrated into the Maximo database. This section focuses on the migrating and viewing of discovered IT asset data using the **Fusion** application and the **Deployed Assets** module. Fusion is used to migrate the data, and the Deployed Assets module contains applications that can be used to view the data.

Fusion

With **Maximo Fusion**, enterprises can aggregate data collected by disparate asset discovery tools and integrate it into Maximo, creating a central repository.



Viewing Deployed Asset Data

After your deployed asset data is migrated into Maximo, you can view it in the **Deployed Assets** module using the **Computers**, **Network Devices**, and **Network Printers** applications. Maximo also uses data imported by Fusion to generate various reports.

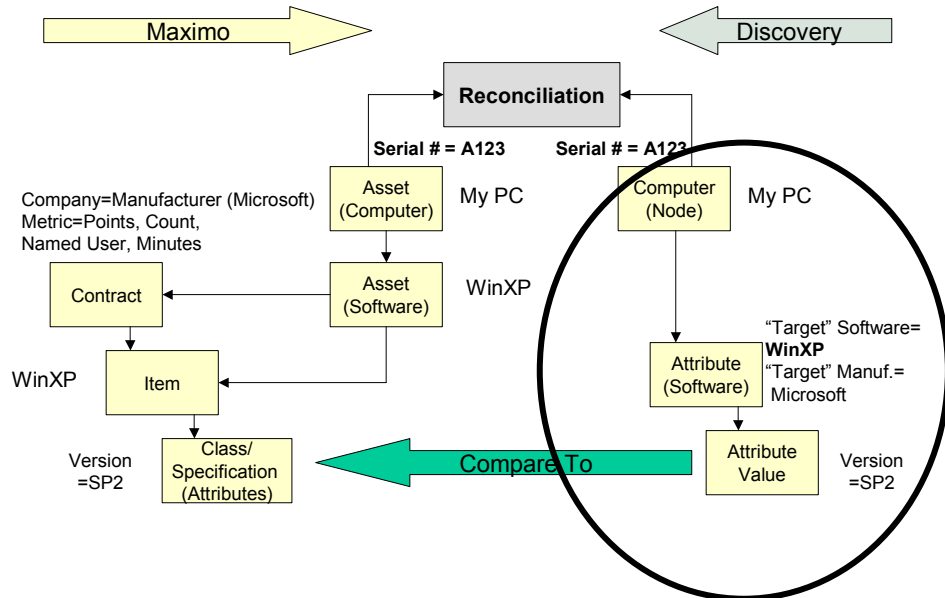


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Migrating and Viewing Data: Fusion and Deployed Assets continued

We Are Here

Fusion is used to migrate the data into Maximo, and the Deployed Assets module contains applications that can be used to view the data.




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Migrating and Viewing Data: Fusion and Deployed Assets continued

Migrating Discovery Data into Maximo



To migrate your data from Discovery into the Maximo database using Fusion, complete the following steps.


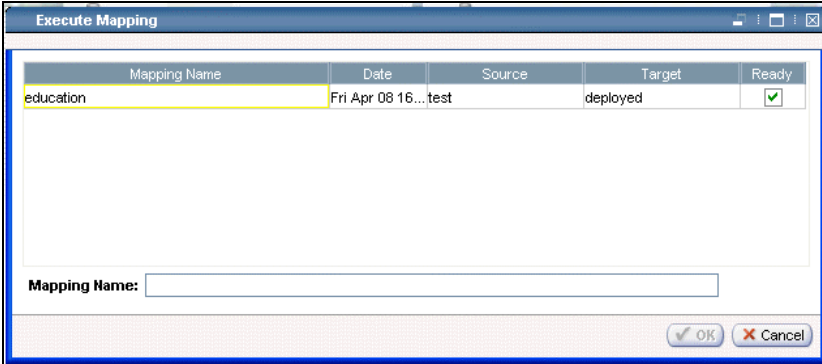
Step	Action
1	<p>Navigate to the Maxim Fusion application from the Start menu.</p> <p><u>Result:</u> The Maximo Fusion sign-in page opens.</p> 

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Migrating and Viewing Data: Fusion and Deployed Assets continued

Migrating Discovery Data into Maximo

continued

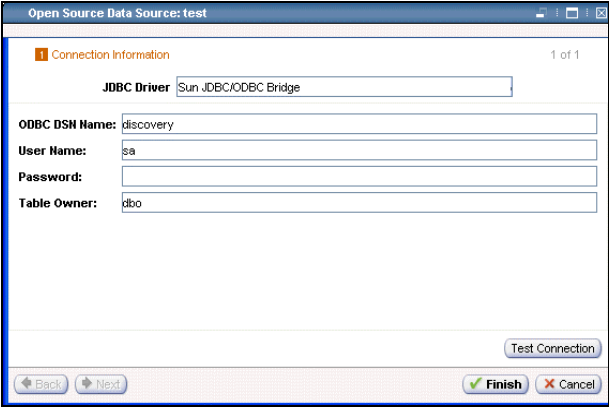
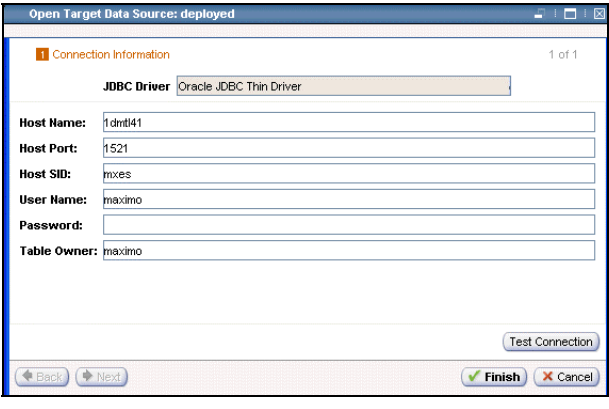
Step	Action										
2	<p>Enter Maximo in the password field, then click Sign In. <u>Result:</u> The Maximo Fusion interface opens.</p>  <p>The screenshot shows the Maximo Fusion interface with two main panels: 'Data Source' and 'Mapping'. The 'Data Source' panel includes options like 'Define New Data Source', 'Browse Data Source by Structure', 'Browse Data Source by Data', 'Delete Data Source', and 'Close Data Source Connection'. The 'Mapping' panel includes 'Create New Mapping', 'Open Existing Mapping', 'Delete Mapping', 'Delete Mapping Last Scan History', and 'Execute Mapping'.</p>										
3	<p>On the Mapping side of the screen, click on Execute Mapping. <u>Result:</u> The Execute Mapping dialog box opens.</p>  <p>The screenshot shows the 'Execute Mapping' dialog box. It contains a table with the following data:</p> <table border="1"> <thead> <tr> <th>Mapping Name</th> <th>Date</th> <th>Source</th> <th>Target</th> <th>Ready</th> </tr> </thead> <tbody> <tr> <td>education</td> <td>Fri Apr 08 16...</td> <td>test</td> <td>deployed</td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table> <p>Below the table is a 'Mapping Name:' text box and 'OK' and 'Cancel' buttons.</p>	Mapping Name	Date	Source	Target	Ready	education	Fri Apr 08 16...	test	deployed	<input checked="" type="checkbox"/>
Mapping Name	Date	Source	Target	Ready							
education	Fri Apr 08 16...	test	deployed	<input checked="" type="checkbox"/>							

continued on next page

Migrating and Viewing Data: Fusion and Deployed Assets continued

Migrating Discovery Data into Maximo

continued



Step	Action
4	Highlight the Mapping Name (there should be only one).
5	<p>Click OK.</p> <p><u>Result:</u> The connection information dialog box for Discovery (the source) opens. There is no password for this screen.</p> 
6	<p>Click Finish.</p> <p><u>Result:</u> The connection information dialog box for the Maximo database (the target) opens.</p> 

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Migrating and Viewing Data: Fusion and Deployed Assets continued

Migrating Discovery Data into Maximo

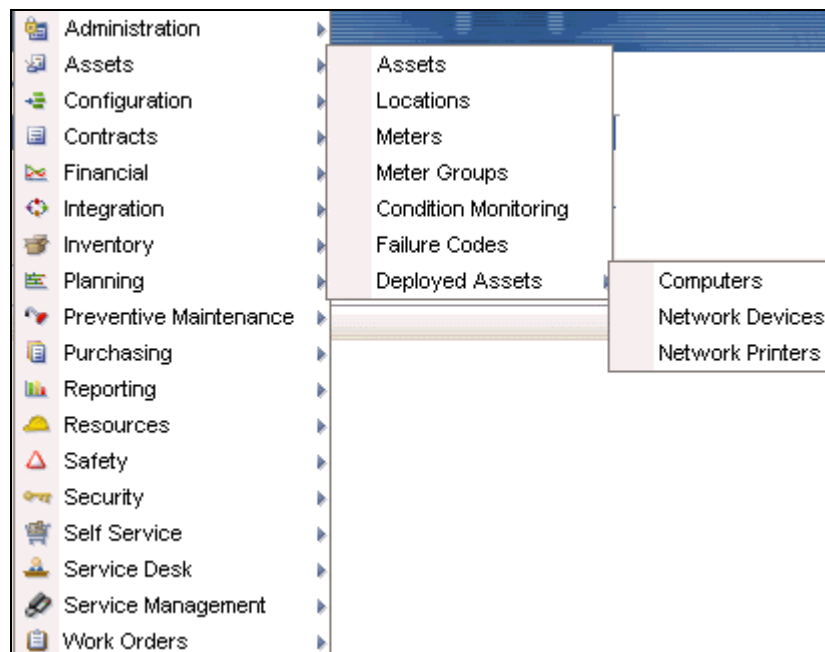
continued

Step	Action
7	Enter Maximo in the Password field.
8	<p>Click Finish.</p> <p><u>Result</u>: Fusion begins to compile the files.</p> <div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p>Compiling 37 files... please wait.</p> <div style="border: 1px solid gray; width: 100%; height: 15px; background-color: #ccc; position: relative;"> <div style="background-color: #eee; width: 62%;"></div> 62% </div> </div> <div style="border: 1px solid gray; padding: 5px;"> <p style="text-align: center; border-bottom: 1px solid gray;">Mapping Execution Progress</p> <div style="text-align: center; margin-bottom: 10px;">  </div> <p>Deployed Asset 66% (2/3)</p> <p>Assetclass: COMPUTER Domainname: MRO-606AF08F1BC</p> <p>Nodename: MRO-606AF08F1BC 00065BAF43C2</p> <div style="border: 1px solid gray; width: 100%; height: 15px; background-color: #ccc; position: relative; margin-bottom: 5px;"> <div style="background-color: #eee; width: 66%;"></div> </div> <p style="text-align: right;">Cancel</p> </div>
9	<p>When mapping is complete, you will see the following message.</p> <div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; border-bottom: 1px solid gray;">Mapping Execution Message</p> <div style="text-align: center; margin-bottom: 10px;">  </div> <p style="text-align: center;">Mapping completed successfully.</p> <p style="text-align: center;">OK</p> </div> <p>Click OK.</p> <p><u>Result</u>: The Maximo Discovery data has been mapped to the Maximo database.</p>

Deployed Assets

The Deployed Assets Module

The **Deployed Assets** module applications maintain data collected directly from assets actually installed in your enterprise. To gather this data, asset discovery tools (Maximo Discovery, or another tool, such as SMS or Tivoli Inventory) scan computers, network devices, and network printers deployed in your enterprise and record information about the hardware and software installed on those assets. Maximo Fusion, an integration tool for aggregating deployed asset data, imports the collected data into Maximo. You view this data in the **Deployed Assets** module applications.



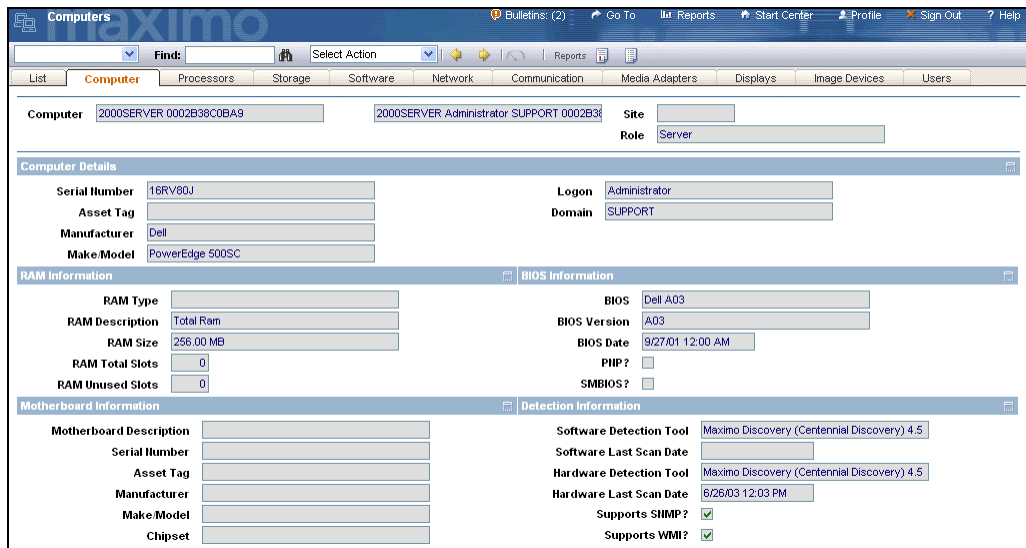
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Deployed Assets continued

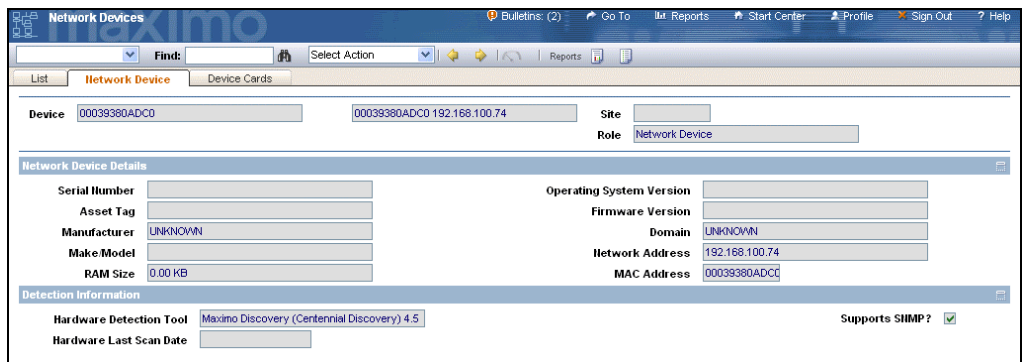
The Deployed Assets Module Applications

The **Deployed Assets** module contains three applications:

- The **Computers** application displays data about specific computers deployed at your company.



- The **Network Devices** application displays information about deployed network devices such as routers, switches, and hubs.



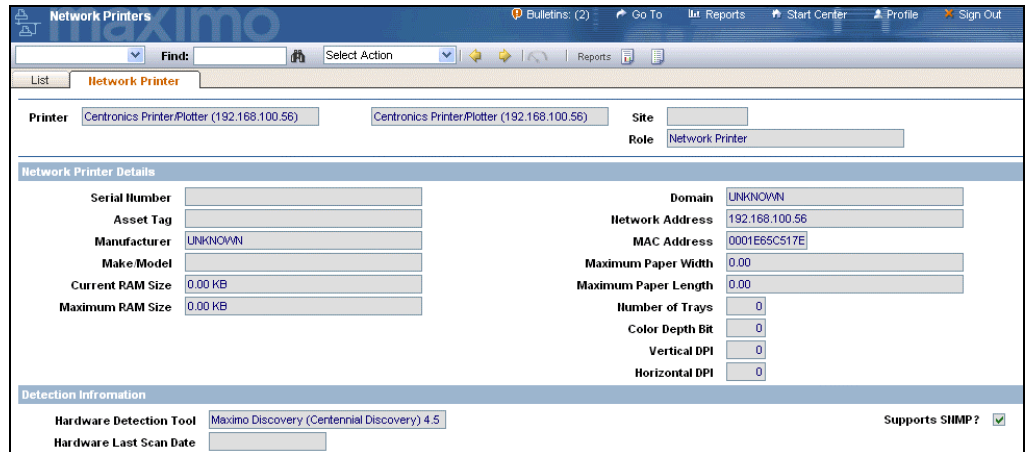
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Deployed Assets continued

The Deployed Assets Module Applications

continued

- The **Network Printers** application displays information about deployed network printers.



Viewing Discovered Computer Data in Maximo



In the following exercise, we will view the data we discovered when we created our on-demand audit previously in this chapter. We will be using the **Computers** application in the **Deployed Assets** module.

Step	Action
1	Open the Computers application in the Deployed Assets submodule of the Assets module.

continued on next page

Deployed Assets continued

Viewing Discovered Computer Data in Maximo

continued

Step	Action
2	Because we conducted an audit on your computer, in the Computer field enter <i>your computer name</i> (right-click your mouse on the desktop My Computer icon and select Properties). If this is an MRO site classroom, enter SERVICEDESK and then press your Enter key.
3	Click on <i>your computer name</i> . <u>Result:</u> You are brought to the Computer tab. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>The screenshot shows the 'Computer' tab in Maximo. At the top, there are navigation tabs: List, Computer (selected), Processors, Storage, Software, Network, Communication, Media Adapters, Displays, Image Devices, and Users. Below these are input fields for Computer (SERVICEDESK 00065BAF436C), Site (SERVICEDESK EDSERVICES SERVICEDESK 00), and Role (Standalone PC). The main area is divided into several sections: Computer Details (Serial Number: 4VDH811, Logon: EDSERVICES, Asset Tag, Domain: SERVICEDESK, Manufacturer: Dell, Make/Model: OptiFlex GX240), RAM Information (RAM Type, Description: Total Ram, Size: 1,024.00 MBYTE, Slots: 0), BIOS Information (BIOS: Dell A02, Version: A02, Date: 12/6/01 12:00 AM, PHP?, SMBIOS?), Motherboard Information (Serial Number, Asset Tag, Manufacturer, Make/Model, Chipset), and Detection Information (Software Detection Tool: Maximo Discovery (Centennial Discovery) 4.5, Hardware Detection Tool: Maximo Discovery (Centennial Discovery) 4.5, Last Scan Date: 5/22/05 9:37 AM, Supports SHMP? [checked], Supports WMI? [checked]).</p> </div>
4	Click on each tab to view information picked up by the audit.

Reconciliation

Introduction

The applications in the **Reconciliation** module let you configure the process Maximo uses to compare and reconcile the IT asset information in the **Assets** application with the deployed asset data maintained in the **Deployed Assets** applications. The reconciliation process identifies matches between IT assets and deployed assets, as well as discrepancies and variances between the two sets of records.

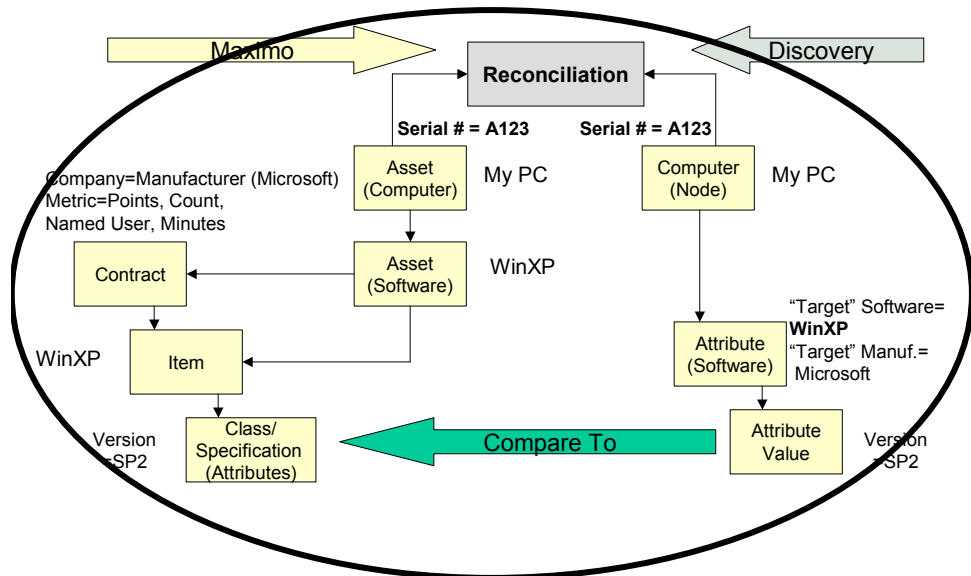
Implementation



For your implementation if you are using a Discovery tool and will be reconciling with Maximo, it is very important that you have determined what criteria will be tracked and audited and what will be reconciled back into Maximo, as setting up your Maximo database will be dictated by what you want to report on and the level of detail you are looking for.

We Are Here

This section focuses on the reconciliation and viewing of asset data using the **Reconciliation** and **Assets** applications.



continued on next page

Reconciliation continued

View Assets Reconciliations

As indicated previously, after a reconciliation process has been initiated (i.e., turning on a cron task), you can run reports to view and manage your result set. For individual assets, you can use the **Asset Details** action in the Assets application to see the reconciliation comparison results for the asset.

The screenshot shows the 'Asset Details' window for asset 20000 at site MCLEAN. It displays asset specifications and reconciliation differences. The reconciliation differences table shows a failure for the RAMSIZE attribute.

Asset	Site	Linked Node ID
20000	MCLEAN	1

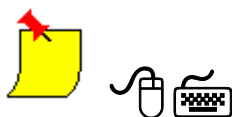
Attribute	Description	Alt Value	Numeric Value	Unit of Measure
DISKSIZE	DISK SIZE		4.00	GBYTE
PROSPEED	PROCESSOR SPEED		266.00	PROSPEED
RAMSIZE	MEMORY SIZE		96.00	MBYTE

Asset Attribute	Asset Value	Unit	DPA Attribute	DPA Value	Unit	Reconciliation Message	Reconciliation Date
RAMSIZE	96.00	MBYTE	RAMSIZE	64	MB	Attribute equality comparison has failed.	2/6/05 1:59 PM
RAMSIZE	96.00	MBYTE	RAMSIZE	64	MB	Attribute equality comparison has failed.	2/6/05 2:04 PM
						No deployed assets were retrieved by the c...	2/11/05 1:16 PM
						Matches found comparison has failed.	2/11/05 6:18 PM

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Reconciliation continued

Reconciliation Setup



As indicated earlier, the **Reconciliation** module consists of six applications that can be used to define and set up your integration points between Maximo and the Discovery tool. This course will not be covering this setup. In the following exercise we will turn on an already created reconciliation task.

Step	Action
1	Open the Cron Task Setup application in the Configuration module.
2	Retrieve the Reconciliation Cron Task record. <u>Result:</u> Your screen should look similar to the one below.
3	For each line item, select the Active? check box. <u>Result:</u> Your screen should look similar to the one below.
4	Save the record.

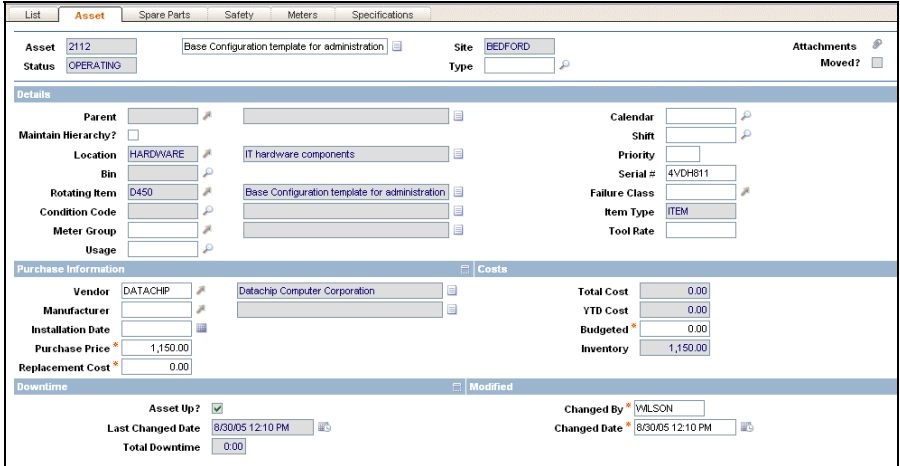
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Reconciliation continued

Viewing Discovered Computer Data in Maximo



In the following exercise, we will view the data we discovered when we created our on-demand audit previously in this chapter. We will be using the **Computers** application in the **Deployed Assets** module.

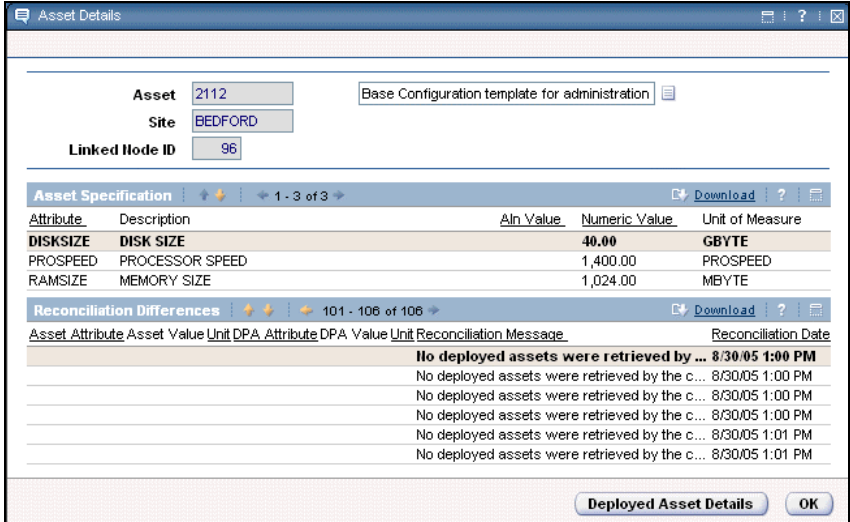
Step	Action
1	<p>Open the Assets application and retrieve the desktop asset record created in Chapter 8 with the following serial number:</p> <ul style="list-style-type: none"> • 4VDH811 if you are at an MRO class site OR • the Asset record with the serial number containing the <i>service tag from your computer</i>. <p><u>Result:</u> Your screen should look similar to the one below.</p> 

continued on next page

Reconciliation continued

Viewing Discovered Computer Data in Maximo

continued

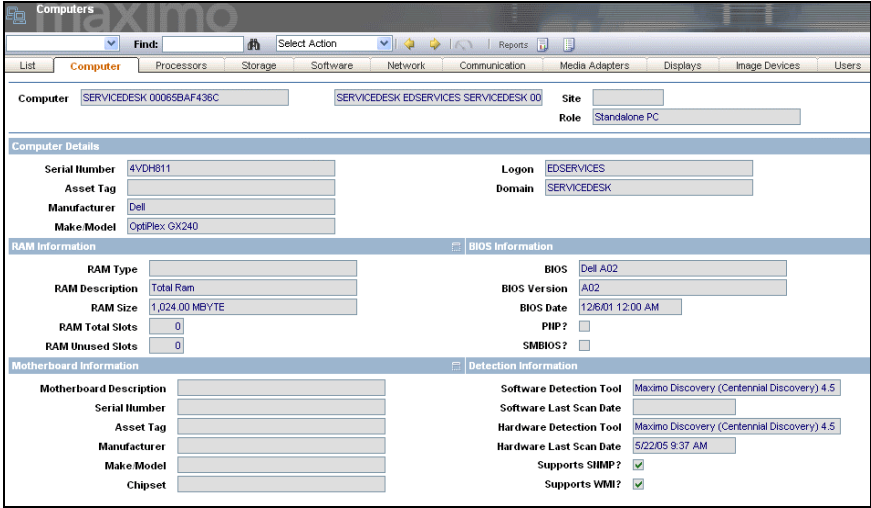
Step	Action
2	<p>From the Select Action menu, select Asset Details.</p> <p><u>Result:</u> Your Asset Details window should contain reconciliation messages.</p> 

continued on next page

Reconciliation continued

Viewing
Discovered
Computer Data
in Maximo

continued

Step	Action
3	<p>To view the deployed asset record, click Deployed Asset Details. <u>Result:</u> You are brought to the Deployed Assets application with your record.</p> 
4	Return to the Assets application.

Chapter Summary

Issuing

You use the **Issues and Transfers** application to transfer assets and items from the storeroom to:

- Assets
- Locations
- Work orders
- GL accounts

When you issue an inventory item from any one of these applications, Maximo decreases the inventory balance for that item.

The Deployed Assets Module

The **Deployed Assets** module applications maintain data collected directly from assets actually installed in your enterprise. To gather this data, asset discovery tools (Maximo Discovery, or another tool, such as SMS or Tivoli Inventory) scan computers, network devices, and network printers deployed in your enterprise and record information about the hardware and software installed on those assets. Maximo Fusion, an integration tool for aggregating deployed asset data, imports the collected data into Maximo. You view this data in the Deployed Assets module applications.

Fusion

With Maximo Fusion, enterprises can aggregate data collected by disparate asset discovery tools and integrate it into Maximo, creating a central repository. After you have discovered your data through Maximo Discovery (or another discovery tool), the data will be migrated into the Maximo database via the Fusion application.

continued on next page

Chapter Summary continued

Reconciliation

The applications in the **Reconciliation** module let you configure the process Maximo uses to compare and reconcile the IT asset information in the Assets application with the deployed asset data maintained in the Deployed Assets applications. The reconciliation process identifies successful matches between IT assets and deployed assets, as well as discrepancies and variances between the two sets of records. You can use this comparison to determine whether the IT assets deployed at your company match the record of authorized assets maintained in the Assets application.

Authorized users can view reconciliation results in the Reconciliation module applications or in reports. You can also view reconciliation results in the Assets application using the Asset Details action available from the Select Action menu.

Discrepancies might be caused by a variety of factors, including incorrect data entry, reconfigured hardware or software, retired hardware or software, theft, and unauthorized use of hardware and software.

MXES Immersion Training for IT

Chapter 10: Maintain: Assets and Service Activities



In This Chapter

This chapter contains the following topics:

Topic	See Page
Chapter Overview	10-1
Service Management Overview	10-4
Service Desk Overview	10-13
Using Self-Service Applications	10-15
Processing Service Requests	10-25
Incident Management Overview	10-49
Processing Incidents	10-51
Problem Management	10-72
Change Management	10-84
Chapter Summary	10-117

Chapter Overview

Introduction

This chapter focuses on the service management activities that support asset configuration and service delivery

Learning Objectives

When you have completed this chapter, you should be able to:

- create and submit a service request via the Service Requests application,
 - view existing service requests,
 - define the incident management process,
 - create an incident from an SR,
 - view related records for an incident,
 - take ownership of an incident,
 - change the status of an incident,
 - modify an incident,
 - create a communication,
 - apply a communication template,
 - create a work log entry, and
 - resolve an incident.
-

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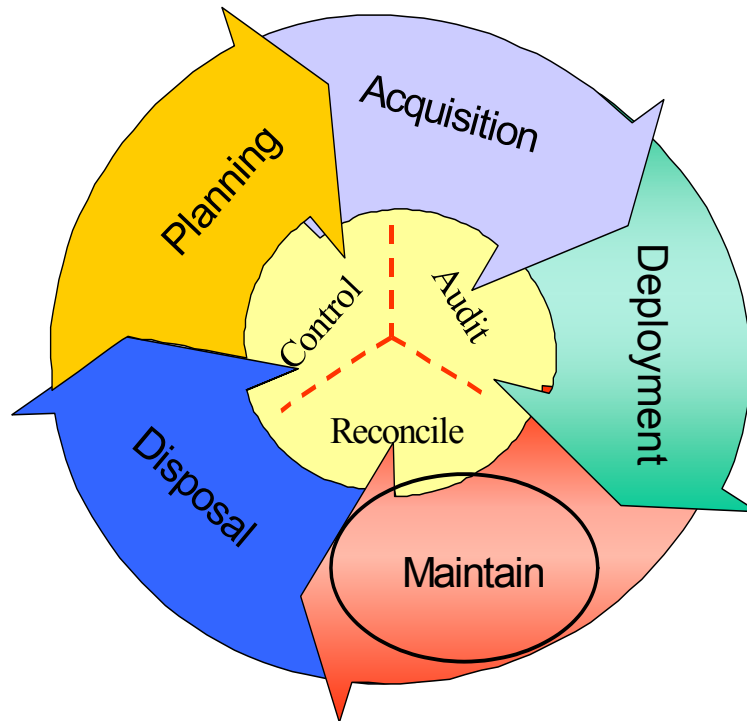
Chapter Overview continued

Chapter Focus: Planning

In the asset lifecycle Maintain stage you perform the following tasks:

- Determining how you want your assets service activities tracked and managed
- Determining the level of IT services provided to the organization and how they will be managed
- Mapping infrastructure components and asset structures to applications and the services delivered to users

In this chapter we will cover how Maximo can be used for these components in the Maintain stage.



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Chapter Overview continued

Chapter Focus: continued
Planning

You can use the following applications to manage service desk and asset activities:

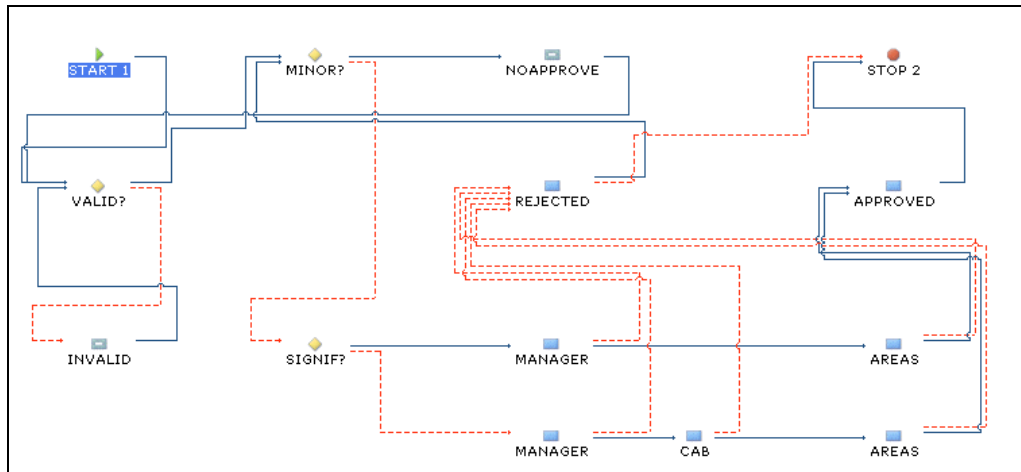
- **Work Order Tracking**
- **Service Requests**
- **Incidents**
- **Problems**
- **Changes**
- **Releases**

Activities can range from taking the call, to logging a request, to finding the solution, to fixing the problem, to IMAC activities that might be undertaken.

Service Management Overview

Introduction

Most organizations will implement a workflow system that automates the steps, or rather clicks, involved with ticket and work processing. In Chapter 12, we will demonstrate this functionality.



In this chapter, we will show you how to process service tickets and change orders from beginning to end *manually*. This is to familiarize you with the applications and actions available, how they can be used in your business process, and where you want these activities to be automated by Workflow.

Workflow Implementation

If you are planning to automate the service desk activities as part of your implementation, we recommend that you take the *IT Workflow Management* course before starting your implementation.

continued on next page

Service Management Overview continued

Building the Database (CMDB in ITIL-speak)

In Unit 2, “Setting Up Core Data,” you established your initial database with core data requirements:

- Currency
- GL accounts
- Sets
- Organizations
- Sites
- Locations
- People
- Labor
- Craft

In Unit 3, “Asset Management,” you have also added to the database by defining item master and asset configuration records, as well as entering contracts and assets via the purchasing and receiving functions using Maximo. In this chapter, before acting on the database to maintain and manage assets and service activities, you need to make additional data considerations to support and manage these activities and services. These additional data considerations are as follows:

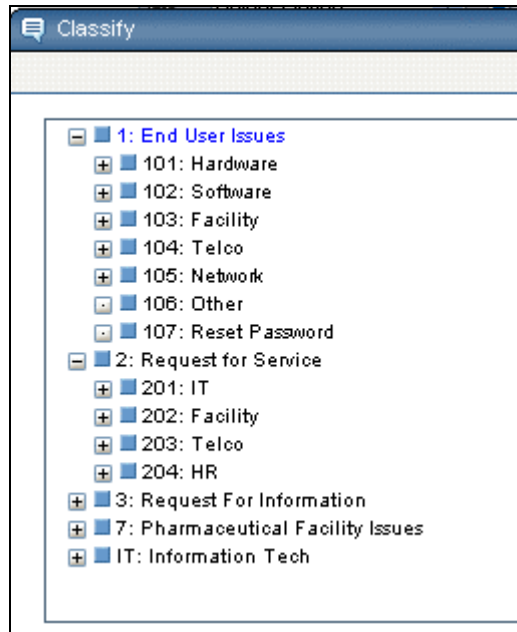
- Classifications
- Ticket templates
- Job plan templates
- Service level catalogs
- Service level agreements
- Solutions knowledgebase

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Service Management Overview continued

Implementation Setup: Classifications

Classifying is not just limited to assets—you can use the Classifications applications to classify and organize services desk calls. Classifying your calls will allow for trending analysis and more comprehensive reporting on service desk activities.



Tickets

Service request records are considered a ticket, and indicated as such in the database. Other ticket types are incidents and problems. The ticket applications are closely related and share many features, including the ability to define relationships between tickets, link them together for information purposes, and view the linkages and details in the appropriate applications.

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Service Management Overview continued

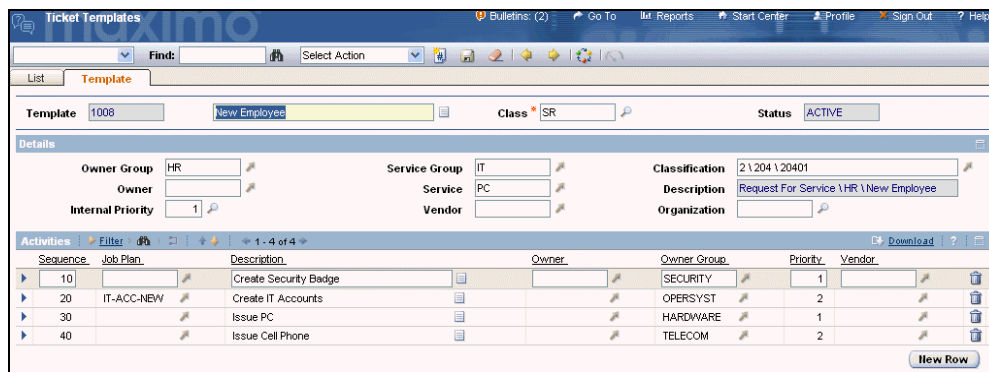
Ticket Classes

In Maximo there are three classes of tickets:

- **Service Request.** A *service request* (SR) is generally a request for information, help, or service. In Maximo, it acts as a mechanism for capturing requests and assigning work. Some service desk organizations might choose to open an SR for all incoming requests, whereas others might open incident or problem records directly from a call.
- **Incident.** An *incident* is a disruption to normal service. When an incident ticket is created, the goal is to restore normal service as soon as possible.
- **Problem.** A *problem* is an issue with an unknown cause. After the cause of a problem is identified, any new ticket that a Maximo user creates for the same problem can be flagged as a “known problem.”

Implementation Setup: Ticket Templates

You use the **Ticket Templates** application to create and manage generic ticket templates that service desk environments can leverage to standardize common or high-volume service requests, incidents, or problems. You can save time by applying a predefined template to a ticket record, letting Maximo populate values from the template into fields on the ticket, which can be overwritten if needed.



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Service Management Overview continued

Activities and Job Plans

When you create a ticket template in the **Ticket Templates** application, you can add any activities that are required to fulfill the service request or resolve the problem or incident.

Sequence	Job Plan	Description	Owner	Owner Group	Priority	Vendor
10		Create Security Badge		SECURITY	1	
20	IT-ACC-NEW	Create IT Accounts		OPERSYST	2	
30		Issue PC		HARDWARE	1	
40		Issue Cell Phone		TELECOM	2	

You can add activities manually by clicking **New Row** and filling in the **description** field.

Sequence	Job Plan	Description	Owner	Owner Group	Priority	Vendor
10		Create Security Badge		SECURITY	1	
20	IT-ACC-NEW	Create IT Accounts		OPERSYST	2	
30		Issue PC		HARDWARE	1	
40		Issue Cell Phone		TELECOM	2	

Details

Sequence:

Job Plan:

Site:

Organization:

Description:

Owner:

Owner Group:

Priority:

Vendor:

Classification:

Classification Description:

Or, you can add a job plan to the template (**Job Plan** field) to leverage a set of activities that already exist. Job plans are initially created in the **Job Plans** application.

Sequence	Job Plan	Description
10		Create Security Badge
20	IT-ACC-NEW	Create IT Accounts

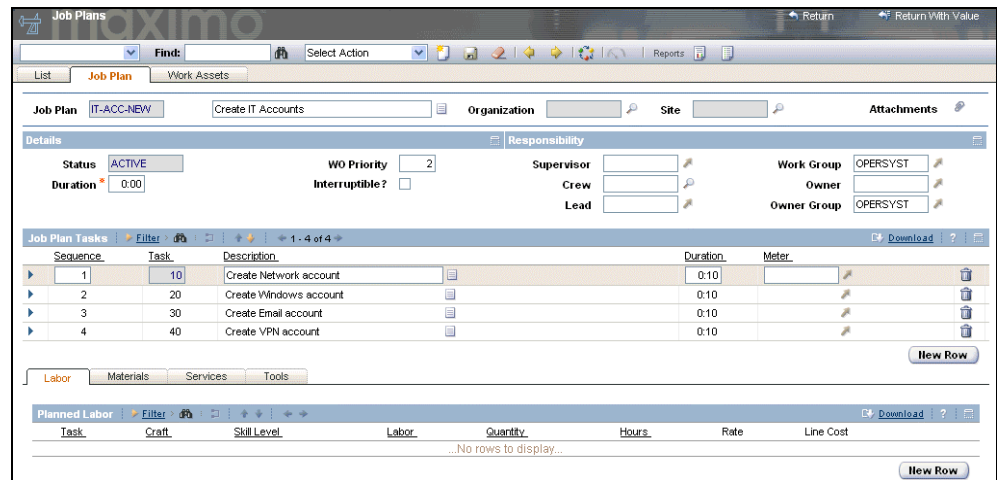
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Service Management Overview continued

Implementation Setup: Job Plans

You use the **Job Plans** application to create, modify, or delete job plan records. A *job plan* is a detailed description of work to be performed. You can copy job plans to work orders or tickets. After a job plan becomes a work or activities plan on a ticket or work order, you can modify the plan without affecting the originating job plan. Job plans generally contain tasks (procedures), along with lists of estimated labor, labor hours, materials, services, and tools required for the work.

You can specify which organizations or organizations and sites can use the information on the plan and/or its tasks. If you do not specify this information, the job plan can be used in any site of any organization.

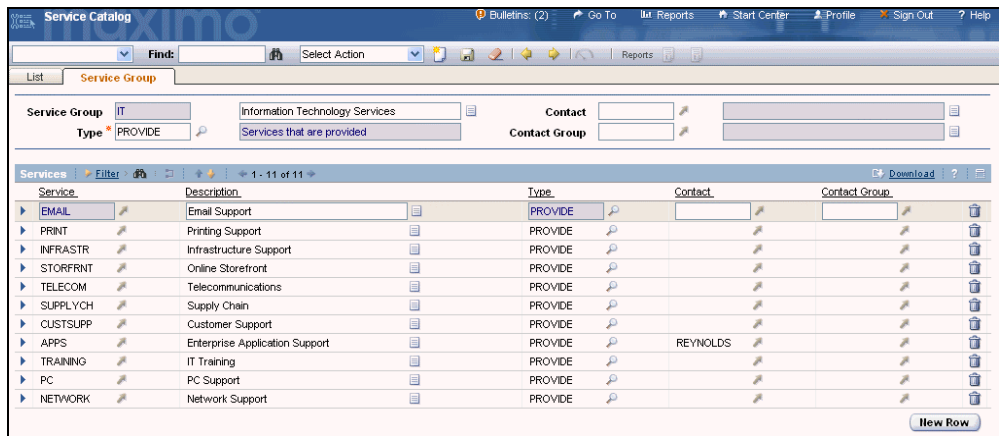


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Service Management Overview continued

Implementation Setup: Service Catalog

You use the **Service Catalog** application to define all services that you provide or procure. You must create a service group for each type of service you define. You can group tickets, work orders, and contracts by service group or individual service, and create service level agreements (SLAs) for a service group or for a service group and service combination.

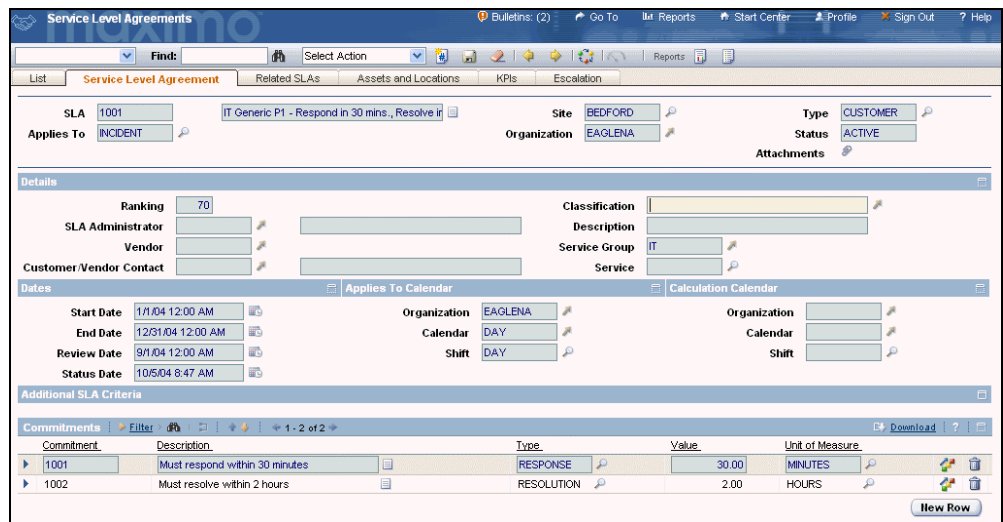


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Service Management Overview continued

Implementation Setup: Service Level Agreements

You use the **Service Level Agreements** application to create and manage service level agreements (SLAs). A *service level agreement* is a written agreement between a service provider and customer that documents the agreed-upon levels of service. A *service* is a set of tasks provided by the service provider that fulfills one or more needs of the customer, and a *service level* (known as a *commitment* in Maximo) describes a measurable or quantifiable aspect of that service. Maximo users can then apply valid SLAs to records from other Maximo applications.

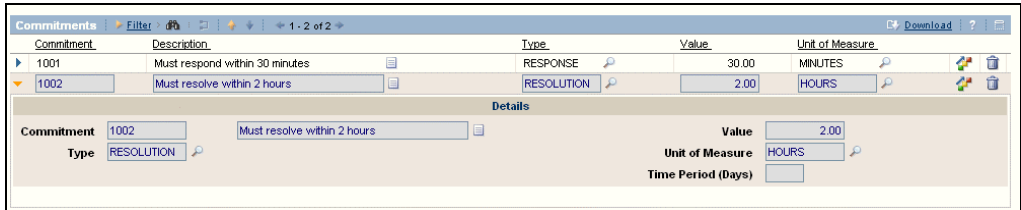


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Service Management Overview continued

Implementation Setup: Escalations

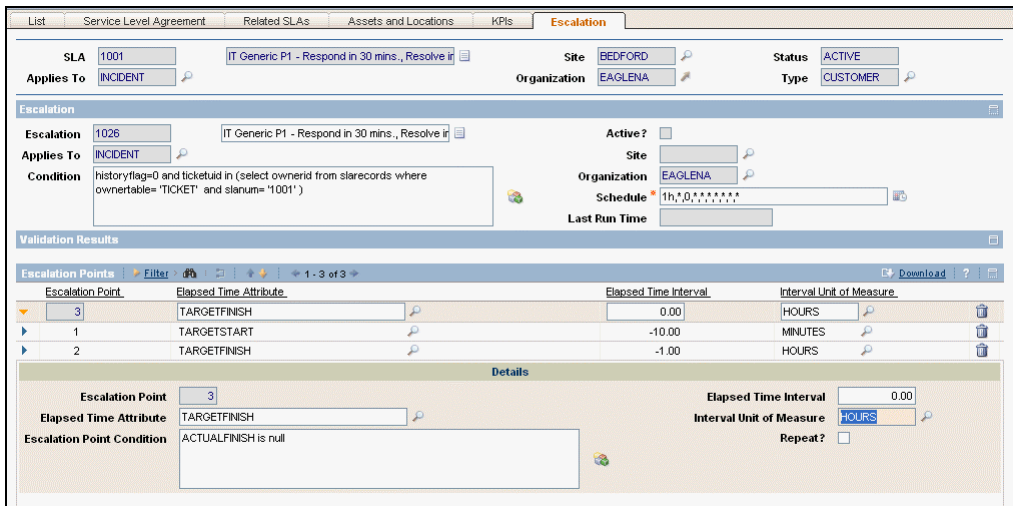
You can use the Service Level Agreements application and Escalation functionality to manage and meet the commitments in an SLA. A *commitment* is a specific responsibility that the service provider must meet to fulfill the service level agreement with the customer.



An *escalation* is a Maximo function that automatically monitors critical processes. An SLA can have one or more commitments, each having its own escalation points. After you have defined commitment for a service level agreement (SLA), you can click the **Define Escalation** button:



on each commitment row to create an escalation point for each commitment.



Maximo defaults values from the commitment row to the escalation point to help define the conditions that will cause Maximo to trigger an escalation.

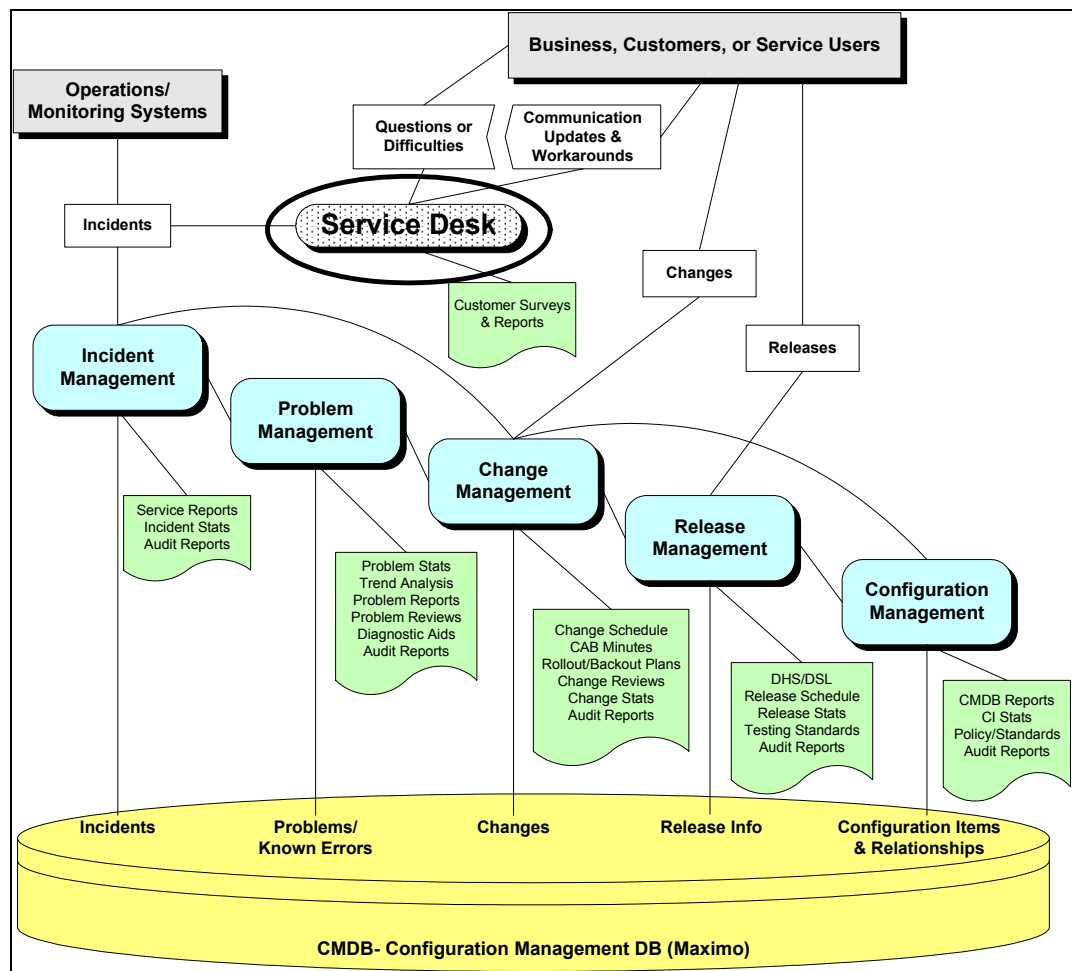
Service Desk Overview

Introduction

The service desk acts as the central point of contact between the user and IT Service Management.

ITIL Connection

Recall the following diagram depicting the various IT Service Management processes as outlined by ITIL. Throughout this section, we will be discussing the Service Desk functionality in Maximo.

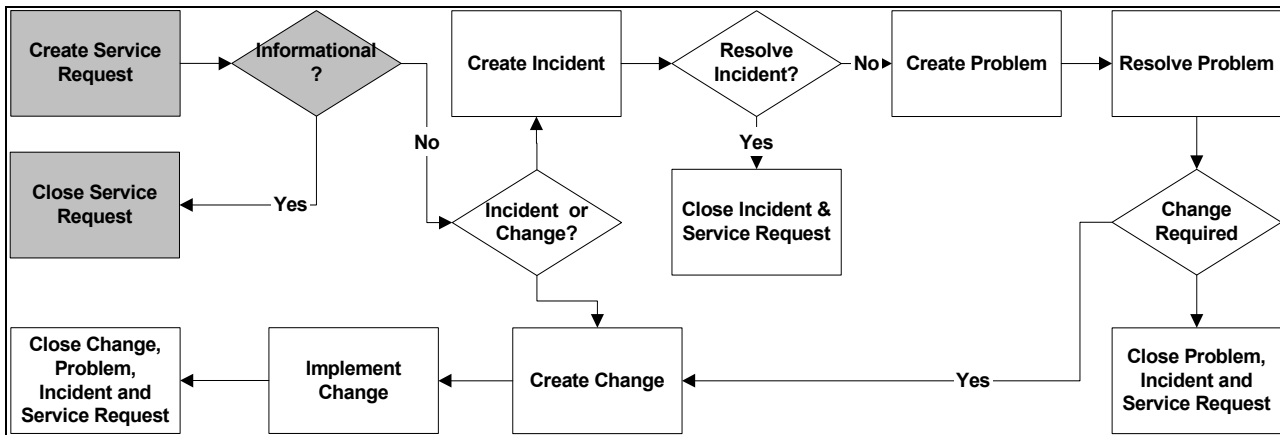


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Service Desk Overview continued

A Typical Service Desk Process Flow

In this chapter, we will use the following process flow for a Service Desk. The highlighted blocks in this diagram depict the parts that we will be discussing throughout this section.



Applications Supporting the Service Desk User

From a Service Desk user’s perspective, Maximo provides the following applications to support a service desk:

- Search Solutions
- Create Service Request
- View Service Requests
- Bulletin Board

Using Self-Service Applications

Introduction

Users submit service requests (SRs) through the Service Desk. Maximo provides several ways for users to submit SRs. This section shows you how to submit an SR through Maximo via a self-service environment.

Applications Supporting Self-Service Functionality

Maximo provides the **Self Service** modules with two supporting applications and sub-applications that support a self-service environment for the end-user community:

- **Desktop Requisitions**



- **Service Requests**



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Using Self-Service Applications continued

Creating Service Requests

As a user, you use the **Create Service Request** application to request a repair or change to your service. You might request the service for yourself or on behalf of another party. In general, you should search the existing library of solutions before submitting a service request.

You can attach screen shots, documents, or Web pages to the request. After creating the service request, you can review the details, submit another service request, or return to your Start Center.

The screenshot shows the 'Create Service Request' web application interface. At the top, there is a navigation bar with 'View Service Requests' and 'Search Solutions' links. The main form is titled 'Create Service Request' and contains several input fields: 'Reported By', 'Phone', 'E-mail', 'Affected User' (with the value 'REDDING'), 'Asset', 'Location', 'Reported Priority', and 'Reported Date' (with the value '5/23/05 11:54 AM'). Below these fields are two sections: 'Request Description' and 'Classify'. The 'Request Description' section has a 'Summary' field and a larger 'Details' text area. The 'Classify' section has a 'Classification' dropdown and a 'Description' text area. At the bottom, there is an 'Attachments' section with a 'Document' table showing '...No rows to display...' and buttons for 'Attach File', 'Attach Web Page', 'Submit', and 'Cancel'.

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Using Self-Service Applications continued

Viewing Service Requests

The **View Service Requests** application contains a single table window that displays the service requests you have created.

As a user, you can view and print details for a service request. You can add or view attachments, such as documents or Web pages. You can also view and update the Service Request log, which contains communications to and from the service desk agent who is handling this request.

The screenshot shows the 'View Service Requests' application interface. At the top, there is a navigation bar with 'View Service Requests' and various utility links. Below this is a search form titled 'Search for Service Request' with input fields for 'Service Request', 'Status', 'Asset', 'Location', 'Reported Date From', and 'Reported Date To'. A 'Find' button is located at the bottom right of the search form. Below the search form, there is a section titled 'View Service Requests' with a 'Download' button. A message states: 'Your Service Requests are listed below. Use the search above to quickly locate a specific Service Request.' Below this message is a table with the following data:

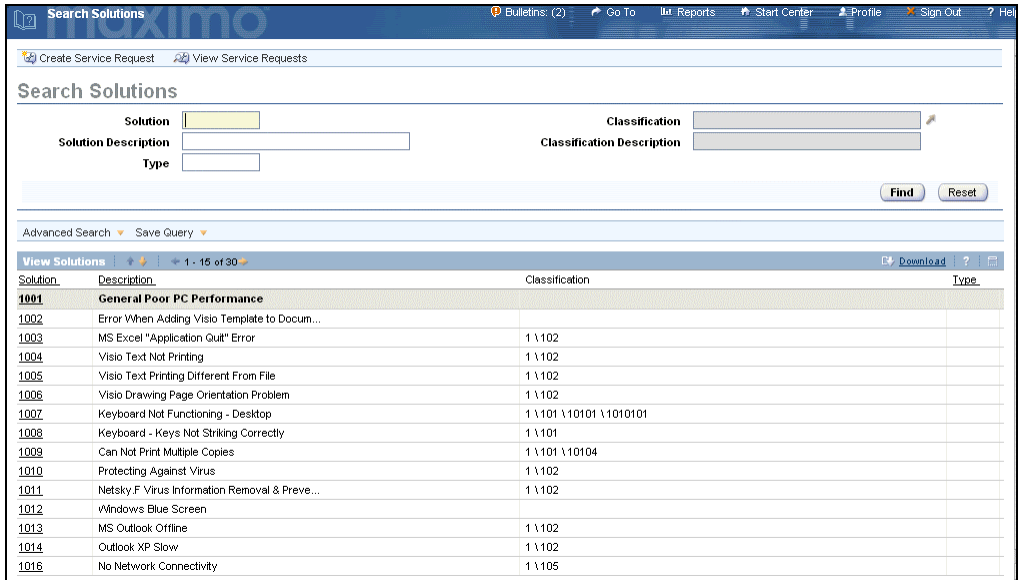
Service Request	Summary	Description	Status	Asset	Location	Reported Date
1130	Fire Alarm Light Blinking in Conf. Room	End User Issue \ Facility \ Lighting	RESOLVED			10/8/04 7:58 AM
1131	Coffee machine won't work	End User Issue \ Facility	RESOLVED		MOFLOOR1	10/8/04 8:36 AM
1140	Machine Dies Unexpectedly	End User Issue \ Hardware \ Laptop \ Other	QUEUED	7112	FIELDSTAFF	1/31/05 9:11 AM
1153	Help! Pop ups	End User Issue \ Other	NEW			5/23/05 11:34 AM

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Using Self-Service Applications continued

The Search Solutions Application

The **Search Solutions** application contains a single table window that displays a list of commonly asked questions or common problems and their solutions. After viewing a solution, you either can indicate that the solution helped you, or create a service request, or search again.

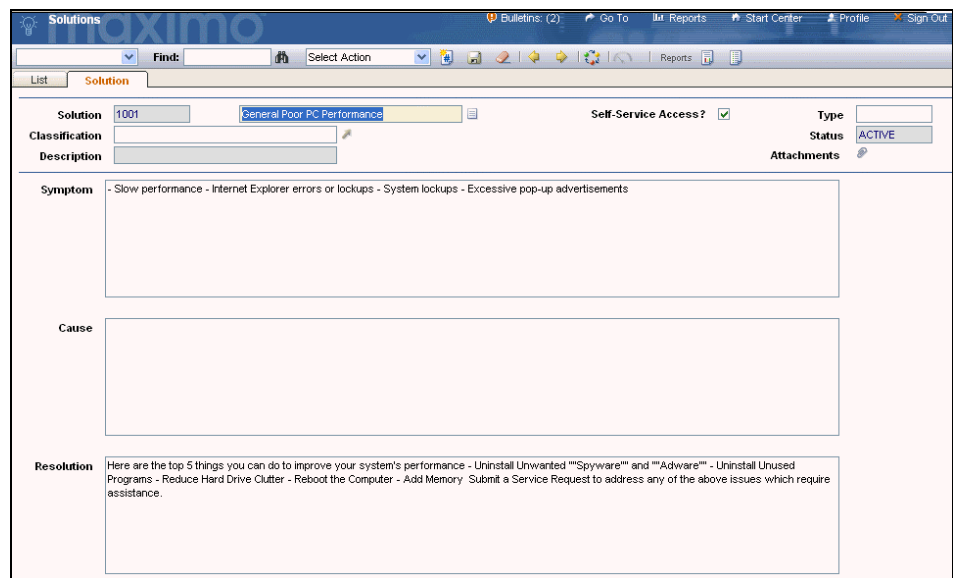


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Using Self-Service Applications continued

Implementation Setup: Solution Knowledge Base

Through the Maximo Solutions Knowledge Base in the **Search Solutions** application, people (end users) can search for and view solutions from within Maximo to resolve their problems on their own. Service desk agents can also use Maximo to associate a solution record to a service request, incident, or problem ticket. Solutions are created and set up in the system using the **Solutions** application.



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Using Self-Service Applications continued

Setup: Solutions Self-Service Access

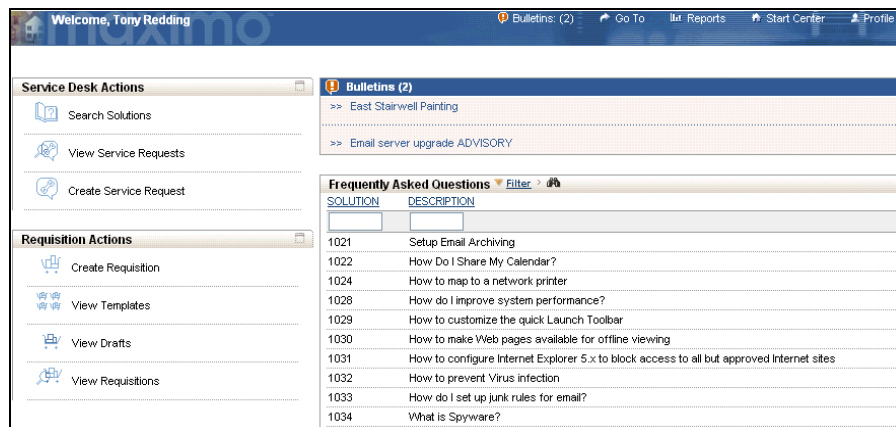
When you set up and enter solutions into the system using the **Solutions** application, you can select the **Self Service Access?** check box ...



...to indicate that this solution is viewable by the self-service user community when accessing the **Search Solutions** application.

Search Solutions		
Solution	<input type="text"/>	Classification
Solution Description	<input type="text"/>	Classification Description
Type	<input type="text"/>	
Advanced Search <input type="button" value="Save Query"/>		
View Solutions <input type="button" value="1 - 15 of 30"/>		
Solution	Description	Classification
1001	General Poor PC Performance	
1002	Error When Adding Visio Template to Docum...	
1003	MS Excel "Application Guit" Error	1 \ 102
1004	Visio Text Not Printing	1 \ 102
1005	Visio Text Printing Different From File	1 \ 102
1006	Visio Drawing Page Orientation Problem	1 \ 102
1007	Keyboard Not Functioning - Desktop	1 \ 101 \ 10101 \ 1010101
1008	Keyboard - Keys Not Striking Correctly	1 \ 101
1009	Can Not Print Multiple Copies	1 \ 101 \ 10104
1010	Protecting Against Virus	1 \ 102
1011	Netsky F Virus Information Removal & Preve...	1 \ 102
1012	windows Blue Screen	
1013	MS Outlook Offline	1 \ 102
1014	Outlook XP Slow	1 \ 102
1016	No Network Connectivity	1 \ 105

You can also set up display solutions as FAQs (frequently asked questions) on the Start Center page.



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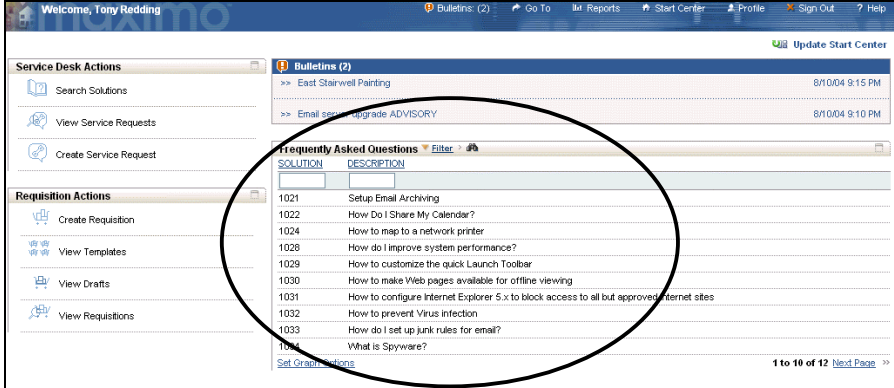
Using Self-Service Applications continued

ITIL Framework

The Maximo **Solutions** application follows the ITIL framework of best practices by allowing service desk personnel to focus on other issues, thereby optimizing their performance and improving responses associated with service level commitments.

Self-Service Request Entry

In this exercise we are a user, Tony Redding, who is having a problem with pop-ups appearing frequently on his desktop. We will first check to see if there is a solution and then, if necessary, create a service ticket.

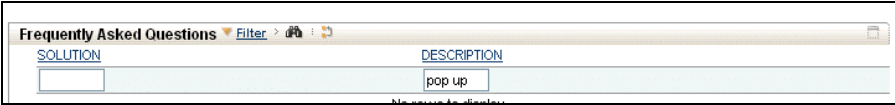
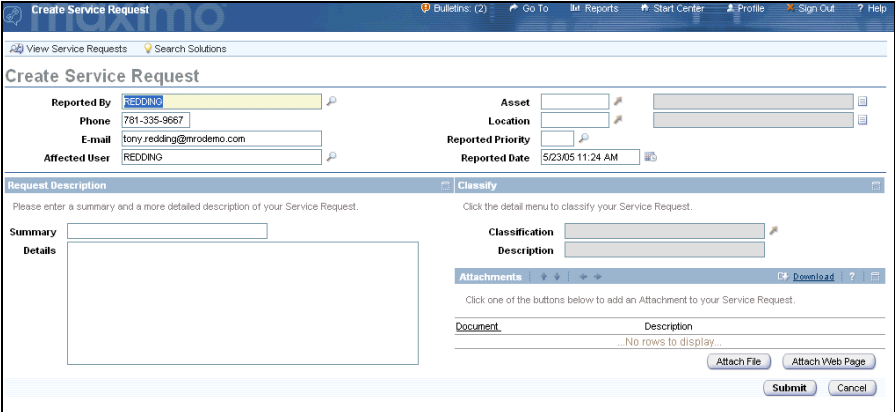
Step	Action
1	<p>Sign out of Maximo and sign back in as: User: redding and Password: redding <u>Result:</u> Maximo displays Tony Redding’s Start Center, which has been set up to have the FAQs displayed. This Start Center has also been configured to display the Self Service applications. If the Start Center had not been set up this way, you could use Go To.</p> 

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Using Self-Service Applications continued

Self-Service Request Entry

continued

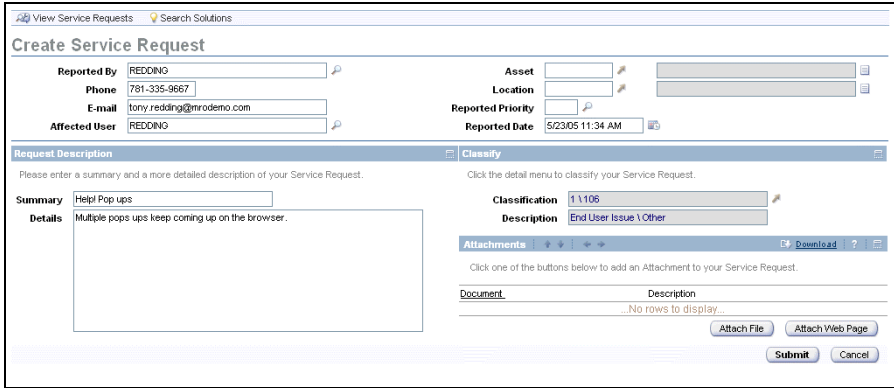

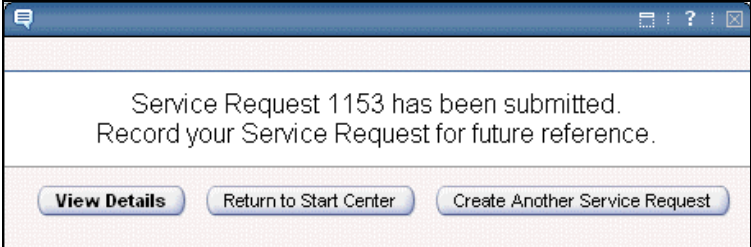
Step	Action
2	<p>In the Description field enter Pop up and then press your Enter key.</p> <p><u>Result:</u> Your result set should indicate there is no match. Therefore, we are going to create a service request for this problem.</p> 
3	<p>Under the Service Desk Actions table window, click Create Service Request.</p> <p><u>Result:</u> The Create Service Request application opens.</p> 

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Using Self-Service Applications continued

Self-Service Request Entry

continued

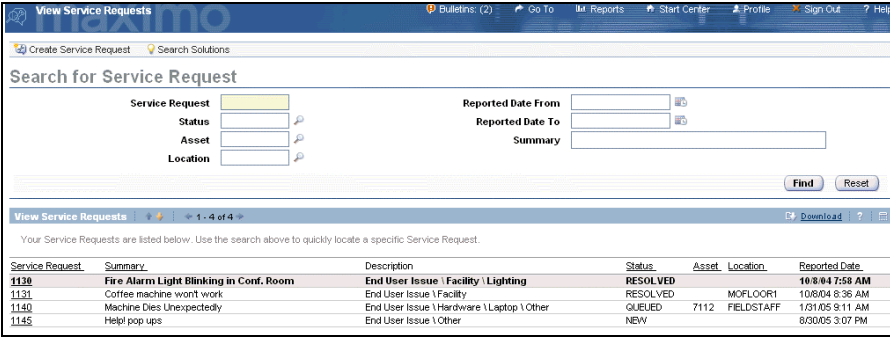
Step	Action
4	<p>In the Summary field, type Help! Pop ups. In the Details window, type Multiple pop ups keep coming up on the browser.</p> <p><u>Result:</u> Your screen should look similar to the one below.</p> 
5	<p>In the Classification field, use the Detail Menu button to select Classify, then enter the following classification: End User Issue \ Other.</p>
	<p>Remember, the Classification application cannot be used to set up asset classification, but can only be set up to classify services.</p>
6	<p>Click Submit.</p> <p><u>Result:</u> Maximo displays a message similar to the following example.</p>  <p>Record your number here: _____</p>

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Using Self-Service Applications continued

Self-Service Request Entry

continued

Step	Action
7	<p>Click Return to Start Center.</p> <p><u>Result:</u> You are brought back to the Start Center.</p>
8	<p>In the Service Desk Actions section, click View Service Requests.</p> <p><u>Result:</u> The View Service Requests page lists all service requests for Redding, including the one we just created, which has a status of NEW.</p> 

Processing Service Requests

Introduction

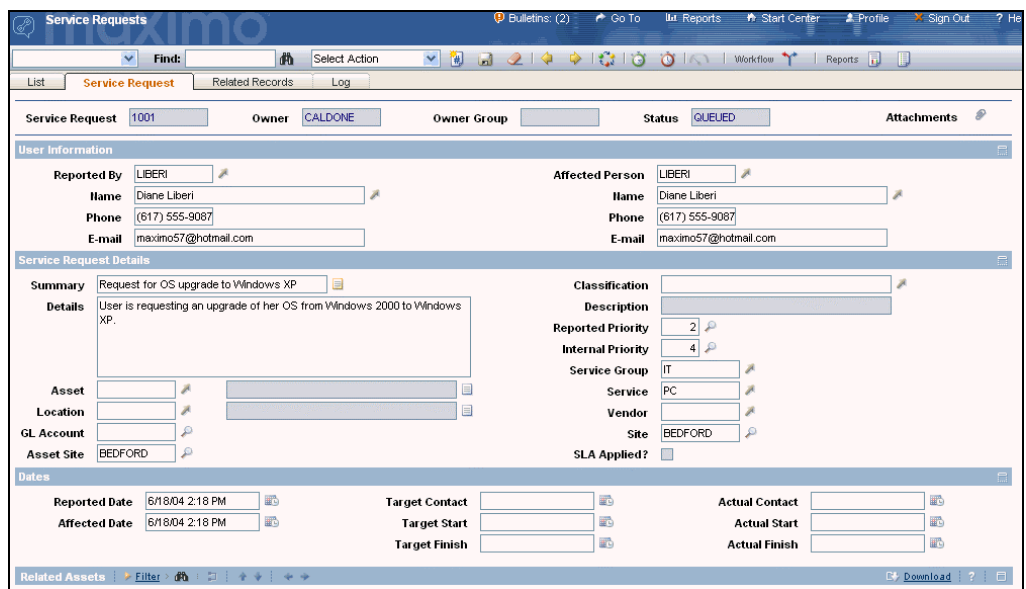
Submitting service requests (SRs) through the Maximo **Create Service Requests** application is just one method for receiving SRs from users. Your organization might have a telephone number or call center setup. Maximo can also receive SRs via e-mail. Your organization might employ some or all of these methods for receiving SRs into your service desk.

The Service Requests Application

Use the **Service Requests** application to create, view, and resolve service requests from customers or requestors. The request can be to resolve an issue, obtain new service, obtain information, or change a current service.

An agent creates a service request record to track all contacts from a requestor, capture information from the requestor, and determine what, if any, further action is needed.

A requestor can either contact the service desk agent or create a service request via e-mail or other form of communication. The agent views these requests in the Service Requests application and either resolves them or delegates them to another party for resolution.



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Processing Service Requests continued

Service Requests Application Tabs

The Service Requests application contains the following tabs:

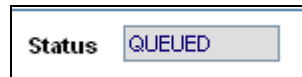
Use this tab...	To...
List	Search Maximo for service requests
Service Request	Create, modify, view, and delete identifying information for the service request
Related Records	Relate, view, and navigate relationships between service requests, incidents, problems, and other records
Log	Create, view, edit, and delete work log entries, and view communication log entries

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Processing Service Requests continued

Status

The status of a service request changes as it moves toward completion. The following table describes the default statuses for service requests. Your system administrator might have added, removed, or changed the names of these supplied statuses.



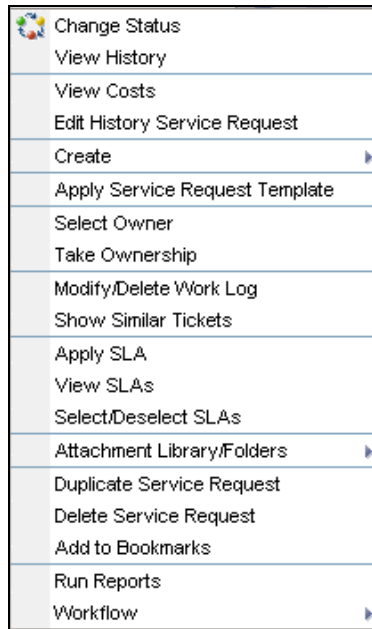
Status	Description
NEW	You create or insert a service request. You cannot revert to this status after you change it.
QUEUED	Service request ownership given to a person or a group.
INPROG	Someone is working on this service request. The first time a service request reaches this status, Maximo populates the Actual Start field, if it is empty.
PENDING	A service request is pending an action (for example, vendor or user call-back, or waiting for parts).
RESOLVED	Information has been gathered and routed, service has been restored, or a solution has been provided. The first time a service request reaches this status, Maximo populates the Actual Finish field, if it is empty. If needed, you can reopen a service request and change the status from RESOLVED to INPROG (in progress).
CLOSE	Service request becomes a historical record. When a record is closed, you cannot change the status. You can, however, edit certain parts of the history record.

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Processing Service Requests continued

SLAs and Templates

From the **Select Action** menu there are several actions specific to service level agreements and ticket templates.



This action...	Allows you to...
Apply Service Request Template	Apply a ticket template to the service request, which will default predefined data onto the request
Apply SLA	Choose from a list of service level agreements particular to the site and the service group indicated on the ticket
View SLAs	View all SLAs currently associated to the ticket
Select/Deselect SLAs	View and select the SLAs that you want to disassociate from the ticket

Note: These actions can be used only if SLAs, service catalogs, and ticket template records have been set up in the database.

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Processing Service Requests continued

Owner

You use the **Take Ownership** action to indicate that you are taking ownership of the ticket.

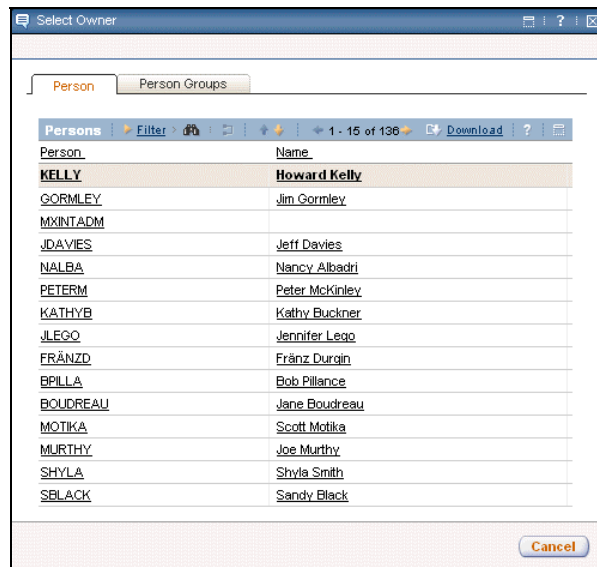


Owner Group

To give ownership to another person or group...



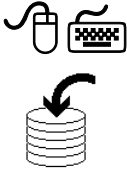
...you use the **Select Owner** action to make the association to a person or person groups.



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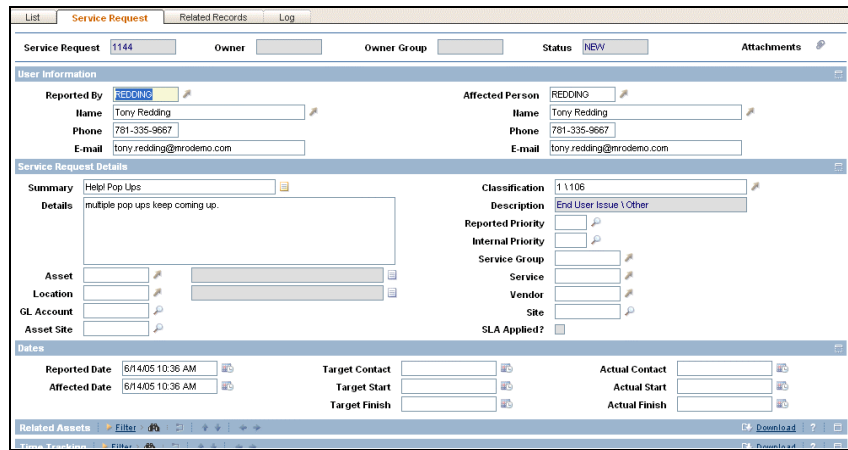
Processing Service Requests continued

Ownership and Resolving SRs



In this exercise we are going to act as a service desk agent and process the record to a QUEUED status.

Step	Action
1	Sign in to Maximo as: User: wilson Password: wilson <u>Result:</u> Maximo displays Wilson’s Start Center.
2	Open the Service Requests application in the Service Desk module and retrieve the service request that you created in the previous exercise. <u>Result:</u> The Service Requests application displays the SR.

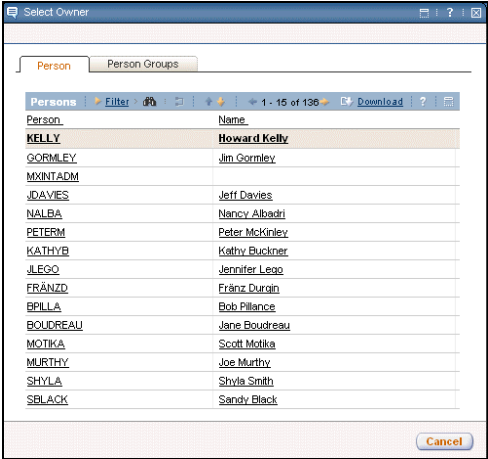
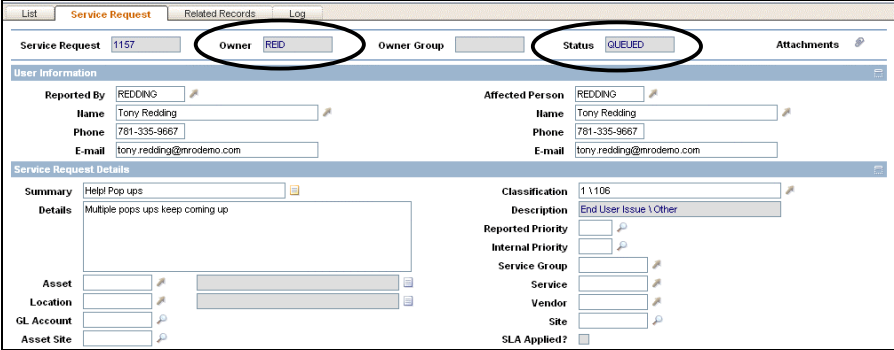


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Processing Service Requests continued

Ownership and Resolving SRs

continued

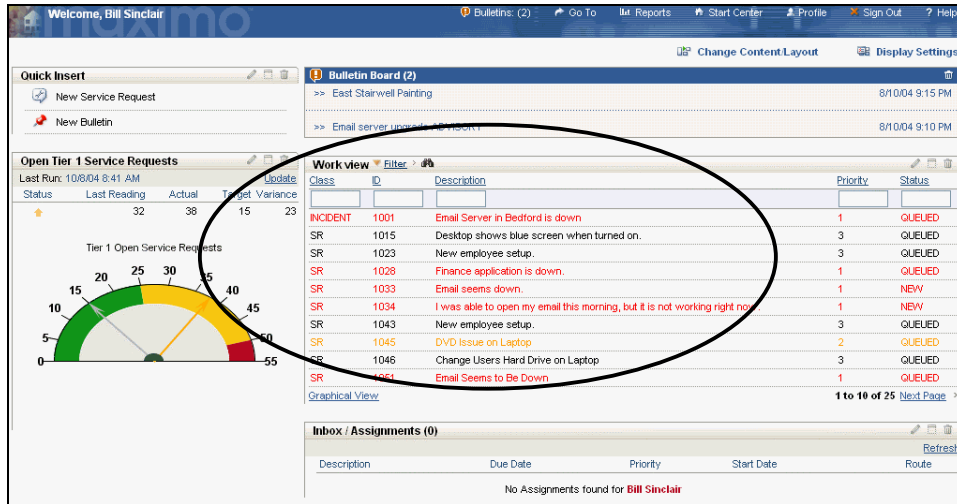
Step	Action
3	<p>From the Select Action menu, choose Select Owner. <u>Result</u>: Maximo displays the Select Owner value list.</p> 
4	<p>Search for and select REID. <u>Result</u>: Reid is given ownership and the status is changed to QUEUED.</p> 

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Processing Service Requests continued

Setup: Work Views

You can set up a Start Center to display a list of work.



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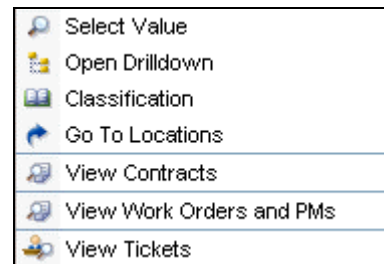
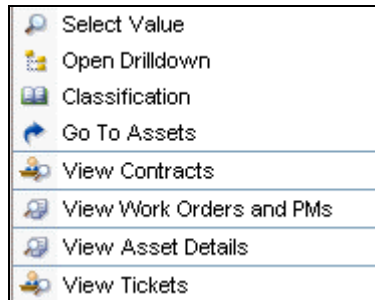
Processing Service Requests continued

Asset and Location Detail Button Revisited

Remember, you can click on the Asset or Location **Detail Menu** button

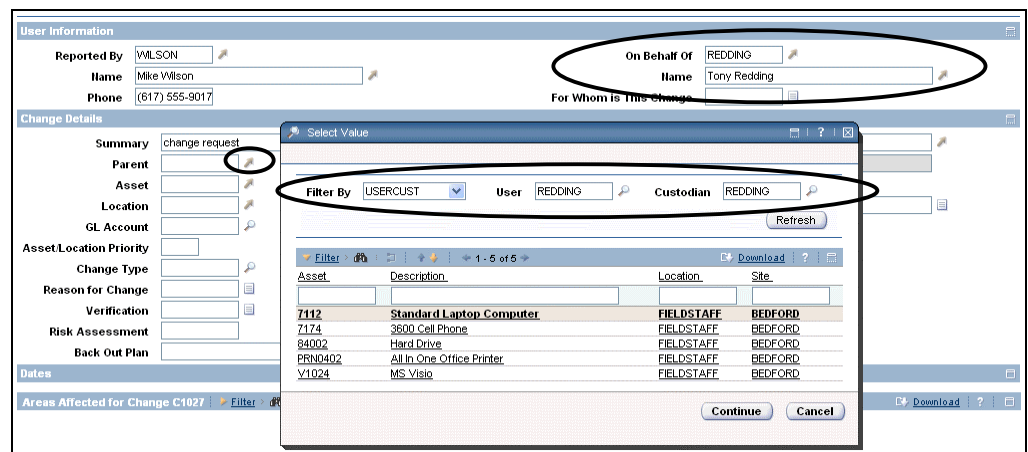


to associate or to view various aspects of the asset or location.



Viewing and Associating User/Custodian Assets

As you might recall, assets can have users and custodians associated to them. When assets are associated to a user/custodian and the asset is in OPERATING status when a ticket or work order is created on behalf of that person, you can set the **Select Value** filter to display only those assets.



If the asset is in a NOT READY or DECOMMISSIONED status, then those assets will not display.

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Processing Service Requests continued

Resolving SRs



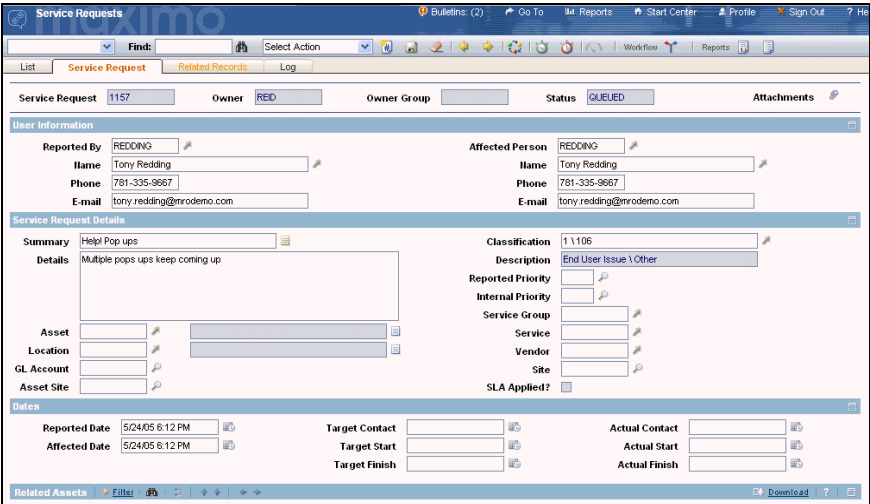
In this exercise we will sign in Maximo as Barry Reid, the IT help desk agent, and resolve the SR.

Step	Action
1	<p>Sign in to Maximo as reid/reid.</p> <p><u>Result:</u> Barry's Start Center is displayed. Notice that his Start Center is set up to display his Work View.</p>

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Processing Service Requests continued

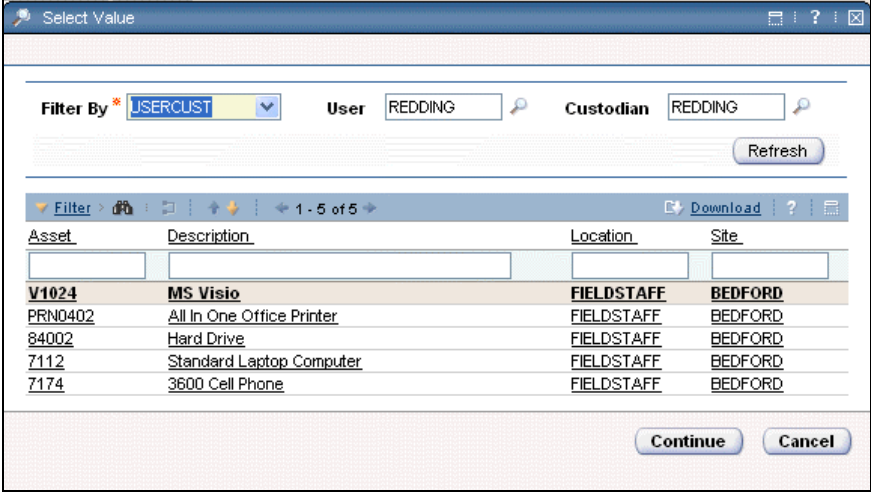
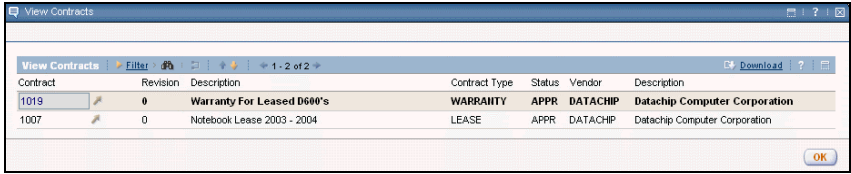
Resolving SRs continued

Step	Action
2	<p>In the Work View area, search for and retrieve the Help! Pop ups service request.</p> <p><u>Result:</u> Maximo displays the service request.</p> 

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Processing Service Requests continued

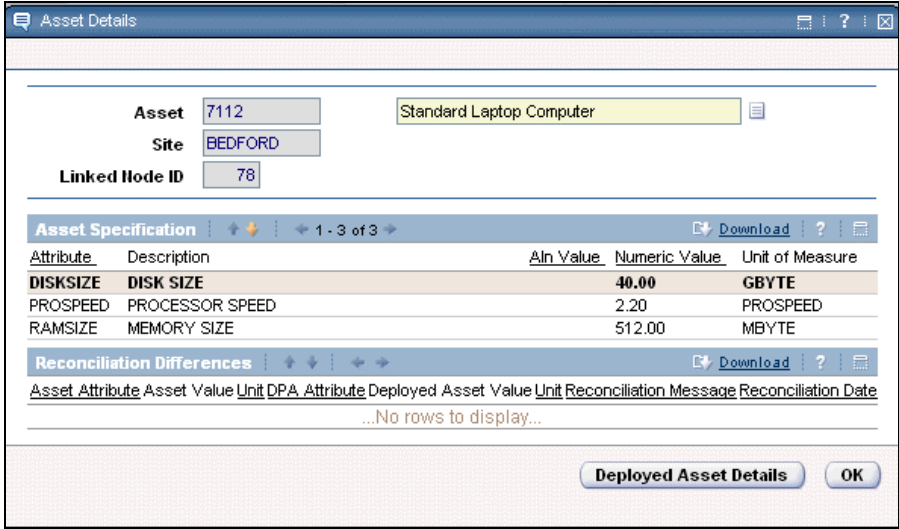
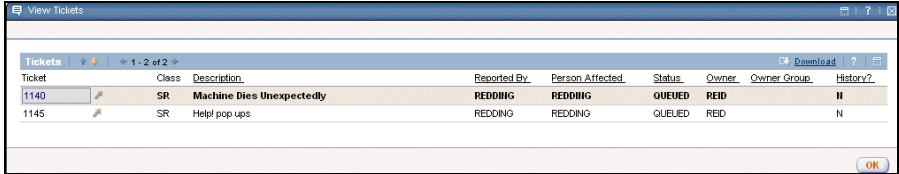
Resolving SRs continued

Step	Action
3	<p>We will assume that Reid, for asset management and tracking purposes, is going to add details to the SR. In the Asset field, click the Detail Menu button and choose Select Value.</p> <p><u>Result:</u> Maximo displays all assets associated to the custodian. Remember, the custodian and owners are associated in the Assets application.</p> 
4	<p>Select asset 7112.</p> <p><u>Result:</u> The Asset field is populated.</p>
5	<p>To view contracts against asset 7112, click Detail Menu and select View Contracts.</p> <p><u>Result:</u> Maximo displays the contracts for this asset.</p> 

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Processing Service Requests continued

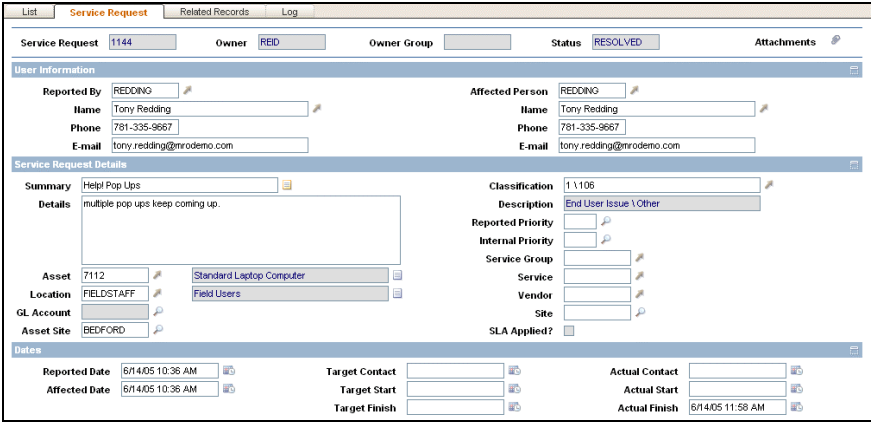
Resolving SRs continued

Step	Action
6	<p>Click OK. To view configuration details for asset 7112, click Detail Menu and select View Asset Details.</p> <p><u>Result</u>: Asset specifications are indicated. If there were differences between the asset specification and the discovered components, those differences would be indicated in the Reconciliation Differences table window.</p> 
7	<p>Click OK. To view additional details on asset 7112, such as tickets, click Detail Menu and select View Tickets.</p> <p><u>Result</u>: Maximo displays tickets written against this asset.</p> 

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Processing Service Requests continued

Resolving SRs continued

Step	Action
8	<p>We will assume the agent instructed Redding to download the spyware removal program from the IT download site and to run it on his computer. For now, it appears to be a good solution.</p> <p>From the toolbar menu, click Change Status and change the status to RESOLVED.</p> <p><u>Result:</u> Your screen should look like the one below.</p> 
9	Do not exit the application.

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Processing Service Requests continued

Work Log

Use the work log in the Service Requests application to document work that needs to be done or that was done to resolve an issue. You can also provide or solicit information to help resolve an issue. The log displays entries for the existing record, an originating record, and any follow-up records.

Note the following points:

- You can optionally make each log entry viewable to the client by specifying **CLIENTNOTE** in the **Type** field.
- You can indicate if it is a work-related log by specifying **WORK** in the **Type** field.
- You can indicate if it is an update to the service request by specifying **UPDATE** in the **Type** field.
- You can optionally make entries visible to self-service users by selecting the **Viewable?** field.
- With appropriate signature authority privileges, you can delete or edit a work log entry using the **Modify/Delete Work Log** action.

Record	Class	Created By	Date	Type	Summary	Viewable?
1157	SR	REID	5/24/05 7:06 PM	CLIENTNOTE		N

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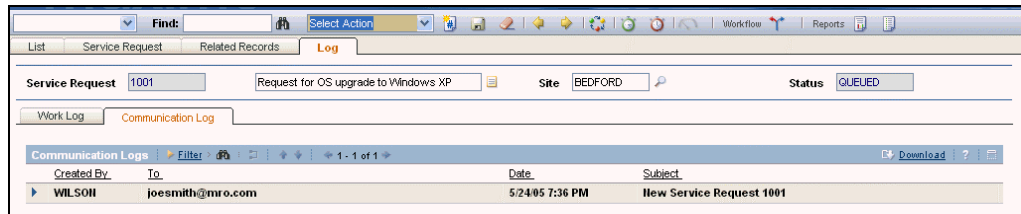
Processing Service Requests continued

Communication Log

The communication log stores inbound and outbound messages and attachments sent between users and agents. The log displays entries for the existing record, an originating record, and any follow-up records.

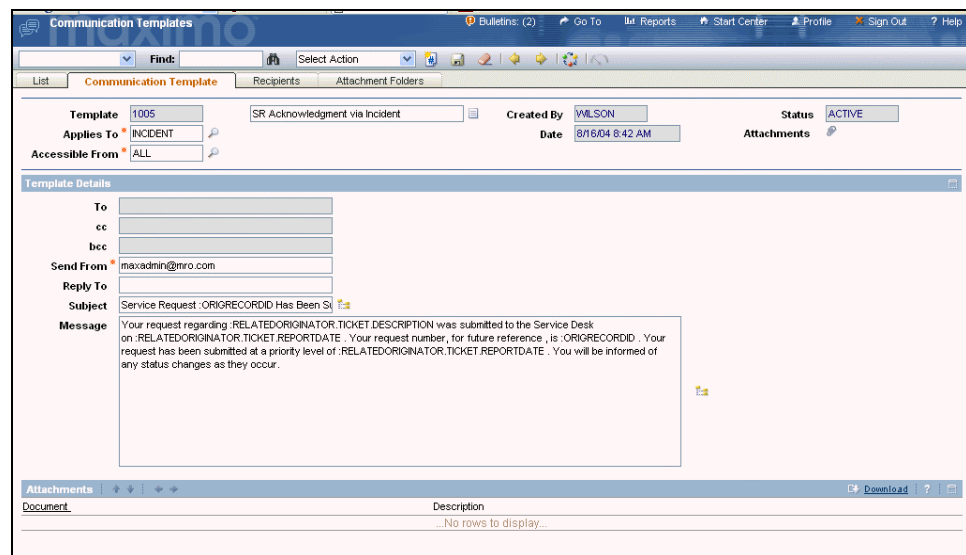
Note the following points:

- You use the **Create Communication** action to send communications about a record to a requestor or other user.
- You can use a communication template to fill in default data, or you can create a free-form communication. Depending on your Maximo settings, this can allow an e-mail listener process to associate the record with the originating record. This can enable communications to go to the original requestor and allow all related communications to become part of the current record.
- You can attach files or a Web page to a communication.



Setup: Communication Templates

You create communication templates using the **Communication Templates** application in the **Administration** module.



Processing Service Requests continued

Setup: Receiving SRs via E-mail



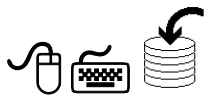
Submitting SRs through the **Create Service Requests** application is just one method for receiving SRs from users. Your organization might have Maximo set up to receive SRs via e-mail.

E-mail

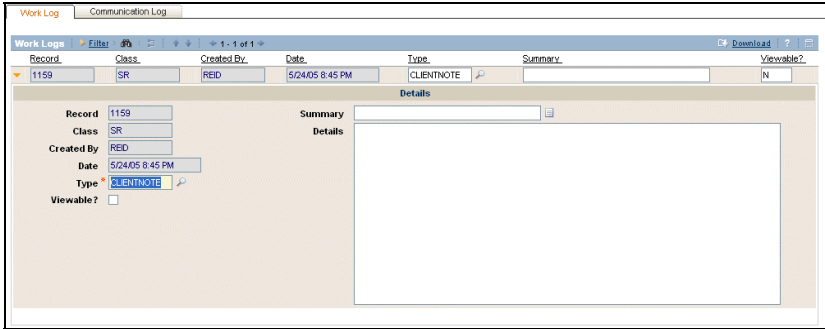


This training environment is not set up to accommodate e-mail; therefore, we will show an example, but will not be processing e-mail messages.

Work Log and Communication Entry



In this exercise we will add a work log and a communication log on this service request.

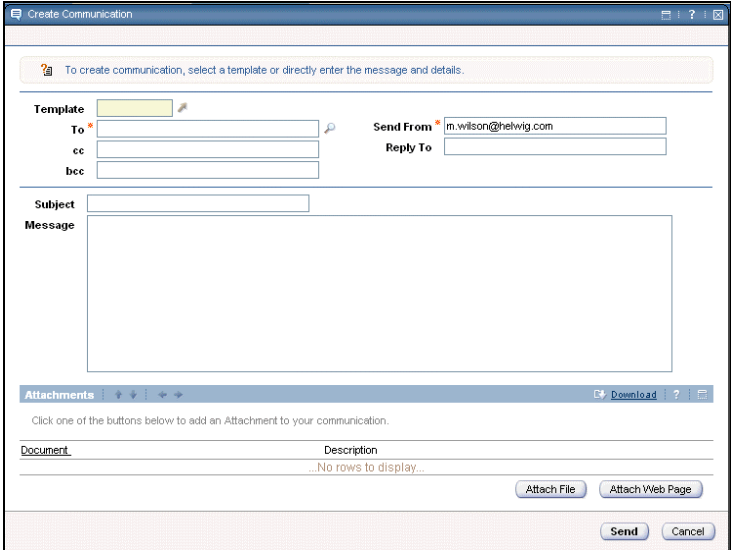
Step	Action
1	To enter a work log, click on the Log tab.
2	On the Work Log subtab, click New Row . <u>Result:</u> A new row opens. 
3	In the Type field, enter WORK . Select the Viewable? check box.

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Processing Service Requests continued

Work Log and Communication Entry

continued

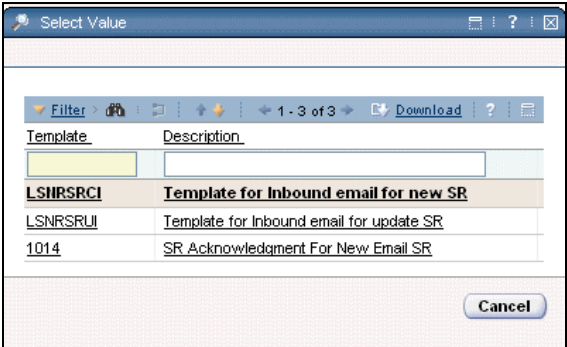
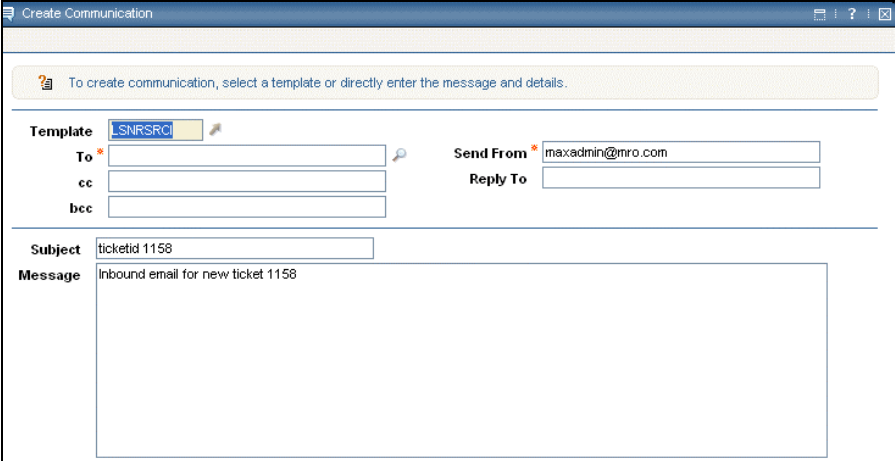
Step	Action
4	In the Summary field, enter Spyware removal. In the Details field, enter Downloaded and ran spyware on computer.
5	Click on the Communication Log subtab.
6	<p>From the Select Action menu, select Create > Communication. <u>Result:</u> The Create Communication dialog box opens.</p> 

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Processing Service Requests continued

Work Log and Communication Entry

continued

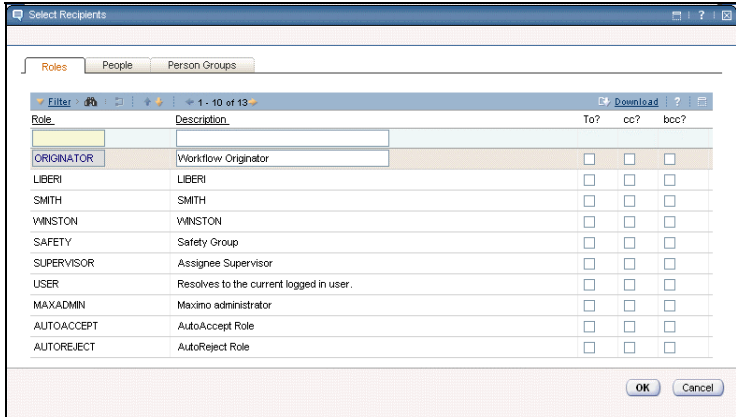
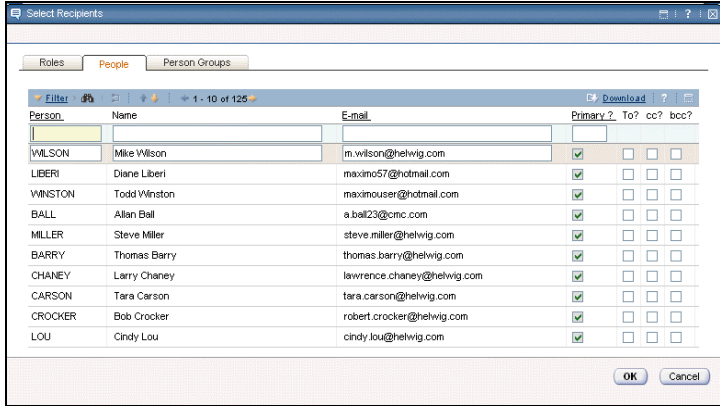
Step	Action
7	<p>In the Template field, click Detail Menu.</p> <p><u>Result:</u> A Select Value dialog box displays the templates created for use with the Service Requests application.</p> 
8	<p>Click on LSNRSRCI.</p> <p><u>Result:</u> Template information defaults to the communication log. In the template setup, substitution variables were used to indicate the service request number.</p> 

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Processing Service Requests continued

Work Log and Communication Entry

continued

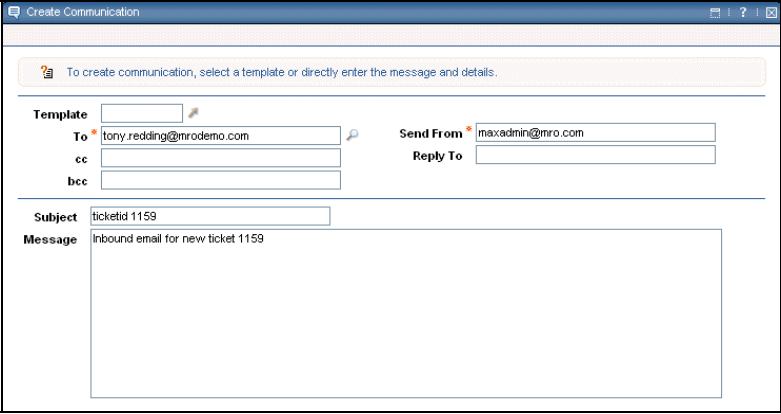
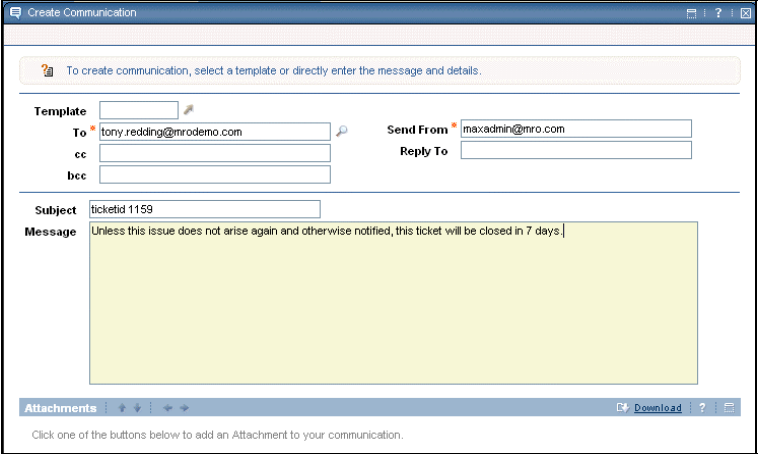
Step	Action
9	Because this is not a template we will be using, delete LSNRSRCI from the Template field.
10	<p>In the To field, click Select Value.</p> <p><u>Result:</u> The Select Recipients dialog box opens. Here you can pick by a role, which was set up in the Roles application and used in a workflow process, or by person or person groups.</p> 
11	<p>Click on the People tab.</p> <p><u>Result:</u> Maximo displays the list of people.</p> 

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Processing Service Requests continued

Work Log and Communication Entry

continued

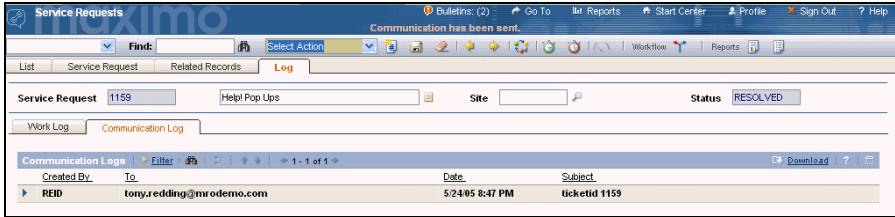
Step	Action
12	<p>Search for Redding, click on his To? check box, and then click OK. <u>Result:</u> Redding's e-mail information populates the To field.</p> 
13	<p>In the Message box, type: Unless this issue arises again, and unless otherwise notified, this ticket will be closed in 7 days. <u>Result:</u> Your screen should look similar to the one below.</p> 

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Processing Service Requests continued

Work Log and Communication Entry

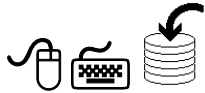
continued

Step	Action
14	<p>Click Send.</p> <p><u>Result:</u> The message will be sent and recorded in the Communication Log.</p>  <p><u>Note:</u> Remember, this training environment is not set up for e-mail. Maximo will display an error message when you click Send.</p>

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Processing Service Requests continued

Creating SRs



In this exercise we will create an SR for a new employee anticipated to start in two weeks. Human Resources has already entered labor information into the system. Complete the following tasks:

1. Insert a new SR for a new employee—**Lou Granger**—and indicate that the SR is reported by **Ted Klien**.
2. Indicate in the Summary that Lou is starting in two weeks.
3. Classify this as **Request for Service\IT**.
4. Give ownership to **OPERSYST**.

Result: Your screen should look similar to the one below.

List		Service Request		Related Records		Log	
Service Request	1148	Owner		Owner Group	OPERSYST	Status	QUEUED
Attachments							
User Information							
Reported By	KLIEN	Affected Person	GRANGER				
Name	Ted Klien	Name	Lou Granger				
Phone	(617) 673-0564	Phone	617-675-0987				
E-mail	ted.klien@sagebrush.com	E-mail	lou.granger@helwig.com				
Service Request Details							
Summary	New Employee	Classification	21201				
Details	Will be starting in two weeks.	Description	Request for Service \IT				
Asset		Reported Priority					
Location		Internal Priority					
GL Account		Service Group					
Asset Site		Service					
		Vendor					
		Site					
		SLA Applied?	<input type="checkbox"/>				
Dates							
Reported Date	6/14/05 12:13 PM	Target Contact		Actual Contact			
Affected Date	6/14/05 12:13 PM	Target Start		Actual Start			
		Target Finish		Actual Finish			

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Processing Service Requests continued

Creating SRs



In this exercise we will create an SR to indicate that the antivirus software is to be updated to the new release throughout the entire company. Complete the following tasks:

1. Insert a new SR and indicate that it is being reported by Wilson.
2. Indicate in the Summary that antivirus software is being updated to a new release.
3. Classify this as 2 \ 201 \ 20105.
4. Site is BEDFORD.
5. Give ownership to HARDWARE.

Result: Your screen should look similar to the one below.

List		Service Request		Related Records		Log	
Service Request	1149	Owner		Owner Group	HARDWARE	Status	QUEUED
Attachments							
User Information							
Reported By	WILSON	Affected Person	WILSON				
Name	Mike Wilson	Name	Mike Wilson				
Phone	(617) 555-9017	Phone	(617) 555-9017				
E-mail	m.wilson@helwig.com	E-mail	m.wilson@helwig.com				
Service Request Details							
Summary	Anti virus software			Classification	2 \ 201 \ 20105		
Details	Anti virus software to be updated to latest release.			Description	Request For Service \IT \Hdw Config		
Asset		Reported Priority		Internal Priority			
Location		Service Group		Service			
GL Account		Vendor		Site	BEDFORD		
Asset Site	BEDFORD	SLA Applied?	<input type="checkbox"/>				
Dates							
Reported Date	6/14/05 12:24 PM	Target Contact		Actual Contact			
Affected Date	6/14/05 12:24 PM	Target Start		Actual Start			
		Target Finish		Actual Finish			

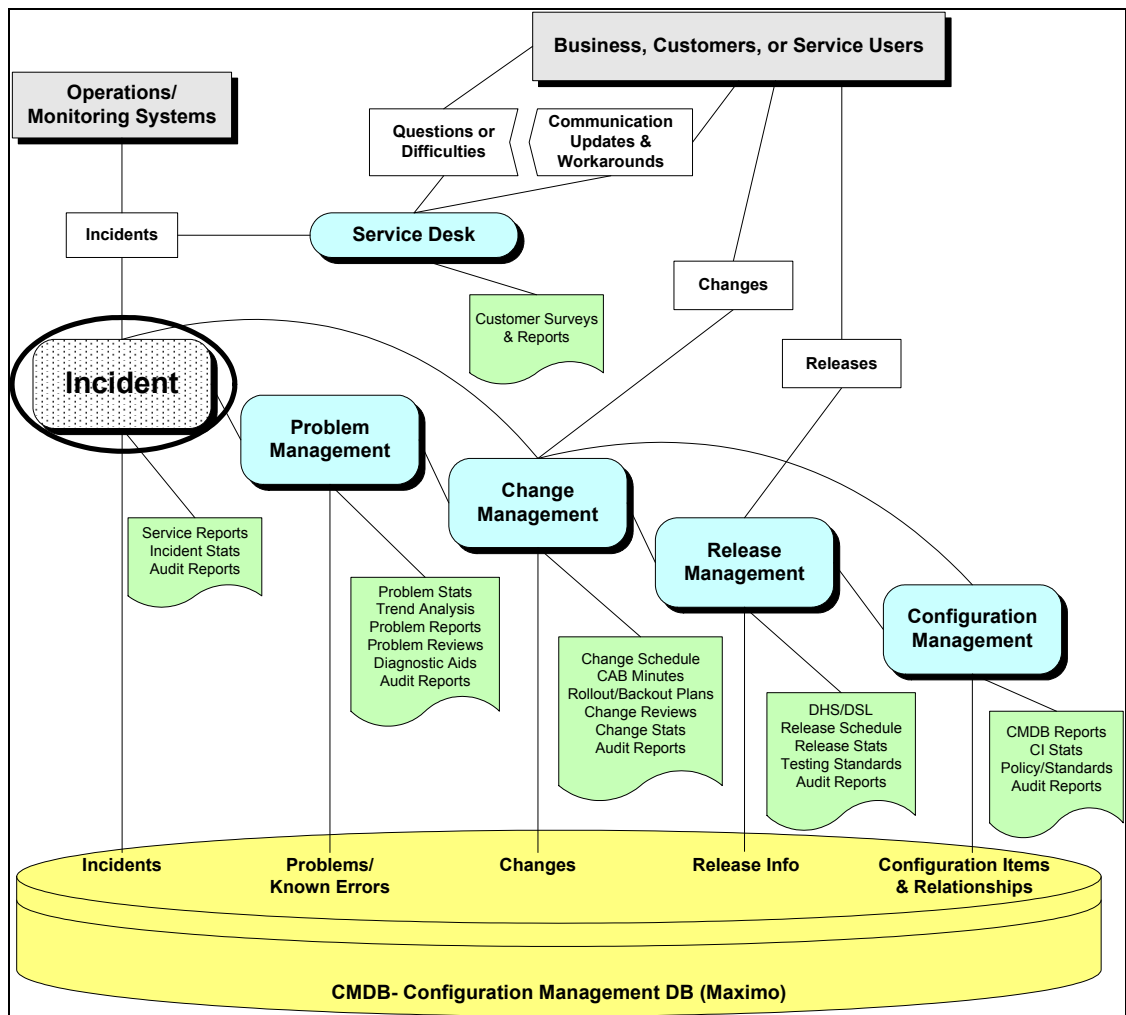
Incident Management Overview

Introduction

Because the overall goal of incident management is to restore service, the resolution of incidents occurs when that service is effectively restored. The actual process of resolving incidents can include one or several steps. However it is described, incident resolution is part of the incident management process.

We Are Here

Recall this diagram depicting the various IT Service Management processes. Throughout this section, we will discuss the incident management process in Maximo.

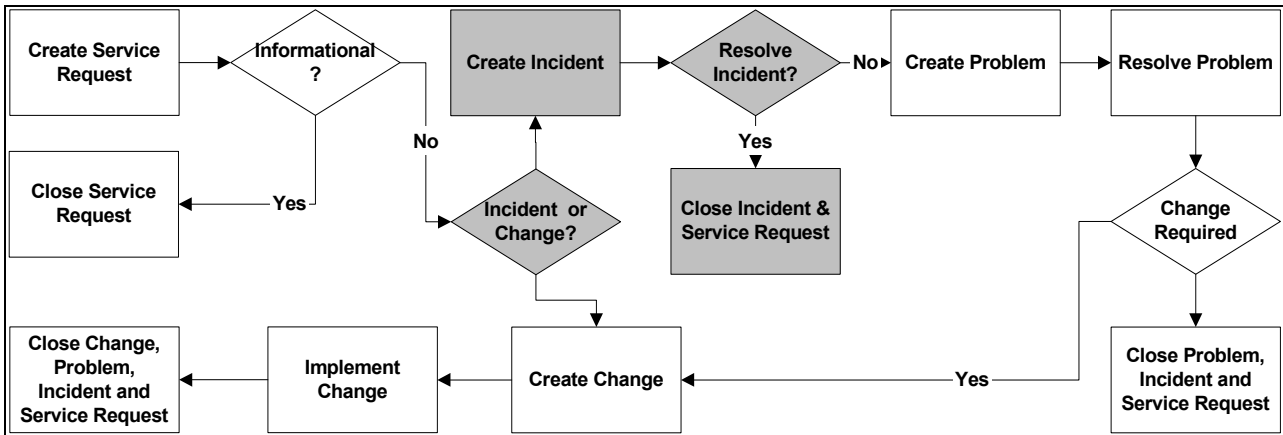


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Incident Management Overview continued

Incident Process Flow

The following typical ticket process flow depicts the portion (Incidents) that we will be covering in this chapter.



Definition: Incident

An *incident* is any event that is not part of the standard operation of a service and that causes, or might cause, an interruption to or a reduction in the quality of that service.

Processing Incidents

The Incidents Application

Use the **Incidents** application to create and modify incident records. You create an incident record to capture information about an event that deviates from standard service or an event that might disrupt the quality of that service. End users might or might not be aware of the event.

The screenshot displays the Maximo Incidents application interface. At the top, there is a navigation bar with 'Incidents' and 'maximo' logos, and a search bar with 'Find:' and 'Select Action' dropdowns. Below this is a tabbed interface with 'Incident' selected. The main content area shows incident details for incident 1148. The 'User Information' section includes fields for 'Reported By' (REDDING), 'Name' (Tony Redding), 'Phone' (781-335-9667), and 'E-mail' (tony.redding@mrodemo.com). The 'Affected Person' section includes fields for 'Name' (Tony Redding), 'Phone' (781-335-9667), and 'E-mail' (tony.redding@mrodemo.com). The 'Incident Details' section includes a 'Summary' field with the text 'I cannot archive my e-mail (Duplicate).', a 'Details' field with the text 'I cannot archive my e-mail. Last month, I was able to archive my e-mail. Today I am reaching my limit and need to archive. I tried and nothing happens. I did search solutions first and tried # 1021. My e-mail setup appears to be correct.', and a 'Classification' field with the value '1 1102 110202'. Other fields include 'Description' (End User Issue \ Software \ Email), 'Reported Priority' (3), 'Internal Priority', 'Service Group', 'Service', 'Vendor', 'Site' (BEDFORD), and 'SLA Applied?' (checkbox). There are also fields for 'Asset', 'Location', 'GL Account', and 'Asset Site'.

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Processing Incidents continued

Tabs

The **Incidents** application has the following tabs:

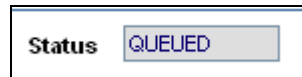
Use this tab...	To...
List	Search Maximo for incident records.
Incident	Create, modify, view, and delete identifying information for the incident record and search for possible solutions.
Activities	Report actual labor time spent resolving the incident, and create, delegate, and track activity work orders for the incident. An activity is unplanned work delegated to others.
Related Records	Relate, view, and navigate relationships between service requests, incidents, problems, and other records.
Solution Details	Add or view solution information for this record.
Log	Create, view, edit, and delete work log entries, and view communication log entries.
Failure Reporting	View and record failure information for assets and locations on an incident record.

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Processing Incidents continued

Incident Statuses in Maximo

The status of an incident changes as it moves toward completion. The following information describes the default statuses for incidents. Your system administrator might have added, removed, or changed the names of these supplied statuses.



Status	Description
NEW	Applies when you create or insert an incident. You cannot revert to this status after you change it.
QUEUED	Applies when incident ownership is given to a person or a group. Ownership assignment can be made manually or might be made automatically via workflow, an associated SLA escalation action, or another escalation process. For more information, see the Workflow help or the Service Level Agreements help, respectively.
INPROG	In progress. Applies when someone is working on this incident. The first time an incident reaches this status, Maximo populates the Actual Start field, if it is empty.
PENDING	Applies when an incident is pending an action (for example, vendor or user call-back, or waiting for parts).
RESOLVED	Resolved. Applies when information has been gathered and routed, service has been restored, or a solution has been provided. The first time an incident reaches this status, Maximo populates the Actual Finish field, if it is empty. If needed, you can reopen an incident and change the status from RESOLVED to INPROG (in progress).
CLOSE	Closed. Applies when an incident becomes a historical record. When a record is closed, you cannot change the status. You can, however, edit certain parts of the history record.

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Processing Incidents continued

Note



In the following exercise, for training purposes, we are going to search for and select a specific SR. In your working environment you will have different business processes, which might include a default query such as one for new SRs listed by priority.

Incidents and Tickets

Use the **Incidents** application to create and modify incident records.

An incident record is a type of ticket. Other ticket types are service requests and problems. The ticket applications are closely related and share many features.

You create an incident record to capture information about an event that deviates from standard service or an event that might disrupt the quality of that service.

SLAs and Ticket Templates

As with the Service Request application, the Select Action menu for the Incidents application allows you to apply, view, and deselect SLAs, as well as apply a ticket template to the incident.

Incident Ownership

As with the Service Request action, the owner of an incident is responsible for managing the work associated with that incident. You can either select an owner of an incident or take ownership yourself.

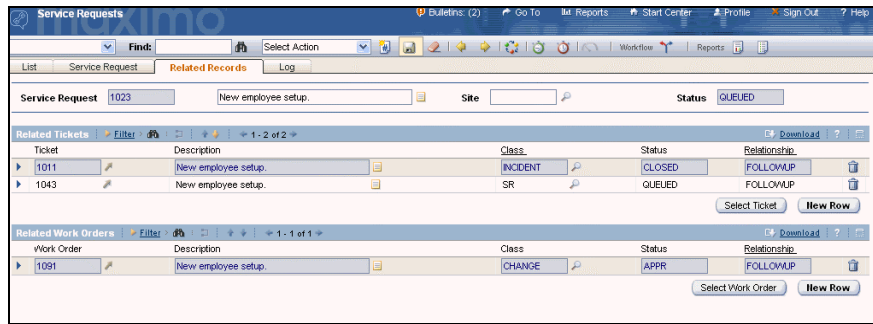
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Processing Incidents continued

Ticket Relationships

Tickets can be related to other tickets and work orders in the following ways:

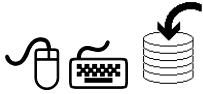
- **RELATED:** Tickets and work orders, relating two tickets or a ticket and a work order for reference or information only. You create these relationships by linking to other records on a ticket's **Related Records** tab.
- **FOLLOWUP:** You associate two tickets or a ticket and a work order more directly, when you create a follow-up record from the ticket. You create a follow-up relationship when you use one of the **Create** actions from the **Select Action** menu on the ticket.



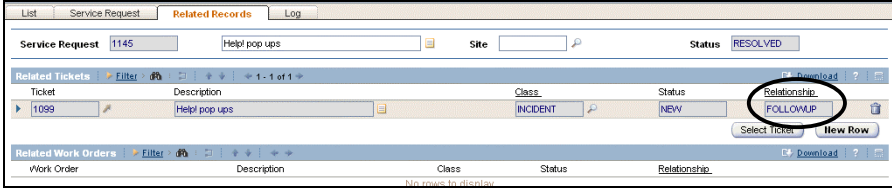
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Processing Incidents continued

Exercise: Updating an SR



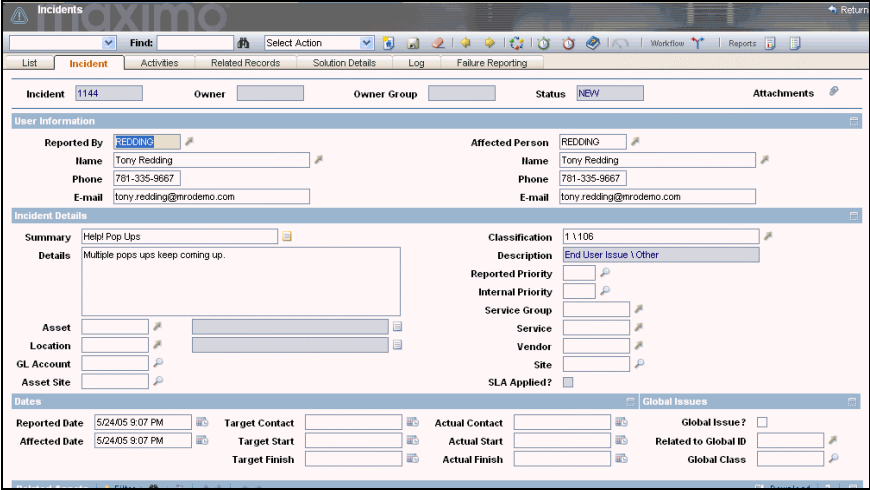
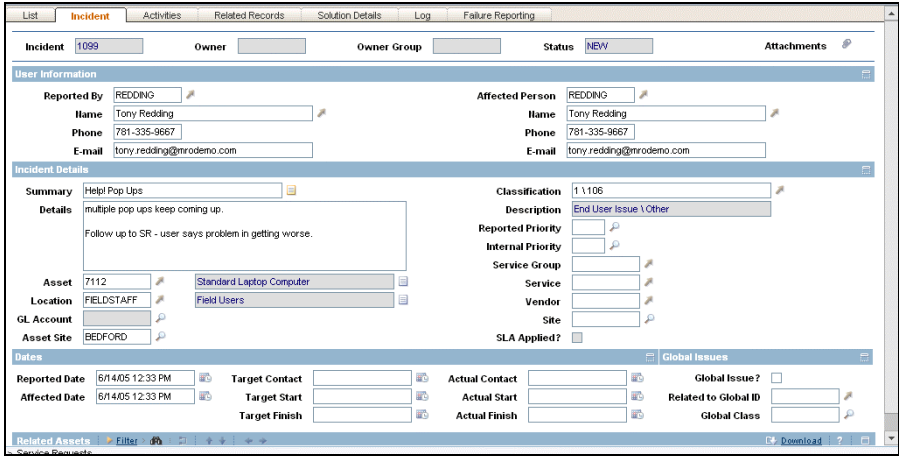
For this exercise we will assume that user Reid called the IT department the following day to tell them that the spyware program did not really resolve the pop-up issue and that it was getting worse. We will open an incident ticket, because an IT agent will need to take a closer look at the issue. In this case we are going to assume that Reid has dropped off his laptop at the IT department.

Step	Action
1	Retrieve your Pop Up service request.
2	With your SR ticket open, from the Select Action menu, select Create and then select Incident . <u>Result:</u> Maximo creates an incident.
3	Click on the Related Records tab. <u>Result:</u> The incident is now a FOLLOWUP relationship. 

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Processing Incidents continued

Exercise: continued
Updating an SR

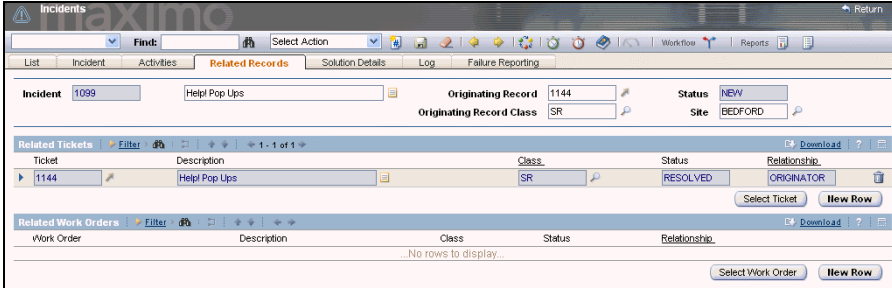
Step	Action
4	<p>In the Related Tickets table window, click on the incident record's Detail Menu and select Go To Incidents.</p> <p><u>Result:</u> You are brought to the Incidents application with information carried over from the service ticket.</p> 
5	<p>In the Details box, add the following information: Follow up to SR, user says problem is getting worse.</p> <p><u>Result:</u> Your screen should look similar to the one below.</p> 

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Processing Incidents continued

Exercise:
Updating an SR

continued

Step	Action
6	In the Internal Priority field, enter 2.
7	Give ownership of this incident ticket to Bill Sinclair .
8	<p>Click on the Related Records tab.</p> <p><u>Result:</u> The Service Request ticket is identified as the originator.</p>  <p>What is the status of the originating SR? _____</p>
9	<p>You could work on the incident here; however, for training purposes we will come back to this incident by another path.</p> <p>Click the Return link.</p> <p><u>Result:</u> You are returned to the SR application.</p>

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Processing Incidents continued

Labor Transactions: Start and Stop Timers

There are two ways on a ticket to report labor:

- You can click the **Start Timer** and **Stop Timer** buttons in the menu bar to report your time (labor) spent working on the incident.



You can then view the details for the labor transaction on the **Activities** tab of the incident.

- On the **Activities** tab **Time Tracking** subtab, you can click on the **Select Labor** or the **New Row** button to manually record labor.

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Processing Incidents continued

Status Change and Dates

When status changes occur on a ticket, several things happen.

- When an incident reaches the status of **CLOSED**, all unapproved, outstanding labor transactions indicted on the Activities tab are approved automatically.
- When an incident reaches the status of **INPROG**, today’s date and time are populated in the **Actual Start** field.
- When an incident reaches the status of **RESOLVED**, today’s date and time are populated in the **Actual Finish** field.

Exercise: Modifying an Incident

As you begin to work on a ticket and want to record the time spent, you can change the status to **In Progress**, and then start the timer to record the amount of time spent working on each ticket.



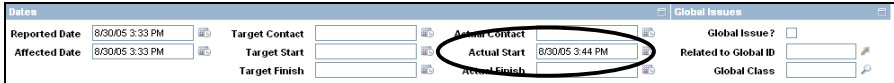
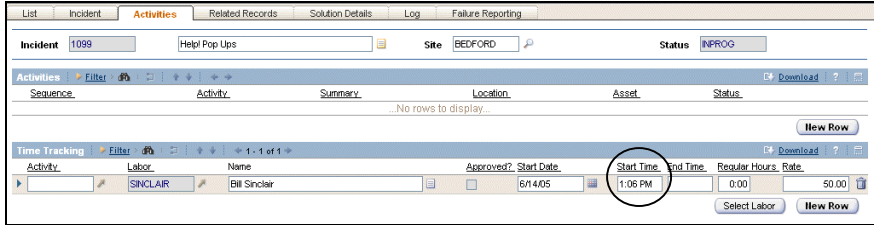
Step	Action
1	Sign in to Maximo as Tier 1 Agent Bill Sinclair. User: sinclair Password: sinclair <u>Result:</u> Maximo displays the Start Center assigned to Bill Sinclair.
2	Find and select the incident created from the SR submitted by user Tony Redding with the Help! Pop ups description. <u>Result:</u> The Incidents application opens with the selected incident.

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Processing Incidents continued

**Exercise:
Modifying an
Incident**

continued

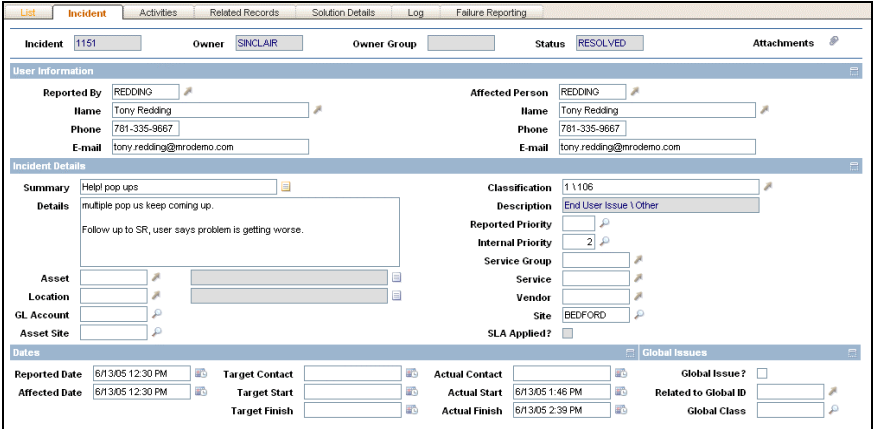

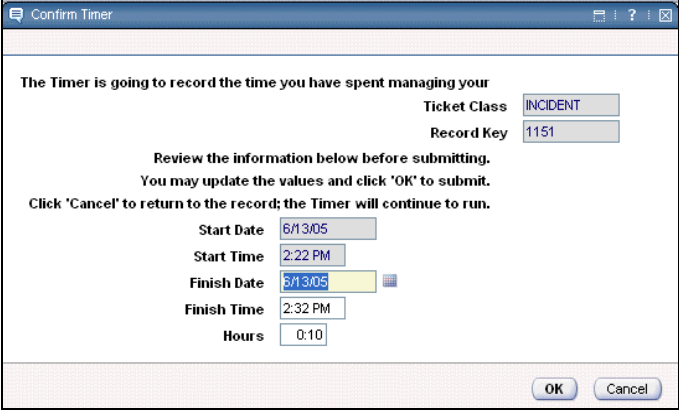
Step	Action
3	<p>Change the status of this incident to In Progress.</p> <p><u>Result:</u> The status changes to INPROG (In Progress) and the Actual Start Time field is populated with today's date and time.</p> 
4	<p>Click on the Start Timer button and then click on the Activities tab.</p> <p><u>Result:</u> The timer begins recording the time spent working on this (incident) ticket.</p> 
5	<p>Insert a work log for a WORK type message that indicates the following information:</p> <p>Put computer in safe mode and cleaned up registry files. Removed suspicious looking files and entries.</p>

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Processing Incidents continued

Exercise: Modifying an Incident

continued

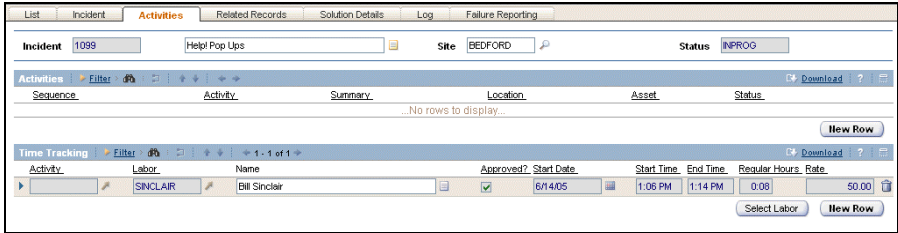
Step	Action
6	<p>Change the status of this incident to RESOLVED.</p> <p><u>Result:</u> The status changes to RESOLVED and the Actual Finish Time field shows today's date and time.</p> 
7	<p>Click the Stop Timer button.</p>  <p><u>Result:</u> The Confirm Timer dialog box opens.</p> 

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Processing Incidents continued

Exercise:
Modifying an Incident

continued

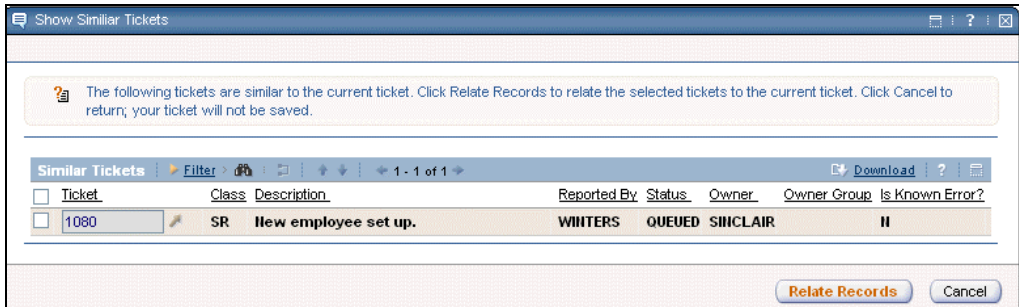
Step	Action
8	<p>Confirm the actual time worked on this incident so far.</p> <p>Ensure that at least 1 minute (00:01) is entered in the Hours field: If the Hours field in the Confirm Timer dialog box reads 00:00, then change the Hours to a minimum of 00:01, then click OK.</p> <p><u>Result:</u> The Confirm Timer dialog box closes.</p>
9	<p>Click on the Activities tab.</p> <p><u>Result:</u> The total labor hours spent on this ticket are recorded.</p> 

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Processing Incidents continued

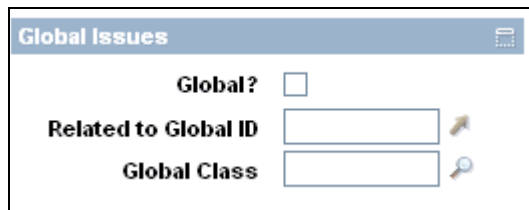
Show Similar Tickets

You use the **Show Similar Tickets** action to search for and relate other tickets to the current record. Relationships you create this way are for information purposes only. The similar ticket search results show only service requests, incidents, and problems having the same value in the **Classification** field, and are not closed to history.



Global Record

A *global record* is an incident or problem with a root cause that is the cause of many other issues, or that is something affecting many other users. Only incident or problem records can be global records. However, other record types might be associated with a global record.



Global Issue Ticket



In this exercise, we are going to act as an IT service desk agent who is getting phone calls and service requests saying that the e-mail server seems to be down. Because it appears to be affecting the entire company, we will process it as a global ticket.

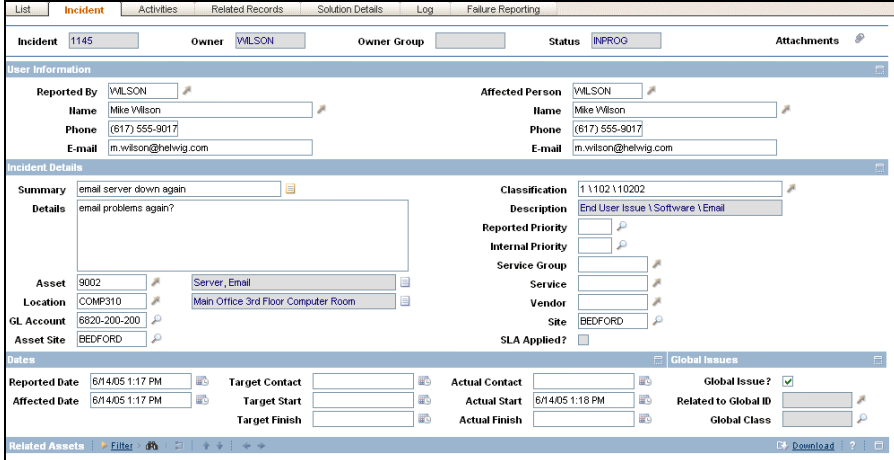
Step	Action
1	Sign in to Maximo as wilson/wilson.

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Processing Incidents continued

Global Issue
Ticket

continued

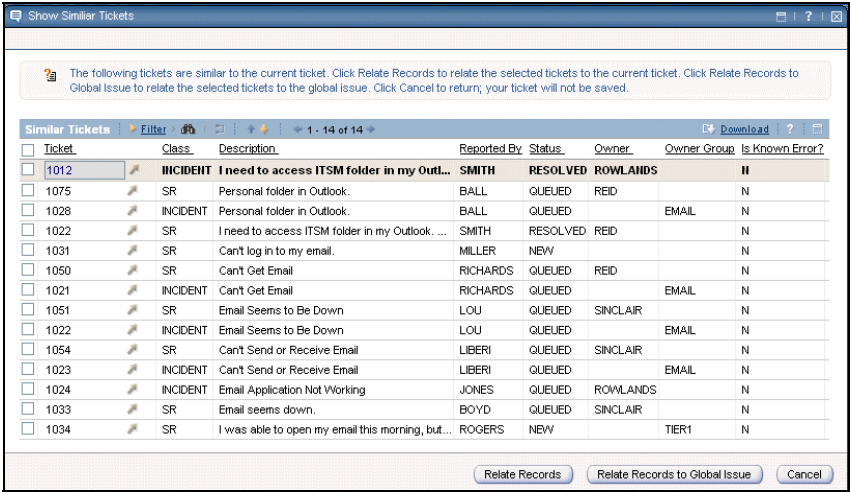
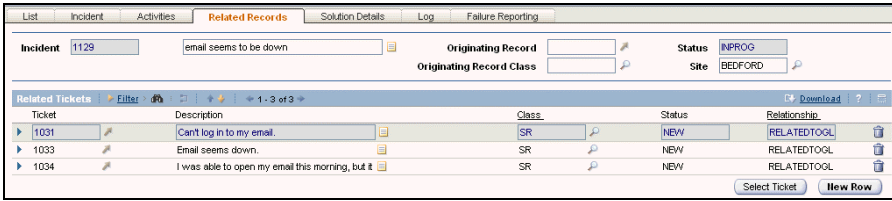
Step	Action
2	<p>Open the Incident application and create a new ticket. Perform the following tasks:</p> <ul style="list-style-type: none"> • Start the timer and change the status to INPROG. • Indicate that the issue is reported by WILSON. • Take ownership as WILSON. • Summarize that the e-mail server is down again and investigation of server is needed. • Indicate that this is for asset 9002. <p><u>Hint:</u> When adding the asset number, you might have to change the filter to ALL.</p> <ul style="list-style-type: none"> • Enter GL account 6820-200-000. • Classify it as 1 \ 102 \ 10202 (End User Issue \ Software \ Email) • Internal priority is 1. • Service group is IT. • Service is EMAIL. • Indicate that it is a global issue. <p><u>Result:</u> Your screen should look like the one below.</p>  <p>The screenshot shows the 'Incident' application interface. At the top, there are tabs for 'List', 'Incident', 'Activities', 'Related Records', 'Solution Details', 'Log', and 'Failure Reporting'. Below the tabs, the incident number is '1145'. The 'Owner' is 'WILSON' and the 'Status' is 'INPROG'. The 'User Information' section shows 'Reported By' as 'WILSON' and 'Affected Person' as 'WILSON'. The 'Incident Details' section includes a 'Summary' field with 'email server down again', a 'Details' field with 'email problems again?', and various fields for 'Asset' (9002), 'Location' (COMP310), 'GL Account' (6820-200-200), and 'Asset Site' (BEDFORD). The 'Classification' section shows '1 \ 102 \ 10202' and 'End User Issue \ Software \ Email'. The 'Global Issues' section at the bottom has a 'Global Issue?' checkbox checked.</p>

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Processing Incidents continued

Global Issue Ticket

continued

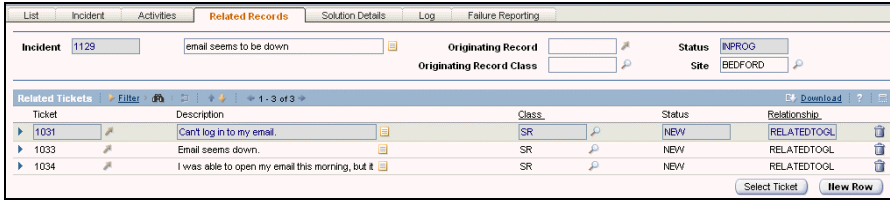
Step	Action																																																																																																																								
3	<p>Save your record and then, from the Select Action menu, select Show Similar Tickets.</p> <p><u>Result:</u> The Show Similar Tickets dialog box opens.</p>  <table border="1"> <thead> <tr> <th>Ticket</th> <th>Class</th> <th>Description</th> <th>Reported By</th> <th>Status</th> <th>Owner</th> <th>Owner Group</th> <th>Is Known Error?</th> </tr> </thead> <tbody> <tr> <td>1012</td> <td>INCIDENT</td> <td>I need to access ITSM folder in my Outlook...</td> <td>SMITH</td> <td>RESOLVED</td> <td>ROWLANDS</td> <td>II</td> <td></td> </tr> <tr> <td>1075</td> <td>SR</td> <td>Personal folder in Outlook.</td> <td>BALL</td> <td>QUEUED</td> <td>REID</td> <td></td> <td>N</td> </tr> <tr> <td>1028</td> <td>INCIDENT</td> <td>Personal folder in Outlook.</td> <td>BALL</td> <td>QUEUED</td> <td></td> <td>EMAIL</td> <td>N</td> </tr> <tr> <td>1022</td> <td>SR</td> <td>I need to access ITSM folder in my Outlook...</td> <td>SMITH</td> <td>RESOLVED</td> <td>REID</td> <td></td> <td>N</td> </tr> <tr> <td>1031</td> <td>SR</td> <td>Can't log in to my email.</td> <td>MILLER</td> <td>NEW</td> <td></td> <td></td> <td>N</td> </tr> <tr> <td>1050</td> <td>SR</td> <td>Can't Get Email</td> <td>RICHARDS</td> <td>QUEUED</td> <td>REID</td> <td></td> <td>N</td> </tr> <tr> <td>1021</td> <td>INCIDENT</td> <td>Can't Get Email</td> <td>RICHARDS</td> <td>QUEUED</td> <td></td> <td>EMAIL</td> <td>N</td> </tr> <tr> <td>1051</td> <td>SR</td> <td>Email Seems to Be Down</td> <td>LOU</td> <td>QUEUED</td> <td>SINCLAIR</td> <td></td> <td>N</td> </tr> <tr> <td>1022</td> <td>INCIDENT</td> <td>Email Seems to Be Down</td> <td>LOU</td> <td>QUEUED</td> <td></td> <td>EMAIL</td> <td>N</td> </tr> <tr> <td>1054</td> <td>SR</td> <td>Can't Send or Receive Email</td> <td>LIBERI</td> <td>QUEUED</td> <td>SINCLAIR</td> <td></td> <td>N</td> </tr> <tr> <td>1023</td> <td>INCIDENT</td> <td>Can't Send or Receive Email</td> <td>LIBERI</td> <td>QUEUED</td> <td></td> <td>EMAIL</td> <td>N</td> </tr> <tr> <td>1024</td> <td>INCIDENT</td> <td>Email Application Not Working</td> <td>JONES</td> <td>QUEUED</td> <td>ROWLANDS</td> <td></td> <td>N</td> </tr> <tr> <td>1033</td> <td>SR</td> <td>Email seems down.</td> <td>BOYD</td> <td>QUEUED</td> <td>SINCLAIR</td> <td></td> <td>N</td> </tr> <tr> <td>1034</td> <td>SR</td> <td>I was able to open my email this morning, but...</td> <td>ROGERS</td> <td>NEW</td> <td></td> <td>TIER1</td> <td>N</td> </tr> </tbody> </table>	Ticket	Class	Description	Reported By	Status	Owner	Owner Group	Is Known Error?	1012	INCIDENT	I need to access ITSM folder in my Outlook...	SMITH	RESOLVED	ROWLANDS	II		1075	SR	Personal folder in Outlook.	BALL	QUEUED	REID		N	1028	INCIDENT	Personal folder in Outlook.	BALL	QUEUED		EMAIL	N	1022	SR	I need to access ITSM folder in my Outlook...	SMITH	RESOLVED	REID		N	1031	SR	Can't log in to my email.	MILLER	NEW			N	1050	SR	Can't Get Email	RICHARDS	QUEUED	REID		N	1021	INCIDENT	Can't Get Email	RICHARDS	QUEUED		EMAIL	N	1051	SR	Email Seems to Be Down	LOU	QUEUED	SINCLAIR		N	1022	INCIDENT	Email Seems to Be Down	LOU	QUEUED		EMAIL	N	1054	SR	Can't Send or Receive Email	LIBERI	QUEUED	SINCLAIR		N	1023	INCIDENT	Can't Send or Receive Email	LIBERI	QUEUED		EMAIL	N	1024	INCIDENT	Email Application Not Working	JONES	QUEUED	ROWLANDS		N	1033	SR	Email seems down.	BOYD	QUEUED	SINCLAIR		N	1034	SR	I was able to open my email this morning, but...	ROGERS	NEW		TIER1	N
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4	<p>Refine your search list to display tickets with Email in the description and the status of NEW.</p> <p><u>Result:</u> Your search list should look like the one below.</p>  <table border="1"> <thead> <tr> <th>Ticket</th> <th>Description</th> <th>Class</th> <th>Status</th> <th>Relationship</th> </tr> </thead> <tbody> <tr> <td>1031</td> <td>Can't log in to my email.</td> <td>SR</td> <td>NEW</td> <td>RELATEDTOGL</td> </tr> <tr> <td>1033</td> <td>Email seems down</td> <td>SR</td> <td>NEW</td> <td>RELATEDTOGL</td> </tr> <tr> <td>1034</td> <td>I was able to open my email this morning, but I</td> <td>SR</td> <td>NEW</td> <td>RELATEDTOGL</td> </tr> </tbody> </table>	Ticket	Description	Class	Status	Relationship	1031	Can't log in to my email.	SR	NEW	RELATEDTOGL	1033	Email seems down	SR	NEW	RELATEDTOGL	1034	I was able to open my email this morning, but I	SR	NEW	RELATEDTOGL																																																																																																				
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5	<p>Select all three service request records and then click Relate Records to Global Issue.</p>																																																																																																																								

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Processing Incidents continued

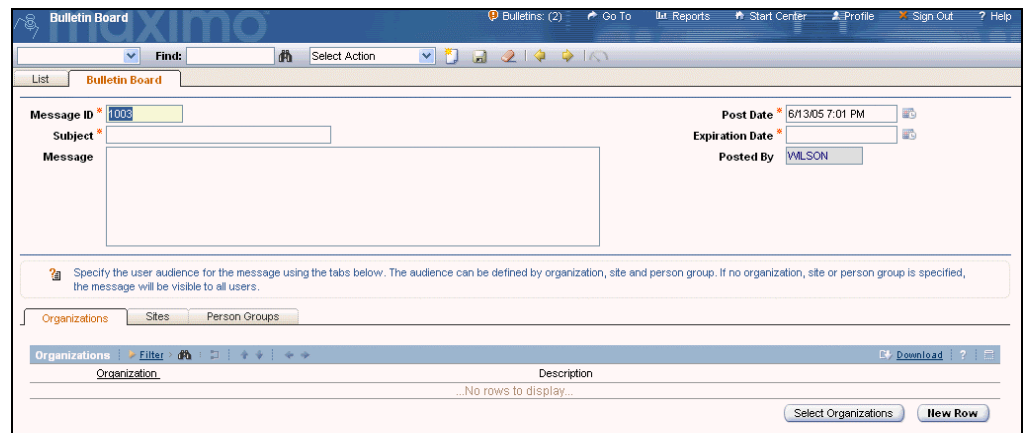
Global Issue Ticket

continued

Step	Action
6	<p>Click on the Related Records tab.</p> <p><u>Result:</u> The service requests records are identified as related to global (RELATEDTOGLOBAL).</p> 

Bulletin Board

By creating and posting messages on the Bulletin Board, you can minimize the creation and duplication of tickets. Bulletin Board messages can be targeted to a specific audience (based on organization, site, or person group). If an audience is not specified, then any user who signs in to Maximo can view the Bulletin Board messages. Bulletin Board messages can be viewed from the Start Center as well as from any Maximo application.

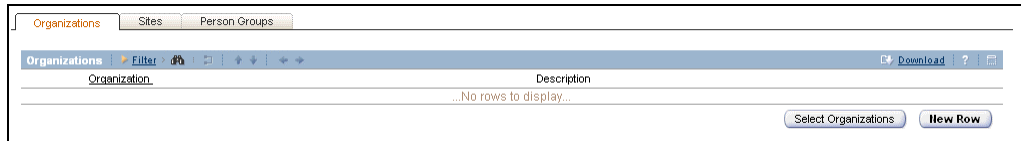


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Processing Incidents continued



Specifying the User Audience for Messages

You can also designate a specific audience for viewing your messages by using the Bulletin Board tabs. You can choose an audience from an organization, a site, or a person group.



Date and Time Criteria

You can specify the date and time you want the message to appear on the Bulletin Board. You can also define a date and time when you want the message to be automatically removed from the Bulletin Board.

Post Date *	<input type="text" value="6/13/05 7:01 PM"/>	
Expiration Date *	<input type="text"/>	

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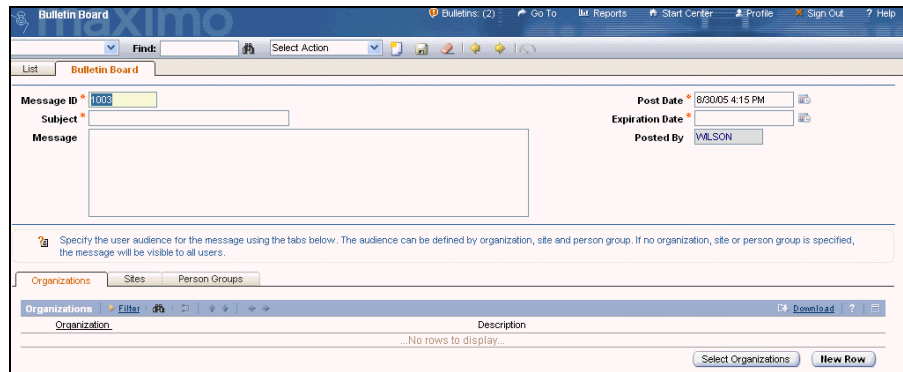
Processing Incidents continued

Inserting a New Bulletin



In this exercise we will assume the e-mail server is down and we cannot send e-mail to let the employees know that the issue is being addressed. Another option to acknowledge the issue and to prevent calls to the service desk and IT department is to use the **Bulletin Board** application to broadcast a message. Follow these steps to insert a new bulletin board message.

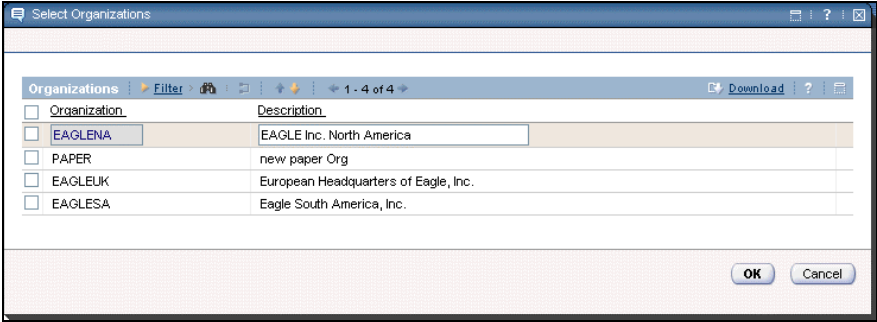
Step	Action
1	Open the Bulletin Board application (Administration module). <u>Result:</u> The Bulletin Board application opens.
2	Click New Message to insert a new Bulletin Board record. <u>Result:</u> The Bulletin Board application displays a blank record, ready for editing.



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Processing Incidents continued

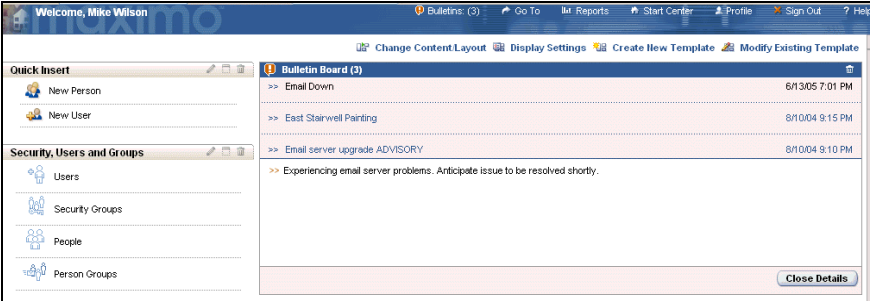
Inserting a New Bulletin continued

Step	Action								
3	Enter the following information: <table border="0"> <tr> <td><u>Field</u></td> <td><u>Value</u></td> </tr> <tr> <td>Subject</td> <td>Email Down</td> </tr> <tr> <td>Message</td> <td>Experiencing email server problems. Anticipate issue to be resolved shortly.</td> </tr> <tr> <td>Expiration Date</td> <td>[Tomorrow]</td> </tr> </table>	<u>Field</u>	<u>Value</u>	Subject	Email Down	Message	Experiencing email server problems. Anticipate issue to be resolved shortly.	Expiration Date	[Tomorrow]
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Subject	Email Down								
Message	Experiencing email server problems. Anticipate issue to be resolved shortly.								
Expiration Date	[Tomorrow]								
4	Click Select Organizations . <u>Result:</u> The Select Organizations dialog box opens. 								
5	Click to select EAGLENA , and then click OK . <u>Result:</u> All EAGLENA sites are now selected to receive this bulletin.								
6	Save the new record.								

continued on next page

Processing Incidents continued

Inserting a New Bulletin continued

Step	Action
7	<p>To view the message, click on Start Center in the toolbar.</p> <p><u>Result:</u> You are brought to Mike Wilson’s Start Center and the Bulletin Board is displaying the Email Down message.</p> <p><u>Hint:</u> Click on the message to view the details.</p>  <p>The screenshot shows a web application interface for Mike Wilson. The top navigation bar includes 'Welcome, Mike Wilson', 'Bulletins (3)', 'Go To', 'Reports', 'Start Center', 'Profile', and 'Sign Out'. Below the navigation bar are several toolbars: 'Quick Insert' with 'New Person' and 'New User' buttons; 'Security, Users and Groups' with 'Users', 'Security Groups', 'People', and 'Person Groups' links; and a 'Bulletin Board (3)' section. The Bulletin Board displays three messages: 'Email Down' (6/13/05 7:01 PM), 'East Stairwell Painting' (8/1/04 9:15 PM), and 'Email server upgrade ADVISORY' (8/1/04 9:10 PM). The 'Email Down' message is highlighted, and a 'Close Details' button is visible at the bottom right of the message list.</p>

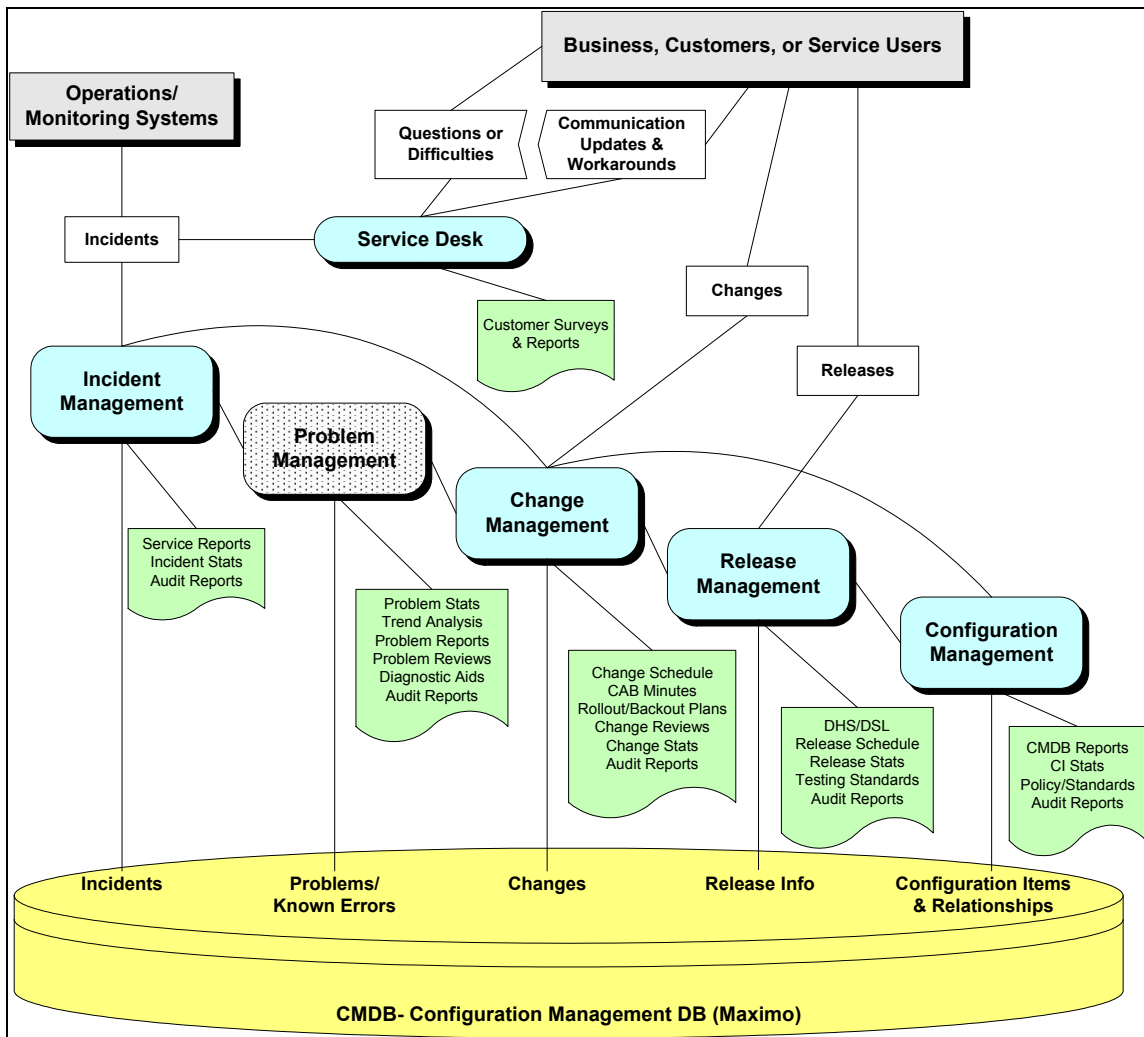
Problem Management

Introduction

In the previous section we went through a scenario of incident management for an incident that required investigation through problem management. In this section we will build on that knowledge, but first let's look at where problem management falls within IT Service Management.

We Are Here

Recall this diagram depicting the various IT Service Management processes. Throughout this section, we will discuss the problem management process in Maximo.



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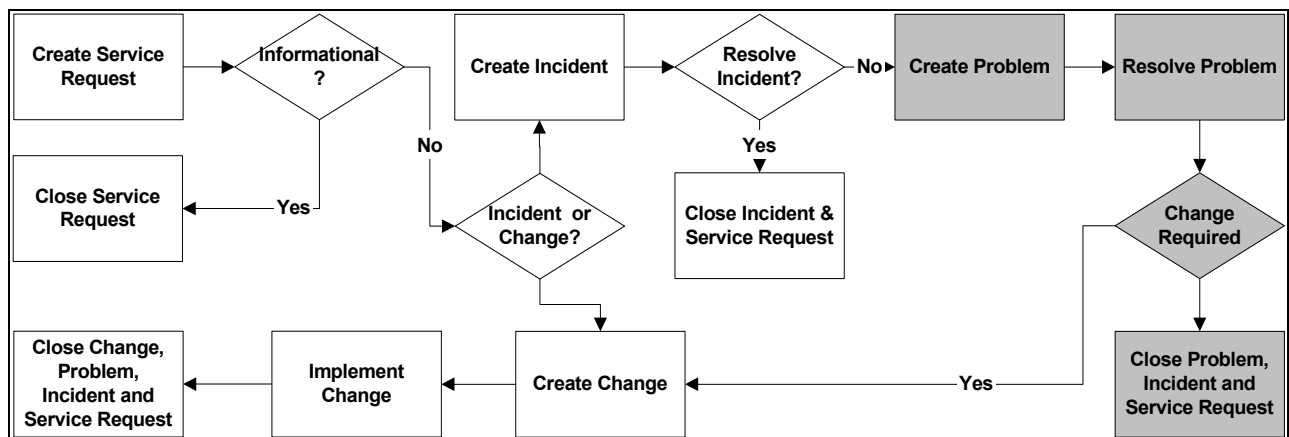
Problem Management continued

**Definition:
Problem**

A *problem* is the unknown underlying cause of one or more incidents. It becomes a known error when the root cause is known and a temporary workaround or a permanent alternative has been identified.

**Incident Process
Flow**

The following typical ticket process flow depicts the portion (Problems) that we will be covering in this section of this chapter.



continued on next page

Problem Management continued

The Problems Application

You use the **Problems** application to create and modify problem records. You create a problem record to capture an unknown, underlying cause of one or more incidents. You resolve a problem when you identify its root cause so that similar incidents in the future are prevented or have a lesser business impact.

The screenshot displays the Maximo Problems application interface. At the top, there is a navigation bar with 'Problems' and a search bar. Below this is a menu with options like 'List', 'Problem', 'Activities', 'Related Records', 'Solution Details', 'Log', and 'Failure Reporting'. The main form area is divided into several sections:

- Problem Information:** Includes fields for Problem (1001), Owner, Owner Group (ERP), Status (INPROG), and Attachments.
- User Information:** Contains 'Reported By' (WILSON, Mike Wilson) and 'Affected Person' (MILLS, Keith Mills) with their respective phone and email addresses.
- Problem Details:** Features a 'Summary' (Finance application is down.), 'Details' (Can't get to Contracts screen.), 'Classification' (1 \ 102 \ 10205), 'Description' (End User Issue \ Software \ Fin. & ERP Apps), 'Reported Priority' (1), 'Internal Priority' (1), 'Service Group' (IT), 'Service', 'Vendor', 'Site', and 'SLA Applied?' (checkbox).
- Asset Information:** Fields for Asset, Location, GL Account, and Asset Site (BEDFORD).
- Is Known Error?** A checkbox.
- Dates:** Fields for Reported Date (9/1/04 9:52 AM), Affected Date (9/1/04 9:52 AM), Target Contact, Target Start, Target Finish, Actual Contact, Actual Start (9/1/04 9:56 AM), and Actual Finish.
- Global Issues:** Fields for Global? (checkbox), Related to Global ID, and Global Class.

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Problem Management continued

**Problems
Application Tabs**

The **Problems** application contains the following tabs:

Use this tab...	To...
List	Search Maximo for problem records.
Problem	Create, view, modify, or delete information that identifies the problem record and search for possible solutions. After the underlying cause is identified, mark the problem as a known error.
Activities	Report actual labor time spent resolving the problem and create, delegate, and track activity work orders for the problem.
Related Records	Relate, view, and navigate relationships between service requests, incidents, problems, and other records.
Solution Details	Add or view solution information for this record.
Log	Create, view, modify, or delete work log entries, and view communication log entries.
Failure Reporting	View and record failure information for assets and locations on a problem record.

continued on next page

Problem Management continued

Problem Ticket Statuses

The status of a problem changes as it moves toward completion. The following information describes the default statuses for problems. Your system administrator might have added, removed, or changed the names of these supplied statuses.

Status	Description
NEW	Used when you create or insert a problem. You cannot revert to this status after you change it.
QUEUED	This status applies when problem ownership is given to a person or a group. Ownership assignment can be made manually or can be made automatically via workflow, a service level agreement, or other escalation process. For more information, see the Workflow help or the Service Level Agreements help, respectively.
INPROG (In Progress)	Use this status when someone is working on this problem. The first time a problem reaches this status, Maximo populates the Actual Start field, if it is empty.
PENDING	Use this status when a problem is pending an external action (for example, vendor or user call-back, or waiting for parts).
RESOLVED	Use this status when information has been gathered and routed, service has been restored or a solution has been provided. The first time a problem reaches this status, Maximo populates the Actual Finish field, if it is empty. If needed, you can reopen a problem and change the status from RESOLVED to INPROG.
CLOSE (Closed)	Use this status when a problem becomes a historical record. When a record is closed, you cannot change the status. You can, however, edit certain parts of the history record.

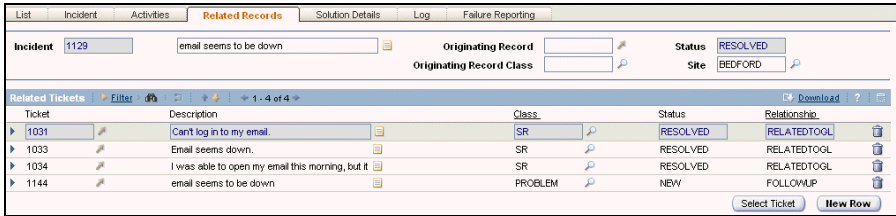
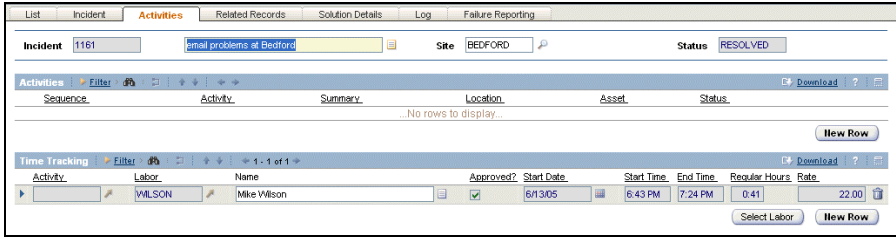
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Problem Management continued

Problem Ticket



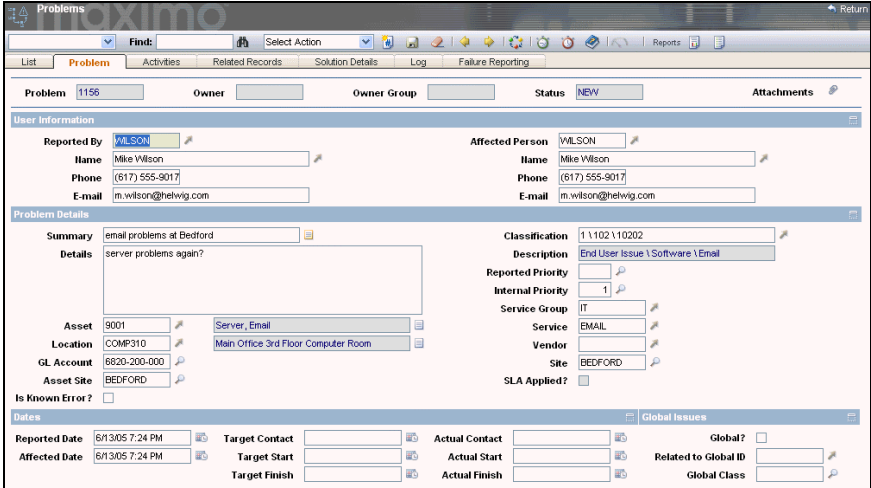
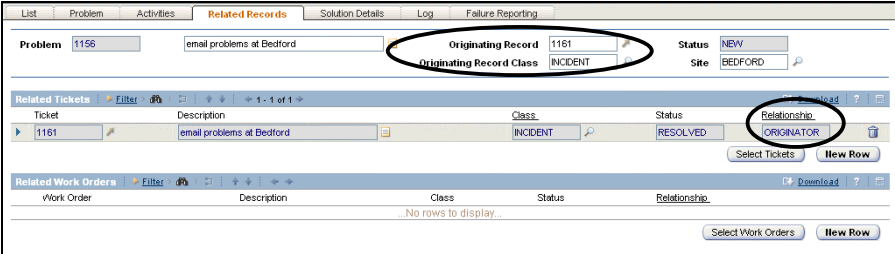
Because we found a temporary fix for the e-mail server, for the incident we are going to indicate that the global incident is resolved. However, we need to indicate that further investigation of the e-mail server is required. Follow the steps below to create and process a problem ticket.

Step	Action
1	<p>Open the Incidents application and retrieve the ticket for the “e-mail server down” problem. Because we found a temporary fix, we are going to indicate that the global incident is resolved; however, we need to indicate that further investigation of the e-mail server is required.</p> <p>Change the status to RESOLVED and, from the Select Action menu, create a Problem ticket.</p>
2	<p>Click on the Related Tickets tab.</p> <p><u>Result:</u> The status of the incidents and related tickets should be RESOLVED and a problem ticket should have been created with a status of NEW.</p> 
3	<p>Stop the timer and click on the Activities tab.</p> <p><u>Result:</u> Wilson’s start and finish times are indicated on the Time Tracking subtab.</p> 

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Problem Management continued

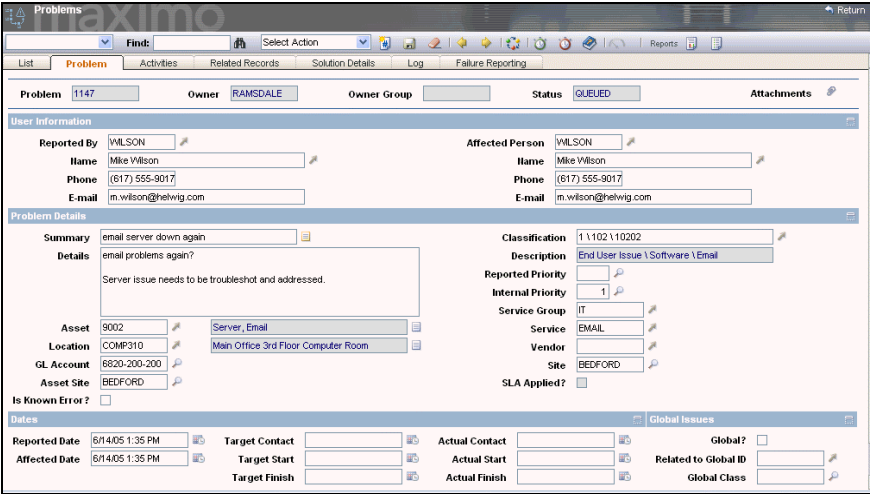
Problem Ticket continued

Step	Action
4	<p>Click on the Related Records tab. Click on the PROBLEM ticket's Detail Menu and select Go To Problems.</p> <p><u>Result:</u> Maximo displays this problem record.</p> 
5	<p>Click on the Related Records tab.</p> <p><u>Result:</u> The incident ticket is displayed and its relationship to the problem is ORIGINATOR.</p> 

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Problem Management continued

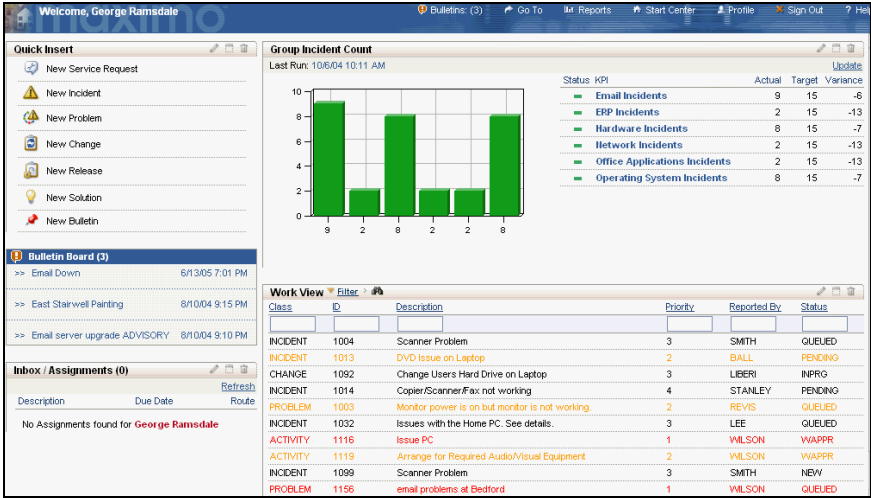
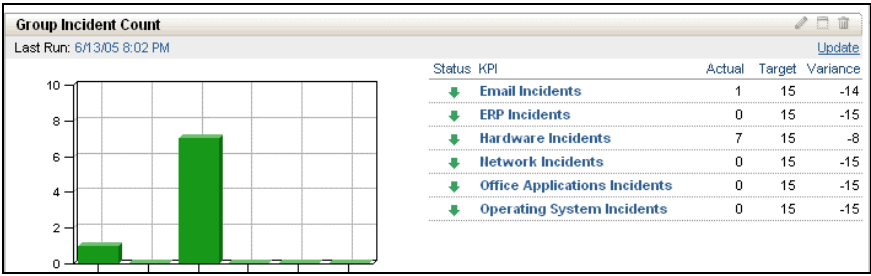
Problem Ticket continued

Step	Action
6	<p>Click on the Problem tab and give ownership to Ramsdale. In the Details window, add the following information: Server issue needs to be troubleshot and addressed.</p> <p><u>Result:</u> Your screen should similar to the one below.</p> 
7	Save the record.

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Problem Management continued

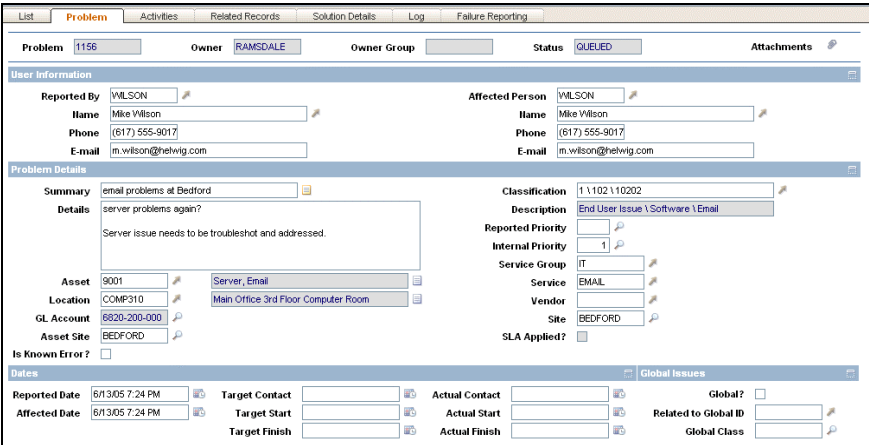
Problem Ticket continued

Step	Action
<p>8</p>	<p>Sign out of Maximo and sign back in as ramsdale/ramsdale. <u>Result:</u> Ramsdale’s Start Center should look like the one below.</p>  <p>The screenshot shows the Maximo Start Center for George Ramsdale. It includes a 'Quick Insert' menu, a 'Bulletin Board' with three items, and an 'Inbox / Assignments' section. The 'Group Incident Count' window is open, displaying a bar chart and a table of incident counts. The 'Work View' table lists various incidents with their IDs, descriptions, priorities, and statuses.</p>
<p>9</p>	<p>In the Group Incident Count window, click on <u>Update</u>. <u>Result:</u> Your KPI numbers and graph are updated.</p>  <p>The screenshot shows the Maximo Start Center after clicking the 'Update' button. The 'Group Incident Count' window is updated, showing a bar chart and a table of incident counts. The 'Work View' table lists various incidents with their IDs, descriptions, priorities, and statuses.</p>

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Problem Management continued

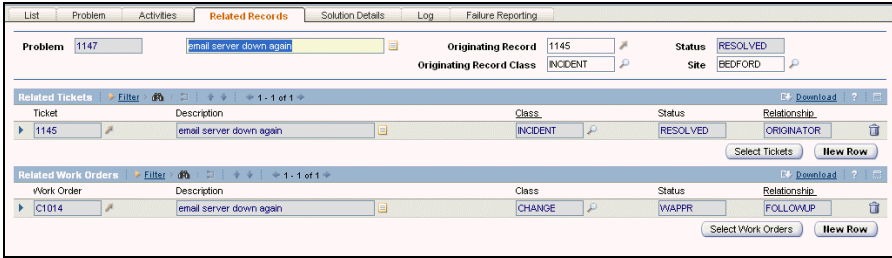
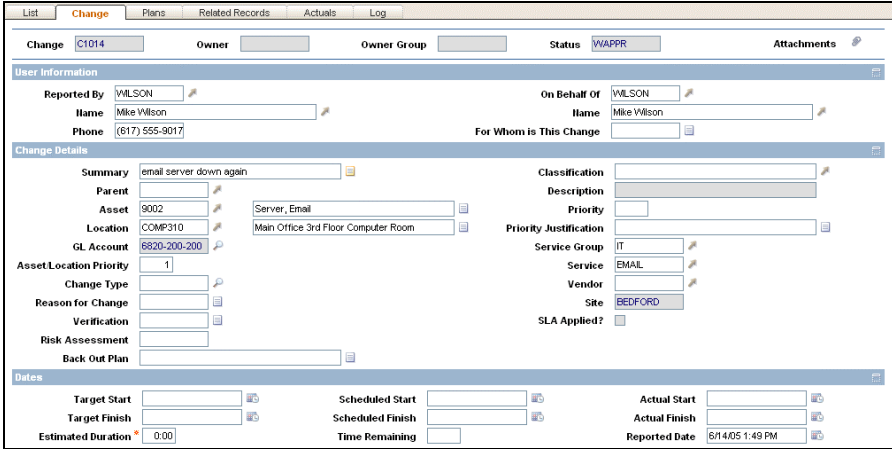
Problem Ticket continued

Step	Action
10	<p>In the Work View table window, click on the email problem ticket reported by Wilson.</p> <p><u>Result:</u> Maximo displays the problem record.</p> 
11	<p>Complete the following tasks:</p> <ul style="list-style-type: none"> • Change the status to INPROG. • Create a work log to indicate that the problem was researched and it was determined that the hard drive seems to be failing and should be replaced soon. • Change the status to RESOLVED. • From the Select Action menu, select Create > Change.

continued on next page

Problem Management continued

Problem Ticket continued

Step	Action
12	<p>Click on the Related Ticket tab.</p> <p><u>Result:</u> Maximo creates a change work order.</p> 
13	<p>Click on the change work order's Detail Menu and select Go To Changes.</p> <p><u>Result:</u> Maximo displays the Change Work Order record.</p> 

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Problem Management continued

Managing Problems

This brief exercise only touched on the responsibility of problem management. Additional responsibilities of problem management are as follows:

- Assistance with handling major incidents
- Proactive prevention of problems
- Obtaining management information from problem data
- Completing major problem reviews

One way that Maximo supports some of these responsibilities is through reports.

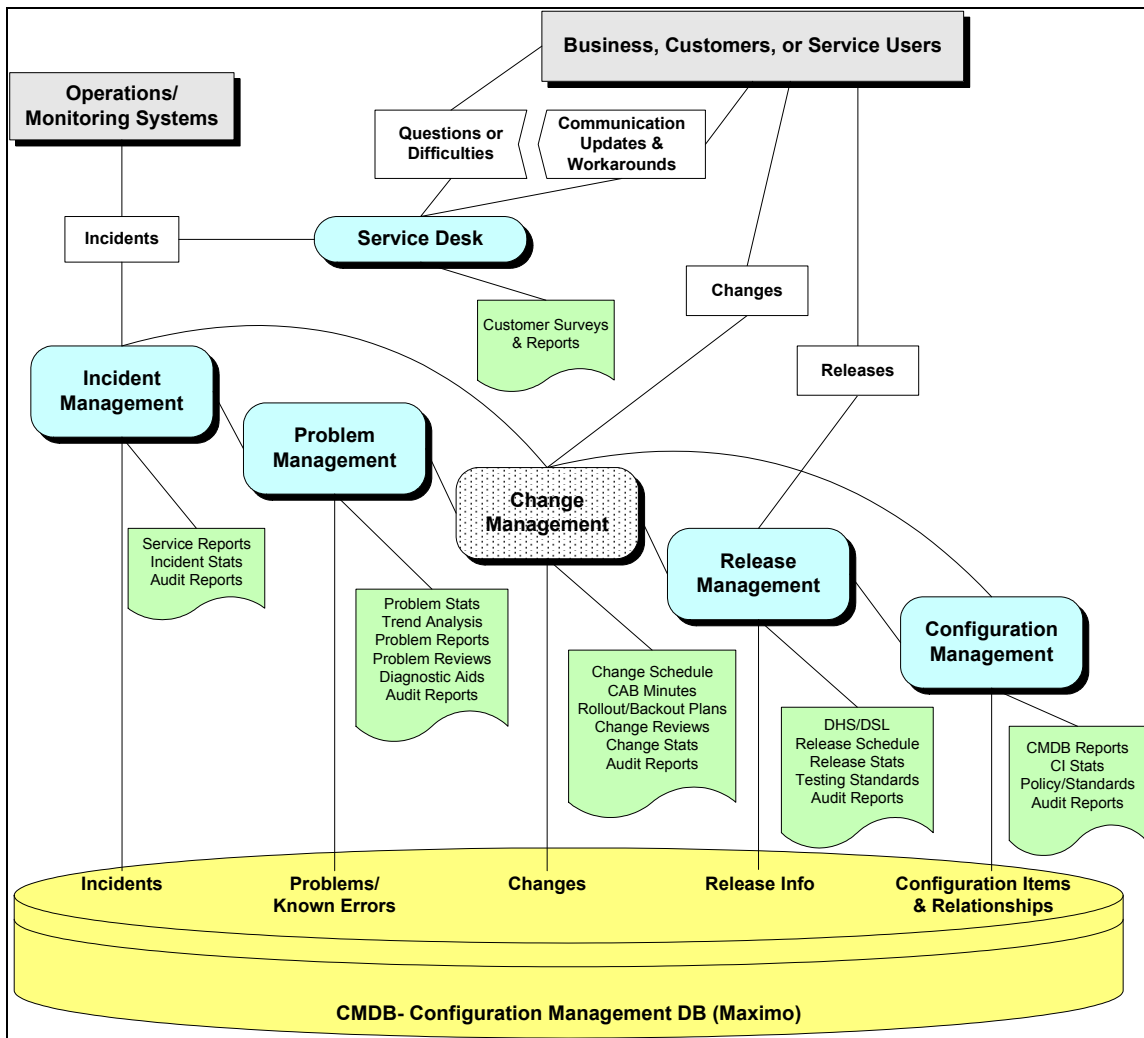
Change Management

Introduction

In the previous section, we went through a scenario for problem management for a problem that required investigation. In this section we will build on that knowledge, but first let's look at where change management falls within IT Service Management.

We Are Here

Recall this diagram depicting the various IT Service Management processes. Throughout this section, we will discuss the change management process in Maximo.



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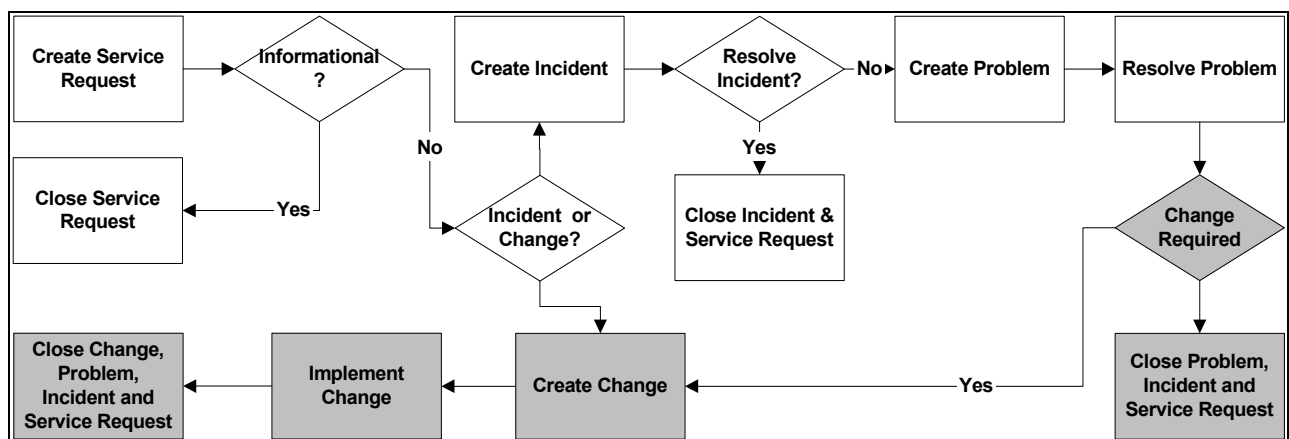
Change Management continued

**Definition:
Change**

A standard *change* is an accepted solution to an identifiable and relatively common set of requirements, where authority is effectively given in advance of implementation.

Incident Process Flow

The following typical ticket process flow depicts the portion (Changes) that we will be covering in this section of this chapter.



Change Types

While your business practices might include additional change types, the following three change types are available out-of-the-box in Maximo:

- **Standard:** Everyday changes.
- **Minor:** Some impact on business, to infrastructure.
- **Major:** Significant impact on business, to infrastructure.

Changes to configuration items (CIs) affect the Configuration Management Database (CMDB).

continued on next page

Change Management continued

The Changes Application

Use the **Changes** application to plan, review, and report actuals to implement changes or deploy new, standard configurations to existing assets.

The screenshot shows the Maximo 'Changes' application interface. At the top, there's a navigation bar with 'List', 'Change', 'Plans', 'Related Records', 'Actuals', and 'Log' tabs. The 'Change' tab is active, showing details for change ID 'C1022'. The status is 'WVAPPR'. Below this, there are sections for 'User Information' (Reported By, Name, Phone, On Behalf Of, For Whom is This Change), 'Change Details' (Summary, Parent, Asset, Location, GL Account, Asset Location Priority, Change Type, Reason for Change, Verification, Risk Assessment, Back Out Plan, Classification, Description, Priority, Priority Justification, Service Group, Service, Vendor, Site, SLA Applied?), and 'Dates' (Target Start, Target Finish, Estimated Duration, Scheduled Start, Scheduled Finish, Time Remaining, Actual Start, Actual Finish, Reported Date).

Changes Application Tabs

The **Changes** application contains the following tabs:

Use this tab...	To...
List	Search the database for work orders using any combination of available fields
Change	Create, view, and modify changes; view scheduling information; select or assign record ownership, identify assets, locations, or services that are affected by a change
Plans	Enter, view, and modify job tasks and labor, material, services, and tool requirements for the work plan
Related Records	View, add, and delete related work orders and tickets; view follow-up records for the current record
Actuals	Enter, view, and modify actual work order start and finish times, labor hours and costs, material quantities, locations, costs, and tool quantities, hours, and costs
Log	View and create work log and communication entries about the current record

continued on next page

Change Management continued

Changes Are a Type of Work Order

A change is a type of work order. Other types of work orders are releases and activities. Activities are actually child work orders. Every work order (including changes) in Maximo has a status value that indicates its position in the work order processing cycle.

The term *work order* can refer to a work order, a **change**, a release, or an activity record.

Work orders can be created with different statuses, depending on which application you use to create or generate them. You might need security authorization to select each status option.

If you change the status of a work order that has child work orders with their **Inherit Status Changes** check box selected, Maximo also applies the status change to the child work orders, if appropriate.

You use the **Change Status** option from the Select Action menu to change the status of one or more records. You can “skip over” some statuses when you select advanced statuses, such as in the processing cycle.

To view previous status changes for a work order, select **View > History** from the Select Action menu.

continued on next page

Change Management continued

Status Work orders (including changes, releases, and activities) can have any of the following statuses:

Status	Description
WAPPR (Waiting on Approval)	This is the default status for records that you create in the following applications: Work Order Tracking, Changes, Releases, and Activities.
APPR (Approved)	This status indicates that the work plan has been approved and the work can begin. You can report actuals against approved work orders.
WSCH (Waiting to Be Scheduled)	Default status for work orders you generate from preventive maintenance and condition monitoring records. You can change the default status on the PM record.
WMATL (Waiting on Material)	This status indicates that materials must arrive before the work can be performed.
WPCOND (Waiting on Plant Condition)	This status indicates that the work will be performed when the plant's condition makes the work possible. For example, if the plant is operating and the work must be performed while the plant is shut down, the work order is waiting on the plant condition.
INPRG (In Progress, or Initiated)	This is the default status for work orders created in Quick Reporting.
COMP (Completed)	This status indicates that all the physical work has been completed.
CLOSE (Closed)	This status finalizes the work order. When you close a work order, Maximo removes inventory reservations for items that were not used on the work order, and makes the work order a history record.
CAN (Canceled)	This status indicates that the work will not be performed. If the work order has already been initiated or actuals have already been reported, you cannot change its status to CAN. If the selected work order has been approved, Maximo removes item reservations from Inventory for the work order, and makes the work order a history record.

continued on next page

Change Management continued

Processing the Change



After some discussions it has been decided that, although the company was planning to move from a Windows to a UNIX environment, replacing the hard drive would have to suffice for now. Use the following steps to start processing the change.

Step	Action
1	<p>With the change open, perform the following tasks:</p> <ul style="list-style-type: none"> • Take ownership. • Change the type to MINOR. • Classify the change as follows: 4 \ 401 \ 40103 (Changes \ Hardware \ Server) • Indicate that the reason for the change is that the hard drive is failing and that a backup server is the backup plan. • Save the record. <p><u>Result:</u> Your Change screen should look similar to the one below.</p> <div> <p>The screenshot shows a software interface for change management. It is divided into several sections: <ul style="list-style-type: none"> User Information: Reported By: WILSON, Name: Mike Wilson, Phone: (617) 555-9017, On Behalf Of: WILSON, Name: Mike Wilson. Change Details: <ul style="list-style-type: none"> Summary: Hard drive replacement Parent: (empty) Asset: 9002 Location: COMP310 GL Account: 6820-200-200 Asset Location Priority: 1 Change Type: MINOR Reason for Change: HARD DRIVE FA Verification: (empty) Risk Assessment: (empty) Back Out Plan: back up server Classification: 4 \ 401 \ 40103 Description: Changes \ Hardware \ Server Priority: (empty) Priority Justification: (empty) Service Group: IT Service: EMAIL Vendor: (empty) Site: BEDFORD SLA Applied? (checkbox) Dates: <ul style="list-style-type: none"> Target Start: (empty) Target Finish: (empty) Estimated Duration: 0:00 Scheduled Start: (empty) Scheduled Finish: (empty) Time Remaining: (empty) Actual Start: 6/14/05 4:57 PM Actual Finish: 6/14/05 5:32 PM Reported Date: 6/14/05 1:49 PM </p></div>
2	<p>Do <i>not</i> close the Changes application; we will continue the next exercise from this point.</p>

continued on next page

Change Management continued

The Plans Tab

You use the **Plans** tab to view, enter, and modify several types of work plan data on work orders. A work plan describes the tasks, labor, materials, services, and tools needed to complete the change.

On the Plans tab, you also can add child work orders and create tasks for the work order. You enter information about estimated labor, materials, services, and tools needed to carry out a work plan on the Labor, Material, Services, and Tools subtabs.

Job Plan Field

An easy way to add a work plan to a work order is to associate a job plan with the record. When you insert an identifier in the **Job Plan** field or generate a work order that already has a job plan from another application, Maximo copies the job plan, called a *work plan*, to the change. Changes you make to the work plan do not affect the original job plan.

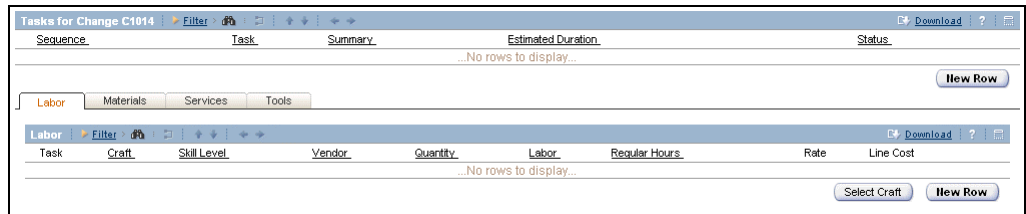
Job Plan

continued on next page

Change Management continued

Plan Tasks

Use the **Tasks** section of the Plans tab to insert or edit a work order's work plan tasks.



If a current work plan is based on a job plan, Maximo copies all tasks and planned data from the job plan. Job plans serve as templates for work plans. Modifications you make to work plans on a change do not affect the original job plan.

You can add or edit planned tasks on a change until the change is closed, but you cannot delete tasks from an approved change or from a change on which actuals were reported for the task.

Creating a Job Plan



We could enter a work plan on the change or attach an already defined job plan to it. In this exercise, because replacing a hard drive can be a somewhat common occurrence, we will create a job plan record and then attach it to the change.

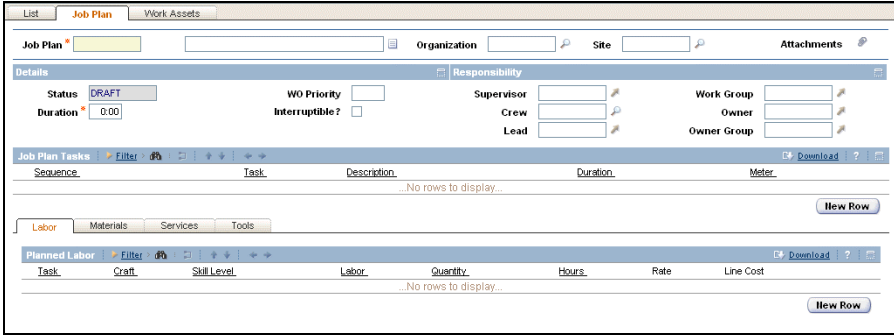
Step	Action
1	Sign in to Maximo as wilson/wilson.

continued on next page

Change Management continued

Creating a Job Plan

continued

Step	Action																				
2	<p>Open the Job Plans application and click New Job Plan. <u>Result:</u> Maximo opens a new job plan.</p> 																				
3	<p>In the Job Plan field, enter HDRP. Enter a description: Hard drive replacement.</p>																				
4	<p>Click New Row for the Job Plan Tasks section. <u>Result:</u> A new row opens for editing.</p>																				
5	<p>Enter the following information:</p> <table border="1"> <thead> <tr> <th><u>Field</u></th> <th><u>Value</u></th> </tr> </thead> <tbody> <tr> <td>Sequence</td> <td>1</td> </tr> <tr> <td>Task</td> <td>10 (<i>default</i>)</td> </tr> <tr> <td>Summary</td> <td>Back up data</td> </tr> <tr> <td>Duration</td> <td>1:00</td> </tr> </tbody> </table>	<u>Field</u>	<u>Value</u>	Sequence	1	Task	10 (<i>default</i>)	Summary	Back up data	Duration	1:00										
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Summary	Back up data																				
Duration	1:00																				
6	<p>Click New Row, and add each of the following rows of data:</p> <table border="1"> <thead> <tr> <th><u>Sequence</u></th> <th><u>Task</u></th> <th><u>Summary</u></th> <th><u>Duration</u></th> </tr> </thead> <tbody> <tr> <td>2</td> <td>20</td> <td>Remove failing hard drive</td> <td>:25</td> </tr> <tr> <td>3</td> <td>30</td> <td>Install new hard drive</td> <td>:20</td> </tr> <tr> <td>4</td> <td>50</td> <td>Restore backed-up data</td> <td>1:00</td> </tr> <tr> <td>5</td> <td>60</td> <td>Check for OS/app updates</td> <td>:30</td> </tr> </tbody> </table>	<u>Sequence</u>	<u>Task</u>	<u>Summary</u>	<u>Duration</u>	2	20	Remove failing hard drive	:25	3	30	Install new hard drive	:20	4	50	Restore backed-up data	1:00	5	60	Check for OS/app updates	:30
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continued on next page

Change Management continued

Subtabs on the Plans Tab

The Plans tab has four subtabs: Labor, Materials, Services, and Tools.

The Labor Subtab

You use the **Labor** subtab of the Plans tab to insert, view, or edit planned labor. If the change has a job plan, Maximo copies all tasks and plan data from the job plan to the work plan. When you enter labor or craft information, Maximo displays the labor or craft's description and rate. When you insert, delete, or modify quantities or hours, Maximo updates the Line Cost, Total Labor Hours, and Total Labor Cost fields.

You can plan labor in the following ways:

- Plan multiple crafts at once
- Enter labor or crafts individually

The screenshot shows the 'Labor' subtab interface. At the top, there are tabs for 'Labor', 'Materials', 'Services', and 'Tools'. Below the tabs is a table with columns: Task, Craft, Skill Level, Vendor, Quantity, Labor, Regular Hours, Rate, and Line Cost. The table contains one row with values: Task (empty), Craft (empty), Skill Level (empty), Vendor (empty), Quantity (1), Labor (empty), Regular Hours (0.00), Rate (empty), and Line Cost (0.00). Below the table is a 'Details' form with fields for Task, Vendor, Regular Hours (0.00), Craft, Labor Contract, Rate, Skill Level, Quantity (1), Labor Cost (0.00), Labor, and Rate Changed? (checkbox).

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Change Management continued

Adding Labor to the Job Plan

Use the following steps to add planned labor to the change (work order).



Step	Action																																																																																																																																																			
1	<p>Select the Labor subtab, and then click its New Row button.</p> <p><u>Result:</u> The Labor subtab opens a new row for editing.</p> <p><u>Note:</u> If you were to choose more than one craft, you could use the Select Craft button.</p>																																																																																																																																																			
2	<p>Leave the Task field blank (<i>default</i>), because the selected labor applies to the entire job.</p> <p>If you had a complicated work plan, one requiring more than one craft for different tasks, then you would identify which crafts were for which tasks.</p>																																																																																																																																																			
3	<p>For the Craft field, use the Detail Menu and choose Select Value.</p> <p><u>Result:</u> The Select Value dialog box for the Craft field opens.</p> <div style="border: 1px solid black; padding: 5px;"> <table border="1"> <thead> <tr> <th>Craft</th> <th>Skill Level</th> <th>Description</th> <th>Vendor</th> <th>Contract</th> <th>Standard Rate</th> <th>Organization</th> </tr> </thead> <tbody> <tr> <td>CARP</td> <td>FIRSTCLASS</td> <td>1st Class Carpenter</td> <td></td> <td></td> <td>18.00</td> <td>EAGLENA</td> </tr> <tr> <td>ELECT</td> <td></td> <td>Electrician</td> <td></td> <td></td> <td>17.00</td> <td>EAGLENA</td> </tr> <tr> <td>ELECT</td> <td>FIRSTCLASS</td> <td>Electrician - 1st Class</td> <td></td> <td></td> <td>22.00</td> <td>EAGLENA</td> </tr> <tr> <td>ELECT</td> <td>SECONDCLASS</td> <td>Electrician - 2nd Class</td> <td></td> <td></td> <td>19.00</td> <td>EAGLENA</td> </tr> <tr> <td>ELECT</td> <td>APPRENTICE</td> <td>Electrician Apprentice</td> <td></td> <td></td> <td>16.00</td> <td>EAGLENA</td> </tr> <tr> <td>CONSTR</td> <td></td> <td>Construction Worker</td> <td></td> <td></td> <td>16.00</td> <td>EAGLENA</td> </tr> <tr> <td>CONSTR</td> <td>FIRSTCLASS</td> <td>1st Class Construction Worker</td> <td></td> <td></td> <td>16.00</td> <td>EAGLENA</td> </tr> <tr> <td>DRIVER</td> <td></td> <td>Driver</td> <td></td> <td></td> <td>14.50</td> <td>EAGLENA</td> </tr> <tr> <td>DRIVER</td> <td>FIRSTCLASS</td> <td>Driver - Class 1</td> <td></td> <td></td> <td>17.00</td> <td>EAGLENA</td> </tr> <tr> <td>INSPECT</td> <td></td> <td>Inspector</td> <td></td> <td></td> <td>19.00</td> <td>EAGLENA</td> </tr> <tr> <td>INSPECT</td> <td>LEVEL 1</td> <td>Inspector</td> <td></td> <td></td> <td>24.00</td> <td>EAGLENA</td> </tr> <tr> <td>LUBR</td> <td></td> <td>Lubricator</td> <td></td> <td></td> <td>14.00</td> <td>EAGLENA</td> </tr> <tr> <td>LUBR</td> <td>FIRSTCLASS</td> <td>Lubricator - 1st Class</td> <td></td> <td></td> <td>17.00</td> <td>EAGLENA</td> </tr> <tr> <td>LUBR</td> <td>APPRENTICE</td> <td>Lubricator Apprentice</td> <td></td> <td></td> <td>13.75</td> <td>EAGLENA</td> </tr> <tr> <td>MACH</td> <td></td> <td>Machinist</td> <td></td> <td></td> <td>18.00</td> <td>EAGLENA</td> </tr> <tr> <td>MACH</td> <td>FIRSTCLASS</td> <td>Machinist 1st Class</td> <td></td> <td></td> <td>24.00</td> <td>EAGLENA</td> </tr> <tr> <td>MACH</td> <td>SECONDCLASS</td> <td>Machinist 2nd Class</td> <td></td> <td></td> <td>20.00</td> <td>EAGLENA</td> </tr> <tr> <td>MACH</td> <td>THIRDCLASS</td> <td>Machinist 3rd Class</td> <td></td> <td></td> <td>18.00</td> <td>EAGLENA</td> </tr> <tr> <td>MACH</td> <td>APPRENTICE</td> <td>Machinist Apprentice</td> <td></td> <td></td> <td>16.00</td> <td>EAGLENA</td> </tr> <tr> <td>OLM</td> <td></td> <td>Overhead Line Maintenance</td> <td></td> <td></td> <td>22.00</td> <td>EAGLENA</td> </tr> </tbody> </table> </div>	Craft	Skill Level	Description	Vendor	Contract	Standard Rate	Organization	CARP	FIRSTCLASS	1st Class Carpenter			18.00	EAGLENA	ELECT		Electrician			17.00	EAGLENA	ELECT	FIRSTCLASS	Electrician - 1st Class			22.00	EAGLENA	ELECT	SECONDCLASS	Electrician - 2nd Class			19.00	EAGLENA	ELECT	APPRENTICE	Electrician Apprentice			16.00	EAGLENA	CONSTR		Construction Worker			16.00	EAGLENA	CONSTR	FIRSTCLASS	1st Class Construction Worker			16.00	EAGLENA	DRIVER		Driver			14.50	EAGLENA	DRIVER	FIRSTCLASS	Driver - Class 1			17.00	EAGLENA	INSPECT		Inspector			19.00	EAGLENA	INSPECT	LEVEL 1	Inspector			24.00	EAGLENA	LUBR		Lubricator			14.00	EAGLENA	LUBR	FIRSTCLASS	Lubricator - 1st Class			17.00	EAGLENA	LUBR	APPRENTICE	Lubricator Apprentice			13.75	EAGLENA	MACH		Machinist			18.00	EAGLENA	MACH	FIRSTCLASS	Machinist 1st Class			24.00	EAGLENA	MACH	SECONDCLASS	Machinist 2nd Class			20.00	EAGLENA	MACH	THIRDCLASS	Machinist 3rd Class			18.00	EAGLENA	MACH	APPRENTICE	Machinist Apprentice			16.00	EAGLENA	OLM		Overhead Line Maintenance			22.00	EAGLENA
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Change Management continued

Adding Labor to the Job Plan continued

Step	Action
4	Find and select the HARDWARE (Hardware Technician) craft. <u>Result:</u> The Select Value dialog box closes, and populates the Craft field with the selected value: HARDWARE.
5	Enter 3:00 into the Hours field. <u>Result:</u> Maximo calculates the Line Cost based on the rate. <u>Note:</u> In this exercise we used the total time for the craft because we are using one craft for the entire job. If you were using different crafts for different tasks, you would enter the planned time for each craft for each task.
6	Save the record. <u>Result:</u> Your screen should look similar to the one below. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>The screenshot shows the 'Job Plan' interface for 'Hard drive replacement'. The 'Details' section shows 'Status: DRAFT' and 'Duration: 0:00'. The 'Job Plan Tasks' table lists four tasks: 1 (Back up Data, 10 min), 2 (remove hard drive, 20 min), 3 (install hard drive, 30 min), and 4 (restore backed up data, 40 min). The 'Planned Labor' table shows 3 hours of labor for the 'HARDWARE' craft at a rate of 100.00, resulting in a line cost of 900.00.</p> </div>

Continued on next page

Change Management continued

The Materials Subtab

You use the **Materials** subtab of the Plans tab to insert, view, or edit planned materials or items for a change. If the work plan is based on a job plan, Maximo copies all tasks and plan data from the job plan to the work plan. When you enter an item number on the Materials subtab, the item's description, location, category, and unit cost are copied from the Inventory storeroom record.

You can plan materials in any of the following ways:

- Select several items at once
- Select materials from vendor catalogs
- Select spare parts associated with the work order's asset
- Plan individual materials



Task	Item	Description	Quantity	Unit Cost	Line Cost	Storeroom	Direct Issue?
			1.00	0.00	0.00		<input type="checkbox"/>

Details

Task	Storeroom *	PR
Line Type * ITEM	Storeroom Site * BEDFORD	PR Line
Item *	Direct Issue? <input type="checkbox"/>	Issue To
Quantity 1.00	Vendor	Required Date 4/14/05 8:31 AM
Order Unit	Stock Category	Requested By
Unit Cost * 0.00	Condition Code	Condition Enabled? <input type="checkbox"/>
Line Cost 0.00		Condition Rate

continued on next page

Change Management continued

The Tools Subtab

You use the **Tools** subtab of the Plans tab to insert, view, or edit planned tool requirements for a change. The Select Tools dialog box allows you to apply multiple tools at once to a change. When the change is approved, Maximo reserves the tools if they are in a storeroom. If the work plan is based on a job plan, Maximo copies all tasks and plan data from the job plan to the work plan.

You can plan tools in either of the following ways:

- Select multiple tools at once
- Plan individual tools

Task	Tool	Description	Quantity	Tool Hours	Rate	Line Cost
			1.00	0.00	0.00	0.00

Details	
Task	Quantity * 1.00
Tool *	Tool Hours * 0.00
	Rate * 0.00
	Line Cost 0.00
Reservation Required?	<input type="checkbox"/>
Storeroom	
Storeroom Site	BEDFORD
Issue To	
Rate Changed ?	<input checked="" type="checkbox"/>

continued on next page

Change Management continued

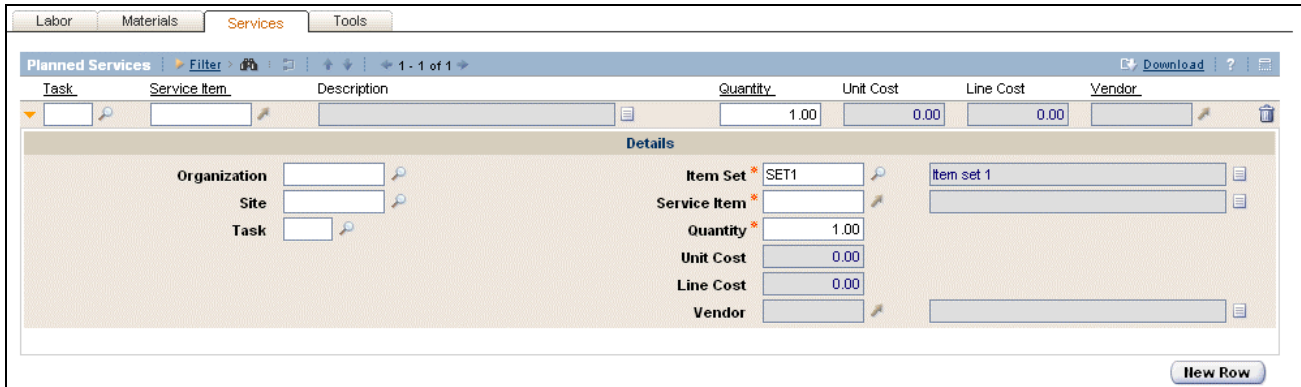
The Services Subtab

You use the **Services** subtab of the Plans tab to view services and add line types of Service or Standard Service (STD SERVICE) to the work plan. Standard services are services such as grounds maintenance, janitorial services, or freight, for which your company might maintain a vendor catalog.

If the change was created with a job plan, Maximo copies the services and all related information from the job plan to the Services subtab.

You can plan services in either of the following ways:

- Select multiple services at once
- Plan services individually



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Change Management continued

Status

A job plan can have one of several statuses. The table below describes the statuses for job plans.

Status	DRAFT
---------------	-------

Status	Description
DRAFT	Job plan is being developed or reviewed. This is the default status for new job plans. Job plans with this status are not displayed in the Select Value lists in other applications; you must change the status to ACTIVE to make them available to other records.
ACTIVE	Job plan is complete. Only job plans of this status are available for use on work orders, PM records, and routes.
INACTIVE	Job plan is not in use on open records. It might be needed for historical purposes. Job plans with this status are not displayed in the Select Value lists in other applications; you must change the status to ACTIVE to make them available to other records.

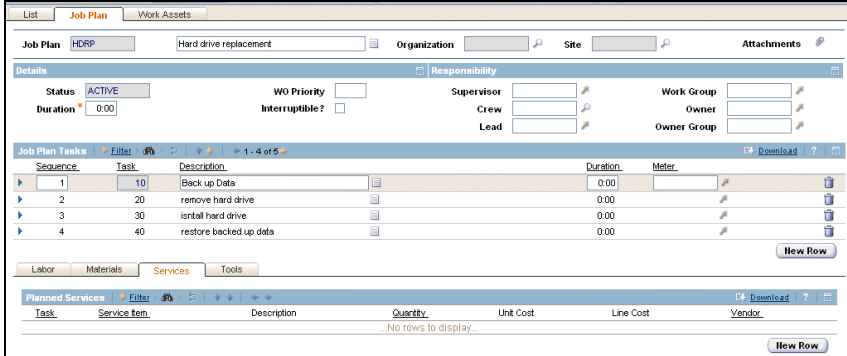
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Change Management continued

Activating the Job Plan and Associating It to a Change



In this exercise you will activate the job plan and then associate it to the change.

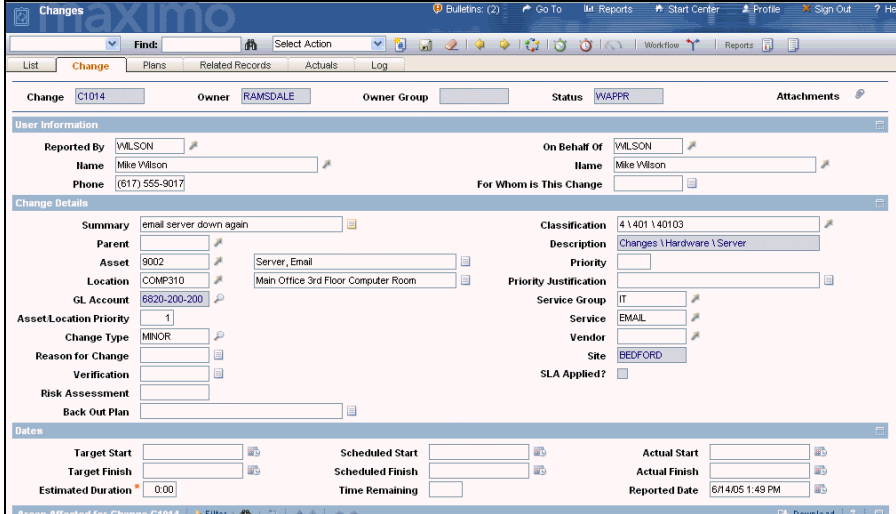
Step	Action
1	<p>Change the status of the job plan to ACTIVE. <u>Result:</u> Your screen should indicate an ACTIVE status.</p> 

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Change Management continued

Activating the Job Plan and Associating It to a Change

continued

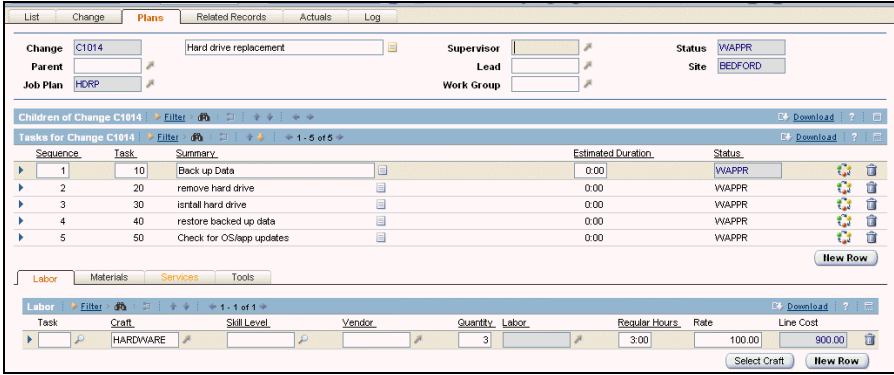
Step	Action
2	<p>Open the Changes application and retrieve the change for the Email Hard Drive replacement.</p> <p><u>Result:</u> Your screen should look like the one below.</p> 
3	Click on the Plans tab. In the Job Plan field, enter HDRP.

continued on next page

Change Management continued

Activating the Job Plan and Associating It to a Change

continued

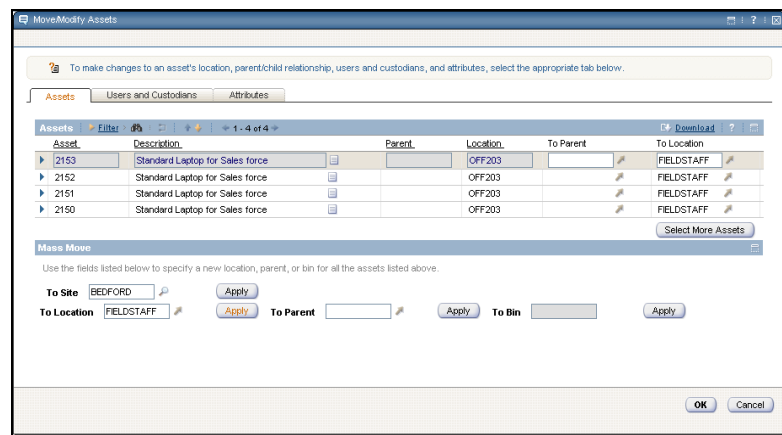
Step	Action
4	<p>Save the record.</p> <p><u>Result:</u> The job plan information is carried over onto the Plans tab.</p> 
5	Change the status to INPRG and start the timer.

continued on next page

Change Management continued

Move/Modify Assets Revisited

There are two move actions in Maximo. The **Move/Modify Asset** (singular) action is available in the Activities, Changes, and Releases applications and allows you to plan a move but execute it later. The **Move/Modify Assets** (plural) action is available in the Assets, Purchase Orders, and Work Order Tracking applications and does not allow you to plan, but does allow you to modify users and custodians. For this section, we will be using the Move/Modify Assets (plural) action from the Assets application.



The following table describes some of the fields in the **Move/Modify Assets** dialog box.

Use this field...	To...
To Site	Move the asset to a new site. If the site to which you want to move the asset already has an asset with the same asset identifier, Maximo prompts you to assign a new asset identifier to the asset you are moving. Every asset within a site must have a unique identifier.
To Location	Move the asset to a new location.
To Parent	Move the asset to a new parent.
To Bin	Move the asset to a new bin.

continued on next page

Change Management continued

Moves Rules Revisited

Remember the following rules about moves and mass moves:

- You can move a single asset the same way you perform a mass move, by choosing just one asset.
 - You can use the Move/Modify Asset dialog box *only* to move an asset from a non-inventory location. That is, you cannot move an asset from a storeroom—you must use the Issues and Transfers application to transfer an asset from a storeroom to another location. However, you can move an asset from a non-inventory location to either another non-inventory location or a storeroom.
 - You can move assets within your current site, to another site within your organization, or to a site in a different organization.
 - You cannot move an asset to a storeroom in another site unless the item already exists in the storeroom to which you are moving the item. If it does not exist, you must first create the item in the Item Master application.
 - If there is an open work order for an asset, you cannot move it unless you close or cancel the change or work order.
-

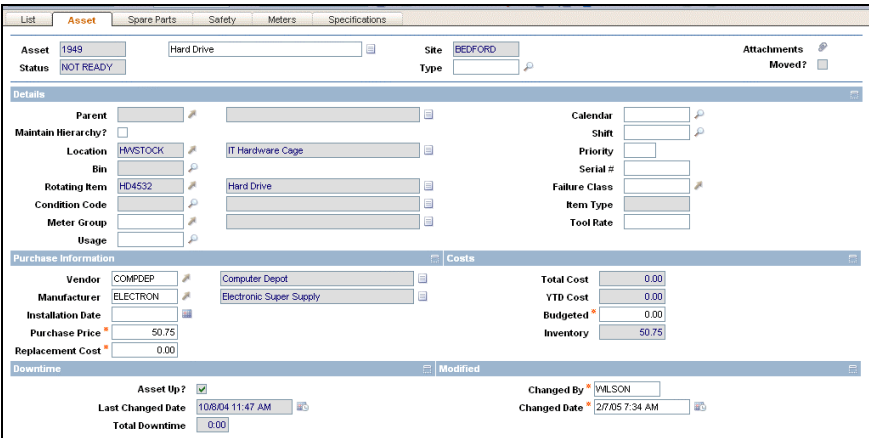
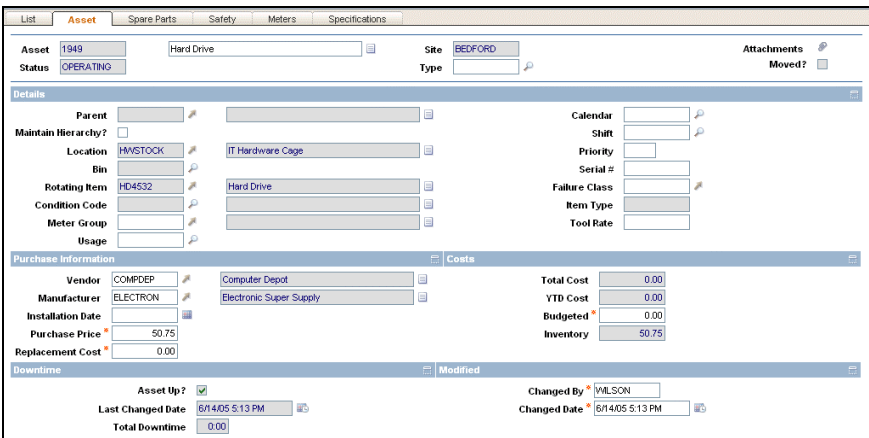
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Change Management continued

Move an Asset



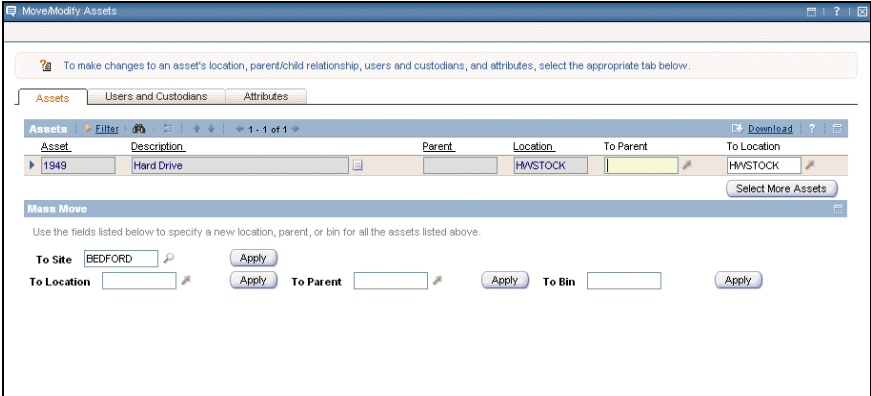
In this exercise we will move the hard drive from the hardware stockroom to indicate in the system that it was installed on the e-mail server.

Step	Action
<p>1</p>	<p>Open the Assets application and retrieve asset 1949. <u>Result:</u> Your screen should look like the one below.</p> 
<p>2</p>	<p>Change the status to OPERATING. <u>Result:</u> Your screen should look like the one below.</p> 

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Change Management continued

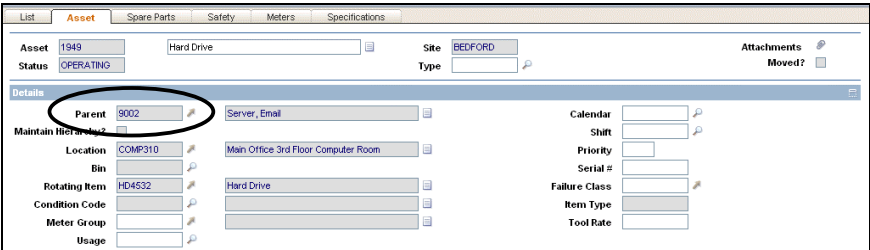
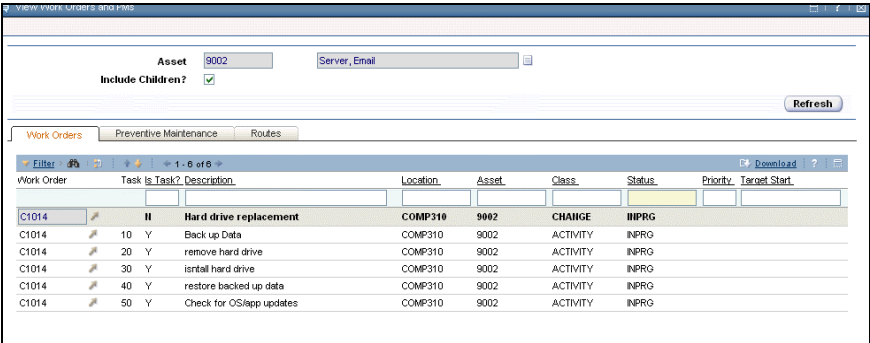
Move an Asset continued

Step	Action
3	<p>From the Select Action menu, select Move/Modify Assets. Result: The Move/Modify dialog box opens.</p> 
4	<p>In the To Parent column field, enter 9002.</p>

continued on next page

Change Management continued

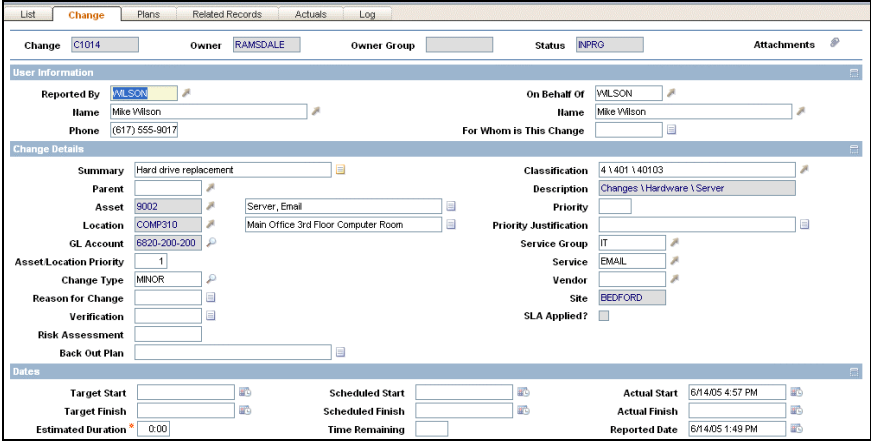
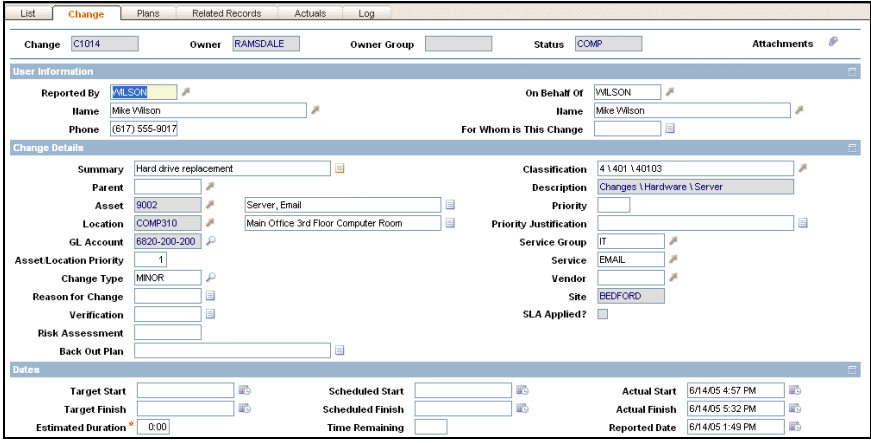
Move an Asset continued

Step	Action																																																															
5	<p>Click OK.</p> <p><u>Result</u>: This asset is now a child component of the e-mail server and is indicated as such in the Parent field.</p>  <p>The screenshot shows the 'Asset Details' form for asset 1949. The 'Parent' field is highlighted with a red circle and contains the value '9002 Server, Email'. Other fields include 'Status: OPERATING', 'Site: BEDFORD', 'Location: COMP310', and 'Rotating Item: HD4532'.</p>																																																															
6	<p>Open the Changes application by clicking on the Parent Assets field and selecting View Work Orders and PMs.</p> <p><u>Result</u>: The View Work Orders and PMs dialog box opens.</p>  <p>The screenshot shows the 'View Work Orders and PMs' dialog box. It displays a table of work orders for asset 9002. The 'Include Children?' checkbox is checked. The table lists several work orders, with the first one highlighted.</p> <table border="1"> <thead> <tr> <th>Work Order</th> <th>Task Is Task?</th> <th>Description</th> <th>Location</th> <th>Asset</th> <th>Class</th> <th>Status</th> <th>Priority</th> <th>Target Start</th> </tr> </thead> <tbody> <tr> <td>C1014</td> <td>Y</td> <td>Hard drive replacement</td> <td>COMP310</td> <td>9002</td> <td>CHANGE</td> <td>INPRG</td> <td></td> <td></td> </tr> <tr> <td>C1014</td> <td>Y</td> <td>Back up Data</td> <td>COMP310</td> <td>9002</td> <td>ACTIVITY</td> <td>INPRG</td> <td></td> <td></td> </tr> <tr> <td>C1014</td> <td>Y</td> <td>remove hard drive</td> <td>COMP310</td> <td>9002</td> <td>ACTIVITY</td> <td>INPRG</td> <td></td> <td></td> </tr> <tr> <td>C1014</td> <td>Y</td> <td>install hard drive</td> <td>COMP310</td> <td>9002</td> <td>ACTIVITY</td> <td>INPRG</td> <td></td> <td></td> </tr> <tr> <td>C1014</td> <td>Y</td> <td>restore backed up data</td> <td>COMP310</td> <td>9002</td> <td>ACTIVITY</td> <td>INPRG</td> <td></td> <td></td> </tr> <tr> <td>C1014</td> <td>Y</td> <td>Check for OS/app updates</td> <td>COMP310</td> <td>9002</td> <td>ACTIVITY</td> <td>INPRG</td> <td></td> <td></td> </tr> </tbody> </table>	Work Order	Task Is Task?	Description	Location	Asset	Class	Status	Priority	Target Start	C1014	Y	Hard drive replacement	COMP310	9002	CHANGE	INPRG			C1014	Y	Back up Data	COMP310	9002	ACTIVITY	INPRG			C1014	Y	remove hard drive	COMP310	9002	ACTIVITY	INPRG			C1014	Y	install hard drive	COMP310	9002	ACTIVITY	INPRG			C1014	Y	restore backed up data	COMP310	9002	ACTIVITY	INPRG			C1014	Y	Check for OS/app updates	COMP310	9002	ACTIVITY	INPRG		
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C1014	Y	Check for OS/app updates	COMP310	9002	ACTIVITY	INPRG																																																										

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Change Management continued

Move an Asset continued

Step	Action
7	<p>Click the Detail Menu button for the Change that is <i>not</i> a task, and select Go to Changes.</p> <p><u>Result:</u> You are brought to the change record.</p>  <p>The screenshot shows a web interface for a change record. At the top, there are tabs for 'List', 'Change', 'Plans', 'Related Records', 'Actuals', and 'Log'. Below this, the change ID is 'C1014' and the owner is 'RAMSDALE'. The status is 'INPRO'. The 'User Information' section shows 'Reported By' as 'WILSON' (Mike Wilson) and 'On Behalf Of' as 'WILSON' (Mike Wilson). The 'Change Details' section includes a summary of 'Hard drive replacement', asset '9002', location 'COMP310', and classification '41401140103'. The 'Dates' section shows 'Actual Start' as 6/14/05 4:57 PM and 'Actual Finish' as 6/14/05 1:49 PM.</p>
8	<p>The work and system entries are complete. Stop the timer and change the status to COMP.</p> <p><u>Result:</u> Your screen should look like the one below.</p>  <p>This screenshot is identical to the previous one, but the status of the change record is now 'COMP'. The 'Actual Start' and 'Actual Finish' dates remain the same.</p>

continued on next page

Change Management continued

Move an Asset continued

Step	Action
9	From the Select Action menu, choose View > History .
10	When you are done viewing the history, click OK .
11	From the Select Action menu, choose View > Costs .
12	When you are done viewing the costs, click OK .

Changing the Status for the Originating Related Records



Recall that the change was generated from a problem ticket, which was generated from an incident, which was generated from an SR. Now that you have closed the change, you can close all of the related records because of the Related Records link in Maximo.

Whether related records are closed when the succeeding record is closed depends on a system setting. Some system settings are held and set in a database object named MAXVARS. The MRO Software *System Administration for MXES* course has more information.

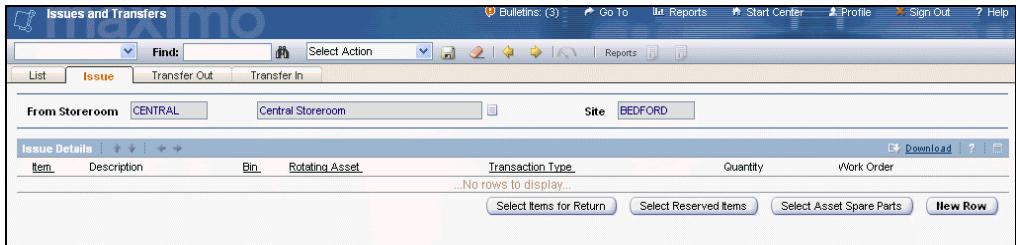
If MAXVARS is not set, then only SRs will be closed when incidents are closed.

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Change Management continued

The Issues and Transfers Application Revisited

The Issues and Transfers application allows you to manage the movement of inventories to and from stockrooms.



Mass Issues



In this exercise we will retrieve the service request for an antivirus update and process the change.

Step	Action
1	<p>In the Service Requests application, retrieve the antivirus SR.</p> <p><u>Result:</u> Your screen should look like the one below.</p>
2	Create a change .

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Change Management continued

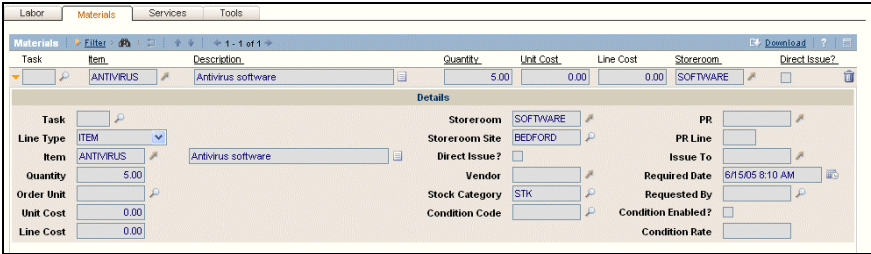
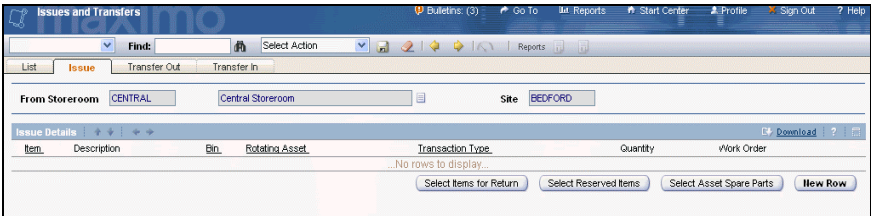
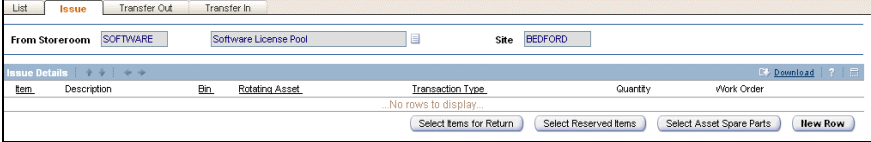
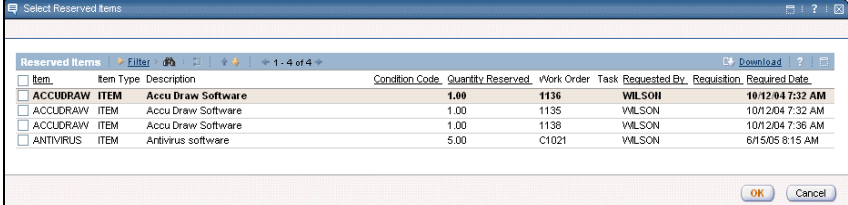
Mass Issues continued

Step	Action						
3	Retrieve this change record in the Changes application and complete the following tasks: <ul style="list-style-type: none"> • Take ownership. • Indicate that the location is SWSTOCK. • Change the type to MINOR. • Indicate that the reason for the change is New SW release. • Classify the change as follows: Changes \ Software. • Save the record. 						
4	Click on the Plans tab and click on the Materials subtab.						
5	On the Materials subtab, click New Row . <u>Result:</u> The details window opens. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> </div>						
6	Enter the following data: <table style="margin-left: 20px;"> <tr> <td><u>Field</u></td> <td><u>Data</u></td> </tr> <tr> <td>Item</td> <td>ANTIVIRUS</td> </tr> <tr> <td>Quantity</td> <td>5</td> </tr> </table>	<u>Field</u>	<u>Data</u>	Item	ANTIVIRUS	Quantity	5
<u>Field</u>	<u>Data</u>						
Item	ANTIVIRUS						
Quantity	5						

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Change Management continued

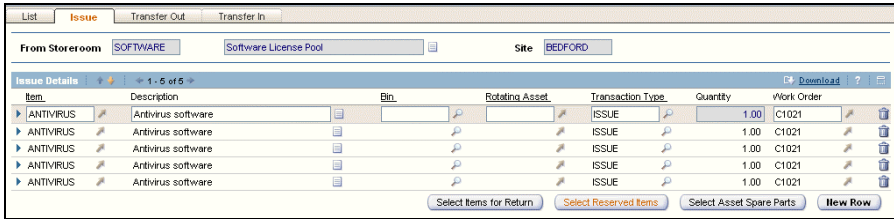
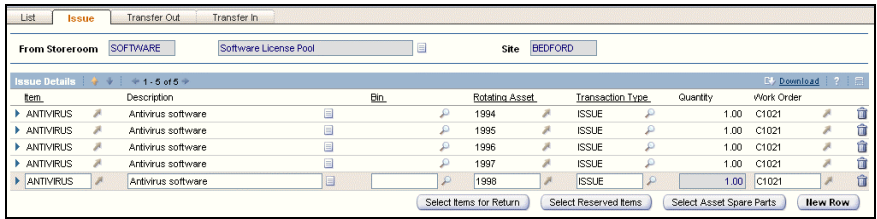
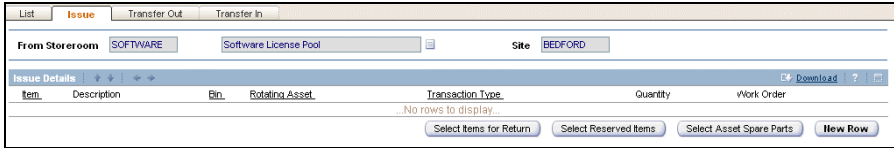
Mass Issues continued

Step	Action
7	<p>Change the status to APPROVED.</p> <p><u>Result:</u> Your Materials subtab should look like the one below.</p> 
8	<p>Open the Issues and Transfers application.</p> <p><u>Result:</u> The Issues and Transfers application opens.</p> 
9	<p>Retrieve the SOFTWARE storeroom.</p> <p><u>Result:</u> Your Issue tab should look like the one below.</p> 
10	<p>Click Select Reserved Items.</p> <p><u>Result:</u> The Select Reserved Items dialog box opens.</p> 

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Change Management continued

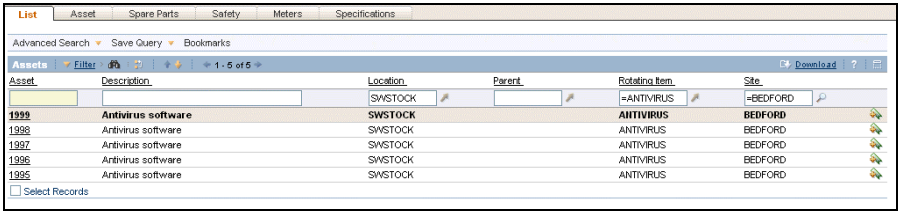
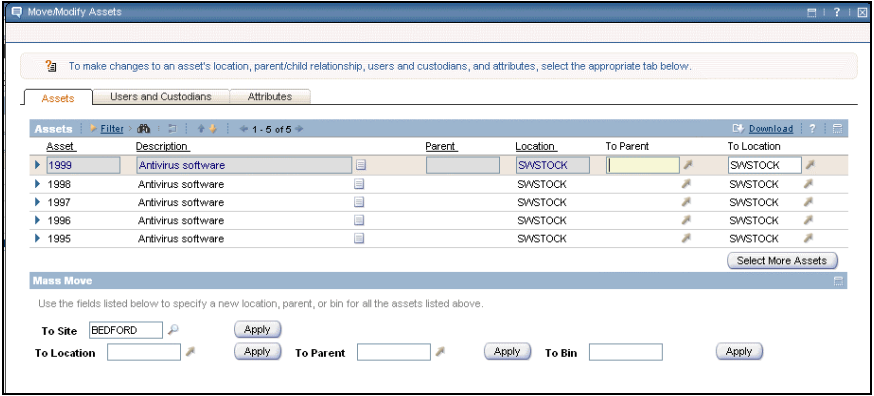
Mass Issues continued

Step	Action
11	<p>Select ANTIVIRUS and then click OK.</p> <p><u>Result:</u> The Issue tab displays each instance of the antivirus software to be issued to an asset.</p> 
12	<p>For each rotating asset line, enter the following numbers:</p> <p>1994 1995 1996 1997 1998</p> <p><u>Result:</u> Your screen should look like the one below.</p> 
13	<p>Click Save.</p> <p><u>Result:</u> Licenses are issued.</p> 
14	<p>Open the Assets application.</p>

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Change Management continued

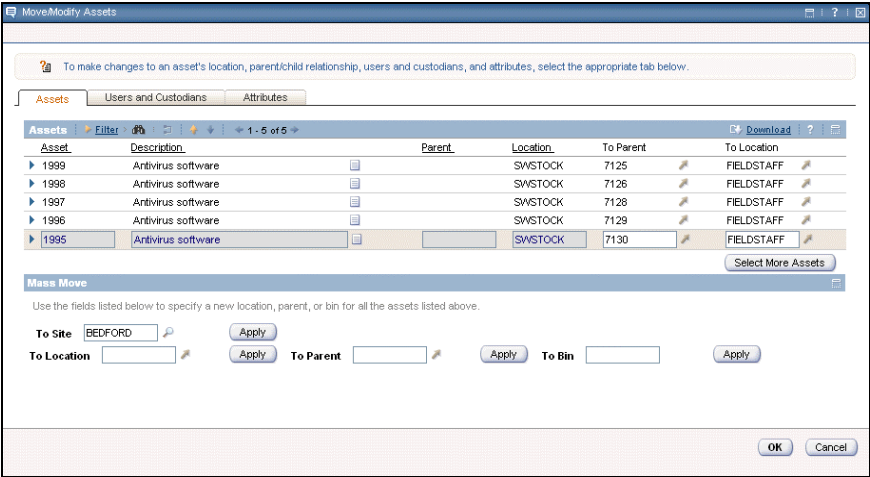
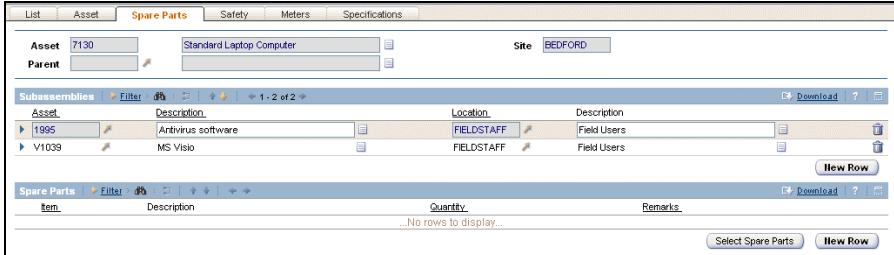
Mass Issues continued

Step	Action																																				
15	<p>On the List tab, retrieve the ANTIVIRUS rotating item, which is at the SWSTOCK location.</p> <p><u>Result:</u> Your result set should look like the one below.</p>  <table border="1"> <thead> <tr> <th>Asset</th> <th>Description</th> <th>Location</th> <th>Parent</th> <th>Rotating Item</th> <th>Site</th> </tr> </thead> <tbody> <tr> <td>1999</td> <td>Antivirus software</td> <td>SWSTOCK</td> <td></td> <td>ANTIVIRUS</td> <td>BEDFORD</td> </tr> <tr> <td>1998</td> <td>Antivirus software</td> <td>SWSTOCK</td> <td></td> <td>ANTIVIRUS</td> <td>BEDFORD</td> </tr> <tr> <td>1997</td> <td>Antivirus software</td> <td>SWSTOCK</td> <td></td> <td>ANTIVIRUS</td> <td>BEDFORD</td> </tr> <tr> <td>1996</td> <td>Antivirus software</td> <td>SWSTOCK</td> <td></td> <td>ANTIVIRUS</td> <td>BEDFORD</td> </tr> <tr> <td>1995</td> <td>Antivirus software</td> <td>SWSTOCK</td> <td></td> <td>ANTIVIRUS</td> <td>BEDFORD</td> </tr> </tbody> </table>	Asset	Description	Location	Parent	Rotating Item	Site	1999	Antivirus software	SWSTOCK		ANTIVIRUS	BEDFORD	1998	Antivirus software	SWSTOCK		ANTIVIRUS	BEDFORD	1997	Antivirus software	SWSTOCK		ANTIVIRUS	BEDFORD	1996	Antivirus software	SWSTOCK		ANTIVIRUS	BEDFORD	1995	Antivirus software	SWSTOCK		ANTIVIRUS	BEDFORD
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16	<p>From the Select Action menu, choose Move/Modify Assets.</p> <p><u>Result:</u> The Move/Modify Assets dialog box opens.</p> 																																				

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Change Management continued

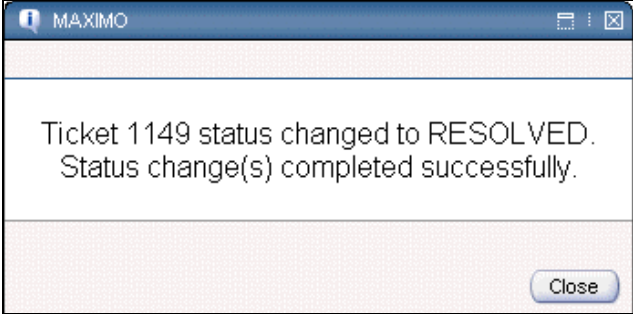
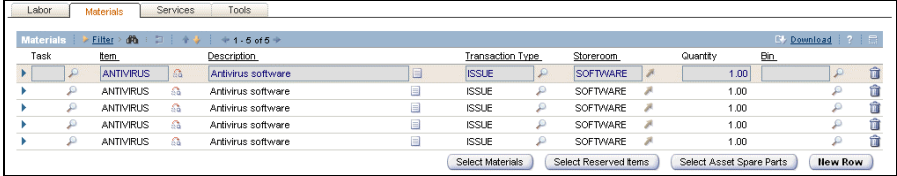
Mass Issues continued

Step	Action
17	<p>For each To Parent column row, enter the following numbers:</p> <p>7125 7126 7128 7129 7130</p> <p><u>Result:</u> Your screen should look like the one below.</p> 
18	<p>Click OK.</p> <p><u>Result:</u> You are brought back to the Asset list.</p>
19	<p>Retrieve one of the assets' parents and then click on the Spare Parts tab.</p> <p><u>Result:</u> The software is part of this asset's configuration.</p> 

continued on next page

Change Management continued

Mass Issues continued

Step	Action
20	Open the change for antivirus .
21	<p>Change the status to Completed.</p> <p><u>Result:</u> Maximo displays a message indicating that the service request status was changed to RESOLVED.</p> 
22	Click Close in the message box.
23	<p>Click on the Actuals tab, then the Materials subtab.</p> <p><u>Result:</u> Items issued from the storeroom are captured on the change.</p> 
24	Sign out of Maximo.

Chapter Summary

Incidents

Incidents can be created from several sources. Typically, service desk agents create incidents from SRs.

Ownership

The owner of an incident is responsible for managing the work associated with that incident. You can either select an owner of an incident or take ownership yourself.

Create Communication

You can use the Create Communication action in the Incidents application to send communications about a record to a requestor or other user.

When you create a communication, you can use a communication template to fill in default data. You can also create a free-form communication. If you use a template, Maximo will fill in data from the template, such as the identifier, subject, and solution.

Incident Management

Because the overall goal of incident management is to restore service, the resolution of incidents occurs when that service is effectively restored. The actual process of resolving incidents can include one or several steps. However it is described, incident resolution is part of the incident management process.

Problem Management

The goal of problem management is to:

- minimize the adverse effect on the business of incidents and problems by errors in the infrastructure;
 - proactively prevent the occurrence of incidents, problems, and errors; and
 - identify the underlying cause of one or more incidents.
-

continued on next page

Chapter Summary continued

Problems Application

You use the Problems application to create and modify problem records. You create a problem record to capture an unknown, underlying cause of one or more incidents. You resolve a problem when you identify its root cause so that similar incidents in the future are prevented or have a lesser business impact.

A problem record is a type of ticket. Other ticket types are service requests and incidents. The Problems, Incidents, and Service Requests applications are closely related and share many features. You can define relationships between tickets, link them for information purposes, and view details for them in the appropriate applications.

Changes Application

You use the Changes application to plan, review, and report actuals for implementing changes or deploying new, standard configurations to existing assets.

You also can create changes in other Maximo applications.

A change is a type of work order. Other types of work orders are releases and activities. Activities are actually child work orders.

While your business practices might include additional change types, the following three types are available out-of-the-box in Maximo:

- **Standard:** Everyday changes.
 - **Minor:** Some impact on business, to infrastructure.
 - **Major:** Significant impact on business, to infrastructure.
-

Plans Tab

You use the Plans tab to view, enter, and modify several types of work plan data on work orders. A work plan describes the tasks, labor, materials, services, and tools needed to complete the work.

MXES Immersion Training for IT

Chapter 11: Disposal



In This Chapter

This chapter contains the following topics:

Topic	See Page
Chapter Overview	11-1
End-of-Life Assets	11-2
Chapter Summary	11-7

Chapter Overview

Introduction

Decommissioning IT assets refers to deinstalling, decommissioning, and disposing of an IT asset. This can occur due to the end of a lease or license, or when an IT asset is being replaced or retired because it is technologically obsolete.

In this chapter, we will focus on the decommissioning of your IT assets. This will include returning leased assets, as well as sending assets to the end-of-life location.

Learning Objectives

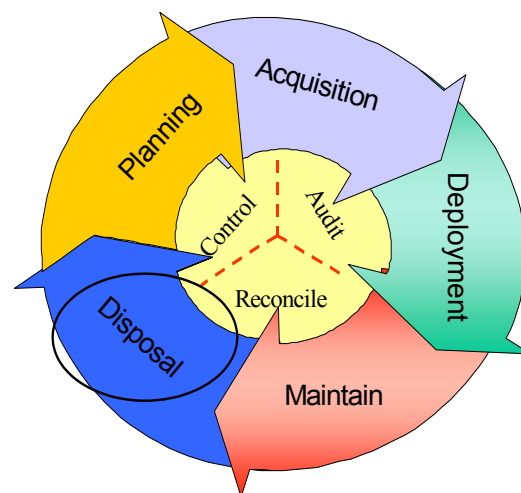
When you have completed this chapter, you should be able to:

- move leased items to an end-of-life location,
 - decommission an asset via the Assets application, and
 - disassociate a user or custodian from an asset.
-

Chapter Focus: Disposal

The asset lifecycle Disposal stage is where you make decisions regarding asset retirement and decommissioning, as well as the business processes needed to support those business functions.

In this chapter we will cover how Maximo can be used for these components in the Disposal stage.



End-of-Life Assets

Introduction

When retiring an asset, you can move it to an end-of-life location, and then decommission it.

Implementation Revisited: End-of-Life Moves

You can create an operating or a storeroom location to represent a “virtual” end-of-life location for your assets.

Implementation Tip

As you might recall, if the asset is in a NOT READY or DECOMMISSIONED status, then that asset will not display the **Select Value** list when a ticket or work order is generated on behalf of that person. Therefore, at the end of an asset’s lifecycle you need to determine whether it is necessary to disassociate the owner/custodian.

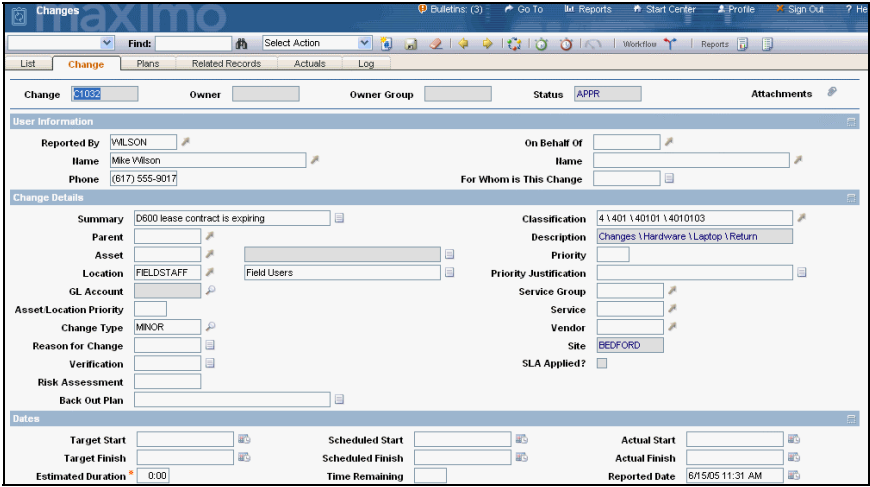
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End-of-Life Assets continued

Change



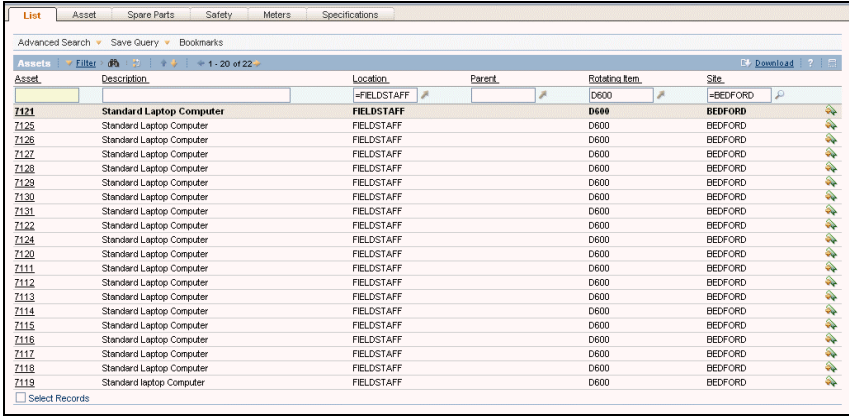
In this exercise, we will process the asset lease return by creating a work order using the **Changes** application, and then use the **Assets** application to move and decommission the assets.

Step	Action
1	Create a change work order.
2	<p>Enter the following information:</p> <ul style="list-style-type: none"> • Indicate that the lease contract for D600's Laptops for the Fieldstaff is expiring. • Classify it as 4 \ 401 \ 40101 \ 4010103 (Changes \ Hardware \ Laptop \ Return). • Approve it. <p><u>Result:</u> Your screen should look similar to the one below.</p>  <p>The screenshot shows the Maximo 'Changes' application interface. The 'Change' field contains '41032'. The 'User Information' section shows 'Reported By' as 'WILSON' and 'Name' as 'Mike Wilson'. The 'Change Details' section includes a 'Summary' of 'D600 lease contract is expiring', 'Location' as 'FIELDSTAFF', and 'Classification' as '4 \ 401 \ 40101 \ 4010103'. The 'Description' is 'Changes \ Hardware \ Laptop \ Return'. The 'Site' is 'BEDFORD'. The 'Dates' section shows 'Target Start', 'Target Finish', 'Estimated Duration' (0:00), 'Scheduled Start', 'Scheduled Finish', 'Time Remaining', 'Actual Start', 'Actual Finish', and 'Reported Date' (6/15/05 11:31 AM).</p>

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End-of-Life Assets continued

Change continued

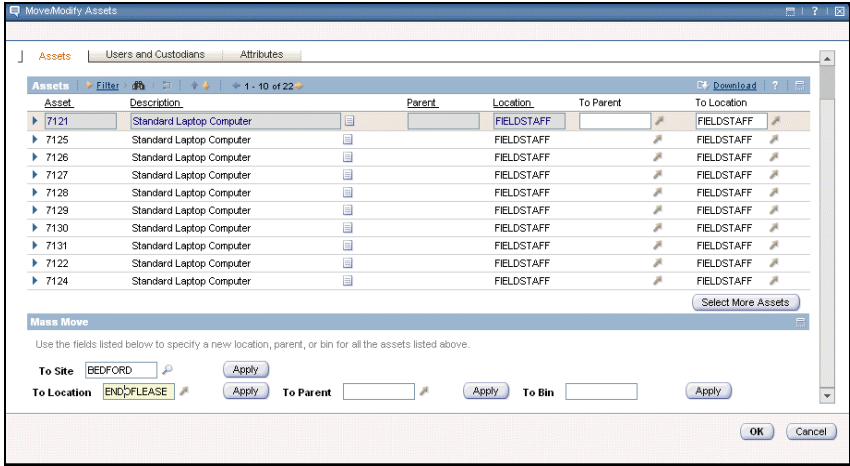
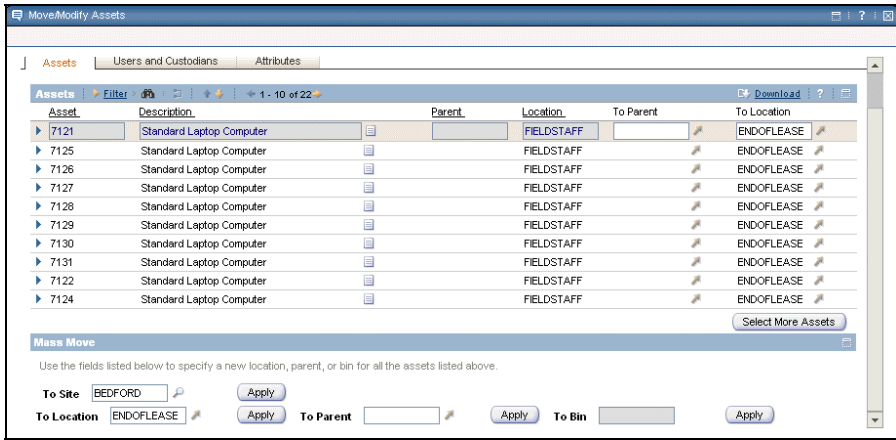
Step	Action																																																																																																																														
3	<p>Go to the Assets application and retrieve rotating item D600 at the FIELDSTAFF location.</p> <p><u>Result:</u> Your list should look like the one below.</p>  <table border="1"> <thead> <tr> <th>Asset</th> <th>Description</th> <th>Location</th> <th>Parent</th> <th>Rotating Item</th> <th>Site</th> </tr> </thead> <tbody> <tr> <td>7121</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td>FIELDSTAFF</td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7125</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7126</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7127</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7128</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7129</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7130</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7131</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7122</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7124</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7120</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7111</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7112</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7113</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7114</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7115</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7116</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7117</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7118</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> <tr> <td>7119</td> <td>Standard Laptop Computer</td> <td>FIELDSTAFF</td> <td></td> <td>D600</td> <td>BEDFORD</td> </tr> </tbody> </table>	Asset	Description	Location	Parent	Rotating Item	Site	7121	Standard Laptop Computer	FIELDSTAFF	FIELDSTAFF	D600	BEDFORD	7125	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7126	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7127	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7128	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7129	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7130	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7131	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7122	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7124	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7120	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7111	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7112	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7113	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7114	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7115	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7116	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7117	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7118	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD	7119	Standard Laptop Computer	FIELDSTAFF		D600	BEDFORD
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4	<p>Select the Select Records check box.</p> <p><u>Result:</u> The results list Select Records column displays.</p>																																																																																																																														
5	<p>Select asset records 7121 – 7131.</p>																																																																																																																														
6	<p>Change the status to Decommissioned.</p> <p><u>Result:</u> All assets on the list are decommissioned.</p>																																																																																																																														

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End-of-Life Assets continued

Change

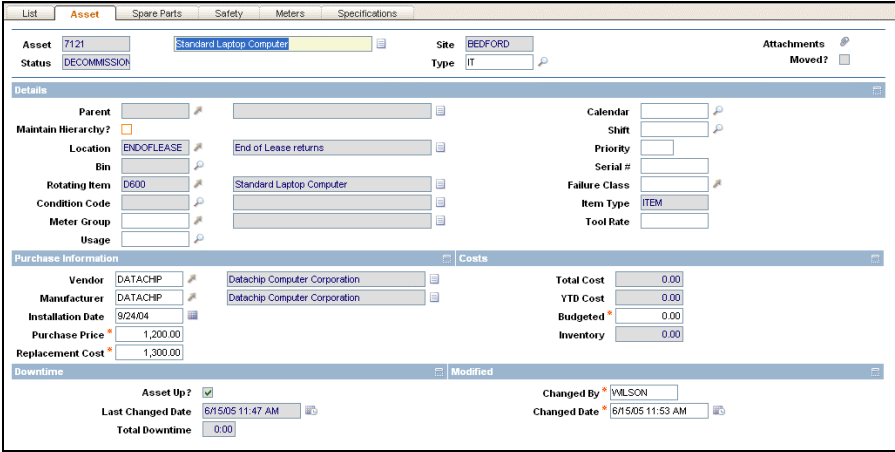
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Step	Action																																																																		
7	<p>Move/Modify these assets in the Mass Move section to the ENDOFLEASE location.</p> <p><u>Result:</u> Your Move/Modify Assets dialog box should look like the one below.</p>  <p>The screenshot shows a 'Move/Modify Assets' dialog box with a table of assets. The 'To Location' field in the 'Mass Move' section is set to 'ENDOFLEASE'.</p> <table border="1"> <thead> <tr> <th>Asset</th> <th>Description</th> <th>Parent</th> <th>Location</th> <th>To Parent</th> <th>To Location</th> </tr> </thead> <tbody> <tr><td>7121</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> <tr><td>7125</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> <tr><td>7126</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> <tr><td>7127</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> <tr><td>7128</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> <tr><td>7129</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> <tr><td>7130</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> <tr><td>7131</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> <tr><td>7122</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> <tr><td>7124</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>FIELDSTAFF</td></tr> </tbody> </table> <p>Mass Move</p> <p>Use the fields listed below to specify a new location, parent, or bin for all the assets listed above.</p> <p>To Site: BEDFORD [Apply] To Location: ENDOFLEASE [Apply] To Parent: [Apply] To Bin: [Apply]</p> <p>[OK] [Cancel]</p>	Asset	Description	Parent	Location	To Parent	To Location	7121	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF	7125	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF	7126	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF	7127	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF	7128	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF	7129	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF	7130	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF	7131	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF	7122	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF	7124	Standard Laptop Computer		FIELDSTAFF		FIELDSTAFF
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8	<p>Click the Apply button next to the To Location field.</p> <p><u>Result:</u> The ENDOFLEASE location is indicated.</p>  <p>The screenshot shows the same 'Move/Modify Assets' dialog box. The 'To Location' field in the 'Mass Move' section is now highlighted in blue, indicating it is selected.</p> <table border="1"> <thead> <tr> <th>Asset</th> <th>Description</th> <th>Parent</th> <th>Location</th> <th>To Parent</th> <th>To Location</th> </tr> </thead> <tbody> <tr><td>7121</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> <tr><td>7125</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> <tr><td>7126</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> <tr><td>7127</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> <tr><td>7128</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> <tr><td>7129</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> <tr><td>7130</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> <tr><td>7131</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> <tr><td>7122</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> <tr><td>7124</td><td>Standard Laptop Computer</td><td></td><td>FIELDSTAFF</td><td></td><td>ENDOFLEASE</td></tr> </tbody> </table> <p>Mass Move</p> <p>Use the fields listed below to specify a new location, parent, or bin for all the assets listed above.</p> <p>To Site: BEDFORD [Apply] To Location: ENDOFLEASE [Apply] To Parent: [Apply] To Bin: [Apply]</p>	Asset	Description	Parent	Location	To Parent	To Location	7121	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE	7125	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE	7126	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE	7127	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE	7128	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE	7129	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE	7130	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE	7131	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE	7122	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE	7124	Standard Laptop Computer		FIELDSTAFF		ENDOFLEASE
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End-of-Life Assets continued

Change continued

Step	Action
9	<p>Click OK and open one of the assets.</p> <p><u>Result:</u> Your assets are moved to a location that indicates they have been returned.</p>  <p>The screenshot shows the 'Asset' details page for 'Standard Laptop Computer' (Asset ID: 7121, Status: DECOMMISSION). The interface includes sections for 'Details', 'Purchase Information', 'Costs', 'Downtime', and 'Modified'. Key fields include: Location (ENDOFLEASE), Rotating Item (D600), Vendor (DATAHP), Manufacturer (Datachip Computer Corporation), Purchase Price (1,200.00), and Replacement Cost (1,300.00). The 'Downtime' section shows 'Asset Up?' checked, 'Last Changed Date' as 6/15/05 11:47 AM, and 'Total Downtime' as 0.00. The 'Modified' section shows 'Changed By' as WILSON and 'Changed Date' as 6/15/05 11:53 AM.</p>
10	<p>Go back to the Changes application and indicate that this work is completed.</p>

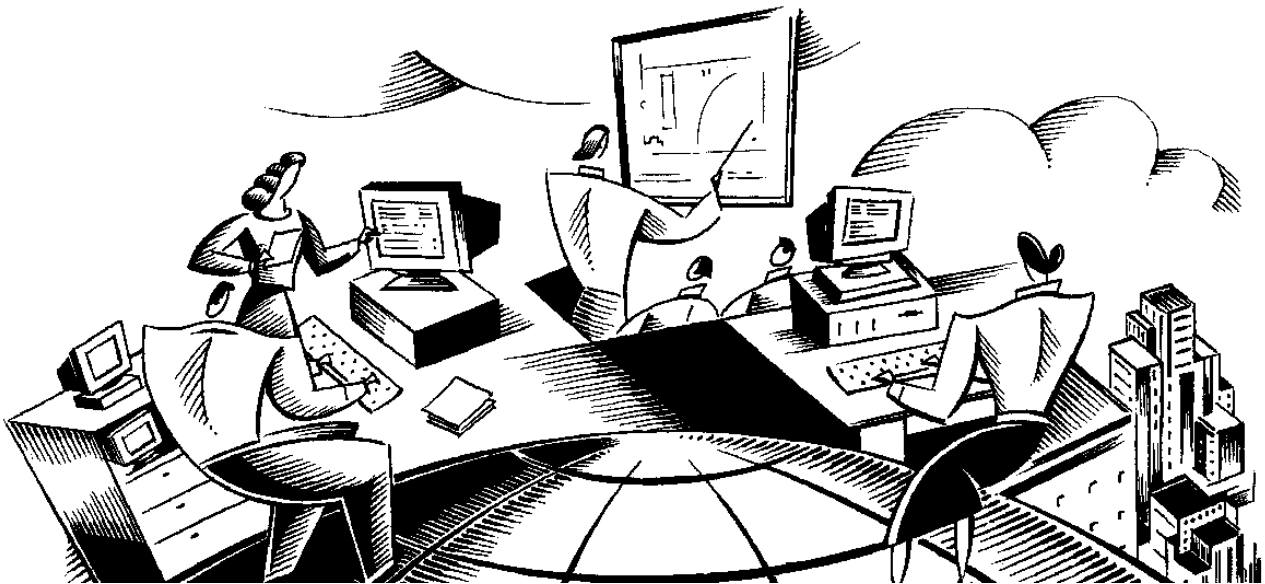
Chapter Summary

Retiring an Asset

When retiring an asset, you can move it to an end-of-life location and then decommission it.

MXES Immersion Training for IT

Unit 4: Automating Business Processes



In This Unit

This unit contains the following chapter:

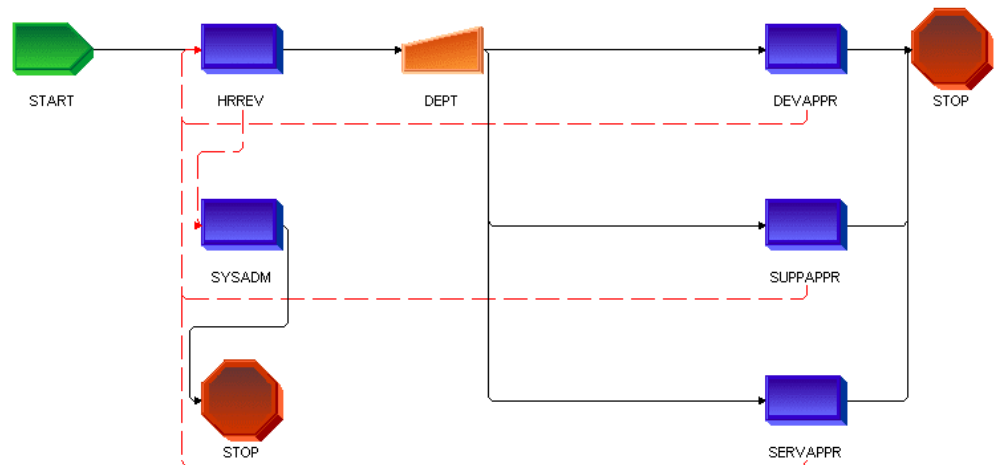
Chapter	Title
12	Automating the Approval Process

Unit Overview

Introduction

Workflow allows you to design the processing of data in Maximo to fit your business processes. Automating your approval processes decreases record processing costs and allows you to track the approval history.

In this unit we will automate data processing by using the Workflow application.



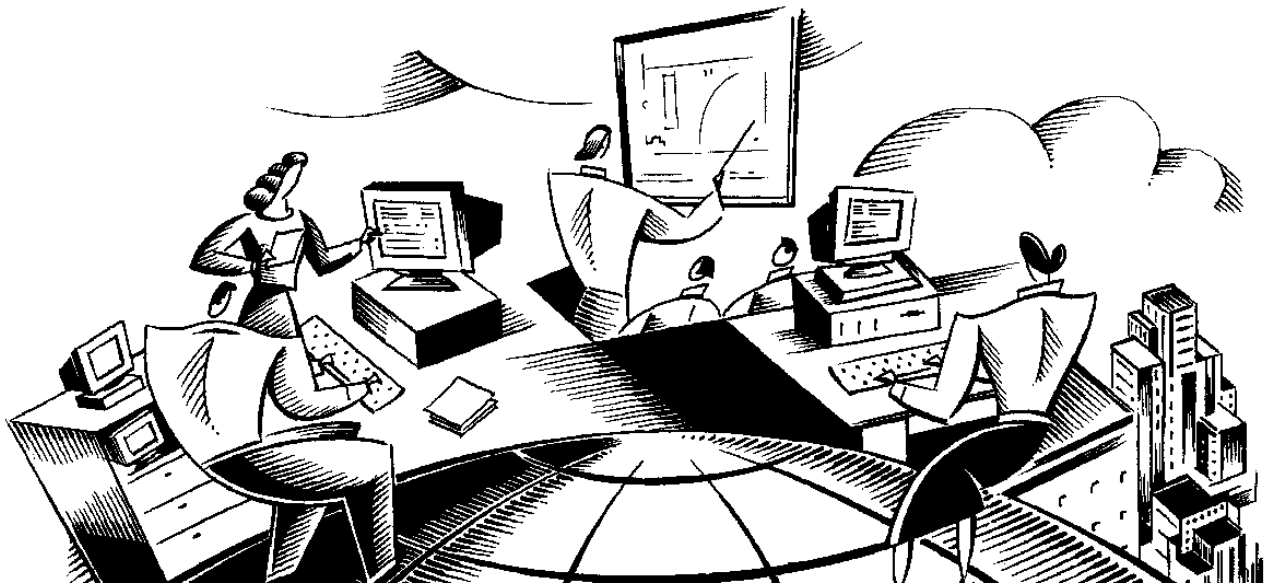
Learning Objectives

When you have completed this unit, you should be able to:

- describe the purpose of Workflow,
 - enable and validate a Workflow process,
 - start a Workflow process,
 - view a Workflow process's history,
 - view an in-process assignment, and
 - complete a Workflow assignment.
-

MXES Immersion Training for IT

Chapter 12: Automating the Approval Process



In This Chapter

This chapter contains the following topics:

Topic	See Page
Chapter Overview	12-1
Workflow in Maximo	12-2
Workflow Configuration Applications	12-10
Workflow Stages	12-17
Creating a Workflow Process Record	12-18
Starting the Workflow Process	12-30
Completing the Workflow Process	12-41
Chapter Summary	12-46

Chapter Overview

Chapter Focus



The previous chapters discussed how to record and manage your business processes using Maximo modules and applications. This chapter provides an overview of Workflow applications, functions, and stages.

Note: For a more in-depth discussion about workflow in Maximo, contact MRO Educational Services.

Learning Objectives

When you have completed this chapter, you should be able to:

- describe the purpose of Workflow,
 - list Workflow configuration applications,
 - list Workflow components,
 - list the types of records that can be routed in a workflow,
 - discuss the advantages of using Workflow,
 - start, enable, and validate a Workflow process,
 - view a Workflow process's history,
 - view an in-process assignment, and
 - complete a Workflow assignment.
-

Workflow in Maximo

Introduction

A *workflow* is a process that can be thought of as a map that guides a record, or a user's interaction with the processed record, through a set of steps.

The Workflow applications in Maximo enable your organization to design, track, and manage these steps throughout the organization.

What Is Workflow?

Workflow is comprised of a number of related components that are integrated into Maximo. These components are used to:

- design and administer processes, and
- create the elements used to develop the workflow process.

Most of these components are created using a variety of applications, including:

- Workflow Administration
- Workflow Designer
- Actions
- Roles
- Communication Templates
- Escalations

Several other applications are used when designing workflow processes and related components:

- People
- People Groups
- Security
- Security Groups
- Labor

There are two other Workflow components to consider:

- A *non-application* component of Workflow is the **Inbox/Assignments** table, which resides on each user's Start Center.
 - **Workflow options** are configured using the Organizations application.
-

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Workflow in Maximo continued

Workflow Goals

The goals of the Workflow solution are to:

- allow you to customize business processes,
 - manage defined processes from start to finish,
 - push information to the right people at the right time, and
 - provide an audit trail of your business processes.
-

Workflow Capabilities

The Workflow components provide a variety of features that you can include in your Workflow design to streamline your approval processes:

- Assignments to roles that can be comprised of labor, people, person groups, supervisors, and delegates
 - User-defined escalation periods and procedures
 - Manual initiation of a Workflow process on a specific process
 - Automatic initiation of Workflow processes; for example, when the system generates purchase requisitions or purchase orders from inventory reorder
 - Escalation of processes based on determined time intervals
 - Notifications using communication templates
 - Use of an SQL Expression Builder to more easily build detailed criteria for process points
 - Context-based interactivity to bring the right application or application component to people when needed to perform a specific task in the process
 - Manual reassignment of tasks using the Workflow Administrator
-

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Workflow in Maximo continued

Types of Workflow

In Maximo there are several workflow types:

- **Process workflow** (traditional, assignment-oriented), where a structured process manages a record's lifecycle – conditionally pushing assignments to people, running actions, and sending notifications along the routing paths.

Example: Route a corrective work order for cost approval, safety approval, scheduling, labor assignments, and supervisory sign-off on completion.

- **Context-based interactions** (assignment-less), where a menu of action choices is presented to the user based on the current record's data properties, "scripting" the user's interaction with the application.

Example: When a help desk technician enters a service request (SR) and presses Route, properties such as ticket type and status conditionally present the available next steps – for example, Close or Create Incident. Close could go to the Start Center; Incident could take the user to the newly inserted incident in its application.

- **Hybrids**, where there is a mix of structured routings along with interactive, conditional page and dialog navigation.

Example: Detect at the time of a work order's completion that a failure report should have been entered, and take the user to the Failure Reporting tab with instructions to that effect.

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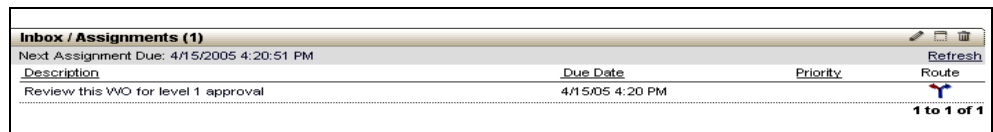
Workflow in Maximo continued

Workflow Inbox/ Assignments Tab

The **Workflow Inbox/Assignments** tab is a Maximo **Start Center** feature that allows you to view your current assignments quickly and efficiently in a modifiable list format.

This list saves time by presenting you with the relevant information of your choice in an easy-to-read form. This reduces the need to sort through multiple records as you search for your assignments and develop priorities.

Workflow also makes your business practices repeatable.



The screenshot displays the 'Inbox / Assignments (1)' window. At the top, it shows 'Next Assignment Due: 4/15/2005 4:20:51 PM' and a 'Refresh' button. Below this is a table with the following data:

Description	Due Date	Priority	Route
Review this WO for level 1 approval	4/15/05 4:20 PM		

At the bottom right of the window, it indicates '1 to 1 of 1'.

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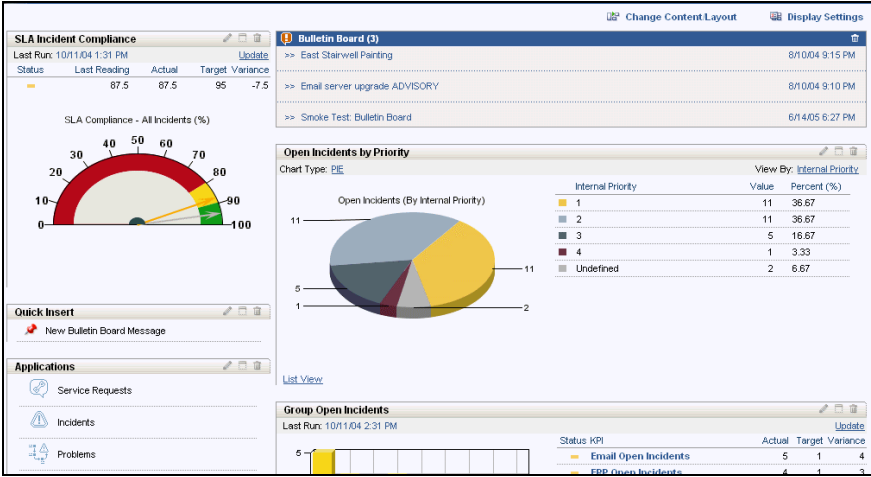
Workflow in Maximo continued

Viewing Assignment/Inbox



In this exercise you will modify Kathy Storm’s Start Center to display the inbox/assignment portlet.

Note: This exercise assumes you have attended the Navigation and Query course.

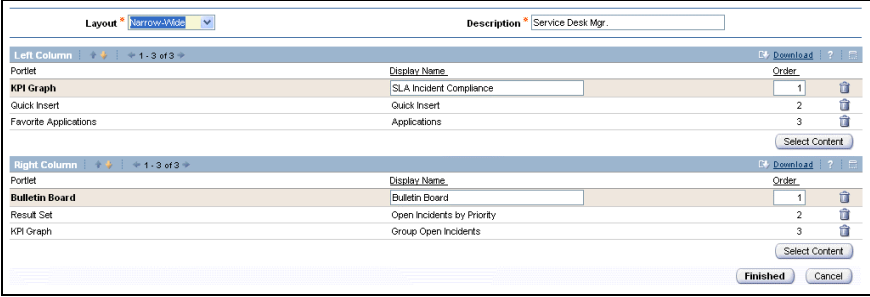
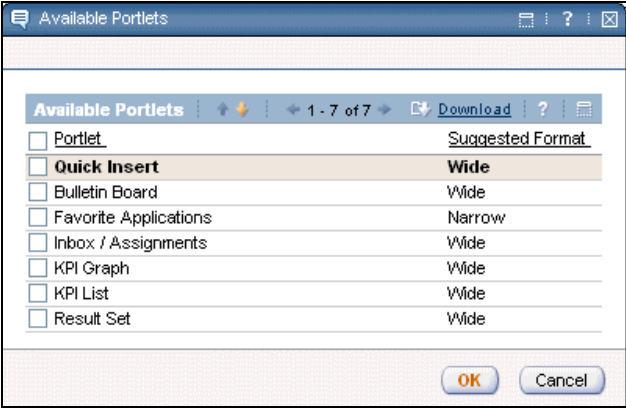
Step	Action
1	<p>Sign in to Maximo as storm/storm.</p> <p><u>Result:</u> Maximo displays Kathy Storm’s Start Center.</p>  <p>The screenshot shows the Maximo Start Center dashboard. It includes several portlets: 'SLA Incident Compliance' with a gauge chart showing 87.5% actual vs 95% target; 'Bulletin Board (3)' with a list of messages; 'Open Incidents by Priority' with a pie chart and a table showing 11 incidents at priority 1 (36.67%), 11 at priority 2 (36.67%), 5 at priority 3 (16.67%), 1 at priority 4 (3.33%), and 2 undefined (6.67%); and 'Group Open Incidents' with a bar chart and table showing 5 email open incidents and 4 ERP open incidents.</p>

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Workflow in Maximo continued

Viewing Assignment/Inbox

continued

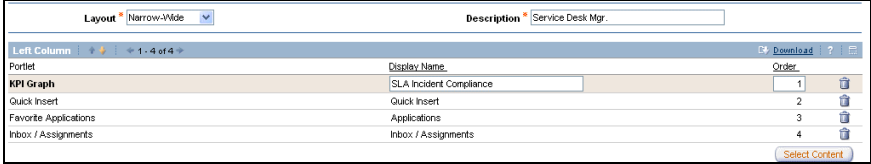

Step	Action
2	<p>Click Change Content/Layout.</p> <p><u>Result</u>: Maximo displays the Layout and Configuration page.</p> 
3	<p>For the left column, click Select Content.</p> <p><u>Result</u>: The Available Portlets window opens.</p> 

continued on next page

Workflow in Maximo continued

Viewing Assignment/Inbox

continued

Step	Action
4	<p>Select Inbox/Assignments and then click OK. <u>Result:</u> The Inbox/Assignment portlet is added.</p>  <p>The screenshot shows a table with columns: Portlet, Display Name, and Order. The 'Inbox / Assignments' portlet is selected and has an order of 4. Other portlets include KPI Graph, Quick Insert, and Favorite Applications.</p>
5	<p>Go to the Start Center and edit the Inbox/Assignment portlet to display the description. <u>Result:</u> The Inbox/Assignment portlet should look like the one below.</p>  <p>The screenshot shows the 'Inbox / Assignments (0)' portlet interface. It includes a 'Refresh' button and a table with columns 'Description' and 'DESCRIPTION'. Below the table, it states 'No Assignments found for Katherine Storm'.</p>

E-mail Notifications

Workflow allows you to send a configurable e-mail message when events occur during the process. With e-mail notification, you can notify the right people at the right time about what is happening in the process. You can configure the system to generate e-mail messages at the onset of the following events:

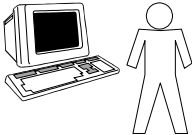
- When the system assigns a task
- When the assigned user completes or rejects a task
- When a manual input node is reached
- When the system evaluates a condition as true or false
- When there is a stop in Workflow

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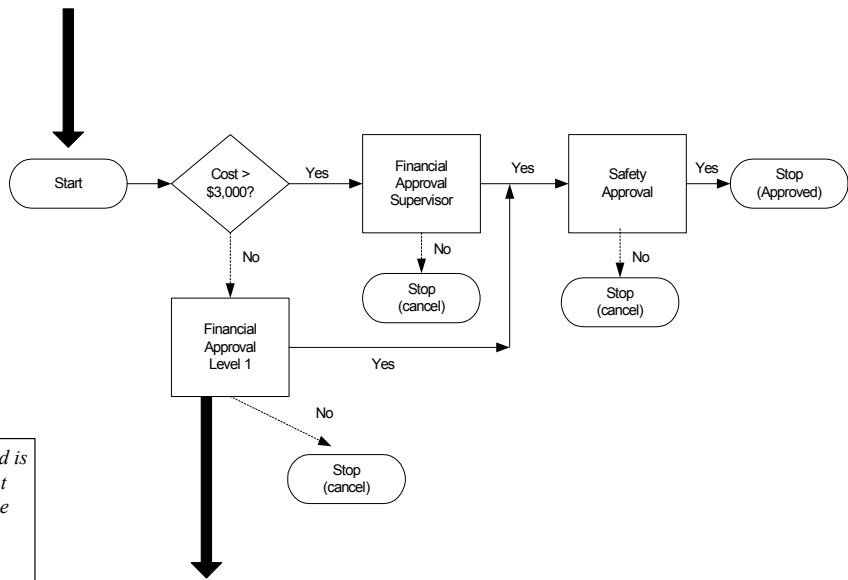
Workflow in Maximo continued

Pushing Information

Workflow gets information to the right people at the right time. Therefore, Workflow provides you with all of your work assignments *in one place*. You do not need to search through long lists of information to find what you need to do.



Service work is requested and using the Work Order Tracking Application is entered into MAXIMO



A Work Order begins its Workflow journey and is waiting for Approval. Thus, based on the right criteria, pushing the right task assignment to the right person.

Inbox / Assignments (2)				
Next Assignment Due: 12/1/2004 12:00:00 AM Refresh				
Description	Due Date	Priority	Start Date	Route
Move from WAPPR to APPR	12/1/04 12:00 AM		12/1/04 12:00 AM	
Move from WAPPR to APPR	12/1/04 12:00 AM		12/1/04 12:00 AM	

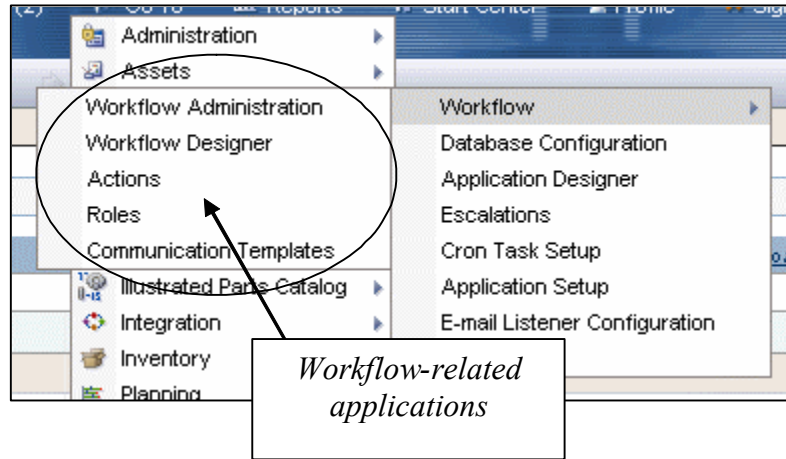
1 to 2 of 2

Workflow Configuration Applications

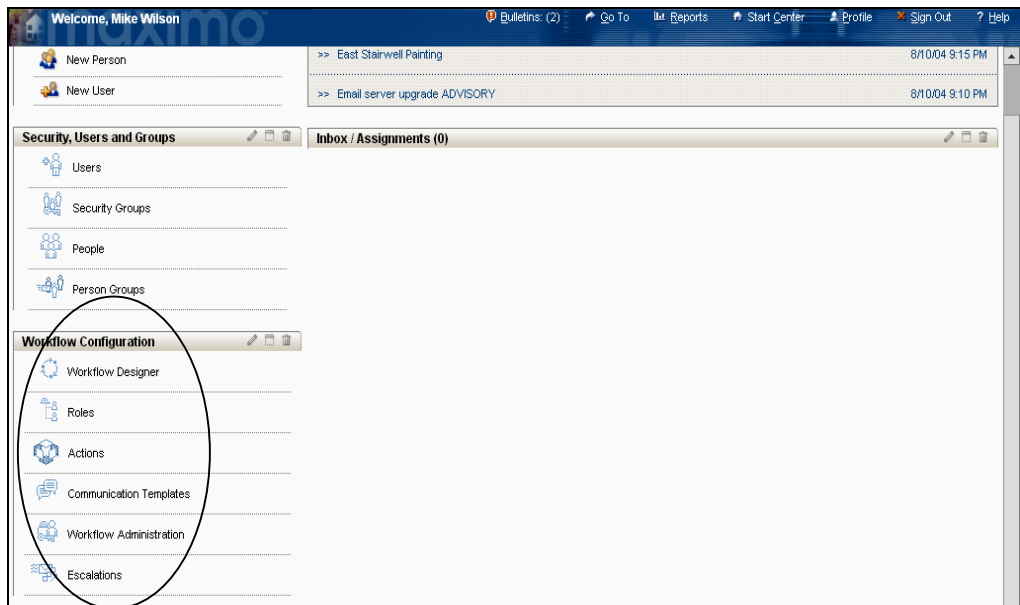
Accessing Workflow Applications

The Maximo administrator can give users privileges to access Workflow applications.

- Most of these applications are in the **Configuration** module, **Workflow** submodule.



- The **Start Center** can be configured to provide access directly, similar to the graphic below.



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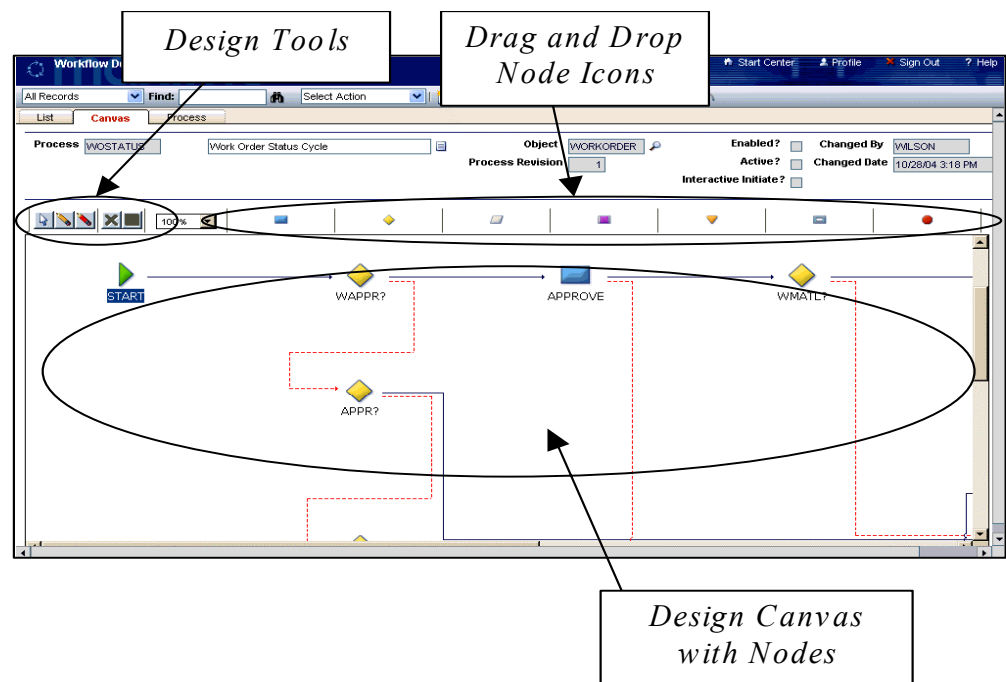
Workflow Configuration Applications continued

Overview of Workflow Configuration Applications

Automating the approval process requires several Maximo applications to be “tailored” in order to create, start, and complete the workflow process.

These applications include the following:

- The **Workflow Designer** application. You can use this application to create a series of paths for records to flow through, called a *process*. The graphical interface of the Workflow Designer illustrates the possible paths the record can follow using simple components called *nodes and actions*, enabling you to route critical business processes to simple or complex paths as your business process demands.



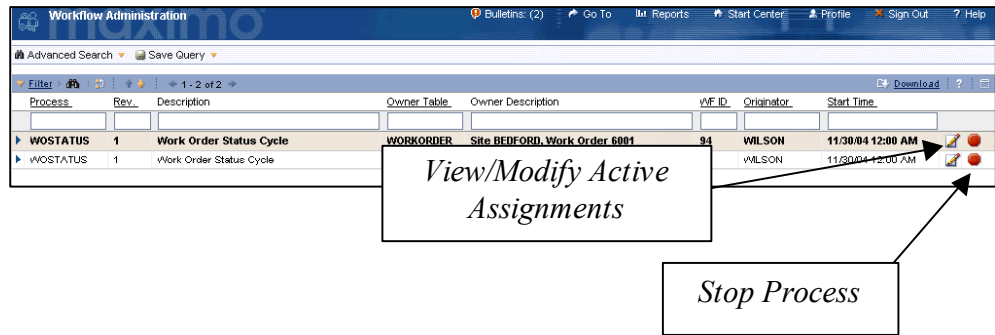
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Workflow Configuration Applications continued

Overview of Workflow Configuration Applications

continued

- The **Workflow Administration** application. You use the Workflow Administration application to view, modify, and stop Workflow assignments.



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Workflow Configuration Applications continued

Overview of Workflow Configuration Applications

continued

- The **Roles** application. You use this application to create and manage a custom user, a set of data related to a record or login user, a person or person groups, or an e-mail address, and to create hyperlinks between a process design and the supporting roles.

The screenshot shows the 'Roles' application interface. The main form is titled 'Role' and contains the following fields:

- Role: ORIGINATOR
- Object: Workflow Originator
- Type: CUSTOM
- Value: psdi.workflow.WorkflowOriginatorRole
- Parameter: (empty)
- E-mail?:
- Broadcast?:

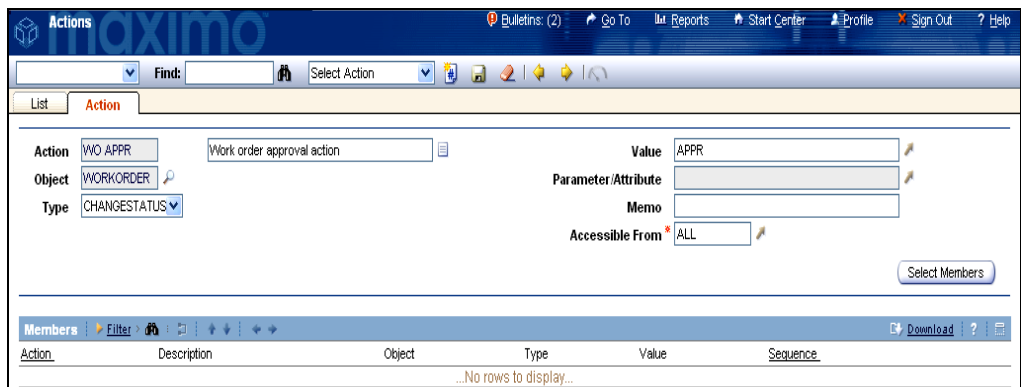
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Workflow Configuration Applications continued

Overview of Workflow Configuration Applications

continued

- The **Actions** application. You use this application to manage the administrative functions of creating actions and action groups within Workflow, Escalation, and Service Level Agreements (SLA) processes. *Actions* are scheduled events that occur when a record leaves a Workflow node. An action can cause a Maximo status change, execute a defined program, set a field value, or execute a custom class action for individual actions or action groups.



continued on next page

Workflow Configuration Applications continued

Overview of Workflow Configuration Applications

continued

- The **Communication Templates** application. You use this application to create and manage generic communication templates that Maximo users can leverage to standardize frequently used e-mail communications (also known as *notifications*). You can also use communication templates to create e-mail notifications for use with the automated workflow and escalation processes.

Example: A workflow process has been designed to send a message to new self-registered Maximo users. The process calls out the REGNOTIFY template to send a predetermined response to self-registered users.

The screenshot displays the 'Communication Templates' application interface. The main window shows the details for a template named 'REGNOTIFY'. The template description is 'Email notification for self-registration process'. The status is 'ACTIVE', created by 'WILSON', and dated '8/25/04 12:00 AM'. The 'Applies To' field is set to 'MAXUSER' and 'Accessible From' is set to 'ALL'. The 'Template Details' section includes fields for 'To' (MAXUSER), 'cc', 'bcc', 'Send From' (Admin), 'Reply To', and 'Subject' (Your MAXIMO registration is being processed). The 'Message' field contains the text: 'Your MAXIMO registration is being processed. We will contact you if we require more information or when your registration is complete.' The 'Attachments' section at the bottom shows a table with one row for a 'Document' attachment, with a 'Description' column and a 'Download' button.

continued on next page

Workflow Configuration Applications continued

Overview of Workflow Configuration Applications

continued

- The **Escalations** application. You use this application to automatically monitor critical processes across your enterprise. The primary goal of escalation management is to ensure that critical tasks are completed on time, such as those defined in Service Level Agreements. When you assign specific steps in a workflow process to employees, those assignments display in their Inbox. If the assignments are not completed promptly, they time-out in the recipients' Inboxes. When this happens, you can use escalations to assign the tasks to other people. This helps tasks get completed on time and helps to prevent work backlogs.

The screenshot displays the Maximo Escalations application interface. At the top, there's a navigation bar with 'Escalations' and various utility icons. Below that, a search bar and a 'Select Action' dropdown are visible. The main form area is divided into several sections:

- Escalation Details:** Includes fields for 'Escalation' (1036), 'Applies To' (WORKORDER), 'Condition' (historytag=0 and workorderid in (select ownerid from slarecords where ownerable='WORKORDER' and slatnum='1027')), 'Active?' (checkbox), 'Site' (BEDFORD), 'Organization' (EAGLENA), 'Schedule' (Sm,*****), and 'Last Run Time'.
- Validation Results:** A section for reviewing validation details.
- Escalation Points:** A table with columns: Escalation Point, Elapsed Time Attribute, Elapsed Time Interval, and Interval Unit of Measure. It contains two rows:

Escalation Point	Elapsed Time Attribute	Elapsed Time Interval	Interval Unit of Measure
1	TARGSTARTDATE	0.00	MINUTES
2	TARGCOMPDATE	0.00	HOURS
- Notifications:** A table with columns: Template, Role/Recipient, and Subject. It contains one row:

Template	Role/Recipient	Subject
1017	WOWNER	Work Order :WORKORDERID Unresponded

Review

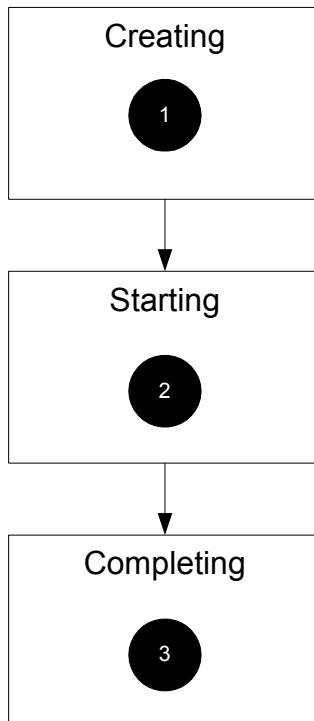


1. The **Workflow Designer** application is used to do what?
2. The **Workflow Administration** application is used to do what?
3. The **Workflow Inbox/Assignments** tab is used to do what?

Workflow Stages

Introduction

To better acquaint you with the Workflow solution, in this section and for the remainder of this chapter, a high-level overview of Workflow stages will be explored. The following chart illustrates and describes what these stages are:



In the first stage, you use the **Workflow Designer** application to perform three steps after *creating or revising* a Workflow process:

- Step 1: Validate the process
- Step 2: Enable the process
- Step 3: Activate the process

In the second stage, a Workflow process record can be started:

- **Manually** by clicking on the **Start/Continue Route** icon in a Workflow-enabled Maximo application, such as Work Requests.
- **Automatically** by using the **Set Process to Auto-Initiate** action in the **Workflow Designer** application where records of certain types automatically enter a Workflow process when the record is **Saved** or **Submitted**.

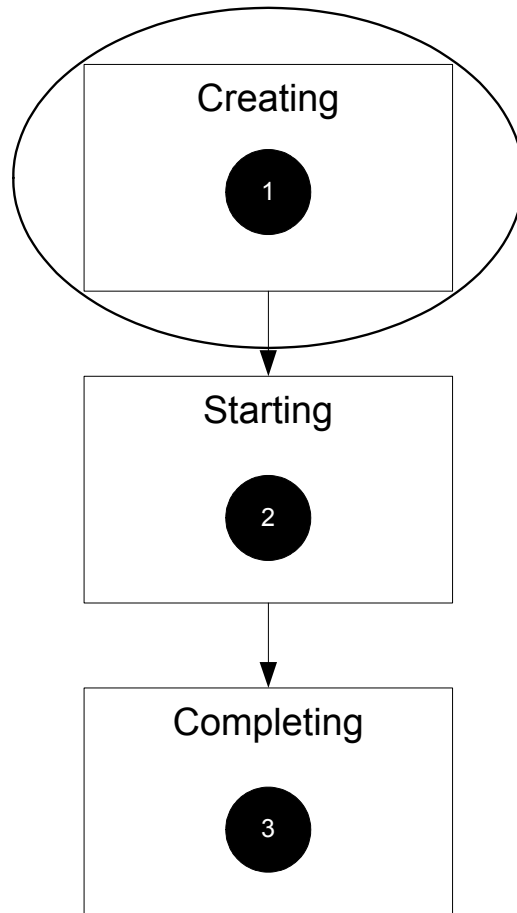
In the third stage, you use the **Workflow Inbox/Assignments** tab in your Start Center to perform Workflow assignments.

Creating a Workflow Process Record

Introduction

As introduced earlier, Workflow consists of three stages—Creating, Starting, and Completing—with each stage having its own application to meet its requirements. In this section we will learn how to navigate the **Workflow Designer** application and enable and activate an already-existing Workflow process. We will not create a new Workflow process.

We Are Here



In the first stage, You use the **Workflow Designer** application to accomplish three steps after *creating or revising* a Workflow process:
Step 1: Validate the process
Step 2: Enable the process
Step 3: Activate the process

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Creating a Workflow Process Record continued

Workflow Designer Application

You use the **Workflow Designer** application to create, revise, and/or modify series of design paths for records to flow through. Then the records will be *validated, enabled, and activated*.

Workflow Designer Application Tabs

The Workflow Designer application has three tabs:









Tab	Description
List	Allows you to search for existing Workflow process records.
Canvas	Gives an overall picture of the Workflow process, <i>graphical design paths, target Maximo Object, process status, and revision history</i> .
Process	Lists all the <i>processes and actions</i> contained in the nodes.

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Creating a Workflow Process Record continued

Overview of Workflow Designer Elements

The Workflow processes consist of components called *task nodes*.



Node	Description
 Start node	Indicates the beginning of a Workflow process. Workflow places one Start node on the canvas when you create a new process. There can be only one starting point to any process.
 Stop node	Marks the point where a Workflow process ends and a record leaves Workflow control. Workflow places one Stop node on the canvas when you create a new process. You can place additional Stop nodes on the canvas as needed.
 Process node	Allows you to direct the path of the record. You must have at least one connection coming out of a Task node. You use a Task node when your business rules call for an affirmative or negative user response to an inbox assignment.
 Condition node	Automatically direct records according to information contained within the record. There must be one positive connection and one negative connection coming out of a Condition node. The connection used by a record as it exits a Condition node is dictated by the SQL expression within the node, which resolves to either true (positive connection) or false (negative connection).
 Manual Input node	Allows you to direct the path of a record. Use a Manual Input node when you want the user to select the next step from a menu.
 Subprocess node	Represents a complete Workflow process nested within another Workflow process. A Subprocess can have a negative line flowing out of it, in addition to the positive. When a Subprocess encounters a stop node it returns to the master process along the same line on which it finished. This enables the Subprocess to carry back the logic that caused the termination to the master process.

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Creating a Workflow Process Record continued

Overview of Workflow Designer Elements

continued

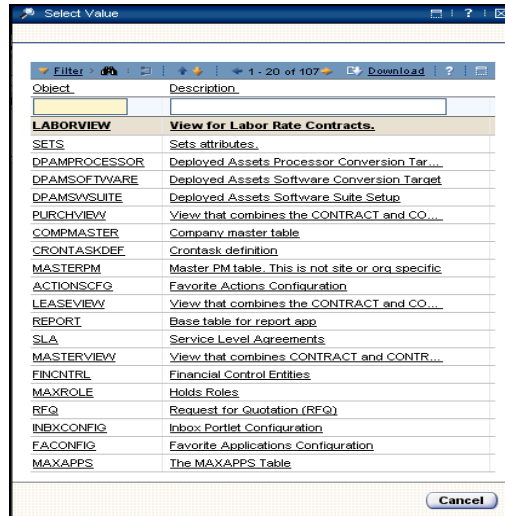
Node	Description
 Interaction node	Must have one or more action lines entering it, but only one action line can exit. You use an interaction node to help lead an end user down particular problem resolution paths, by offering well defined choices, which guide the user through a scripted path and manages the relationship with the record in any given session. A manual input node usually precedes the interaction node.
 Wait node	Creates a certain reaction to an action. You can define any action to trigger a specified reaction in a Wait node. When Workflow encounters a Wait node in an active process, the process pauses at that node indefinitely until any of the specified events occur. When the specified event does occur, it informs the node and the process resumes by exiting the node at the single exit point.

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Creating a Workflow Process Record continued

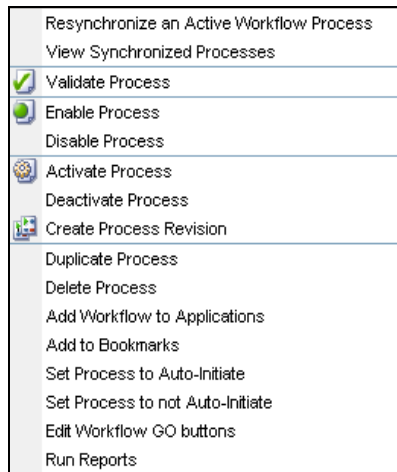
Overview of Maximo Business Objects

In the Workflow Designer application, Canvas tab, Object field, Detail Menu, you can select a Maximo Business Object, which contains specific criteria of processes in which Workflow can be applied.



Workflow Actions

You can use the Select Action menu in the Workflow Designer application to manage the Workflow processes.



The following sections provide some screenshots and descriptions of Workflow actions.

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Creating a Workflow Process Record continued

Workflow Action: Validate Process

You can *validate* a workflow process by choosing **Validate Process** in the Select Action menu or by clicking the **Validate Process** button on the Workflow Designer toolbar.



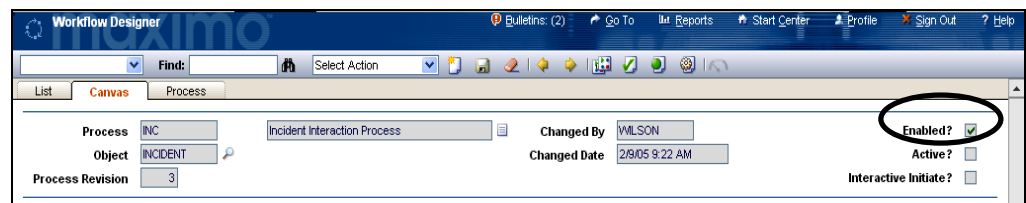
The validation process checks to see if all of the components necessary to a Workflow process are present and that the process has paths that travel through its entire length without interruption. The validation process does not attempt to determine the suitability of a process for your business needs.

Workflow Action: Enable Process

You can *enable* a workflow process by choosing **Enable Process** in the Select Action menu or by clicking the **Enable Process** button on the Workflow Designer toolbar.



The Enabled? check box in Workflow Designer, Canvas tab, will be checked once the Workflow process is enabled.



Note: Enabling a Workflow process will automatically validate a “valid” process.



Note: You cannot enable an invalid process.

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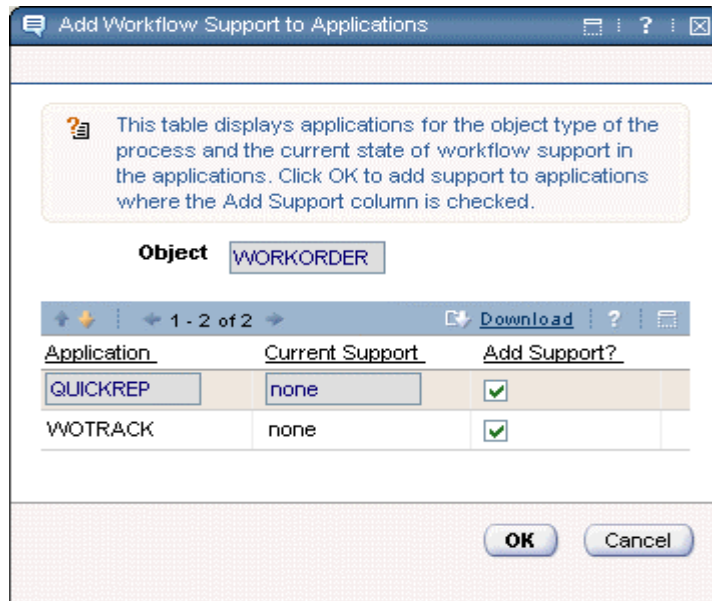
Creating a Workflow Process Record continued

Workflow Action: Activate Process

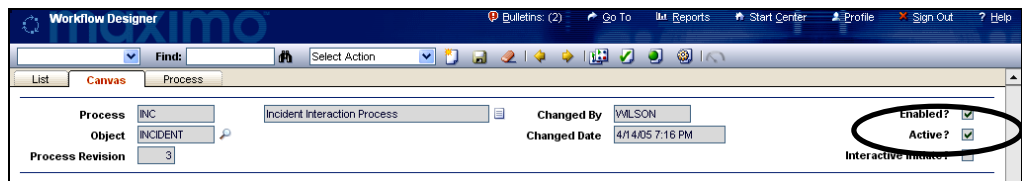
You can *activate* a workflow process by choosing **Activate Process** in the Select Action menu or by clicking the **Activate Process** button on the Workflow Designer toolbar.



Activating the workflow process will prompt the **Add Workflow Support to Applications** dialog box to open. This table displays applications for the object type of the process and the current state of Workflow support in the applications.



Note: The Active? check box in Workflow Designer, Canvas tab, will be checked once the Workflow process is enabled.



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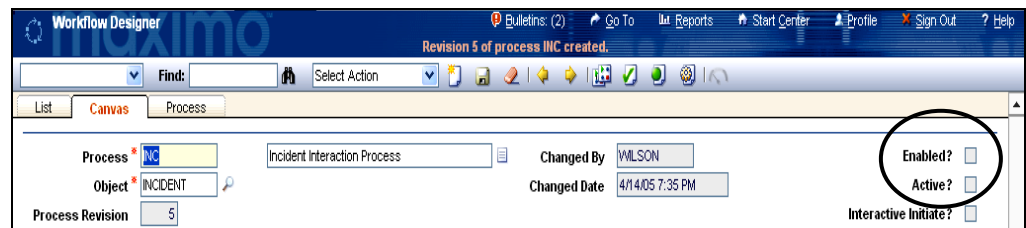
Creating a Workflow Process Record continued

Workflow Action: Create Process Revision

You can *revise* an existing workflow process by choosing **Create Process Revision** in the Select Action menu or by clicking the **Create Process Revision** button on the Workflow Designer toolbar.



A new revision of the process opens with the Enabled? and Active? check boxes cleared and the revision number adjusted to the next available number. Make the modifications to the nodes as needed, and then enable and activate the process. Maximo deactivates and disables the original process and activates and enables the new process automatically.



Workflow Designer

Bulletins: (2) Go To Reports Start Center Profile Sign Out Help

Revision 5 of process IINC created.

Find: Select Action

List Canvas Process

Process * NC Incident Interaction Process Changed By WILSON

Object * INCIDENT Changed Date 4/14/05 7:35 PM

Process Revision 5

Enabled?

Active?

Interactive Initiate?

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Creating a Workflow Process Record continued

**Exercise
Scenario
Premise**

To demonstrate how a Workflow process can be started and completed, we are going to open an existing Workflow process record in the Workflow Designer application. Specifically, we will apply the Workflow stages to:

- validate, enable, and activate the revised Workflow record using Workflow Designer;
 - start the Workflow; and
 - complete the Workflow by accessing the Workflow Inbox/Assignments tab in the Start Center.
-

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Creating a Workflow Process Record continued

Step 1: Enable and Activate a Workflow Record



In this exercise you will act as a Maximo administrator who will revise, enable, activate, and apply an existing Workflow process according to the premise stated previously.

In this section, you will learn to view and configure the task nodes according to your scenario premise before a Workflow process is applied.

Step	Action
1	Sign in to Maximo as wilson/wilson.
2	From the Configuration module, Workflow submodule, access the Workflow Designer application (or access it using the Start Center). <u>Result:</u> The Workflow Designer application opens on the List tab.


Process	Description	Object	Process Revision	Enabled?	Active?
ACTIVITY	Activity Auto Process	WOACTIVITY	1	Y	Y
CHANGE	Change Approval Process	WCHANGE	1	N	N
IBEP	Process created to handle incoming communications	INBOUNDCOMM	1	Y	Y
INC	Incident Interaction Process	INCIDENT	3	Y	Y
INVOICE	Sample Invoice Process	INVOICE	1	N	N
POSTATUS	Purchase Order Status Cycle	PO	1	N	N
PRSTATUS	Purchase Requisition Workflow	PR	1	N	N
REGUSTIN	Requisitions	MR	1	N	N
REGSTATUS	RFQ Sample Process	RFQ	1	N	N
SELFREG	Review and approve/reject the self registered user.	MAXUSER	1	Y	Y
SOLUTION	Solution Review and Approval Process	SOLUTION	1	Y	N
SR	Service Request Process	SR	10	Y	Y
WOAPPROVE	Work order approval process	WORKORDER	1	N	N
WOSTATUS	Work Order Status Cycle	WORKORDER	1	Y	Y

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Creating a Workflow Process Record continued

**Step 1:
Enable and
Activate a
Workflow
Record**

continued


Step	Action
3	<p>Select the CHANGE process from the List tab.</p> <p><u>Result:</u> Maximo displays the CHANGE process record on the Canvas tab.</p>
4	<p>If it is not already enabled, click Enable Process.</p>  <p>When Maximo displays the confirmation message, click Close to close the message.</p> <p><u>Result:</u> The Enabled? check box is selected.</p>

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Creating a Workflow Process Record continued

Step 1: Enable and Activate a Workflow Record

continued

Step	Action
5	<p>If it is not already activated, click Activate Process.</p>  <p><u>Result:</u> The Add Workflow Support to Applications dialog box displays a list of the applications that use the object indicated on the process.</p>
6	<p>Click OK.</p> <p><u>Result:</u> Maximo works behind the scenes to add code to support Workflow for the selected applications. The Active? check box is selected. The process is now ready to be used in Maximo.</p> <p><u>Note:</u> There is quite a bit going on here, so it might take Maximo a few minutes to complete this process.</p>

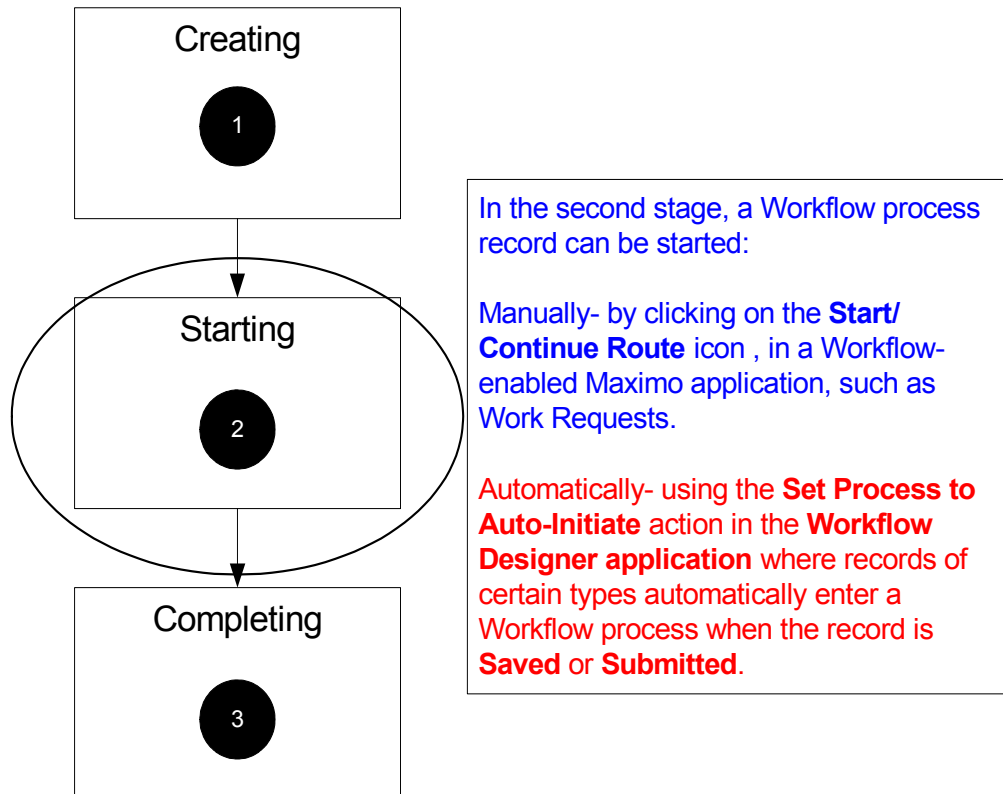
Starting the Workflow Process

Introduction

As introduced earlier, Workflow consists of three stages—Creating, Starting, and Completing—with each stage having its own application to meet its requirements.

In this section, we will manually start a workflow process using the **Work Order Tracking** application.

We Are Here

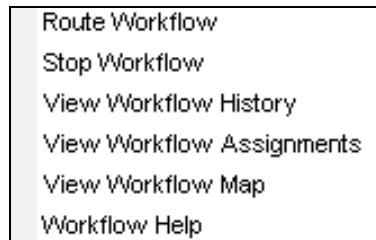


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Starting the Workflow Process continued

Application-Level Workflow Actions

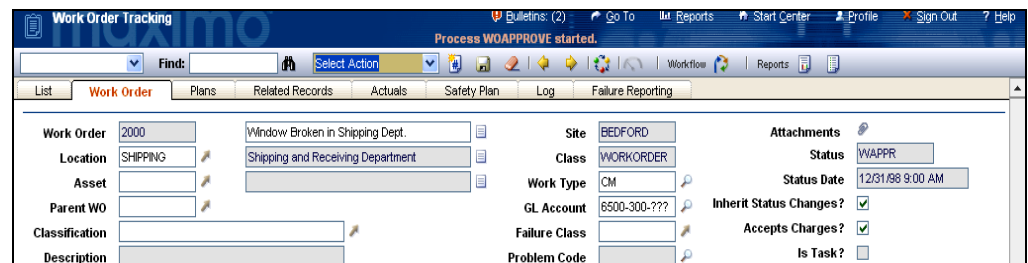
Workflow actions applied in Maximo applications can be selected using the Select Action menu, Workflow action.



The following sections describe each action.

Workflow Action: Route Workflow

In Maximo applications where Workflow is applied, you can start the Workflow process by choosing **Route Workflow** in the **Select Action** menu, **Workflow** action, or by clicking the **Start/ Continue Route** button.



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Starting the Workflow Process continued

Workflow Action: Stop Workflow

You can stop the Workflow process by choosing **Stop Workflow** in the **Select Action** menu, **Workflow** action.

The screenshot shows the 'Stop Workflow' dialog box. At the top, a message states: 'You have chosen to stop the active workflow process for this record. Choose one or both of the "Send e-mail" options below to notify users that this workflow process has been stopped. Optionally enter an e-mail message and transaction memo below. Click OK to stop the workflow process for this record. Click Cancel to return to the record.'

Below the message is a table of assignees:

Assigned Person Code	Name	Description	Assignment Status
SMITH	Roland Smith	Review this WO for level 1 approval	ACTIVE

Under the table is the 'Send e-mail to?' section with the following fields:

- Communication Template:** WFSTOP
- Send To:** Default User Stopped Workflow Process mess
- E-mail Open?:**
- E-mail Complete?:**
- E-mail Subject:** Process :ProcessName was stopped.
- E-mail Message:** The process was halted through the Stop Workflow menu action.
- Transaction Memo:** (empty field)

At the bottom right are 'OK' and 'Cancel' buttons.



Upon stopping, Maximo takes the record out of Workflow, notifies the specified recipients, and writes a transaction history record.

You can notify both past and current participants of the stoppage using a standard communication template or a free-form e-mail message.

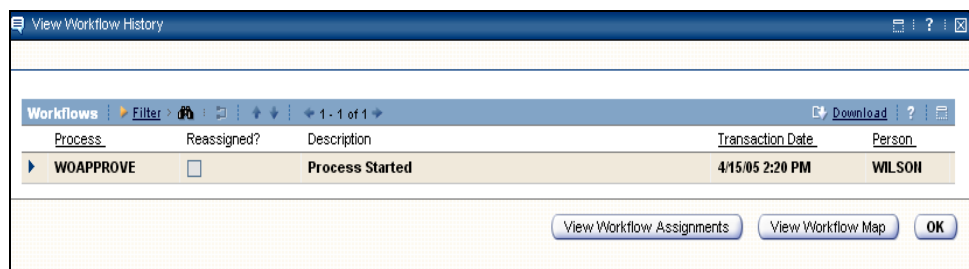
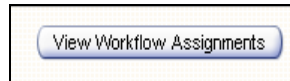
Workflow history stays recorded permanently, regardless of whether it was stopped by an administrator or a default user, or stopped due to the end of the Workflow process.

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Starting the Workflow Process continued

Workflow Action: View Workflow History

You can view the Workflow history by choosing **View Workflow History** in the **Select Action** menu, **Workflow** action or by clicking the **View Workflow History** button in the **View Workflow Assignment** or **View Workflow Map** dialog boxes.

A screenshot of a software window titled "View Workflow History". The window contains a table with the following data:

Process	Reassigned?	Description	Transaction Date	Person
WOAPPROVE	<input type="checkbox"/>	Process Started	4/15/05 2:20 PM	WILSON

Below the table are three buttons: "View Workflow Assignments", "View Workflow Map", and "OK".

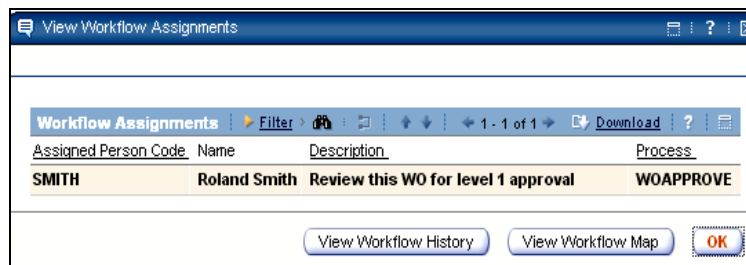
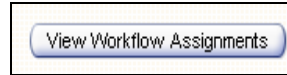
The **Workflow History** table window displays Workflow-related actions taken on the record by users. The table window displays the nodes the record has visited, with the type of transaction each node requires, what action took place at each node, the date of the action, and the labor code that took this action.

continued on next page

Starting the Workflow Process continued

Workflow Action: View Workflow Assignments

You can view the Workflow assignments by choosing **View Workflow Assignments** in the **Select Action** menu, **Workflow** action or by clicking the **View Workflow Assignments** button in the **View Workflow History** or **View Workflow Map** dialog boxes.



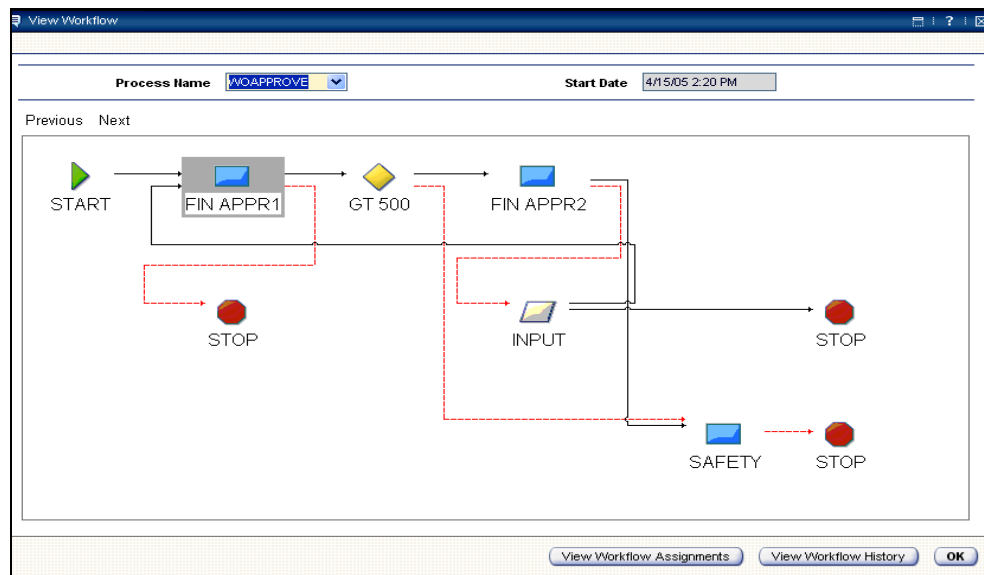
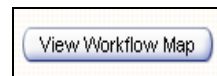
You use the **View Workflow Assignments** action to view the currently assigned user to take action on the Workflow-processed record.

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Starting the Workflow Process continued

Workflow Action: View Workflow Map

You can view the Workflow map by selecting **View Workflow Map** in the **Select Action** menu, **Workflow** action or by clicking **View Workflow Map** in the **View Workflow History** or **View Workflow Map** dialog boxes.



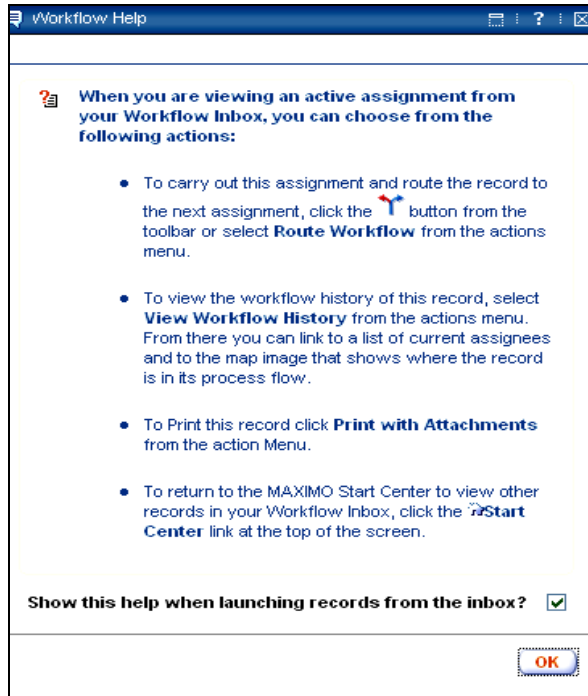
The **Workflow Map** tab depicts the Workflow process. A highlighted node marks the record's location in the process. You can use the View Workflow Assignments action to determine the person or person groups who can or must act on the record before it can move to the next step in the Workflow process.

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Starting the Workflow Process continued

Workflow Action: Workflow Help

You can view Workflow Help by selecting **Workflow Help** in the **Select Action** menu, **Workflow** action.



The Workflow Help action gives additional information in using and navigating the Workflow process.

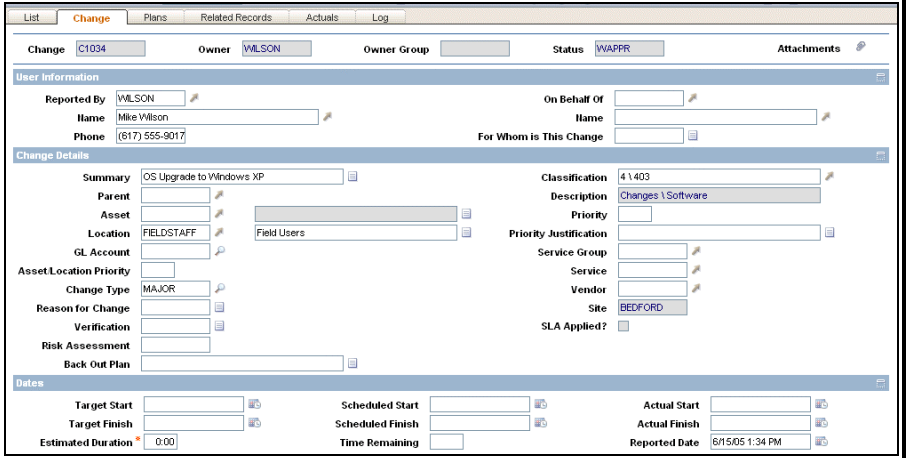
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Starting the Workflow Process continued

Step 2: Starting the Workflow Process



In this exercise you will *manually* start the Workflow process created in the **Workflow Designer** application.


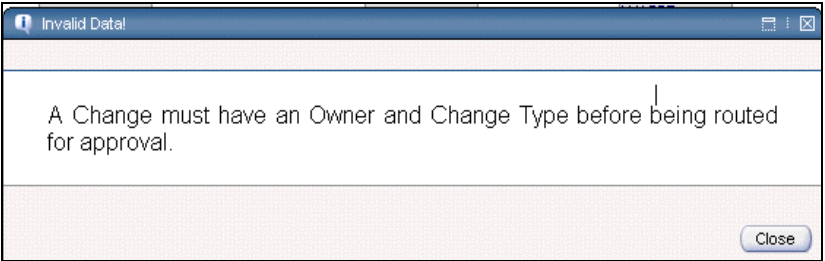
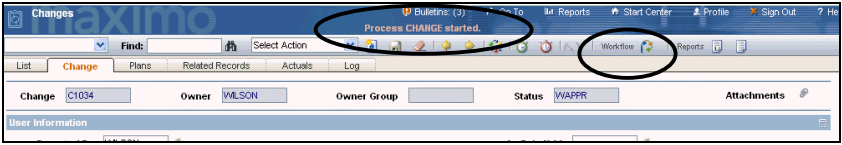
Step	Action
1	Go to the Changes application and create a new change.
2	<p>Enter the following information:</p> <ul style="list-style-type: none"> • Indicate that the change is for an OS upgrade to Windows XP for the field staff. • Classify it as Changes \ Software. • Indicate that this is a major change. • Save your record. <p><u>Result:</u> Your screen should look similar to the one below.</p> 

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Starting the Workflow Process continued

Step 2: Starting the Workflow Process

continued

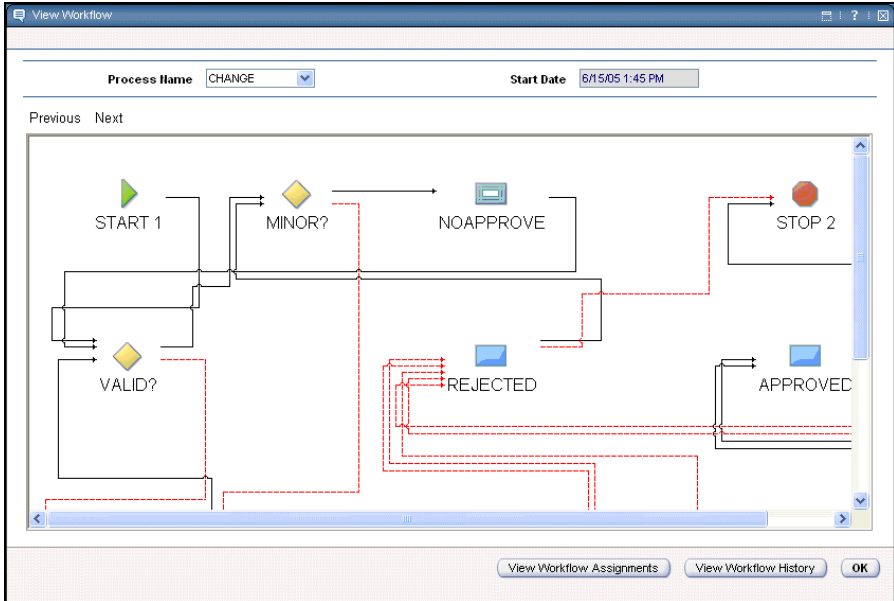
Step	Action
3	<p>Click the Route Workflow button.</p>  <p><u>Result:</u> Maximo displays a message dialog box saying that additional information is needed before the record can be routed in Workflow.</p> 
4	<p>Click Close and take ownership of this change. Click Route Workflow.</p> <p><u>Result:</u> Maximo displays a message saying that the process has started, and the Route Workflow button has changed to indicate that the record is in Workflow.</p> 

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Starting the Workflow Process continued

Step 2: Starting the Workflow Process

continued

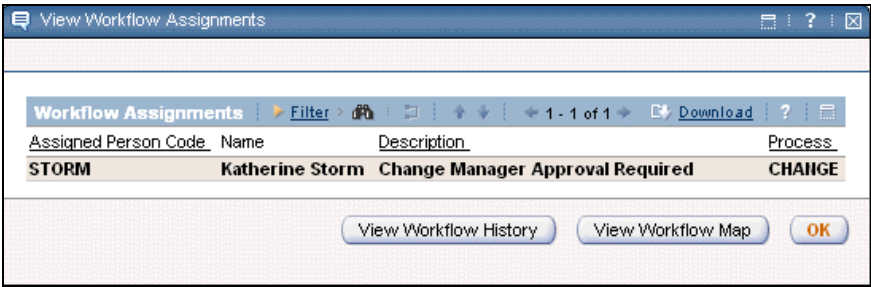
Step	Action
5	<p>From the Select Action menu, Workflow action, select View Workflow History.</p> <p><u>Result:</u> The View Workflow dialog box opens.</p> 
6	Use the scroll buttons to navigate the screen.

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Starting the Workflow Process continued

Step 2: Starting the Workflow Process

continued

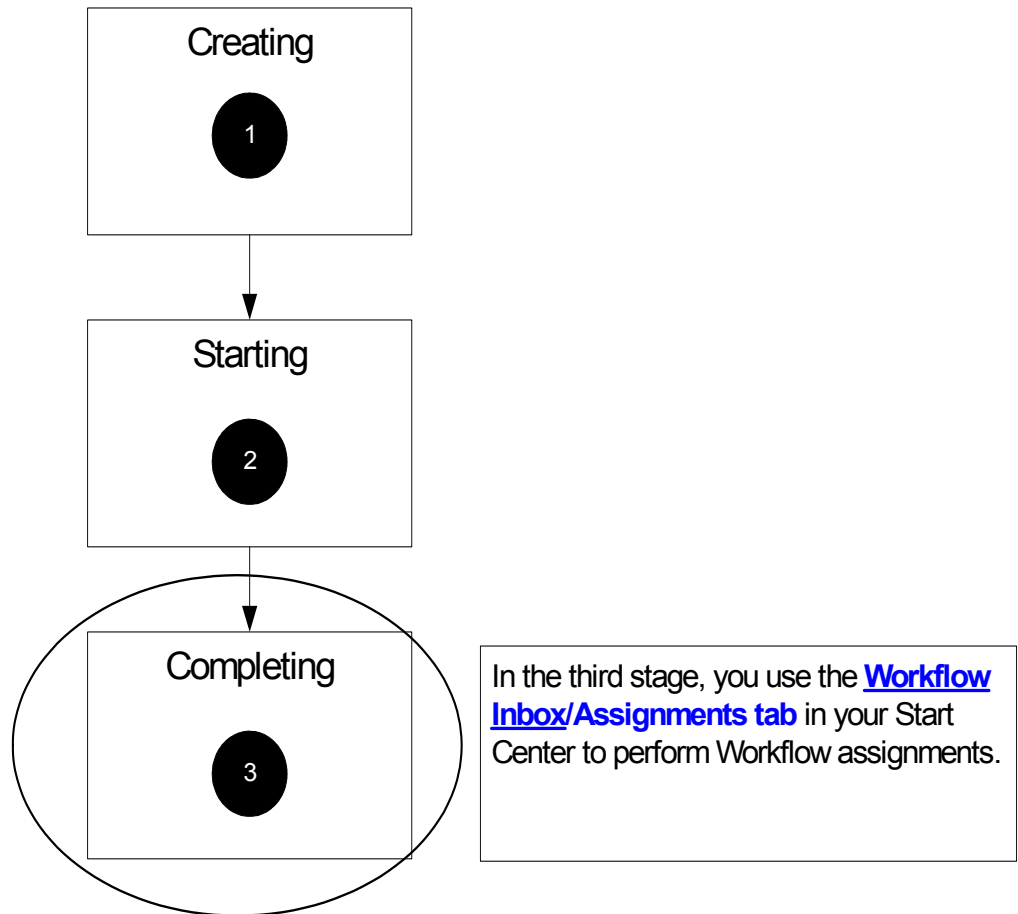
Step	Action
7	<p>From the View Workflow dialog box, click the View Workflow Assignments button.</p> <p><u>Result:</u> The View Workflow Assignments dialog box opens.</p> <p><u>Note:</u> You can all use the Workflow Actions View Assignments action.</p> 
8	Click OK .

Completing the Workflow Process

Introduction

In this section you will learn how to navigate the **Workflow Inbox/Assignments** tab in the Maximo Start Center to complete a Workflow process.

We Are Here

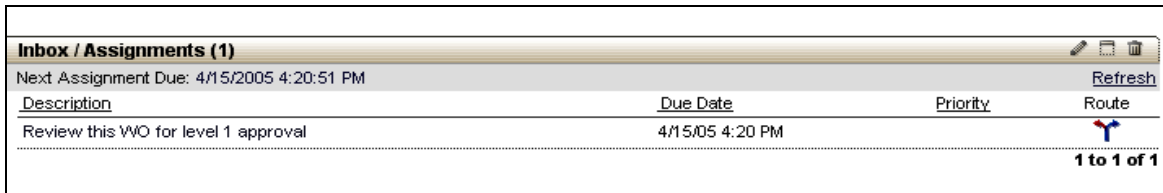


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Completing the Workflow Process continued

Workflow Inbox/ Assignments Tab

In the Maximo Start Center, you use the **Workflow Inbox/Assignments** tab to review, route, and complete task assignments.



Workflow Inbox/ Assignments Fields

Inbox/Assignments includes several fields:

Field	Description
Description	Use this field to view the Maximo application where Workflow is applied
Due Date	The calculated time value needed to complete the Workflow assignment
Priority	Shows the Workflow priority level
Route	Clicking the Route icon routes the Workflow process to the next assignment level


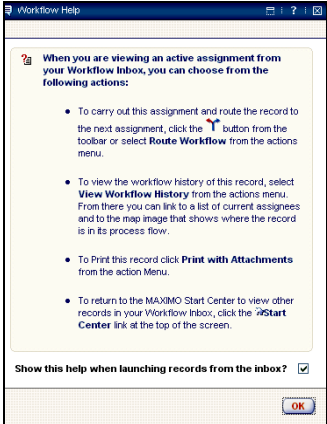
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Completing the Workflow Process continued

Step 3: Completing the Workflow Process



Now you will sign in as Roland Smith, who approves the financial condition. From the Workflow **Inbox/ Assignments** tab, we will route the Workflow assignment to complete the process.

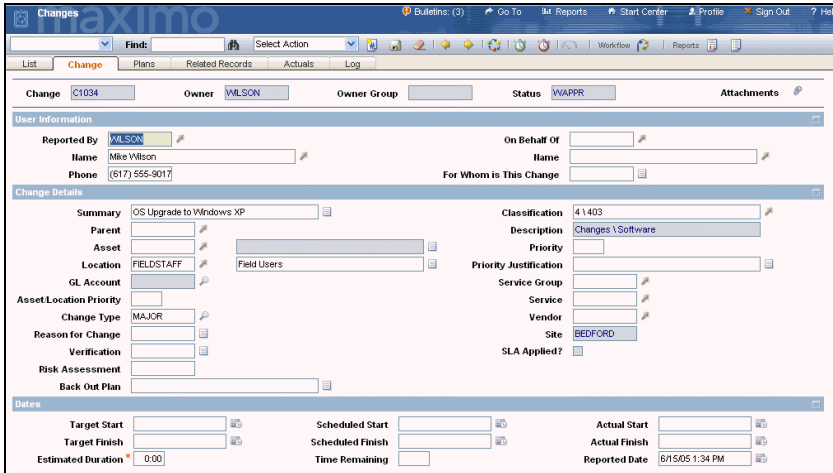
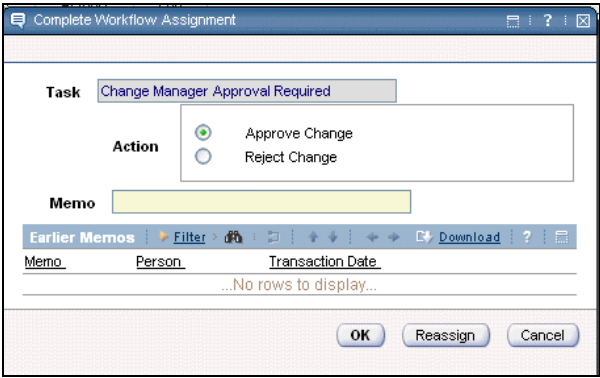
Step	Action
1	<p>Sign out of Maximo and sign in as storm/storm.</p> <p><u>Result:</u> You are brought to Kathy Storm’s Start Center and her Inbox/Assignments displays the change you just submitted.</p> 
2	<p>From the Inbox/ Assignments tab, click on Change Manager Approval Required (Description field).</p> <p><u>Result:</u> The change record is retrieved and Workflow Help opens.</p> 

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Completing the Workflow Process continued

Step 3: Completing the Workflow Process

continued

Step	Action
3	<p>Clear the Show this... check box and then click OK.</p> <p><u>Result:</u> You are brought back to the change record.</p> 
4	<p>Click the Route Workflow button.</p> <p><u>Result:</u> The Complete Workflow Assignment window opens.</p> 

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Completing the Workflow Process continued

Step 3: Completing the Workflow Process

continued

Step	Action
5	Click OK . <u>Result</u> : Maximo displays a message indicating that the change assignment has been made.
6	From the Select Action menu, select View Assignments . <u>Result</u> : The View Assignments window opens. How many people have to give approval for this change? Where is it on the map?
7	At this point we could sign in and sign out as each user to process the record through to the Approved status. However, this exercise is simply to illustrate Workflow and its functionality, and therefore we will not process the change to the Approved status.

Chapter Summary

Workflow Introduction

A Workflow is a process that can be thought of as a map that guides a record, or a user's interaction with the processed record, through a set of steps.

The Workflow applications in Maximo enable your organization to design, track, and manage these steps as they are strategically communicated throughout the organization.

What Is Workflow?

Workflow is comprised of a number of related components that are integrated into Maximo. These components are used to:

- design and administer processes, and
 - create the elements used to develop the Workflow process.
-

Workflow Capabilities

The Workflow components provide a variety of features that you can include in your Workflow design to streamline your approval processes.

These features include the following:

- Manual initiation of a Workflow process on a specific work order, purchase requisition, or purchase order
 - Automatic initiation of a Workflow process (for example, when the system generates purchase requisitions or purchase orders from inventory reorder)
 - Workflow records can be assigned for action to a person, a person group, a person's delegate (alternate), or a role via e-mail notification or Workflow Inbox/Assignments
 - User-defined escalation periods and procedures
 - Reassignment of tasks using an application wizard
-

Workflow Inbox/Assignments Tab

The **Workflow Inbox/ Assignments** tab is a Maximo Start Center feature that allows you to view your current assignments quickly and efficiently in a modifiable list format.

This list saves time by presenting you with the relevant information of your choices in an easy-to-read form. This reduces the need to sort through multiple records as you search for your assignments and develop priorities.

Workflow also makes your business practices repeatable.

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Chapter Summary continued

Accessing Workflow Applications

The Maximo administrator can give users privileges to access Workflow applications from the following locations:

- **Configuration** module, **Workflow** submodule; or
 - **Start Center**, **Workflow Configuration** tab.
-

Overview of Workflow Configuration Applications

Automating the approval process requires several Maximo applications to be “tailored” in order to create, start, and complete the Workflow process.

These applications include:

- The **Workflow Designer** application. You can use this application to create a series of paths for records to flow through, called a *process*. The graphical interface of the Workflow Designer illustrates the possible paths the record can follow using simple components called *nodes and actions*, enabling you to route critical business processes to simple or complex paths as your business process demands.
- The **Workflow Administration** application. You use the Workflow Administration application to view, modify, and stop Workflow assignments.
- The **Roles** application. You use this application to create and manage a custom user, a set of data related to a record or login user, a person or person groups, or an e-mail address, and to create hyperlinks between a process design and the supporting roles.
- The **Actions** application. You use this application to manage the administrative functions of creating actions and action groups within Workflow, Escalation, and Service Level Agreements (SLA) processes. *Actions* are scheduled events that occur when a record leaves a Workflow node. An action can cause a Maximo status change, execute a defined program, set a field value, or execute a custom class action for individual actions or action groups.

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Chapter Summary continued

Overview of Workflow Configuration Applications

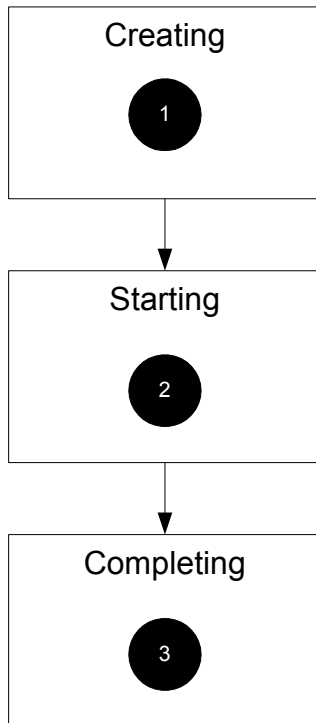
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- The **Communication Templates** application. You use this application to create and manage generic communication templates that Maximo users can leverage to standardize frequently used e-mail communications (also known as *notifications*). You can also use communication templates to create e-mail notifications for use with the automated workflow and escalation processes.
- The **Escalations** application. You use this application to automatically monitor critical processes across your enterprise. The primary goal of escalation management is to ensure that critical tasks are completed on time, such as those defined in Service Level Agreements. When you assign specific steps in a workflow process to employees, those assignments display in their Inbox. If the assignments are not completed promptly, they time-out in the recipients' Inboxes. When this happens, you can use escalations to assign the tasks to other people. This helps tasks get completed on time and helps to prevent work backlogs.

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Chapter Summary continued

Workflow Stages A high-level overview of Workflow stages was explored in this chapter. The following chart illustrates and describes these stages:



In the first stage, you use the **Workflow Designer** application to accomplish three steps after *creating or revising* a Workflow process:

- Step 1: Validate the process
- Step 2: Enable the process
- Step 3: Activate the process

In the second stage, a Workflow process record can be started:

- **Manually**, by clicking on the **Start/Continue Route** icon in a Workflow-enabled Maximo application, such as Work Requests.
- **Automatically**, using the **Set Process to Auto-Initiate** action in the **Workflow Designer** application, where records of certain types automatically enter a Workflow process when the record is saved or submitted.

In the third stage, you use the **Workflow Inbox/Assignments** tab in your Start Center to perform Workflow assignments.

Name: _____
Class: _____

Instructor: _____
Date: _____

	Excel- lent	Very Good	Good	Fair	Poor	Very Poor
1. The course structure and style was:						
2. The course content was:						
3. The workshops as a whole were:						
4. The length of the course was :						
5. Course organization was:						
6. Relevance and usefulness of course content was:						
7. Opportunity for practicing what was learned was:						
8. Amount you learned in the class was:						
9. The instructor's effectiveness in teaching the subject matter was:						
10. Use of class time was:						
11. Instructor's use of examples and illustrations was:						
12. Instructor's ability to answer student questions was:						
13. Instructor's ability to present alternative explanations when needed was:						
14. Tailoring of instruction to varying student skill levels was:						
15. Instructor demonstrations were:						
16. Instructor's ability to solve unexpected problems was:						

17. Which aspects of this course were most effective? _____

18. Which aspects of this course detracted from your learning? _____

19. What suggestions do you have for improving this course? _____