IBM Maximo Asset Management
Version 7 Release 6

Planning for Multiple Sites

IBM

This edition applies to version 7, release 6, modification 0 of IBM Maximo Asset Management and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Planning for multiple sites

You can use a multisite setup to categorize the facilities in your company into sites and organizations. A multisite setup enables sites to share data from a single database while keeping their operations separate. Before you create multiple sites, you must determine what types of operations are performed at each location and what data can be shared by each location.

Multisite capability

The multisite capability provides a way to standardize and share certain kinds of data between facilities while keeping other kinds of data, such as work management records, unique to a particular site. The multisite capability also can selectively give users access to data at different sites.

Why the multisite capability is needed

Separate facilities often have common business practices or share common data, which results in the duplication of information in the separate databases. The multisite capability provides a single Maximo® database while maintaining both data sharing and data separation, depending on your business needs.

You are not required to use the multisite capability. If your business is relatively small and has a single general ledger accounting system, you might consider whether you have a specific reason for using the multisite capability, such as multiple facilities with separate maintenance operations. The minimum implementation requirement is to create a single organization with a single site, one company set, and one item set.

How the multisite capability works

The basic units of a multisite implementation are organizations and sites. An enterprise can have multiple organizations; each organization can have multiple sites. Organizations and sites are virtual entities that can accommodate many different kinds of business practices. Organizations and sites do not necessarily correspond to physical sites or facilities.

To use the multisite capability, the administrator installs the application software once and sets up multiple sites that can access the software and the Maximo database. Although a single database is used, the multisite capability provides site-specific independence for certain kinds of data. For example, different sites can share the same vendor list but still keep their work order and inventory records separate.

The multisite capability creates an environment that has the following characteristics:
- All sites use the same Maximo database.
- All sites use the same product instance, which runs on an application server.
- Users at any site can access applications by using a Web browser.
- Different sites can keep certain operations separate, according to their business needs and the constraints of the application architecture.

Sites

A site is typically a facility in an organization where work is managed. These activities include managing assets and physical locations by using preventive maintenance schedules and work orders, managing inventory in storerooms, processing stock replenishment, and other supply chain-related activities.

A site is not required to be a physical location. For example, you can use sites in any of the following ways:

- Two sites can correspond to two different facilities in two different countries.
- Two sites can correspond to two subdivisions that you want to keep separate for business reasons, even if the sites are located within the same facility.
- Several facilities can correspond to a single site because they all use the same data that the application software treats as site-level data. For example, the facilities all use the same work order data.

Organizations

An organization is typically a financial entity in an enterprise in which all financial transactions are maintained in one base currency. Each organization maintains its own general ledger account, which is available to all sites that belong to that organization.

In a large enterprise, multiple business functions can also be configured as separate organizations. For example, a company can define two organizations: one to maintain its own assets, and another to maintain the assets of its clients.

Product settings

You must plan the settings you define in the product. Settings can be stored at the system level, the organization level, the site level, or the security level. Depending on where you define settings within the hierarchy, product settings affect the functioning of many applications.

Site settings

Settings enable each site in your organization to use different business rules, depending on the requirements of each organization.

You define most site settings in the Organizations application. Most options have default values. You must verify that the defaults correspond to your business rules and change them if necessary.

Table 1. Configuration of site settings

Action in the Organizations application	Function
Work order options	Configure the site settings for work orders, such as numbering for tasks.
Inventory options	Configure the site-level settings for inventory, such as determining how costs are calculated at issue.
PM options	Configure how your sites schedule planned maintenance. For example, scheduling by priority or frequency, or specifying how far in advance to generate work orders.
SLA options	Specify how you want to match service level agreements (SLAs) to records for example, one or multiple SLAs.

Table 1. Configuration of site settings (continued)

Action in the Organizations application	Function
Autonumber setup	Configure auto-numbering for items that are numbered at the site level, such as work orders. For example, you can configure starting numbers and prefixes.

Organization settings

You can create organizations and sites in the Organizations application. You can further configure your organizations using the Organizations, Chart of Accounts, Exchange Rates, and Calendars applications.

Several of the organization options have default values. Be sure to verify that the default values correspond to your business rules and change them if necessary.

Table 2. Configuration tasks by application

Application	Tab or action	Function
Chart of Accounts		Define general ledger accounts and configuring rules surrounding general ledger account code validation. Most companies import their general ledger account codes and use this application to view the import and configure the validation rules. Configure additional chart of accounts options through database configuration.
Exchange Rates		Configure and administer exchange rates for currencies you and your vendors use.
Calendars		Define calendars, holidays, shifts, and work periods for your company. This data is used to schedule in other areas within the system.
Organizations	**Addresses** tab	Configure addresses for your company.
	Sites tab	Create sites. You must have at least one site to use the system. You can set additional administrative options for each site in a different part of the application.
	Work order options action	Configure the options that your organization uses for work orders. For example, configure editing rules and configure prompts for failure and downtime reporting.
	Inventory options action	Configure the options that your organization uses for inventory. For example, specify options for breakpoints, negative balances, and reorder rules.
	Drill down options action	Configure the appearance of drill down menus.
	Safety plan options action	Specify that the system displays the hazards of a work asset in the select hazards dialog box.
	PO options action	Configure purchase order options for your organization. For example, specify the options for converting purchase requisitions to purchase orders.

Table 2. Configuration tasks by application (continued)

Application	Tab or action	Function
	Contract options action	Associate terms and conditions with contract types.
	Tax options action	Configure tax options for your organization, including how multiple taxes are calculated.
	PO labor options action	Configure options for the rules of your organization for outside labor costs, including reporting of actuals and requirements for purchase orders.
	Labor options action	Configure options for labor costs in your organization, including reporting of actuals and requirements for purchase orders.
	Workflow options action	Configure options for workflow processes in your organization, including reporting automated generation of work orders and purchase orders.
	Autonumber setup action	Configure auto-numbering for items that are numbered at the organization level, such as assets. For example, you can configure starting numbers and prefixes. This action facilitates moves from one site to another.

System settings

You configure system-wide settings based upon your business requirements. At this level, you can create at least one organization, currency code, item set, and company set.

Table 3. System settings

Application	Tasks
Database Configuration	Create objects and associate attributes with objects. You can create objects or import objects into the database. Configure the database in administration mode or in command line mode.
Organizations	Define organizations and sites. You must define at least one organization and site. Many organizations and sites can share a single database. Set up the Autonumber feature: Specify autonumber seeds and prefixes for record IDs that are unique at the system level.
Sets	Create item sets and company sets. • Item sets are groups of items that are shared between organizations to enable features such as inventory sharing. • Company sets are groups of vendors that are shared between organizations.
Currency Codes	Define the codes to represent currencies that you and your vendors use. One currency code is the base currency. Define exchange rates if needed.

Security settings

You can set up user records and security groups to define different levels of access.

Table 4. Applications with security settings

Application	Description
Security Groups	A security group defines levels of access to system applications and data.
Users	A user record defines how the system looks and behaves for a user. The record must have an associated person record. You can maintain both records from the Users application. A user must be a member of at least one group to access system applications. Users do not need to be given access to any sites in their groups to access data in system-level applications.

When to create multiple organizations and sites

When using the multisite capability, you must first decide whether you want to set up multiple organizations. Then, for each organization, you must decide whether to set up multiple sites. You can set up multiple sites even if your implementation has only a single organization.

When to create multiple organizations

You create an organization to identify a unique business entity to which one or more sites can belong.

Table 5. Situations in which you can create multiple organizations

Situation	Example	Recommendation
An enterprise has multiple legal entities, each of which maintains its own general ledger account.	An aerospace company has two legal entities: International and North American.	Create an organization for each legal entity.
An enterprise has multiple businesses. The maintenance operations are independent of each other and have their own general ledger accounts.	A large multinational company has two businesses: a utilities operation and a fleet of vehicles.	Create an organization for each business.
An enterprise has two different departments, one of which manages IT assets while one manages IBM® Maximo Asset Management assets. Each department has a unique set of general ledger accounts and cost centers.	A manufacturing company has a facilities department for managing general assets and an information technology department for managing IT assets.	Create an organization for each department.

When to create multiple sites

You typically create multiple sites within an organization when you want to have separate work management practices. When you create multiple sites, each site can maintain its own work orders, assets, inventory, and preventive maintenance orders.

Table 6. Situations in which you can create multiple sites

Situation	Example	Recommendation
An enterprise has a North American organization with facilities in multiple cities, each with independent maintenance operations.	An aerospace company has facilities in Boston, Chicago, and Denver.	Create a site for each facility.
A service enterprise maintains assets in facilities that are located in several countries. The enterprise deals in multiple currencies, but uses one general ledger system with a single base currency.	A large multinational company has facilities in Peru, Chile, and Argentina.	Create a single organization, and then create a site for each facility.
An enterprise has maintenance operations that occur in multiple facilities, but only some of the facilities use the same inventory and work orders.	A manufacturing company has three locations in the state of Ohio, all which share the same inventory and work orders. Two other facilities in another state do not use the same data as the Ohio facilities and also do not use the same data as each other.	Create a site for the three facilities in Ohio, then create a separate site for each of the other facilities.

Levels in the hierarchy

Systems, organizations, and sites form a hierarchy that guides how you use and configure the product to fit your organization. When you create an organization, you create at least one site.

Applications store data at different levels in a multiple site implementation. The following definitions describe the types of levels that can occur in an implementation with more than one site:

System level
A system is a single instance of a database. A single system can contain one or more sets, organizations, and sites.

Set Sets exist below the system level, but above the organization level. This configuration enables multiple organizations to share company and item data. Each organization can have only one company set and one item set. Each set can be shared by more than one organization.

Organization
An organization identifies a unique legal entity. A large corporation can have different organizations for different companies. A corporation can also group the facilities that exist in a continent or country into an organization. There can be many organizations in a single database.

Site A site identifies a work location, such as a plant or a facility. A site is a

division within an organization that maintains certain data independently from other sites. You can also use sites to administer security, and give users different rights at different sites.

Example of a utility company

A utility company owns several power plants, three water treatment plants, and two water distribution systems

- System-level refers to the entire utility company.
- The organizations of the company are grouped into power plants, water treatment, and water distribution facilities.
- Each organization has several sites that track inventory separately. The sites are the individual power plants, the treatment plants, and the water distribution systems.

The following figure shows a sample hierarchy of systems, organizations, and sites at a utility company.
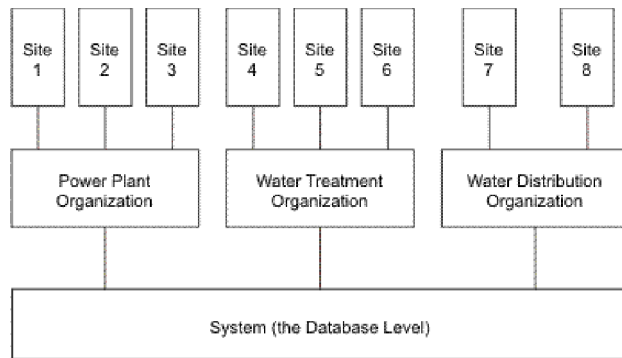

Figure 1. Sample hierarchy of systems, organizations, and sites

Data storage levels

Application data is stored at the following four levels: enterprise, set, organization, and site. The data that a user can see and use depends on the level at which the data is stored and whether the user is part of an organization or site that can access the data.

Enterprise level

An enterprise represents a single instance of the Maximo database. Data that is stored at the enterprise level, which is sometimes referred to as the system level, is available to all organizations and sites in the enterprise. An enterprise can have multiple organizations, and each organization can have multiple sites.

When an application stores data at the enterprise level, the data is unique for the entire implementation. An identifier for a record in an enterprise-level application can be used only once for that application. For example, in the People application, if a person record exists with the identifier 12345, then no other person record in any organization or site can use the identifier 12345.

Set level

The set level is a category below the enterprise level, but above the organization level. The set level allows multiple organizations to use the same item data and vendor data. Item data is stored in an item set. Vendor data is stored in a company set.

An enterprise can have multiple item sets and company sets, but each organization can use only one company set and one item set. Multiple organizations can use the same item set or company set.

For example, a utilities company owns several power plants and several water treatment facilities. The business practices of the power plants are similar, but different from the water treatment facilities. You can create an item set and a company set for use by the power plant organizations. Then you can create a different item set and company set for use by the water treatment organizations.

Organization level

Organizations and sites correspond to logical divisions in the company. An organization contains one or more sites.

If an application stores data at the organization level, then all sites in that organization access and use the same data from that application. For organization-level applications, different organizations can maintain separate data.

For example, the Chart of Accounts application is an organization-level application. Two organizations can each maintain separate general ledger accounts. The corollary is that different organizations can use the identical general ledger account code to refer to different accounts. For example, the account code 2000-300-400 might identify a tax debit account in one organization and an expense account in another organization.

Site level

A site is a division in an organization that maintains certain kinds of data independently from other sites. For example, the Assets application is a site-level application. The same asset number might identify a pump at one site and a computer at another site. Site-level applications primarily involve work management activities.

You can also use sites in administering security. You can give users different rights at different sites. For example, a user with management responsibility at one site might need full rights to the Work Order Tracking application at that site. The same user might only need to view work order data at another site.

Applications and their data storage levels

Records must be unique within the data storage level. For example, the Automation Scripts application stores data at the enterprise level, so you could not have two scripts with the same identifiers in an enterprise. Some applications, such as the Job Plans application, are able to store data at multiple levels.

Table 7. Applications and the levels at which they store data

Application	Enterprise level	Set level	Organization level	Site level	Notes
Actions	X				
Activities and Tasks				X	
Application Designer	X				
Asset Templates			X		
Assets				X	Assets are defined at the site level. However, a user can issue items from a storeroom located in one site to an asset located in another site. The user must have access to both sites, and the two sites must belong to the same organization.
Assignment Manager				X	
Automation Scripts	X				
Bulletin Board	X				
Calendars	X				
Catalogs		Item set			
Catalog Orders				X	
Catalog Purchase Requisitions				X	
Chart of Accounts			X		
CI Types	X				
Classifications	X		X	X	Classifications exist at the enterprise level but can be restricted to a particular organization or site.
Cognos Reporting	X				
Commodity Codes		Item set			Menu item
Company Master		Company set			Company master records are defined at the company set level and are unique at that level.
Companies			X		Company records are defined at the organization level. However, they are unique at the company set level. A company record must exist in the Company Master application before it can be defined for an organization.
Communication Templates	X				
Condition Codes		Item set			All condition enabled items in an item set can use the codes.

Table 7. Applications and the levels at which they store data (continued)

Application	Enterprise level	Set level	Organization level	Site level	Notes
Condition Monitoring				X	Condition monitoring points are defined against an asset or location and hence are accessible only in the site where the asset or location is defined.
Conditional Expression Manager	X				
Configuration Items	X				
Conversion Values		Item set			All condition enabled items in an item set can use the codes.
Create Interactions	X				
Crews			X		
Crew Types			X		
Cost Management				X	
Crafts			X		
Create Requisitions				X	Transactions can reside at enterprise, organization, or site level.
Create Service Requests	X		X	X	Transactions can reside at enterprise, organization, or site level.
Cron Task Setup	X				
Currency Codes	X				All sites and organizations can access currency codes.
Database Configuration	X				
Database Information	X				
Domains	X		X	X	Domains are defined at the enterprise level, but individual values can be restricted to an organization or site.
Email Interaction Setup	X				
Email Listeners	X				
End Points	X				
Enterprise Services	X				
Escalations	X				
Exchange Rates			X		Exchange rates are accessible to all sites in the organization in which the exchange rates were defined.
External Systems	X				
Failure Codes			X		The problems, causes, and remedies associated with failure codes are also defined at the organization level and are unique at that level.

Table 7. Applications and the levels at which they store data (continued)

Application	Enterprise level	Set level	Organization level	Site level	Notes
Features	X				
Fulfillment Options		Item set		X	
Global Search	X				
Hazards			X		The precautions associated with the hazards are defined at the site level.
Interactions	X				
Inventory				X	Items in a storeroom are defined at the site level. Items can be transferred from a storeroom in one site to a storeroom in another site, provided the two sites belong to the same organization or the organizations of the two sites use the same item set.
Inventory Usage				X	
Incidents	X				Incidents are defined at the enterprise level. The incident can specify an asset or location that belongs to any site. The incident can also be handled at any site, not just the site specified for the asset or location.
Integration Modules	X				
Invocation Channels	X				
Invoices				X	
Issues and Transfers				X	
Item Master		Item set			Items are defined at the item set level and the identifiers are unique at that level. An organization can use only one item set, and all sites in that organization can access all the items defined in that item set.
Job Plans	X		X	X	Job plans can be defined at the enterprise level, organization level, or site level. When a job plan is defined at the enterprise level, the identifier is unique at that level. No other job plan at the site level or the organization level can have the same identifier. When a job plan is defined at the organization level, the identifier is unique at the organization level. No other job plan at the site level within that organization can have the same identifier.
KPI Manager	X				

Table 7. Applications and the levels at which they store data (continued)

Application	Enterprise level	Set level	Organization level	Site level	Notes
KPI Viewer	X				
Labor			X		
Labor Rate Contracts			X		Labor rate contracts are accessible to all the sites in the organization in which the contract was created.
Labor Reporting				X	
Launch in Context	X				
Lease/Rental Contracts			X		Though lease/rental contracts are defined at the organization level, you must explicitly specify the sites to which a lease/rental contract applies using the Authorize Sites action. The sites must belong to the organization in which the contract is created or to an organization that uses the same item set and company set as the organization in which the contract is created.
Locations				X	Though locations are defined at the site level, a user can issue items from a storeroom located in one site to a location in another site. The user must have access to both sites, and the two sites must belong to the same organization.
Lock Out/Tag Out				X	
Logging	X				
Logical Management Operations	X				
Master Contracts			X		Though master contracts are defined at the organization level, you must explicitly specify the sites to which a master contract applies using the Authorize Sites action. The sites must belong to the organization in which the contract is created or to an organization that uses the same item set and company set as the organization in which the contract is created.
Master PM	X				PM records from any site can be associated with a master PM.
Maps			X		
Message Reprocessing	X				
Message Tracking	X				

Table 7. Applications and the levels at which they store data (continued)

Application	Enterprise level	Set level	Organization level	Site level	Notes
Meter Groups	X				Defined items, assets, and locations can access all the meters defined in the Meter Groups application. Defined items, assets, and locations can access all the meters defined in the Meters application.
Meters	X				Defined items, assets, and locations can access all the meters defined in the Meter Groups application. Defined items, assets, and locations can access all the meters defined in the Meters application.
Migration Collections	X				
Migration Groups	X				
Migration Manager	X				
Object Structures	X				
Offerings Catalog		Item set			
Offerings		Item set			
Organizations	X				
OSLC Providers	X				
OSLC Resources	X				
People	X				
Person Group	X		X	X	Person group records are defined at the enterprise level and the identifiers are unique at that level. Person groups contain people records, which can be restricted to a site or an organization.
Precautions				X	
Preventive Maintenance				X	
Priority Matrix	X				
Process Requests	X				
Publish Channels	X				
Purchase Contracts			X		Though purchase contracts are defined at the organization level, you must explicitly specify the sites to which a purchase contract applies using the Authorize Sites action. The sites must belong to the organization in which the contract is created or to an organization that uses the same item set and company set as the organization in which the contract is created.

Table 7. Applications and the levels at which they store data (continued)

Application	Enterprise level	Set level	Organization level	Site level	Notes
Purchase Orders				X	You can create purchase orders (both internal and external) for storerooms that belong to the site in which you create the purchase order. For an external PO, you can request items for storerooms in multiple sites, provided the PO site and all the storeroom sites belong to the same organization. When you create an internal PO, you can request items from a storeroom belonging to a different site than the one in which you create the PO, provided the two sites are in the same organization or the organizations for the two sites use the same item set.
Purchase Requisitions				X	You can create purchase requests (both internal and external) for storerooms that belong to the site in which you create the request. When you create an internal PR, you can request items from a storeroom belonging to a different site than the one in which you create the PR, provided the two sites are in the same organization or the organizations for the two sites use the same item set.
Qualifications			X		
Quick Reporting				X	
Receiving				X	
Release Records				X	
Relationships	X				
Request for Quotations				X	
Report Administration	X				
Report Viewer	X				
Response Plans	X				
Roles	X				
Routes				X	Only assets and locations that belong to the specified site can be part of that route. Any specified job plans must either belong to the site for the route or be at the enterprise level.
Safety Plans				X	
Search Solutions	X		X	X	Transactions can reside at enterprise, organization, or site level.
Security Group	X				

Table 7. Applications and the levels at which they store data (continued)

Application	Enterprise level	Set level	Organization level	Site level	Notes
Service Addresses			X		
Service Fulfillment		Item set			
Service Groups		Item set			
Service Items		Item set			Service items are defined at the item set level and the identifiers are unique at that level. An organization can use only one item set, and all sites in that organization can access all the service items defined in that item set.
Service Level Agreements	X				SLA records can be defined at the enterprise level, organization level or at the site level. The SLA identifier is unique at the enterprise level.
Service Requests	X		X	X	Service requests are defined at the enterprise level. The requested service can specify an asset or location that belongs to any site. The service request can also be handled at any site, not just the site specified for the asset or location.
Service Request Manager Search	X				
Sets	X				
Shipment Receiving				X	
Software License View	X				
Solutions	X				
Stocked Tools				X	Tools can be transferred from a storeroom in one site to a storeroom in another site, provided the two sites belong to the same organization or the organizations of the two sites use the same item set.
Storerooms				X	
System Properties	X				
Tax Codes			X		Menu item
Tenants	X				
Terms and Conditions			X		Terms and conditions are accessible to all sites in the organization in which the terms and conditions were created.
Ticket Templates	X				Ticket templates can contain job plans that can be from any level.
Time Zone Rule	X				

Table 7. Applications and the levels at which they store data (continued)

Application	Enterprise level	Set level	Organization level	Site level	Notes
Tools		Item set			Tools are defined at the item set level and the identifiers are unique at that level. An organization can use only one item set, and all sites in that organization can access all the tools defined in that item set.
Units of Measurement	X				Menu item
Users	X				
View Catalog Requests				X	
View Drafts				X	
View Requisitions				X	
View Service Requests	X		X	X	Transactions can reside at enterprise, organization, or site level.
View Shopping Carts				X	
View Templates				X	
Warranty Contracts			X		Though warranty contracts are defined at the organization level, you must explicitly specify the sites to which a warranty contract applies using the Authorize Sites action. The sites must belong to the organization in which the contract is created or to an organization that uses the same item set and company set as the organization in which the contract is created.
Web Services Library	X				
Work Order Tracking				X	
Work View	X				
Workflow Administration	X				
Workflow Designer	X				

Data sharing between organizations

Sets allow for the sharing of data between organizations. An item set allows organizations to share item data, such as inventory. A company set allows organizations to share vendor information.

Item sets and data sharing between organizations

Item sets group information about assets, materials, spare parts, service items, and tools. Records created in the Item Master application are stored at the set level. You can specify a unique identifier, assign properties, and add the item to the inventory of one or multiple sites.

Assets and inventory items shared between organizations

When you create an item master record, it becomes part of the item set of the organization to which your default site for new records belongs. The items are unique within the set. Because you can assign the same item set to multiple organizations, you can use the same item definitions for all sites within those organizations.

Using item sets provides the following benefits:
- You can transfer items between organizations.
- You can standardize your item definition so that all organizations and their sites share the same item catalog and item assembly structure.
- The Item Master application provides an item catalog from which to set up inventory at multiple sites.

If more than one organization in your enterprise requires its own item definition, you can create multiple item sets. You can assign a separate item set to each organization, or to each group of organizations that you want to share the same item definition.

The following figure illustrates an example of an enterprise with three organizations and eight sites. Two organizations and their six sites share the same item set. The third organization has its own item set.
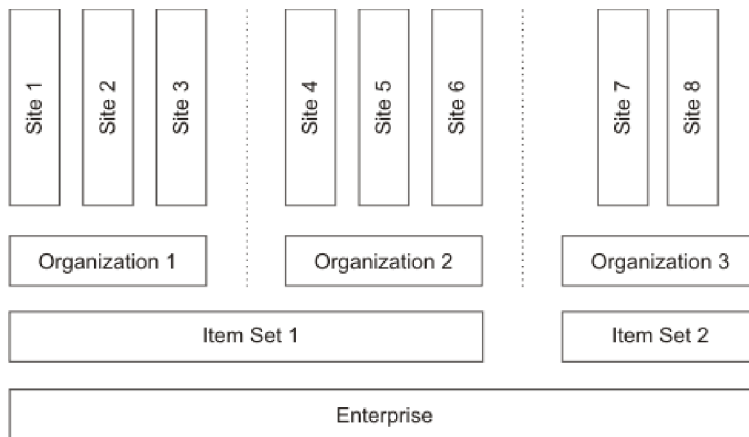

Figure 2. Two organizations can share one item set

Service items and tools shared between organizations

Service items and tools records are also stored at the item set level. Service items and tools are unique to the item set. Any organization assigned to the item set can use the service items and tools records in the item set.

Some of the data on a service item record may be specific to a single organization or site. For example, the companies listed in the Vendors window are at the organization level.

Company sets and vendors shared between organizations

The Company Master application, in which you maintain a master list of vendors, stores data in the company set. The vendors that you do business with are unique within the company set. One or more organizations can share the same company set.

Using company sets provides the following benefits:
- You can standardize your list of approved vendors.
- You can create global contracts that can be shared by multiple organizations.

The relationship between the Company Master application and the Companies applications is like the relationship between the Item Master application and the Inventory application. In the Company Master application, you create a catalog of companies and you associate individual companies with specific organizations. In the Companies application, which stores data at the organization level, users can access the vendor information associated with their organization.

The companies records and company master records have many fields in common. A user can edit these fields in the Companies application without changing the values in the Company Master application. For example, while the **Ship Via** field in the Company Master record might be one shipping vendor, one of the organizations using that company set might want to specify a different vendor.

When you create a company set in the Sets application, you have the option of automatically adding the companies to the Company Master application. By default, this option is not enabled, which means that users must manually enter new companies in the Company Master application. However, you can enable the options so that the record is automatically added in the Company Master application.

You apply a company set to one or more organizations. If an organization requires its own list of vendors and contracts, you can create a separate company set for it.

The following figure illustrates an example of an enterprise with three organizations and eight sites. Two organizations, and their five sites, share the same company set. The third organization has its own company set.
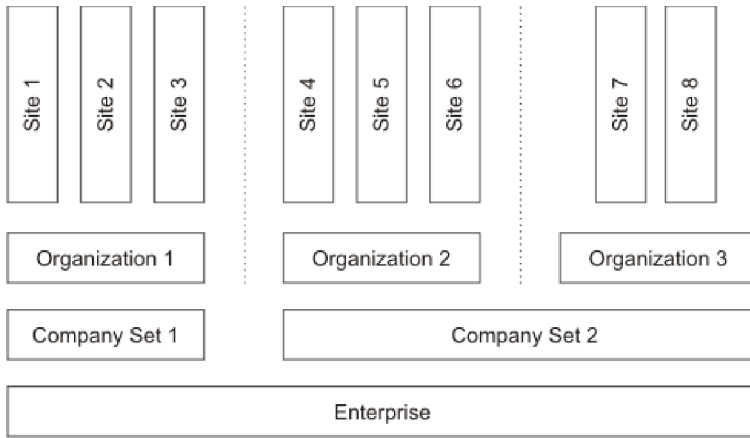
Figure 3. Organizations can share a company set

Item sets and company sets are independent of each other. The following figure illustrates such an example. There are four organizations and eight sites. Organizations 1 and 2 share Item Set 1; Organizations 3 and 4 share Item Set 2. Organizations 1 and 2 each have their own company set. Organizations 3 and 4 share Company Set 3.
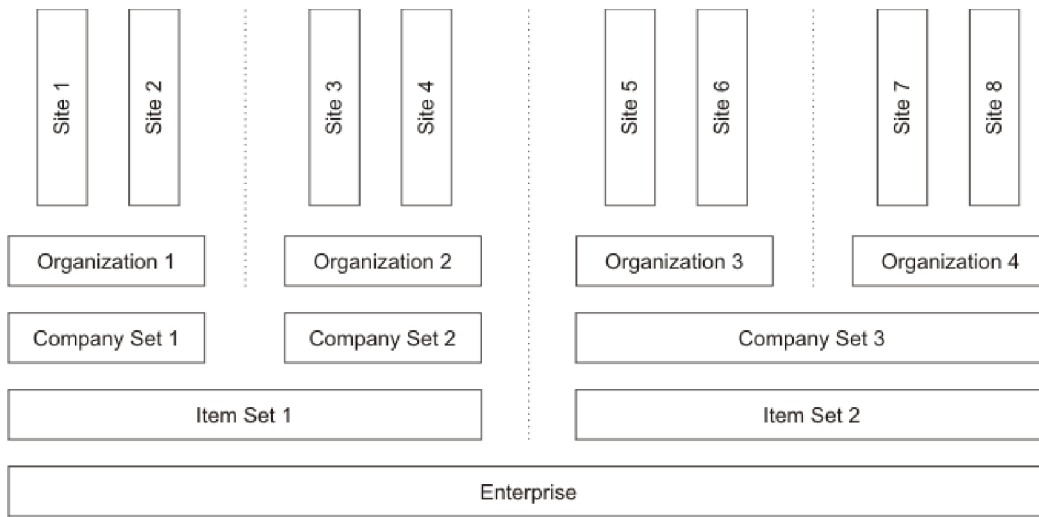

Figure 4. Organizations can share an item set while having separate company sets

Selective data sharing

Applications that can store data at the enterprise, organization, and site levels typically store data at the enterprise level by default. Storing data at the organization level means that all sites in the organization can use the data. Storing data at the site level restricts data to just the specified site.

Job Plans application

When you create a job plan, you can specify an organization, a site, or neither. If you specify neither, the job plan is stored at the enterprise level, which makes it available to all sites and organizations. If you specify an organization, the job plan

is available to all sites within the organization but cannot be accessed by other organizations. If you specify a site, the job plan is available only to that site and cannot be accessed by other sites.

When you create enterprise-level job plans, you also have the option of specifying organization-specific or site-specific tasks, labor, materials, services, and tools. Organization-specific tasks, such as labor records, are copied only to those work orders that are created in a site belonging to that organization. Site-specific tasks are copied only to those work orders created at that site.

Classifications application

By default, classification records are at the enterprise level and can be accessed by all organizations and sites. However, when you add a new classification record, you have the option of specifying an organization or site, but only if the **Items** check box in the **Use With** section is not selected. Any classification used with items must be at the enterprise level.

You can similarly add child classifications. If the parent classification is stored at the enterprise level, you can restrict the child classification to an organization or site. But if the parent classification is restricted to an organization or site, then all the children must be restricted to the lowest level of the parent classification. For example, if the parent classification is restricted to an organization, a child classification can be further restricted to a specific site. If the parent classification is restricted to a site, then all the children must be restricted to that site.

Domains application

The Domains application enables you to create several kinds of domains, including value lists and crossover fields. By default, domains apply at the enterprise level and all sites can access them. You have the option of applying domain values to a particular organization or site.

The synonym domain works differently from other domain types when you specify an organization or site for a domain value:

- For a synonym domain, if you add a new value and specify an organization or site, the records in that organization or site that access that domain show the new value as well as the existing enterprise-level values. This behavior occurs because synonym domains are part of the product and have existing business rules. You cannot add new synonym domains, only new synonym values.
- For other domain types, after you specify an organization or site for one value in a domain, records in that organization or site no longer have access to values in that domain that have no organization or site specified. Therefore, the best practice for non-synonym domains is either to leave the **Organization** and **Site** fields empty for all values in a domain or to specify an organization or site for all values in the domain.

Person Groups application

Person groups apply at the enterprise level and can be accessed by all sites, but you can restrict individual persons in the group to particular organizations or sites. When you add a person to a person group, you can specify an organization or site for that person. You can add multiple rows for the same person to specify multiple sites or organizations. If you add multiple rows, you must use multiple sites or multiple organizations. You cannot use a mixture of sites and organizations.

Transactions involving multiple sites in site-level applications

Applications that store data at the site level require that the identifier field for each record is unique within the site. However, an identifier can be used within other sites and organizations. Only users who have security permission for the site and the application can view the records.

Transactions that involve multiple sites can be performed in applications that store data at the site level.

Purchase requisitions

You can create a purchase requisition at one site that requests items from a storeroom at a different site. The storeroom site must belong to the same organization as the requesting site, or the requesting site and the supplying site must belong to organizations that share the same item set.

Purchase orders

You can create an internal purchase order at one site that requests parts from a storeroom at a different site. The storeroom site must belong to the same organization as the requesting site, or the requesting site and the supplying site must belong to organizations that share the same item set.

To facilitate centralized purchasing, the system allows you to create a purchase order at one site that requests items from a storeroom at a different site. The storeroom must belong to a site that is in the same organization as the site in which you create the purchase order.

Asset transfers

You can transfer assets from one site to another. The destination site can belong to a different organization if the asset is not a rotating asset.

If the asset is rotating, the organizations for the originating and destination sites must share the same item set. If the site to which you want to move an asset already has an asset with the same asset identifier, the system prompts you to assign a new asset identifier to the asset you are moving.

Issues

You can issue an item from a storeroom in Site A, for example, to a work order created in Site B. When performing this transaction you must have access to both sites and the storeroom. The two sites must belong to the same organization.

If you need to issue an item to a site in a different organization, you must use the internal transfer capability to transfer the item and then issue the item.

Work planning

You can specify the storeroom from which to obtain an item. The storeroom site can be different than the work order site if both sites belong to the same organization and you have access to both sites.

Limitations when setting up options in the Organizations application

Except for system settings and autonumber settings, options apply at either the organization or site level, regardless of the level at which the application stores data. Even if an application stores data at the application level, it can have settings that are applied at the organization level.

For example, the Work Order Tracking application stores data at the application level. However, edit rules for the Work Order Tracking application apply at the organization level. All the sites in an organization use the same edit rules. The Preventive Maintenance application stores data at the application level and its options are also applied at the application level.

If you are able to select or specify a site in an option dialog box, then the settings apply at the site level. When you see a list of sites in a dialog box, the sites all belong to the organization that you selected on the **List** tab. For settings that apply at the site level, you can specify different settings for different sites. For example, you can apply different inventory cost options for different sites.

If you do not see a list of sites in an options dialog box, then the settings apply at the organization level, specifically to the organization you selected on the **List** tab. The settings you make apply to all the sites in the selected organization. You can select a different organization on the **List** tab to specify option settings for that organization.

The following table shows the options and the levels to which they apply.

Table 8. Options that apply at the organization level or the site level

Menu action	Menu sub-action	Organization	Site	Options description
Work Order Options	Work Type	X		Define work order class and type including a description and the prompts for failure or downtime.
	Edit Rules	X		Specify which fields on the work order are editable for each work order status.
	Other Organization Options	X		Set default start for downtime, the actual start date, the prompts that are displayed, when material reservations are cleared, and when duplicate warnings are displayed.
	Site Options		X	Specify default starting number and increment for task numbering.
Inventory Options	Inventory Defaults	X		Set ABC breakpoint options.
	Reorder	X		Specify when external and internal requests are created and also the maximum number of reorder lines on each purchase order or purchase requisition.
	Inventory Costs		X	Set whether issue cost is standard or average and whether non-capitalized rotating is an issue cost or an asset cost.

Menu action	Menu sub-action	Organization	Site	Options description
Asset Options		X		Specify when the asset history is recorded.
Drilldown Options		X		Set order for the top-level asset on the **Asset** tab.
PM Options			X	Specify how preventive maintenance work orders are issued.
Safety Plan Options			X	Determine whether the hazards appear in the **Select Hazards** action for an asset.
Purchasing Options	**PO Options**	X		Specify purchasing options such as whether purchase requisitions require approval, when purchase requisitions are closed, whether standard service costs are added to direct issue lines, and whether the generation of special order items is allowed.
	Contract Options	X		Add and modify contract types.
	Tax Options	X		Specify the general ledger options for tax, such as the rate and effective date.
	PO Labor Options	X		Determine whether a purchase order is required to approve inside labor.
Labor Options		X		Specify whether inside and outside labor transactions are automatically approved, whether mismatched craft and labor are permitted when reporting actuals, whether invoices from labor transactions are automatically approved, and the number of hours for future labor transaction tolerance.
Service Desk Options	**Global Ticket Solution Options**	X		Specify whether solutions are applied to related global tickets.
SLA Options			X	Specify whether multiple service level agreements are allowed and, if so, how multiple are ranked.
Ownership Assignment Options			X	Specify whether person availability is checked.
Workflow Options			X	Determine which workflow processes are initiated automatically.

The following table shows the levels for the autonumber settings and the system settings.

Table 9. Levels for the autonumber settings and system settings

Menu action	Menu sub-action	Enterprise	Company Set	Item Set	Organization	Site
Autonumber Settings	**System Level**	X				

Table 9. Levels for the autonumber settings and system settings (continued)

Menu action	Menu sub-action	Enterprise	Company Set	Item Set	Organization	Site
	Set Level		X	X		
	Organization Level				X	
	Site Level					X
System Settings		X				

Examples of using the multisite capability

The multisite capability provides flexibility when you are setting up your implementation. You can create item sets, company sets, organizations, and sites to reflect the structures of your business.

Example: Multisite configuration with separate general ledger accounts

You can create two organizations that share a company set but maintain separate item sets. This example illustrates a way to reflect the structure of your enterprise with sites, organizations, and sets.

Your enterprise has two distinct business operations: a utilities operation and a fleet of vehicles. Both are run from a central location in Denver, Colorado, and both use the same list of vendors. Each operation has its own general ledger accounts.

The utilities operation also has a facility in Laramie, Wyoming. All operations and locations use the same vendors, although the utilities and fleet operations maintain different items and storerooms.

You can accommodate your enterprise structure by doing the following:
- Create two organizations: Utilities and Fleet.
- Create two sites for the Utilities organization: Util-Denver and Util-Laramie.
- Create one site for the Fleet organization: Flt-Denver.
- Create one company set for use by both organizations.
- Create an item set for the Utilities organization.
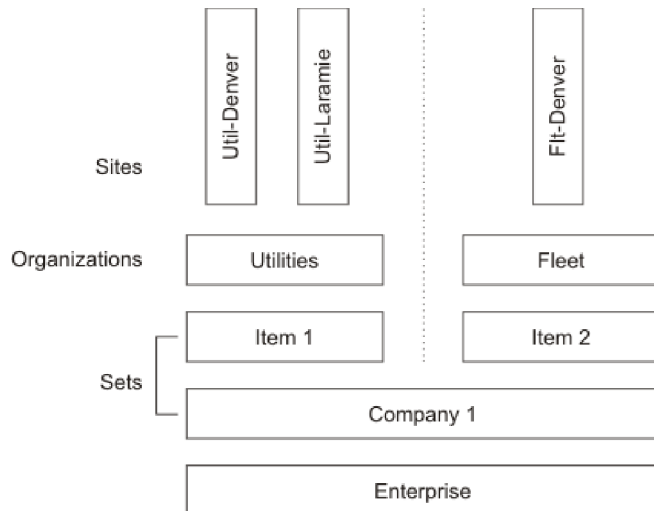- Create an item set for the Fleet organization.

Figure 5. Two organizations with separate general ledger accounts

Example: Multisite configuration with separate maintenance and IT operations

The multisite capability allows you to create organizations with sites in different locations. These organizations can share an item set and a company set.

Your enterprise has production facilities in the United States (U.S.) and in the Republic of South Africa (R.S.A.). Both production facilities have separate maintenance and service desk operations, each with its own general ledger account. Both production facilities also have two locations that maintain separate work orders.

You want to maintain two item sets: one for maintenance operations and one for the service desk departments.

You also use different sets of vendors for maintenance and for service desk. You want to be able to create global contracts so that, for example, the South African and United States maintenance facilities can buy from the same vendors.

- Create four organizations:
  - U.S. Maintenance
  - U.S. Service Desk
  - R.S.A. Maintenance
  - R.S.A. Service Desk
- Create two sites in the U.S. Maintenance organization:
  - M-Baltimore
  - M-Boston
- Create two sites in the U.S. Service Desk organization:
  - IT-Baltimore
  - IT-Boston
- Create two sites in the R.S.A. Maintenance organization:
  - M-Capetown
  - M-Durban

- Create two sites in the R.S.A. Service Desk organization:
  - IT-Capetown
  - IT-Durban
- Create an item set for use by both maintenance organizations.
- Create an item set for use by both service desk organizations.
- Create a company set for use by both maintenance organizations.
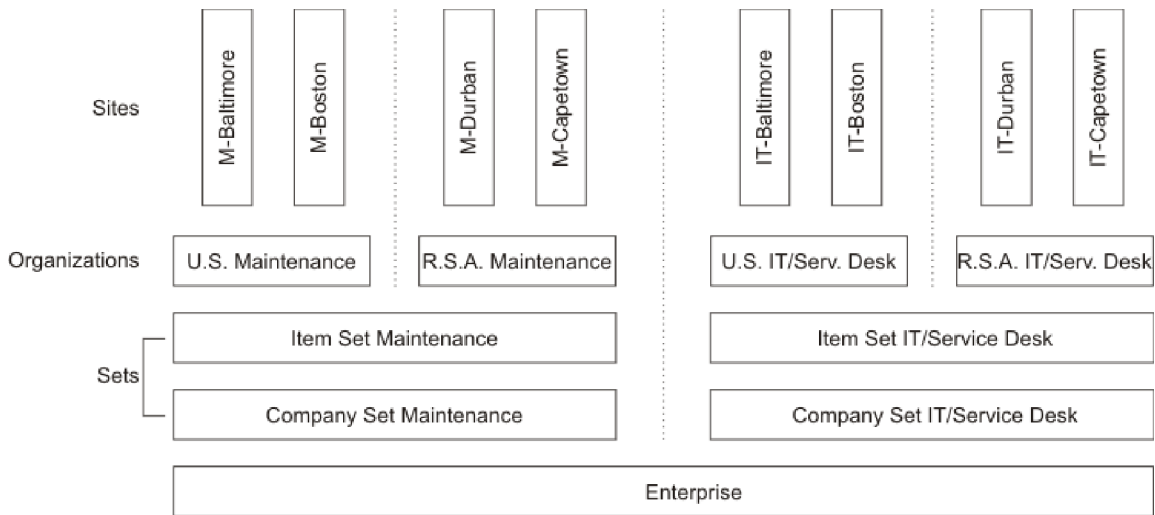- Create a company set for use by both service desk organizations.

Figure 6. Separate maintenance and IT organizations

Local vendors

If each organization uses separate vendor lists, then you can create separate company sets for each organization.
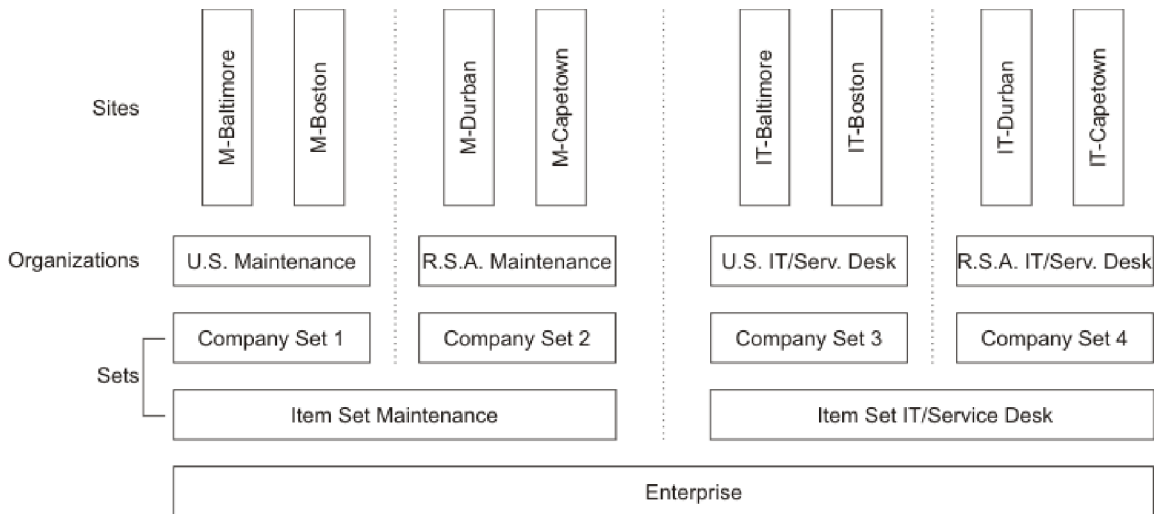

Figure 7. Multiple organizations using separate company sets

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