

# Overview of Inventory Management

Student Guide

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## Preface

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### **Profile**

#### **Before You Begin This Course**

Before you begin this course, you should have the following qualifications:

- Basic knowledge of inventory management and control concepts

#### **Prerequisites**

- There are no prerequisites for this course.

#### **How This Course Is Organized**

*Overview of Inventory Management* is a NetClass. Online demonstrations and practice sessions reinforce the concepts and skills introduced.

## Related Publications

### Oracle Publications

Title	Part Number
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*N/A*

### Additional Publications

- System release bulletins
- Installation and user's guides
- *read.me* files
- Oracle Applications User's Group (OAUG) articles
- *Oracle Magazine*

# Typographic Conventions

## Typographic Conventions in Text

Convention	Element	Example
Bold italic	Glossary term (if there is a glossary)	The <i>algorithm</i> inserts the new key.
Caps and lowercase	Buttons, check boxes, triggers, windows	Click the Executable button. Select the Can't Delete Card check box. Assign a When-Validate-Item trigger to the ORD block. Open the Master Schedule window.
Courier new, case sensitive (default is lowercase)	Code output, directory names, filenames, passwords, pathnames, URLs, user input, usernames	Code output: <code>debug.set ('I", 300);</code> Directory: <code>bin (DOS), \$FMHOME (UNIX)</code> Filename: Locate the <code>init.ora</code> file. Password: User <code>tiger</code> as your password. Pathname: Open <code>c:\my_docs\projects</code> URL: Go to <code>http://www.oracle.com</code> User input: Enter <code>300</code> Username: Log on as <code>scott</code>
Initial cap	Graphics labels (unless the term is a proper noun)	Customer address ( <i>but</i> Oracle Payables)
Italic	Emphasized words and phrases, titles of books and courses, variables	Do <i>not</i> save changes to the database. For further information, see <i>Oracle7 Server SQL Language Reference Manual</i> . Enter <code>user_id@us.oracle.com</code> , where <i>user_id</i> is the name of the user.
Quotation marks	Interface elements with long names that have only initial caps; lesson and chapter titles in cross-references	Select "Include a reusable module component" and click Finish.  This subject is covered in Unit II, Lesson 3, "Working with Objects."
Uppercase	SQL column names, commands, functions, schemas, table names	Use the SELECT command to view information stored in the LAST_NAME column of the EMP table.

Convention	Element	Example
Arrow	Menu paths	Select File→ Save.
Brackets	Key names	Press [Enter].
Commas	Key sequences	Press and release keys one at a time: [Alternate], [F], [D]
Plus signs	Key combinations	Press and hold these keys simultaneously: [Ctrl]+[Alt]+[Del]

## Typographic Conventions in Code

Convention	Element	Example
Caps and lowercase	Oracle Forms triggers	When-Validate-Item
Lowercase	Column names, table names	SELECT last_name FROM s_emp;
	Passwords	DROP USER scott IDENTIFIED BY tiger;
	PL/SQL objects	OG_ACTIVATE_LAYER (OG_GET_LAYER (`prod_pie_layer`))
Lowercase italic	Syntax variables	CREATE ROLE <i>role</i>
Uppercase	SQL commands and functions	SELECT userid FROM emp;

## Typographic Conventions in Navigation Paths

This course uses simplified navigation paths, such as the following example, to direct you through Oracle Applications.

(N) Invoice→Entry→Invoice Batches Summary (M) Query→Find (B) Approve

This simplified path translates to the following:

1. (N) From the Navigator window, select Invoice→Entry→Invoice Batches Summary.
2. (M) From the menu, select Query→Find.
3. (B) Click the Approve button.



## Notations :

(N) = Navigator

(M) = Menu

(T) = Tab

(I) = Icon

(H) = Hyperlink

(B) = Button

## Typographical Conventions in Help System Paths

This course uses a “navigation path” convention to represent actions you perform to find pertinent information in the Oracle Applications Help System.

The following help navigation path, for example—

(Help) General Ledger > Journals > Enter Journals

—represents the following sequence of actions:

1. In the navigation frame of the help system window, expand the General Ledger entry.
2. Under the General Ledger entry, expand Journals.
3. Under Journals, select Enter Journals.
4. Review the Enter Journals topic that appears in the document frame of the help system window.



# Overview of Inventory Management

## Chapter 1

# Overview of Inventory Management

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### Objectives

**After completing this course, you should be able to describe how to:**

- **Define inventory structures that correspond to your sites**
- **Define and maintain item numbers**
- **Implement controls to track items in your inventory**
- **Record movement of items within your inventory structures**
- **Check accuracy of on-hand quantities by performing physical inventory and cycle counting**
- **Perform inventory forecasting and planning**

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# Agenda

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## Agenda

- **Introduction to Oracle Inventory**
- **Overview of Inventory Enterprise Structure**
- **Overview of Creating and Maintaining Items**
- **Overview of Inventory Controls**
- **Overview of Transactions**
- **Overview of Inventory Accuracy Controls**
- **Overview of Inventory Planning**

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### Overview

**Oracle Inventory enables you to satisfy your company's business needs, area such as:**

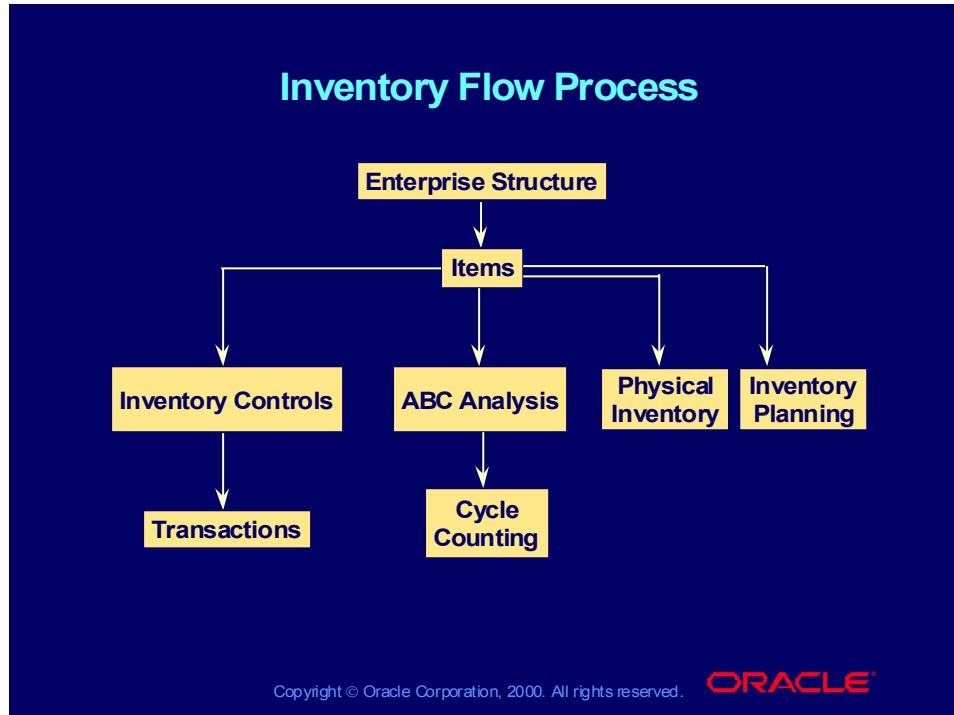
- **Defining part numbers**
- **Modeling organization structures**
- **Tracking perpetual inventory**
- **Maintaining accurate on-hand balances**
- **Planning material replenishments**
- **Forecasting anticipated demand**

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# Inventory Flow Process

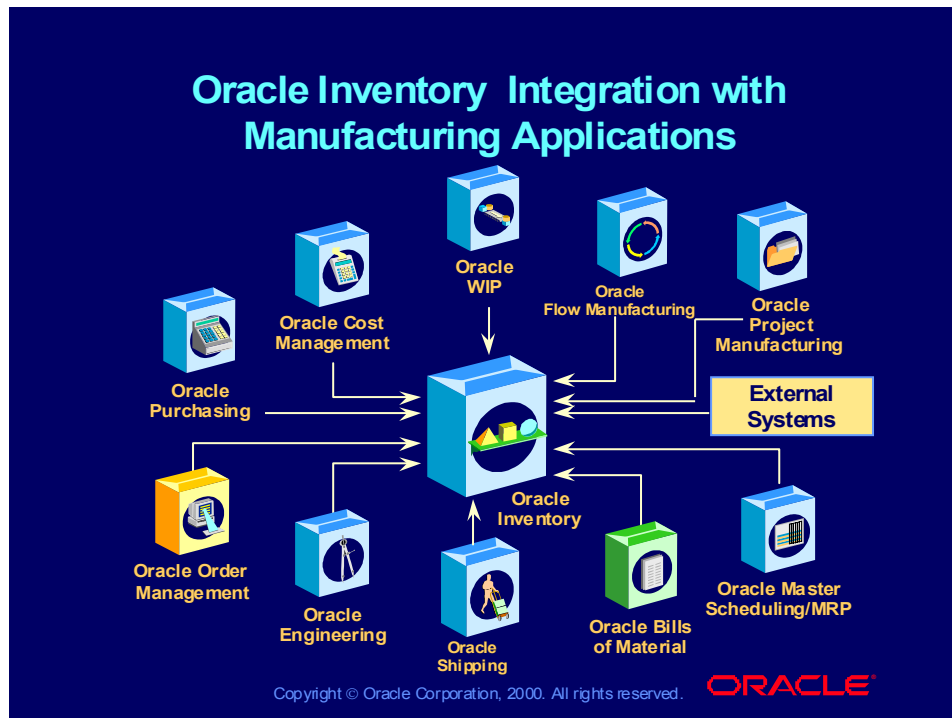
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# Oracle Inventory Integration with Manufacturing Applications

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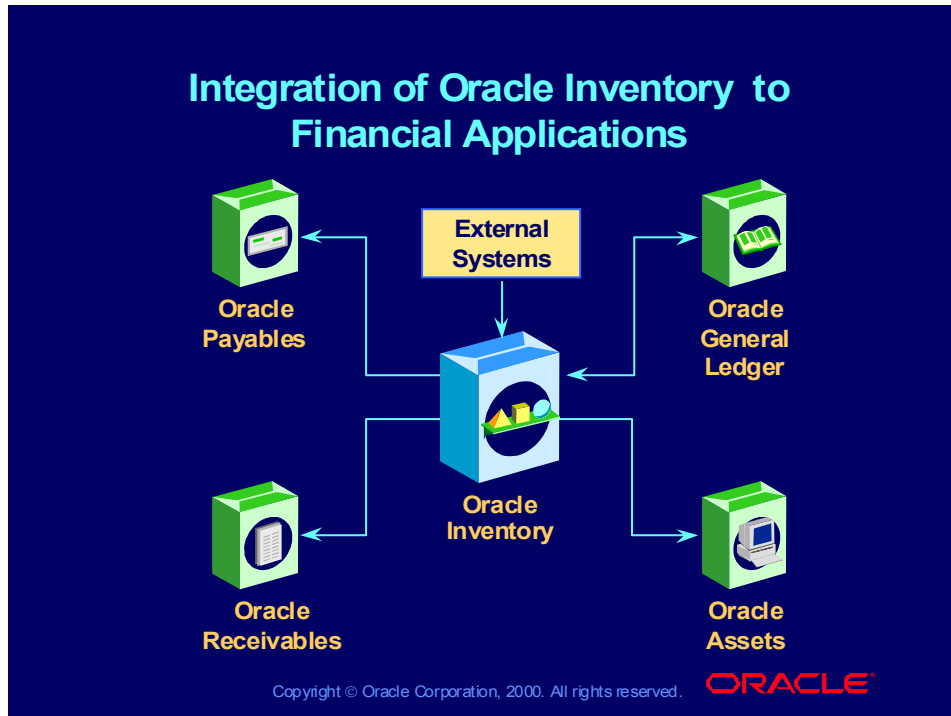
## Integration of Oracle Inventory to Manufacturing Applications

Oracle Inventory interacts with the other applications by sharing information:

- Oracle Cost Management: From cost Information to transaction rates
- Oracle Work in Progress: From WIP activity and ATP supply information to UOM, items, and on-hand quantity.
- Oracle Master Scheduling/MRP: From ATP supply information to on-hand quantity and forecasts
- Oracle Bill of Materials to UOM and items
- Oracle Engineering: From engineering item information to UOM and items
- Oracle Order Management: From Shipping, reservations, and demand to UOM, items, and ATP/on-hand quantity
- Oracle Purchasing: From receipts/deliveries, ATP supply, and planning supply to UOM, items, requisition, and inter-org shipments

# Integration of Oracle Inventory to Financial Applications

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## Integration of Oracle Inventory to Financial Applications

### Oracle General Ledger

- From: Set of Books and Currency Exchange Rates
- To: Transaction Accounting Summary or Detail

### Oracle Payables

- To: UOM and Items

### Oracle Receivables

- To: UOM and items
- From: Intercompany Invoice

### Oracle Assets

- To: UOM and Items

# Agenda

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## Agenda

- Introduction to Oracle Inventory
- Overview of Inventory Enterprise Structure
- Overview of Creating and Maintaining Items
- Overview of Inventory Controls
- Overview of Transactions
- Overview of Inventory Accuracy Controls
- Overview of Inventory Planning

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## Inventory Enterprise Structure

- **Creating organization structures in inventory**
- **Defining a unit of measure**
- **Creating a workday calendar**

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# Inventory Organizations

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## Inventory Organizations

- **Defining an organization**
  - **An organization is an inventory location with its own set of books, costing method, workday calendar, and list of items.**
  - **An organization can be a company, subsidiary, or warehouse.**

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### Inventory Enterprise Structure

Consider the following issues when you plan your enterprise structure:

- **Sets of Books:** You can tie one Oracle General Ledger set of books to each inventory organization.
- **Costing Methods:** You can choose your costing method (Standard or Average) only at the organizational level. Costing organization is determined by the item attribute control level.
- **Item Costs:** Oracle Inventory keeps one cost per item per inventory organization.
- **Movement Between Inventory Sites:** You can use intransit inventory for interorganization transfers.
- **Planning Method**
  - You can perform reorder point planning at the organization level.
  - You can perform min-max planning at both the organization and the subinventory levels.
  - You can only perform replenishment counting at the subinventory level.
- **Forecasting:** Oracle Inventory forecasts item usage at the organization level only.
- **Accuracy Analysis**
  - You can perform physical inventory at both the organization and the subinventory levels.
  - You can perform ABC classifications at both the organization and the subinventory levels.

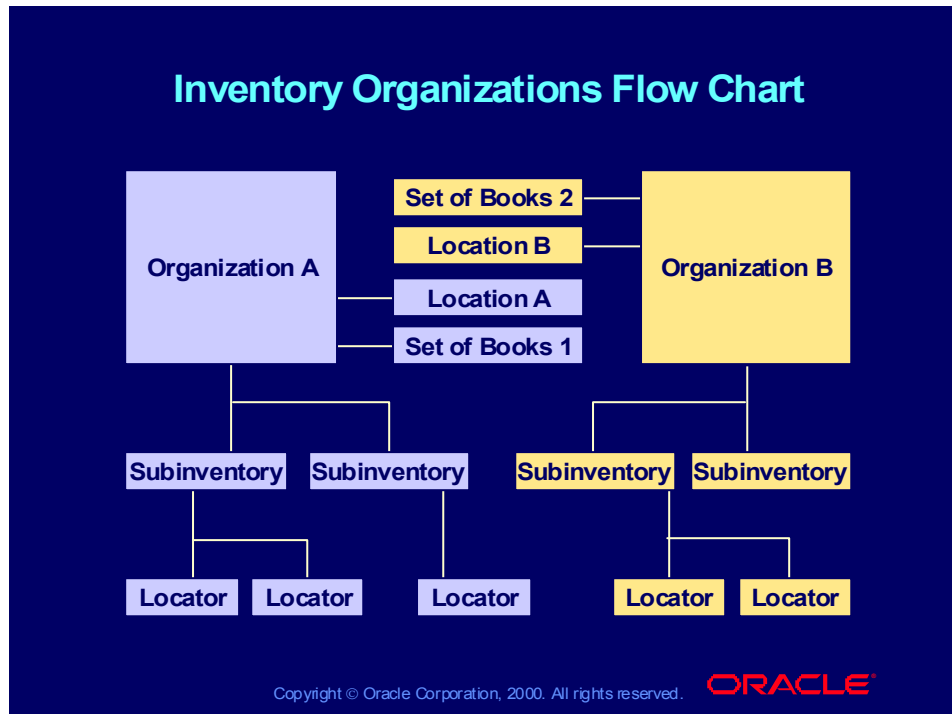
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- You can perform cycle counting at both the organization and the subinventory levels.

# Inventory Organizations Flow Chart

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## Defining Organizations

### Classify the Organization

- Choose an organization classification to describe the general purpose of your organization.
- Examples of organization classifications are inventory organization, legal company, and HR organization.
- Choose inventory organization as your organization classification to use your organization for inventory management.

### Set of Books

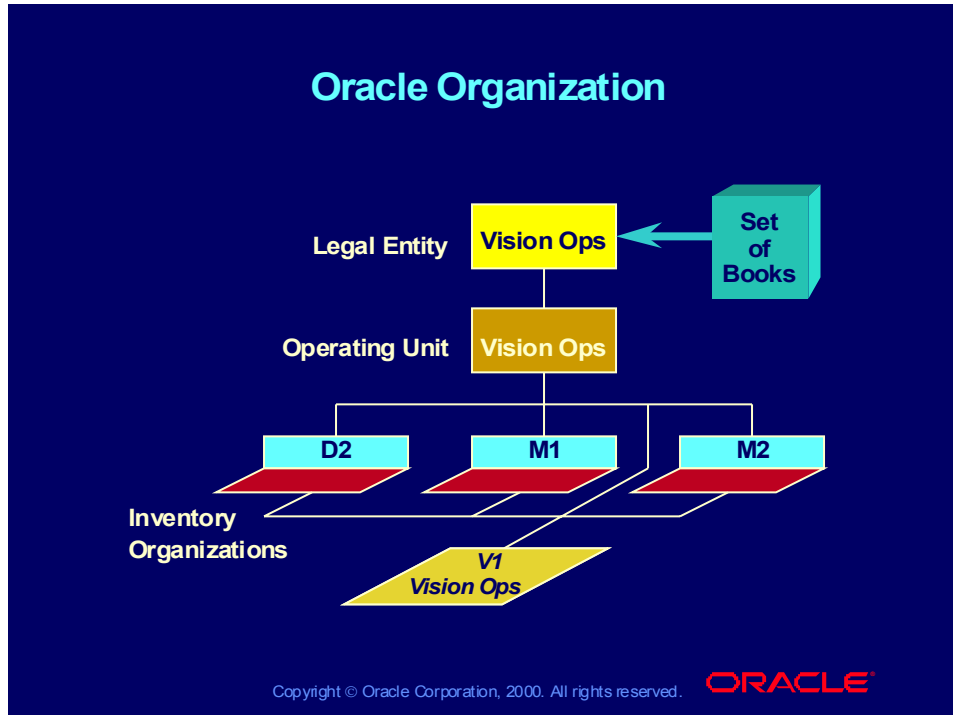
- Tie each organization to an operating unit, which is associated to a legal entity and a general ledger set of books.

### Inventory Parameters

- Use the Organization Parameters window to complete your organization definition for inventory purposes.
- Define receiving parameters if you receive items on purchase orders, internal orders, and intransit interorganization shipments.

# Oracle Organization

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### Unit of Measure

#### Defining a unit of measure:

- A unit of measure (UOM) is a term that you must use, along with a numeric value, to specify the quantity of an item. For example, “each” is a unit of measure that you would use to specify the number of units of an item.
- Defining a unit of measure class:
- A unit of measure class is a group of units of measure with similar characteristics. For example, “weight” can be a unit of measure class with units of measure such as kilogram, gram, pound, and ounce.

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### Unit of Measure

**Defining a unit of measure conversion:**

- **A unit of measure conversion is a mathematical relationship between two different units of measure. For example, 16 ounces = 1 pound, or 2.2 pounds = 1 kilogram.**

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### Organization Calendar

- If you perform inventory forecasting, reorder-point planning, available-to-promise analysis, or cycle counting, you must define your workday calendar.
- Oracle Inventory automatically generates a workday pattern (the base calendar) that includes all days, including non-workdays, between the start and end dates you specify.
- You can assign workday exceptions to the base calendar to denote holidays, scheduled maintenance, or overtime.

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## Review Question

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### Review Question

To define an inventory structure, you need to set up

1. Organization only
2. Organization and UOM
3. UOM and workday calendar
4. Organization, UOM, and workday calendar
5. None of the above

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## Review Question

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### Review Question

To define an inventory structure, you need to set up

1. Organization only
2. Organization and UOM
3. UOM and workday calendar
4. Organization, UOM, and workday calendar
5. None of the above

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# Agenda

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## Agenda

- Introduction to Oracle Inventory
- Overview of Inventory Enterprise Structure
- **Overview of Creating and Maintaining Items**
- Overview of Inventory Controls
- Overview of Transactions
- Overview of Inventory Accuracy Controls
- Overview of Inventory Planning

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### Creating and Maintaining Items

- Defining item statuses and attributes
- Defining items
- Defining categories and category sets

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## Item Statuses and Attributes

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### Item Statuses and Attributes

- **Status attributes are item attributes that enable key functionality for each item.**
- **An item status is defined by selecting the value check boxes for the status attributes.**
- **Both status attributes and item status can be controlled at the item level or organization levels.**

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<b>Status Attribute</b>	<b>Functional Area</b>	<b>Functionality</b>
Stockable	Oracle Inventory	You can stock the item
Transactable	Inventory, Order Entry, Purchasing, Work in Process	You can transact the item in Inventory, OE, Purchasing, or WIP
Purchasable	Oracle Purchasing	You can place the item on a PO
Build in WIP	Oracle Work in Process	You can build the item on a discrete job or a repetitive schedule
Customer Orders Enabled	Oracle Order Management	You can place the item on a sales order
Internal Orders Enabled	Inventory, Order Entry, Purchasing	You can create an internal sales order for the item
BOM Allowed	Oracle Bills of Material	You can create a bill of material for the item
Invoice Enabled	Oracle Revenue Accounting	You can create an invoice for the item

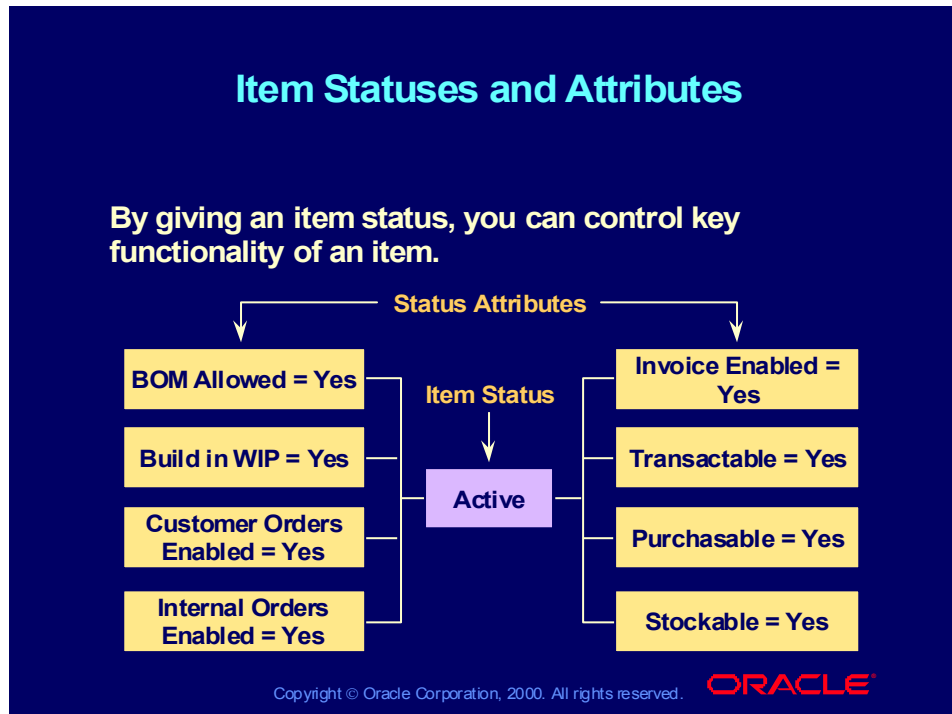
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# Item Statuses and Attributes

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### Status Attributes

#### Master-Level Control

- An attribute that you maintain at the master level has identical values for an item in all organizations that use it.

#### Organization-Level Control

- An attribute that you maintain at the organization level may have different values for an item in each organization that uses it.

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## Review Question

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### Review Question

**Status attributes cannot be controlled at the item level or organization levels.**

- 1. True**
- 2. False**

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## Review Question

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### Review Question

Status attributes cannot be controlled at the item level or organization levels.

1. True
2. False

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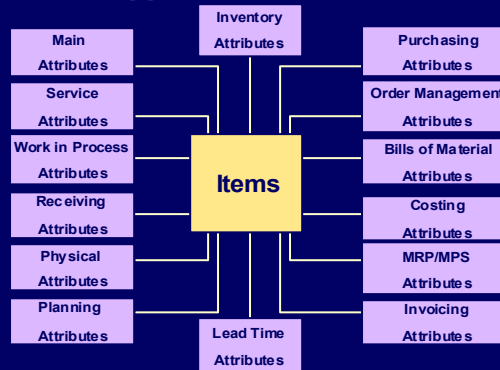
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# Defining Items

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## Defining Items

An item is a part or service that you purchase, sell, plan, manufacture, stock, distribute, or prototype. The following Oracle Applications use items:

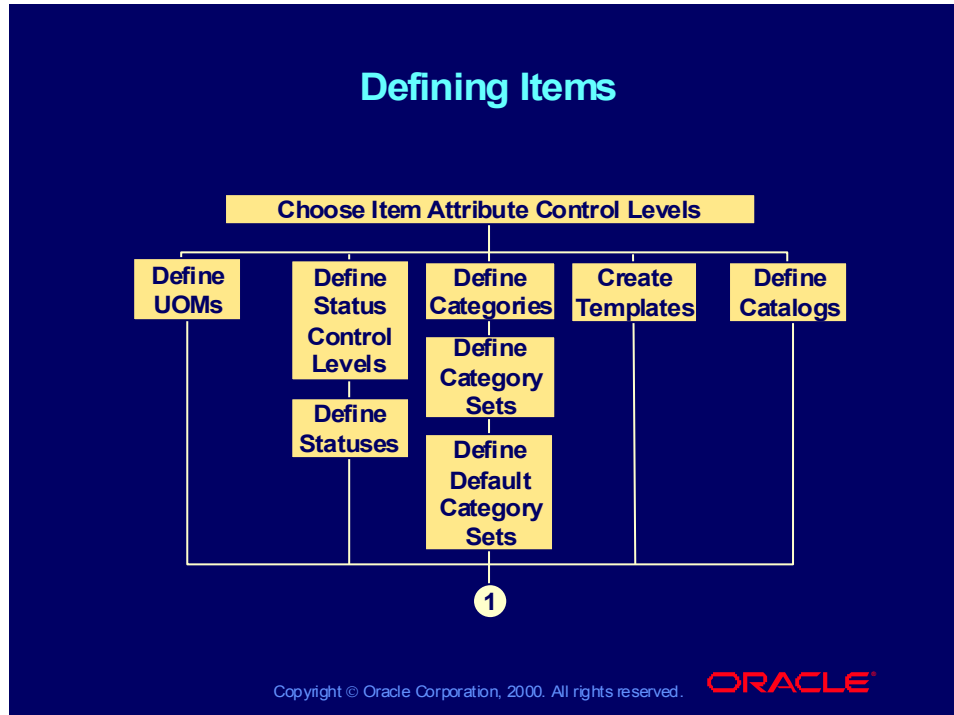


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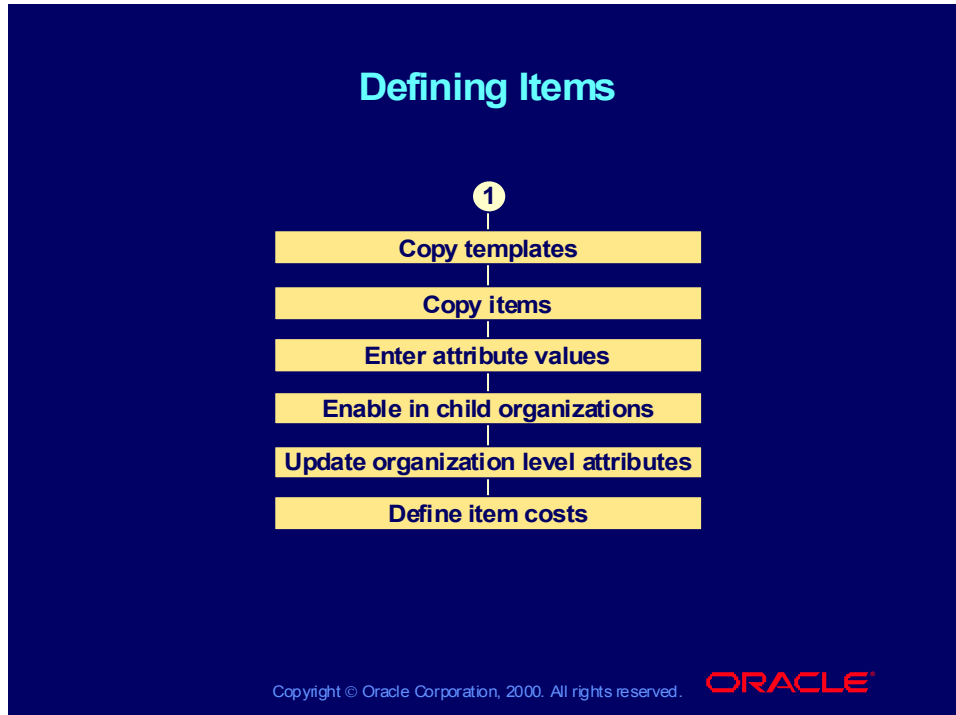
# Defining Items

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# Defining Items

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### Creating Item Templates

- If you regularly define many items that share the same values for a number of attributes, you may want to define item templates to avoid duplicating effort.
- An item template contains values for any number of item attributes. Oracle Inventory has several predefined templates that you can use to define and update items. Use your own terminology to define templates.

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## Enabling Attributes in a Template

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### Enabling Attributes in a Template

- You can enable attributes and assign them values in each template that you create.
- When you apply a template to an item, Oracle Inventory updates only the attributes that are enabled for the template.
- You can define templates with relatively few attributes enabled because you can apply more than one template to define one item.

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### Defining Item Relationships

- You can specify the following types of relationships for items:
  - Item cross-references
  - Substitute items
  - Related items
  - Manufacturer part numbers
  - Customer item numbers
- You can define relationships between items to improve purchasing management and item searching capabilities. You can receive substitute items in Oracle Purchasing.

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### Defining Items in Item Master

- **Always define items in the master item. Oracle automatically changes your current organization to the master organization.**
- **Enable your item in as many child organizations as you want.**

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### Organization Assignment and Organization Item

- You can enable your item in all child organizations under your master organization or choose child organizations where you use the item.
- Oracle Inventory propagates your item to all organizations in which you want to define it.
- You can use the master item in each organization to enter or change organization-level attribute values for items enabled in the organization. For example, go to an organization to choose reorder point planning for an item, and then go to another organization and choose Min-Max planning for the same item.

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### Deletion Constraints and Deletion Groups

- If you want to enforce specific business rules and add custom checks before Oracle Inventory allows deletion of an item, you must define item deletion constraints to supplement the standard predefined item deletion conditions.
- You can delete items that have incorrect attribute information. For example, if you make a mistake in entering an item number, use the Deletion Groups window to delete the item.
- If you decide to purge the item immediately after incorrectly defining it and before using it anywhere in the system, you will be able to delete it.

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## Review Question

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### Review Question

**When you apply a template to an item, Oracle Inventory updates only the attributes that are enabled for the template.**

- 1. True**
- 2. False**

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## Review Question

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### Review Question

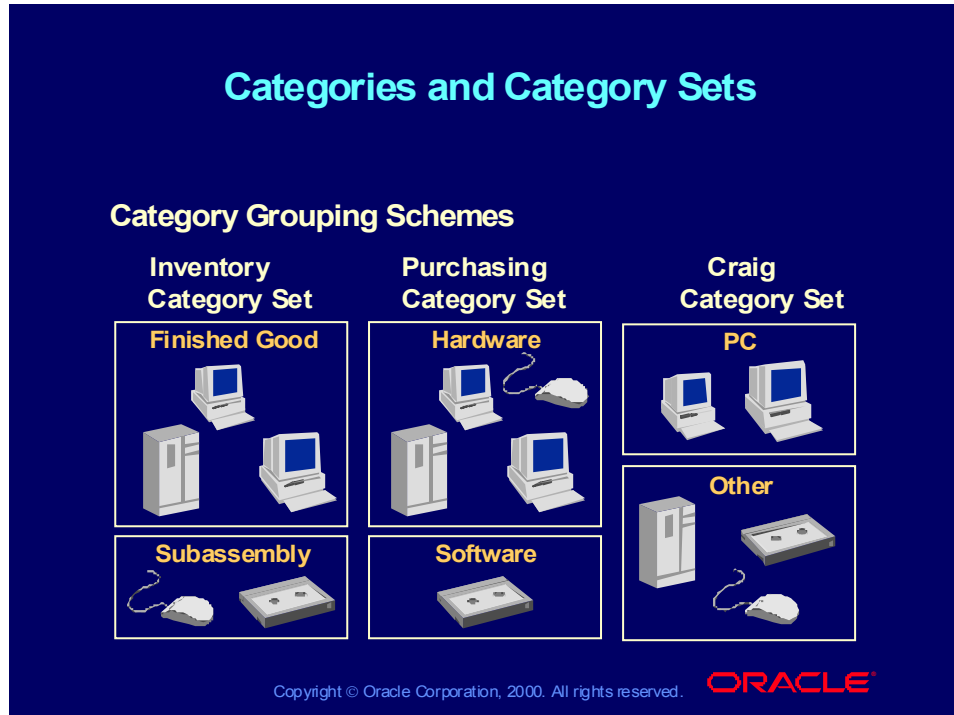
When you apply a template to an item, Oracle Inventory updates only the attributes that are enabled for the template.

1. True
2. False

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# Categories and Category Sets

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## Categories and Category Sets

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### Categories and Category Sets

- **Categories are logical groupings of items that have similar characteristics.**
- **A category set is a distinct category grouping scheme and consists of categories.**

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### Defining the Item Categories Flexfield

Each category grouping scheme can use different terminology for its categories, as well as different naming structures based on number of segments.

You can define multiple structures for your Item Categories flexfield. You can configure each flexfield structure by using as many segments and any level of value set validation that you need.

## Uses of Categories in Oracle Inventory

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### Uses of Categories in Oracle Inventory

- **Inventory Items:** You can use categories to group inventory items.
- **Item Category Group:** For each item category group, you can enter a list of recommended categories to use for items in that catalog group.
- **Summarizing Demand Histories:** You can summarize demand history for a particular category of items.
- **Loading Forecasts:** You can compile a statistical or focus forecast for a particular category of items.

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#### **Note**

You can also perform min-max planning or reorder point planning for a particular category of items.

### Defining Category Sets

#### Personalized Lists of Items

- You can define categories and category sets to create personalized lists of items to limit the ranges of items appearing on reports or processes.
- This now enables planners to submit any report just for items under their responsibility.

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### Assigning Multiple Categories

- You can choose one category for each additional category set that you want to associate with the item.
- If you assign an item or organization-level category set in the item master (for example, in the Master Item window), Oracle Inventory does not propagate that category set to the child organizations, unless it is a default category set.

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# Agenda

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## Agenda

- Introduction to Oracle Inventory
- Overview of Inventory Enterprise Structure
- Overview of Creating and Maintaining Items
- **Overview of Inventory Controls**
- Overview of Transactions
- Overview of Inventory Accuracy Controls
- Overview of Inventory Planning

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### Inventory Controls

- Defining locator control
- Defining revision control
- Defining lot control
- Defining serial number control
- Defining serial genealogy

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### Overview

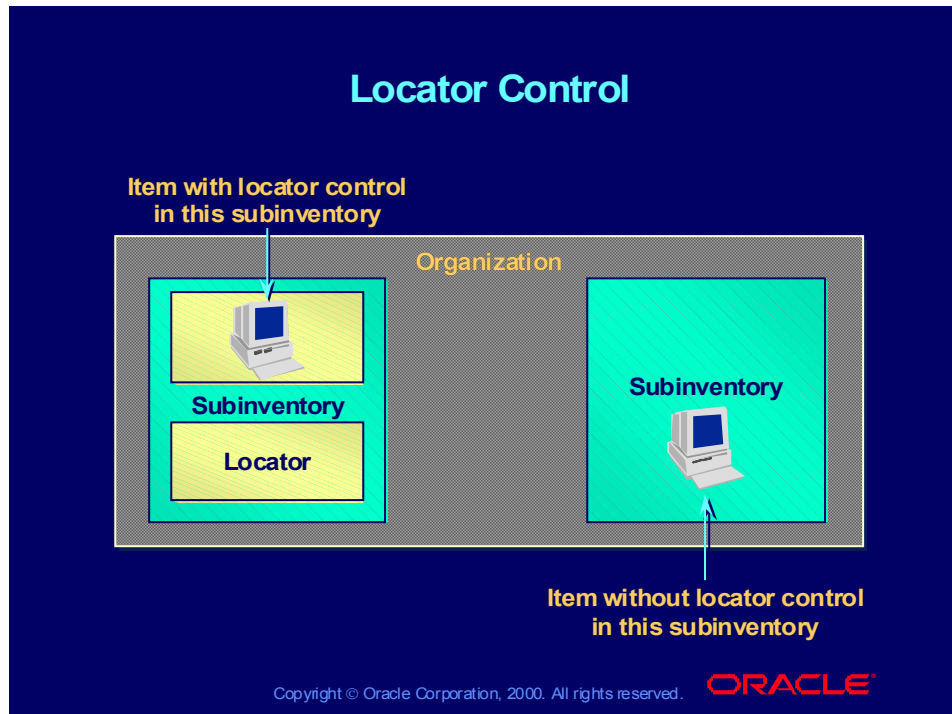
- **With Oracle Inventory you can implement locator, revision, lot, and serial number control.**
- **Flexible Controls**
  - **You can implement any combination of the four controls (locator, revision, lot, and serial number) for each item.**
  - **Inventory controls are optional for all items. You can choose to implement inventory controls for specific items.**

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# Locator Control

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### Locator Control

- **Locators are structures within subinventories.**
- **Locators are the third level in the enterprise structuring scheme of Oracle Inventory .**
- **Locators may represent rows, aisles, or bins in warehouses. You can receive items directly into and ship items directly from locators.**

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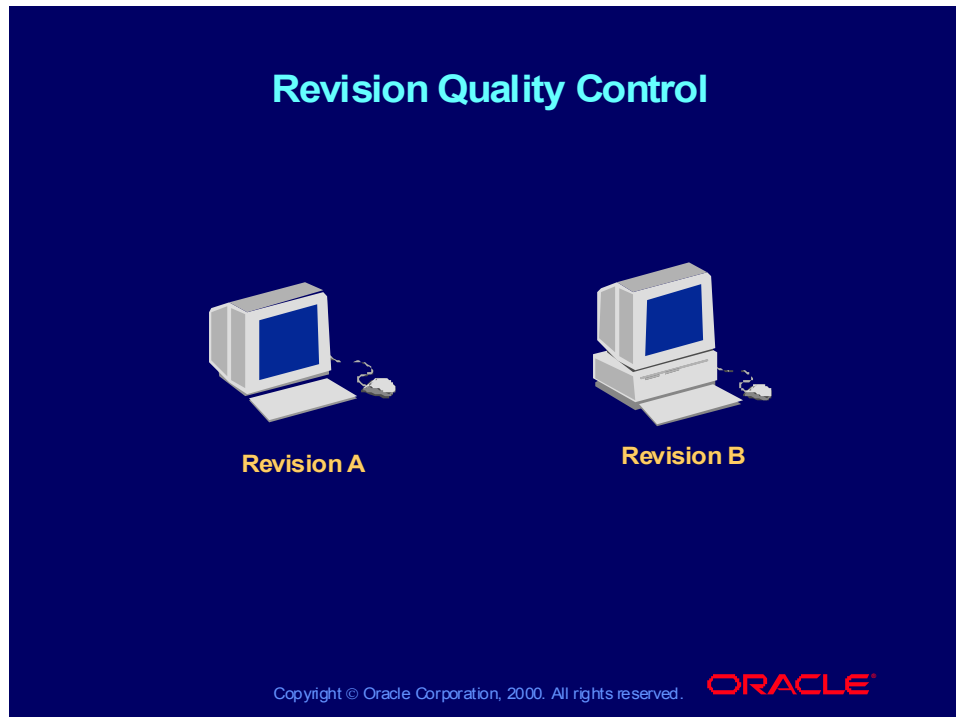
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### Locator Structuring

You can structure your Oracle Inventory installation so that some of the subinventories and items have locator control while others do not. Each locator you define must belong to a subinventory. Each subinventory can have multiple locators.

# Revision Quality Control

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### Revision Quality Control

- **A revision is a particular version of an item, bill of material, or routing. By using the revision quantity control option you can track item quantities by item revision. To do so you must specify a revision for each material transaction.**
- **You can enable revision quantity control for items for which you must track version changes or changes that are significant enough to track but are not affecting the function and feature of the item and therefore do not require an item change.**

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### Lot Control

- A lot is a specific batch of an item that you receive and store in your organization.
- Lot control is a technique for enforcing the use of lot numbers during material transactions, thus enabling the tracking of batches of items throughout their movement in and out of inventory.

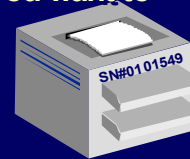


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### Serial Number Control

- A serial number is an alphanumeric piece of information that you assign to an individual unit of an item. A serialized unit is a combination of an item and a serial number.
- You can track individual units of items by using serial numbers. Serial number control is a system technique for enforcing the use of serial numbers during a material transaction. You can use serial numbers to track items over which you want to maintain very tight control.



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## Review Question

---

### Review Question

Which of the following sentences describes “Lot” properly?

1. An alphanumeric piece of information that you assign to an individual unit of an item.
2. A specific batch of an item that you receive and store in your organization.
3. A particular version of an item, bill of material, or routing.
4. None of the above.

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## Review Question

---

### Review Question

Which of the following sentences describes “Lot” properly?

1. An alphanumeric piece of information that you assign to an individual unit of an item.
2. A specific batch of an item that you receive and store in your organization.
3. A particular version of an item, bill of material, or routing.
4. None of the above.

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### Serial Genealogy

Using serial genealogy enables you to:

- Easily trace from end item to all components
- Trace from component to final assembly
- Isolate the compromised assemblies after finding a defect with components
- Isolate source of defects by tracing from problem assembly to components

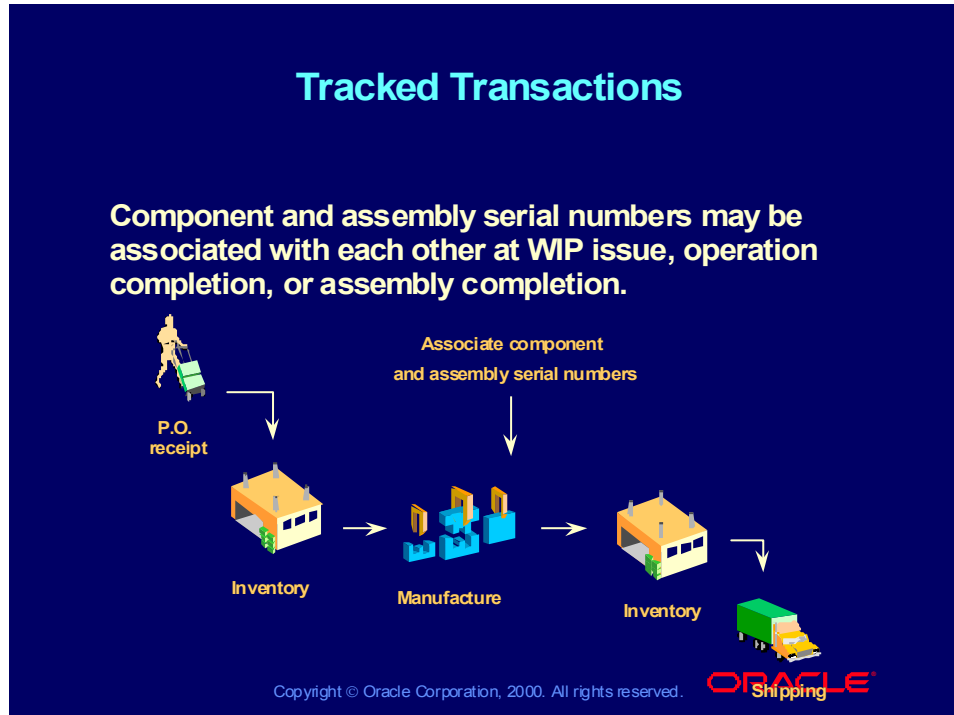
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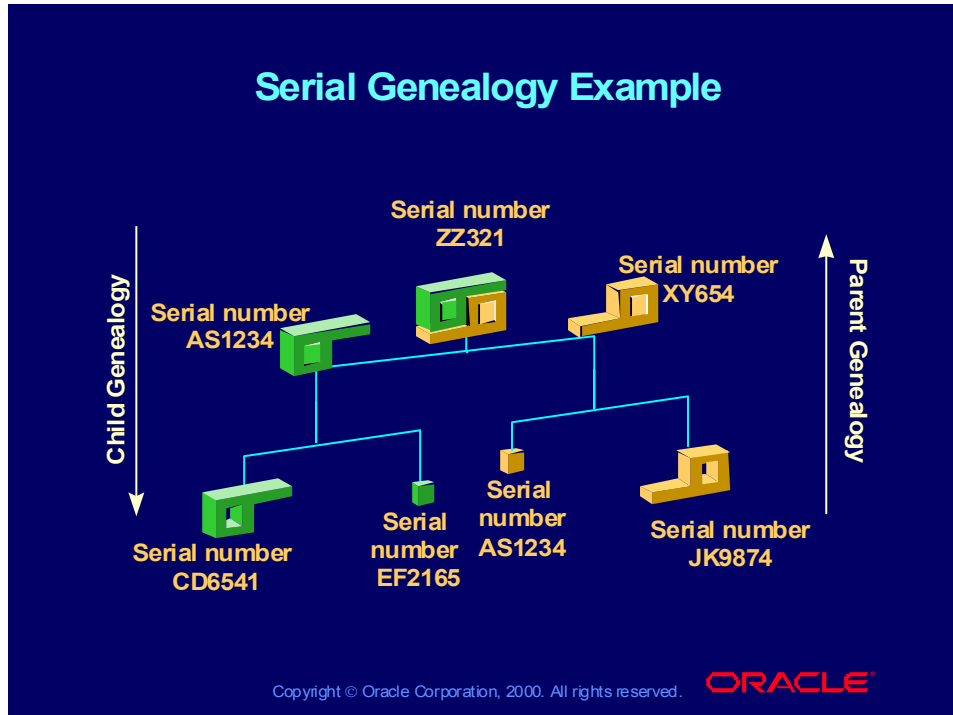


# Tracked Transactions

---



# Serial Genealogy Example



# Agenda

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## Agenda

- Introduction to Oracle Inventory
- Overview of Inventory Enterprise Structure
- Overview of Creating and Maintaining Items
- Overview of Inventory Controls
- Overview of Transactions
- Overview of Inventory Accuracy Controls
- Overview of Inventory Planning

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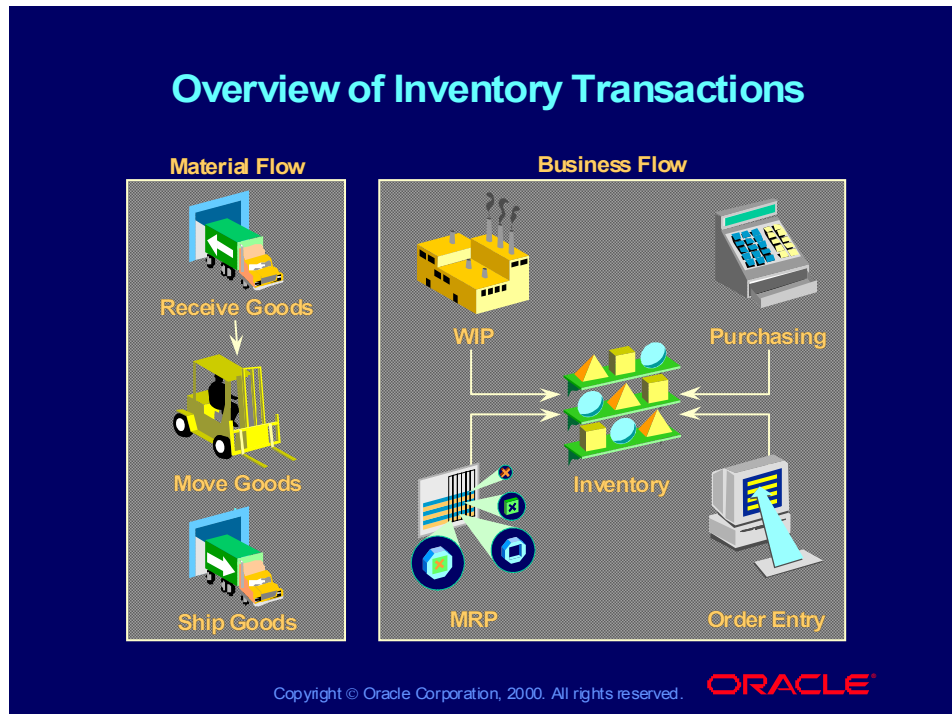
### Inventory Transactions

- Customizing and processing transactions
- Performing miscellaneous inventory transactions
- Move orders
- Shortage alerts and shortage notifications
- Movement statistics

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# Overview of Inventory Transactions

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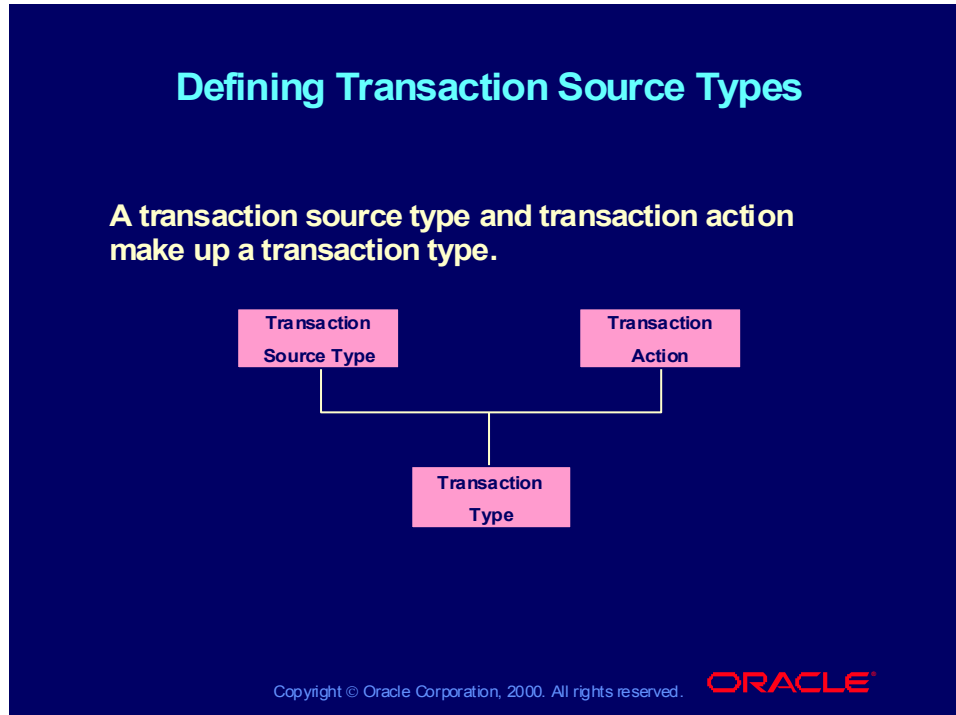


## Transaction

- A transaction is an item movement into, within, or out of inventory.
- A transaction changes the quantity, location, or cost of an item.
- Oracle Inventory supports a number of predefined and user-defined transaction types.
- Every material movement has a corresponding set of accounting transactions that Oracle Inventory automatically generates.
- All transactions validate the various controls (revision, locator, lot number, and serial number) you enable for your items.
- You can choose your own transaction processing methods to use available computing resources most effectively.

## Defining Transaction Source Types

---



### Transaction Source Types

You can add user-defined transaction types to the list of predefined transaction types.

### Customizing Transaction Entry

- Define a new transaction source type
- Use the new transaction source type and a transaction action to define a new transaction type

#### Reasons to Customize Transactions

- Flexibility to use your own terminology to name common transactions
- Unlimited number of transactions to use for recording material movement
- Ability to record and review material movement using customized transaction names and source types

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## Review Question

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### Review Question

**A transaction is an item movement into, within, or out of inventory.**

- 1. True**
- 2. False**

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## Review Question

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### Review Question

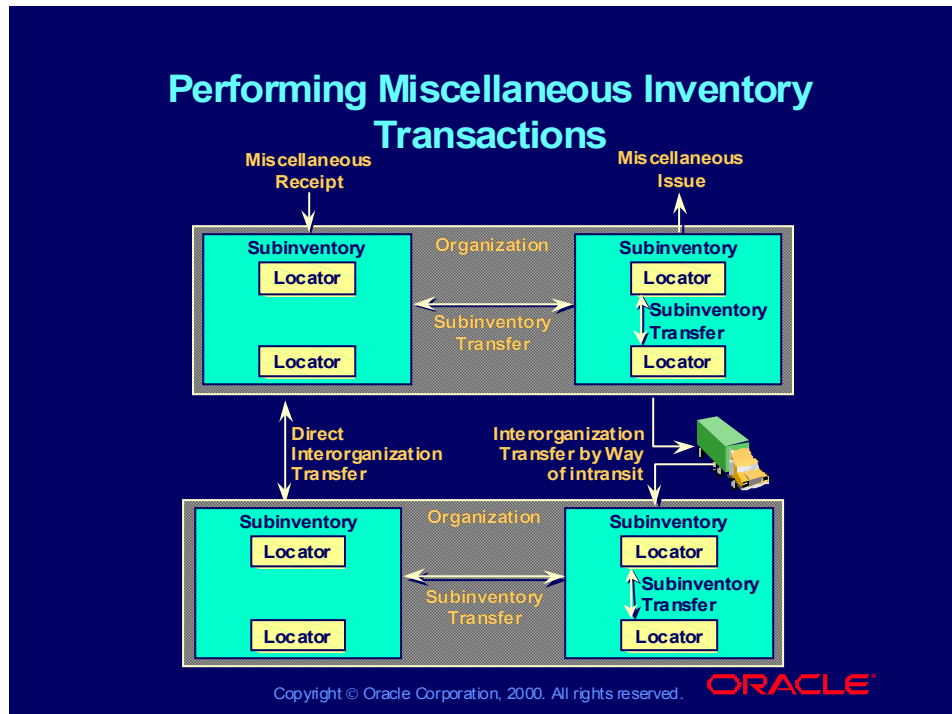
A transaction is an item movement into, within, or out of inventory.

1. True
2. False

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## Performing Miscellaneous Inventory Transactions

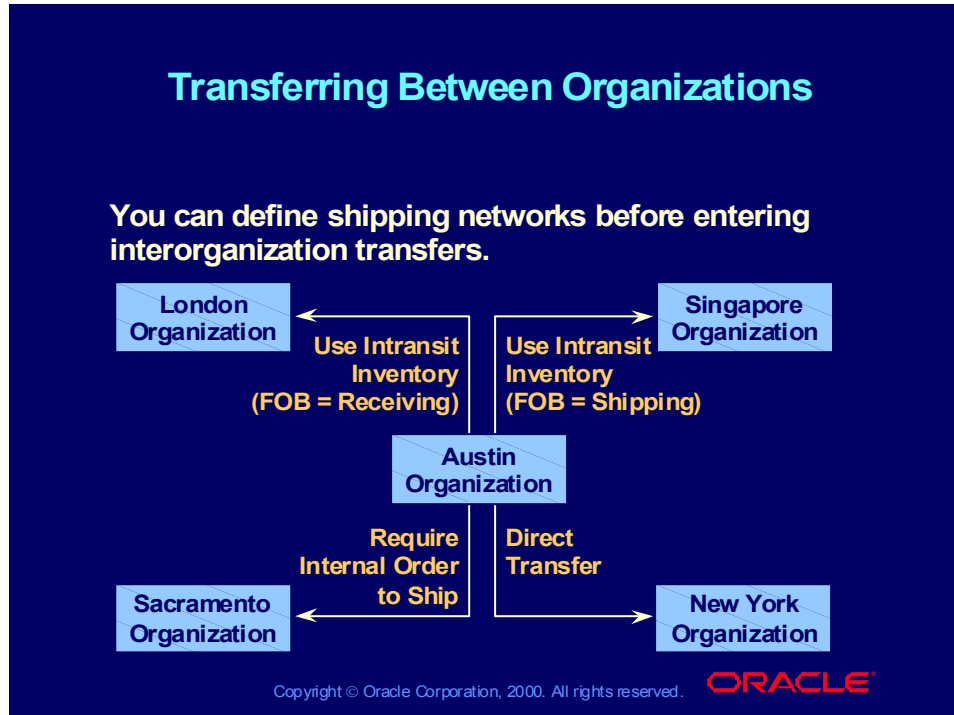


### You Can Perform the Following Oracle Inventory Transactions

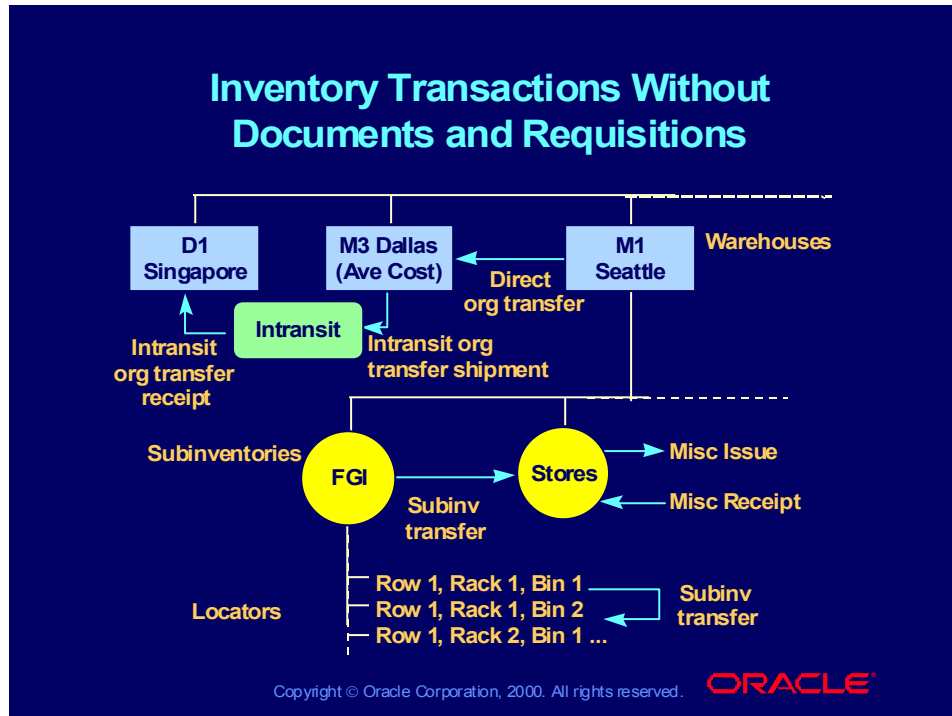
- Receive items into your organization from a general ledger account number
- Issue items from your organization to a general ledger account number
- Transfer items from a subinventory in your organization to another subinventory in the same organization
- Transfer items directly between organizations
- Transfer items between organizations by way of intransit
- Reserve items for a specific account or temporarily prevent the release of items onto the shop floor

# Transferring Between Organizations

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# Inventory Transactions Without Documents and Requisitions

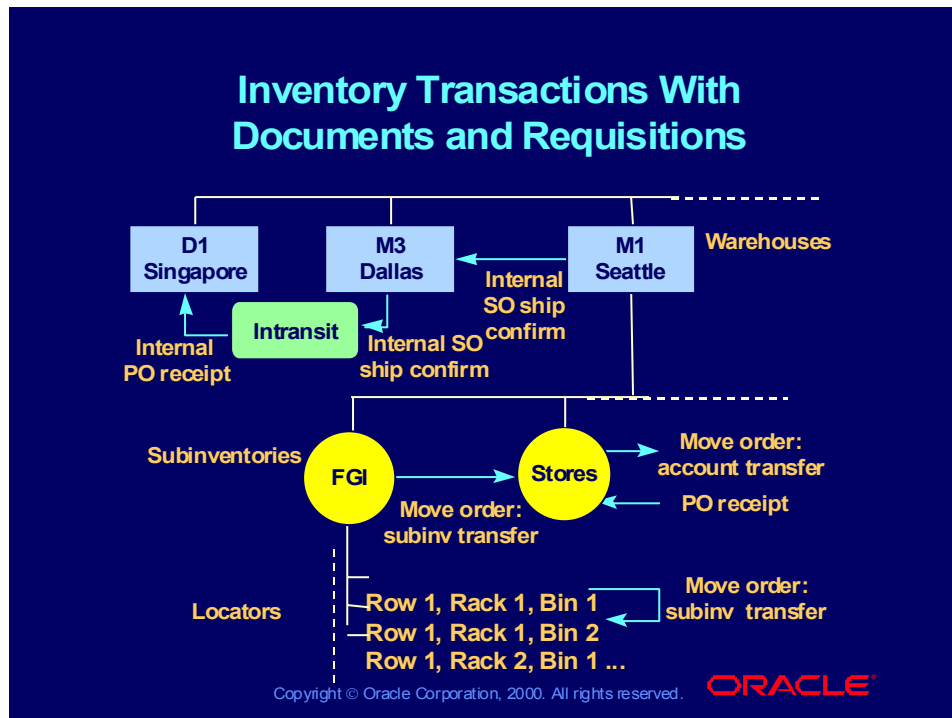


## Moving Inventory

Inventory organization transfers may be accomplished without using an internal requisition/internal sales order.

- You can use miscellaneous receipts to receive material without a purchase order number.
- Use miscellaneous issues to receive material without approvals or a document number.
- Use subinventory transfers to transfer the location of material without a document number.

# Inventory Transactions With Documents and Requisitions



## Moving Inventory (continued)

You can use internal requisitions and internal sales orders as an approval mechanism and to provide a document to track when you transport material between warehouses or transfer material across inventory organizations.

Use miscellaneous receipts to receive material without a purchase order number.

- Use move orders with an Account Transfer transaction type to approve a transaction and to provide a document to track the issue of the material. Previously, sales orders with approvals in the order cycle were used to issue the material and track the movement.
- Use move orders with a Subinventory Transfer transaction type to approve a transfer and to provide a document to track the transfer of the material.

### Move Orders

- **A move order is a request for a subinventory transfer or account issue (also called an account transfer). When using an account transfer, the actual movement is an issue, not a transfer from subinventory to subinventory.**
- **Using move orders, you can manage all material requisitions and request processes within an organization by manually or automatically creating, approving, and transacting a move order.**

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#### Overview

Previously, these transactions have been one-step occurrences, and there has been no way to plan these intraorganization material movements. Move orders allow planners and facility managers to request the movement of material within the four walls of a warehouse or facility for replenishment, material storage relocations, quality handling or other purposes.

Individual users can request move orders, and Oracle Inventory automatically creates move orders when warranted for inventory replenishment and order picking.

This lesson covers the basic types of move orders, their uses, and the benefits of managing inventory movement by using move orders.

## Move Orders

---

**Move Orders**

**Managed Material Flow**

- **Oracle Inventory uses move orders to distinguish the user roles that should manage inventory levels from those who carry out actual transactions. This provides:**
- **Faster response**
  - **Warehouse visibility**
  - **Tracking**

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### Managed Material Flow

Oracle Inventory uses move orders to distinguish the user roles that should manage inventory levels from those who carry out actual transactions. This provides:

**Faster Response:** You can now request a transaction and forward the request on to a picker for actual transaction execution. The request is tracked in Oracle Inventory to avoid manual systems that can result in inaccurate information transfer. When warranted, replenishment mechanisms can automatically generate move orders without the intervention of an item planner for simple cases where the material is drawn from within the facility. This results in faster inventory replenishment with minimal human intervention.

**Warehouse Visibility:** Move orders use inventory picking rules to determine where to source material for a subinventory or account transfer. This ensures that the same mechanisms created to rotate material properly for deliveries can be used to rotate material within the facility. It also uses the material visibility in Oracle's Inventory to suggest source locations, lots, and so on automatically.

**Tracking:** Move orders can be transacted through Application Program Interface. APIs allow you to use mobile devices to transact, giving you better material visibility and accuracy. Move orders can also be created to cross-dock material to staging locations.

## Move Order Source Types

---

Move Order Source Types		
Move Order Requisition	<ul style="list-style-type: none"> <li>Account Transfer</li> <li>Subinventory Transfer</li> </ul>	<ul style="list-style-type: none"> <li>Manually Generated</li> <li>Optional Approval</li> <li>Processing</li> </ul>
Replenishment Move Orders	<ul style="list-style-type: none"> <li>Kanban</li> <li>Min Max</li> <li>Replenishment Count</li> </ul>	<ul style="list-style-type: none"> <li>Automatically Generated</li> <li>Preapproved</li> <li>Ready for Transaction</li> </ul>
Pick Wave Move Orders	Subinventory Transfer	<ul style="list-style-type: none"> <li>Automatically Generated</li> <li>Preapproved</li> <li>Ready for Transaction</li> </ul>

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### Source Types

Oracle Inventory provides two types of move orders. The move order type refers to the entity that created the move order. For all move orders, the final result is one of the two supported transactions: subinventory or account transfer.

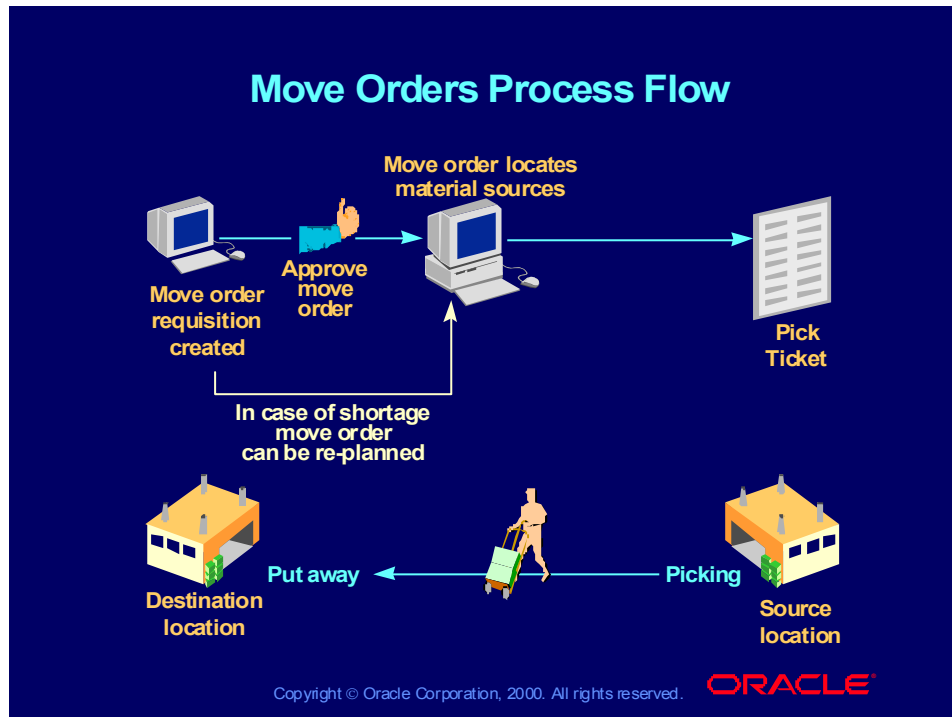
**Move Order Requisition:** The requisition is a manually generated request for a move order. You must create a move order requisition. You can generate requests for subinventory transfers or account transfers. The requisition can optionally go through an Oracle Workflow approval process before it becomes a move order. If no approval process is used, the requisition becomes a move order immediately.

**Replenishment Move Order:** These move orders are generated by Kanban cards where the pull sequence calls for a subinventory transfer (intraorganization kanbans), or by min-max planned items where the item's replenishment source (set at the item-subinventory level) is another subinventory. In this case, the min max or replenishment count report automatically generates a move order. Replenishment move orders are preapproved and ready to be transacted.

**Pick Wave Move Orders:** The pick release process generates move orders to bring the material from its source location in stores to a staging location, which you define as a subinventory in Oracle Inventory. This transaction is a subinventory transfer.



# Move Orders Process Flow



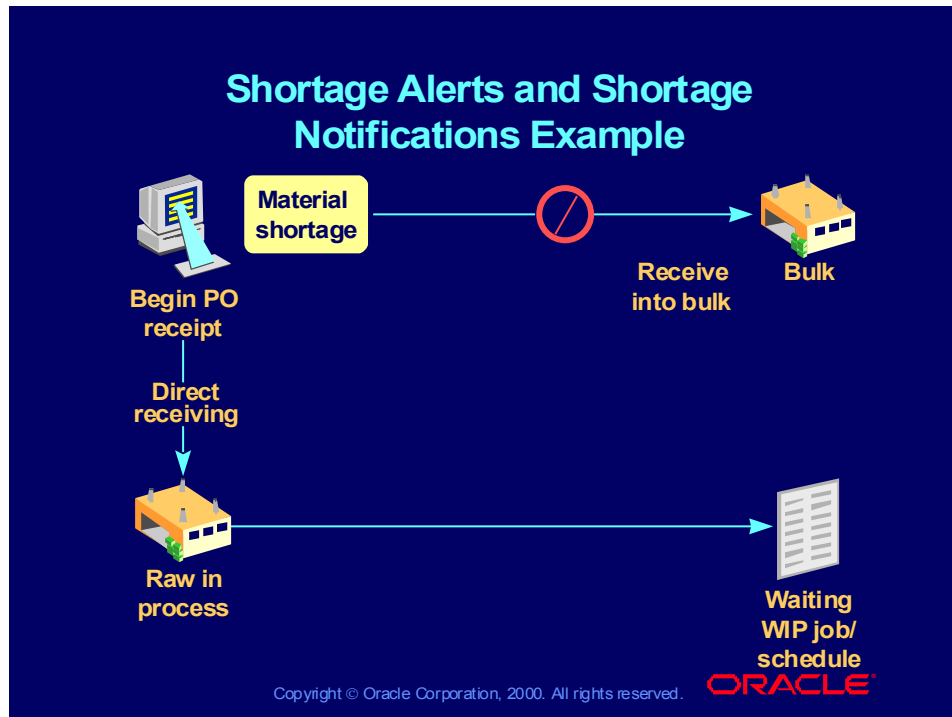
### Shortage Alerts and Shortage Notifications

- **Shortage Messages: Alerting or notifying individuals that material needed elsewhere in the organization is newly available.**
- **Shortage messages may alert the user to a cross docking opportunity.**

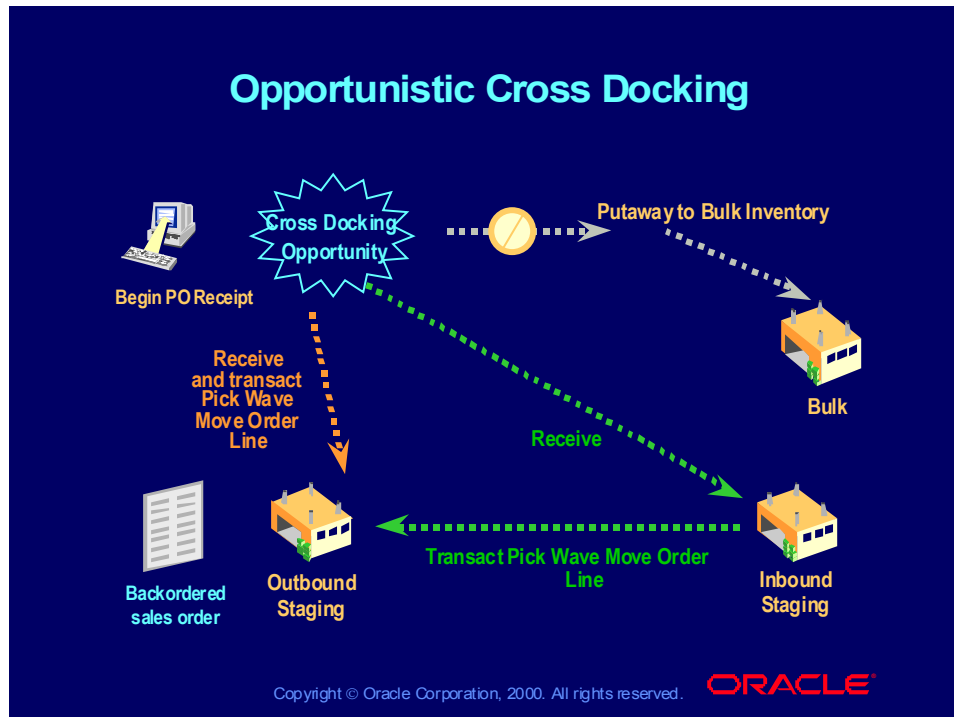
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## Shortage Alerts and Shortage Notifications Example

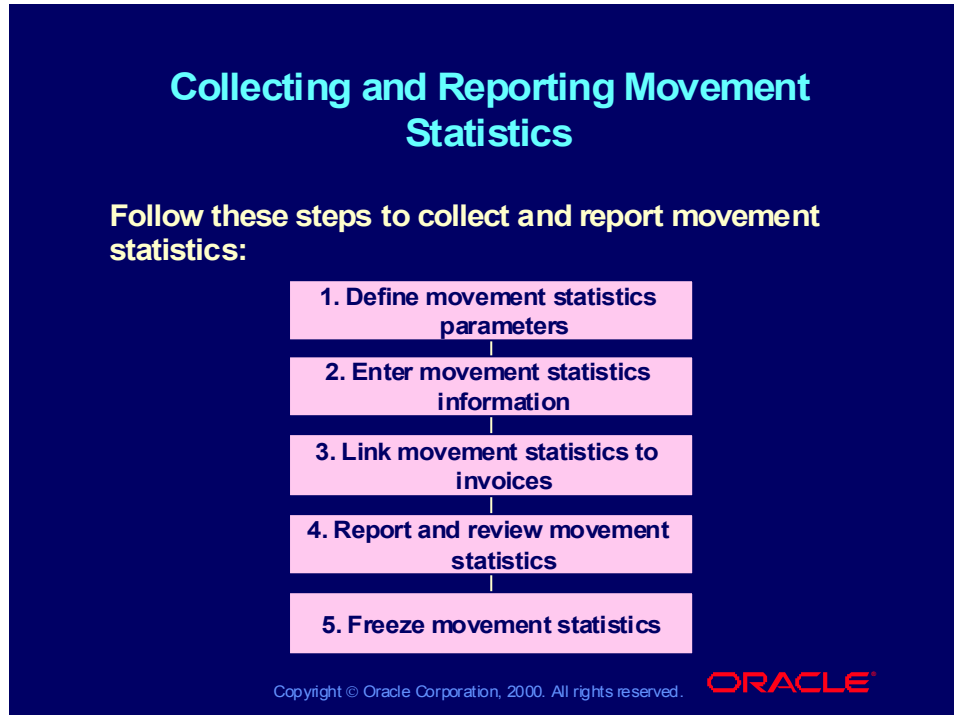


# Opportunistic Cross Docking



# Collecting and Reporting Movement Statistics

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# Agenda

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## Agenda

- Introduction to Oracle Inventory
- Overview of Inventory Enterprise Structure
- Overview of Creating and Maintaining Items
- Overview of Inventory Controls
- Overview of Transactions
- **Overview of Inventory Accuracy Controls**
- Overview of Inventory Planning

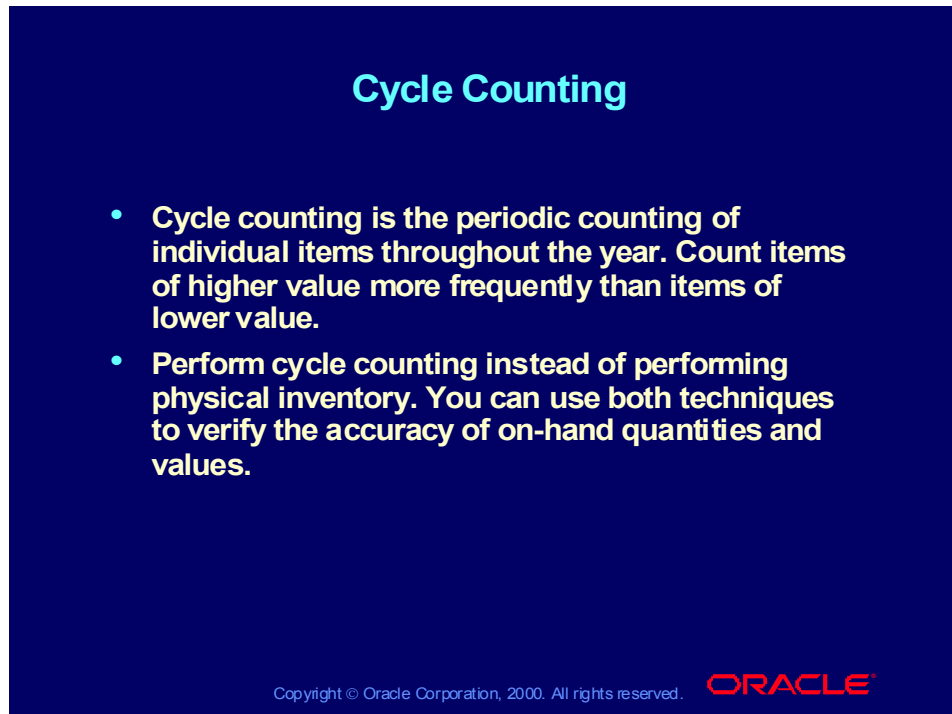
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### Inventory Accuracy Controls

- **Cycle counting**
- **Physical inventory**

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**Cycle Counting**

- **Cycle counting is the periodic counting of individual items throughout the year. Count items of higher value more frequently than items of lower value.**
- **Perform cycle counting instead of performing physical inventory. You can use both techniques to verify the accuracy of on-hand quantities and values.**

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### **Initialization**

Initialization is the process of identifying the items to cycle count. Initialize your cycle count by choosing an ABC group that you define.

### **Automatic Scheduling**

Automatic scheduling is the process of choosing the specific items to count in a time interval. Oracle enables you to choose how frequently you want to run the automatic scheduler. How frequently you run the automatic scheduler determines the time interval for which Oracle Inventory schedules items to cycle count.

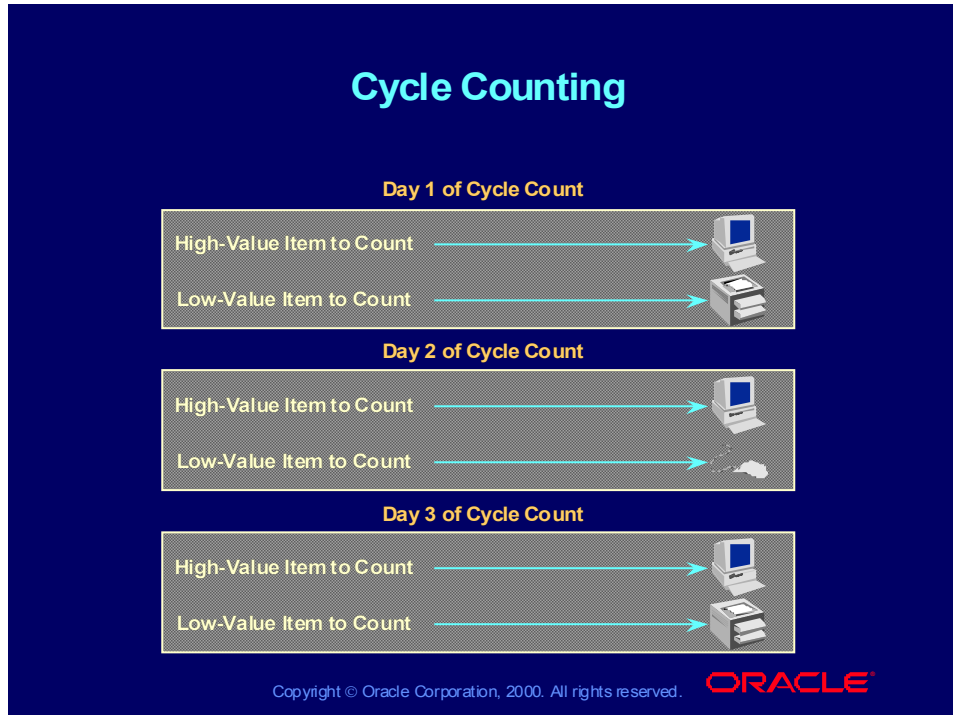
### **Manual Scheduling**

Manual scheduling is the process of requesting counts for any item at any time. You can request counts for specific subinventories, locators, and items, and you can set the count for any date.



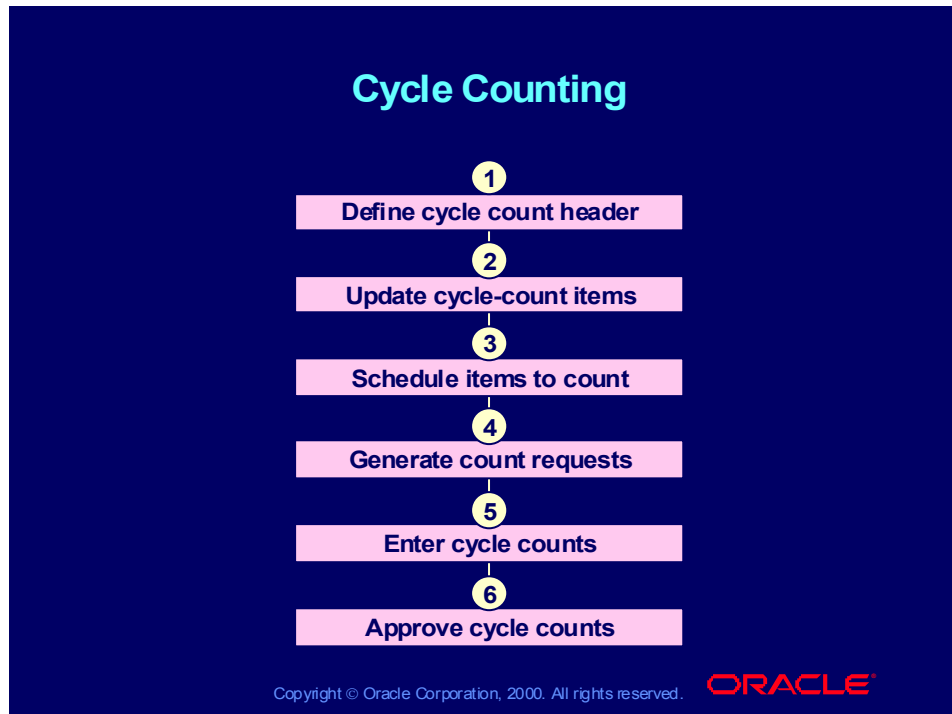
# Cycle Counting

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# Cycle Counting

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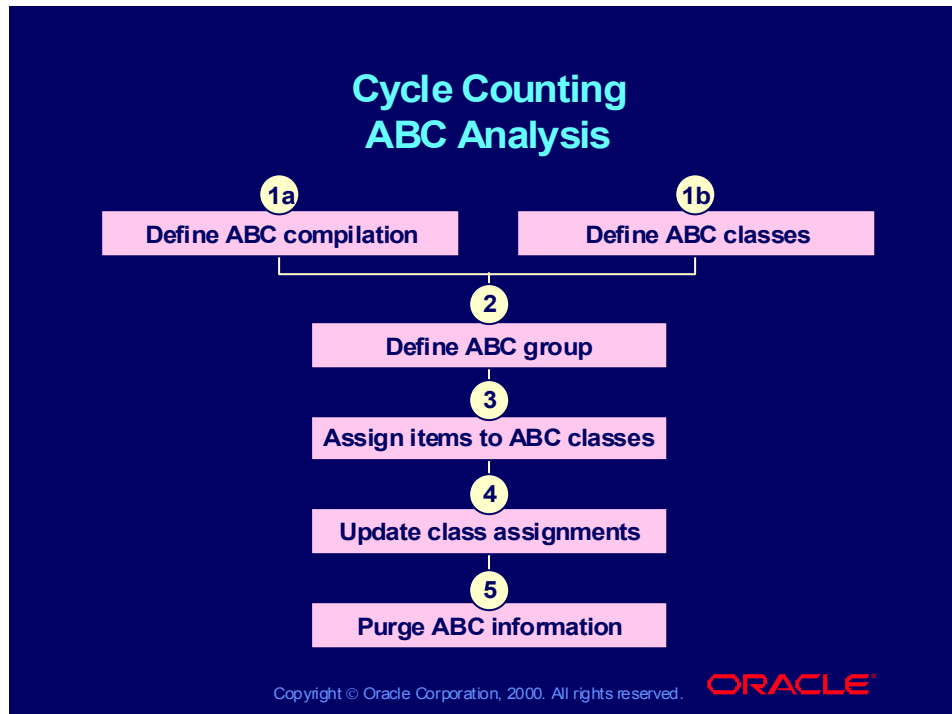


## Uses in Oracle Inventory

- You can reconcile system on-hand balances with actual counts in inventory.
- You can maintain tighter control of items of higher relative value.
- You can perform cycle count for the entire organization or for specific subinventories within an organization.

# Cycle Counting ABC Analysis

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## Reasons for ABC Analysis


- You can perform an ABC analysis to decide how frequently you want to count items in each ABC class.
- Typically you count items of higher value more frequently than you count items of lower value.
- The principle of ABC analysis is that effort saved through relaxed controls on low-value items can be applied to improve control of high-value items.

## Cycle Counting ABC Analysis

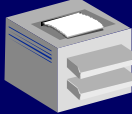
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**Cycle Counting  
ABC Analysis**


- **ABC analysis is a method of determining the relative value of items in your inventory sites.**
- **An ABC analysis involves ranking your items according to a criterion and then grouping items into classes. ABC refers to the rankings you assign your items as a result of this analysis, where A items are more valuable than B items, and so on.**



**Computer  
Item A**



**Printer  
Item B**



**Mouse  
Item C**

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### **ABC Classification**

ABC classification is the process of assigning items to groups called ABC classes. With Oracle Inventory you can use your own terminology to define ABC classes.

### **ABC Ranking**

With Oracle Inventory you can choose one of 11 compilation criteria for performing an ABC analysis. You can also maintain multiple rankings of the same set of items.

### Physical Inventory

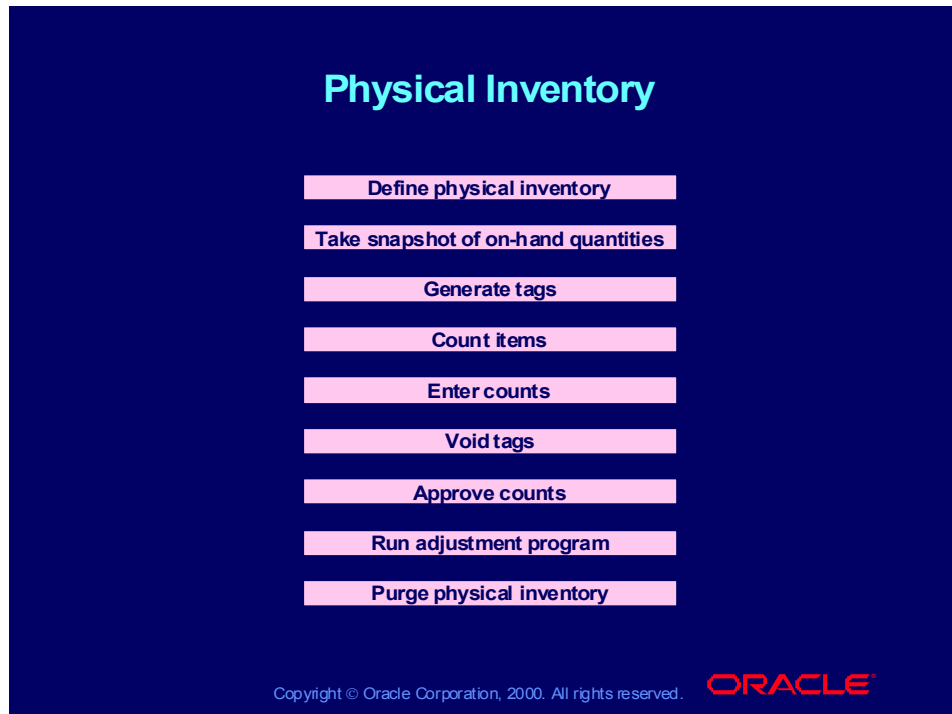
- **A physical inventory is a periodic reconciliation of system on-hand balances with physical counts in inventory.**
- **You can perform a physical inventory whenever you choose to verify the accuracy of your system on-hand quantities.**
- **You can perform a physical inventory for the entire organization or for particular subinventories within an organization.**

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# Physical Inventory

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## Reasons for Performing Physical Inventories

Accurate on-hand quantities are essential for effective planning and for minimizing inventory investment. Accurate on-hand quantities are required for tax and audit purposes.

## Physical Inventory Tags

A tag is a tool for recording the on-hand quantity of a specific item in a particular location. Usually a tag is a slip of paper posted at the item's location. You refer to a tag by using alphanumeric notation. Oracle can automatically generate tag numbers that you can use to enter physical inventory counts. You can enter tag numbers that the system does not generate for you.

## Review Question

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### Review Question

**You cannot perform a physical inventory for the entire organization or for particular subinventories within an organization.**

- 1. True**
- 2. False**

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## Review Question

---

### Review Question

**You cannot perform a physical inventory for the entire organization or for particular subinventories within an organization.**

1. True
2. False

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# Agenda

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## Agenda

- Introduction to Oracle Inventory
- Overview of Inventory Enterprise Structure
- Overview of Creating and Maintaining Items
- Overview of Inventory Controls
- Overview of Transactions
- Overview of Inventory Accuracy Controls
- Overview of Inventory Planning

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## Inventory Planning and Replenishment

### Planning methods:

- Performing reorder-point planning
- Performing Min-Max planning
- Subinventory replenishment planning
- Creating and executing Kanban cards

### Replenishment source:

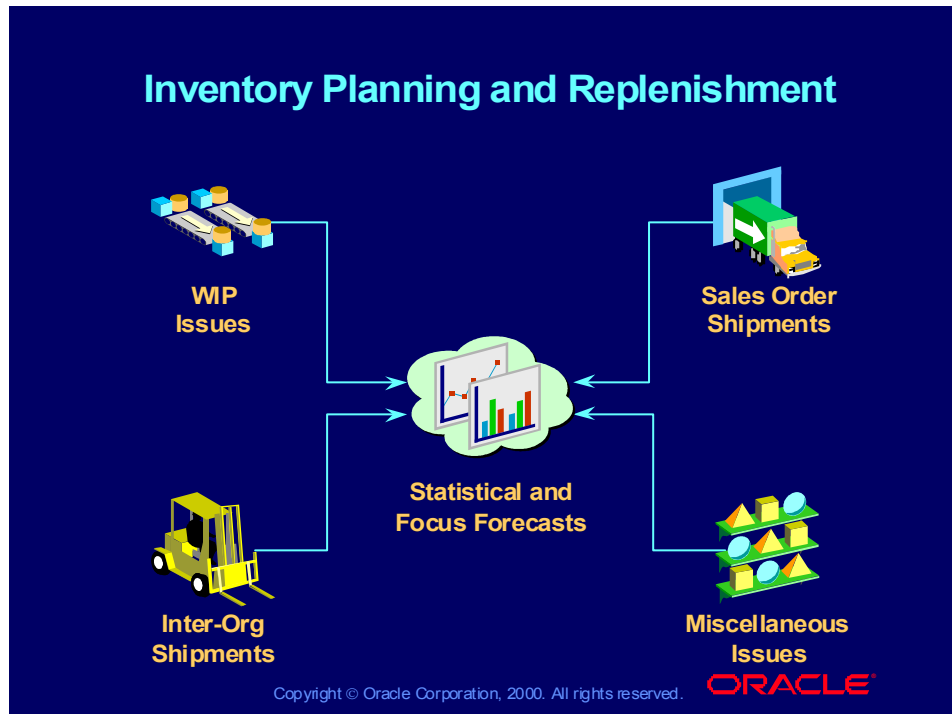
- Suppliers
- Inventory organizations
- Subinventories
- Manufacturing

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# Inventory Planning and Replenishment

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## When to Order?

Typically, you should order when:  $\text{On-hand quantity} + \text{supply} - \text{demand} < \text{minimum inventory level}$ .

The minimum level is a safety stock designed to be on an exception basis to meet demand or inventory while waiting for replenishment.

How Much to Order?

Typically you should order a quantity that balances the cost of placing an order with the cost of carrying inventory while covering expected demand. You then create a requisition to replenish inventory from another organization or a supplier.

## Planning Methods

- Reorder-point planning (organization)
- Min-max planning (organization and subinventory)
- Material-requirements planning: Master Production Scheduling/Master Demand Scheduling (organization)

### Reorder-Point Planning

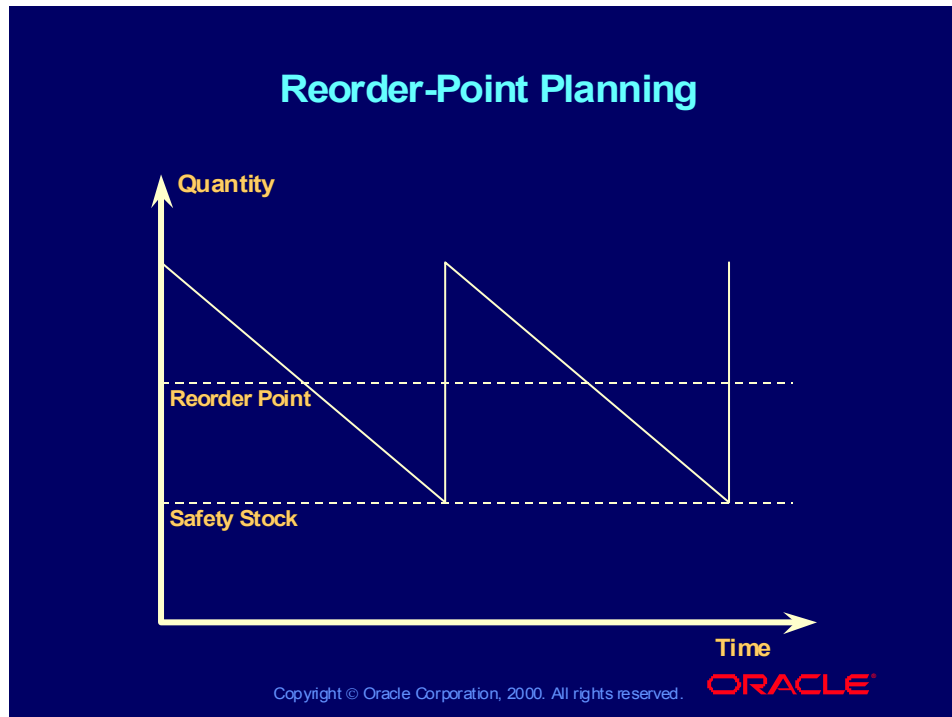
- Reorder-point planning is a method of determining the size and timing of item replenishment orders.
- Reorder-point planning uses the following pieces of information:
  - Safety stock
  - Replenishment lead time
  - Item demand
  - Order cost
  - Carrying cost

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# Reorder-Point Planning

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## Uses in Oracle Inventory

You can perform reorder-point planning for the entire organization. You can use reorder point planning for items under independent demand.

You can specify reorder point planning as the inventory planning method when you define an item. You can use reorder point planning for items that you do not need to control very tightly and that are not very expensive to carry in inventory.

### Min-Max Planning

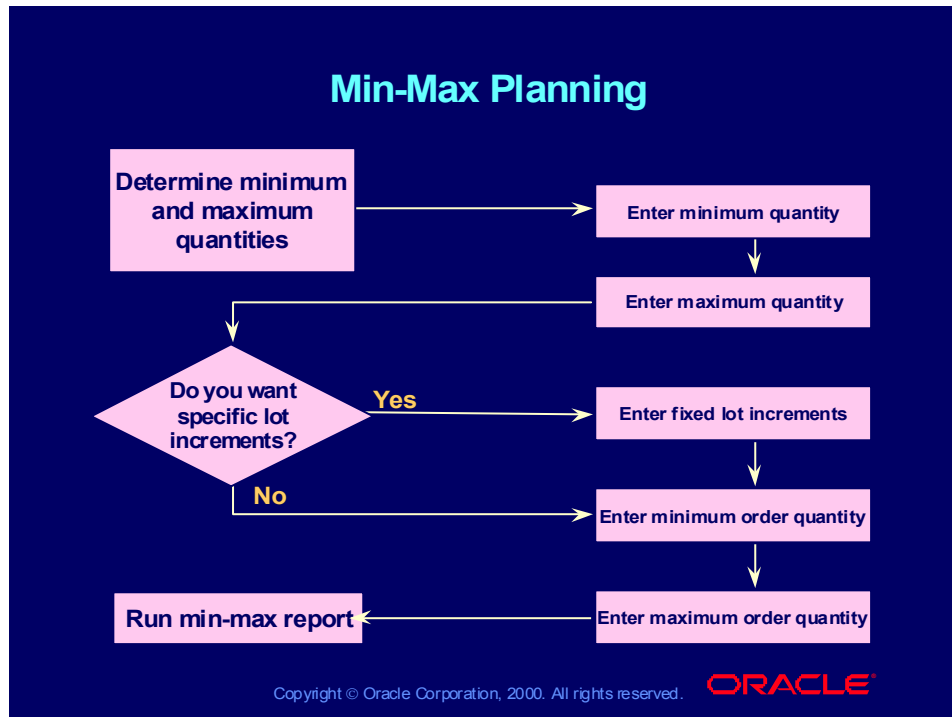
- **Min-max planning is a method of determining when and how much to order based on user-defined minimum and maximum inventory levels.**
- **In Oracle Inventory you can perform min-max planning at two levels:**
  - **Organization: To perform organization-level min-max planning for an item, you must specify organization-level minimum and maximum quantities.**
  - **Subinventory: To perform subinventory-level min-max planning for an item, you must specify subinventory-level minimum and maximum quantities.**

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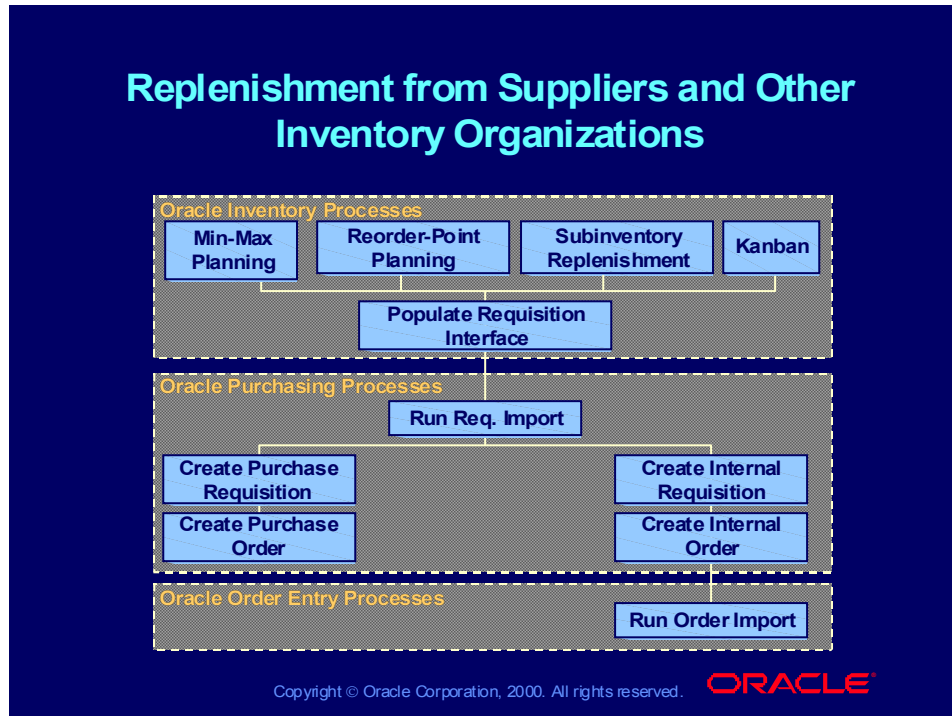
# Min-Max Planning

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# Replenishment from Suppliers and Other Inventory Organizations

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## Uses in Oracle Inventory

Organization-Level Planning: You can perform min-max planning for the entire organization.



## Kanban Management

### Techniques used

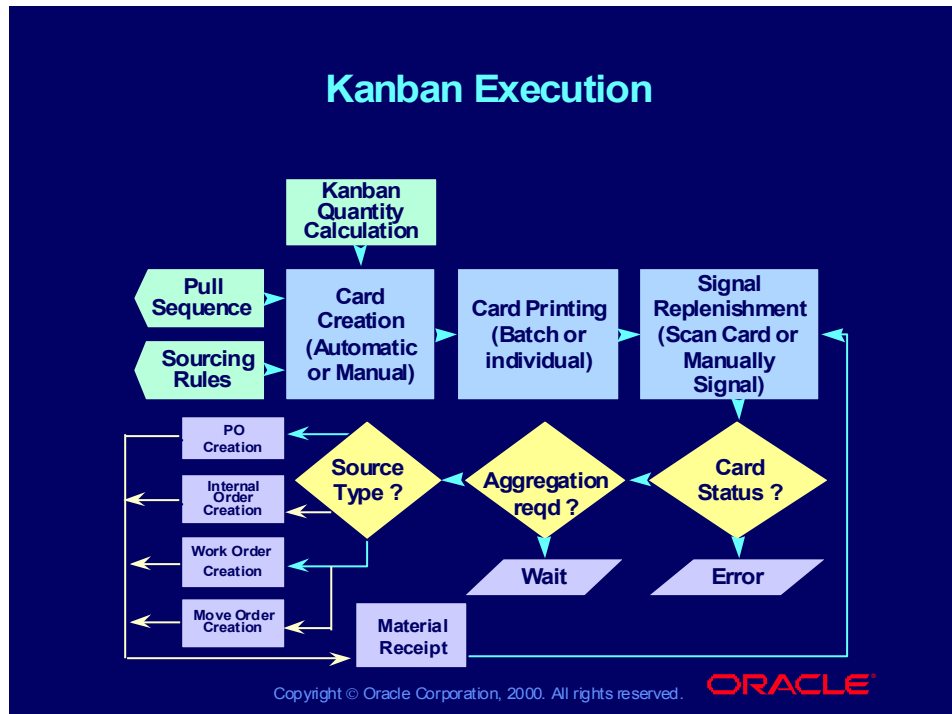
- Define pull sequences
- Calculate number of cards and Kanban size
- Kanban requirements simulation
- Generate nonreplenishable Kanbans
- Automate transactions; generate requisitions

<u>Kanban Cards</u>	<u>Replenish From</u>	<u>Doc. Created</u>
Supplier	Supplier	Purchase Req.
Inter-org	Inventory Org	Internal Req.
Intra-org	Subinventory	Move order
Production	Manufacturing	Work order/Flow schedule

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# Kanban Execution



## Processing Kanban Signals

The example above gives you a map of how Oracle Inventory executes the following Kanban signals:

- Request supplier Kanbans(PO)
- Request inter-Org Kanbans (Internal order)
- Request production Kanbans (work order)
- Request intra-org Kanbans
- Aggregate Kanban Signals
- Replenishable and Nonreplenishable

### Summary

**In this lesson, you should have learned how to:**

- **Define inventory structures that correspond to your sites**
- **Define and maintain item numbers**
- **Implement controls to track items in your inventory**
- **Record movement of items within your inventory structures**
- **Check accuracy of on-hand quantities by performing physical inventory and cycle counting**
- **Perform inventory forecasting and planning**

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