

# **Oracle Inventory Replenishment II, Release 11i**

**Student Guide**

Course Code 14504GC10

Edition 1.0

Month November 2000

Part Number M0-13654

**ORACLE®**

**Copyright © Oracle Corporation, 2000. All rights reserved.**

This documentation contains proprietary information of Oracle Corporation. It is provided under a license agreement containing restrictions on use and disclosure and is also protected by copyright law. Reverse engineering of the software is prohibited. If this documentation is delivered to a U.S. Government Agency of the Department of Defense, then it is delivered with Restricted Rights and the following legend is applicable:

#### **Restricted Rights Legend**

Use, duplication or disclosure by the Government is subject to restrictions for commercial computer software and shall be deemed to be Restricted Rights software under Federal law, as set forth in subparagraph (c)(1)(ii) of DFARS 252.227-7013, Rights in Technical Data and Computer Software (October 1988).

This material or any portion of it may not be copied in any form or by any means without the express prior written permission of the Education Products group of Oracle Corporation. Any other copying is a violation of copyright law and may result in civil and/or criminal penalties.

If this documentation is delivered to a U.S. Government Agency not within the Department of Defense, then it is delivered with "Restricted Rights," as defined in FAR 52.227-14, Rights in Data-General, including Alternate III (June 1987).

The information in this document is subject to change without notice. If you find any problems in the documentation, please report them in writing to Worldwide Education Services, Oracle Corporation, 500 Oracle Parkway, Box SB-6, Redwood Shores, CA 94065. Oracle Corporation does not warrant that this document is error-free.

Oracle and all references to Oracle Products are trademarks or registered trademarks of Oracle Corporation.

All other products or company names are used for identification purposes only, and may be trademarks of their respective owners.

## **Author**

April Nelson

## **Technical Contributors and Reviewers**

Pam Freeman, Denise Wagner

**This book was published using:**

**Oracle® Tutor™**



# Table of Contents

---

<b>Oracle Inventory Replenishment II, Release 11i.....</b>	<b>1-1</b>
Oracle Inventory Replenishment II.....	1-2
Objectives.....	1-3
Agenda.....	1-4
Course Overview.....	1-5
Agenda.....	1-6
Uses of Reorder-Point Planning.....	1-7
Reorder-Point Planning: Safety Stock.....	1-8
Reorder-Point Planning: Lead Time.....	1-9
Reorder-Point Planning: Reorder Quantity.....	1-10
Reorder-Point Planning Steps.....	1-11
Entering Item Planning Attributes.....	1-12
Entering General Planning Attributes for Reorder-Point Planning.....	1-13
Entering Lead Times.....	1-14
Entering Safety Stocks.....	1-15
Entering Safety Stocks (continued).....	1-16
Performing Reorder-Point Planning.....	1-17
Performing Reorder-Point Planning (continued).....	1-18
Submitting Reorder-Point Planning Requests.....	1-19
Practice 1 Overview: Performing Reorder Point Planning.....	1-20
Practice 1: Performing Reorder Point Planning.....	1-21
Practice 1: Performing Reorder Point Planning (continued).....	1-22
Agenda.....	1-23
Uses of Min-Max Planning.....	1-24
Min-Max Planning.....	1-25
Min-Max Planning: How Much to Order?.....	1-26
Min-Max Planning Steps.....	1-27
Item Planning Attributes.....	1-28
Min-Max Planning Setup Procedure.....	1-29
Setting Up the Min-Max System Profile Value.....	1-30
Selecting a Planning Level.....	1-31
Entering Planning Attributes.....	1-32
Submitting the Min-Max Planning Requests.....	1-33
Submitting the Min-Max Planning Requests (continued).....	1-34
Practice 2 Overview: Performing Min-Max Planning.....	1-36
Practice 2: Performing Min-Max Planning.....	1-37
Practice 2: Performing Min-Max Planning (continued).....	1-38
Agenda.....	1-39
Uses of Replenishment Counting.....	1-40
Subinventory Replenishment Planning Steps.....	1-41
System Profile Values.....	1-42
Subinventory Setup Windows.....	1-43
Subinventories Window.....	1-44
Item Subinventories Window.....	1-45
Item Subinventories: Order Modifier Tab.....	1-46
Replenishment Count Headers.....	1-47
Replenishment Count Lines.....	1-48
Replenishment Count Lines (continued).....	1-49
Processing Replenishment Counts.....	1-50
Review Question.....	1-51
Review Question Solution.....	1-52
Agenda.....	1-53

Kanban Cards .....	1-54
Kanban Planned Items .....	1-55
Pull Sequence Sources .....	1-56
Kanban Cards .....	1-57
Kanban Card Status .....	1-58
Supply Status .....	1-59
Kanban Replenishment Sources .....	1-60
Card Printing.....	1-61
Practice 3 Overview: Generating Kanban Cards .....	1-62
Practice 3: Generating Kanban Cards.....	1-63
Agenda.....	1-64
Overview of Move Orders .....	1-65
Move Order Source Types.....	1-66
Replenishment Move Orders .....	1-67
Submitting the Min-Max Planning Requests .....	1-68
Review Question.....	1-69
Agenda.....	1-71
Available to Promise.....	1-72
ATP Rules and ATP Checks.....	1-73
Uses of ATP in Oracle Inventory.....	1-74
Steps for Checking ATP .....	1-75
ATP Rules Setup Steps.....	1-76
Defining Computation Options.....	1-77
Defining Computation Options (continued) .....	1-78
Specifying Supply and Demand Time Fences .....	1-79
Specifying Supply and Demand Time Fences (continued).....	1-80
Specifying Demand Sources.....	1-82
Specifying Supply Sources .....	1-83
Setting Up Item and Bills for ATP Checking .....	1-84
ATP Checking .....	1-85
ATP Checking (continued) .....	1-86
Viewing ATP Criteria.....	1-88
Practice 4 Overview: Setting Up ATP Rules and Performing ATP Checking.....	1-89
Practice 4: Setting Up ATP Rules and Performing ATP Checking .....	1-90
Agenda.....	1-91
Inventory Profile Values.....	1-92
Inventory Profile Values (continued).....	1-93
Summary.....	1-94

# Preface

---

## Profile

### Before You Begin This Course

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

- Working experience with Oracle Inventory

### Prerequisites

- Setting up enterprise structures
- Setting up items
- Setting up inventory controls
- Setting up and performing inventory transactions

### How This Course Is Organized

*Oracle Inventory Replenishment II, Release 11i* is an instructor-led course featuring lecture and hands-on exercises. Online demonstrations and written practice sessions reinforce the concepts and skills introduced.

## Related Publications

### Oracle Publications

Title	Part Number
<i>Oracle Inventory User's Guide, R11I</i>	<i>A83505-01</i>
<i>MRP and Supply Chain Planning User's Guide</i>	<i>A82939-01</i>

### Additional Publications

- System release bulletins
- Installation and user's guides
- *read.me* files
- *Oracle Magazine*

# Typographic Conventions

## Typographic Conventions in Text

Convention	Element	Example
Bold italic	Glossary term (if there is a glossary)	The <i><b>algorithm</b></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.

## Getting Help

Oracle Applications provides you with a complete online help facility.

Whenever you need assistance, simply choose an item from the Help menu to pinpoint the type of information you want.

### To display help for a current window:

1. Choose Window Help from the Help menu, click the Help button on the toolbar, or hold down the Control key and type 'h'.

A web browser window appears, containing search and navigation frames on the left, and a frame that displays help documents on the right.

The document frame provides information on the window containing the cursor. The navigation frame displays the top-level topics for your responsibility, arranged in a tree control.

2. If the document frame contains a list of topics associated with the window, click on a topic of interest to display more detailed information.

3. You can navigate to other topics of interest in the help system, or choose Close from your web browser's File menu to close help.

## **Searching for Help**

You can perform a search to find the Oracle Applications help information you want. Simply enter your query in the text field located in the top-left frame of the browser window when viewing help, then click the adjacent Find button.

A list of titles, ranked by relevance and linked to the documents in question, is returned from your search in the right-hand document frame. Click on whichever title seems to best answer your needs to display the complete document in this frame. If the document doesn't fully answer your questions, use your browser's Back button to return to the list of titles and try another.

# **Oracle Inventory Replenishment II, Release 11i**

## **Chapter 1**

# Oracle Inventory Replenishment II

Release 11*i*

Copyright © Oracle Corporation, 2000. All rights reserved.

**ORACLE**

### Objectives

**After completing this module, you should be able to do the following:**

- **Perform Reorder-point planning**
- **Perform Min-max planning**
- **Perform replenishment counting**
- **Generate kanban cards**
- **Set up available to promise (ATP)**
- **Perform ATP checks**
- **Set up inventory planning profile options**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

# Agenda

---

## Agenda

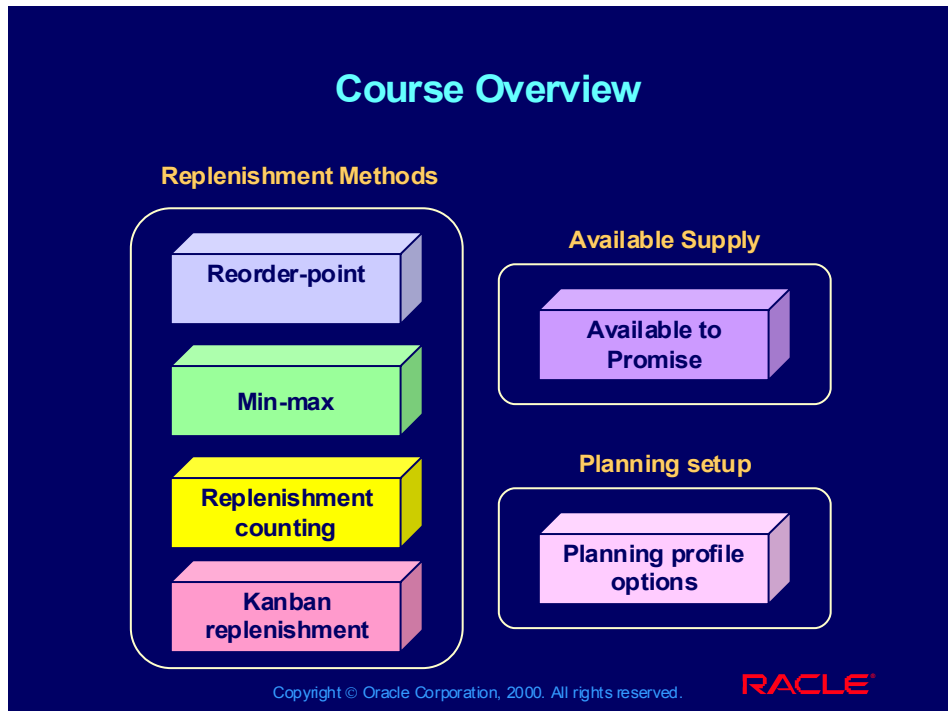
- ✓ **Module Overview**
  - **Performing Reorder-point planning**
  - **Performing Min-max planning**
  - **Performing replenishment counting**
  - **Generating kanban cards**
  - **Describing replenishment move-orders**
  - **Setting up available to promise (ATP)**
  - **Setting up Inventory profile values**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Course Overview

---



# Agenda

---

## Agenda

- Module Overview
- ✓ Performing Reorder-point Planning
- Performing Min-max Planning
- Performing replenishment counting
- Generating kanban cards
- Describing replenishment move-orders
- Setting up available to promise (ATP)
- Setting up Inventory profile values

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**



### Uses of Reorder-Point Planning

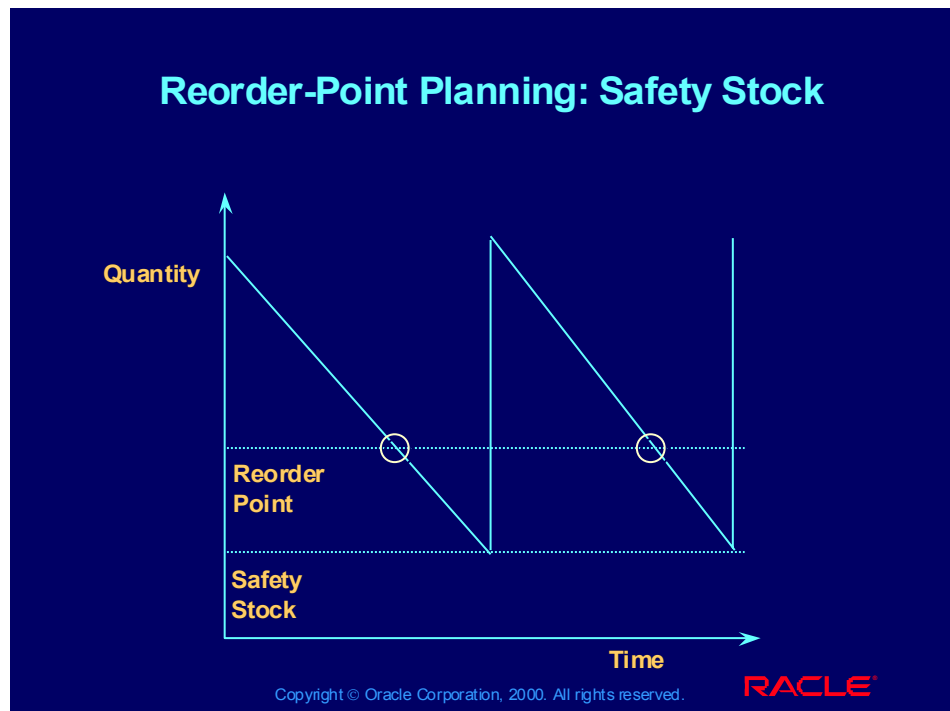
- You can perform-reorder point planning for the entire organization.
- You can use Reorder-point planning for items under independent demand.
- You can specify Reorder-point planning as the inventory planning method when you define an item.
- You can use Reorder-point planning for items that you do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

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Reorder-Point Planning: Safety Stock

---



### Describing Reorder-Point Planning

Recall from Replenishment I that with Reorder-point planning, you order a quantity when the quantity falls to a predetermined reorder point, as shown in the above graphic.

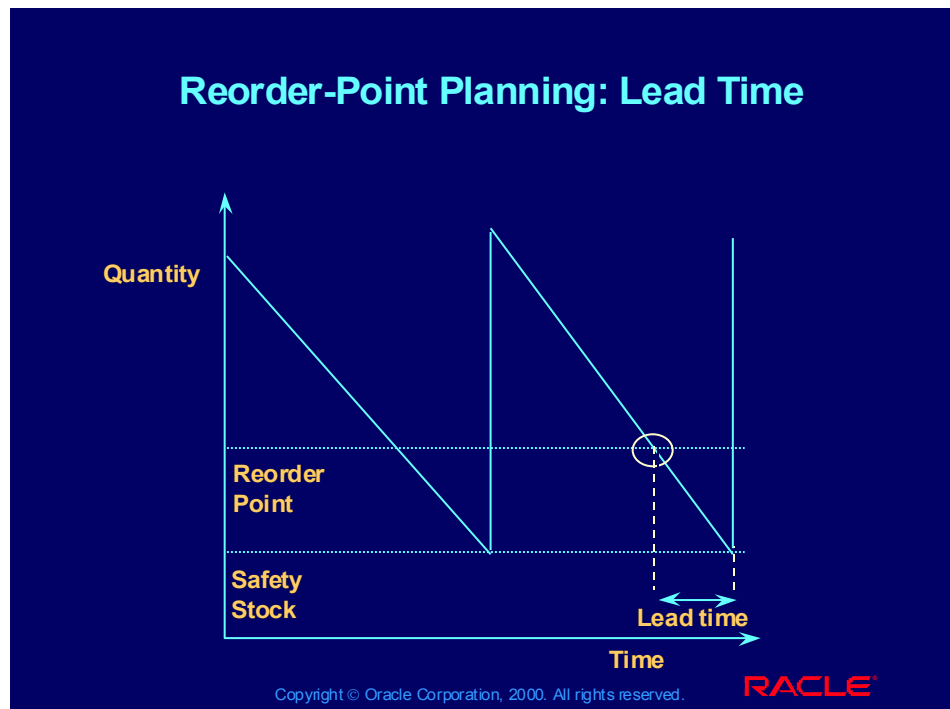
Reorder-point planning uses the following pieces of information:

- Safety stock
- Replenishment lead time
- Item demand
- Order cost
- Carrying cost

### Safety Stock

Safety stock is the quantity of an item that you plan to have in inventory to protect against fluctuations in supply and demand. You can manually enter safety stock quantities, or Oracle Inventory can calculate a safety stock level based on an existing forecast for an item.

## Reorder-Point Planning: Lead Time



### Describing Reorder-Point Planning (continued)

#### Replenishment Lead Time

Replenishment lead time is the total time between recognizing the need to reorder and the receipt of items. Order processing lead times include the following components:

- Preprocessing lead time
- Processing lead time
- Postprocessing lead time

Oracle Inventory calculates reorder point planning lead time by adding all three components.

#### Item Demand

The reorder point planning routine uses the average demand during the replenishment lead time. Oracle Inventory uses forecast information to calculate average demand.

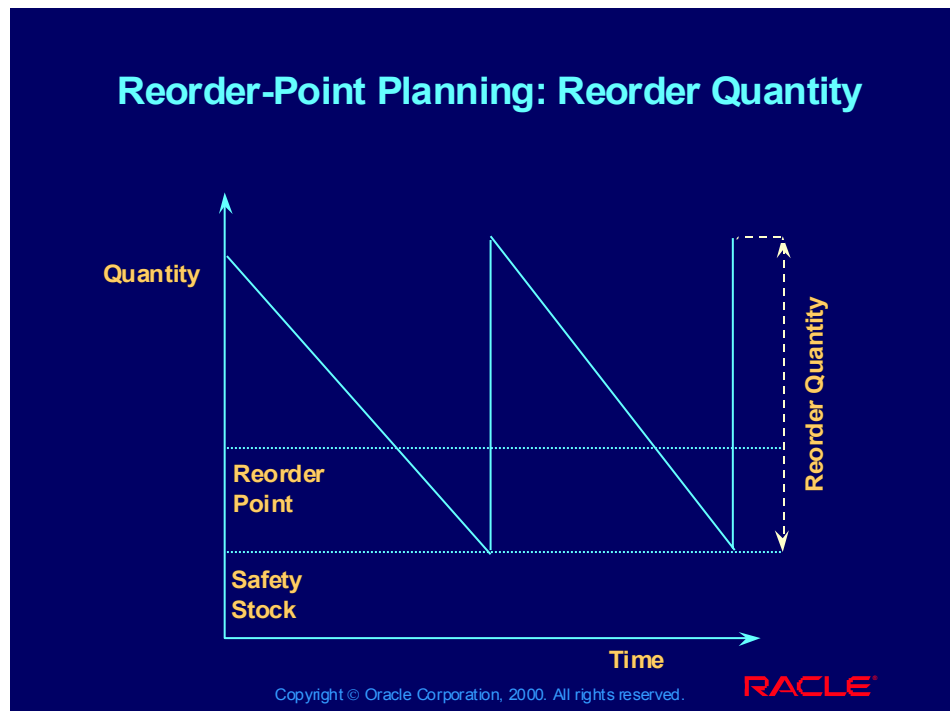
#### Timing of Reorders

You should reorder when the following is true:

$(\text{quantity on hand} + \text{quantity on order}) < \text{reorder point}$

where the reorder point = safety stock +  $[(\text{lead time}) \times (\text{average demand during lead time})]$

## Reorder-Point Planning: Reorder Quantity



### Describing Reorder-Point Planning (continued)

#### Quantity of Reorders

The reorder quantity is equal to the Economic Order quantity (EOQ). The EOQ is the quantity that minimizes the total cost of ordering and storing inventory.

Use the following formula to determine the EOQ:

$$EOQ = \text{SQRT} \{ [2 \times (\text{annual demand}) \times (\text{order cost})] / (\text{annual carrying costs}) \}$$

Oracle Inventory calculates the EOQ by using annual demand from the forecast that you provide when you perform Reorder-point planning. The system also uses the order and annual carrying costs that you specify when you define items.

You can constrain the reorder quantity by specifying the following information for each item:

- Fixed-lot multiplier
- Minimum order quantity
- Maximum order quantity

#### Quantity on Order

Quantity on order represents supply that you have not yet received. The quantity on order is the sum of the purchase order, requisition (internal and supplier), and in-transit quantities owned by the organization.

## Reorder-Point Planning Steps

---



### Entering Item Planning Attributes

Entering item planning attributes includes setting up general planning attributes. At this point, you also enter the following:

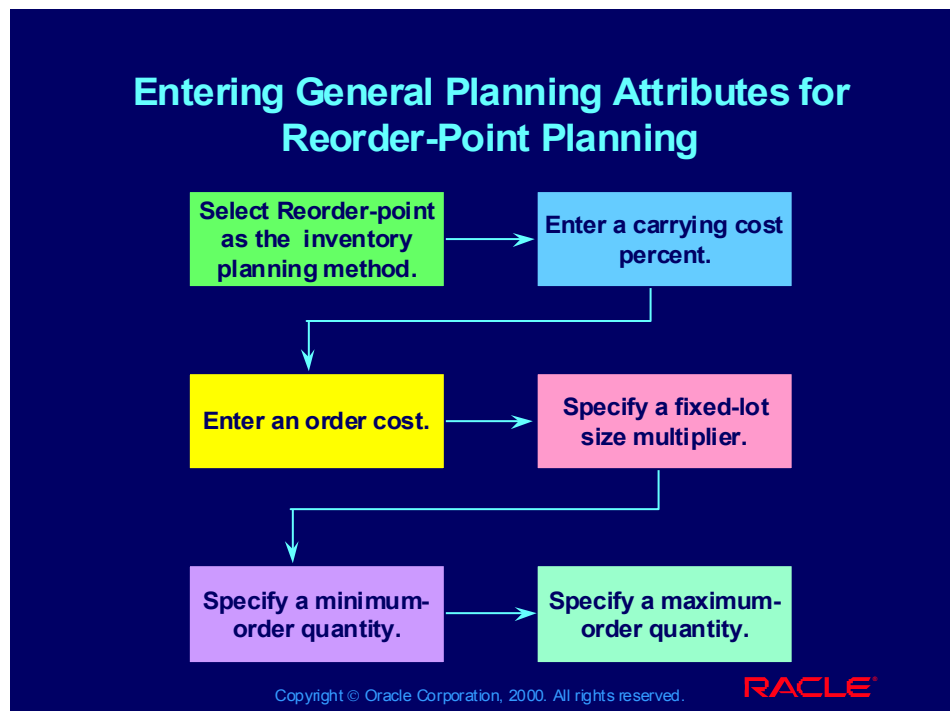
- Lead times
- Safety stock

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Entering General Planning Attributes for Reorder-Point Planning

---



### Organization Items: General Planning Window

(N) Items > Organization Items > (T) General Planning

#### Carrying Cost Percent

Oracle Inventory uses the carrying cost percent information to calculate the EOQ for the item. The annual carrying cost represents your internal cost to stock one of that item per year.

$\text{Carrying cost} = (\text{carrying cost percent}) \times (\text{standard unit cost})$

#### Order Cost

Oracle Inventory uses the order cost to calculate the EOQ for the item. The order cost represents the fixed cost of placing an order for any quantity of the item.

#### Fixed-lot Size

Oracle Inventory orders a quantity that is a multiple of the fixed-lot size multiplier.

#### Minimum-Order Quantity

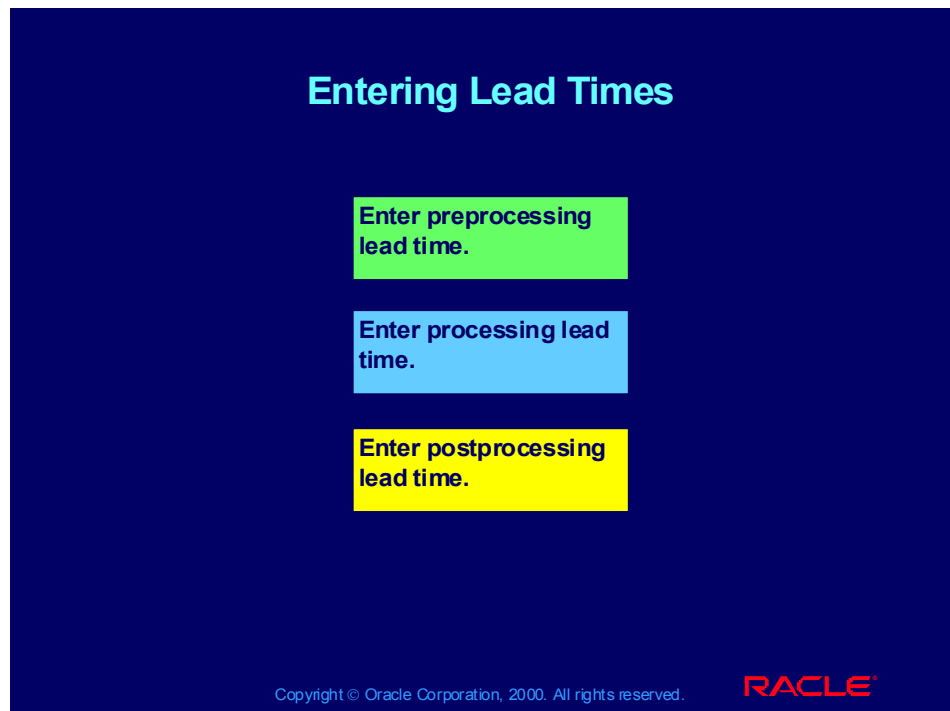
Oracle Inventory orders a quantity that is at least as large as the minimum-order quantity.

#### Maximum-Order Quantity

Oracle Inventory orders a quantity that is less than or equal to the maximum-order quantity.

## Entering Lead Times

---



### Organization Items: Lead Times Window

(N) Items > Organization Items > (T) Lead Times

#### Describing Lead Times

You can specify the following lead times:

- Preprocessing lead time: Represents the number of days required to place a purchase or manufacturing order.
- Processing lead time: Represents the number of days required to procure or manufacture the item.
- Postprocessing lead time: Represents the number of days required to deliver a purchased item from the initial supplier receipt of the purchase order (PO).



## Entering Safety Stocks

---

**Entering Safety Stocks**

You can select one of the following three safety stock calculation methods for each item:

- User-defined quantity
- User-defined percentage
- Mean absolute deviation

Copyright © Oracle Corporation, 2000. All rights reserved. **ORACLE**

### Accessing the Enter Item Safety Stocks Window

With safety stock, you can enter a user-defined quantity or have the system calculate a safety stock for you. You enter user-defined quantities in the Enter Item Safety Stocks window.

(N) Planning > Safety Stocks

If you want Oracle Inventory to calculate safety stock, using the Mean Absolute Deviation method, you must submit a concurrent request through the Reload Safety Stock window

(N) Planning > Safety Stock Update

### Describing Stock Calculation Methods

- User-defined quantity method: You can enter safety stock quantities and the date for which each quantity is effective. You can update safety stock quantities that you previously entered or that Oracle Inventory calculated for you.
- User-defined percentage method: To use the user-defined percentage method, you must use the Reload Safety Stock window and specify the following information for the item:
  - A forecast
  - A safety stock percent

## Entering Safety Stocks (continued)

---

### Entering Safety Stocks (continued)

You can select one of the following three safety stock calculation methods for each item:

- User-defined quantity
- User-defined percentage
- Mean absolute deviation

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Accessing the Enter Item Safety Stocks Window (continued)

#### Describing Stock Calculation Methods (continued)

Oracle Inventory uses the following equation to calculate safety stock quantities:

$$\text{Safety stock} = (\text{safety stock percent}) \times (\text{forecast demand})$$

- Mean Absolute Deviation Method: To calculate safety stock using this method, you submit a concurrent request using the Reload Safety Stock window. In this window, you must specify the following information:
  - A forecast
  - A service level percent

The service level percent represents the probability that you can fill an order from available inventory. If you enter a high service level, then Oracle Inventory calculates relatively larger safety stock quantities.

Oracle Inventory calculates safety stock quantity by using the following equation:

$$\text{safety stock} = Z \times 1.25 \times (\text{mean absolute deviation})$$

where Z is the appropriate value from a table of standard normal distribution, corresponding to the service level. The mean absolute deviation is a measure of how the forecast demand deviates from the actual demand.

## Performing Reorder-Point Planning

---

### Performing Reorder-Point Planning

In addition to setting up planning attributes, lead times, and safety stock, Reorder-point planning involves the following tasks:

- Providing a forecast
- Providing on-order quantity information
- Viewing planning information
- Creating requisitions
- Performing exception reporting

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Providing a Forecast

The reorder-point planning program uses information from the forecast to calculate the economic order quantity (EOQ) and the reorder-point quantity. The following equations show each of these calculations:

- $EOQ = \text{SQRT} \{ [2 \times (\text{annual demand}) \times (\text{order cost})] / (\text{carrying cost}) \}$
- $\text{Reorder point} = \text{safety stock} + [(\text{lead time}) \times (\text{average demand})]$

### Providing On-Order Quantity Information

Oracle uses on-order quantity information to determine when to reorder an item. You should reorder when the following is true:

$(\text{quantity on hand} + \text{quantity on-order}) < \text{reorder point}$

Oracle uses the following sources to calculate on-order quantities:

- Purchase orders
- Requisitions (internal and supplier)
- In-transit shipments owned by the organization

Oracle Inventory uses purchase orders, requisitions, and in-transit shipments that are scheduled to be delivered before the supply cutoff date.

## Performing Reorder-Point Planning (continued)

---

### Performing Reorder-Point Planning (continued)

In addition to setting up planning attributes, lead times, and safety stock, Reorder-point planning involves the following tasks:

- Providing a forecast
- Providing on-order quantity information
- Viewing planning information
- Creating requisitions
- Performing exception reporting

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Viewing Planning Information

You can view planning information before creating replenishment orders. If you want to create replenishment orders automatically, then you must request requisitions.

### Creating Requisitions

Oracle creates requisitions for all items that meet the following condition:

$(\text{quantity on hand} + \text{quantity on order}) < \text{reorder point}$

Oracle creates either purchase requisitions (if the source is the supplier) or internal requisitions (if the source is the organization). The reorder quantity is the EOQ constrained by the following attributes:

- Fixed-lot size multiplier
- Minimum order quantity
- Maximum order quantity

### Describing Exception Reporting

You can submit the planning process for all items under reorder-point planning, or submit the planning process for just those items that are below their reorder-point quantities.

## Submitting Reorder-Point Planning Requests

---

### Submitting Reorder-Point Planning Requests

To perform reorder-point planning, you submit a concurrent request through the Reorder Point Planning concurrent request window. You must specify the following parameters:

- Item Select
- Demand cutoff date
- Supply cutoff date
- Whether or not to restock
- Default deliver to location
- Forecast

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Reorder Point Planning

(N) Planning > Reorder Point Planning

### Describing Reorder-Point Planning Considerations

When submitting Reorder-point planning requests, consider the following:

- Nettable Subinventories: Oracle Inventory uses on-hand quantities that exist in nettable subinventories only.
- Oracle Inventory displays the sum of all unfulfilled demand created before the cutoff date.
- Oracle Inventory calculates demand quantity by using information from the following sources:
  - Sales orders
  - Internal orders

## Practice 1 Overview: Performing Reorder Point Planning

---

### Practice 1 Overview: Performing Reorder Point Planning

**Purpose:** In this practice, you will set up the attributes for an item that will enable the system to perform Reorder-point planning for that item. You will also run and view the Reorder-point planning report.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Practice 1: Performing Reorder Point Planning

#### Instructions

**Note:** Wherever you see XX, substitute your student number. If you have not done so, assign your XX-Item01 to Seattle Manufacturing (M1).

1. Set the item attributes for your XX-Item01 for Reorder Point Planning.

(N) Items > Organization Items

- The Find window opens. Enter your item information, and click the Find button.
- General Planning Tab
  - Inventory Planning Method      Reorder Point Planning
  - Minimum Order Quantity      35
  - Order Cost      45
  - Carrying Cost Percent      12
- Lead Time Tab
  - Processing Lead Time      5
- Save your work. (M) Action > Save

## Practice 1: Performing Reorder Point Planning

**Practice 1: Performing Reorder Point Planning**

Item	Description	Effective Date	UOM	Quantity
99-Item01	Mouse Pad	11-NOV-2000	Ea	50

Safety Stock Method:

Forecast:

Safety Stock %:

Service Level %:

Copyright © Oracle Corporation, 2000. All rights reserved. **RACLE**

### Practice 1: Performing Reorder Point Planning

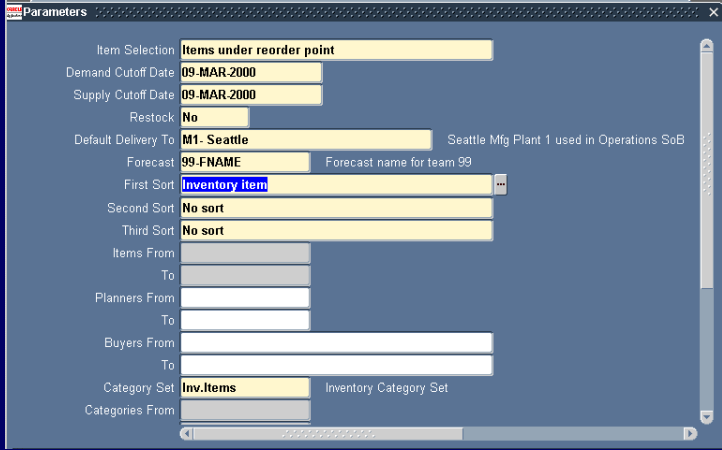
2. Enter item safety stock for the item [that you used in Step 1].

(N) Planning > Safety Stocks

- Click the New button
- Tab through the default item field and navigate to the Item field. Enter the following information:
  - Item
  - Effective date
  - Quantity
- Save your work. (M) Action > Save

## Practice 1: Performing Reorder Point Planning (continued)

**Practice 1: Performing Reorder Point Planning (continued)**



The screenshot shows a 'Parameters' window with the following fields and values:

Field	Value
Item Selection	Items under reorder point
Demand Cutoff Date	09-MAR-2000
Supply Cutoff Date	09-MAR-2000
Restock	No
Default Delivery To	M1- Seattle
Forecast	99-FNAME
First Sort	Inventory item
Second Sort	No sort
Third Sort	No sort
Items From	
To	
Planners From	
To	
Buyers From	
To	
Category Set	Inv.Items
Categories From	

**Reorder-Point Planning report parameters**

Copyright © Oracle Corporation, 2000. All rights reserved. **RACLE**

### Practice 1: Performing Reorder Point Planning

3. Request the Reorder Point Planning report.

(N) Planning > Reorder Point Planning

The Parameters window for the Reorder Point Planning report opens.

- Enter the following parameters:
    - Parameters                      Items under reorder point
    - Demand cut off date        4 months from now
    - Supply cut off date        4 months from now
    - Restock                        No
    - Forecast                      Your forecast
    - Accept all other defaults
  - Click the OK button to return to the Reorder Point Planning submit requests window.
  - Click the Submit button to submit the Reorder Point Planning report.
  - Write down your request number \_\_\_\_\_
  - Click the No button when prompted to enter another request.
  - Save your work. (M) Action > Save
4. Select (M) View > Requests to view your report.
- How many of this item should you reorder? \_\_\_\_\_



# Agenda

---

## Agenda

- Module Overview
- Performing Reorder-point Planning
- ✓ **Performing Min-max Planning**
- Performing replenishment counting
- Generating kanban cards
- Describing replenishment move-orders
- Setting up available to promise (ATP)
- Setting up Inventory profile values

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

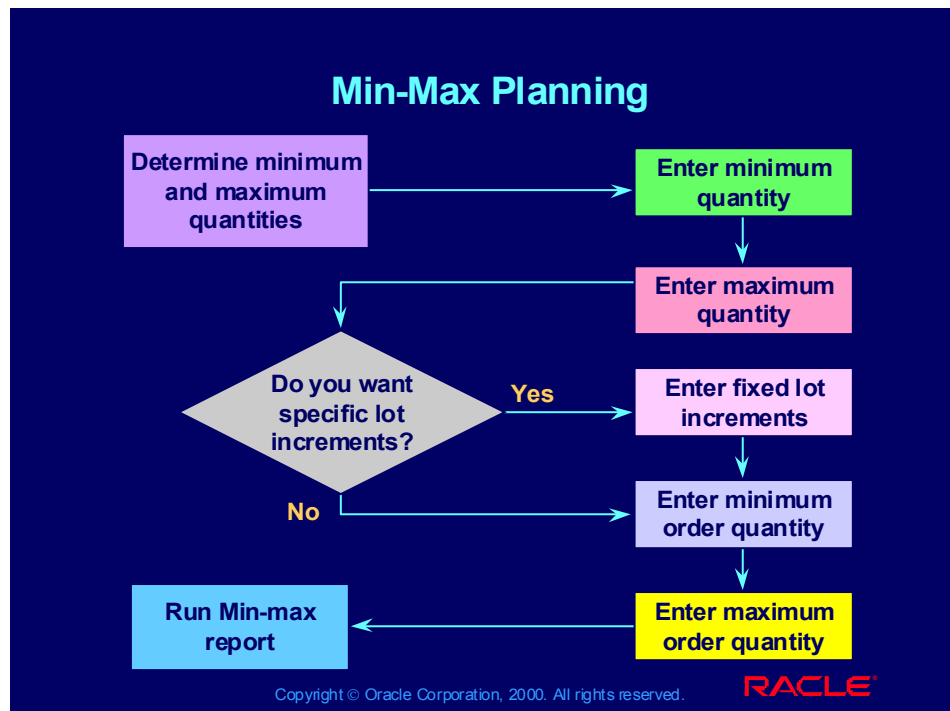
### Uses of Min-Max Planning

- You can use Min-max planning for items with independent demand.
- Because you specify the minimum and maximum inventory levels, you can use Min-max planning for those items that you want to tightly control.
- You can perform Min-max planning for the entire organization.
- You can perform Min-Max planning for a specific subinventory.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Min-Max Planning



### Describing Min-Max Planning

Recall that Min-max planning is a method of determining when and how much to order based on user-defined minimum and maximum inventory levels.

**Note:** To perform organization-level Min-max planning for an item, you must specify organization-level minimum and maximum quantities.

### Deciding When to Order with Min-Max Planning

You should order when the following is true:

$(\text{on-hand quantity} - \text{demand}) + (\text{quantity on order}) < \text{minimum quantity}$

Quantity on order is the sum of purchase order quantities, requisition quantities, and in transit shipments. It also includes WIP jobs as supply at the organization level. Quantity on order represents supplies that you have not yet received in your organization.

## Min-Max Planning: How Much to Order?

---

### Min-Max Planning: How Much to Order?

The following equation represents when you should order:

$$\text{Order quantity} = (\text{maximum quantity}) - [(\text{on-hand quantity}) + (\text{quantity on order})]$$

You can constrain the order quantity by specifying the following order modifiers for an item:

- Fixed lot multiplier
- Minimum order quantity
- Maximum order quantity

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Min-Max Planning Steps

---

### Min-Max Planning Steps

- 1 Enter item planning attributes.
- 2 Define subinventory-level min-max information (optional).
- 3 Run the Min-max report.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Item Planning Attributes

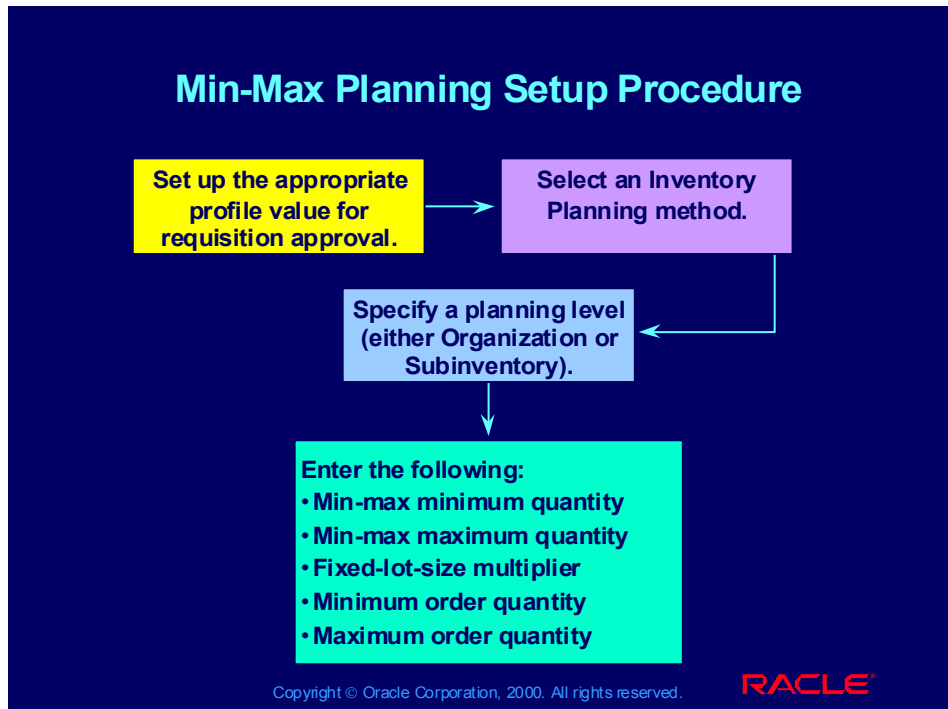
**Item planning attributes include setting up general planning attributes for either the organization or the subinventory in which you want to use Min-max planning.**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

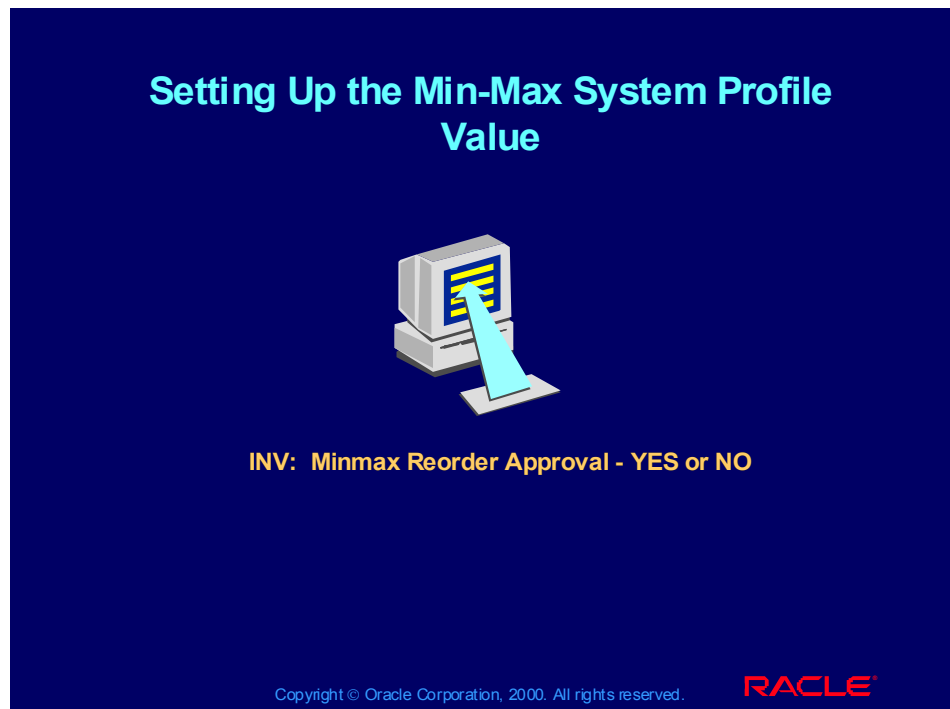
## Min-Max Planning Setup Procedure

---



## Setting Up the Min-Max System Profile Value

---



### Entering Min-Max Approval Status

When you run the Min-max report, the INV: Minmax Reorder Approval profile option enables you to create requisitions as either approved or unapproved.

#### How to Enter a Min-Max Approval Status

To enter a min-max requisition approval status, navigate to the System Profiles window to enter a personal or system profile value to specify a min-max reorder approval status.

(N) Setup > Profiles > Personal

A Find window appears. Enter “%Minmax%” in the find window to locate the Minmax Reorder Approval profile option.

**Note:** If you do not have access to system-level profile values, ask your system administrator for assistance in setting up the system-level Minmax Reorder Approval profile option.



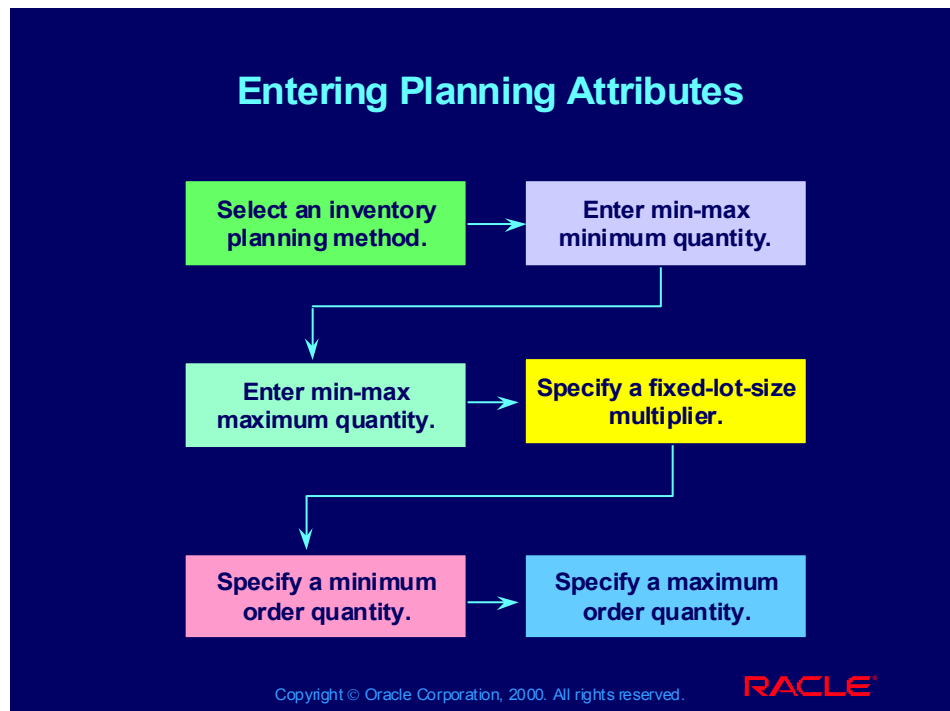
### Selecting a Planning Level

**You can select Min-max planning as the inventory planning method for each item. If you select the Min-max planning method for an item, Oracle performs Min-max planning for that item at both the organization and subinventory levels. To perform Min-max planning at both the organization and the subinventory levels, you need to enter minimum and maximum quantities for each level.**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Entering Planning Attributes



### Entering Item Planning Attributes

After you select a planning level, either Organization or Subinventory, you enter the appropriate planning attributes. The following table describes these attributes in more detail:

Planning Attribute	Organization-Level	Subinventory-Level
Min-Max Minimum Quantity	Compares the item's on-hand quantity in the entire organization to the item's organization-level min-max minimum quantity	Compares the item's on-hand quantity in the specific subinventory to the item's subinventory level min-max minimum quantity
Min-Max Maximum Quantity	Uses the organization-level min-max maximum quantity to calculate the order quantity	Uses the item's subinventory-level min-max maximum quantity to calculate the order quantity
Fixed-Lot-Size-Multiplier	Calculates order quantities that are multiples of the fixed-lot-size multiplier	Calculates order quantities that are multiples of the fixed-lot-size multiplier
Minimum Order Quantity	Calculates order quantities that are greater than or equal to the minimum order quantity	Calculates order quantities that are greater than or equal to the minimum order quantity
Maximum Order Quantity	Calculates order quantities that are less than or equal to the maximum order quantity	Calculates order quantities that are less than or equal to the maximum order quantity

## Submitting the Min-Max Planning Requests

---

### Submitting the Min-Max Planning Requests

In addition to setting up planning attributes, Min-max planning involves submitting a concurrent process that generates the Min-max planning report. You can also perform exception reporting with the Min-max planning reporting feature.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Submitting the Min-Max Planning Report

When you submit the Min-max planning report, you must specify a number of parameters, including parameters that address the following:

- Nettable Subinventories
- Demand quantities
- On-order quantity information
- Requisitions and WIP unrealized jobs
- Exception reporting

### Using Nettable Subinventories

Oracle Inventory enables you to use on-hand quantities that exist in either nettable or non-nettable subinventories, or both.

## Submitting the Min-Max Planning Requests (continued)

### Submitting the Min-Max Planning Requests (continued)

From the Oracle Inventory Navigator, use the following navigation path to submit a Min-max planning request :

**(N) Reports > Planning**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Submitting the Min-Max Planning Report (continued)

#### Displaying Demand Quantity

Oracle Inventory displays the sum of all unfulfilled demand created before the cutoff date. The system calculates demand quantity by using information from the following sources:

- Sales orders
- Internal orders

You can include WIP job component requirements as a source of demand as well. You can net unfulfilled demand against on-hand quantity and also include inventory reservations in netting on-hand quantity against demand.

#### Viewing Planning Information

You can view planning information before creating replenishment orders. To automatically create replenishment orders, you must request requisitions.

## Submitting the Min-Max Planning Requests (continued)

### Submitting the Min-Max Planning Requests (continued)

You can submit the planning process for all items under min-max planning. You can also submit the planning process for just those items under their minimum quantities and submit the planning process for just those items over the maximum quantities.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Submitting the Min-Max Planning Report (continued)

#### Creating Requisitions and WIP Unrealized Jobs

If you request a restock, Oracle Inventory creates requisitions and WIP unreleased jobs for all items that meet the following condition:

$(\text{on-hand quantity}) + (\text{quantity on order}) < \text{minimum quantity}$

Oracle Inventory creates purchase requisitions (if the source is Supplier) and internal requisitions (if the source is Inventory Organization) for all Buy items, and WIP unreleased jobs for all Make items. The order quantity is constrained by the following attributes:

- Fixed-lot size multiplier
- Minimum order quantity
- Maximum order quantity

## Practice 2 Overview: Performing Min-Max Planning

---

### Practice 2 Overview: Performing Min-Max Planning

**Purpose:** In this practice, you will enter attributes for an item that will enable the system to perform Min-max planning for that item. You will also run and view the Min-max planning report.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Practice 2: Performing Min-Max Planning

#### Instructions

**Note:** Wherever you see XX, substitute your student number. If you have not done so, assign your XX-Item03 to Seattle Manufacturing (M1).

1. Set the item's general planning attributes for your XX-Item03 for Min-Max Planning.

(N) Items > Organization Items

The Find window opens. Enter your item, and click the Find button.

- General Planning Attributes tab
  - Inventory Planning Method                      Min-Max Planning
  - Min-max Quantity: Minimum                      500
  - Min-max Quantity: Maximum                      3000
- Select (M) File > Save

## Practice 2: Performing Min-Max Planning

### Practice 2: Performing Min-Max Planning

Subinventory	Description	Min-Max Planning	Min Qty	Max Qty
FGI	Finished Goods Inventory	<input checked="" type="checkbox"/>	300	900
		<input type="checkbox"/>		
		<input type="checkbox"/>		
		<input type="checkbox"/>		
		<input type="checkbox"/>		

Copyright © Oracle Corporation, 2000. All rights reserved.

RACLE

### Practice 2: Performing Min-Max Planning

2. In this practice, you run your Min-Max report by subinventory, so you need to enter the min-max quantities for the item/subinventory combination, or special item/subinventory. If you have not closed the Organization Items window, skip the next navigation step to reopen the Organizational Items window, and select (M) Tools > Items/Sub-inventories.

(N) Items > Organization Items

Enter your item in the Find window and then click the Find button.

(M) Tools > Item Subinventories

- Enter the following information for the item:
  - Name Select the FGI subinventory
  - Min-Max Planning checkbox Selected
  - Minimum Quantity 300
  - Maximum Quantity 900

- Save your work. (M) File > Save

**Note:** These general planning attributes affect organization-level planning, not subinventory-level planning.

## Practice 2: Performing Min-Max Planning (continued)

**Practice 2: Performing Min-Max Planning  
(continued)**

**Min-Max Planning (M1)**

Run this Request...

Name: **Min-max planning report**

Parameters: **Organization::Items under minimum quantity:Inv.Items::Inventory item:09-NOV-2**

Language: **American English**

At these Times...

**As Soon as Possible**

Upon Completion...

☒ Save all Output Files

Notify: \_\_\_\_\_

Print to: **adsprinter**

Help (B) Submit Cancel

Copyright © Oracle Corporation, 2000. All rights reserved. **ORACLE**

### Practice 2: Performing Min-Max Planning

3. Request the Min-Max Planning report for your FGI subinventory.

(N) Reports > Planning

- In the Report Name field, select the Min-Max Planning Report from the list of values.
- Click the Save icon to save your selection.
- Click the Submit Request button to submit your request.

Write down the concurrent request ID number \_\_\_\_\_.

- View your report.

(M) View > Requests



## Agenda

---

### Agenda

- Module Overview
- Performing Reorder-point Planning
- Performing Min-max Planning
- ✓ **Performing replenishment counting**
- Generating kanban cards
- Describing replenishment move-orders
- Setting up available to promise (ATP)
- Setting up Inventory profile values

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Uses of Replenishment Counting

---

### Uses of Replenishment Counting

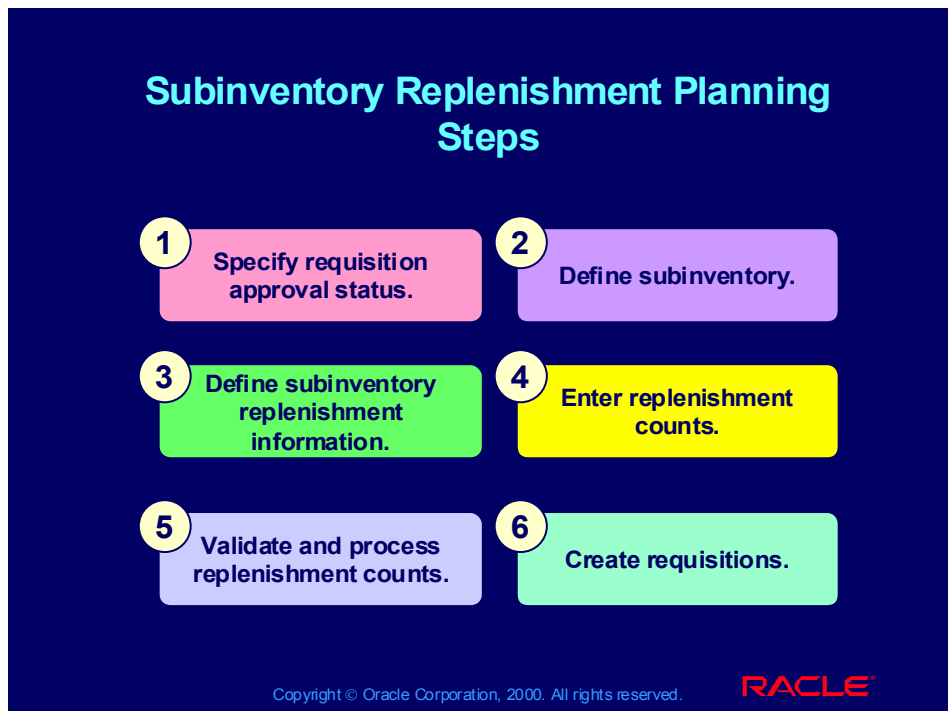
Recall that replenishment counting is a method of ordering items for nontracked subinventories. You can perform counts for the nontracked subinventories and then have Oracle Inventory check these counts against the minimum quantities that you have specified. Oracle Inventory creates requisitions that are based on the sourcing options that you specify for each item.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Subinventory Replenishment Planning Steps

---



## System Profile Values

---

### System Profile Values

**You can specify whether requisitions created should be preapproved. If you select the preapproved requisition status, requisitions created by the Replenishment Counting Process do not have to be approved in Oracle Purchasing. You can specify a requisition approval status for your Oracle Inventory installation.**

**Use the following navigation path to access the System Profile Values window:**

**(N) Setup > Profiles > System (B) Find**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Subinventory Setup Windows

Use the following windows to set up and process subinventories for which you want to enter replenishments counts:

- Subinventories
- Item Subinventories
- Replenishment Count Headers
- Replenishment Count Lines
- Process Replenishment Counts
- Purge Replenishment Counts

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Subinventories Window

---

### Subinventories Window

**(N) Setup > Organizations > Subinventories (B) New >  
(B) Open**

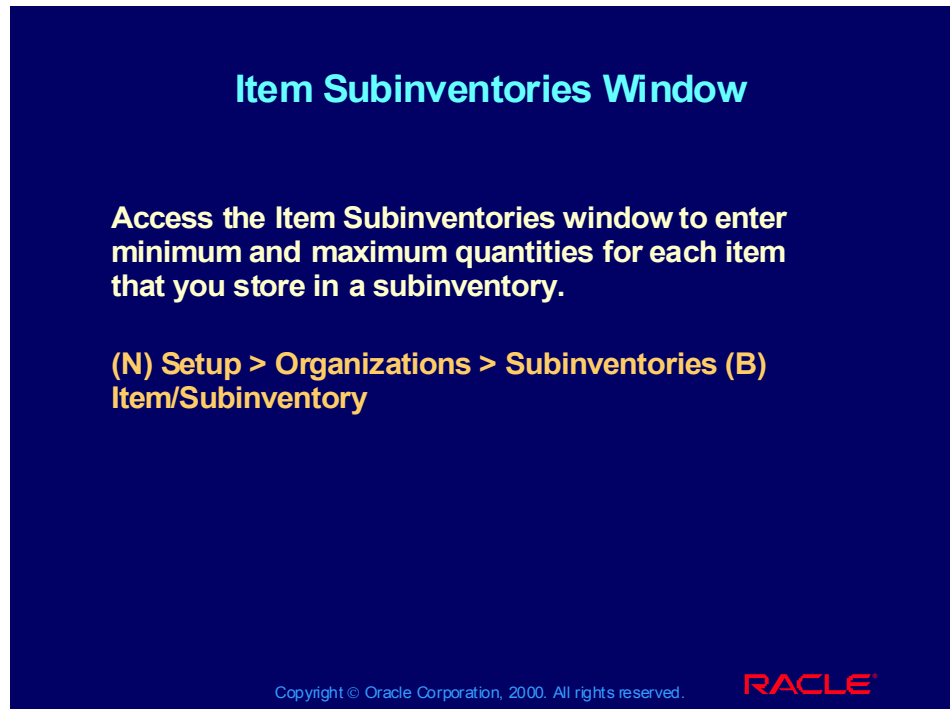
**In this window, you can define subinventories for  
which you want to perform replenishment counts.**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Item Subinventories Window

---



### Specifying Min-Max Planning

To enter replenishment counts for an item, you must specify subinventory-level min-max planning for the item.

### Entering Subinventory-Level Min-Max Minimum and Maximum Quantities

You can use the Min-max method to replenish subinventories. In one replenishment count entry method, you can order the min-max maximum quantity.

In another replenishment count entry method designed only for nontracked subinventories, you can enter an on-hand quantity, after which Oracle Inventory performs min-max calculations.

### Item Subinventories: Order Modifier Tab

In the Item Subinventories window, Order Modifier tabbed region, you specify the following information:

- Fixed-lot-size multiplier
- Minimum order quantity
- Maximum order quantity

Use the following navigation path to access the order modifiers window.

**(N) Setup > Organizations > Subinventories > (T)  
Order Modifiers**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Entering Order Modifiers

#### **Fixed-Lot-Size Multiplier**

When you perform replenishment counting, Oracle Inventory calculates order quantities that are multiples of the fixed-lot-size multiplier.

#### **Minimum Order Quantity**

When you perform replenishment counting, Oracle Inventory calculates order quantities that are greater than the minimum order quantity.

#### **Maximum Order Quantity**

When you perform subinventory replenishment, Oracle Inventory calculates order quantities that are less than the maximum order quantity.



## Replenishment Count Headers

---

### Replenishment Count Headers

**You can enter counts to replenish subinventories. Oracle Inventory replenishes subinventories according to the method that you use to enter counts. Oracle Inventory does not store on-hand quantity information for nontracked subinventories.**

**Use the following navigation path to access the Replenishment Count Header window:**

**(N) Counting > Replenishments Counts > Counts (B) New**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Entering Replenishment Count Header Information

In the Replenishment Count Header window, you enter a name and subinventory for which you want to perform replenishment counting.

## Replenishment Count Lines

---

### Replenishment Count Lines

You can select one of three replenishment count types for each item:

- On-hand quantity
- Order maximum
- Order quantity

Use the following navigation path to access the Replenishment Count Lines window:

**(N) Counting > Replenishment Counts > Counts (B) Lines**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Entering Replenishment Count Lines

You must enter replenishment count header information to enter replenishment count lines for items that are associated with the subinventory that you specify.

#### On-Hand Quantity

This method is designed only for nontracked subinventories. The item for which you select this method must be a min-max planned item.

You can count the contents of the subinventory and then enter the on-hand quantity. Oracle Inventory uses the quantity that you enter to perform min-max comparisons and to generate requisitions.

Requisition quantities are constrained by fixed-lot multiple quantities, maximum order quantities, and minimum order quantities. Oracle Inventory uses the sourcing options defined for that item and subinventory combination.

## Replenishment Count Lines (continued)

---

### Replenishment Count Lines (continued)

You can select one of three replenishment count types for each item:

- On-hand quantity
- Order maximum
- Order quantity

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Explaining Replenishment Count Types (continued)

#### Order Maximum

The item for which you select this method must be a min-max planned item. Oracle Inventory generates a requisition in the min-max maximum quantity specific to that item and subinventory combination.

Requisition quantities are constrained by fixed-lot multiple quantities, maximum order quantities, and minimum order quantities. You cannot enter a quantity if you select this option.

Oracle Inventory uses the sourcing options defined for that item and subinventory combination.

#### Order Quantity

The item for which you select this method can be planned using any replenishment planning method. With the Order Quantity count type, Oracle Inventory generates a requisition for the quantity that you enter. Requisition quantities are constrained by fixed-lot multiple quantities, maximum order quantities, and minimum order quantities. Oracle Inventory uses the sourcing options defined for that item and subinventory combination.

## Processing Replenishment Counts

---

### Processing Replenishment Counts

The replenishment processor performs the calculations that are necessary to verify whether Oracle Inventory should create requisitions. You can select whether Oracle Inventory should process the replenishment counts. You can save your changes and run the replenishment processor later.

Use the following navigation path to access the Process Replenishment Counts window and submit a replenishment counts request::

**(N) Counting > Replenishment Counts > Process Interface**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Entering Counts Using External Devices

You can use external data collection devices, such as bar code readers to enter replenishment counts. You can run the replenishment validator and processor after entering counts directly into the replenishment open interface.

#### Submitting the Replenishment Validator and Processor

The replenishment validator reads the count records that exist in the interface table. The interface table stores the counts that you enter with an external device. Oracle validates the items, subinventories, and counts, and then writes the records to the count tables. The replenishment count processor performs the calculations that are necessary to determine whether Oracle should create requisitions. Oracle creates internal or purchase requisitions according to each item's default sourcing options. Run the replenishment validator program before submitting the replenishment processor.

#### Purging Replenishment Counts

If you want to purge replenishment counts, use the following navigation path to access the Purge Replenishment Counts window:

**(N) Counting > Replenishment Counts > Purge**

## Review Question

---

### Review Question

**You typically use replenishment counting to perform counts for tracked inventory items.**

- True
- False

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Review Question Solution

You typically use replenishment counting to perform counts for tracked inventory items.

- True
- False

**False:** Replenishment counting is a method of ordering items for *nontracked* subinventories.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Agenda

---

### Agenda

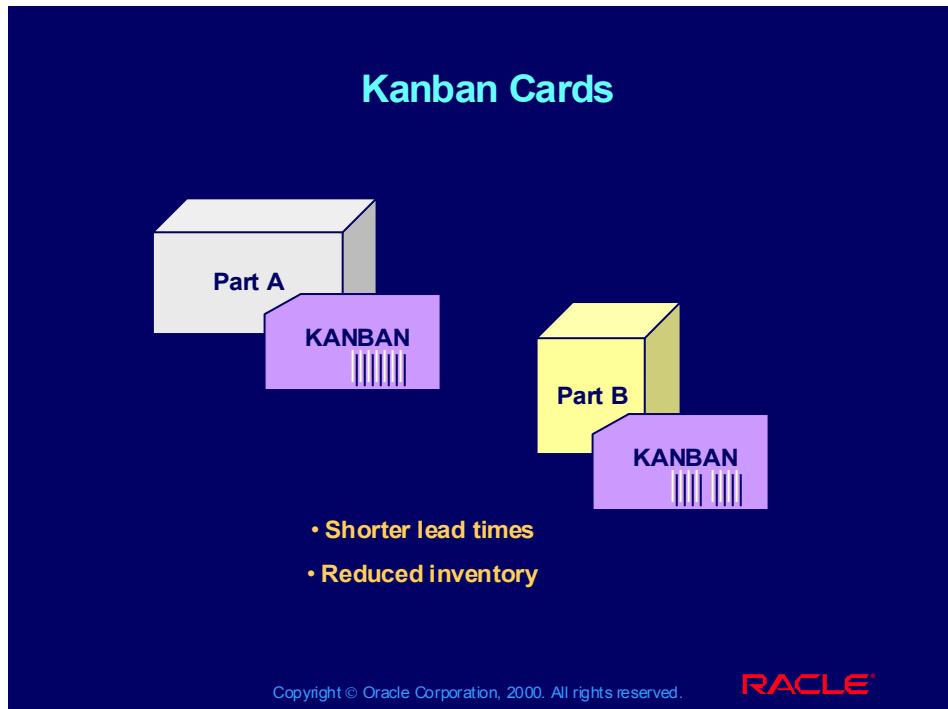
- Module Overview
- Performing Reorder-point Planning
- Performing Min-max Planning
- Performing replenishment counting
- ✓ **Generating kanban cards**
- Describing replenishment move-orders
- Setting up available to promise (ATP)
- Setting up Inventory profile values

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Kanban Cards

---



### Describing Kanban Replenishment

Recall that a kanban system is a self-regulating pull system that leads to shorter lead times and reduced inventory. Kanban systems are typically applied to items with relatively constant demand and medium-to-high production volume.



### Kanban Planned Items

To define a kanban planned item, you must set the Release Time Fence attribute in the MPS/MRP Planning attribute group to the Kanban Item (Do Not Release) option in the Master Items window. Use the following navigation path to access the MPS/MRP Planning attribute:

**(N) Items > Master Item**

Only kanban planned items can be used in defining a pull sequence.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Pull Sequence Sources

---

### Pull Sequence Sources

After you set the master item Release Time Fence, you can define kanban pull sequences. Use the following navigation path to access the Pull Sequences Summary window:

**(N) Kanban > Pull Sequences > (T) Source**

From the Pull Sequence Summary window, you can view existing kanban cards or generate new ones.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Defining Pull Sequence Sources

For every kanban planned item, you must define a pull sequence, which is a series of kanban locations that model the replenishment network on the shop floor. A kanban location can be a subinventory locator. The replenishment source for a kanban location can be another kanban location, a production line, or an external source. You can use locators even if locator control is turned off at the organization, and item levels.

Kanbans can be sourced from an external supplier or an internal organization. A Supplier source type kanban triggers a purchase request to the supplier, while an Inter-org. source type kanban results in an inter-organization transfer.

### Kanban Cards

Kanban cards are created for an item, subinventory, and locator (optional). They are uniquely identified by a kanban number. For cards generated from a kanban pull sequence, the number is automatically generated. For manually defined cards, both replenishable and nonreplenishable, you can enter an unused kanban number or let the system create the number.

Use the following navigation path to access the kanban generation window:

**(N) Kanban > Pull Sequences (T) Kanban**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Describing Replenishment Cards

You cannot override the quantity for generated cards, but you can add additional cards or delete existing cards from the pull sequence to control the inventory in the replenishment chain.

A supply source defaults from the sourcing rules if a sourcing rule is available for the item and kanban location. Only the primary supplier, based on the split percentage and ranking, is used. You can manually override the quantity and supply source on a pull sequence only before the cards that have been printed. Changes to the pull sequence are not reflected until the old cards are deleted and new ones are created. Updates to the sourcing rules apply only to cards created after the update.

### Kanban Card Status

**Kanban cards are generated with a default card status of Active. When you define a card manually, you can initially give it either Active or Hold status. You can terminate use of a card by changing the card status to Canceled, but you cannot reverse this change. Only canceled cards can be deleted.**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Supply Status

---

### Supply Status

All of the following supply status codes can be set manually. With the exception of the In-Transit status, all statuses can also be set automatically.

- New
- Empty
- Full
- Wait
- In-Process
- In-Transit

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Describing Supply Statuses

The following table describes supply statuses in more detail:

Supply Status	Description
New	Indicates that the kanban has just been created and is not yet part of the replenishment chain
Empty	Indicates that the kanban is empty and that a replenishment signal has been generated
Full	Indicates that the kanban has been replenished
Wait	Indicates that the kanban is waiting until the minimum order quantity has been met by the aggregation of cards
In-Process	For the Supplier source type, indicates that the purchase order has been approved. For the Interorganization source type, indicates that the internal requisition has been approved.
In-Transit	Indicates that you have received an advanced shipping notice (ASN) that the kanban has shipped, but that you have not yet received it

## Kanban Replenishment Sources

---

### Kanban Replenishment Sources

**With Oracle Inventory, Release 11i, the following options for kanban replenishment sourcing have been added to the application:**

- Intra-org replenishment
- Production replenishment

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### **Describing Kanban Sources of Replenishment**

If you specify a kanban replenishment source of intra-organization, then Oracle Inventory creates a preapproved move order that is referenced to the corresponding kanban card.

If you specify a kanban replenishment source of intra-organization, then Oracle Inventory creates a work order or repetitive schedule.

### Card Printing

**You can print kanban cards for a replenishment plan or a replenishment chain when you generate the cards. You can also print cards individually if the card information is complete. You can print duplicate cards only if the original is lost or voided. You are given a warning message before.**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Practice 3 Overview: Generating Kanban Cards

---

### Practice 3 Overview: Generating Kanban Cards

**Purpose:** In this practice, you will perform the following activities:

- Setup item pull sequences
- Generate kanban cards

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Practice 3: Generating Kanban Cards

#### Instructions

**Note:** Wherever you see XX, substitute your student number.

1. Use the Source, Kanban, and Planning tabs to set up a pull sequence for your item that has been kanban enabled.

(N) Kanban > Pull Sequences

- |                   |   |
|-------------------|---|
| • Organization    | M1 - Seattle Manufacturing                |
| • Item            | Select your kanban enabled item           |
| • Subinventory    | Stores                                    |
| • Locator         | 99.110.50 (or provided by the instructor) |
| • Supplier        | Advanced Networking Devices               |
| • Supplier Site   | Santa Clara                               |
| • Calculate field | Number of cards                           |



## Practice 3: Generating Kanban Cards

**Practice 3: Generating Kanban Cards**

Item	Subinventory	Locator	Source Type	Supplier	Sup Site
99-Item03	Stores	99,110.50..	Supplier	Network Device	SAN

Item Description: Slot Cover  
Source Organization:

Generate Cards   Cards   Open

Copyright © Oracle Corporation, 2000. All rights reserved. **RACLE**

### Practice 3: Generating Kanban Cards

1. (Continued from Step 1 on the previous page).

- Size 10
- Cards 10
- Minimum Quantity 20
- Lead time 3
- Allocation % 75
- Safety Stock 1

When you finish entering the pull sequence information, save your work.

2. Click the Generate Cards button to generate your kanban cards.
3. Click the Cards button to view your kanban cards for accuracy.
4. For the first two cards, click the Open button to view all of the details for the selected cards.
5. For the first card, click the Replenish button to generate a replenishment signal and to verify that the supply status is now Wait.
6. For the second card, click the Replenish button to generate a replenishment signal and to verify that the supply status of the card is Empty.

## Agenda

---

### Agenda

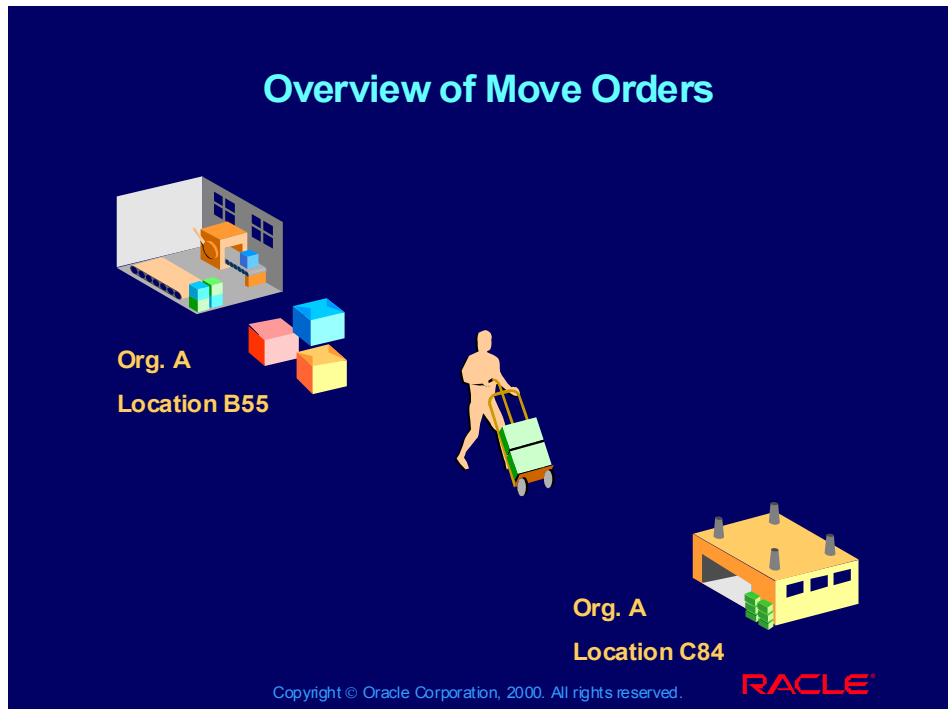
- Module Overview
- Performing Reorder-point Planning
- Performing Min-max Planning
- Performing replenishment counting
- Generating kanban cards
- ✓ Describing replenishment move-orders
- Setting up available to promise (ATP)
- Setting up Inventory profile values

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Overview of Move Orders

---



### Describing Move Orders

Move orders are requests for the movement of material within a single organization. Move orders enable planners and facility managers to request the movement of material within a warehouse or facility for purposes, such as replenishment, material storage relocations, and quality handling. You can generate move orders either manually or automatically depending on the source type that you use.

## Move Order Source Types

---

### Move Order Source Types

To perform move orders, you must select one of the following move order source types:

- Move order requisitions
- Replenishment move orders
- Pick wave move orders

This module describes replenishment move orders. For more information about move order requisitions and pick wave move orders, access the Oracle Inventory online help topic for move orders.

(Help) Oracle Inventory > Transactions > Overview of Move Orders

Copyright © Oracle Corporation, 2000. All rights reserved.

**ORACLE**

### Setting the Inventory Source Type

For Min-max planning and replenishment counting, you can set the subinventory source type at the following levels:

- Master/Organization Items
- Subinventory
- Item Subinventory

For kanban pull sequence cards, you set the subinventory source type at the Pull Sequence level.

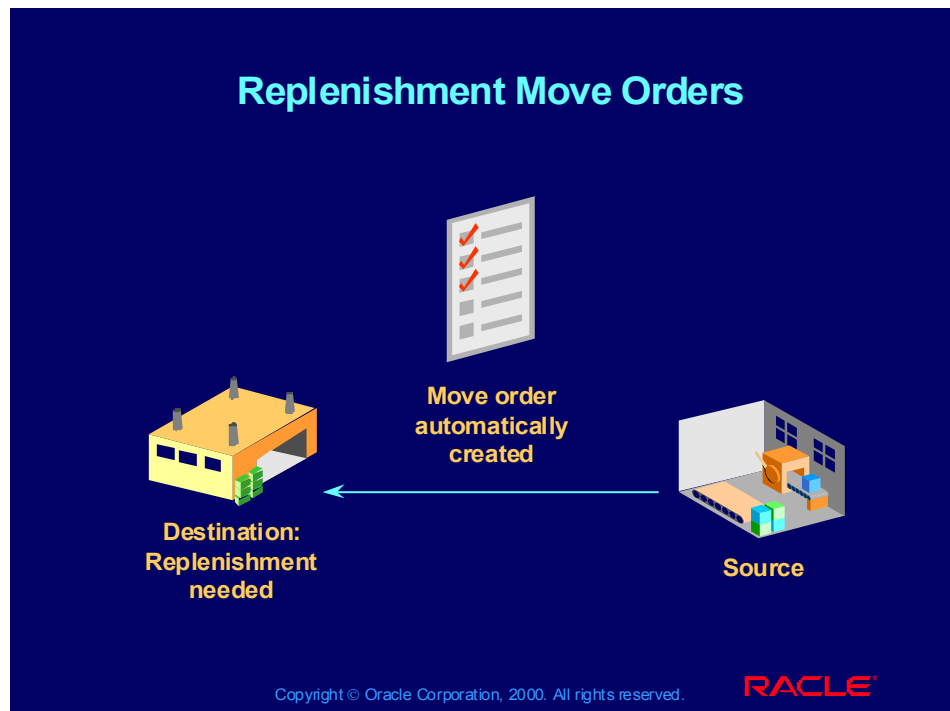
After you set up the subinventory source type and other move order attributes, Oracle Inventory will automatically create a preapproved move order when you run the corresponding planning report, such as the Min-Max Planning report.

For more information about specifying the inventory source type and setting up move orders, access the following Oracle Inventory online help:

(Help) Oracle Inventory > Overview of Move Orders > Setting Up Move Orders

## Replenishment Move Orders

---



### Describing Replenishment Move Orders

Oracle Inventory enables you to automatically create pre-approved move orders using any of the following replenishment planning methods:

- Min-Max planning
- Replenishment counting
- Kanban replenishment

When using one of these planning methods, Oracle Inventory generates move orders if the material is sourced from another inventory location within the organization.

## Submitting the Min-Max Planning Requests

---

### Submitting the Min-Max Planning Requests

In addition to setting up planning attributes, Min-max planning involves submitting a concurrent process that generates the Min-max planning report. You can also perform exception reporting with the Min-max planning reporting feature.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Submitting the Min-Max Planning Report

When you submit the Min-max planning report, you must specify a number of parameters, including parameters that address the following:

- Nettable subinventories
- Demand quantities
- On-order quantity information
- Requisitions and WIP unrealized jobs
- Exception reporting

### Using Nettable Subinventories

Oracle Inventory enables you to use on-hand quantities that exist in either nettable or non-nettable subinventories, or both.

## Review Question

---

### Review Question

**You must specify a Pick Wave Move Order source type if you want Oracle Inventory to automatically generate move orders when you run a replenishment planning method, such as Min-Max planning.**

- True
- False

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Review Question

---

### Review Question

**You must specify a Pick Wave Move Order source type if you want Oracle Inventory to automatically generate move orders when you run a replenishment planning method, such as Min-Max planning.**

- **True**
- **False**

**False: You must specify a Replenishment Move Orders source type if you want Oracle Inventory to automatically generate move orders when you run a replenishment planning method.**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**



## Agenda

---

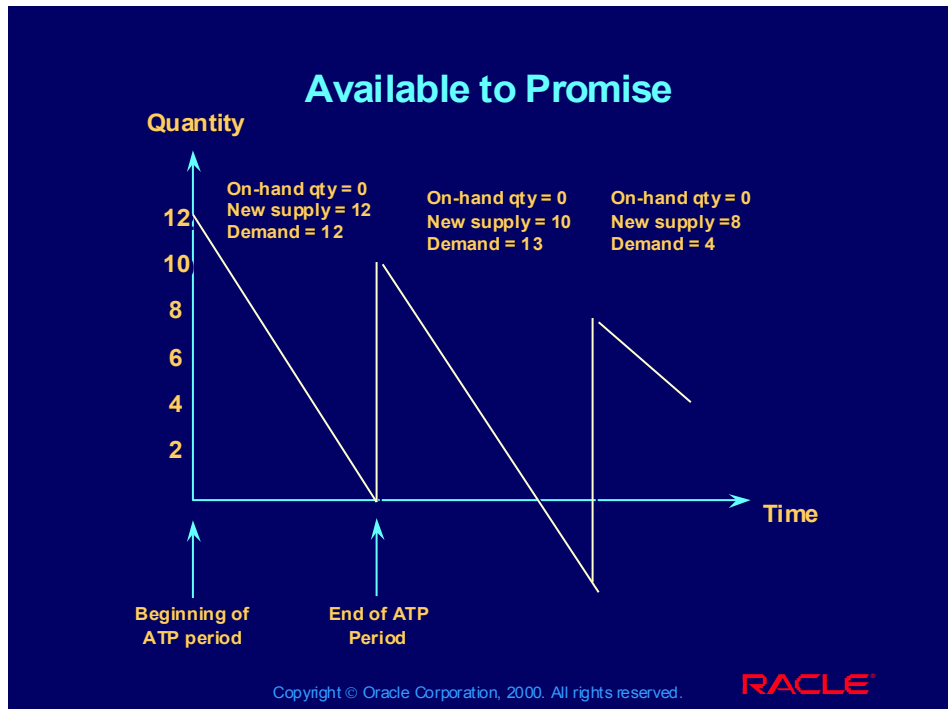
### Agenda

- Module Overview
- Performing Reorder-point Planning
- Performing Min-max Planning
- Performing replenishment counting
- Generating kanban cards
- Describing replenishment move-orders
- ✓ **Setting up available to promise (ATP)**
- Setting up Inventory profile values

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Available to Promise



### Describing Available to Promise

Available to promise (ATP) represent the quantity available for sale at any given period. The basic formula for ATP is

ATP quantity = on-hand quantity + supply - demand - shortage

**Note:** The shortage in the second period is covered in the third period by using the concept of forward consumption of shortage, which is a concept explained later in this module.

The following table provides period ATP quantities for the example shown in the slide:

Periods →	1	2	3
Beginning on-hand quantity	0	0	0
New supply	12	10	8
Period demand	12	13	4
Period ATP	0	- 3	1

Oracle Inventory enables you to define different rules that govern what is considered supply and demand.

### ATP Rules and ATP Checks

**Defining ATP rules includes the following:**

- Computation options
- Time fence options
- Supply sources
- Demand sources

**Setting up items and bills for ATP checks includes the following:**

- Item ATP rule
- Check ATP attribute
- ATP components attribute
- Bill Component Check ATP attribute

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Uses of ATP in Oracle Inventory

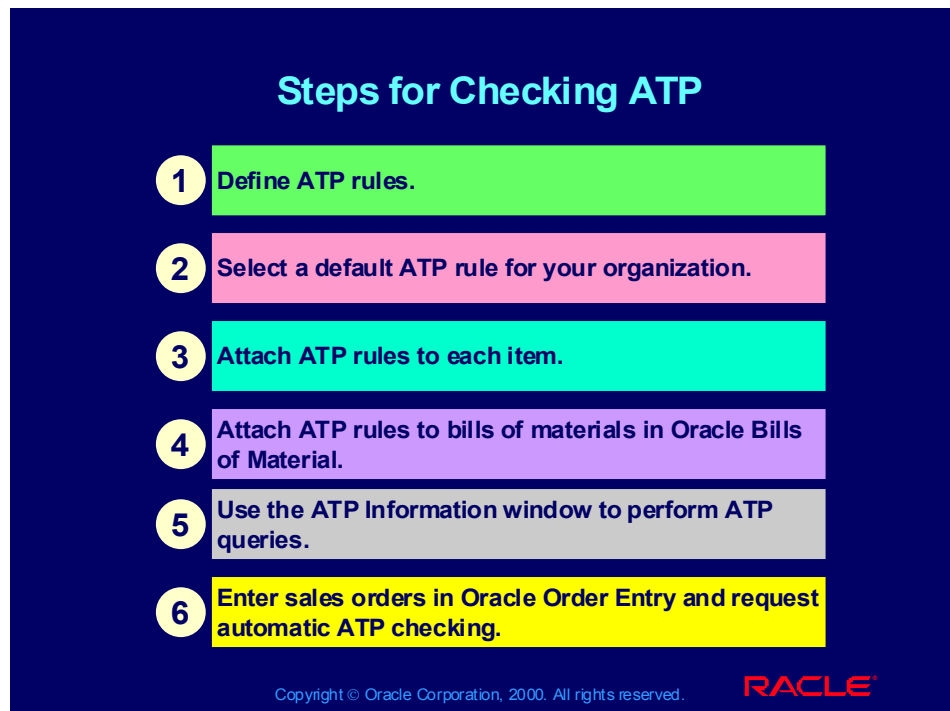
- You can view the earliest available data for a specific quantity of an item or a group of items and the available quantity of an item for a specific date.
- You can view the supply, demand, and ATP item quantities for the periods that fall between the current date and the end of the ATP horizon.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Steps for Checking ATP

---

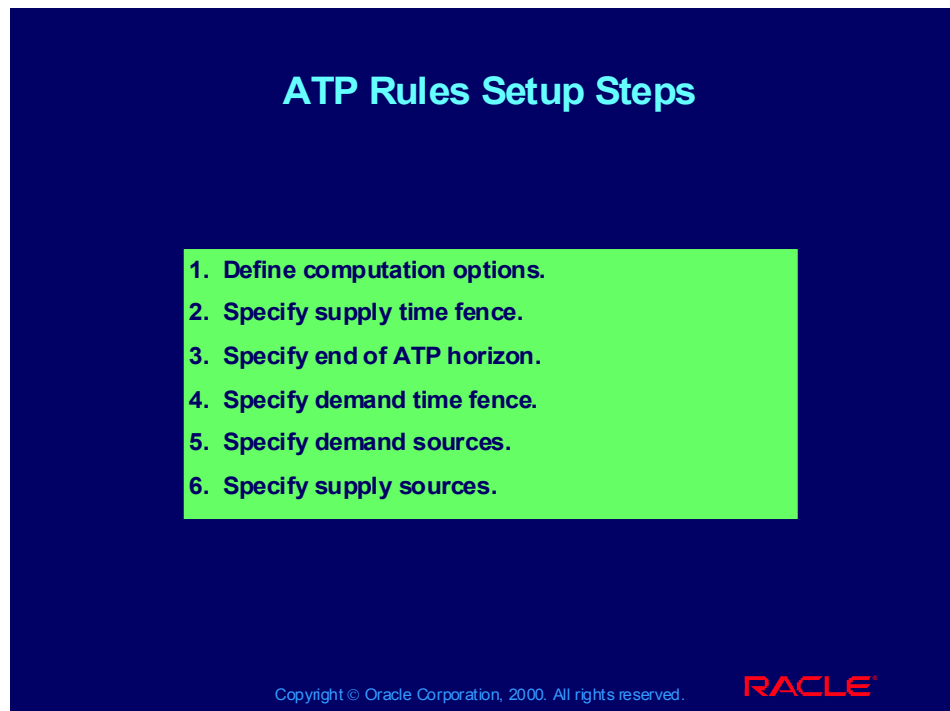


### Checking ATP

**Note:** Oracle Inventory displays the organization-level default ATP rule whenever you perform ATP queries in your organization.

## ATP Rules Setup Steps

---

A presentation slide with a dark blue background. At the top, the title "ATP Rules Setup Steps" is written in light blue. In the center, a yellow rectangular box contains a numbered list of six steps. At the bottom left, there is a small copyright notice, and at the bottom right, the "RACLE" logo is displayed in red.

**ATP Rules Setup Steps**

1. Define computation options.
2. Specify supply time fence.
3. Specify end of ATP horizon.
4. Specify demand time fence.
5. Specify demand sources.
6. Specify supply sources.

Copyright © Oracle Corporation, 2000. All rights reserved. **RACLE**

### Defining an ATP Rule

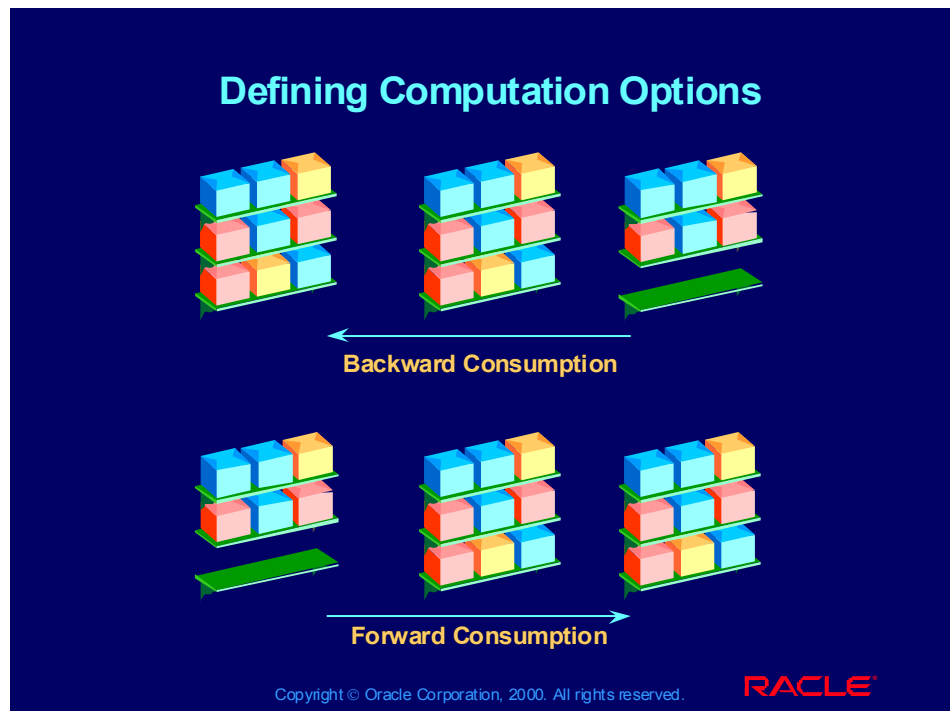
Use the following navigation path to access the ATP Rules window:

(N) Setup > Rules > Available to Promise

You can use the following equation to calculate the ATP quantity for each supply period.

Period ATP = (period supply) – (period demand)

## Defining Computation Options



### Describing ATP Consumption Options

When you define ATP rules, you must specify computation options. Computation options govern how to calculate the ATP quantity in each period. You can use computation options individually or in combination.

#### Forward Consumption of Shortage

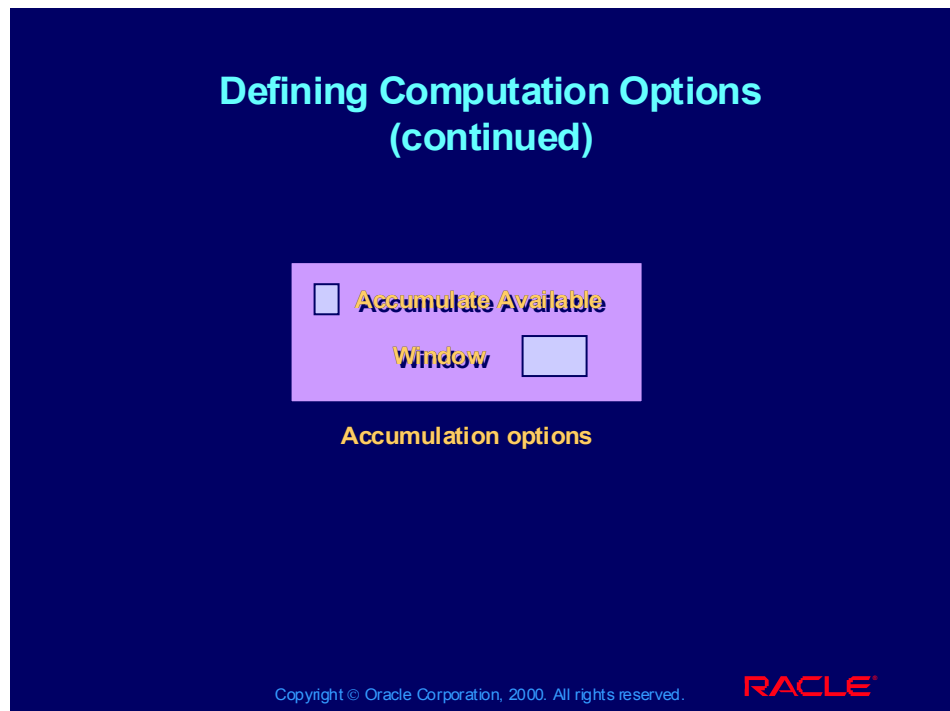
You can calculate ATP information by using a surplus quantity of an item from future ATP periods to cover an earlier period shortage. If the period ATP is negative, then you can go forward through the supply periods, one at a time, and subtract the shortage from the available quantity. You can keep going forward until the shortage disappears or you run out of periods.

#### Backward Consumption of Shortage

You can calculate ATP information by using the surplus quantity of an item from prior ATP periods to cover a period shortage. If the period ATP is negative, you can go backward through the supply periods, one at a time, and subtract the shortage from the available quantity. You can keep going backward until the shortage disappears or you run out of periods.

## Defining Computation Options (continued)

---



### Determining ATP using Accumulation Options

You can use the Accumulate Available option to calculate ATP by carrying over the available quantity of an item from one ATP period to the next. **Note:** This option assumes backward consumption of shortage.

### Entering an Accumulation Window

You can also enter the number of workdays by which to limit the accumulation of available supply. The Accumulation Window is measured in workdays based on the organization calendar and exception set.

The Accumulation Window option prevents the commitment of near-term supply to orders that have requirement dates far into the future. The Accumulation Window applies to only the following two computation options:

- Accumulate Available
- Backward Consumption



## Specifying Supply and Demand Time Fences

---

### Specifying Supply and Demand Time Fences

**A time fence is the total lead time required to purchase or manufacture an item. You can define item time fence options to provide timing information for the ATP calculation.**

**The ATP calculation algorithm uses the following time fences:**

- **Past-due-supply time fence**
- **Past-due-demand time fence**
- **Infinite-supply time fence**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Entering Past Due Supply and Demand Days

#### **Past-Due-Supply Days**

The ATP process does not consider any supply scheduled before the past-due-supply time fence date. The ATP process considers all supply from the beginning of the past-due-supply time fence date to the current date as supply for the current date.

Past-due-supply time fence date = (current date) – (past-due-supply days)

#### **Past-Due-Demand Days**

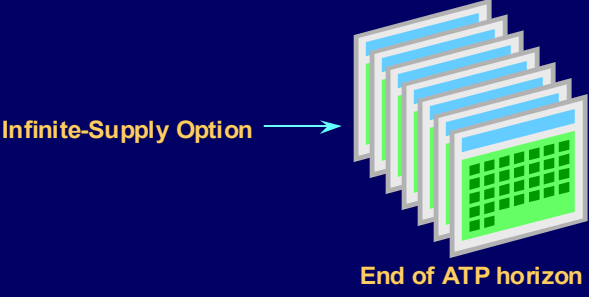
The ATP process does not consider any demand scheduled before the past-due-demand time fence date. The ATP process considers all demand from the beginning of the past-due-demand time fence date to the current date as demand for the current date.

Past-due-demand time fence = (current date) – (past-due-demand days)

## Specifying Supply and Demand Time Fences (continued)

---

**Specifying Supply and Demand Time Fences (continued)**



Infinite-Supply Option → End of ATP horizon

Options

- Cumulative manufacturing lead time
- Cumulative total lead time
- Total lead time
- User-defined time fence

RACLE

Copyright © Oracle Corporation, 2000. All rights reserved.

### Selecting an Infinite-Supply Option

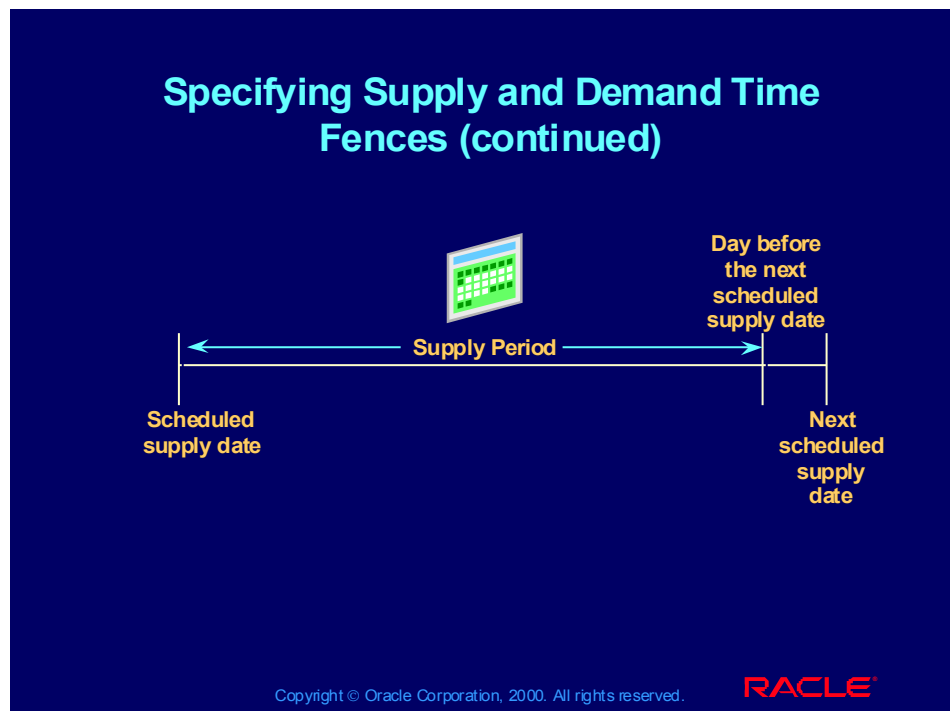
The infinite-supply time fence date is the end of the ATP horizon. Oracle Inventory does not consider supply sources scheduled on or after this date in ATP calculations. The infinite-supply option represents the total time beyond which the ATP process assumes that infinite supply is available to cover any scheduled demand.

You can select one of the following infinite-supply options:

- Cumulative manufacturing lead time: The manufacturing lead time of an assembly plus the largest adjusted cumulative manufacturing lead time of its components
- Cumulative total lead time: The total lead time of an assembly plus the largest adjusted cumulative total lead time of its components
- Total lead time: The sum of the preprocessing, processing, and postprocessing lead times of an item
- User-define time fence: A lead time that you specify for the item

## Specifying Supply and Demand Time Fences (continued)

---



### Specifying a Supply Period

Oracle Inventory designates a period as beginning on a scheduled supply date and ending on the day before the next scheduled supply date. A supply period can cover several days or be a minimum of one day.

If supply occurs on a nonworkday, the ATP calculation considers that supply as belonging to the next workday. If multiple supply events occur on the same day, the ATP process considers the total supply.

## Specifying Demand Sources

---

### Specifying Demand Sources

**You can define demand sources for each ATP rule. Oracle Inventory includes in the ATP calculation only those demand sources that you enable.**

**In addition to Oracle's predefined sources, you can use your own demand source. To use your own demand sources, you must populate the user-defined demand interface table with your external demand information.**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Describing ATP Demand

ATP demand is the sum of all demand quantities in the supply period. If demand occurs on a nonworkday, the ATP calculation considers that demand as belonging to the previous workday.

#### **ATP by Demand Class Checkbox**

If you select the ATP by Demand Class check box, the ATP calculation considers only supply and demand for a particular demand class. The demand class feature enables you to forecast, plan, and promise based on subdivisions of your demand. For example, a demand class might represent a large customer or a group of related customers.

If you select ATP by Demand Class, Oracle Inventory considers only the following sources of supply:

- Discrete MPS
- Repetitive MPS
- Discrete WIP
- Repetitive WIP
- Nonstandard WIP

## Specifying Supply Sources

---

### Specifying Supply Sources

**You can define supply sources for each ATP rule.  
Oracle Inventory includes in the ATP calculation only  
for those supply sources that you enable.**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### **Using the Available On-Hand Quantity as the Supply Source**

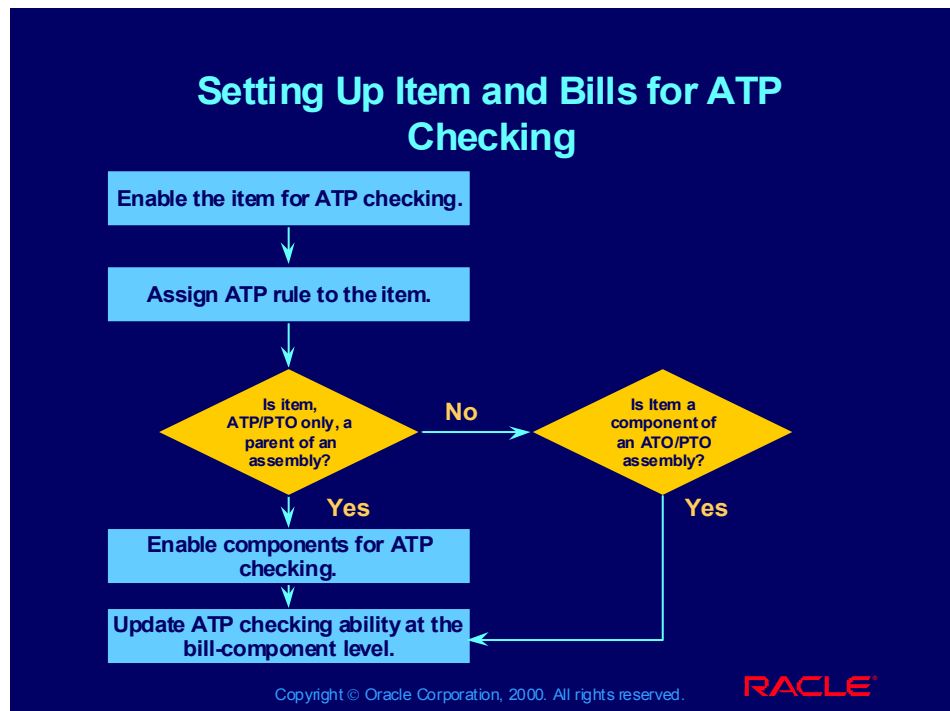
You can decide whether to include available on-hand quantity as a source of supply. However, you should not typically use available on-hand quantity as supply in make-to-order and assemble-to-order environments.

### **Including User-Defined Supply as a Supply Source**

In addition to Oracle's predefined supply sources, you can use your own supply source. However, you must populate the user-defined supply interface table with your external supply information.

## Setting Up Item and Bills for ATP Checking

---



### ATP Checking

**You set up ATP checking in the Master Item window, Order Management tab.**

**Use the following navigation path to access the Master Items window.**

**(N) Items > Master Items > (T) Order Management**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Enabling ATP Checking When Placing a Demand

If you enable the Check ATP attribute, the item must pass an ATP test before you can place a demand for it in Oracle Order Management. When you place a demand for the item in Oracle Order Management, the ATP process checks to see if there is sufficient quantity.

If you decide not to enable the Check ATP attribute, then you can place a demand for the item even if there is not sufficient stock to satisfy the demand. You should not enable the Check ATP attribute for items that are noncritical, rarely out of stock, on a short manufacturing cycle, or replenishable on short notice.

### Specifying an Item ATP Rule

Oracle Inventory uses the ATP rule that you assigned to check ATP when you place a demand for the item in Oracle Order Management. If you do not specify an ATP rule for the item, the ATP process uses the organization-level default ATP rule that you enter in the Organization Parameters window.

### ATP Checking (continued)

You can select the ATP Components attribute of Oracle Inventory only if you select one of the following attribute values for the item:

- Assemble to Order
- Pick Components
- A phantom WIP Supply Type

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

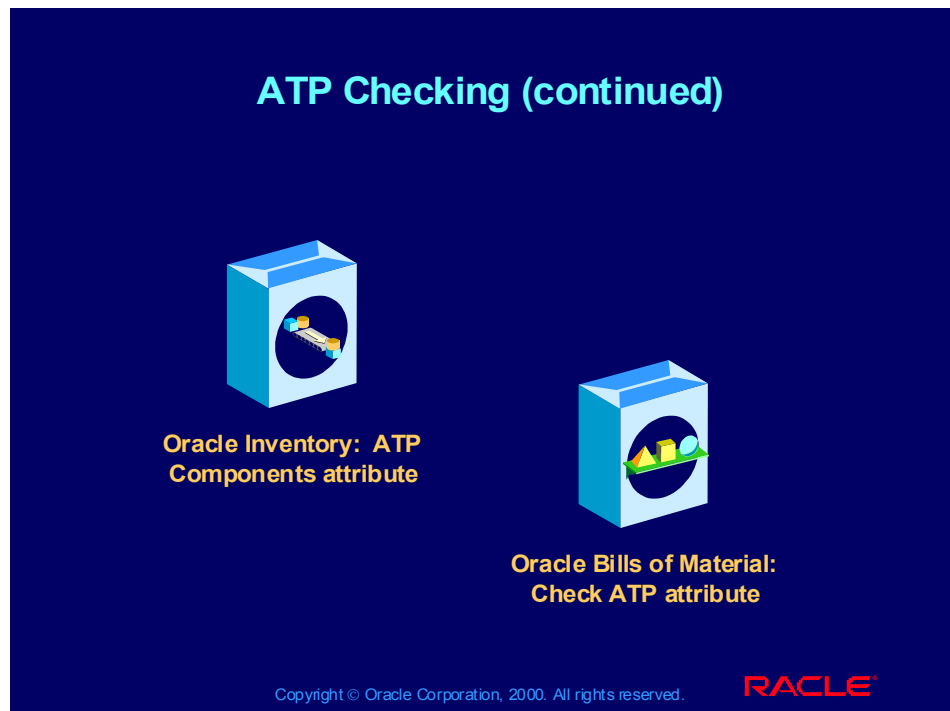
### Selecting the ATP Components Attribute

If you enable the ATP Components attribute for an assembly, you can place a demand for the assembly only if all of the components with the enabled Check ATP attribute at the bill-component level pass the ATP check. If you enable the Check ATP attribute for the assembly, then the assembly must also pass the ATP check before you can place a demand for it.



## ATP Checking (continued)

---



### Setting the Check ATP attribute at the Bill Level

Use the following navigation path to access the Bill of Material window:

Navigate to the Oracle Bills of Material application, (N) Bills > Bills.

If an item is a component in a bill of material, you can change the value of the Check ATP attribute, at the bill-component level, to something other than what you set at the master-item level.

If you enabled the Check ATP attribute when you defined the item, you can decide whether to enable or disable the component Check ATP attribute.

If you decide not to enable the Check ATP attribute when you defined the item, Oracle Inventory does not enable the bill component Check ATP attribute.

This enables you to set up items that require passing ATP checks when ordered directly, but that do not require passing ATP checks when they are components of an assembly.

## Viewing ATP Criteria

---

### Viewing ATP Criteria

Oracle Inventory calculates ATP quantities based on the ATP rule that you select in the ATP Criteria window. Use the following navigation path to access the ATP Criteria window:

**(N) On-hand, Availability > Available to Promise**

Copyright © Oracle Corporation, 2000. All rights reserved. **RACLE**

### Viewing ATP Information for Individual Items

When you set up ATP criteria, you must specify the following information:

- Required quantity
- Required date

Oracle Inventory then displays the following ATP results:

- Earliest date on which the required quantity will be available
- ATP quantity for the required date

### Viewing ATP Information for a Group of Items

Oracle Inventory returns the date when all for the items in the group will be available. You can view the ATP result and supply and demand detail for each item by navigating to the ATP by Period and Supply/Demand Detail windows, respectively.

### Viewing ATP Information for a Demand Class

You can view ATP information for individual items and groups of items that belong to a particular demand class.

## Practice 4 Overview: Setting Up ATP Rules and Performing ATP Checking

---

### Practice 4 Overview: Setting Up ATP Rules and Performing ATP Checking

**Purpose:** In this practice, you will define and ATP rule and perform ATP checking for an item.

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Practice 4: Setting Up ATP Rules and Performing ATP Checking Instructions

**Note:** Wherever you see XX, substitute your student number.

#### 1. Define an ATP rule.

(N) Setup > Rules > Available to Promise

- Name XX-ATP Rule
- Description Your ATP rule
- Accumulate AvailableLeave blank (no)
- Past due demand days 50
- Past due supply days 50
- Infinite supply option User defined time fence
- Infinite supply days 15
- ATP by demand class No
- Leave all other options as is
- Save your work. (M) File > Save

## Practice 4: Setting Up ATP Rules and Performing ATP Checking

Copyright © Oracle Corporation, 2000. All rights reserved.

# RACLE

2. Apply your ATP rule to one of your items that has existing stock.  
(N) Items > Master Items
  - Enter your stocked item in the Find window and then click the Find button.
  - In the ATP Rule field, select your ATP rule from the list of values.

(N) On-Hand Availability > Available to Promise

4. Can you promise 1000 of these items on the date that you entered? \_\_\_\_\_
5. How many can you promise on that date? \_\_\_\_\_
6. When can you promise the rest?

Copyright © Oracle Corporation, 2000. All rights reserved.

## Agenda

---

### Agenda

- **Module Overview**
- **Performing Reorder-point Planning**
- **Performing Min-max Planning**
- **Performing replenishment counting**
- **Generating kanban cards**
- **Describing replenishment move-orders**
- **Setting up available to promise (ATP)**
- ✓ **Setting up Inventory profile values**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Inventory Profile Values

**Profile values specify how Oracle Inventory processes and controls access to data. Profile values can typically be set at one or more of the following levels:**

- **Site**
- **Application**
- **Responsibility**
- **User**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

## Inventory Profile Values (continued)

---

### Inventory Profile Values (continued)

- You use the **Personal Profile Values** window to set profile values at the user level.
- **System administrators** use the **System Profile Values** window to set profile values at the site, application, responsibility, and user levels.
- Use the following navigation path to access the **System Profile Values** window:  
**(N) Setup > Profiles > System**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**

### Setting Up System Profile Values

Use the Find feature in the System Profile Value window to locate the following system profile values that you should set up for Oracle Inventory planning:

- Min-max Reorder Approval
- RC Line Failure
- RC Requisition Approval
- Enter Replenishment Count form

### Setting Up Personal Profile Values

Use the following navigation path to access the personal profile values that you should set up for Oracle Inventory planning:

(N) Setup > Profiles > Personal

- Min-max Reorder Approval
- RC Line Feature
- RC Requisition Approval
- Enter Replenishment Count form

### Summary

**This module explained the following topics:**

- **Performing Reorder-point planning**
- **Performing Min-max planning**
- **Performing replenishment counting**
- **Generating kanban cards**
- **Describing replenishment move orders**
- **Setting up available to promise (ATP)**
- **Performing ATP checks**
- **Setting up inventory planning profile options**

Copyright © Oracle Corporation, 2000. All rights reserved.

**RACLE**