

# **Oracle Quality Setup and Implementation Release 11i**

**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:

- Thorough knowledge of inventory and shop floor processes.
- Working experience with quality data collection and analysis.

### Prerequisites

- There are no prerequisites for this course.

### How This Course Is Organized

Oracle Quality: Setup and Implementation Release 11*i* is an instructor-led course featuring lecture and instructor demonstrations. Online demonstrations and written practice sessions reinforce the concepts and skills introduced.

## Related Publications

### Oracle Publications

Title	Part Number
Oracle Quality User's Guide	A75098-01

### 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 <b><i>algorithm</i></b> 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.

# **Course Introduction**

## **Chapter 1**

## Oracle Quality: Setup and Implementation Release 11i

### Course Introduction

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### Course Objectives

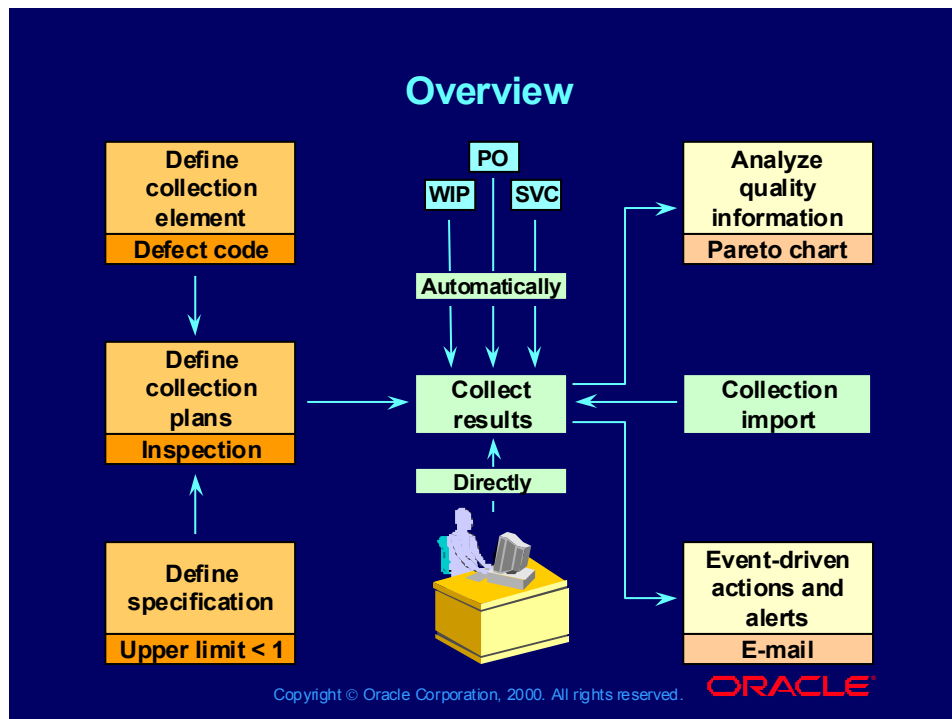
**After completing this course, you should be able to do the following:**

- **Set up your quality data-collection structure**
  - Define collection elements
  - Define specifications
  - Define collection plans
- **Discuss the issues involved in setting up the data-collection structure**

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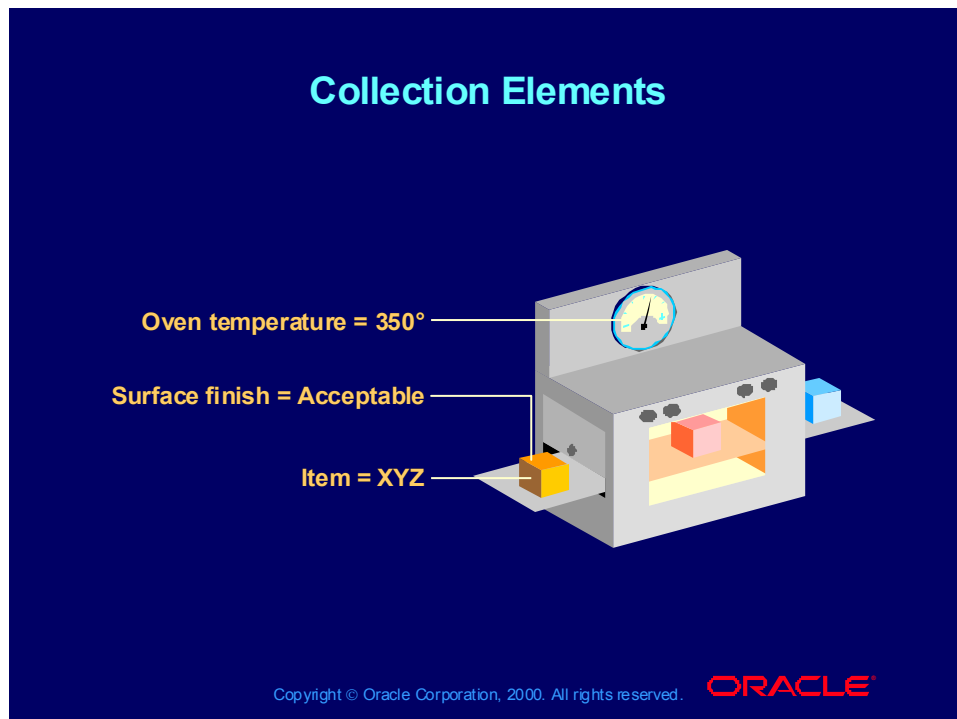
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## Overview



## Collection Elements

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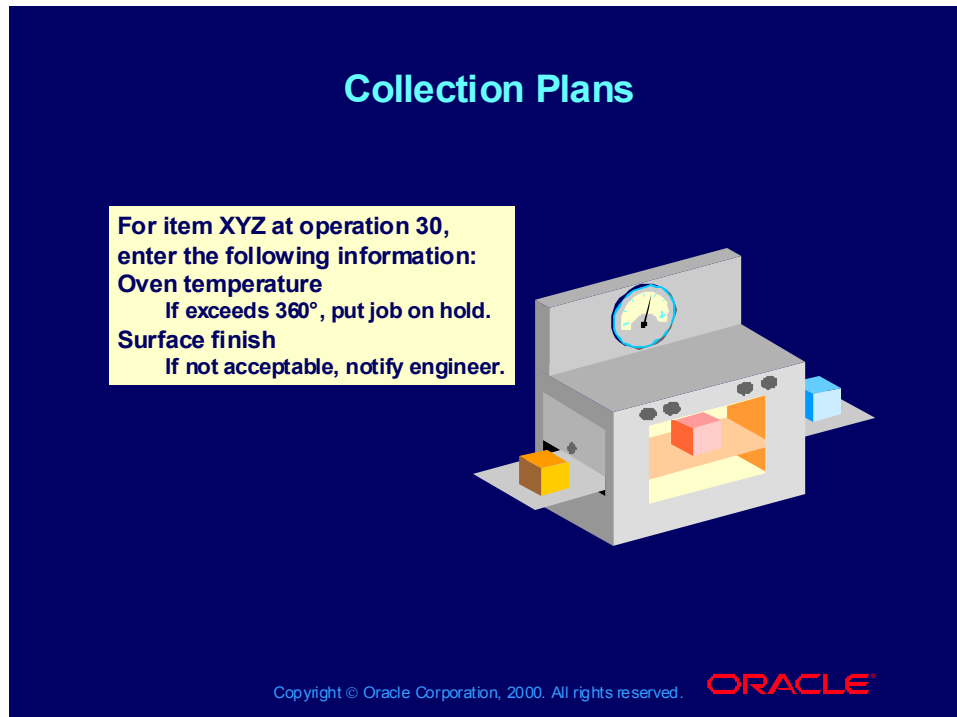
### Overview

Before you can collect data with Oracle Quality, you must first set up your data-collection structure. The basic building block of this structure is the collection element, which is used in both the specification and the collection plan.

Collection elements define the characteristics of the product or process for which you are collecting, analyzing, and reporting data. For each collection element, you can specify a list of acceptable values or specification limits, such as target value and upper and lower limits.

## Collection Plans

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### Overview of Collection Plans

Collection plans are similar to test or inspection plans. Collection plans specify the collection elements to use in collecting data. Collection plans specify when and how to collect the data as well as the actions to take based on the data collected.



# Specifications

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# Specifications

Global Computers				
Item Specification				
Specification 506	Effective Date 5/5/97	Revision 5/12/97	Expiration Date 12/2/98	
Item — 2601				
Item Name — Automotive Pinion				
Process Procedure Pinion stock is cut with spines and the shaft is turned to specifications to fit sleeve.				
Test Condition Failure code information has been established according to a quality control plan and must be entered, process is in operation—lot #12, heat #3 and runs 20 pieces per hour, quality data is being collected manually. Pieces for rework must be marked with lot # and heat #.				
Characteristics	UOM	Target Value	Lower Spec Limit	Upper Spec Limit
Shaft Diameter	Inches	3.14	3.135	3.145
Spine Cut Depth	Inches	0.6	0.595	0.605
Shaft Cut Length	Inches	22.5	22.494	22.505
Disposition of Noncompliant Product Disposition Code 1: Scrap when measurements are less than lower spec limit Disposition Code 2: Rework when measurements exceed upper spec limit Disposition Code 3: Production when measurements are within spec limits				

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## Overview of Specifications

Specifications describe the requirements of a product. You can define specification limits for key characteristics of the product that you produce.



# **Collection Elements**

## **Chapter 2**

## Collection Elements

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### **Oracle Quality: Setup and Implementation Release 11i**

#### **Collection Elements**

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### Objectives

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

- **Define quality collection elements**
- **Assign acceptable values to collection elements**
- **Define default specification limits for collection elements**
- **Define action rules for collection elements**

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## Quality Collection Elements

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### Overview

The collection element is the foundation of the Oracle Quality application. The characteristics of the product or process define the collection elements. Quality collection elements represent the most basic data that you can collect and analyze.

You can use collection elements to accomplish the following:

- Identify the object that you are collecting information about:
  - Item
  - Lot number
  - Serial number
- Provide cross-reference information for analysis:
  - Supplier
  - Customer
  - Department
- Provide reference information:
  - Purchase order
  - Discrete job
  - Incident type
- Input key quality-control variables:
  - Temperature
  - Width

- Input key quality-control attributes:
  - Defect code
  - Cause code

You use collection elements to further define quality specifications, collection plans, and reports.



## Collection Element Types

---

Collection Element Types			
Attribute		Reference	
Color	Blue Yellow Red	Job To Op Seq Lot	Oracle Work in Process
Disposition	Rework Scrap Use as is	PO number Supplier	Oracle Purchasing
Variable			
Diameter	2.75 cm + .05 cm		
Temperature	98° + 2°		

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### Collection Element Types Overview

A collection element type groups collection elements to distinguish types of data collected and is used for sorting and reporting quality data.

#### Predefined Collection Element Types

There are three predefined collection element types:

- Attribute: Often represents the outcome of a process or a discrete characteristic of an item
- Variable: Often represents numeric measurements
- Reference information: Refers to common objects defined in other Oracle Applications (They are also known as context elements because their values are derived in the context of transactions entered and saved in these applications.)

Each collection element must be associated with a collection element type.

## Defining Collection Element Types

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### Defining Collection Element Types

Use the Element Type Lookups window to assign a collection element type to each collection element that you define.

(N) Quality > Setup > Collection Element Types

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### Defining Collection Element Types

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Elements > Collection Element Types

... > Defining Collection Element Types

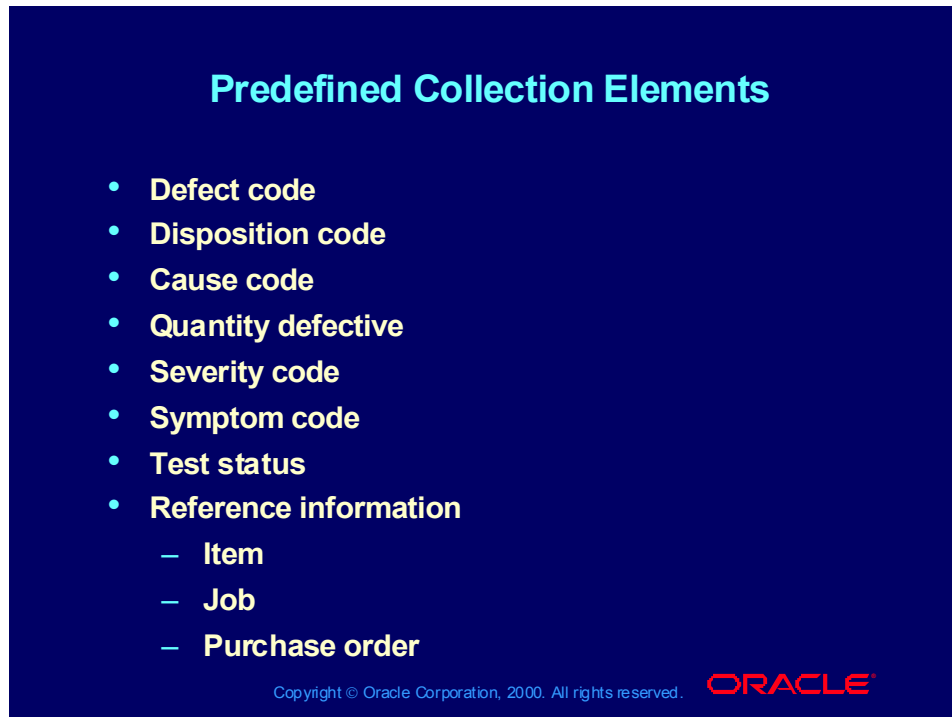
#### How to Define Collection Element Types

Collection element types can be user defined, and you can have an unlimited number of types.

- Enter a unique code, meaning, and description to define a new collection element type.
- Select the Enabled check box before you assign the collection element type to the collection elements that you are defining.

## Predefined Collection Elements

---



**Predefined Collection Elements**

- Defect code
- Disposition code
- Cause code
- Quantity defective
- Severity code
- Symptom code
- Test status
- Reference information
  - Item
  - Job
  - Purchase order

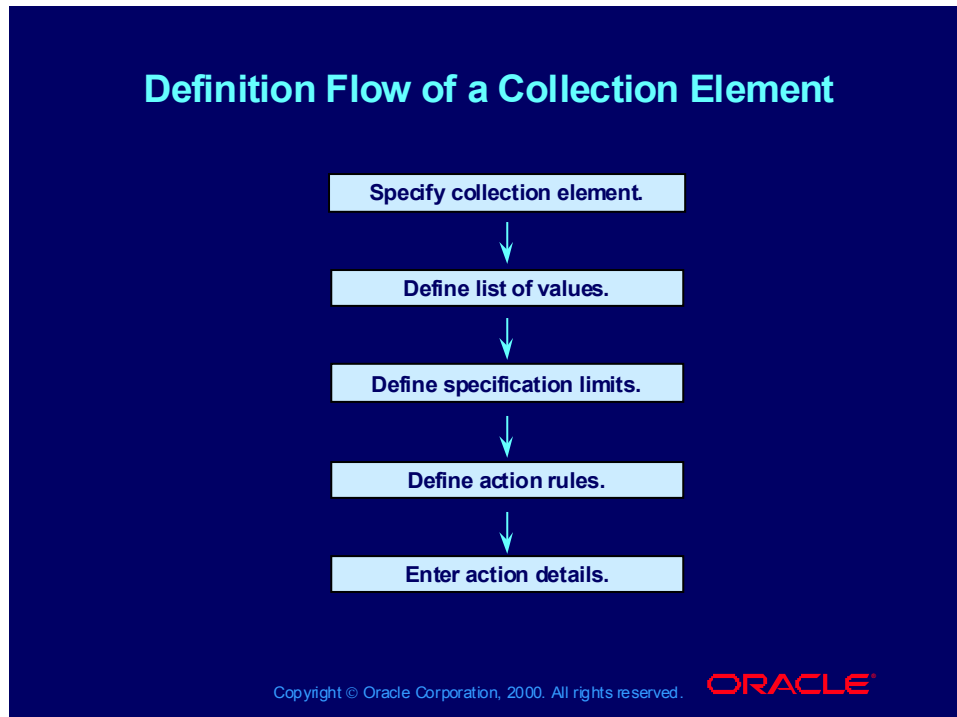
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### Predefined Collection Elements Overview

In addition to reference information collection elements, Oracle Quality provides some predefined collection elements, as listed on the slide. You can create an unlimited number of additional collection elements.

## Definition Flow of a Collection Element

---



### Definition Flow of a Collection Element

For each collection element that you create, you can define the following:

- Collection element values
- Specification limits
- Action rules and action details

## Defining Collection Elements

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### Defining Collection Elements

Use the **Collection Elements** window to define, update, delete, and view collection elements.

**(N) Quality > Setup > Collection Elements**

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### Defining Collection Elements

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Elements > Defining Collection Elements

... Process for Defining Collection Elements

#### How to Define Collection Elements

Having defined the collection element type, you can add user-defined collection elements. The collection element type classifies the collection element for reporting.

- Enter the name of the collection element.
- Select the Enabled check box before adding the collection element to a collection plan or quality specification. Only enabled collection elements can be used in collection plans and specifications. Collection elements can be disabled but not deleted if results are associated with them.
- Select a collection element type.
- Enter a prompt. The prompt is displayed in the Enter Quality Results window and serves as a column heading in the quality results reports and online inquiries. The name of the collection element is the default prompt.
- Enter a hint (optional). The hint is displayed in the Enter Quality Results window to guide you at data-collection time.
- Select a data type. The available data types are character, number, or date. You cannot change the Data Type field after defining the collection element.

- Select the Mandatory check box if you require users to enter results for this collection element when it is on a collection plan. The Mandatory check box indicates mandatory input at data-collection time. When adding this collection element to a collection plan, you can redefine it as nonmandatory.
- Enter the reporting length. The reporting length determines how much space to use for collection element values on reports and inquiries and for this collection element in the Enter Quality Results window.
- If the collection element is numerical, enter the decimal precision.
- Select a unit of measure to indicate how this collection element is measured.
- Enter a default value (optional). The default value is displayed in the Enter Quality Results window during collection of quality data.
- Enter a SQL validation statement (optional). This statement is used for validation when you enter quality data.

## Validating a Collection Element

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### Validating a Collection Element

#### Comparing against a predefined list of machine codes:

```
SELECT machine_number code, machine_description  
description FROM machine_numbers
```

#### Comparing a desired date with a system date:

```
SELECT machine_number code, machine_description  
description FROM machine_numbers WHERE  
NVL(disable_date, SYSDATE+1) > SYSDATE ORDER BY  
custom_machine_number
```

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### Example of a SQL Validation Statement

You can base the data validation of a collection element on any table in the Oracle database.

For example, if you store machine numbers in a user table, you can tell Oracle Quality to validate machines against entries in your custom machine numbers table.

To do this, you can define a SQL validation statement that Oracle Quality uses during data collection. This statement must be a SELECT statement in which you select two columns, one aliased to the column name Code and the other aliased to the column name Description.

**Note:** If you define both a SQL validation statement and a list of values, Oracle Quality uses the list of values and ignores the SQL validation statement during quality data collection.

## Defining Collection Element Values

---

### Defining Collection Element Values

Use the **Collection Element Values** window to define a list of values for a user-defined collection element that users must select from when they enter quality results.

**(N) Quality > Setup > Collection Elements (B) Values**

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### Defining Collection Element Values

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Elements > Defining Collection Element Values

... Collection Element Values

#### Overview

You can define a list of values for a user-defined collection element. The list ensures that users will enter valid values from the defined list. Default values are typically defined for attribute collection elements, although they are not limited to this. Associating a value to the collection element eases data entry by using a short code.

Collection element default values can be copied to any collection plan that contains that collection element. Make sure that the collection element has a value before adding it to a collection plan.

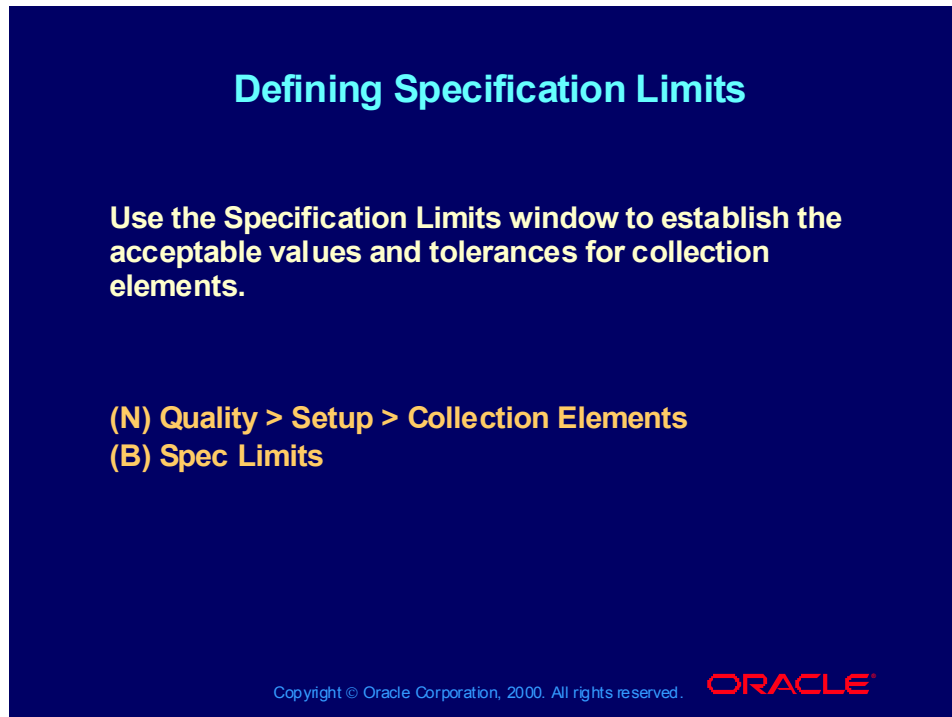
How to to Define Collection Element Values

- Select Values.
- Enter a unique short code that matches the data type of the collection element and a description.



## Defining Specification Limits

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### Defining Specification Limits

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Elements > Defining Collection Element Specification Limits

#### How to Define Specification Limits for Collection Elements

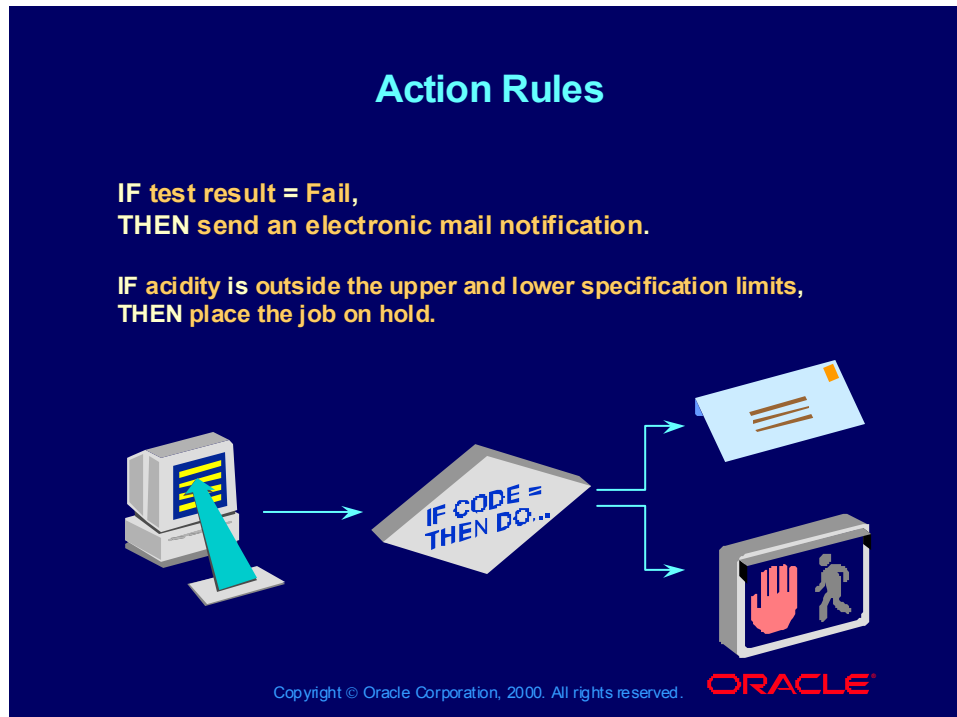
Specification limits that you define for the collection element are used as default values when you add collection elements to a quality specification.

- Enter the target value.
- Enter the lower and upper user-defined range limits.
- Enter the lower and upper specification range limits.
- Enter the upper and lower values for reasonable range limits.

When you enter the range values, make sure that the upper limit exceeds the lower limit.

## Action Rules

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### Quality Actions

Depending on the quality data values collected, you may want to initiate certain actions. You can define collection element actions that are executed depending on a certain condition. This condition and the resulting action are defined as an action rule. Action rules are evaluated and executed during the quality data-collection process.

## Types of Actions

---



### Types of Actions

There are three types of actions in Oracle Quality.

#### Message Actions

- Display a message to the operator.
- Reject the input; forces you to enter an acceptable value before allowing you to continue.
- Post an entry to the Quality Action Log.

#### Alert Actions

- Send an electronic mail notification.
- Execute an operating system script.
- Execute a SQL script.
- Launch a concurrent request.

#### Application-Specific Actions

- Work in Process actions
  - Place the job on hold.
  - Hold all schedules building this assembly on this production line.
  - Assign a shop-floor status to the interoperation step; you can specify a shop-floor status to assign to the To Move intraoperation step of the To Operation sequence.
- Purchasing actions
  - Accept the shipment.

- Reject the shipment; rejected shipments can be reinspected.
- Place the supplier on hold; prevents you from approving purchase orders for suppliers on hold.
- Place a document or release on hold; you cannot print, receive against, invoice, or approve purchase orders or releases that are on hold.
- Assign an ASL status; updates the approved supplier's status to the status that you specify.

## Mutually Exclusive Action Rules

---

### Mutually Exclusive Action Rules

**Oven temperature = 191°**  
User-defined specification limits = 195° - 205°  
Upper and lower specification limits = 190° - 210°

10	IF temp is outside the upper and lower specification limits, THEN place the job on hold.
20	IF temp is outside the user-defined specification limits, THEN display a message to operator.
30	IF temp is less than 193°, THEN send an electronic mail notification to Maintenance.

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### Action Rule Sequencing

You can define more than one action rule for a collection element or collection plan element.

When action rules are mutually exclusive, you assign a unique sequence number to each action rule. The sequence number gives the order in which the action rules are evaluated.

- During the collection of quality data, the first rule in the sequence is evaluated.
- If that rule is true, then the action related to the action rule is invoked.
- If that rule is not true, the next rule in the sequence is evaluated, and so on, until an action rule is evaluated as true.
- Evaluation stops when a true condition is found. Use the action rule sequence to specify an action hierarchy.

## Nonmutually Exclusive Action Rules

---

### Nonmutually Exclusive Action Rules

Oven temperature = 191°

User-defined specification limits = 195° - 205°

Upper and lower specification limits = 190° - 210°

10	IF temp is outside the upper and lower specification limits, THEN place the job on hold.	
20	IF temp is outside the user-defined specification limits, THEN display a message to operator.	←
20	IF temp is less than 193°, THEN send an electronic mail notification to Maintenance.	←

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### Overview

When action rules are not mutually exclusive, you can define multiple action rules for each sequence number. All action rules associated with the same sequence number are evaluated. Even if the first action rule is evaluated as true, the subsequent action rules with the same sequence are evaluated.

## Defining Collection Element Actions


---

### Defining Collection Element Actions

Use the **Quality Actions** window to specify that Oracle Quality initiates an action based on the quality data that you collect.

**(N) Quality > Setup > Collection Elements**  
**(B) Actions**

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### Defining Collection Element Actions

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Elements > Defining Collection Element Actions

- ... Quality Actions
- ... Types of Actions
- ... Action Rules and Invoked Actions
- ... Action Rule Sequencing

#### How to Define Collection Element Actions

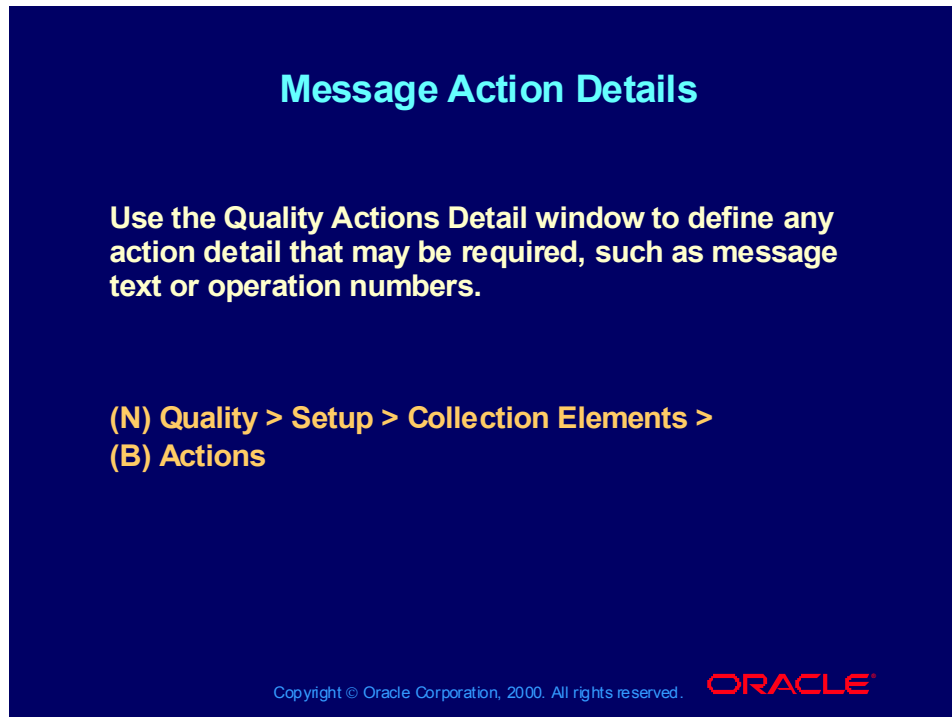
- Enter the sequence for the action rule. The sequence number determines the order in which action rules are evaluated during data collection.
- Select the condition that must be met to invoke this action.
- Select the Value or Spec Limit check box to specify the evaluation method.
  - If you select the Value check box, you can specify a particular value or range of values. If the collection element has a list of predefined values associated with it, then you must select values from that list.
  - If you select the Spec Limit check box, you must specify which specification limit values you want to evaluate against.
- If the condition requires a range of values, enter the from and to values. If the condition requires only one value, enter only the from value.
- Select an action to invoke. You can associate one or more actions for a given action rule.

- Enter details for the related action. Not all actions require details, and depending on the action, there will be different ways of entering the action details.



## Message Action Details

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### Entering Message Action Details

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Elements > Action Details

#### Action Details for Message Actions

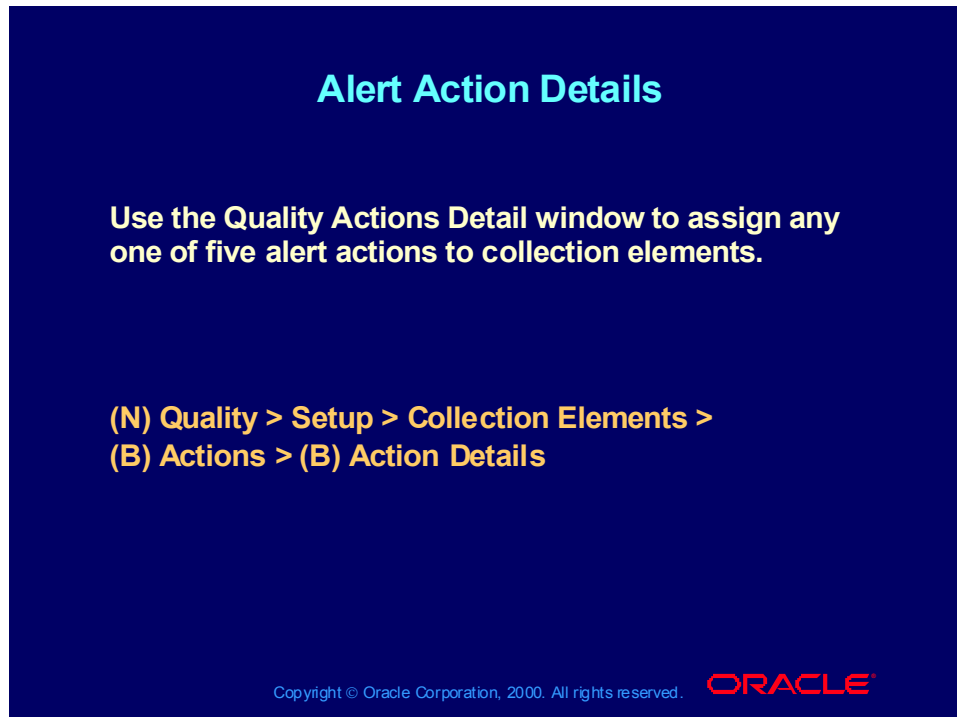
Enter the message text that you want displayed as a message to the operator or posted to the Quality Action Log in the Action Details region.

#### Action Details for Application-Specific Actions

- Work in Process Actions
  - If the action is “Assign a shop floor status to the intraoperation step,” enter the status code to assign to the intraoperation step.
  - If the action is “Place the job on hold” or “Hold all schedules building this assembly on this production line,” then no action details are required.
- Purchasing Actions
  - The actions “Accept the shipment” and “Reject the shipment” work in conjunction. You must use both actions.
  - “Place the supplier on hold” and “Place a document or release on hold” do not require any action details.
  - If the action is “Assign an ASL status,” enter the status code to assign to the supplier.

## Alert Action Details

---



### Entering Alert Action Details

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Elements > Defining Collection Element Alert Actions

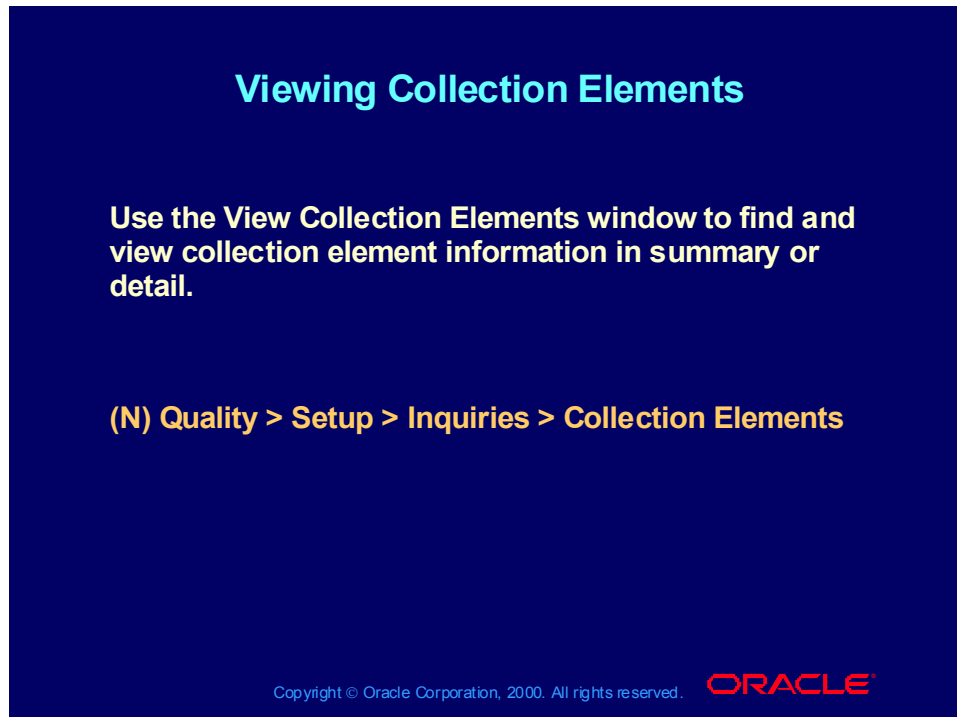
#### Overview

The action detail window and information required vary depending on the quality action selected.

- Send electronic mail notification: You can create dynamic distribution lists and send a message that includes quality results values in the message text.
- Execute an operating system script: You can use output variables to pass quality results as arguments to operating system scripts.
- Execute a SQL script: You can use output variables to pass quality results as arguments to SQL scripts.
- Launch a concurrent request: Select the application name for the concurrent program, then select the name of the concurrent program, and enter any necessary parameters.

## Viewing Collection Elements

---



### Viewing Collection Elements

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Elements > Viewing Collection Elements

#### How to View Collection Elements

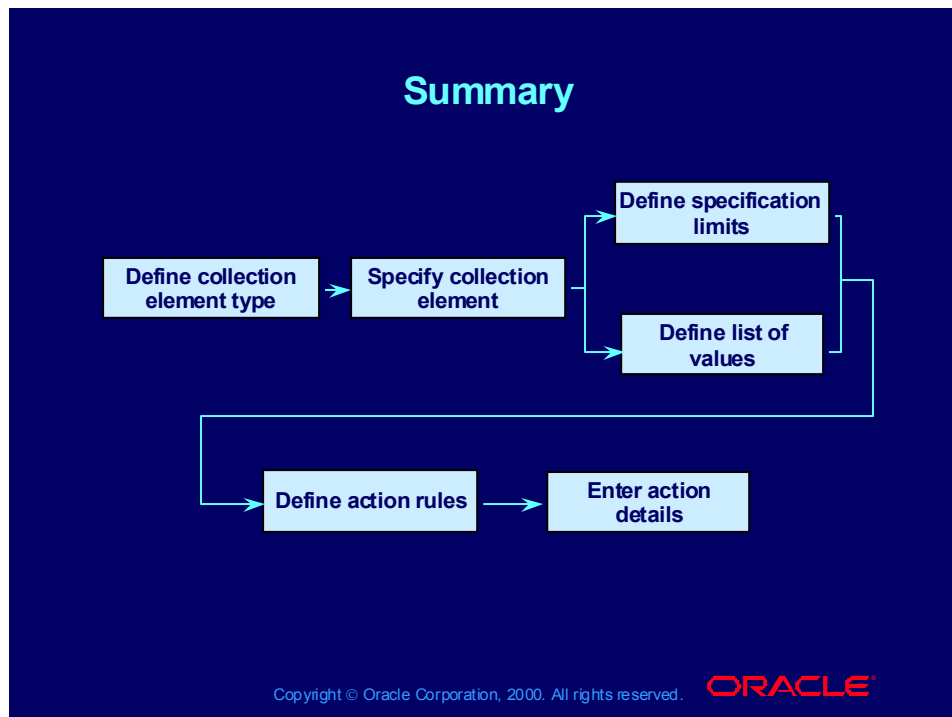
You can find and view collection elements in summary or detail.

- Enter the appropriate search criteria in the Find Collection Elements window.
- Click Find.

If more than one collection element is found, the View Collection Elements Summary window will display a summarized list of the results.

## Summary

---



### Summary

This lesson has addressed the setup and uses of collection elements. Collection elements are the building blocks for all activities in the Oracle Quality application.

A collection element represents the characteristic of the product or process for which you are collecting, analyzing, and reporting data.

- All quality data is collected, analyzed, and reported using collection elements.
- Collection elements are either predefined or user defined.

You use a collection element type to group collection elements for sorting and reporting.

Optionally, you can associate values with user-defined collection elements for data entry validation.

You can use collection element specification limits to define acceptable values, to set tolerance ranges, to validate and collect data entered. Element specification limits are optional.

You can use collection element actions to initiate an activity or response to data being entered. Actions are invoked during data collection when an action rule is true. Actions are optional.

### Instructor Demonstration

- Defining collection elements
- Assigning values to the collection elements

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# **Specifications**

## **Chapter 3**

# Oracle Quality: Setup and Implementation Release 11i Specifications

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### Objectives

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

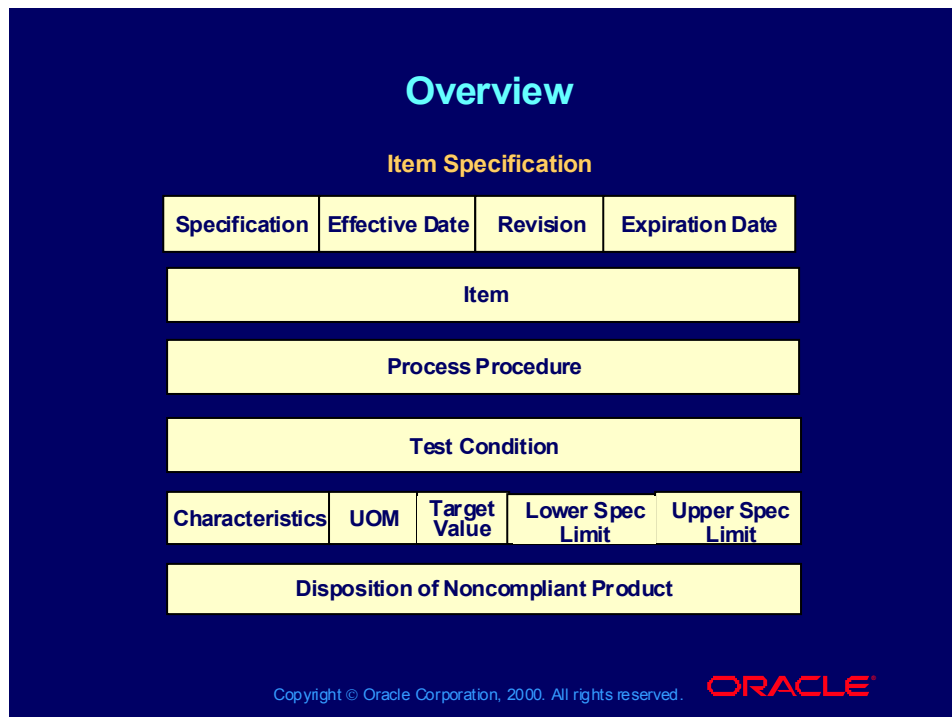
- **Define quality specifications for an item, supplier, or customer**
- **Define a specification by copying specification elements from another specification**
- **Attach electronic documents, images, multimedia instructions, Web pages, or text to a specification**

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## Overview

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### Overview

Products and services are designed to perform or accomplish a particular task. Specifications document the requirements to which a product or service should conform. They help ensure that the goods that you receive from a supplier, or that you produce or make for a customer, conform to quality standards.

Organizations develop specifications to document process or inspection procedures, disposition instructions, engineering drawings, or corrective actions.

You can use the Oracle Quality application to define specifications for the key quality characteristics of products that you manufacture or material that you receive from suppliers. Specification limits are retrieved during the collection of quality data, displayed in the Enter Quality Results window, and are used for evaluating action rules based on the specification.

## Uses of Specifications

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### Uses of Specifications

- Specifications can be used to prohibit out-of-range values from being entered.
- Specifications display specification limits as quality results are being entered.
- You use specification limits to define action rules.

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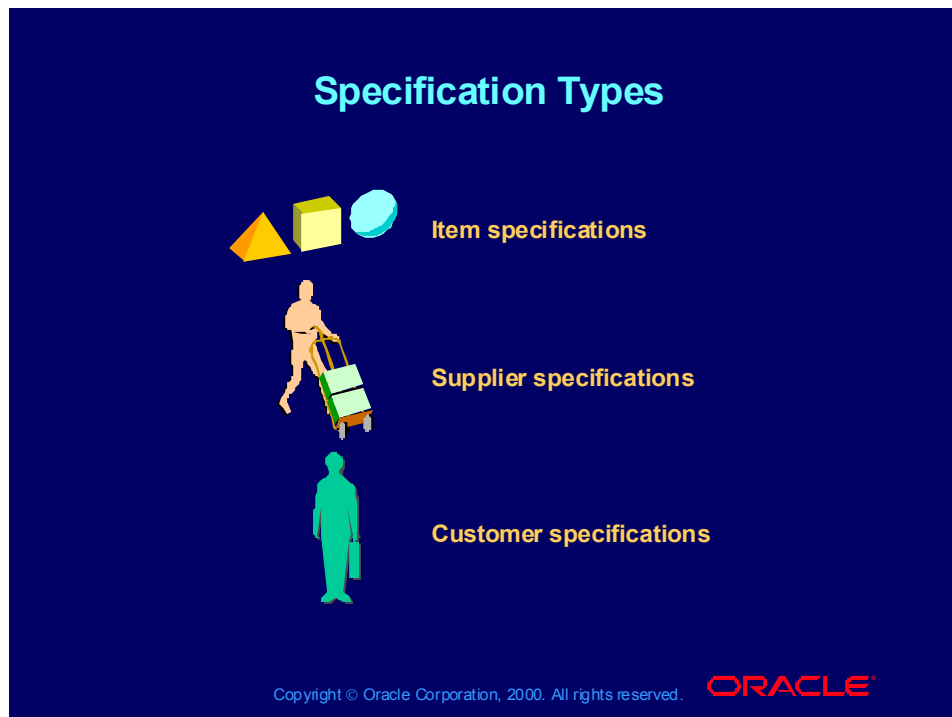
### Uses of Specifications

Specifications are used for the following purposes:

- During data collection, specifications prohibit entering values that lie outside the reasonable range of the specification.
- Specifications assist operators as they enter data, by allowing the display of specification limits during data entry.
- You define action rules based on specification limits.

## Specification Types

---



### Specification Types

When defining a specification, you must select a specification type. There are three types of specifications:

- Item specifications provide detail about an item.
- Supplier specifications provide detail about a supplier/item combination.
- Customer specifications provide detail about a customer/item combination.

Each type of specification can be based on either an item or an item category. If you are entering quality results for an item using a collection plan that is associated with a specification, but no specification exists for that item, Oracle Quality will use the specification defined for the category of that item.

### Specification Type Examples

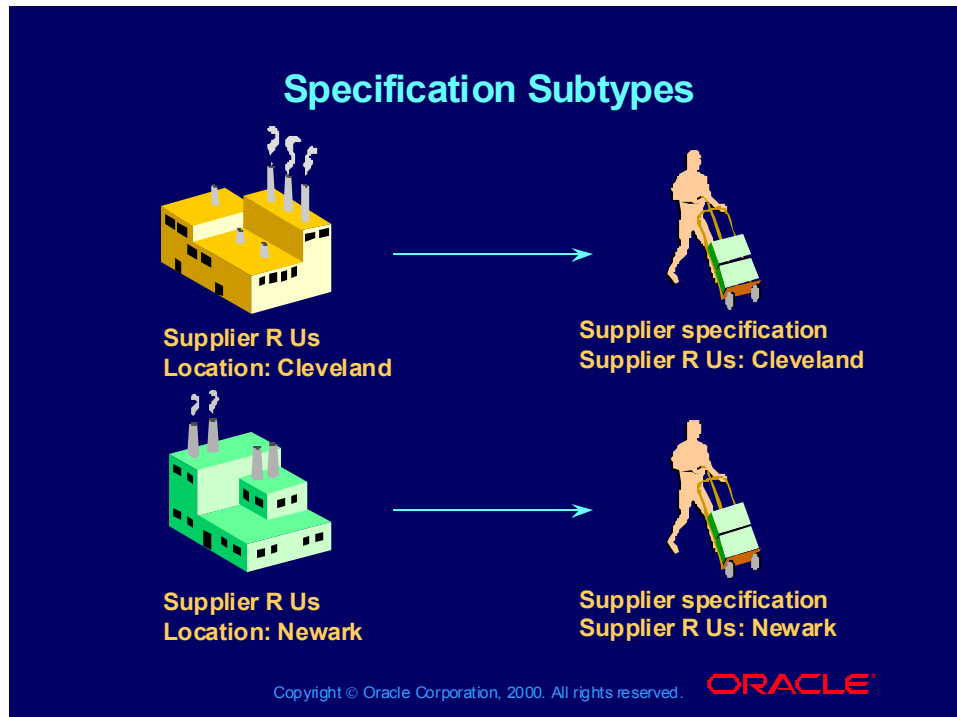
**Item specification** For a given item, thickness must be 0.55 inches, plus or minus 0.02 inches, torque strength must be between 4.5 and 5.2, and burn-in hours must be 48.

**Supplier specification** Carbon black received from supplier XYZ must be tested to ensure that its particle size does not exceed 0.0026 millimeters.

**Customer specification** Steel coils sold to customer ABC must always contain at least 1.5% molybdenum and 2.5% manganese, and they must have a tensile strength of at least 60.

## Specification Subtypes

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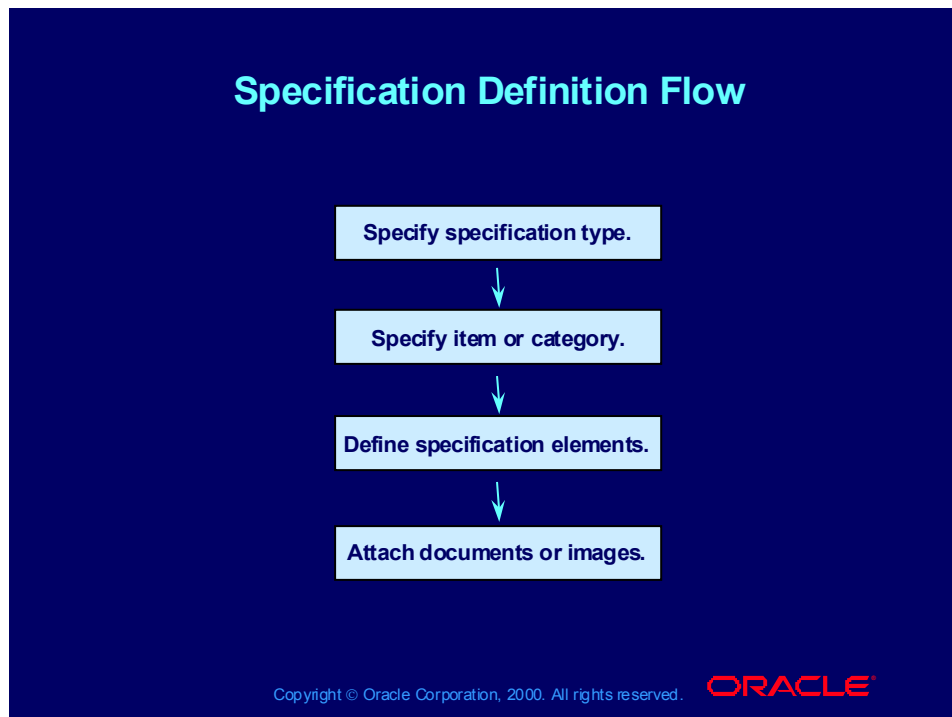


### Uses of Specification Subtypes

You can also define specification subtypes, which are used to create more detailed specifications. For example, if you require a different specification for deliveries from different locations from the same supplier, you could use specification subtypes to ensure that the correct specification is used.

## Specification Definition Flow

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### Specification Definition Flow

For each specification that you create, you can:

- Specify the type of specification
- Define specification elements
- Attach documents or images

## Defining a Specification

---



**Defining a Specification**

Use the Specifications window to describe the requirements to which a product should conform.

**(N) Quality > Setup > Specifications**

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### Defining a Specification

(Help) Oracle Manufacturing Applications > Oracle Quality > Specifications > Defining Specifications

... > Overview of Specifications

... > Specification Types

#### How to Define a Specification

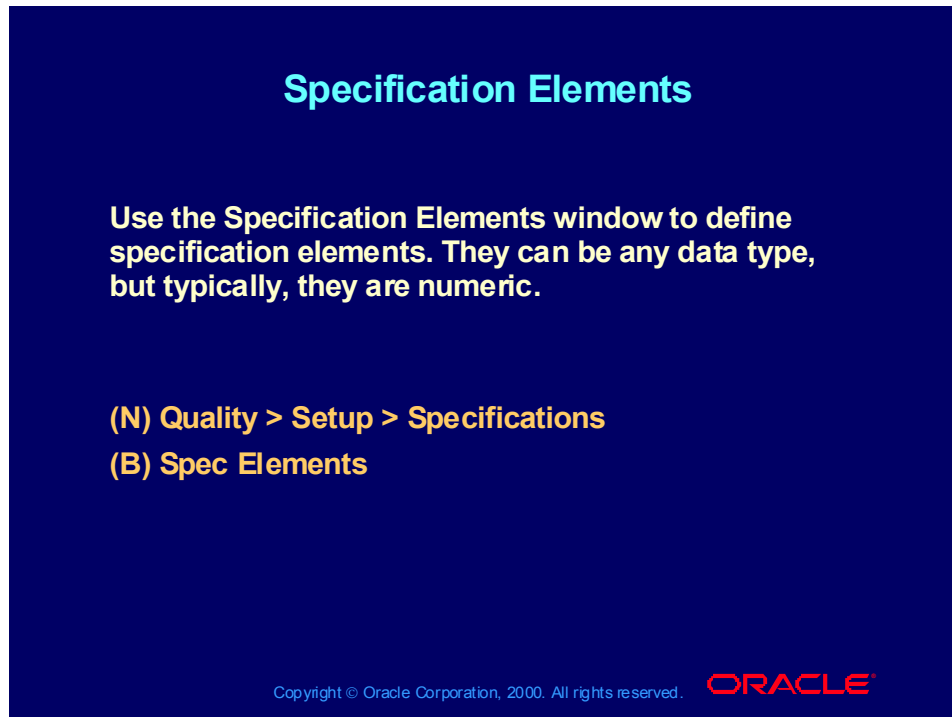
- Enter a specification name.
- Enter an effective date range (optional).
- Select Item, Supplier, or Customer to determine the type of specification you are creating.
- Select either Item or Category to determine whether the specification that will be based on the item or item category.
- If the specification is based on:
  - An item: Enter the item and optionally the revision. You can have only one specification for each item/revision combination.
  - An item category: Select the category. The system will default the category set defined by the profile option QA:Quality Category Set.
- If the specification is:
  - A supplier specification: Select the supplier.
  - A customer specification: Select the customer.

- If you require further granularity, enter a specification subtype by selecting a collection element and a value for that collection element.



## Specification Elements

---



**Specification Elements**

Use the **Specification Elements** window to define specification elements. They can be any data type, but typically, they are numeric.

**(N) Quality > Setup > Specifications**  
**(B) Spec Elements**

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### Defining Specification Elements

(Help) Oracle Manufacturing Applications > Oracle Quality > Specifications > Defining Specifications Elements  
... > Specification Elements and Specification Limits

#### Overview

Specification elements are the basic components of a specification. You create specification elements by adding collection elements to your specifications. You can do this two ways:

- By adding specific collection elements to your specification
- By copying specification elements from an existing specification

You must have already defined the specification elements as collection elements in the Collection Elements window.

#### How to Define Specification Elements

- Select the specification element from the list of collection elements.
- To use the specification element in the data-collection process, select the Enabled check box.
- Enter the target value, upper and lower specification range, upper and lower user-defined range, and upper and lower reasonable range. If you have defined target and limit values for the associated collection element, those values are defaulted. You can override these values.

## Copying Specification Elements

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### Copying Specification Elements

(Help) Oracle Manufacturing Applications > Oracle Quality > Specifications > Defining Specification Elements

#### Copying Specification Elements

You can copy all specification elements from existing specifications by choosing Copy From... in the Specification Elements window. Using this feature, you can set up a template specification, which can be copied to additional specifications and then modified.

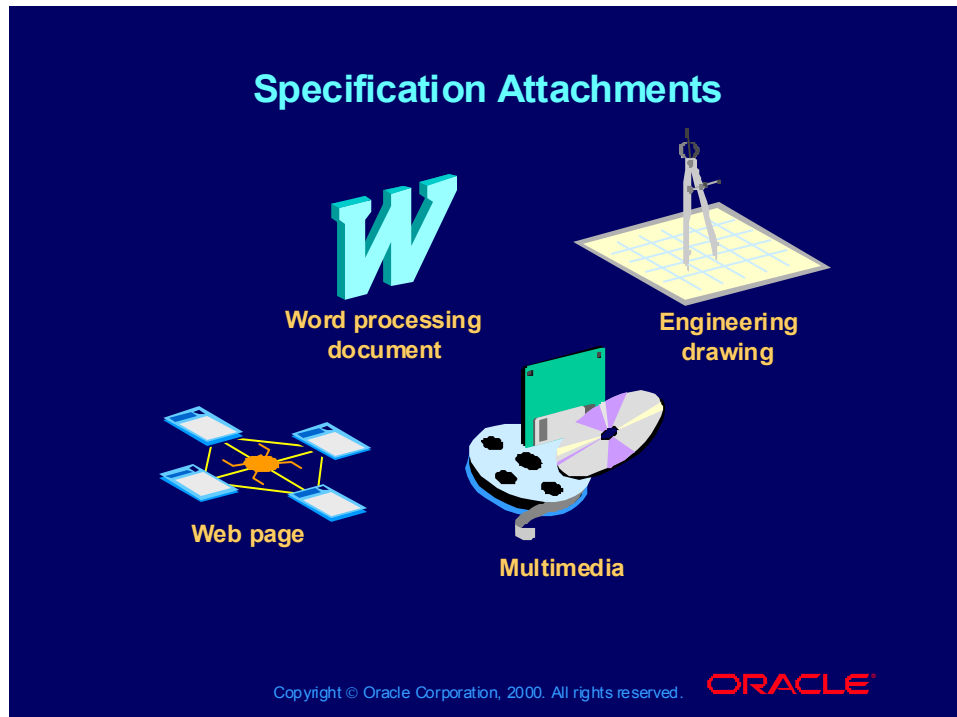
- Copied elements are appended to those elements previously defined in the specification.
- Existing elements are not deleted.
- Copied elements can be updated or deleted.
- Specification limits are defaulted from the source specification.

#### How to Copy Specification Elements

- From the Specification Elements window, click Copy From....
- From the list of specifications, select the specification to copy from.

## Specification Attachments

---



### Overview

An attachment provides additional information regarding the specification. One example is the attachment of a drawing depicting an assembly process for an item. Each specification can have multiple attachments. Collection plans can also have attachments.

#### **Attachments can be in any of these forms:**

- Electronic documents (word processing document, spreadsheet)
- Images (engineering drawing)
- Multimedia instruction (video of an assembly procedure)
- Web page (specify a URL reference)
- Text (short or long—greater than 2,000 characters)

You can view specification attachments during the collection of quality data by clicking Attachments on the toolbar.

## Attaching Documents and Images

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### Attaching Documents and Images

Use the Attachments window to attach illustrative or explanatory files in the form of text, images, word processing documents, spreadsheets, video, graphics, OLE objects, and so on to collection plans and specifications as they are created or updated.

(N) Quality > Setup > Specifications >  
(M) Attachments

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### Attaching Files to Specifications

(Help) Oracle Manufacturing Applications > Oracle Quality > Specifications > Defining Specifications

#### How to Attach Documents and Images

- Select an existing specification by clicking the Find icon on the toolbar.
- Click the Attachments icon on the toolbar.
- Enter a sequence number.
- Select an attachments category.
- Enter a description.
- Select an attachment data type.
- If the attachment is:
  - A file: Select the file.
  - A Web page: Enter the URL.

### Summary

- You can use specifications to identify key characteristics of an item.
- You can create specifications for items, suppliers, or customers.
- You can attach electronic images and documents to specifications.

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### **Instructor Demonstration**

#### **Defining specifications**

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# **Collection Plans**

## **Chapter 4**

### **Oracle Quality: Setup and Implementation Release 11i**

#### **Collection Plans**

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### Objectives

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

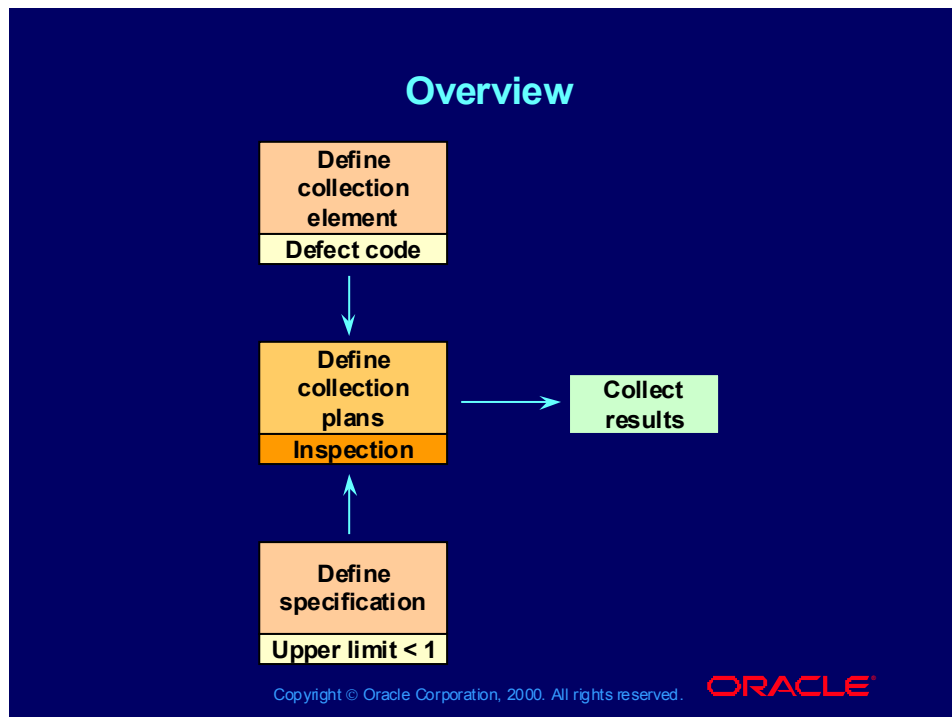
- **Define a collection plan type and a collection plan**
- **Add collection elements to a collection plan and assign acceptable values to them**
- **Associate specifications to collection plans**
- **Define action rules for collection plan elements**
- **Associate collection transactions to a collection plan**
- **Create attachments for collection plans**

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## Overview

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### Overview

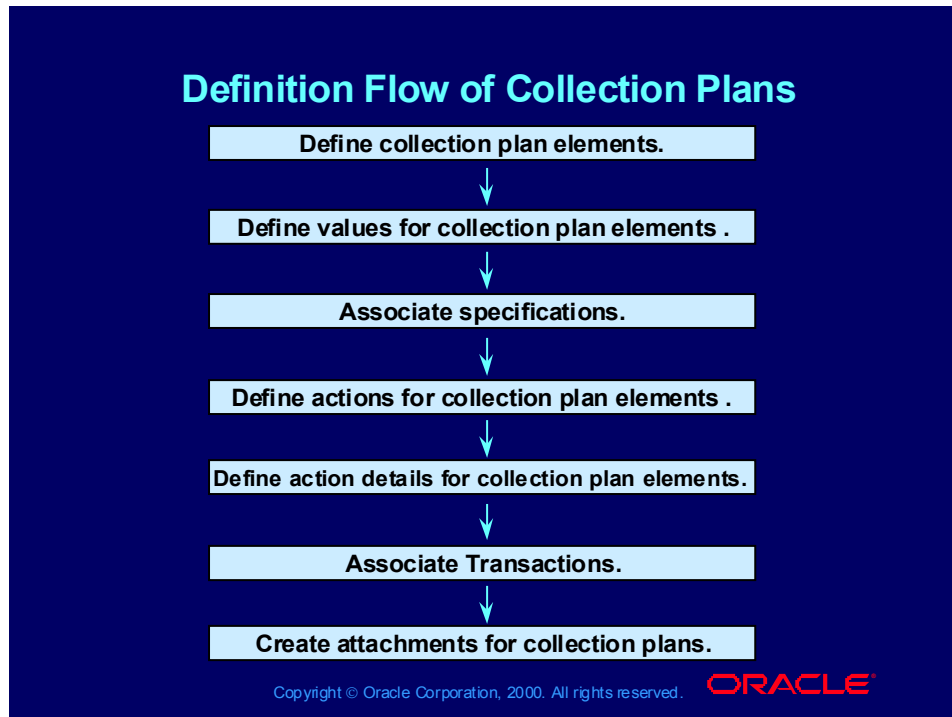
Quality collection plans determine what data to collect, where to collect it, and what action to take based on the results. A collection plan is a test plan or inspection plan, consisting of a group of collection elements that you want to collect and analyze for a given business case.

Using Oracle Quality, you can create any number of collection plans to support the needs of your enterprise for quality data collection and analysis. For example, you can create collection plans to collect the following information:

- Supplier data
- Incoming inspection information
- Work-in-process defects
- Material review board data
- Equipment failures
- Details of field failures
- Customer complaints

## Definition Flow of Collection Plans

---



### Overview

Collection elements are the building blocks of collection plans. They determine what data will be collected. You create collection plan elements by adding collection elements to collection plans. You can copy collection element values and actions to collection plans or define them directly in the collection plan.

For each collection plan that you create, you can:

- Define lists of acceptable values for collection plan elements
- Associate specification types: item, customer, or supplier
- Define action rules and conditions when those actions are invoked
- Specify which transactions in Oracle Applications will invoke data collection

## Defining Collection Plan Types

---

### Defining Collection Plan Types

Use the **Collection Plan Type Quick Codes** window to assign a collection plan type to each collection plan that you create for sorting, grouping, categorizing, and other informational purposes.

**(N) Quality > Setup > Collection Plan Types**

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### Defining Collection Plan Types

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans  
> Defining Collection Plan Types

... > Collection Plans

... > Collection Plan Types

#### Types of Collection Plans

Collection plan types categorize collection plans and are informational only. You can create your own collection plan types or use the following predefined types:

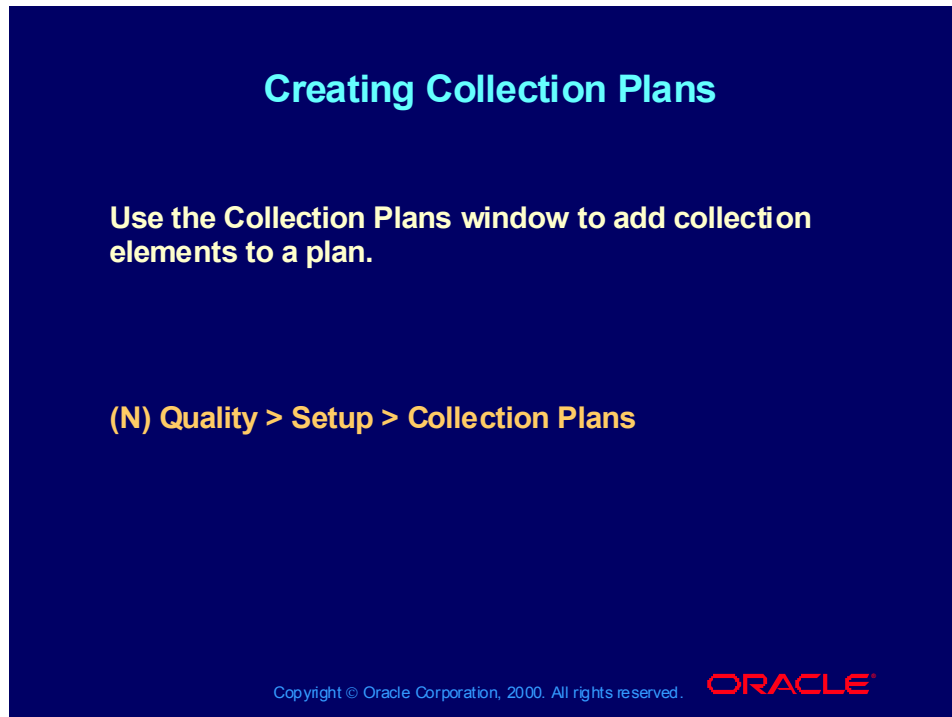
- WIP inspection
- Receiving inspection
- Finished goods inspection
- Field returns
- Service requests

#### How to Define Collection Plan Types

- Enter a unique alphanumeric code for the collection plan type.
- Enter the meaning and description.
- (Optionally) Enter the from and to effective dates.
- Select the Enabled check box so that you can use it when creating collection plans.

## Creating Collection Plans

---



### Creating Collection Plans

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans  
> Creating Collection Plans  
... > Collection Plans

#### How to Define Collection Plans

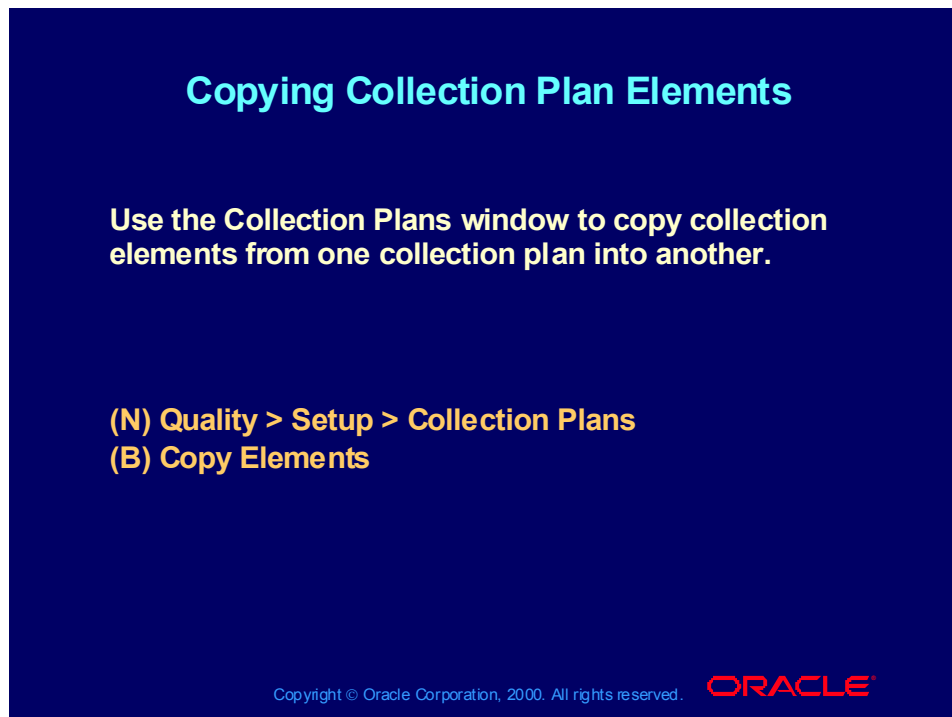
You can define an unlimited number of collection plans. As your data collection requirements change, you can update existing plans, add new plans, or delete obsolete plans.

- Enter the name and the description of the collection plan. The name is also used as a database view name when the collection plan view is created. Each new or modified collection plan generates a database view used for custom reporting. Use these views to access the results of each collection plan.
- (Optionally) Enter the effective from and to dates.
- Select the collection plan type.
- Select the collection plan element. You must add at least one enabled and mandatory collection element.
- Enter the sequence number. The sequence number defines the order of the collection plan elements when you are entering data and the order of the columns in the database.

- Enter the prompt to be displayed at data-entry time. The prompt serves as a column heading in the quality results reports and online inquiries. The prompt defaults from the collection element but can be overwritten.
- Select the Mandatory check box if you require users to enter results for this collection plan element. The value defaults from the collection element but can be overwritten.
- Select the Enabled check box to enable the collection plan element to be used in the data-collection process.
- Select the Displayed check box so that the collection plan element is displayed in the Enter Quality Results window. This applies only to transactional data collection, not to quality data entered directly.
- Enter the default value (optional). The default value is displayed in the Enter Quality Results window during data collection. The value defaults from the collection element. **Note:** The collection element list of values and actions is not copied automatically.

## Copying Collection Plan Elements

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### Copying Collection Plan Elements

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans  
> Creating Collection Plans  
... > Collection Plans

#### How to Copy Collection Plan Elements

You can copy collection plan elements from existing collection plans, including those created in other organizations. Collection plan elements that are copied from a source plan are appended to the destination collection plan. You can add, delete, or disable collection elements. You can disable, but not delete, any collection elements for which you have collected results.

- From the Collection Plans window, click Copy Elements....
- Select a collection plan from the Copy From Plan list.

Four collection plan templates are already predefined that you can copy to create your own collection plans. The collections plans are Template PO Inspection, Template PO Receiving, Template Service Request, and Template WIP Move.

**Note:** The collection plan element list of values and actions are not copied automatically.

## Common Collection Plan Elements

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### Common Collection Plan Elements

- Organization
- Created By
- Collection Number
- Collection Plan Name
- Collection Plan Type
- Last Update Date
- Last Updated By
- Entry Date

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### Overview

You can add any collection element to your collection plan. This list of collection elements is added automatically to your collection plan. Common collection elements give you an audit trail of when and how the data was collected. These elements are not visible on the collection plan, and you will not see them during data entry. They are visible only when you view the results of your data entry.



## Defining Collection Plan Element Values

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### Defining Collection Plan Element Values

Use the **Values** window to define collection plan element values that are used to validate data as it is collected.

**(N) Quality > Setup > Collection Plans (B) Values**

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### Defining Collection Plan Element Values

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans > Defining Collection Plan Element Values

#### Overview

When you copy a collection element to a collection plan, it does not automatically copy the list of values to the collection plan element. You can manually copy the entire list of values or a subset of the values to the collection plan element. You can also add and define values for a collection plan element independent of the collection element.

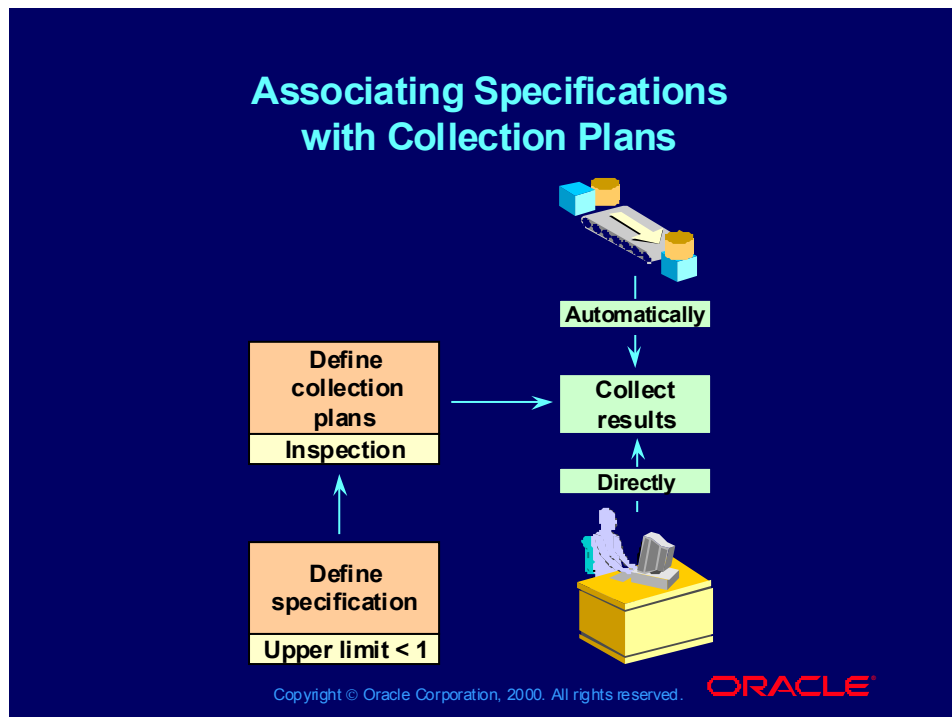
#### How to Copy Values

- Enter the name of the collection plan.
- Move to a collection element.
- If the collection element has a list of values, click **Values**.
- To copy individual collection element values, select a short code from the list of values. Click **Defaults** to copy the entire list of values defined for the collection element.

#### Defining New Values for a Collection Plan Element

In the **Values** window, enter a short code and description. The short code must match the data type of the collection element.

## Associating Specifications with Collection Plans



### Associating Specification Types with Collection Plans

The specification type enables Oracle Quality to find the correct specification during the collection of quality data. You can specify the type of specification that you want to associate to the collection plan:

- Item specification
- Supplier specification
- Customer specification
- No specification

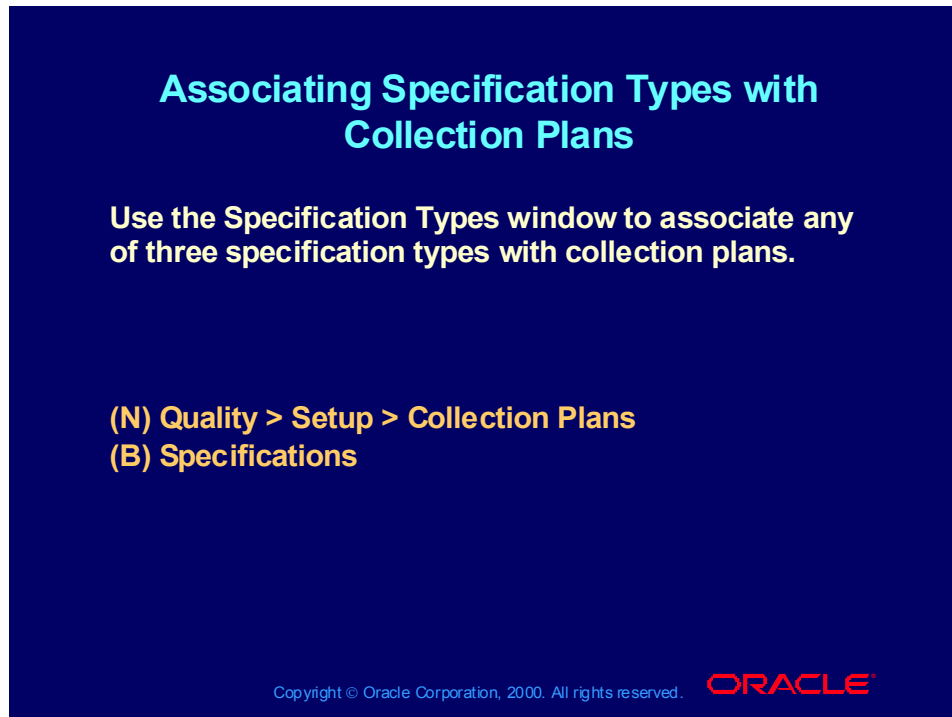
When entering quality data during transactions, context information about the transaction is used to determine the appropriate specification. For example, given that you have associated an item specification with the collection plan, when you enter quality data during a Work in Process move transaction, the specification associated with the item being moved is used.

Use the collection plan and the specification to compare specification limits with results.

- The Enter Quality Results window displays a target value and upper and lower tolerances.
- Use collection plan action rules, based on specification limits, to control when and how to respond to out-of-specification conditions.
- Use the upper and lower reasonable limits of the collection element if you want to automatically reject an input that is not within the specification.

## Associating Specification Types with Collection Plans

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### Associating Specification Types with Collection Plans

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans  
> Associating Specification Types with Collection Plans

#### How to Associate Specification Types with Collection Plans

- Navigate to the Collection Plans window.
- Select the Collection Plan.
- Click Specifications... The Specification Types window appears.
- In the Specification Types window, select the default specification type.

The specification type that you associate with a collection plan can be overridden during data collection.

## Defining Collection Plan Actions

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### Defining Collection Plan Actions

Use the **Quality Actions** window to define action rules for each collection element that you add to a collection plan.

(N) **Quality > Setup > Collection Plans**  
(B) **Actions**

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### Defining Collection Plan Actions

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans  
> Defining Collection Plan Element Actions

#### Defining Actions for a Collection Plan Element

When you copy a collection element to a collection plan, it does not automatically copy the action rule to the collection plan element. You can manually copy the action rule to the collection plan element. You can also add new action rules to the collection plan element or update the copied action rules.

#### How to Copy Action Rules

- Enter the name of the collection plan.
- Move to a collection element and click **Actions**.
- Click **Defaults....** The Copy Actions window will appear.
- Click **Copy** to copy the collection elements actions.

#### How to Define New Actions

- Enter the sequence for the action rule. The sequence number determines the order in which action rules are evaluated during data collection.
- Select the condition that must be met to invoke this action.
- Select the **Value** or **Spec Limit** check box to specify the evaluation method.
  - If you select the **Value** check box, you must specify a particular value or range of values. If the collection plan element has a list of

predefined values associated with it, then you must select values from that list.

- If you select the Spec Limit check box, you can specify which specification limit values you want to evaluate against.
- If the condition requires a range of values, enter the from and to values. If the condition requires only one value, enter only the from value.
- Select an action to invoke. You can associate one or more actions for a given action rule. All the actions available to you in defining collection elements are available to use when defining collection plan elements. “Assign a value to a collection element,” which takes advantage of user-defined formulas, is an additional action available to use on collection plan elements.
- Enter details for the related action. Not all actions require details, and depending on the action, there are different ways of entering the action details.

## Assigning a Value to a Collection Element

---

### Assigning a Value to a Collection Element

Use the Quality Actions window to assign a value when action rules associated with “Assign a value to a collection element” actions are evaluated and found to be true.

(N) Quality > Setup > Collection Plans  
(B) Actions

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### Assigning a Value to a Collection Element

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans  
> Defining Collection Plan Element Values

#### Overview

Values are assigned when action rules associated with “Assign a value to a collection element” actions are evaluated and found to be true. You can define formulas to derive a value based on quality data entered. For example, as you enter quality results for a specific job, you can calculate your failure rate for a test operation by taking the defective quantity and dividing it by the job quantity. This value is dynamically assigned to a collection plan element as you collect quality data. The collection elements for both defective quantity and job quantity must already have values assigned to them for the formula to do the calculation. Therefore, if defective quantity is entered before job quantity, then the “Assign a value to a collection element” action should be on job quantity.

You can assign constants, character strings, and equations to collection plan elements. For example:

- 3
- $(40 + 780) / 50$
- 'FAIL'
- $\&DEFECTQTY / \&QTY$
- $ABS(\&SEVERITY) + \&BAD$
- 'Defect' | |  $\&DEFECTCODE$

## Defining Output Variables

---

### Defining Output Variables

Use the **Output Variables** window to incorporate quality results values into the action details of the following alert actions: *Send an electronic mail notification*, *Execute a SQL script*, and *Execute an operating system script*.

**(N) Quality > Setup > Collection Plans (B) Actions  
> (B) Action Details > (B) Variables**

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### Defining Output Variables

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans > Defining Collection Plan Element Alert Actions > (L) Associating Output Variables with Actions

#### How to Define Output Variables for Actions

To use result values in your user-defined formulas, you will need to use output variable tokens, such as &DEFECTQTY, where DEFECTQTY is the quantity defective. In your formula you would use &DEFECTQTY as a variable. You use the Output Variables window to define the output variable token and associate it with the corresponding collection plan element.

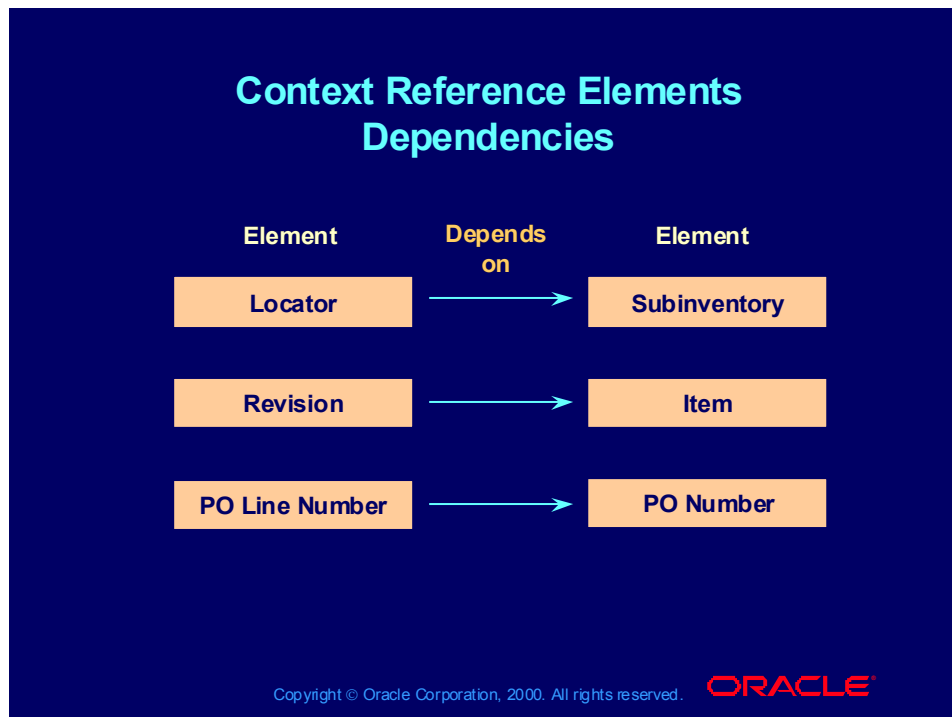
- Enter the token name. Do not enter the ampersand (&).
- Select the collection element to associate with the token name. Only those collection elements on the collection plan are available to choose from.

You can also use output variables for the following actions:

- Sending an electronic mail notification
- Executing a SQL script
- Executing an operating system script

## Context Reference Elements Dependencies

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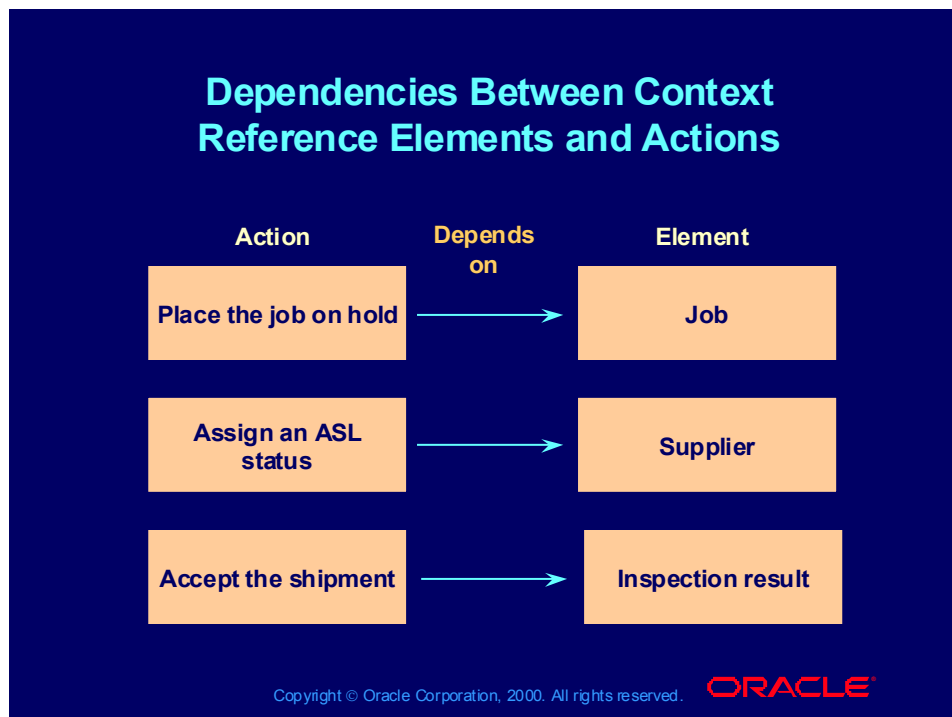
### Dependencies of Context Reference Elements

Some context reference collection elements depend on others. For example, Locator depends on Subinventory. If you want to include Locator as a collection element in your collection plan, you have to include Subinventory as a collection plan element as well. This dependency is also enforced during data entry, where you are not allowed to enter locator information unless you have already entered the subinventory information.



## Dependencies Between Context Reference Elements and Actions

---



### Dependencies Between Context Reference Elements and Actions

The actions listed on the slide depend on context reference elements being included in the collection plan. However, the action does not have to be defined for that element. For example, you have created a collection plan that includes the collection elements Failure Code and Job. You can create an action against Failure Code to put the job on hold if the Failure Code equals fail. The requirement is that Job must be included as an element in the collection plan.

# Quality Data-Collection Transactions

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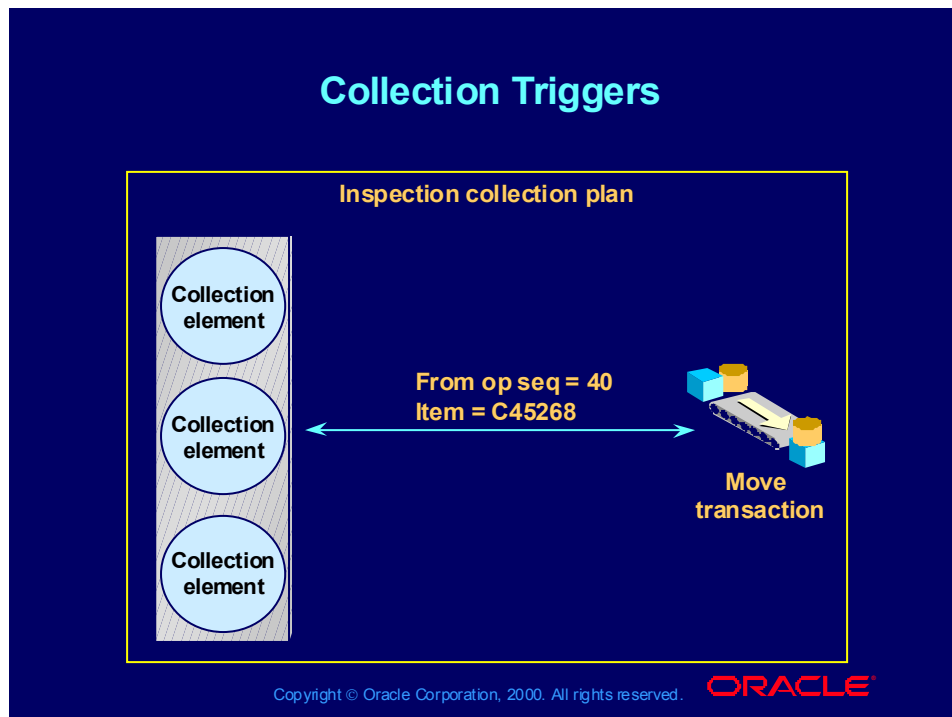


## Overview

You can associate transactions with collection plans to integrate the collection of quality data with the manufacturing workflow. You can associate the following transactions with your collection plans:

- Inspection transactions (Oracle Purchasing)
- Receiving transactions (Oracle Purchasing)
- Service requests (Oracle Service)
- Move transactions (Oracle Work in Process)

## Collection Triggers



### Collection Triggers

Quality collection triggers are collection elements that represent transactional reference information.

Each transaction that is integrated with Oracle Quality has a predefined list of associated context reference collection elements used as triggers. These context reference elements are reference collection elements whose values are already available in the context of the transaction. For example, in a Work in Process job, the specific job number, item, and from operation sequence are already available to be used in data collection. There is no need for the operator to manually enter these values.

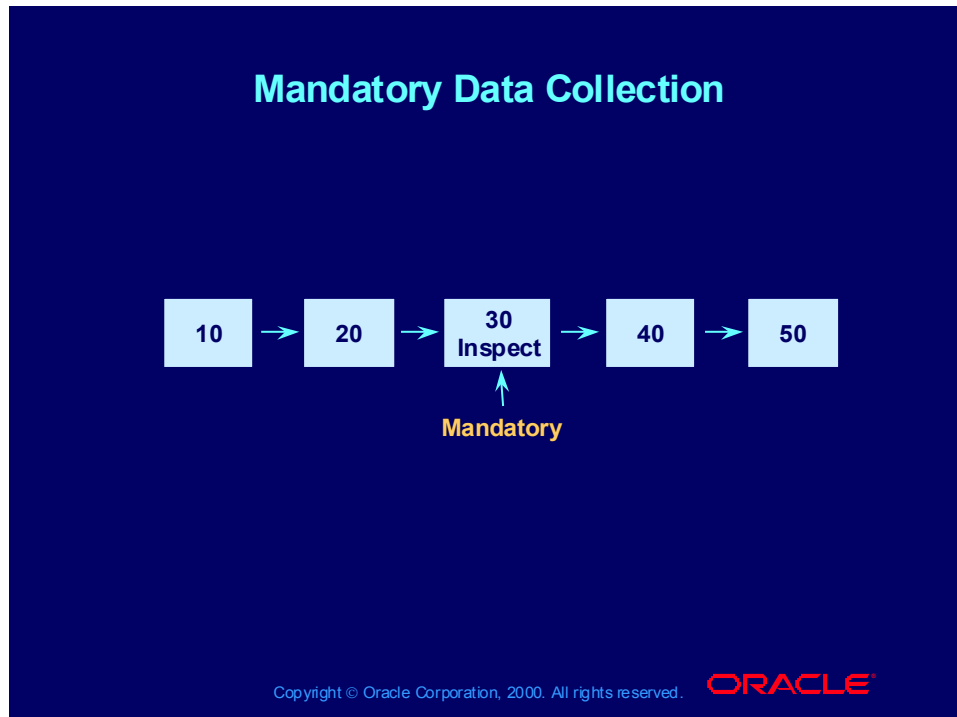
These context reference collection elements are used to define conditions that must be satisfied before the transactional quality data collection can be automatically invoked.

Context reference elements that are used to trigger quality data collection do not have to be added to the collection plan. When they do appear on the collection plan, their values are automatically entered and saved when the parent transaction is saved.

You can assign multiple collection triggers to a transaction.

## Mandatory Data Collection

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### Overview

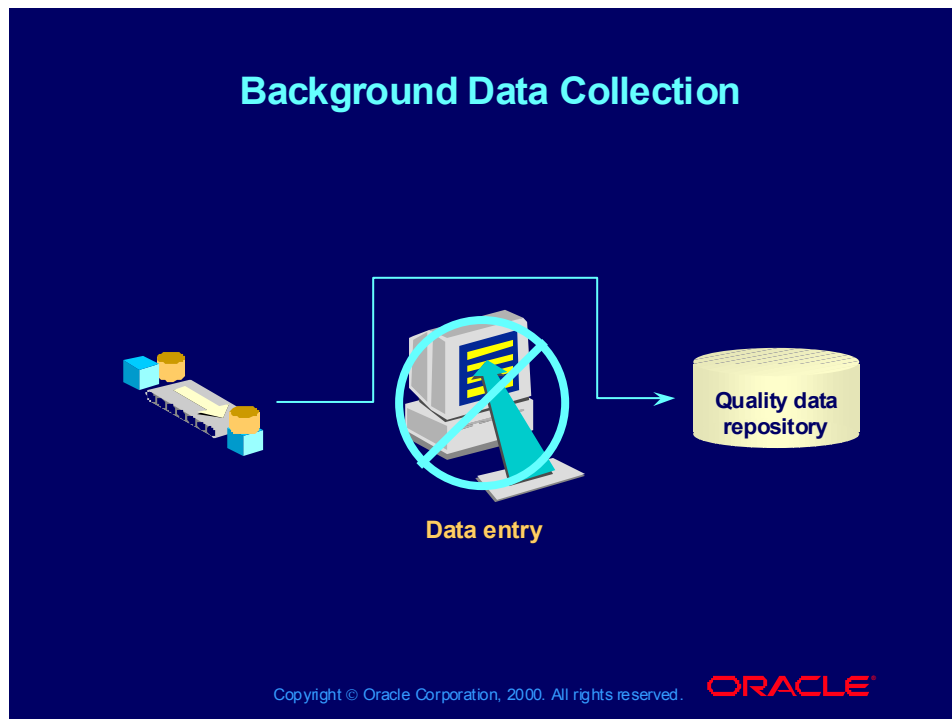
When associating a collection transaction with a collection plan, you can specify whether data collection should be mandatory or optional. By specifying it as mandatory, when all collection trigger conditions are met, it forces quality data to be entered.

### Example

As illustrated on the slide, operation 30 is a required inspection operation. To prevent an operator from bypassing the inspection and entering the relevant quality data, you designate the associated collection transaction as mandatory. The assembly cannot be moved past operation 30 without forcing the operator to enter quality data.

## Background Data Collection

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### Overview

You can use background data collection to collect quality results for context reference elements without invoking the Enter Quality Results window. When associating a collection transaction with a collection plan, you can specify whether data collection should be done in the background.

Background data collection is available only for actions that do not require user input. For example, “Assign a shop floor status to the intraoperation step” can be done only in the foreground because it requires input from the operator, whereas “Execute a SQL script” can be done in the background.

## Associating Transactions with Collection Plans

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### Associating Transactions with Collection Plans

Use the Collection Transactions window to associate transactions with collection plans.

(N) Quality > Setup > Collection Plans  
(B) Transactions

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### Associating Collection Plans with Transactions

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans  
> Associating Collection Plans with Transactions

#### How to Associate Transactions with Collection Plans

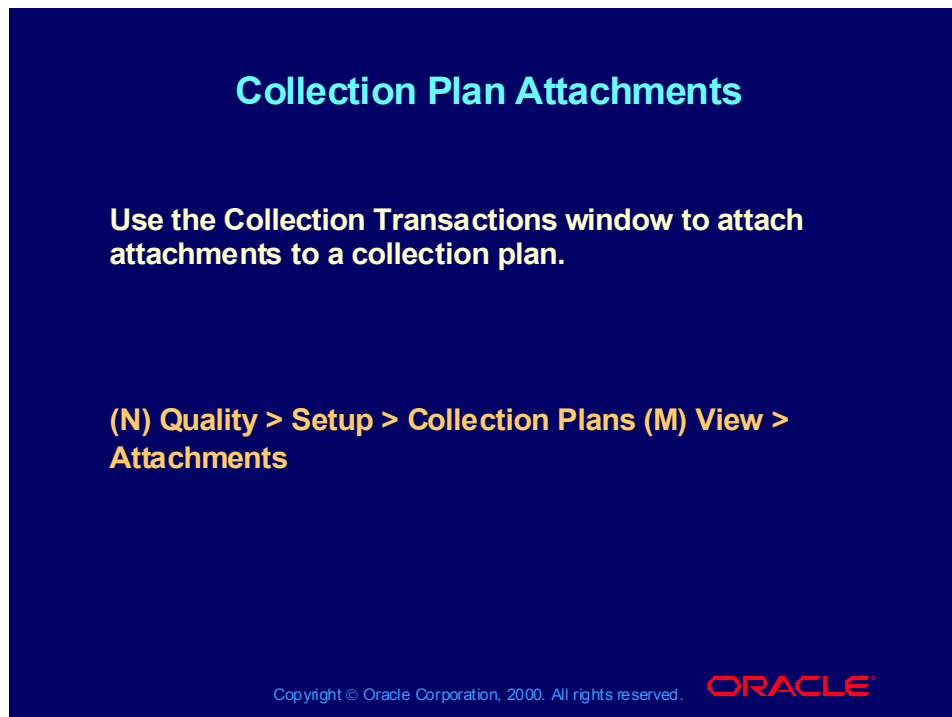
You can associate multiple transactions with one collection plan and conversely, multiple collection plans with a single transaction.

- Select the transaction description for the type of transaction with which you want to integrate.
- Select the Mandatory check box to enforce data collection. By not having the data collection mandatory, you have the option of not entering quality data during the transaction.
- Select the Background check box to indicate that data collection is done in the background.
- Select a trigger name. The trigger name specifies which context collection element to use as part of the condition.
- Select the condition that must be true to invoke data collection.
- Based on the condition, enter a value or range of values.

**Note:** For a given collection transaction, all the trigger conditions must be true to invoke automatic quality data collection.

## Collection Plan Attachments

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### Collection Plan Attachments

(Help) Oracle Manufacturing Applications > Oracle Quality > Collection Plans > Creating Collection Plans > (L) Attaching Files to Collection Plans, Specifications, and Results Lines

#### Overview

You can attach documents and images to collection plans. For example, you can attach inspection instruction documents that are accessible during data collection. Each collection plan can have multiple attachments.

#### How to Attach Documents and Images to a Collection Plan

- Select an existing collection plan by clicking the Find icon on the toolbar.
- Click the Attachments icon on the toolbar.
- Enter a sequence number.
- Select an attachment category.
- Enter a description.
- Select an attachment data type.
- If the attachment is:
  - A file: Select the file.
  - A Web page: Enter the URL.

## Summary

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### Summary

**Collection plans are similar to test or inspection plans. They determine:**

- **What data to collect**
- **Which transaction to collect the data in**
- **When to collect the data**
- **Which action to take based on the data collected**

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### Summary

You use a collection plan to collect quality data for a specific business case. Collection plans are similar to test or inspection plans.

The Oracle Quality application provides standard collection plan types, or you can create collection plan types.

You can copy collection elements and their values, specifications, and actions to a collection plan.

You can modify a collection plan.

You can associate transactions with a collection plan to eliminate duplicate data entry and multiple quality systems.

You can attach electronic documents, images, multimedia instructions, or text to a collection plan.



### **Instructor Demonstration**

**Defining a collection plan for a WIP move transaction**

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# **Setup and Implementation Considerations**

## **Chapter 5**

# Oracle Quality: Setup and Implementation Release 11i

## Setup and Implementation Considerations

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## Objectives

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### Objectives

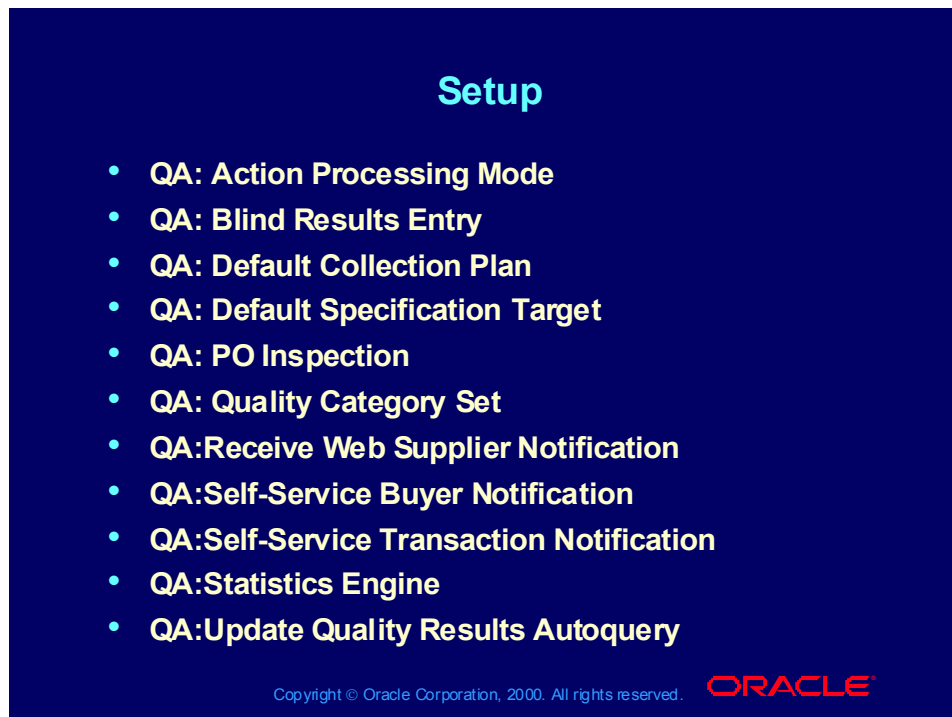
**After completing this lesson, you should be able to describe and perform Oracle Quality Release 11i Profile Option setup.**

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## Setup

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A screenshot of the Oracle Quality Setup screen. The title 'Setup' is displayed in red at the top center. Below it is a bulleted list of setup options in yellow text on a dark blue background. At the bottom right is the Oracle logo, and at the bottom left is the copyright notice.

**Setup**

- **QA: Action Processing Mode**
- **QA: Blind Results Entry**
- **QA: Default Collection Plan**
- **QA: Default Specification Target**
- **QA: PO Inspection**
- **QA: Quality Category Set**
- **QA:Receive Web Supplier Notification**
- **QA:Self-Service Buyer Notification**
- **QA:Self-Service Transaction Notification**
- **QA:Statistics Engine**
- **QA:Update Quality Results Autoquery**

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### Quality Setup

(Help) Oracle Manufacturing Applications > Oracle Quality > Setting Up > Profile Options

Quality profile options control how data is accessed and processed and how Quality integrates with other Oracle and non-Oracle products. During implementation, you set a value for each user profile option to specify how Oracle Quality controls access to and processes data. Generally, the system administrator sets and updates profile values.

## Profile Option Setup

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**Profile Option Setup**

Use the Personal Profile Options window to specify which item category set to use as the default when defining item category specifications.

**(N) Quality > Other > Profile**

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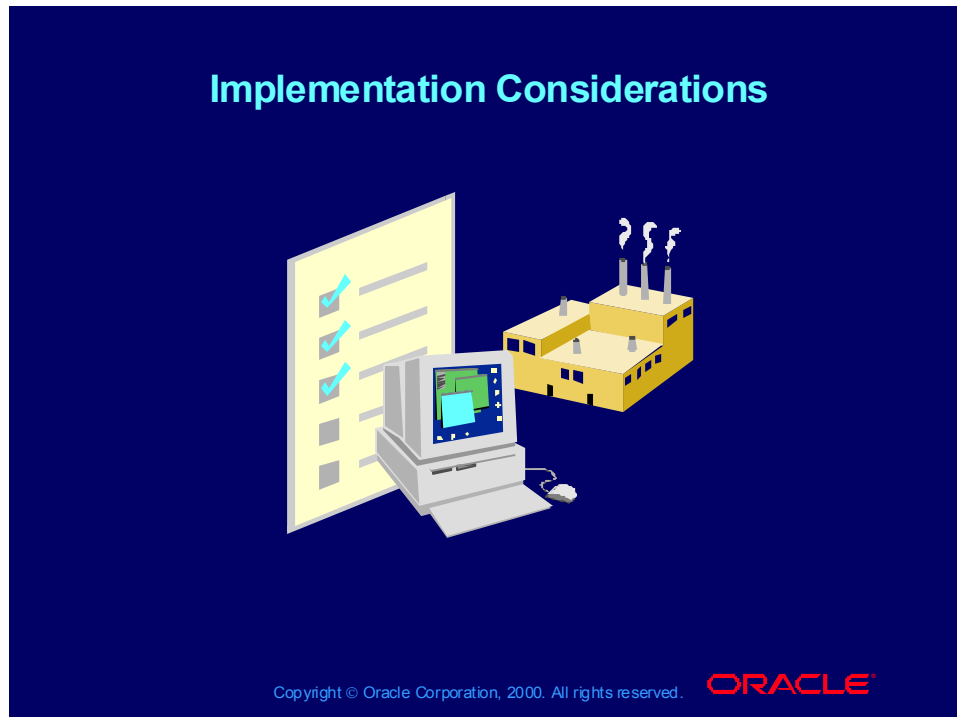
### **QA: Quality Category Set**

Specify which item category set to use as the default when defining item category specifications. This profile option must be set before defining item category specifications.

Item categories are defined in Oracle Inventory. If you are entering quality results for an item using a collection plan that is associated with a specification, but the specification for that item cannot be found, the system uses the category set specified in QA:Quality Category Set to find a specification for the category of that item.

## Implementation Considerations

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### Business Process

- Do you monitor cycle history, such as multiple passes through testing or debugging?
- Do you maintain statistical process controls?
- Do you take or recommend action based on sampling or analysis of a series of outputs?
- How is failure data currently collected?
- Do you collect information on everything and not just failures?
- Do you have a corrective action loop in your process?
- What sampling programs do you use?
- What is your material review board workflow?
- Are responsibilities for dispositioning of nonconformances established by name, department, and role?
- Do you track corrective actions through analysis, action, and change control?
- Do you rework offline or during production?
- Do you keep track of quality costs (rework and repair orders)?
- Do you need to maintain history (for example, serial or lot) records, where you keep track of results for a particular item throughout its process?

### Collection Elements



- What are the key variables and attributes that are monitored during production?
- Do you want collection elements to be autopopulated?
- Do you collect time-to-failure statistics?
- Do you currently log time spent debugging or troubleshooting failures?
- What important characteristics and elements do you plan to collect?
- What types of holds are used after a quality event has occurred and before disposition is made?

### **Specifications**

- What criteria are used to pass material during inspection?
- Do you maintain specifications by item, supplier, and customer?
- Is it necessary to store schematics and other drawings online as electronic documents for inspection purposes?
- Do you maintain target values and validation limits on your specifications?

### **Collection Plans**

- Are collection elements ever calculated as a function of other elements?
- How do you alert the appropriate personnel when quality nonconformance occurs?
- Do collection plans need to be updated frequently?
- Are collection elements derived from other elements? For example, symptom code might be derived from a comparison of results to specifications.
- Do test and inspection instructions need to be available throughout the process?
- Do you want the system to prompt suggested test or debug steps based on preliminary collection results?
- Are action rules and systematic notifications used when a quality event occurs?
- Do you collect symptom, cause, and action codes along the corrective action loop?
- Do you have the capability to determine what quality characteristics must be entered based on other entries or actions?
- Do you need the results on quality collection to initiate another program—for example, transfer material to a subinventory?
- Do collection plans vary by organization for the same transactions?
- Based on the quality results, what are the types of predefined actions you want to specify?

### **Data Collection and Analysis**

- Do you need to be able to back out any collected results?
- Do you prefer to have quality results collected in the background, where no operator intervention is required?
- To what extent are Cp, Cpk, and other process capability statistics maintained and used?
- To what extent are correlation statistics maintained?
- Are failure analyses reported by problem and product?
- Given the data collected, what is the best way of displaying the results?
- What are the primary quality analysis reports in current use? How are they used? By whom are they used? How frequently are they generated?
- What is the frequency of data collected and reporting?

### **Supplier Quality**

- Do suppliers do their own QA?
- Do you need access to their Quality reports?
- Should they be part of your normal quality system?
- Do you do receiving inspection still or do you only use qualified suppliers?
- What qualifies a supplier as a qualified supplier?
- How are they qualified?
- Do you need a quality interface with them?

# **Course Summary**

## **Chapter 6**

### **Oracle Quality: Setup and Implementation Release 11i**

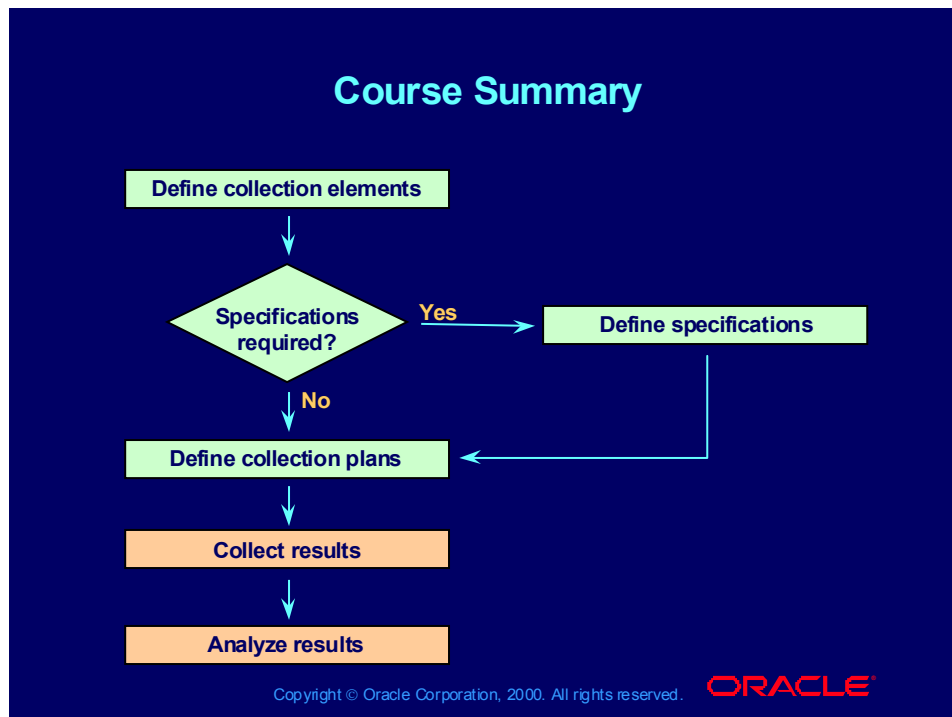
#### **Course Summary**

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## Course Summary

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### Summary

Collection elements are the basic elements that are used to define both collection plans and specifications. They describe the type of data that you want to collect.

Specifications describe the requirements of the product that you are building. When data is collected, the values entered will be compared with the specification.

You create collection plans to collect quality data. Collection plans use collection elements to determine what data to collect and specifications to determine if the values entered are appropriate. Depending on the values entered, certain actions can take place.

