



Training Guide

QAD Item Attributes and Quality Control

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April 2015

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Change Summary

The following table summarizes significant differences between this document and the previous version.

Date/Version	Description	Reference
April 2015 /v2015EE	Initial release	--

About This Course

Course Description

This class is designed to train students in QAD Item Attributes and Quality Control. At the end of the class, students will gain sufficient experience and knowledge to lead and support a high-level conference room pilot or implement a test or a training environment.

Course Objectives

By the end of this class, students will:

- Obtain competency to demonstrate QAD Item Attributes and Quality Control.
- Gain sufficient experience and knowledge to lead and support a high-level conference room pilot or implement a test or a training environment.

Audience

The target users for Item and Lot Attributes include:

- Professionals responsible for master data who define and manage the usage of attributes for items and item lots.
- Material Managers and Quality Control Managers responsible for managing materials based on the conformance and/or characteristics for inventory lots.
- Buyers, Customer Service Representatives, and Production Schedulers responsible for managing deviations for the acceptance of materials received from suppliers, issued to production, and shipped to customers.

The target users for Quality Control include:

- Quality Engineering and Quality Control Professionals responsible for managing quality specifications
- Quality Control Technicians and Quality Control Managers responsible for recording, approving, and reporting quality results data.

Prerequisites

In order to obtain maximum benefit from this class, an understanding of how to use core QAD functions for master data, purchase orders, work orders, Advanced Repetitive, and sales orders is required to complete the exercises for this class.

Virtual Environment Information

The hands-on exercises in this book should be used with the latest Enterprise Edition learning environment. When prompted to log in, specify demo for user ID and qad for password.

Additional Resources

If you encounter questions on QAD software that are not addressed in this book, several resources are available. The QAD corporate Web site provides product and company overviews. From the main site, you can access the QAD Learning or Support site and the QAD Document Library. Access to some portions of these sites depends on having a registered account. <http://www.qad.com/>

QAD Learning Center

To view available training courses, locations, and materials, use the QAD Learning Center. Choose Education under the Services tab to access this resource. In the Learning Center, you can reserve a learning environment if you want to perform self-study and follow a training guide on your own.

QAD Document Library

To access release notes, user guides, training guides, and installation and conversion guides by product and release, visit the QAD Document Library. Choose Document Library under the Support tab. In the QAD Document Library, you can view HTML pages online, print specific pages, or download a PDF of an entire book.

To find a resource, you can use the navigation tree on the left or use a powerful cross-document search, which finds all documents with your search terms and lets you refine the search by book type, product suite or module, and date published.

QAD Support

Support also offers an array of tools depending on your company's maintenance agreement with QAD. These include the Knowledgebase and QAD Forums, where you can post questions and search for topics of interest. To access these, choose Visit Online Support Center under the Support tab.

CHAPTER 1

Introduction to QAD IAQ

QAD Item Attributes and Quality Control

QAD Item Attributes and Quality Control

Functional Task-Based Training
v2015EE



Our Passion. Your Advantage.

Course Objectives

Introduction to Item Attributes and Quality Control

Course Objectives

- Obtain competency to demonstrate QAD Item Attributes
- Preparation for QAD Quality Control
- Gain sufficient experience and knowledge to lead and support a high-level conference room pilot

Course Lessons

Introduction to Item Attributes and Quality Control

Course Lessons


- Item and Lot Attributes Orientation
- Manage Item Attributes
- Manage Materials with Lot Attributes
- Lot Attribute Profile Parameters
- Managing Attribute Layer Priority

Target Users for Item and Lot Attributes

Introduction to Item Attributes and Quality Control

Target Users for Item and Lot Attributes

Target Users	Responsibilities and Duties
<ul style="list-style-type: none"> • Professionals 	Responsible for master data and defining and managing the use of attributes for items and item lots.
<ul style="list-style-type: none"> • Materials Managers • Quality Control Managers 	Responsible in managing materials for lot attributes.
<ul style="list-style-type: none"> • Buyers • Customer Service Reps • Production Schedulers 	Responsible for managing deviations that come from suppliers, purchase orders, customers, sales orders or production.


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The target users for Item and Lot Attributes include:


- **Professionals.** Responsible for master data who define and manage the usage of attributes for items and item lots.
- **Material Managers and Quality Control Managers.** Responsible for managing materials for lot attributes.
- **Buyers, Customer Service Representatives and Production Schedulers.** Responsible for managing deviations that come from suppliers, purchase orders, customers, sales orders or production.

Target Users for Quality Control

Introduction to Item Attributes and Quality Control

Target Users for Quality Control

Target Users	Responsibilities and Duties
<ul style="list-style-type: none"> • Quality Engineering • Quality Control Professionals 	Responsible for defining and managing specifications for tests.
<ul style="list-style-type: none"> • Quality Control Technicians • Quality Control Mangers 	Responsible for recording, approving, and reporting quality results data.


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The target users for Quality Control include:

- **Quality Engineering and Quality Control Professionals** . Responsible for defining and managing specifications for tests.
- **Quality Control Technicians and Quality Control Mangers.** Responsible for recording, approving, and reporting quality results data.

CHAPTER 2

IAQ Navigation and Process Maps

IAQ Navigation and Process Maps

IAQ Navigation and Process Maps

Functional Task Based Training



Our Passion. Your Advantage.



Lesson Objectives

IAQ Navigation and Process Maps

Lesson Objectives

- Learn how to successfully navigate the IAQ process maps

Lesson Content

IAQ Navigation and Process Maps

Lesson Content

- Navigation and search best practices
- Underlying foundational elements
- Collections and user interface best practices

IAQ Navigation – Do's and Don'ts

IAQ Navigation and Process Maps

IAQ Navigation – Do's and Don'ts



- **Use process maps and favorites** to navigate and search for programs.



- Do not use Menu Search to open programs in IAQ.

Note: Most programs that support browse collections do not work as standalone programs

To navigate through the programs and collections in IAQ, use the process maps included in QAD EE. The IAQ solutions are supported using browse collections and browses that are designed to be accessed from process maps or saved as favorites. Menu-level functions for item attributes and quality control should only be accessed from a browse collection. When selected from the .NET Applications search or using a character user interface, those menu level functions are not supported.

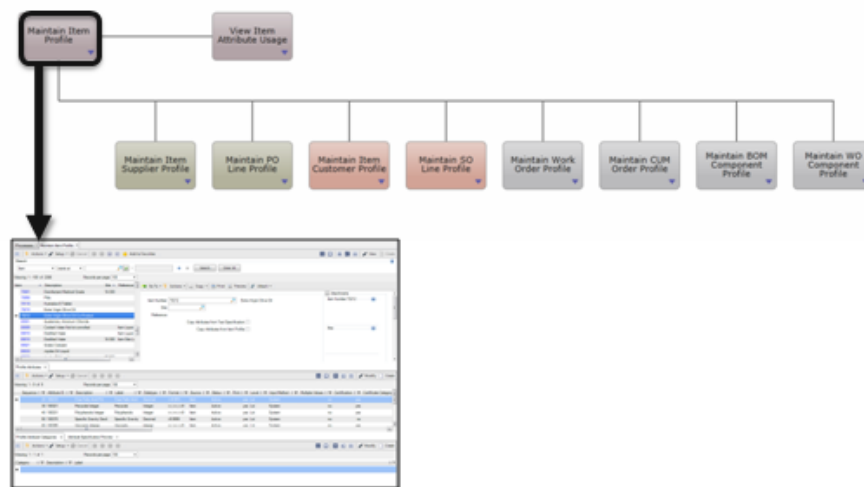
Note: Do not use Attribute Definition Maintenance (7.19.2, gpatrmt.p) to define item attributes. It is a specialized function that should only be used by qualified Information Technology personnel to define attributes for other applications other than Item Attributes and Quality Control.

IAQ Navigation – Using Process Maps

IAQ Navigation and Process Maps

IAQ Navigation – Using Process Maps

- Select Maintain Item Attributes to open the Maintain Item Profile collection.



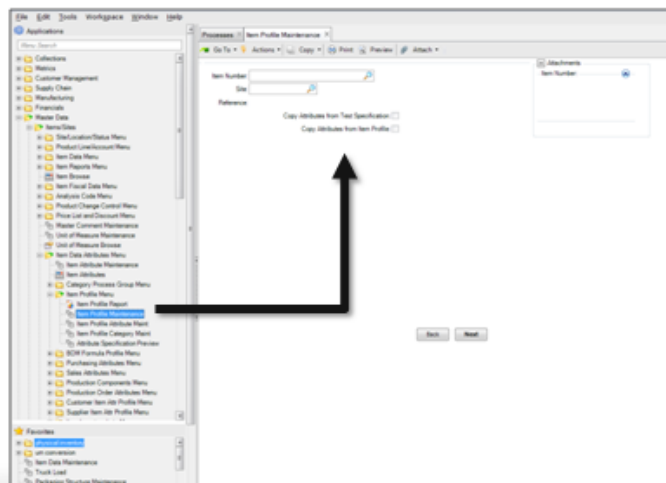
For example, if you select Maintain Item Attributes from the process map, the system opens the Maintain Item Profile collection, which contains the necessary IAQ functions and programs to maintain an item profile.

IAQ Navigation – Menu Search

IAQ Navigation and Process Maps

IAQ Navigation – Menu Search

- Selecting Item Profile Maintenance from the Menu Search only opens one program used in the Maintain Item Profile Collection.



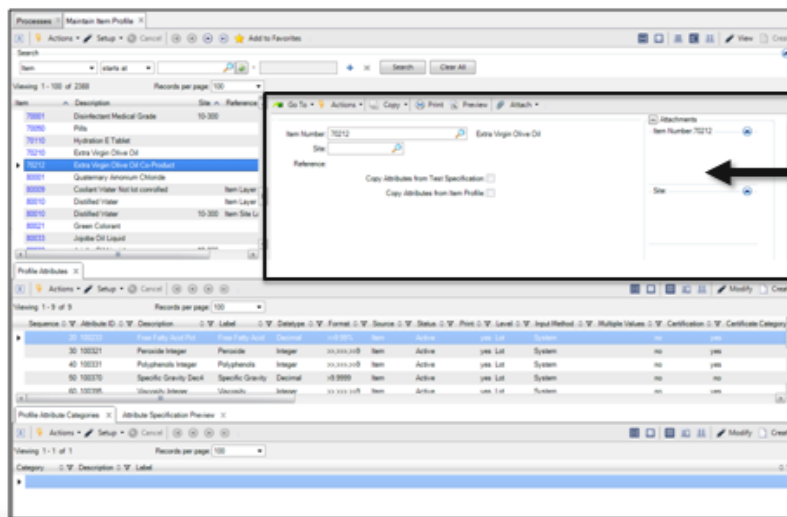
If you select Item Profile Maintenance from the Menu Search, the system will only open the Item Profile Maintenance program, which is only one program used in the Maintain Item Profile collection.

IAQ Navigation – Menu Search

IAQ Navigation and Process Maps

IAQ Navigation – Menu Search

- The Item Profile Maintenance program functions properly when used within the collection.



Item Profile
Maintenance
program

In the Maintain Item Profile collection, the Item Profile Maintenance program is used in the upper browse.

IAQ Process Maps

IAQ Navigation and Process Maps

IAQ Process Maps

Functional Task Based Training

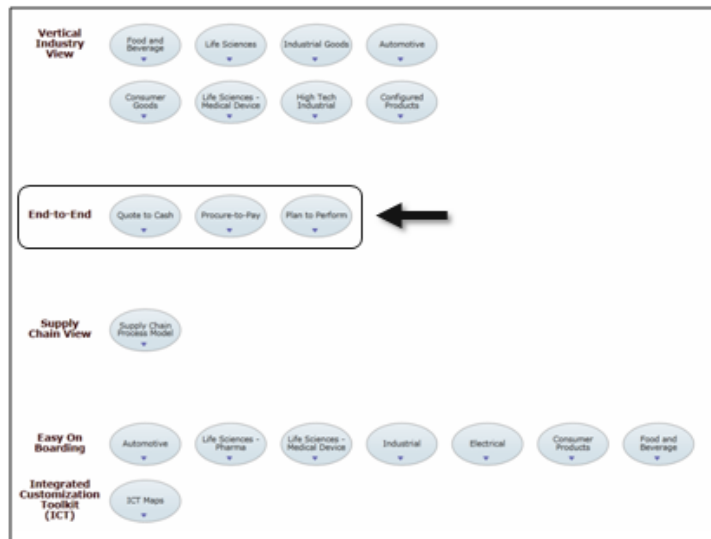


QAD Process Maps

IAQ Navigation and Process Maps

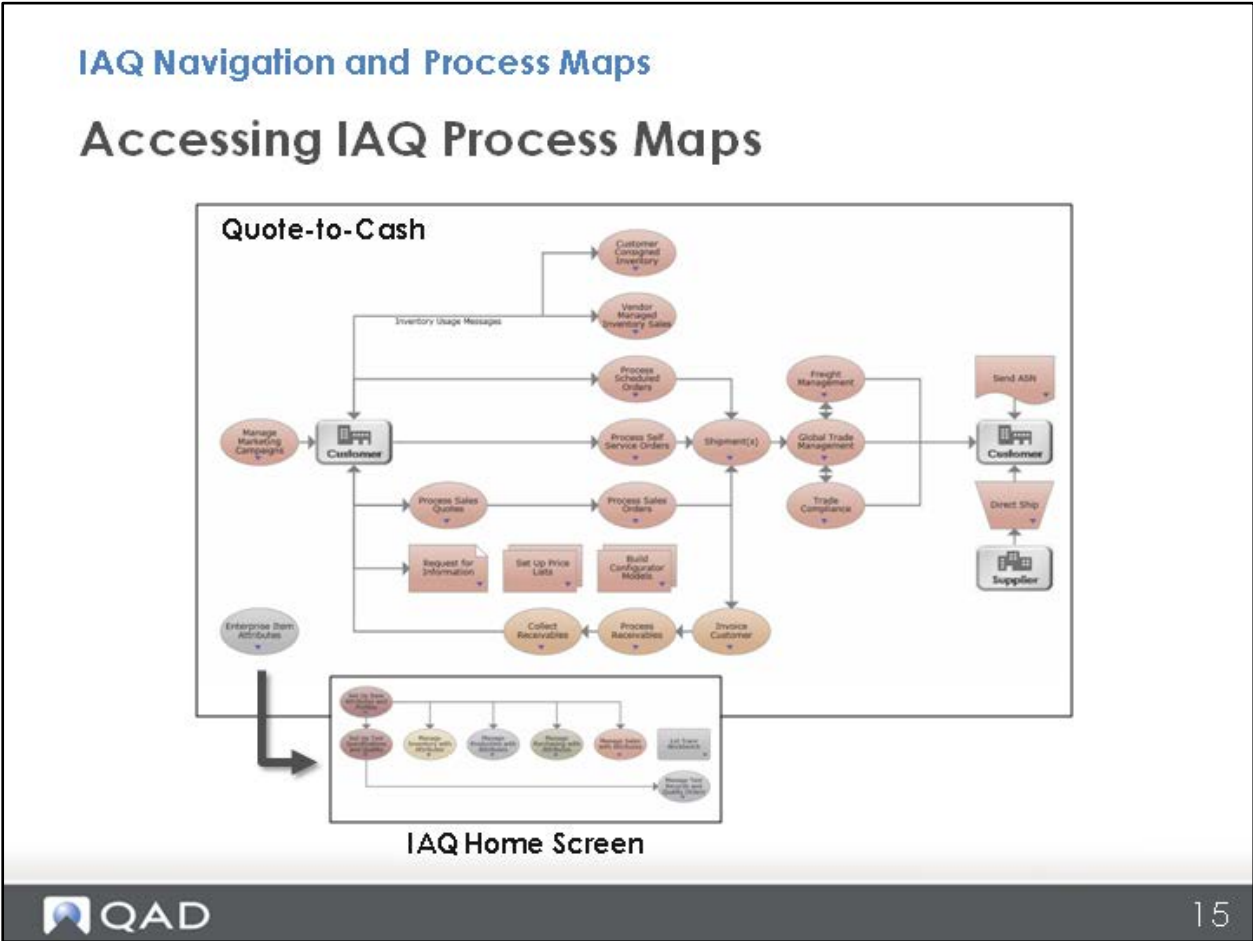
QAD Process Maps

- Access the IAQ process maps from:
 - Quote to Cash
 - Procure-to-Pay
 - Plan to Perform



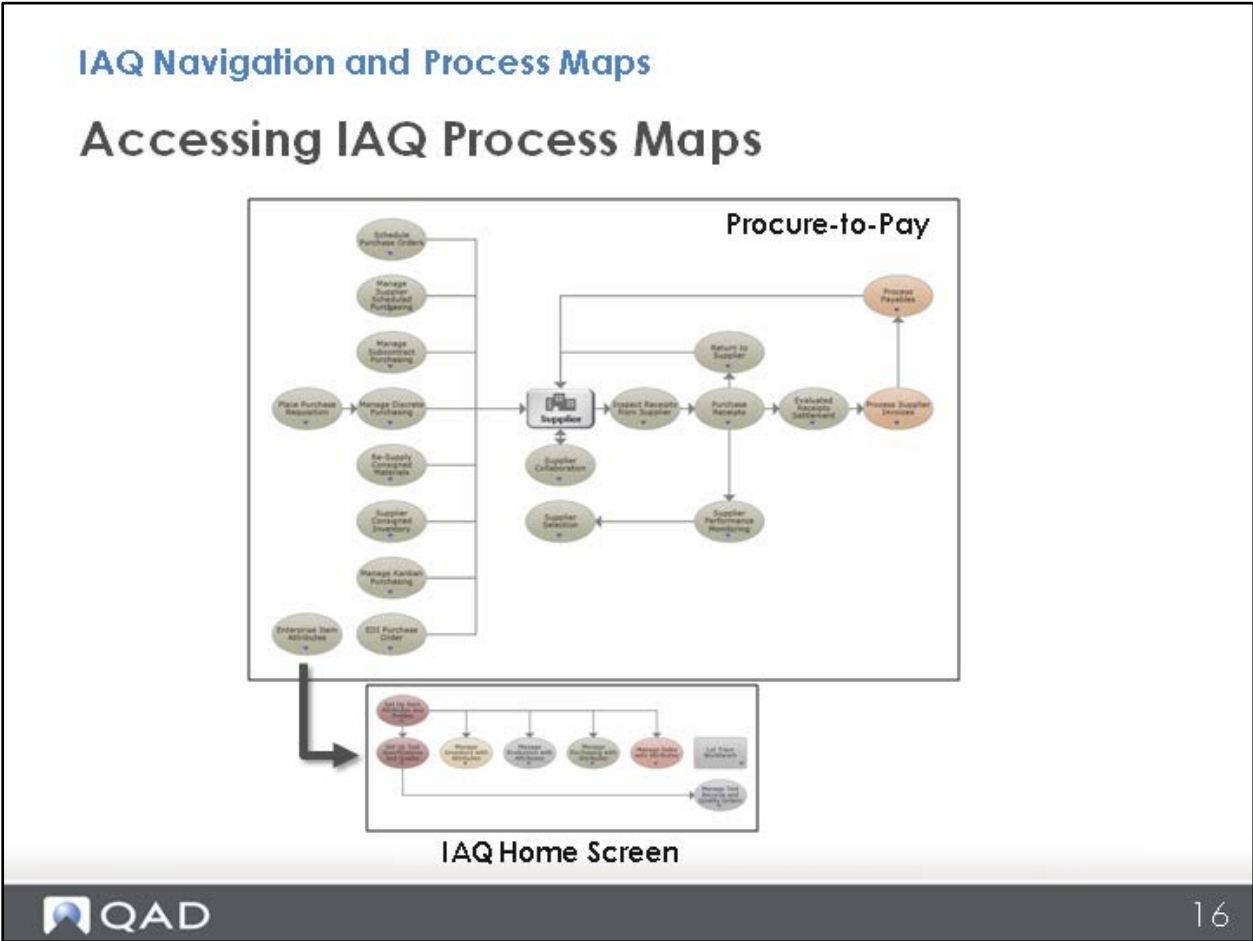
Process maps are the primary navigation tool for both Item Attributes and Quality Control. The process maps for Item Attributes and Quality Control are configured with the essential functions for inventory, purchasing, production, quality, and sales business cycles using attributes. Access the IAQ process maps from **Quote to Cash**, **Procure-to-Pay**, and **Plan to Perform**.

Accessing IAQ Process Maps



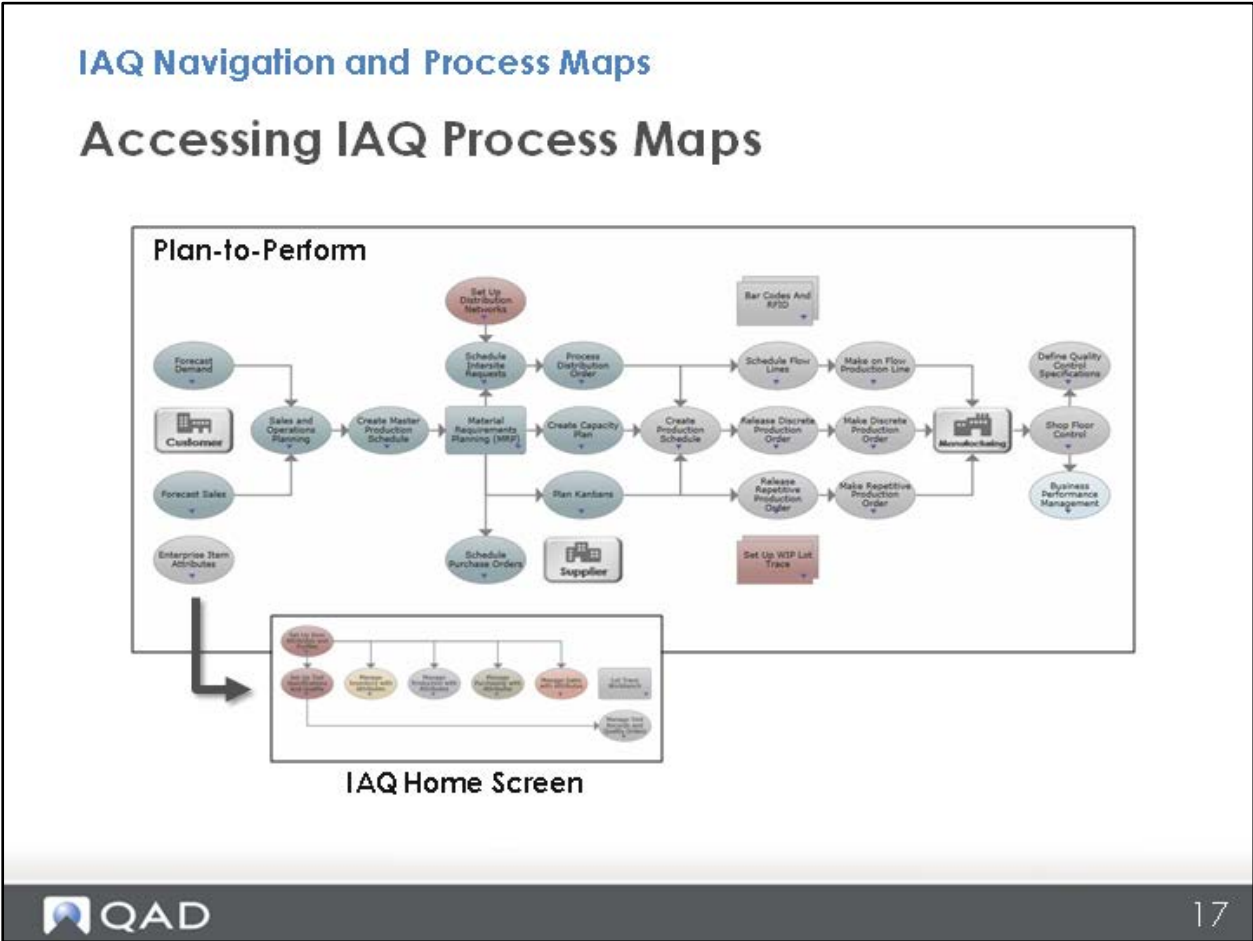
From the Quote to Cash process map, select Enterprise Item Attributes to access the IAQ home screen.

Accessing IAQ Process Maps



From the Procure-to-Pay process map, select Enterprise Item Attributes to access the IAQ home screen.

Accessing IAQ Process Maps



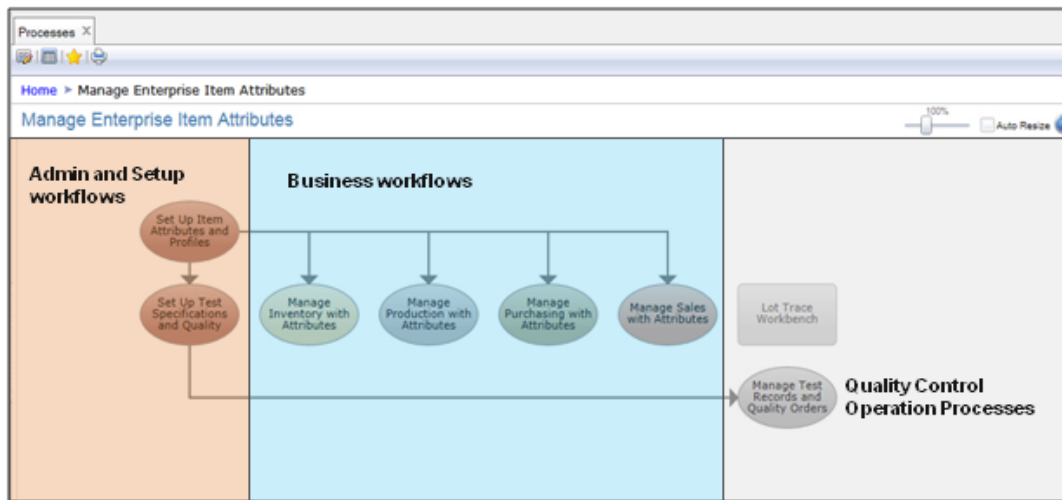
From the Plan-to-Perform process map, select Enterprise Item Attributes to access the IAQ home screen.

IAQ Home Process Map

IAQ Navigation and Process Maps

IAQ Home Process Map

- Manage Enterprise Item Attributes



Manage Enterprise Item Attributes is the top level/home process map for IAQ. This process map is organized in the following workflows:

- **Administrative and Setup Workflows.** Include the Set Up Item Attributes and Profiles and Set Up Test Specifications and Quality programs.
- **Business Workflows.** Include the points of entry for inventory, purchasing, production, quality, and sales business cycles using attributes.

IAQ Process Maps

IAQ Navigation and Process Maps

IAQ Process Maps

Function	Process Map
Setting up item attributes and quality control	<ul style="list-style-type: none">• Set Up Item Attributes• Set Up Test Specifications and Quality
Business operations using attributes (inventory, production, purchasing, and sales)	<ul style="list-style-type: none">• Manage Inventory with Attributes• Manage Production with Attributes• Manage Purchasing with Attributes• Manage Sales with Attributes
Quality control operations using attributes and test specifications (inventory, production, purchasing, and sales)	<ul style="list-style-type: none">• Inspect Inventory• Inspect Production Receipts• Inspect Purchasing Receipts• Inspect Inventory for Sales• Inspect Production Operations

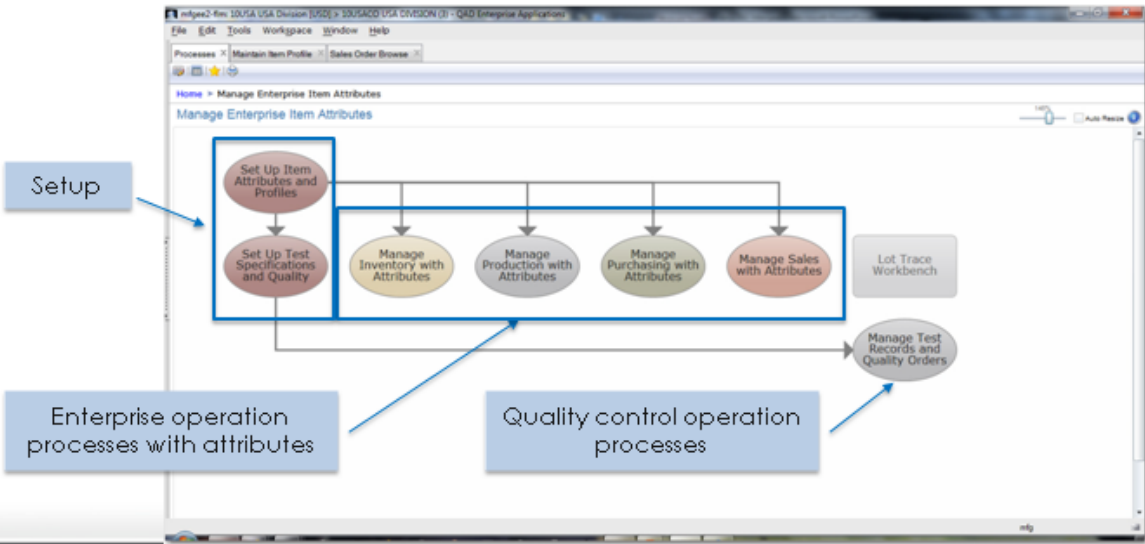


Enterprise Attribute Processes

Item and Lot Attributes Orientation

Enterprise Attribute Processes

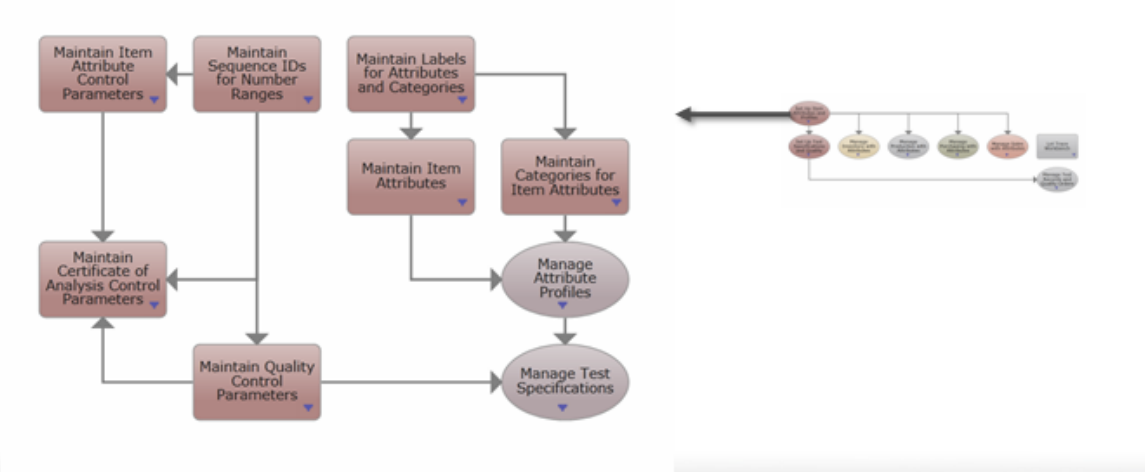
- Processes for operation activities with attributes



Set Up Item Attributes

IAQ Navigation and Process Maps Set Up Item Attributes

- **Set Up Item Attributes Process Map**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Set Up Item Attributes and Profiles



*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

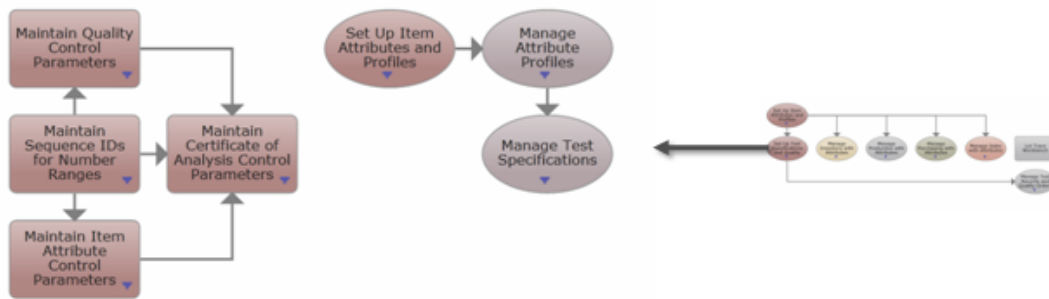


Set Up Test Specifications and Quality

IAQ Navigation and Process Maps

Set Up Test Specifications and Quality

- **Set Up Test Specifications and Quality**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Set Up Test Specifications and Quality



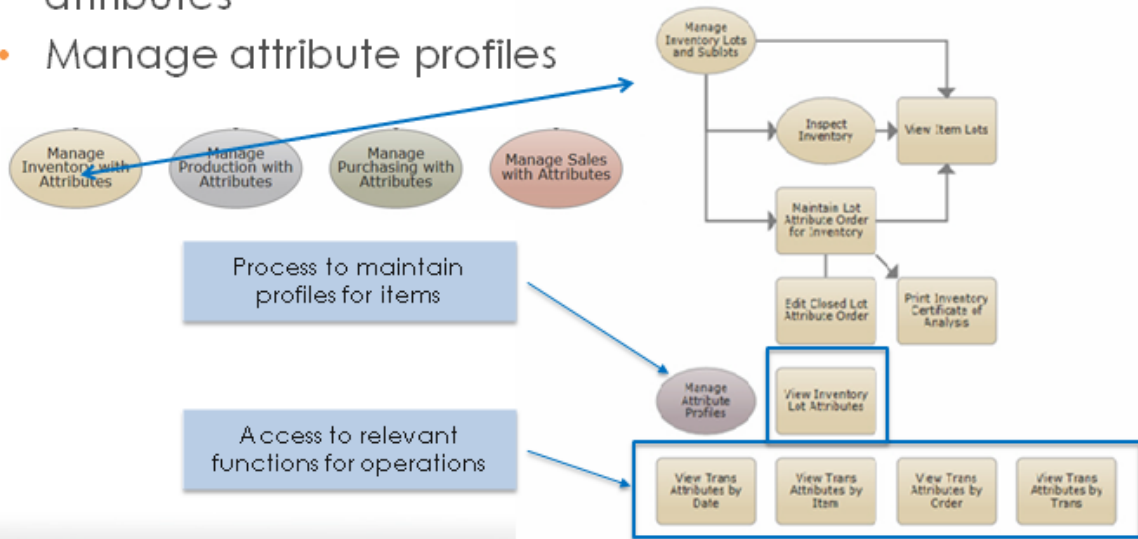
*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

Enterprise Operation Processes

Item and Lot Attributes Orientation

Enterprise Operation Processes

- Example from Manage Inventory process map
- Access to key functions to manage operations with attributes
- Manage attribute profiles



Within each of the four operational process maps for item attributes, you have access to be able to manage attribute profiles.

Each of the process maps also provide quick access to key functions to support operations.

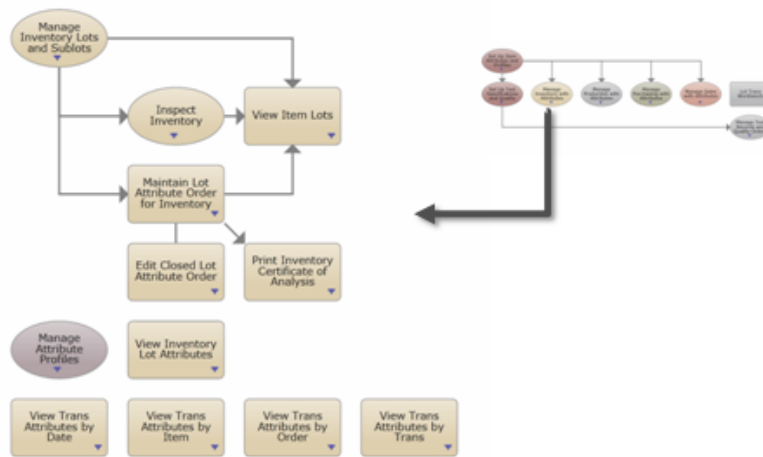
This map to Manage Inventory with attributes has functions specifically related to managing inventory with lot attribute values.

Manage Inventory with Attributes

IAQ Navigation and Process Maps

Manage Inventory with Attributes

- **Manage Inventory with Attributes**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Inventory with Attributes



Within each of the four operational process maps for item attributes, you have access to be able to manage attribute profiles.

Each of the process maps also provide quick access to key functions to support operations.

This map to Manage Inventory with attributes has functions specifically related to managing inventory with lot attribute values.

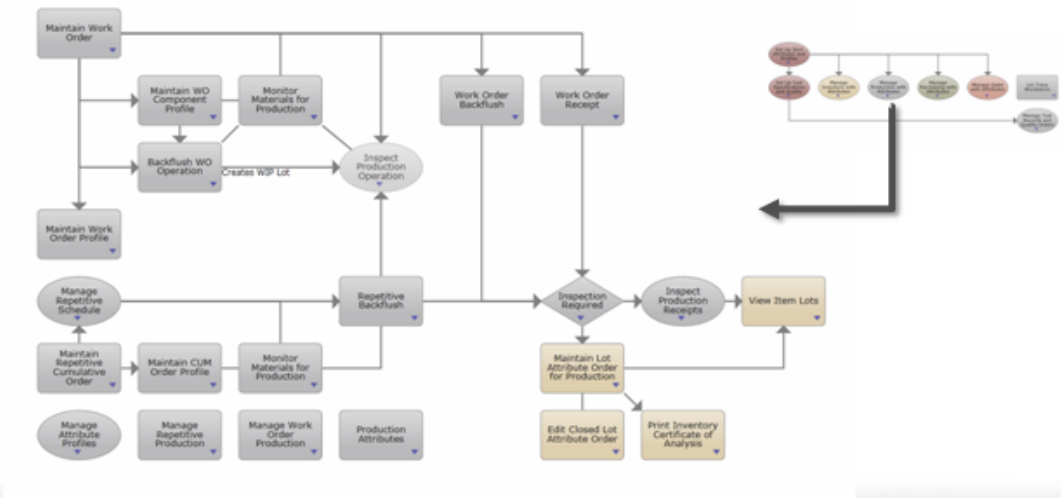
*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

Manage Production with Attributes

IAQ Navigation and Process Maps

Manage Production with Attributes

- **Manage Production with Attributes**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Production with Attributes



*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

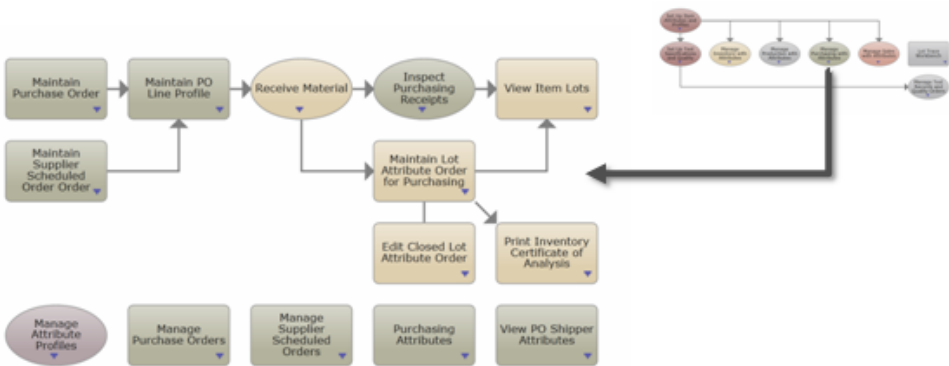


Manage Purchasing with Attributes

IAQ Navigation and Process Maps

Manage Purchasing with Attributes

- **Manage Purchasing with Attributes**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Purchasing with Attributes



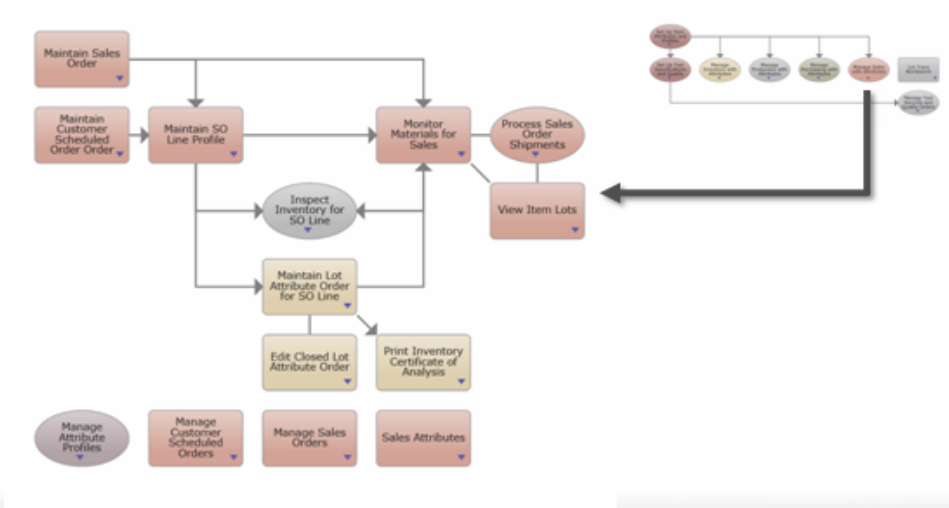
*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

Manage Sales with Attributes

IAQ Navigation and Process Maps

Manage Sales with Attributes

- **Manage Sales with Attributes**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Sales with Attributes



*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

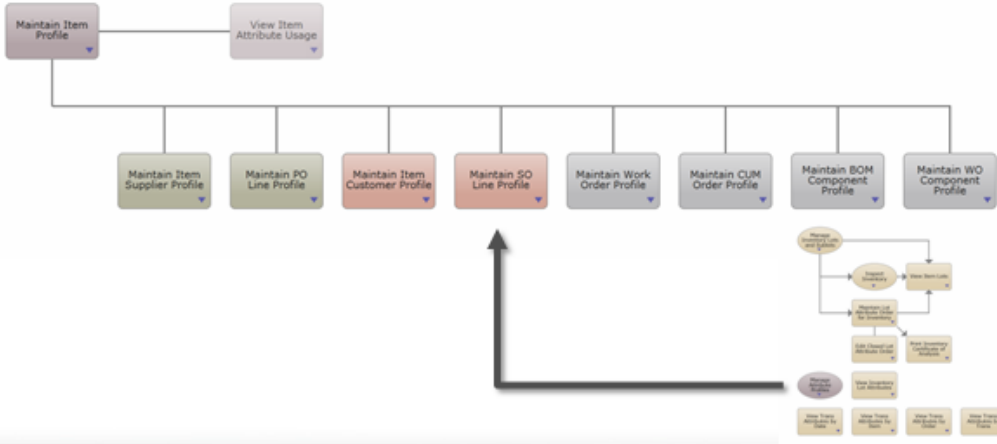


Manage Attribute Profiles

IAQ Navigation and Process Maps

Manage Attribute Profiles

- **Manage Attribute Profiles**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Inventory with Attributes | Manage Attribute Profiles



*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

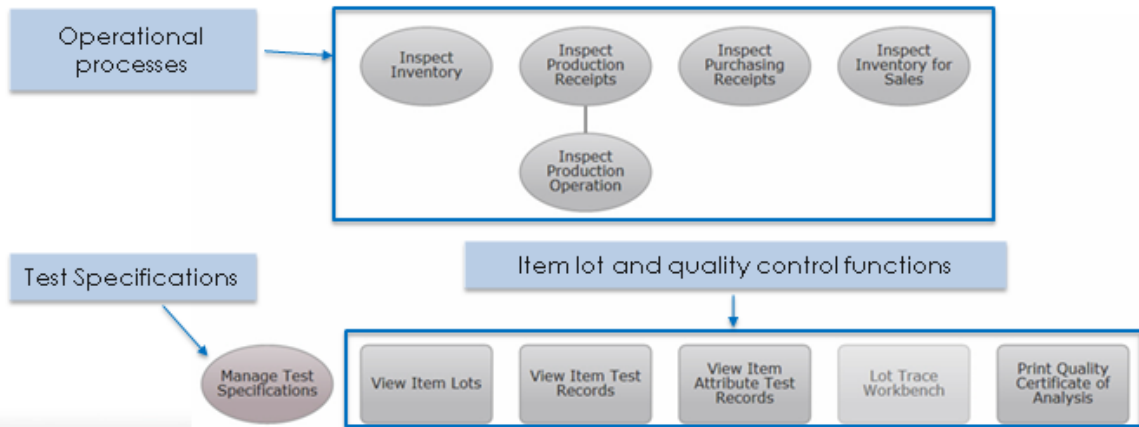


Quality Control Operation Processes

Item and Lot Attributes Orientation

Quality Control Operation Processes

- Processes for operation activities and quality
- Manage test specifications
- Functions for item lots and quality control



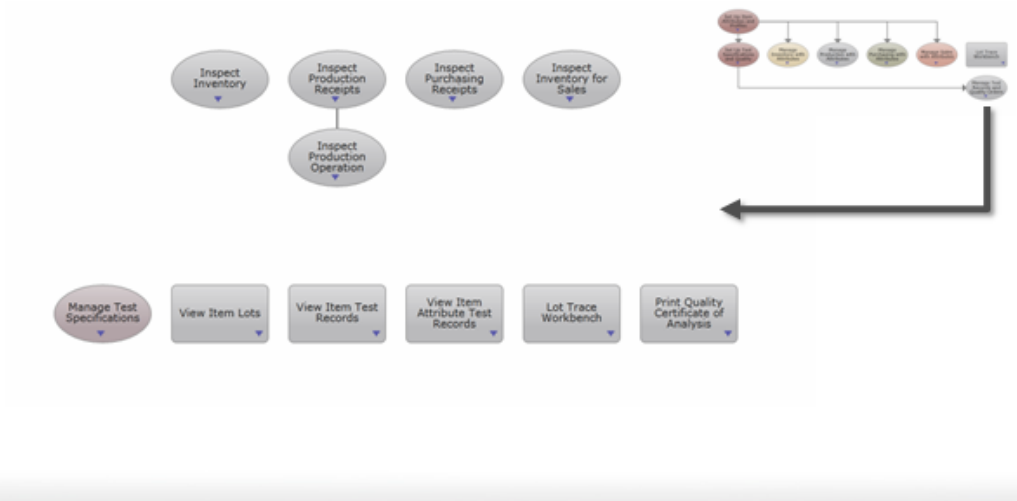
The process map for Test Records and Quality Orders provides access to manage test specifications, as well as quality control operations.

Manage Test Records and Quality Orders

IAQ Navigation and Process Maps

Manage Test Records and Quality Orders

- **Manage Test Records and Quality Orders**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Test Records and Quality Orders



*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

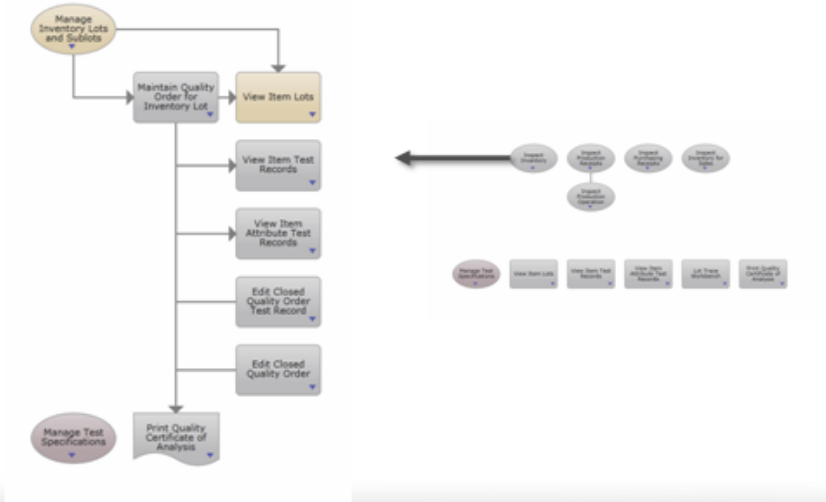


Inspect Inventory

IAQ Navigation and Process Maps

Inspect Inventory

- **Inspect Inventory**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Test Records and Quality Orders | Inspect Inventory



*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

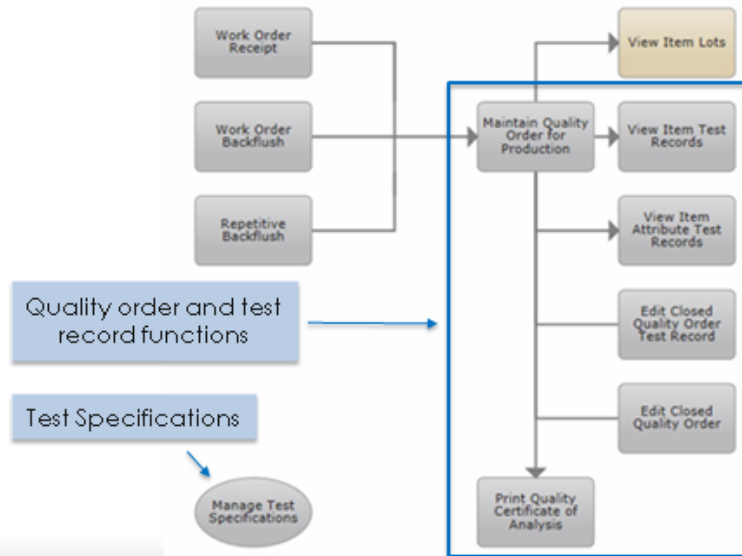


Quality Control Inspection Processes

Item and Lot Attributes Orientation

Quality Control Inspection Processes

- Access to key quality functions for an operational area including test specifications



Each of the maps for quality control inspection process provide access to manage test specifications. They also provide access to functions related to test records, quality orders, and certificates of analysis.

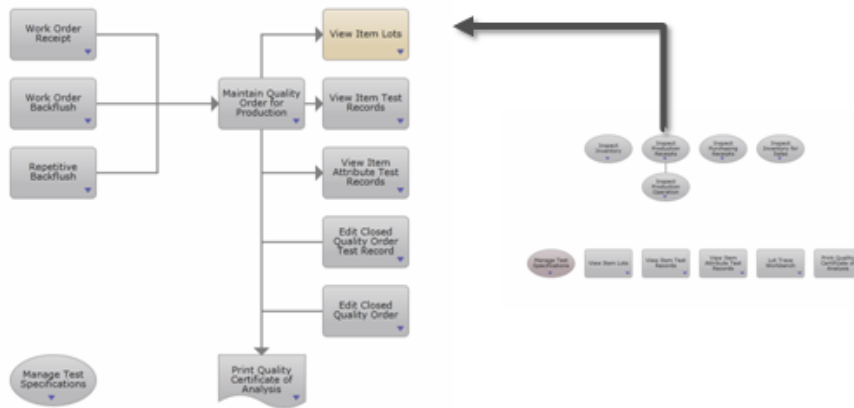
Inspect Production Receipts

IAQ Navigation and Process Maps

Inspect Production Receipts

- **Inspect Production Receipts**

- Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Test Records and Quality Orders | Inspect Production Receipts



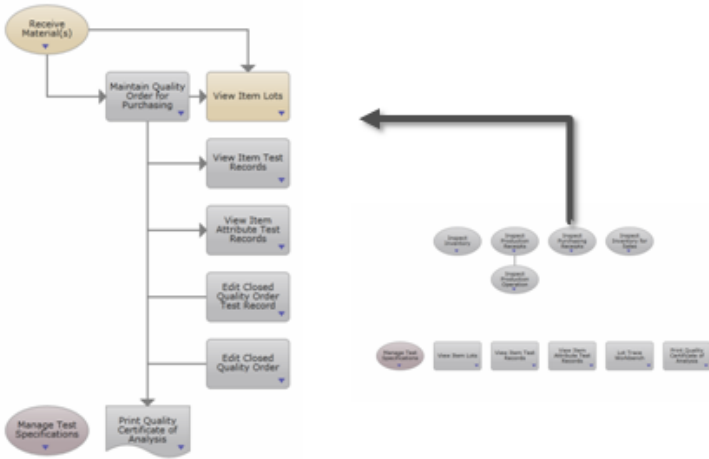
*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

Inspect Purchasing Receipts

IAQ Navigation and Process Maps

Inspect Purchasing Receipts

- **Inspect Purchasing Receipts**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Test Records and Quality Orders | Inspect Purchasing Receipts



*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

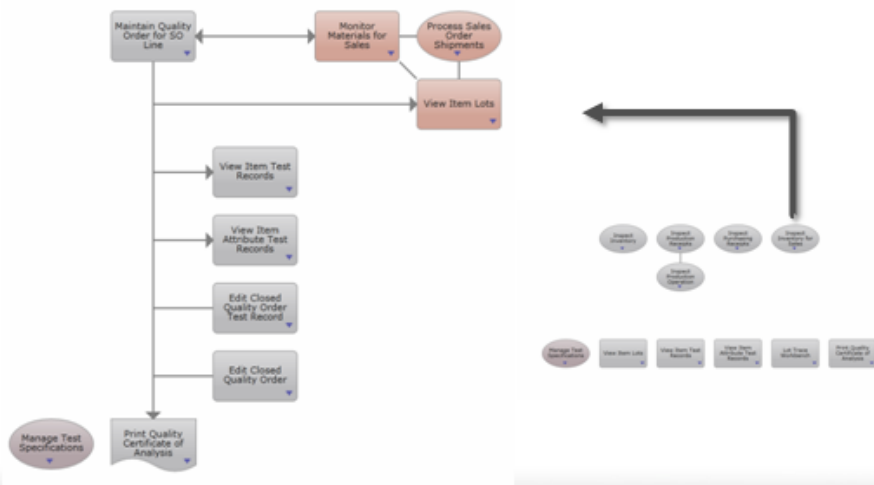


Inspect Inventory for Sales

IAQ Navigation and Process Maps

Inspect Inventory for Sales

- **Inspect Inventory for Sales**
 - Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Test Records and Quality Orders | Inspect Inventory for Sales



*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.



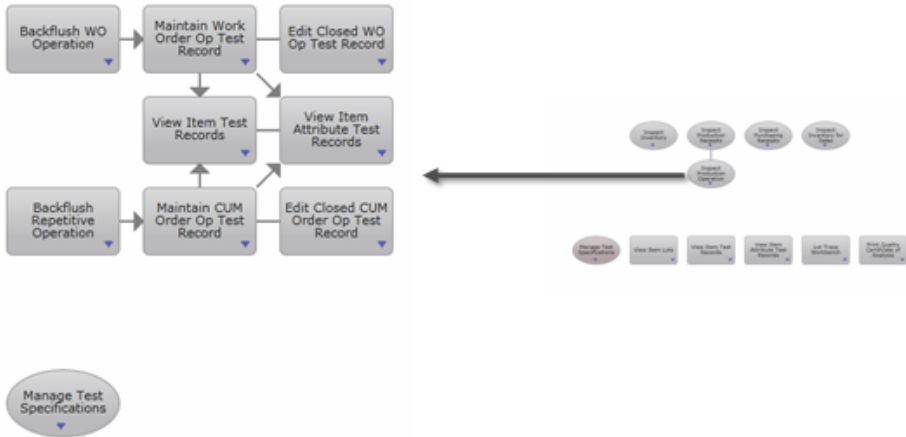
Inspect Production Operation

IAQ Navigation and Process Maps

Inspect Production Operation

- **Inspect Production Operation**

- Home | Quote to Cash* | Manage Enterprise Item Attributes | Manage Test Records and Quality Orders | Inspect Production Operation



*This path shows how to access the process map from Quote to Cash. You can also access this process map from Procure to Pay or Plan to Perform.

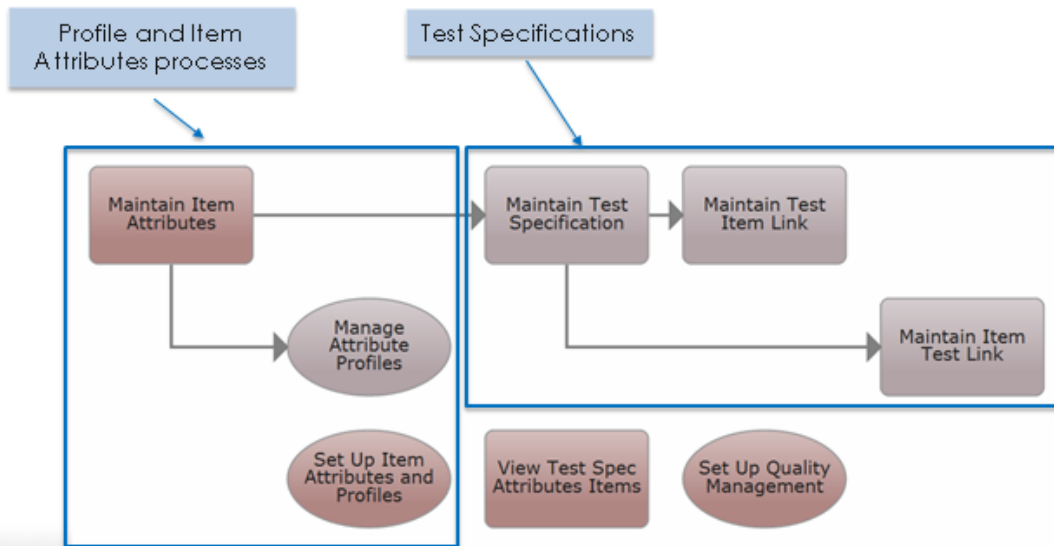


Manage Test Specification with Profiles

Item and Lot Attributes Orientation

Manage Test Specification with Profiles

- Access to all functions related to test specifications
- Processes to set up profiles and item attributes



Exercise

Item and Lot Attributes Orientation

Exercise

- Objective
 - To become familiar with using process maps and seeing how they are organized
- Use the process maps to find and execute the collection for
 - Maintain Item Supplier Profile
- Use the menu search and execute functions
 - ItemSupplier Profile Attributes
 - ItemSupplier Profiles

CHAPTER 3

IAQ Setup

Item Attribute Foundation Elements

IAQ Setup

Item Attribute Foundation Elements

QAD Item Attributes and Quality Control



Foundational Elements

IAQ Setup

Foundational Elements

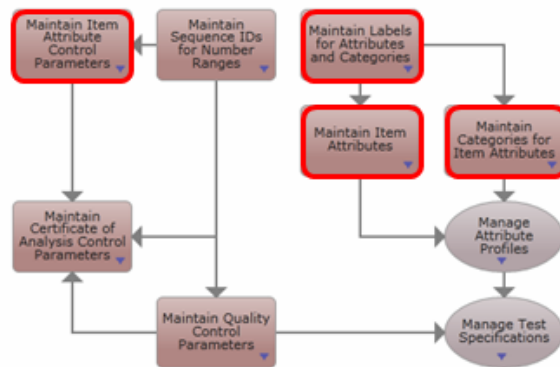
- Required to use Item Attributes and Quality Control
- Set up by IT administrators
 - To provide data that can be used by broader range of users

Four Elements of Item Attributes

IAQ Setup

Four Elements of Item Attributes

- Item Attribute Control
- Label Master
- Attribute Categories
- Item Attributes



To manage item attributes, you should first understand the core foundational elements:

- Label Master
- Item Attributes
- Attribute Categories
- Item Attribute Control

These core elements are used for business applications for both Item Attributes and Quality Control.

Item Attribute Control

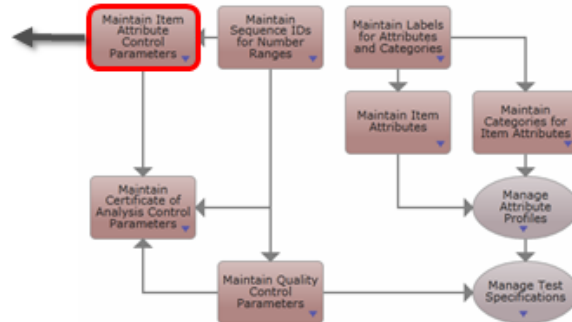
IAQ Setup

Item Attribute Control

- Set up the high level settings that govern item attribute management
- Determine how inventory is categorized and how new IDs are generated

The screenshot shows the 'Item Attribute Control' setup window. It includes the following fields and options:

- Attribute Status: Active
- Non-conforming Status: N-N-N
- Display Specification for Results Entry:
- Use Inventory Reference as Sublot:
- Lot Attribute Order Sequence ID: loid
- Auto Lot Number Sequence ID: getnumgi
- Attribute ID Sequence ID: attrid



In Item Attribute Control, you can define control parameters that determine the default values for fields associated with item attribute or QAD EE programs. You can:

- Set up the default status for a new attribute when it is added to an attribute profile.
- Set the default inventory status code to be used for processing a non-conforming item lot.
- Determine if the specifications for lot and subplot profile attributes are displayed when using receipt transaction.
- Determine if the inventory detail Reference field identifies a subplot.
- Set the Number Range Management (NRM) sequence code for lot attribute order IDs, automatically assigned lot numbers, and item attribute IDs.

Item Attribute Control – Field Definitions

IAQ Setup

Item Attribute Control – Field Definitions

- Attribute Status
- Non-Conforming Status
- Display Specification for Results Entry
- Use Inventory Reference as Sublot
- Lot Attribute Sequence ID
- Auto Lot Number Sequence ID
- Attribute Sequence ID



Item Attribute Control

- **Attribute Status.** Set the default status to Active or Inactive. It is recommended that you set the default status to Active, which is the default status for a new attribute when it is added to an attribute profile. For more information about attribute status, see “Adding Attributes to an Item Profile” on page 23.
- **Non-conforming Status.** Select the inventory status code that is applied to an inventory lot when the result for that lot on a quality or lot attribute order is non-conforming. The inventory status code is applied when you close the quality or lot attribute order for that inventory lot. For more information about inventory status codes, see the QAD Master Data User Guide.
- **Display Specification for Results Entry.** Select this check box to have the system display the profile specifications for lot and subplot attributes when entering values for those attributes using supported receipt transactions.

- **Use Inventory Reference as Sublot.** Select this check box to have the inventory detail Reference field identify the subplot for an inventory lot record. This check box should only be selected if:
 - The Reference field for inventory records will never be used to identify a location such as a shelf, a bin, a pallet, or a container.
 - and,
 - There is no integration with QAD Warehousing.

Note: If you are using QAD Warehousing, do not select this check box because Warehousing uses the Reference field for pallets.

- **Lot Attribute Order Sequence ID.** Enter the Number Range Management (NRM) sequence used to automatically assign the ID for lot attribute orders. The system uses this code to generate sequence numbers for all lot attribute order numbers. When setting up the sequence in NRM, use ql_id as the target dataset. For information on setting up NRM sequences, see the QAD System Administration User Guide.
- **Auto Lot Number Sequence ID.** Enter the NRM sequence code used to automatically assign lot numbers for inventory. The system uses this sequence ID when there is no auto lot number specified in the item master. When setting up the sequence in NRM, use attrlot_lot as the target dataset. For information on setting up NRM sequences, QAD System Administration User Guide.
- **Attribute ID Sequence ID.** Enter the NRM sequence code used to automatically assign the attribute ID for an item attribute. When setting up the sequence in NRM, use attr_name as the target dataset. For information on setting up NRM sequences, see the QAD System Administration User Guide.

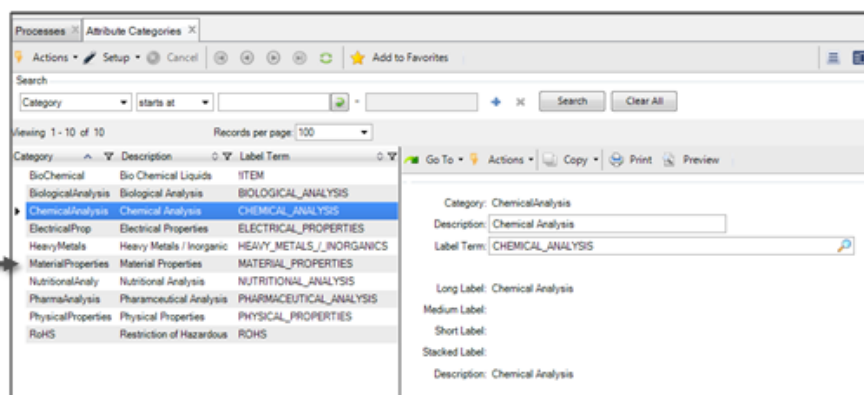
Attribute Categories

IAQ Setup

Attribute Categories

- Used for organizing information for attributes on a certificate of analysis
- Available, but not required, when defining an attribute for an item

List of categories in the system



Use the Attribute Categories function to browse, create, and maintain attribute categories that you can use with item attributes. For certificate of analysis functions, the system uses attribute categories to organize and label groups of attributes.

You can identify ways that attributes are classified for items, then create attribute categories for each classification. In some cases, an attribute can belong to multiple attribute categories. For example, you can create attribute categories for:

- Classes and sub-classes of attributes that need to be verified or measured when items are received or produced.
- Item attributes that have values that you need to maintain, store, and report for inventory quantities and/or item lots.
- Item attributes that have specifications that you need to communicate to suppliers or customers.
- Item attributes that have specifications and typical or actual values that you need to communicate to suppliers or customers.

Attribute Categories – Field Definitions

IAQ Setup

Attribute Categories – Field Definitions

- Category
- Description
- Label Term
- Long Label
- Medium Label
- Short Label
- Stacked Label
- Description



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Attribute Categories

- **Category.** Enter a unique identifier for the attribute category.

Note: Attributes can be classified in different ways and optionally have one or more attribute categories to classify them.

- **Description.** Enter a short description of the attribute category.
- **Label.** Select a valid label term defined in Label Master Maintenance. The system uses this term and the defined attribute to determine the label that displays on the user interface.

Note: If the value for Label Term is left blank or if a label master record does not exist for the label term, the attribute functions display the attribute description in place of a label.

- **Long Label.** Displays the Label Term's primary display label from the label master record.
- **Medium Label.** Displays the Label Term's medium display label from the label master record. The medium label is only displayed if the long label is too long to display on the screen.
- **Short Label.** Displays the Label Term's short display label from the label master record. The short label is only displayed if the long and medium labels are too long to display on the screen.
- **Stacked Label.** Displays the Label Term's stacked display label from the label master record.
- **Description.** Displays the Label Term's description from the label master record.

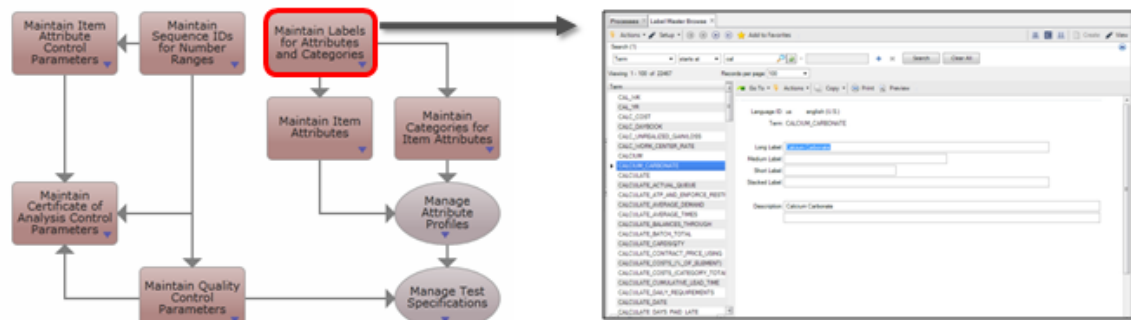
Label Master Maintenance

IAQ Setup

Label Master Maintenance

Maintain Labels for Attributes and Categories

- Standardized attribute descriptions for multiple languages
- Attribute labels are stored with those used for the QAD user interface.



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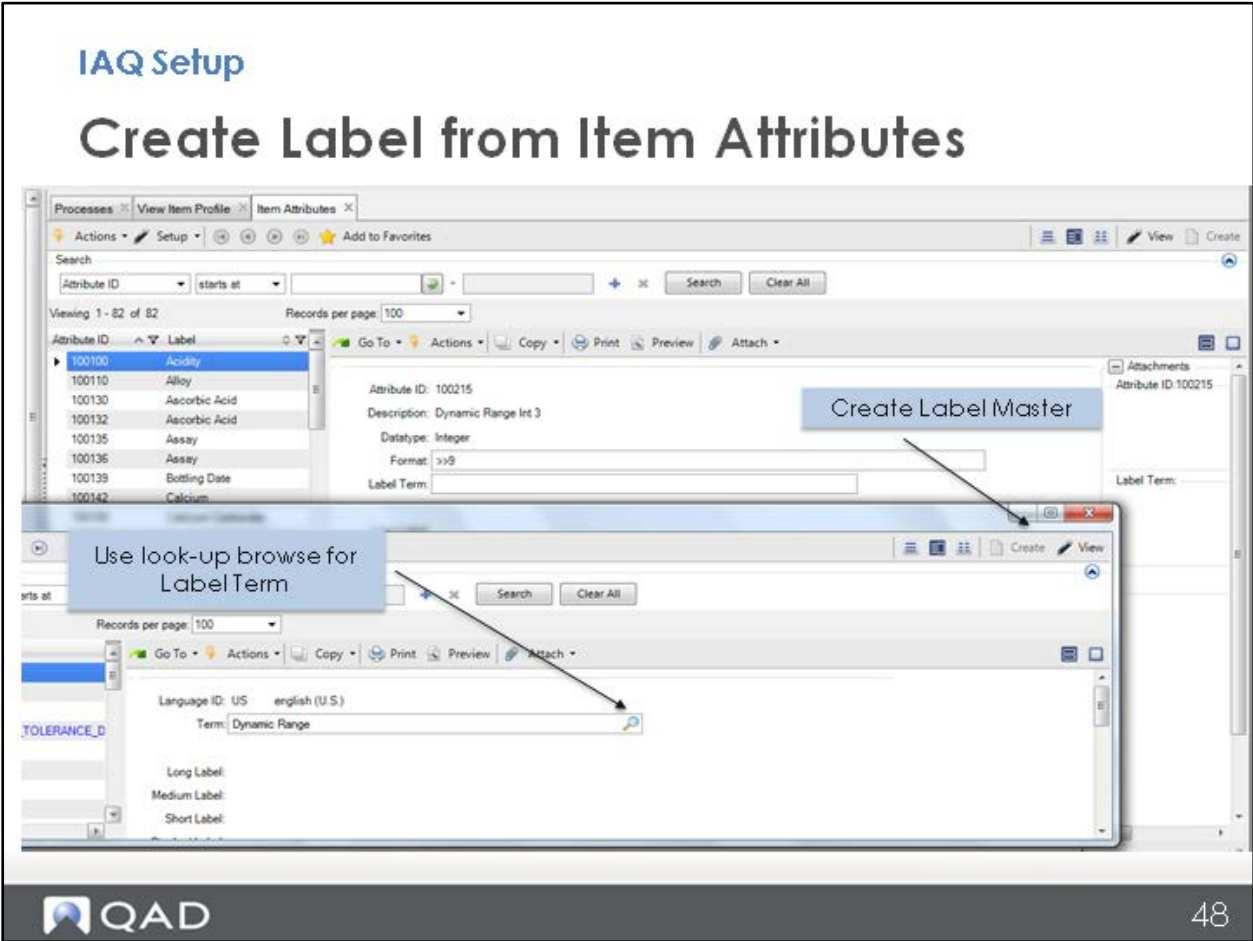
Labels determine how attributes appear on reports and within the system and they allow multiple attributes to measure the same characteristic using different datatypes. This enables you to create variants of an attribute that are distinct within the system.

QAD EE uses label master records to provide support for multiple languages for all applications, including IAQ. In IAQ, label master records help standardize the attribute descriptions for multiple languages. For more information about creating labels, see the QAD System Administration User Guide.

Use the Label Master Maintenance within the Label Master Browse to create and modify labels for a language. Each label has a Term, which is the unique identifier for that label, and a collection of labels which may or may not be unique.

Note: Best practice is to create labels before creating attributes. Label master records are system-level data that should be secured and accessed by Information Technology personnel.

Create Label from Item Attributes



To simplify the label creation process, a new label master record can be created by searching on Label Term and using the create button on the Label Master Browse. This will launch the maintenance program.

Item Attributes – Key Facts

IAQ Setup

Item Attributes – Key Facts

- Basic building block of:
 - Item Attributes
 - Lot Attributes
 - Test Specifications
 - Quality Results
- Cross domains



Item attributes are specific characteristics that can be applied to items. Attributes serve as the basic building blocks necessary to support item attributes, lot attributes, quality control specifications, and quality control results. Attributes, which are used for items and quality control, can be applied across all domains.

An item attribute consists of an identifier, description, label identifier, and additional data for a characteristic that can be applied to an item. Each attribute has a unique identifier and an optional label identifier that supports the capability for an attribute to have labels that are appropriate for a user's language. Like labels, once item attributes are defined in one domain, they are shared and available across all domains.

Item Attributes – Key Facts (cont.)

IAQ Setup

Item Attributes – Key Facts (cont.)

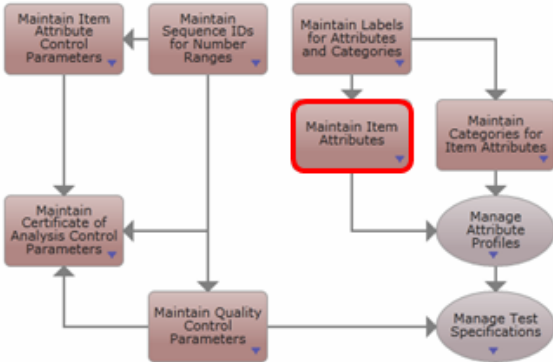
- Can be applied to items, item lots, and quality control
- Are different from attributes that are applied to other things, such as customers, suppliers, and price lists

Creating an Item Attribute

IAQ Setup

Creating an Item Attribute

1. Open Item Attributes by selecting Maintain Item Attributes from the Manage Enterprise Item Attributes process map.

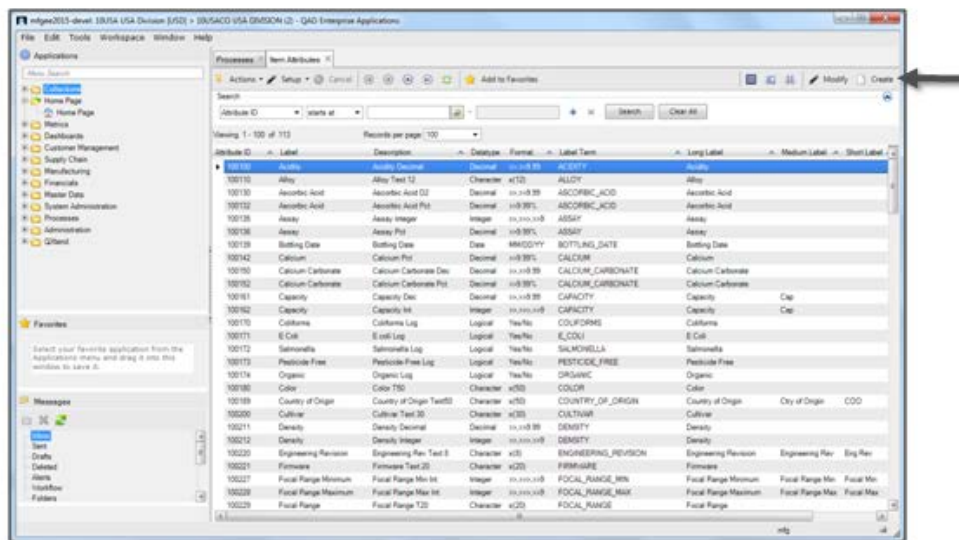


Creating an Item Attribute

IAQ Setup

Creating an Item Attribute

- The Item Attribute browse opens. To create a new Item Attribute, click Create.



The Item Attribute browse displays a list of item attributes that can be assigned to items. To create an item attribute, click Create.

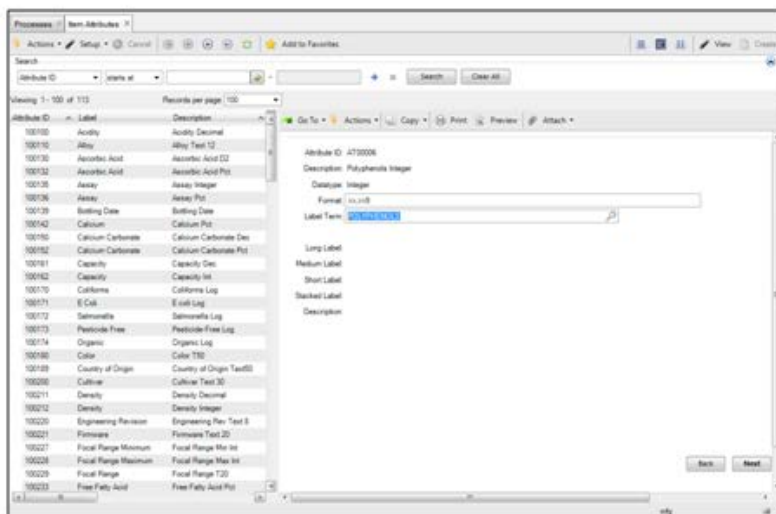
Note: You can also use the Setup Item Attribute browse collection to create item attributes. Item Attributes, like label master records, are not limited to a single domain; they are available across domains.

Creating an Item Attribute

IAQ Setup

Creating an Item Attribute

3. A blank item attribute record opens. Enter the required information in the fields.



Item Attribute – Field Definitions:

- **Attribute ID.** Leave this field blank and click Next; the system automatically inserts an ID in this field. Otherwise, enter a unique alphanumeric ID of up to 32 characters for the attribute.
- **Description.** Enter a short description to identify the attribute. When entering a description, the best practice is to indicate the name of the attribute and information about its datatype and format. This information is particularly useful when multiple attributes share the same label, but have different combinations of datatype and format. For example, if there are two attributes for capacity with integer and decimal datatypes, you can enter Capacity Int and Capacity Dec for the descriptions.
- **Datatype.** Use the lookup and select the datatype (character, decimal, integer, date, or logical) associated with the attribute. If you select the date or logical datatype, the system automatically enters the datatype format in the Format field.

Note: Once an attribute is referenced by an attribute profile or test specification, you cannot modify the value for Datatype.

- **Format.** Define the format for the datatype that was selected using standard programming and database conventions.
 - **Character.** For a character datatype, enter the value in the form x(n), where n is the maximum number of characters that can be entered in this field. The value for n cannot be greater than 50.
 - **Decimal.** For a decimal datatype, enter the following formats depending on the desired value range:

Format	Value Range
>.99	0.00 - 9.99
>, >>9.99	0.00 - 9,999.99
>>>.9999%	0.00 - 999.9999%

- **Integer.** For an integer datatype, the following table contains examples of formats that can be entered depending on the desired value range:

Format	Value Range
>9	0 - 99
>, >>9	0 - 9,999
>9%	0 - 99%

- **Date.** For a date datatype, the format is system-defined as MM/DD/YY.
- **Logical.** For a logical datatype, the format is system-defined as Yes/No.

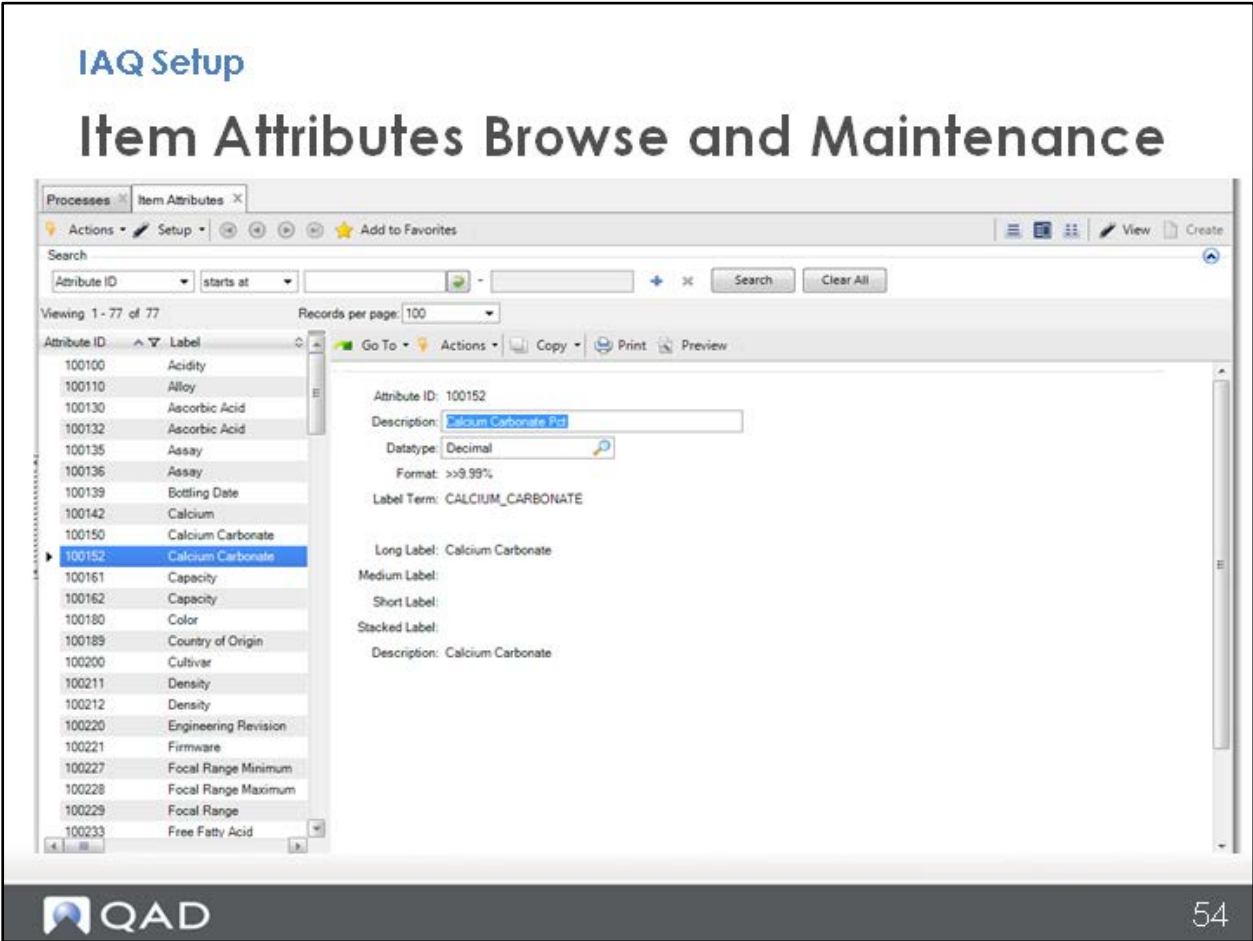
Note: If this item attribute is referenced by an attribute profile, you can modify the format for an item attribute. However, existing transaction history records are not updated. The system applies the updated format definition to records created after the change.

- **Label Term.** Select a valid label term defined in Label Master Maintenance. The system uses this term and the defined attribute to determine the label that displays on the user interface. For more information about creating labels, see QAD System Administration User Guide.

Note: If the value for Label Term is left blank or if a label master record does not exist for the label term, most attribute functions display the attribute description in place of a label.

- **Long Label.** Displays the Label Term's primary display label from the label master record.
- **Medium Label.** Displays the Label Term's medium display label from the label master record. The medium label is only displayed if the long label is too long to display on the screen.
- **Short Label.** Displays the Label Term's short display label from the label master record. The short label is only displayed if the long and medium labels are too long to display on the screen.
- **Stacked Label.** Displays the Label Term's stacked display label from the label master record.
- **Description.** Displays the Label Term's description from the label master record.
- **Input Value.** Enter a valid value for this attribute to verify that you have correctly set up the datatype and format for the attribute.
- **Display With Format.** Displays how the attribute appears in the user interface with its datatype and format for the input value.

Item Attributes Browse and Maintenance



Use the Item Attributes browse to create and modify attributes. As with other functions, data for Item Attributes and Quality Control is accessed through either a browse or a browse collection. From here, you can enter the defining characteristics of an attribute and attach the correct label set.

Exercise

IAQ Setup

Exercise

- Objective
 - Gain basic experience maintaining labels and item attributes
- Add a label then add item attributes as required to support
 - Voltage
 - Format and datatype to accept integer values to 999
 - Voltage
 - format and datatype to accept decimal values to 99.99

Collections and User Interface Tips

Item and Lot Attributes Orientation

Collections and User Interface Tips

QAD Item Attributes and Quality Control



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Section Objectives

Item and Lot Attributes Orientation

Section Objectives

- Provide background to successfully use browse collections
- Understand best practices and what not to do

Collections and Record Locking

Item and Lot Attributes Orientation

Collections and Record Locking

- Create or modify mode will lock database records
- Hybrid view mode will often lock data records
- Using functions from multiple browses can result in record locking



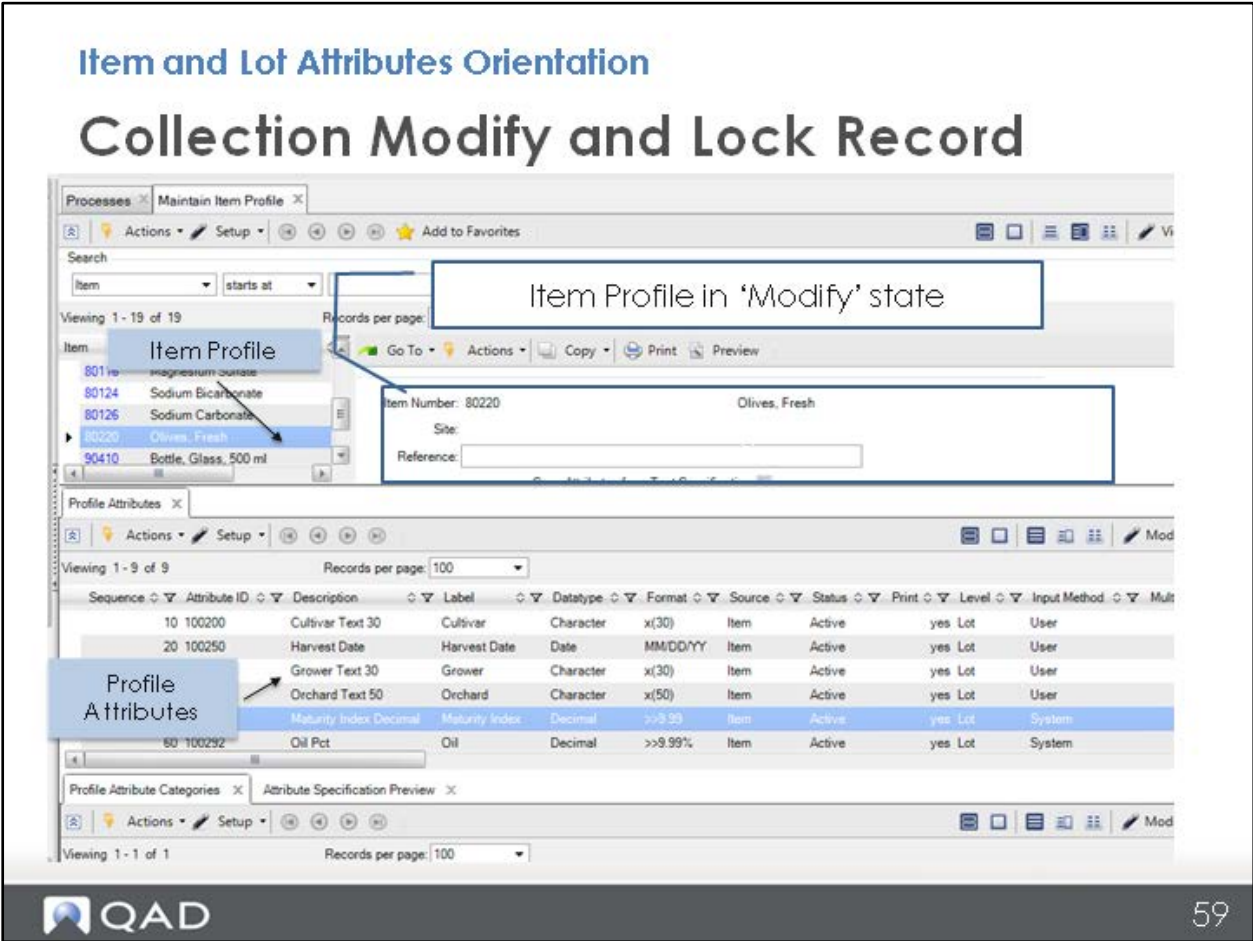
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One of the most common problems that users encounter when first using browse collections is record locking, where the locked record is locked by the user by her or himself.

Locked records prevent users from accessing or editing certain records. This happens because the records are in use by the system.

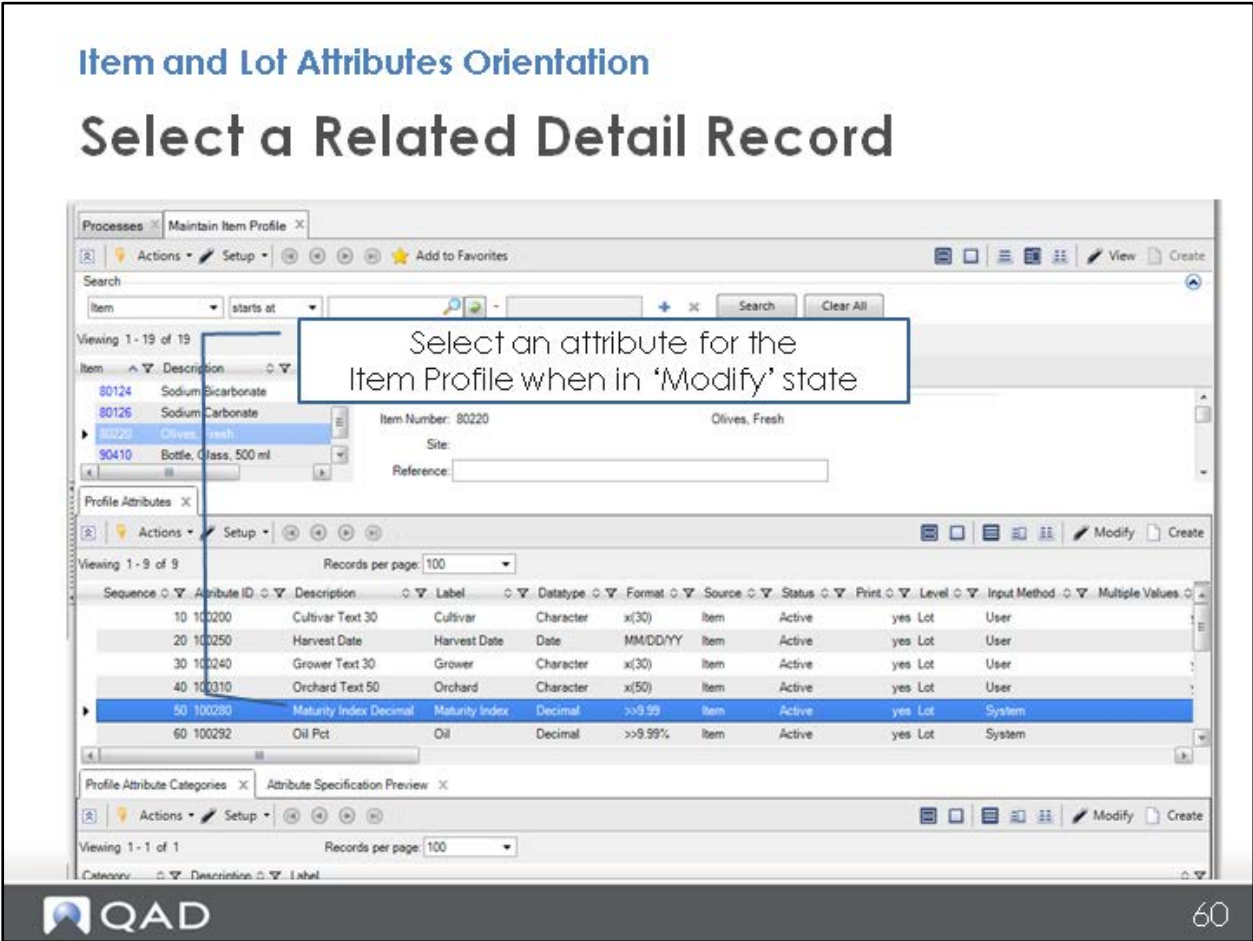
There are two common causes of record locking. The first is entering create or modify mode with a record. The second is to access different browses within the same collection.

Collection Modify and Lock Record



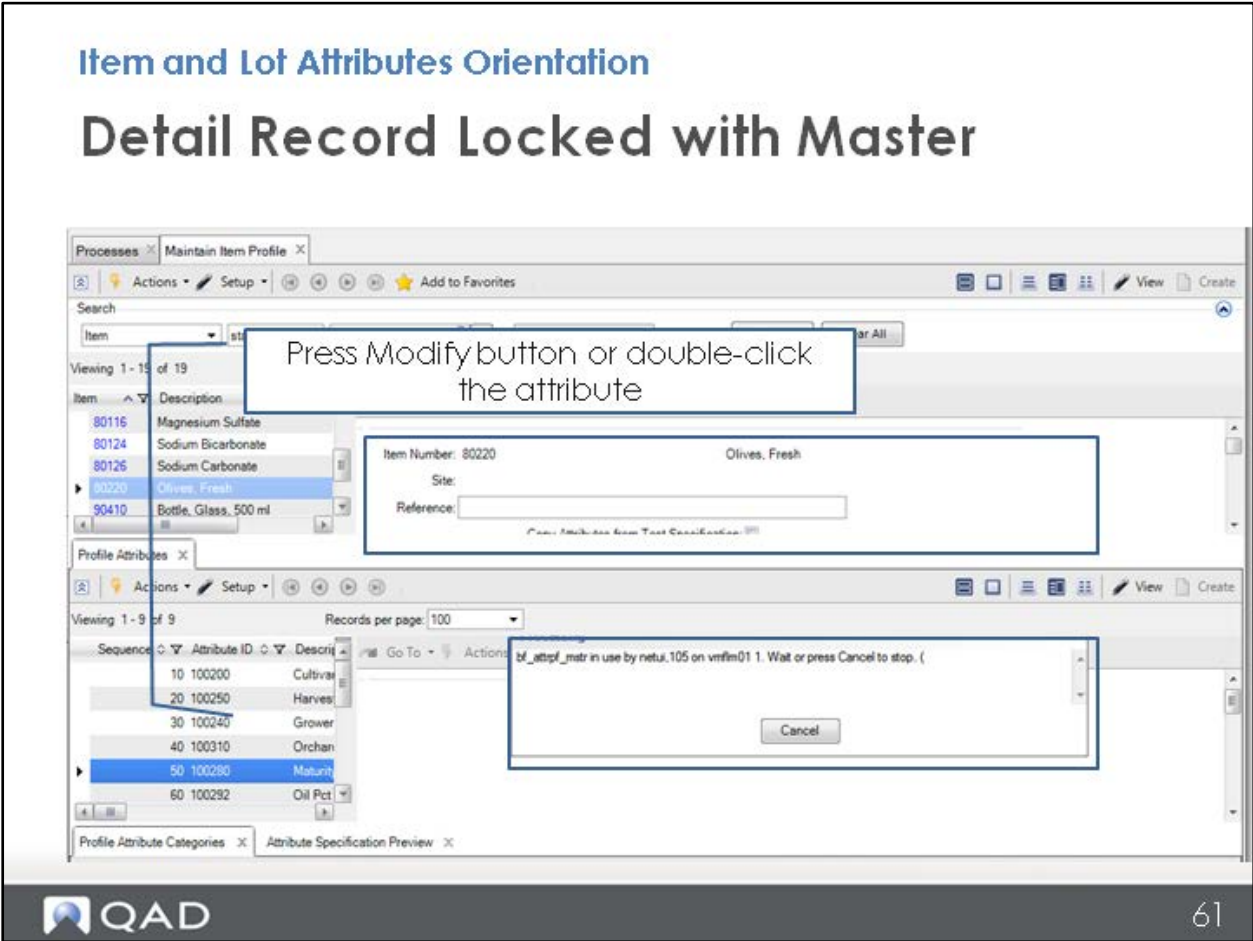
When you create or modify a record, that record enters the modify state. While in the modify state, a record is locked. Accessing it elsewhere while result in an error.

Select a Related Detail Record



While a record is in the modify state, the records in more detailed levels of its browse collection are also locked.

Detail Record Locked with Master



Attempting to modify or create a record in a lower level browse of a locked attribute will result in an error.

Profile with Tile View

Item and Lot Attributes Orientation

Profile with Tile View

The screenshot displays the QAD EE software interface for maintaining an item profile. The top window, 'Maintain Item Profile', shows a search bar and a list of items. The bottom window, 'Profile Attributes', shows a table of attributes for the selected item. Two callout boxes point to specific UI elements: 'Tile View selector' points to a button in the top right of the first section, and 'Full Screen View selector' points to a button in the top right of the second section.

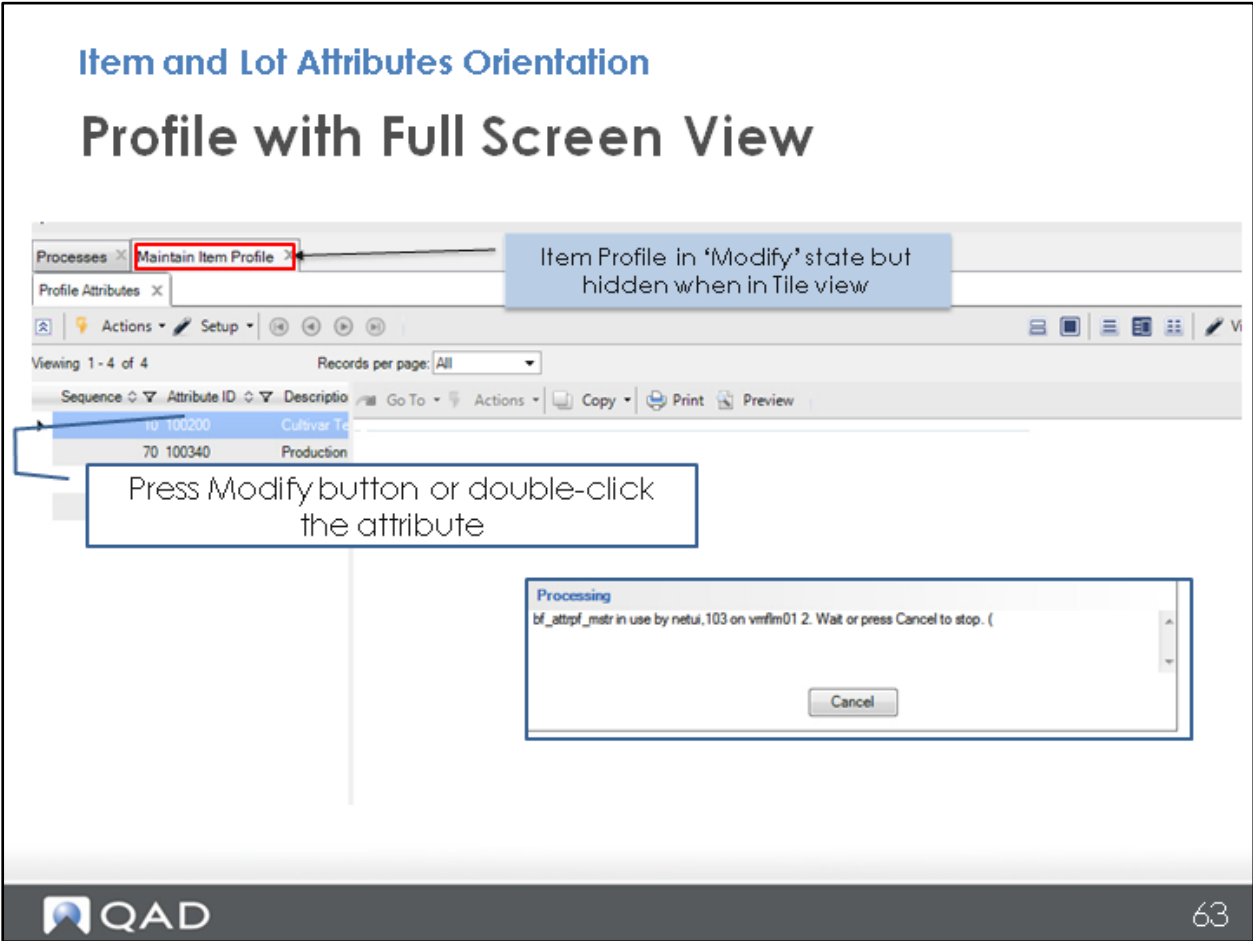
Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Input Method	Multiple Values
10	100200	Cultivar Text 30	Cultivar	Character	x(30)	Item	Active	yes	Lot	User	
20	100250	Harvest Date	Harvest Date	Date	MM/DD/YY	Item	Active	yes	Lot	User	
30	100240	Grower Text 30	Grower	Character	x(30)	Item	Active	yes	Lot	User	
40	100310	Orchard Text 50	Orchard	Character	x(50)	Item	Active	yes	Lot	User	
50	100280	Maturity Index Decimal	Maturity Index	Decimal	>>8.99	Item	Active	yes	Lot	System	
60	100292	Oil Pct	Oil	Decimal	>>8.99%	Item	Active	yes	Lot	System	

When using QAD EE, you have multiple options for viewing browses and browse collections.

The Tile View presents all levels of a browse collection, at once, tiled downward by hierarchy. This option provides the most complete view of the browse hierarchy.

The Full Screen View expands the selected browse to fill the screen. This minimizes higher level browses and hides lower level browses. This option makes the browse significantly easier to use.

Profile with Full Screen View



Note that minimizing higher level browses may hide that a record is in the modify state. Lower level records are still locked when the higher level record is in the modify state, even when it is hidden.

Exercise

Item and Lot Attributes Orientation

Exercise

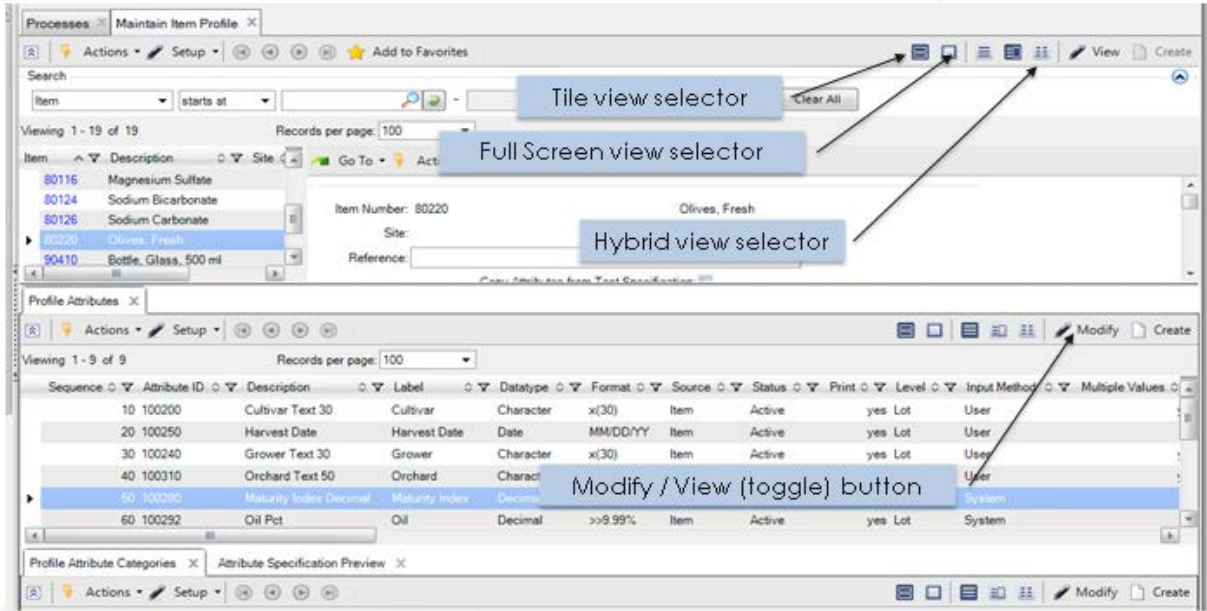
- Objective
 - See how it is easy to encounter record locks and how to avoid them
- Use 'Maintain Item Profile' and
 - Browse records in the first and second level browses
 - Use the modify button then proceed through a function by using either the next button or enter key
 - Use the tile and full screen mode views for a row on the first and second level collection
 - Use the hybrid views
- Troubleshooting
 - Find and use 'Connection Manager' to identify and delete the source of a record lock

Profile Exercise

Item and Lot Attributes Orientation

Profile Exercise

- Maintain Item Profile – do not modify



For this exercise, view Maintain Item Profile but do not modify any item profiles.



CHAPTER 4

Item Profiles

Managing Item Attributes

QAD Item Attributes and Quality Control

Managing Item Attributes

Functional Task-Based Training



Our Passion. Your Advantage.

Business Task

Managing Item Attributes

Business Task

- Maintain attributes for item characteristics
 - Easy to set up and maintain
 - Think in terms of adding fields to the item master
- Supporting activities
 - Control labels, values, and specifications for the item

Lesson Objectives

Managing Item Attributes

Lesson Objectives

- Understand key concepts and facts for
 - Item profile attributes
 - Attribute values and specifications



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This section of training covers how QAD EE controls lot attributes.

By the end of this training, you will be familiar with the key concepts that explain and enable lot attribute control within QAD EE.

Also, you will understand sublots, and the function they perform within the system.

Then, you will cover how lot attributes differ from inventory detail attributes and how the two interact. Finally, you will cover the actual process of entering values for lot attributes.

Managing Item Attributes

QAD Item Attributes

Managing Item Attributes

QAD Item Attributes and Quality Control

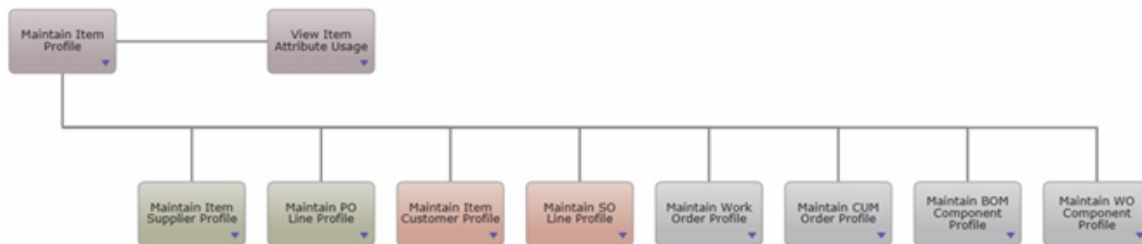


Attribute and Profiles

Managing Item Attributes

Attribute and Profiles

- Essential concepts
 - A profile is a collection of attributes for an item
 - Item attribute profiles can be further qualified for deviations by data such as a supplier or PO line



The essential concept is that a profile is the specific collection of attributes, from all of the available attributes, that apply to a specific item.

To begin, access Maintain Item Profile within the process maps.

Find this option under Home > Manage Enterprise Item Attributes > Set Up Item Attributes and Profiles > Manage Attribute Profiles

The Maintain Item Profile Collection

Managing Item Attributes

The Maintain Item Profile Collection

- Basic layout and navigation

The screenshot displays the QAD software interface for maintaining item profiles. It is divided into several sections:

- Item List:** A table showing a list of items. The first row is selected.

Item	Description	Site	Reference
01050	Pocket Ultrasound		
04810	Extra Virgin 500 ml		
04512	Extra Virgin 750 ml		
06010	Hydration Essentials 50		
60041	Aluminum Housing		
- Profile Attributes Table:** A table showing attributes for the selected item.

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Input Method	Multiple Values
10	100003	Cultivar Test 30	Cultivar	Character	x(30)	Item	Active	yes	Lot	User	yes
70	100340	Production Date	Production Date	Date	MMDDYY	Item	Active	yes	Lot	User	no
90	100139	Bottling Date	Bottling Date	Date	MMDDYY	Item	Active	yes	Lot	User	no
95	100189	Country of Origin Text50	Country of Origin	Character	x(50)	Item	Active	yes	Lot	User	yes
- Profile Attribute Categories:** A table showing categories for profile attributes.

Category	Description	Label

Callouts in the image provide the following information:

- "Browse to select and maintain an item profile" points to the Item List table.
- "Browse with attributes for an item profile" points to the Profile Attributes table.
- "Preview function to test attribute setup" points to the Attribute Specification Preview tab.
- "Optional categories for a profile attribute" points to the Profile Attribute Categories table.

The Maintain Item Profile browse collection allows you to create, modify, and view item profiles.

The second level Profile Attributes tab within the browse collection stores information on the attributes associated with each profile.

In the picture above, you can see the profile attributes associated with the selected item profile.

Section Objectives

Managing Item Attributes

Section Objectives

- Become familiar with the
 - Organizational structure for Maintain Item Profile
 - Key elements that are needed for defining item attributes

When you finish this section of training, you will be able to manage fixed value attributes for an item – attributes that are essentially an extension of what you might see in Item Master Maintenance

Creating an Item Profile

Managing Item Attributes

Creating an Item Profile

- First the 'Create' button to add a profile for an item – do this with site value blank

The screenshot shows the 'Maintain Item Profile' window in QAD. The window is in 'Tile view' and 'create' mode. A callout box points to the 'Item Number' field, stating 'Enter item number with blank site'. Another callout box points to the 'Create' button, stating 'Tile view and "create" mode for an item profile'. The 'Profile Attributes' table is visible at the bottom.

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Input Method	Multiple Values	Certification	Certification
10	100220	Engineering Rev. Text	Engineering Revision	Character	x(3)	Item	Active	yes	Lot	User	no	yes	
20	100221	Firmware Text 20	Firmware	Character	x(20)	Item	Active	yes	Lot	User	no	yes	
60	100275	Manufacture Date	Manufacture Date	Date	MM/DD/YY	Item	Active	no	Lot	User	no	yes	

When specifying attributes for an items for a site and for the item across all sites, first define the attribute for the item with a blank site as a general definition for the item and attribute. Do this to prevent potential conflicts between site specific definitions for the item and attribute and the general definition for the item and attribute.

Creating Item Profile Attributes

Managing Item Attributes

Creating Item Profile Attributes

- Creating attributes for an item profile
 - Add them manually using 'Profile Attributes' browse and maintenance
 - Copy attributes and parameters from another profile
 - Copy attributes and parameters from a test specification
- Alternative
 - Item Master Copy automatically copies the profile attributes from an existing item

You can create a new profile manually.

When doing so, it is possible to copy attributes directly from other profiles or test specifications. This can save time and reduce errors.

Alternatives for Adding Attributes

Managing Item Attributes

Alternatives for Adding Attributes

- Copy parameters

The screenshot shows the 'Maintain Item Profile' window in QAD. The left pane lists various items, with '04510 Extra Virgin 500 ml' selected. The right pane shows the details for this item, including 'Item Number: 04510' and 'Extra Virgin 500 ml'. Below these are fields for 'Site' and 'Reference'. Two checkboxes are present: 'Copy Attributes from Test Specification' and 'Copy Attributes from Item Profile'. A callout box points to these checkboxes with the text: 'Copy attributes from another item profile or from a test specification'.

To create a new profile, click the Create button in the top-right corner of the Maintain Item Profile browse. Then, you can select to copy attributes from test specifications, item profiles, or both.

Profile Attributes Browse

Managing Item Attributes

Profile Attributes Browse

- Browse, select, modify, and add attributes for the item profile

The screenshot shows two overlapping windows in the QAD software. The top window, titled 'Maintain Item Profile', displays a list of items. The second item, '04510 Extra Virgin 500 ml', is selected. The bottom window, titled 'Profile Attributes', shows a table of attributes for the selected item. A callout box with an arrow points to the table and contains the text 'Attributes and their parameters'.

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Input Method	Multiple Values
10	100200	Cultivar Text 30	Cultivar	Character	x(30)	Item	Active	yes	Lot	User	yes
70	100340	Production Date	Production Date	Date	MM/DD/YY	Item	Active	yes	Lot	User	no
90	100139	Bottling Date	Bottling Date	Date	MM/DD/YY	Item	Active	yes	Lot	User	no
95	100189	Country of Origin Text50	Country of Origin	Character	x(50)	Item	Active	yes	Lot	User	yes

The second level Profile Attributes tab within the browse collection stores information on the attributes associated with each profile.

In the picture above, you can see the profile attributes associated with the selected item profile.

Attribute Level Parameter - Item

Managing Item Attributes

Attribute Level Parameter - Item

- When adding an attribute, change the default value for the 'Level' parameter from 'Lot' to 'Item'

The screenshot displays the 'Maintain Item Profile' window in QAD. The 'Profile Attributes' table is shown with the following data:

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Input Method	Multiple Values	Certification
10	100182	Capacity Int	Capacity	Integer	>>>>>>9	Item	Active	no	Item	None	no	no
20	100180	Color T50	Color	Character	x(50)	Item	Active	no	Item	None	no	no
30	100542	Diameter Int	Diameter	Integer	>>>>>>9	Item	Active	no	Item	None	no	no
40	100512	Weight Int	Weight	Integer	>>>>>>9	Item	Active	no	Item	None	no	no

An item attributes will be defined with Level parameter 'Item'

Each profile attribute has a Level which denotes the source of the attribute. Item attributes should all have Level set to 'Item'.

Additional Parameters for Item Attributes

Managing Item Attributes

Additional Parameters for Item Attributes

- Sequence
- Attribute ID
- Print
- Status
- Default Value
- Measurement
- Specification

Profile Attributes X

Actions Setup Cancel [Navigation Icons] Modify Create

Viewing 1 - 4 of 4 Records per page: 100

Sequence	Attribute ID	Description	Label	Source	Status	Print	Level	Input Method	Default Value	Measurement	Specification	Certification
10	100162	Capacity Int	Capacity	Item	Active	no	Item	None	500	ml	500 ml	no
20	100180	Color T50	Color	Item	Active	no	Item	None	Green		Green	no
30	100542	Diameter int	Diameter	Item	Active	no	Item	None	60	mm	60 mm	no
40	100512	Weight Int	Weight	Item	Active	no	Item	None	440	g	440 g	no

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In addition to their Level, these are the parameters that should be considered for an item attribute.

At the moment, pay close attention to the following:

- **Sequence.** The order in which attributes appear by default
- **Attribute ID.** The unique identifier of an attribute within the system
- **Status.** Whether the attribute is currently in use
- **Default Value.** The nominal value for the attribute
- **Measurement.** The measure for an attribute specification (not the same as UM)
- **Specification.** The nominal specification for the attribute

Maintaining a Profile Attribute

Managing Item Attributes

Maintaining a Profile Attribute

- Maintain the parameters for a profile attribute

The screenshot shows the 'Maintain Item Profile' window in QAD software. The window title is 'Maintain Item Profile'. The main area displays a table of profile attributes:

Sequence	Attribute ID	Description
10	100162	Capacity Int
20	100180	Color T50
30	100542	Diameter in
40	100512	Weight Int

The selected attribute (Sequence 10, Attribute ID 100162) is shown in a detailed view on the right:

- Attribute ID: 100162
- Label: Capacity
- Description: Capacity Int
- Format: >>>>>>9
- Sequence: 10
- Type: Integer
- Status: Active
- Print:
- Level: Item
- Input Method: None
- Certification:
- Certification Category: Label

A callout box with an arrow points to the 'Modify' mode icon in the toolbar, with the text: 'Profile attribute with full screen view and 'modify' mode'.

QAD logo is visible in the bottom left corner, and the number 79 is in the bottom right corner.

In addition, attributes also have a certification parameter. This determines whether the attribute appears on certificates of analysis.

To access this parameter, enter modify mode and click 'Next' until the Certification parameter becomes editable.

Nominal Value and Specification

Managing Item Attributes

Nominal Value and Specification

- Enter the nominal value for the attribute as the 'Default Value'

The screenshot shows a software interface for managing item profiles. A table lists attributes with columns for Sequence, Attribute ID, and Description. A dialog box titled 'Number Attribute Specification' is overlaid on the table. The dialog box contains the following fields:

- Default Value: 500
- Specification Type: None
- Measurement: ml
- Specification: 500 ml
- Test: (empty field)
- Test Method: (empty field)
- Value Required:
- Validation:
- Edit Specification:
- Reference: (empty field)

The specification determines the conforming value of an attribute. When setting the specification, the following fields are available.

- **Default Value.** The value which the system suggests while users enter the attribute.
- **Measurement.** The unit of measure which the attribute uses.
- **Specification.** A short description of what the specification measures.
- **Test.** If you are not using Quality Control for this attribute, this determines what test method is used.
- **Test Method.** What method is used for the test. This appears on Certificates of Analysis.
- **Value Required.** Whether a value is required for this attribute.
- **Validation.** Whether this attribute checks for conformance to the specification.
- **Edit Specification.** This field addresses Layers, a more advanced function. For the moment, you do not need to work with this field.
- **Reference.** Information which helps users of the system find information on the attribute.

Date Attributes and Default Value

Lot Attribute Profile Parameters

Date Attributes and Default Value

- For date attributes select User Defined for the Default Value and specify a date

For an item level attribute set default value to User Defined to specify a fixed date

Mnemonic	Label	Code
Eff Date	Effective Date	1
TranDate	Transaction Date	2
User Def	User Defined	3

For an item level date attribute select User Defined for the Default Value and specify a date.

Exercise

Managing Item Attributes

Exercise

- Objective
 - Understand the basic flow or process for adding and maintaining attributes with Level "Item" using a profile
- Create a new item attribute for 'Voltage' with format '>>9.9<<'
- For item 60044 Lithium Ion Battery add attributes for voltage and capacity
 - Voltage with default value and specification of 7.4 V using the newly created attribute
 - Capacity with default value and specification of 1750 mAh using attribute 100162



'Item Attributes' browse to create an attribute for 'Voltage'

'Maintain Item Profile' to add attributes for 60044

CHAPTER 5

Lot Attribute Orders

Introduction to Lot Attributes

QAD Item Attributes and Quality Control

Introduction to Lot Attributes

Functional Task-Based Training



Our Passion. Your Advantage.

Business Task

Introduction to Lot Attributes

Business Task

- Record lot attributes for
 - Product genealogy
 - Materials management including allocations, picking, shipments, and issues to production
- Allocate, issue, and ship materials with attribute values to conform to specifications
- Supporting activities
 - Maintain attributes and specifications for values to be captured for item lot characteristics
 - Record and maintain values for item lot attributes
 - Optionally maintain deviations to specifications

Monitor Conformance with Lot Attributes

Introduction to Lot Attributes

Monitor Conformance with Lot Attributes

The screenshot displays the QAD software interface for monitoring lot attributes. It is divided into three main sections:

- Sales Order Section:** Shows a search for 'Sales Order' starting at a specific date. A table lists sales orders with columns for Sales Order, Order Date, Sold-To, Name, Ship-To, Action Status, Line, Item Number, Description, UM, Consignment, and Sched. One record is highlighted: Sales Order 10510015, Order Date 3/25/2013, Sold-To 10C1003, Name Pacific Health Care Systems, Ship-To 10C1003, Line 1, Item Number 1044, Description Industrial Handheld, UM EA, Consignment No.
- Allocations Section:** Shows a table of allocations with columns for Item Number, Item Description, Site, Location, Lot/Serial, Reference, Unit of Measure, Conforming, and Quantity Shipped. Two records are shown: Item Number 1044, Industrial Handheld Heavy Duty Ultrasound, Site 10-100, Location 010, Lot/Serial IHL1001, Reference EA, Conforming, Quantity Shipped 0. The second record is highlighted: Item Number 1044, Industrial Handheld Heavy Duty Ultrasound, Site 10-100, Location 010, Lot/Serial IHL1002, Reference EA, Non-conforming, Quantity Shipped 0.
- Attribute Detail Section:** Shows a table of attribute details with columns for Sequence, Attribute ID, Description, Label, Attribute Value, UM, Validation, Result, Source, and Specification. Four records are shown: Sequence 10, Attribute ID 100220, Description Engineering Rev Text 8, Label Engineering Revision, Attribute Value A, UM, Validation yes, Result Conforming, Source Item, Specification. The second record is highlighted: Sequence 20, Attribute ID 100221, Description Firmware Text 20, Label Firmware, Attribute Value 10 5 004, UM, Validation yes, Result Non-conforming, Source Customer, Specification 10 5 005B.



Lesson Objectives

Introduction to Lot Attributes

Lesson Objectives

- Understand key concepts and facts for
 - Inventory detail attributes
 - Lots and lot attributes
 - Sublot attributes
 - Lot attributes and inventory detail attributes
- Develop high-level understanding of how to define the attributes for an item that are to be used as lot attributes
- Understand issues related attributes and datatype



This section of training covers how QAD EE controls lot attributes.

By the end of this training, you will be familiar with the key concepts that explain and enable lot attribute control within QAD EE.

Also, you will understand sublots, and the function they perform within the system.

Then, you will cover how lot attributes differ from inventory detail attributes and how the two interact. Finally, you will cover the actual process of entering values for lot attributes.

Concepts for Lot Attributes

Introduction to Lot Attributes

Concepts for Lot Attributes

QAD Item Attributes and Quality Control



Inventory Detail Attributes

Introduction to Lot Attributes

Inventory Detail Attributes

- Limited to
 - Expire Date
 - Grade
 - Assay
- Lot attributes linked to and depend on inventory data
 - Values for inventory lot records for a site, location, and reference
 - Values are not fixed for a lot and can differ by location
 - Lot values disappear when inventory records are deleted



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Only cover expiration dates, grade, and assay.

Although item detail attributes are separate from most lot attributes, they are in fact a subtype of lot attributes with a specific purpose. Also known as inventory detail or regulatory attributes, they cover lot records with specific sites, locations, or reference points. They can differ by location, even when part of a single lot.

When inventory records are deleted, the lot values for the attributes are deleted.

Attributes for Inventory Detail

Introduction to Lot Attributes

Attributes for Inventory Detail

Site: 10-100 Ultrasound Mfg Site

Location: 010

Item Number: 01012 Sterile Probe Covers, 20

Lot/Serial: 01012-0712

Reference:

Quantity On Hand: 275.0

Shelf Life: 365

Expire date, grade, assay percentage

Expire Date: 7/13/2013

Grade: []

Assay Percentage: 0.00%

Inventory Status: Y-Y-Y

Attachments

- Site:10-100
- Location:
- Item Number:01012
- Inventory Status:Y-Y-Y

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Lot Attributes

Introduction to Lot Attributes

Lot Attributes

- Lot master records for an item, lot, and domain
 - Attribute values for lot master records
 - Lot attributes are independent from inventory lot data
 - Attribute values for a lot are consistent for that lot across locations and sites
- Independent from inventory detail attributes for expire date, grade, and assay
- Lot attribute values not automatically retained when using cross-domain EMT
- Support for subplot attributes



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Lot attributes are the attribute values which attach to lot master records.

They are independent from the data in the inventory lot. They instead apply to all locations and sites connected to the lot master record within a domain.

Lot attribute values are not automatically retained when using cross-domain EMT

Lot attributes support the use of sublots, which can have attached subplot attributes.

Lot and subplot attributes function independently from inventory detail attributes.

Sublot Attributes

Introduction to Lot Attributes

Sublot Attributes

- Lot-sublot master records for an item, lot, reference, and domain
 - Attribute values for a lot are consistent for an item, lot, and reference across locations and sites
- Inventory reference field must be dedicated to identify a subplot
 - Should not be used when reference is used to identify a location, skid, or pallet
 - Not appropriate when using QAD Warehousing
- When the reference field cannot be used for subplot
 - Create new a lot number when a subplot is created.



Sublot attributes, like lot attributes, stay consistent across the different items, lots, locations and sites that the subplot governs.

Sublots are appropriate to use when a the inventory reference is dedicated. Locations, skids, and pallets are not dedicated, and as such are not appropriate places to use sublots. They are also not appropriate for use with QAD warehousing.

The basic limitation is that there is a single reference field for inventory detail. There is not an additional field that can be used independently for subplot.

Implementation when the reference field cannot be used for subplot will require that a new lot number be created when a subplot is created.

Entering Lot Attribute Data

Introduction to Lot Attributes

Entering Lot Attribute Data

- Three points of entry
 - Receipt transactions
 - Receipts from suppliers
 - Receipts from production
 - Receipt resulting from an inventory transfer
 - Unplanned inventory receipts
 - Lot attribute orders
 - Quality orders



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You can enter data for lot attributes at three points.

First, you have an option to enter values during some receipt transactions. This includes receipts from suppliers on purchase orders, receipts from production on work orders, or receipts from a repetitive schedule.

If you do not enter the values during the receipt itself, you can also enter values directly. Do this on the lot attribute order created by the receipt transaction.

If there is a test specification attached to the item, a quality order attaches to the receipt. You can enter lot attribute values through quality orders.

Lot Attribute Orders and Quality Orders

Introduction to Lot Attributes

Lot Attribute Orders and Quality Orders

- Support separation of duties between inventory functions, administrative functions, and quality functions
 - Configure attributes to streamline, prevent, or permit entry of lot attribute values during purchasing and production receipts
 - Provision of lot attribute orders and quality orders for maintaining values by appropriate personnel



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Quality orders are the subset of lot attribute orders which enable quality control.

Quality orders are separate from lot attribute orders as a whole because they focus on a specific situation. Quality orders are attached to the testing process. They are not useful for general inventory management or administration.

Users can set up lot attributes and test specifications to control how lot attribute orders and quality orders are created.

Attributes for Expire Date, Grade, Assay?

Introduction to Lot Attributes

Attributes for Expire Date, Grade, Assay?

- Decision Point
 - Continue or begin use of inventory detail attributes or
 - Begin use of lot attributes

Inventory Detail Attributes

Introduction to Lot Attributes

Inventory Detail Attributes

- For Expire Date, Grade, and Assay
 - Not true lot attributes because they can vary by site, location, and reference
 - Not visible together with lot and subplot attributes
 - Require higher vigilance to keep the values for those attributes consistent across sites, locations, and reference
 - Values of inventory detail attributes are lost when inventory detail records are deleted
 - Not likely to require changes to business procedures when using item lot attributes

Lot Attributes

Introduction to Lot Attributes

Lot Attributes

- For Expire Date, Grade, and Assay
 - Stored as true lot attributes with a lot master
 - Values do not vary across sites and locations
 - Visible across with other lot and subplot attributes
 - May require configuration of screens to hide inventory detail attributes for Expire Date, Grade, Assay
 - May require conversion to capture values for existing inventory
 - May require changes to business processes

Group Discussion

Introduction to Lot Attributes

Group Discussion

- What other factors need to be considered when using inventory detail attributes?
- What other factors need to be considered when implementing lot and subplot attributes?

Defining Lot Attributes for Items

Introduction to Lot Attributes

Defining Lot Attributes for Items

QAD Item Attributes and Quality Control



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Defining Lot Attributes for an Item

Introduction to Lot Attributes

Defining Lot Attributes for an Item

- Setup task to define the attributes that will be tracked as tracked for an item lot
- Use of profile collections such as Maintain Item Attributes
- Similar workflow as defining item attributes
- More attention to the parameters for each attribute (covered in a different lesson)



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Lot attributes are the attributes which support lot master data and lot-sublot master data.

Associations are defined by profile collections.

The Maintain Item Profile collection

Introduction to Lot Attributes

The Maintain Item Profile collection

- Item Profile for 04510 Olive Oil
- Attribute 'level' parameter = 'Lot' or 'Sublot'

Browse to select and maintain an item profile

Browse with attributes for an item profile

Optional categories for a profile attribute

Preview function to test attribute setup

The Maintain Item Profile browse collection allows you to create, modify, and view item profiles.

The second level Profile Attributes tab within the browse collection stores information on the attributes associated with each profile.

In the picture above, you can see the profile attributes associated with the selected item profile.

Exercise

Introduction to Lot Attributes

Exercise

- Objective
 - Become familiar at a very high level with the attribute parameters for Level "Lot" attributes for an item
- Use either View Item Profile or Maintain Item Profile to review the existing item profiles for
 - Item 60043 Touch Screen P-Ultrasound
 - Do not modify any of the attribute parameters

Group Exercise

Introduction to Lot Attributes

Group Exercise

- Examine the attributes for the following items
 - Item 60046 CPU P-Ultrasound
 - 90230 Bottle, Glass, 500 ml
- What differences can you observe about the attribute parameter settings between the two items?

Attributes and Datatype

Introduction to Lot Attributes

Attributes and Datatype

QAD Item Attributes and Quality Control



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Item Attributes are Inherently Open

Introduction to Lot Attributes

Item Attributes are Inherently Open

- Flexible to define many different attributes with different datatypes and the same label for one characteristic
- Requires detailed analysis for an item and its attributes that includes
 - How each attribute value will be represented
 - The range of possible values for the an attribute
 - How the working specification details for the attribute will be expressed

Group Discussion

Introduction to Lot Attributes

Group Discussion

- What datatype and format should be used to define
 - Attribute 1
 - Nominal value of 26
 - Nominal specification of minimum 26
 - Possible values range from 0 – 50
 - Attribute 2
 - Nominal value of 145
 - Nominal specification is 145 +/- 2.50
 - Possible value range from 140 – 155
 - Attribute 2
 - Nominal value of 3
 - Nominal specification is 'less than 3 PPM'
 - Possible value can be either 'Less than 3 PPM' or 'Exceeds specifications'

Attribute with Logical Datatype

Introduction to Lot Attributes

Attribute with Logical Datatype

- An attribute defined with a logical datatype
 - Can have one of two values such as true or false
 - Values can be expressed with outcomes such as 'gluten free' or 'contains gluten'
 - Can be appropriate for representing characteristics that are measured with numeric values such as heavy metals or bacteria

Use of Logical Attributes

Introduction to Lot Attributes

Use of Logical Attributes

- Suppose a characteristic for 'lead' or 'cadmium' is measured by a test that yields integer or decimal data such as '3 ppm'
- Discussion questions
 - When is that characteristic for a lot best expressed with
 - A single integer or decimal attribute
 - A single logical attribute
 - More than one attribute, an integer or decimal attribute and a logical attribute
 - What are the best applications for logical attributes?
 - What are the pros and cons of using logical attributes for those items?

Discussion on Attribute Specificity

Introduction to Lot Attributes

Discussion on Attribute Specificity

- What are the pros and cons of creating fewer rather than more attributes for items by limiting the number of datatype, format, and label combinations for a characteristic such as 'protein'?
- What advice would you provide to a team that has the task to analyze and select attributes for an item profile?

CHAPTER 6

Lot Attribute Orders

Manage Materials with Lot Attributes

QAD Item Attributes and Quality Control

Manage Materials with Lot Attributes

Functional Task-Based Training



Our Passion. Your Advantage.

Lesson Objective

Manage Materials with Lot Attributes

Lesson Objective

- Understand the process of recording values for lot attributes during receipt transactions
- Learn how to update attribute values for an item lot using lot attribute orders
- Use item attribute collections to manage materials that have lot attributes



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This section of training covers how to use QAD Item Attribute to configure, process, and record attribute values for item lots.

In this training you will become familiar with the key concepts that explain and enable lot attribute

You will learn how lot attributes differ from regulatory attributes and how the two interact. You will also understand sublots, and the function they perform within the system.

Finally, you will complete an exercise that includes the entering and processing of values for lot attributes.

Recording Values for Lot Attributes

Manage Materials with Lot Attributes

Recording Values for Lot Attributes

QAD Item Attributes and Quality Control



Transaction Processes and Lot Attributes

Manage Materials with Lot Attributes

Transaction Processes and Lot Attributes

- For profile attributes with Level parameter Lot or Sublot
- Values can be entered during select receipt transactions
- Values can also be entered using a lot attribute order



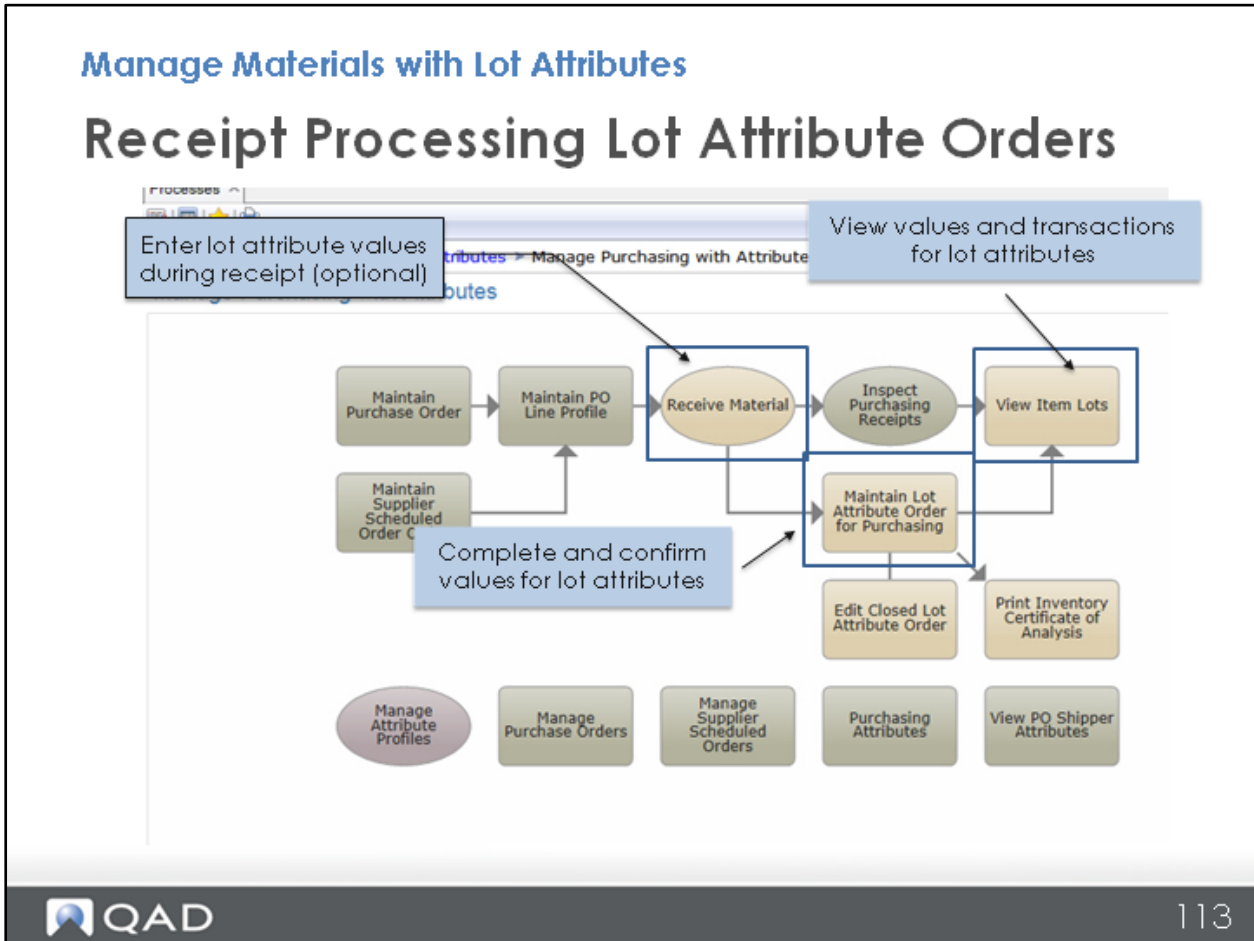
112

Values can optionally be entered using receipt transactions

Receipt of purchase orders, work orders, repetitive schedules, inventory transfers, receipts – unplanned

Values can also be entered using a lot attribute order, created by selected receipt transactions (or created manually) to confirm lot attribute values

Receipt Processing Lot Attribute Orders



This section of this guide covers the processing of lot attribute orders generated through receipts.

You can find the process maps important to this process in:

Home > Manage Enterprise Item Attributes > Manage Purchasing with Attributes

Attribute Values and Input Method

Manage Materials with Lot Attributes

Attribute Values and Input Method

- Input Method parameter set to User
 - To permit a person to enter a value for the attribute during receipt transactions
 - Also update the attribute value later, using a lot attribute or quality order
- Input Method parameter set to System
 - Limits the ability to update the attribute value to either a lot attribute or quality order



There are two scenarios for updating values for Lot and Sublot level attributes for an item lot.

First, you can view attributes and enter them at the point of transaction receipt. This is an option when the Input Method for a profile attribute is set to User.

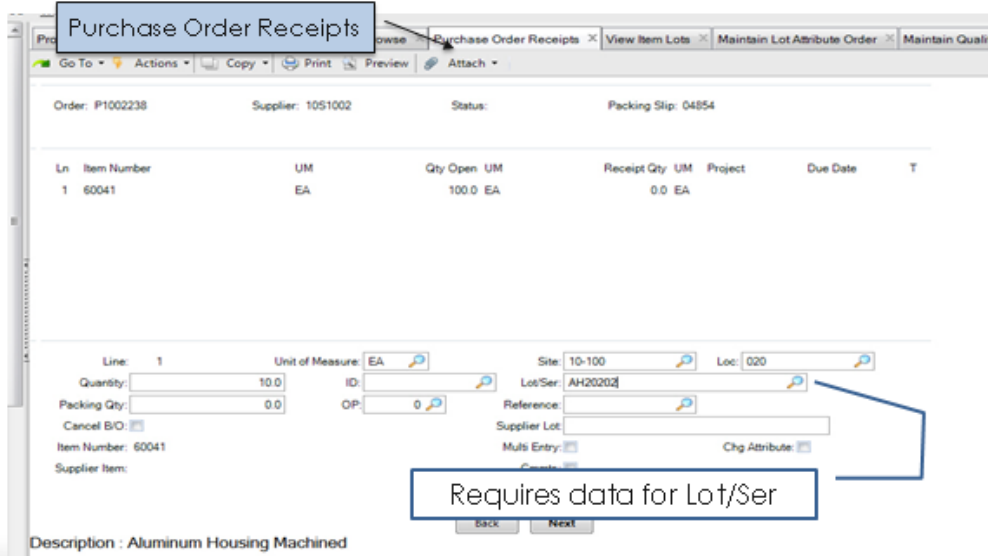
Second, you can enter them in a lot attribute order or quality order created automatically by a receipt transaction, or created manually. This is an option when the Input Method is set to either User or System. Set the Input Method parameter to System to prevent the value for an attribute from being entered upon receipt.

PO Receipt Data for a PO Line

Manage Materials with Lot Attributes

PO Receipt Data for a PO Line

- Purchasing and production receipt support the optional entry of values for lot attributes



Lot attributes require an associated lot. Therefore, you can only generate a lot attribute or lot attribute order if you specify a lot or serial when receiving an order.



Lot Attribute Entry User Interface

Manage Materials with Lot Attributes

Lot Attribute Entry User Interface

- Display of attribute specification data

The screenshot displays the 'Purchase Order Receipts' window. The main form area is titled 'Transaction Attributes' and contains the following fields:

- Item Number: 60041
- Site: 10-100
- Lot/Serial: AH20202
- Quantity: 10.0
- UM: EA
- Item Desc: Aluminum
- Location: 020
- Reference:
- Attribute ID: 100220
- Description: Engineering Rev Text 8
- Label: Engineering Revision
- Sequence: 10
- Level: Lot
- Value: 3 (highlighted)
- Attribute UM:
- Remarks:
- Validation:

Navigation buttons 'Back' and 'Next' are located at the bottom of the form area.

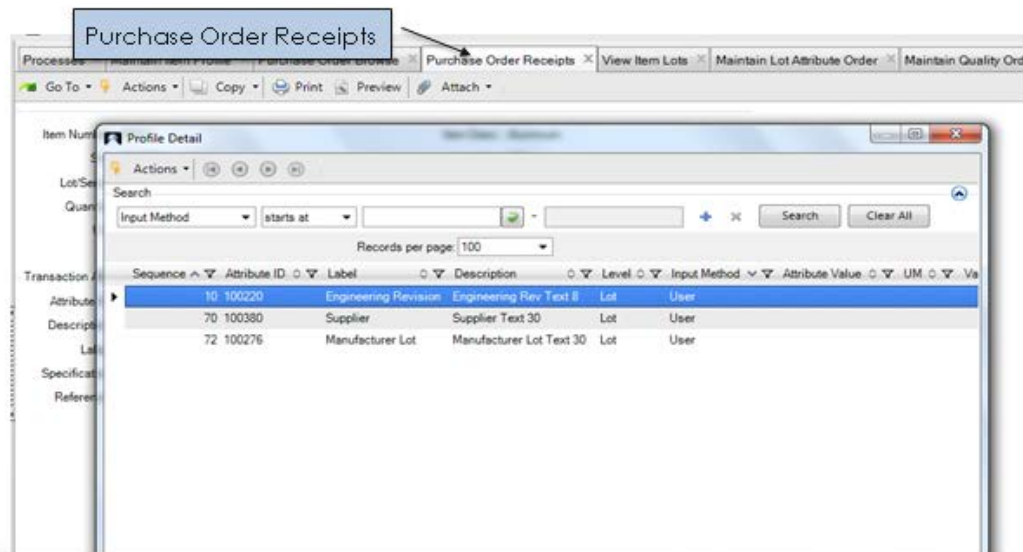
Enter Value and other fields for the attribute. Then click Next to save the information. After entering all attributes you intend to enter, click Back to finish saving the purchase order.

Lot Attribute Selection Look-Up

Manage Materials with Lot Attributes

Lot Attribute Selection Look-Up

- Entry of attribute values support by a lookup browse



After receiving a purchase order with attached lot level attributes, you are given a chance to enter attributes.

To enter a specific attribute, first select it using the Lookup tool.

You can enter attributes with an Input Method of User.

Receipt Attribute Entry Scenarios

Manage Materials with Lot Attributes

Receipt Attribute Entry Scenarios

- Do not record attribute values
- Record some attribute values
- Record all attribute values



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When entering attribute values at the time of receipt, you can enter all, none, or some of them.

Any attributes you enter copy to the item lot. That attribute then counts as Entered.

If you enter all required attributes at the time of receipt, then the system does not create a lot attribute order.

If you enter no attributes, or only some required attributes, then the system creates a lot attribute order for the remaining attributes of the lot.

Note: If you processed a blank attribute value for an attribute with an Input Method of System, then QAD EE will treat that attribute as entered for the purpose of generating a lot attribute order.

Visibility of Result

Manage Materials with Lot Attributes

Visibility of Result

- Value for Result as conforming or non-conforming determined by attribute values and their parameters

Purchase Order Receipts

Order: P1002238 Supplier: 10S1002 Status: Packing Slip: 04854

Ln	Item Number	Site	Location Ref	Lot/Serial Supplier Lot	Quantity
1	60041	10-100	020	AH20202	10.0

Conform

Conform or Nonconforming

After entering attributes for the receipt, view the lines for the order and the Result for each lot.

View Item Lot Attributes

Manage Materials with Lot Attributes

View Item Lot Attributes

QAD Item Attributes and Quality Control



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Receipt Processing Lot Attribute Orders

Manage Materials with Lot Attributes

Receipt Processing Lot Attribute Orders

Processes X
 Home > Manage Enterprise Item Attributes > Manage Purchasing with Attributes
 Manage Purchasing with Attributes

View values and transactions for lot attributes

```

                    graph LR
                        MSO[Maintain Supplier Scheduled Order Order] --> MPO[Maintain PO Line Profile]
                        MPO --> RM((Receive Material))
                        RM --> IPR((Inspect Purchasing Receipts))
                        IPR --> VIL[View Item Lots]
                        MPO --> MLO[Maintain Lot Attribute Order for Purchasing]
                        MLO --> VIL
                        MLO --> ECLAO[Edit Closed Lot Attribute Order]
                        MLO --> PICOA[Print Inventory Certificate of Analysis]
                        VIL --> VPOSA[View PO Shipper Attributes]
                    
```

The flowchart illustrates the process of receipt processing for lot attribute orders. It starts with 'Maintain Supplier Scheduled Order Order' leading to 'Maintain PO Line Profile', which then leads to 'Receive Material'. From 'Receive Material', the process can go to 'Inspect Purchasing Receipts' and then 'View Item Lots'. Alternatively, it can go to 'Maintain Lot Attribute Order for Purchasing', which also leads to 'View Item Lots'. From 'Maintain Lot Attribute Order for Purchasing', there are three paths: 'Edit Closed Lot Attribute Order', 'Print Inventory Certificate of Analysis', and 'View PO Shipper Attributes'. A callout box points to the 'View Item Lots' step, indicating where to view values and transactions for lot attributes.

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View Item Lots for Lot Attribute Data

Manage Materials with Lot Attributes

View Item Lots for Lot Attribute Data

- View Item Lot collection
- Additional collection View Item Sublots

The screenshot displays the 'View Item Lots' window in QAD Enterprise Applications. The search criteria are set to 'Item equals 60041'. The main table shows the following data:

Item Number	Description	Lot/Seq	Sequence	Attribute ID	Description	Label	Attribute Value	UM	Entered	Date/Time
60041	Aluminum Housing/Finished	AH0202	10	10020	Engineering Revision	0	yes	Character		
60041	Aluminum Housing/Finished	AH0202	20	10030	Supplier Test 30	Supplier	no	Character		
60041	Aluminum Housing/Finished	AH0202	72	10076	Manufacturer Lot Test 30	Manufacturer Lot	no	Character		

Below the table, the 'Item Lot Attribute History' window is open, showing a transaction for '200102 RCT PH' with an initial value of 0, an incoming value of 0, and a date of 10/20/14 at 11:20 PM. The transaction type is 'yes' and the result is 'Customer'.

Callout boxes on the left side of the screenshot provide the following instructions:

- Browse to select an item lot for a domain
- Browse with attribute data for an item lot
- Transaction history for a selected lot attribute

Additional callouts on the right side of the screenshot point to:

- Inventory detail for an item lot
- Transaction history and attribute changes for an item lot

The QAD logo is visible in the bottom left corner, and the page number '122' is in the bottom right corner.

Exercise

Manage Materials with Lot Attributes

Exercise

- Objective
 - Know how lot attribute values can and cannot be entered during a receipt transaction and be able determine what values have been entered for a lot after the transaction has been completed
- For P1002241 line 3 item 60043
 - Receive quantity 30 with a lot number
 - Enter a value for 'Revision' attribute
 - Do not process any other attributes

Exercise

Manage Materials with Lot Attributes

Exercise

- For P1002241 line 5 item 60046
 - Receive quantity 30 with a lot number
 - Do not enter attribute values for 60046
- Use the View Item Lots collection for the lots received for the purchase order
 - View lot attribute values
 - View inventory detail
 - View inventory transactions and attribute transactions

Completing Lot Attribute Orders

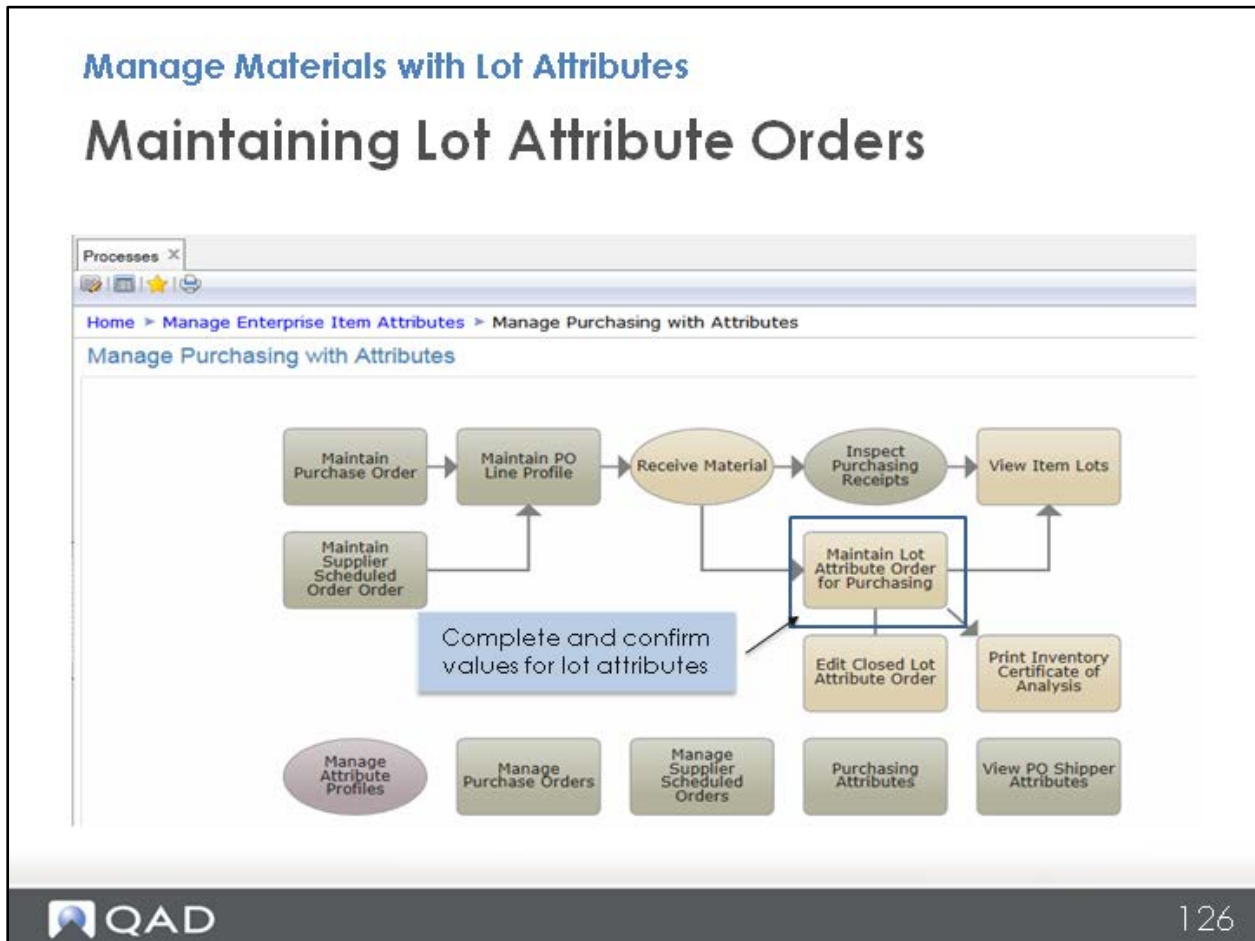
Manage Materials with Lot Attributes

Completing Lot Attribute Orders

QAD Item Attributes and Quality Control



Maintaining Lot Attribute Orders



Lot Attribute Orders are used to complete entry of and confirm the values for lot attributes.

Lot Attribute Orders are not created when all of the required lot attribute values have been entered and there are no tests required for the item.

Lot Attribute Order Facts

Manage Materials with Lot Attributes

Lot Attribute Order Facts

- Lot attribute orders to support segregation of duties
- Purpose to verify and record values for lot attributes
- Documented record for changes to lot attribute values
- Access to item lot attributes and inventory detail attributes



Lot attribute orders support segregation of duties.

When lot attributes are set up with Level = System, a receiving clerk is limited to recording information such as items, lots, quantities and locations, and not permitted to record values for lot attributes.

Lot attribute orders provide administrative users to separate function for recording values for lot attributes, separate from recording the movement of materials.

Lot Attribute Order

Manage Materials with Lot Attributes

Lot Attribute Order

- For recording attribute values for an item lot

Browse to select and maintain an order for an item lot

Browse and select a lot attribute for the order

Browse certificates of analysis printed for a closed order

Drill down to view the transaction source for the order

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You can access Lot Attribute Orders through the Maintain Lot Attribute Order collection from a process map.

There are complementary collections for recording values for lot attribute orders created for purchase order receipts and for production receipts.

Tasks to Maintain Lot Attribute Order

Manage Materials with Lot Attributes

Tasks to Maintain Lot Attribute Order

1. Browse and select lot attribute order for a lot
2. View source for lot attribute order
3. Browse, select, and maintain values for lot attributes
4. Maintain and complete the lot attribute order

Review Source for Lot Attribute Order

Manage Materials with Lot Attributes

Review Source for Lot Attribute Order

- Lot attribute order source will show whether it was created for receipt for a specific order

The screenshot shows the QAD software interface. At the top, there's a search bar with 'starts at' and a search button. Below that, a table lists records with columns for Item, Description, Site, Lot, Sublot, Qty, Lot Attribute Order, Open, Type, Status, Result, Completed By, and Completed. A callout box points to the 'Source' tab in the browser's tab bar, with the text: 'Discover origin from receipt transaction or manual entry for a lot'. Below the table, the 'Quality Order: LR140120001' is displayed. The 'Purchasing Data' section includes:

Supplier: 1051002	Bridgeville Industries	Order Type:
Order: P1002238		Line Type:
Line: 1		Status:
Site: 10-100		Receiver: R1010629
Packing Slip: 04854		
Receipt Date: 1/20/2014		
Receipt Quantity: 10.0		UM: EA

The second level Source tab in a Lot Attribute Order gives information on the creation of a Lot Attribute Order.

Review and Update Attribute Values

Manage Materials with Lot Attributes

Review and Update Attribute Values

- View, select, and update values for each lot attribute

The screenshot shows the 'Maintain Lot Attribute Order' window in QAD. The window title is 'Lot Attribute Order Attributes'. It features a table with columns for 'Sequence', 'Attribute ID', and 'Source'. The table contains three rows: (10, 100220, Item), (70, 100380, Supplier), and (72, 100276, Item). The first row is selected. To the right of the table, the 'Inventory Attributes' section displays details for the selected attribute: Sequence: 10, Source: Item, Attribute ID: 100220, Label: Engineering Revision, and Specification: Engineering Rev Text 8. Below this, there are fields for 'Test ID' and 'Test Method'. At the bottom, there is a 'Value' input field, a 'Level' dropdown set to 'Lot', a 'Result' dropdown set to 'Conform', and a 'UM' dropdown. There are also 'Reference' and 'Remarks' text input fields.

Sequence	Attribute ID	Source
10	100220	Item
70	100380	Supplier
72	100276	Item

Inventory Attributes

Sequence: 10 Source: Item
 Attribute ID: 100220 Engineering Rev Text 8
 Label: Engineering Revision
 Specification:

Test ID: Test Method:

Value:
 Level: Lot
 Result: Conform UM:
 Reference:
 Remarks:

Within the second level Lot Attribute Order Attributes, you can enter values for attributes. To do so, double click the attribute to access the modify function.

Order Attribute Result Value

Manage Materials with Lot Attributes

Order Attribute Result Value

- Result is 'Not Entered' when attribute value has not been processed by a user

The screenshot shows the 'Maintain Lot Attribute Order' screen in QAD. The interface includes a table of attributes and a detailed view of a selected attribute.

Sequence	Attribute ID	Source
10	100220	Item
70	100380	Supplier
72	100276	Item

The detailed view for the selected attribute (Sequence: 70, Attribute ID: 100380) shows the following information:

- Source: Supplier
- Supplier Text: 30
- Label: Supplier
- Specification:
- Test ID:
- Test Method:
- Value: 10S100
- Level: Lot
- Result: Not Ent
- UM:
- Reference:
- Remarks:

The modify screen for the attributes includes a Result field. This shows whether the attribute has been entered and whether it conforms. The Result field is used to determine when the order can be closed and whether the order as a whole conforms.

View Parameters for Lot Attributes

Manage Materials with Lot Attributes

View Parameters for Lot Attributes

- Important parameters and fields for an attribute for a lot on an order

The screenshot displays the 'Lot Attribute Order Attributes' tab in the QAD software. The interface includes a search bar, a table of attributes, and a detailed view of a specific attribute. Callouts point to various fields in the table and the detailed view.

Sequence	Attribute ID	Source	Label	Value	Result	Required	Validate	Entered	Specification Detail	Test ID	Description	Te
10	100220	Item	Engineering Revision	B	Conforming	Yes	Yes	Yes	Minimum 0; Minimum Inclusive no;			
70	100380	Supplier	Supplier	10S1002		No	No	Yes	None			
72	100276	Item	Manufacturer Lot	PSL3200343		Yes	No	Yes	None			

The second level Lot Attribute Order Attributes tab displays the important parameters of the attributes within the order.

Lot Attribute Order Lifecycle

Quality Specifications and Item Attributes

Lot Attribute Order Lifecycle

- Optionally use order Status to impose controls that determine what data can be modified for the order

The screenshot displays the QAD software interface for maintaining a Lot Attribute Order. The main window shows details for Lot Attribute Order LR140120001, Item 60041, Lot AH20202, and Order Quantity 10.0. A blue overlay box titled "Lot Attribute Order Status Lifecycle" contains a flowchart with the following steps: Open (solid box) → Results Pending (dashed box) → Approval Pending (dashed box) → Closed (solid box). A dashed arrow also points from Open to Cancelled (dashed box).

Each lot attribute order has an Order Status which determines its position in the workflow.

The following statuses are available:

- Open.** The default status when the order is created. When the status is Open, subsequent receipts for the same item and lot will increment the order quantity for the Lot Attribute Order. The status can be changed from Open to Results Pending, Approval Pending, Closed, or Cancelled.
- Results Pending.** You can optionally change the status to Results Pending when the entire lot quantity has been received. When the status is Results Pending, the Order Quantity is not automatically updated by subsequent receipts for the item and lot.
- Approval Pending.** You can optionally change the status to Approval Pending after the order results and the attribute values and results for the lot attribute order have been recorded. When the status is Approval Pending, attribute values cannot be modified and the Order Quantity is not automatically updated by subsequent receipts for the item and lot.
- Cancelled.** Change the status to Cancelled when the lot attribute order is not required and will not be completed. Once cancelled, an order cannot be re-opened.

- **Closed.** Change the status to Closed when the order results and its attribute results are final. When the status is changed to Closed, transactions are processed to scrap the quantity destroyed, transfer the quantity retained, and optionally transfer the remaining quantity or update its inventory status. You cannot set closed orders to any other status and you cannot edit the values in their fields.
- **Closed Edit Pending.** The status that is assigned by the system when an administrator edits a closed order using the Edit Closed Lot Attribute Order function. Using that function the status can then be changed back to Closed.

Complete the Lot Attribute Order

Manage Materials with Lot Attributes

Complete the Lot Attribute Order

- Simple status flow from 'Open' to 'Closed'

The screenshot displays the QAD software interface for managing Lot Attribute Orders. The main window shows a form for Lot Attribute Order: LR140120001. The form includes fields for Item (60041), Lot (AH20202), Order Quantity (10.0), Total Qty Destroyed (0.0), Grade, and Manufacture Date (1/20/2014). The Order Status is set to 'Open'. Other fields include Date Open (1/20/2014), Effective Date (1/22/2014), and various disposition and approval dates. A Language Code dialog box is open in the foreground, showing a table of language codes with columns for Mnemonic, Label, and Code. The 'ApprovalP' code is highlighted.

Mnemonic	Label	Code
ApprovalP	Approval Pending	3
Canceled	Canceled	4
Closed	Closed	1
ClosedEP	Closed Edit Pending	5
Open	Open	0
ResultsP	Results Pending	2



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Each lot attribute order has an Order Status which determines its position in the workflow.

- **Open.** The default status when the order is created. When the status is Open, subsequent receipts for the same item and lot will increment the order quantity for the Lot Attribute Order. The status can be changed from Open to Results Pending, Approval Pending, Closed, or Cancelled.
- **Closed.** Change the status to Closed when the order results and its attribute results are final. When the status is changed to Closed, transactions are processed to scrap the quantity destroyed, transfer the quantity retained, and optionally transfer the remaining quantity or update its inventory status. You cannot set closed orders to any other status and you cannot edit the values in their fields.

Lot Attribute Order Scenarios

Manage Materials with Lot Attributes

Lot Attribute Order Scenarios

- Typical 'happy day' scenario
 - Record the results for the order then change the status to closed
- Exception scenarios
 - Change the status to 'Cancel' with no changes to lot attribute values
 - Delete the order with no changes to lot attribute values – not permitted if any attribute parameters have 'Required' of 'Validation' = yes



The three most common ways to handle an open lot attribute order are to close it, cancel it, or delete it. Each has a specific purpose within most workflows.

The most common is to record the results of the order and close it. You have already covered this within the guide.

Next, you may have to cancel the lot attribute order. This is appropriate when the lot attribute order would be no longer helpful, but is still incomplete. A record of the cancelled order remains in the system.

Finally, you may need to delete a lot attribute order. This is helpful when an order is redundant or improperly created. Deleting an order is useful when you need to end an order, but leaving a record of a cancelled order would be confusing.

Closed Order Updates Lot Attribute Values

Manage Materials with Lot Attributes

Closed Order Updates Lot Attribute Values


Home > Manage Enterprise Item Attributes > Manage Inventory with Attributes

Manage Inventory with Attributes

```

graph TD
    A([Manage Inventory Lots and Sublots]) --> B([Inspect Inventory])
    A --> C[View Item Lots]
    B --> C
    A --> D[Maintain Lot Attribute Order for Inventory]
    D --> E[Print Inventory Certificate of Analysis]
    D --> F[Edit Closed Lot Attribute Order]
    G([Manage Attribute Profiles]) --> H[View Inventory Lot Attributes]
    I[View Trans Attributes by Date]
    J[View Trans Attributes by Item]
    K[View Trans Attributes by Order]
    L[View Trans Attributes by Trans]
    
```

Provides access to update limited data for an order


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View Item Lots in Detail

Manage Materials with Lot Attributes

View Item Lots in Detail

The screenshot shows a web browser window with the following breadcrumb trail: Home > Manage Enterprise Item Attributes > Manage Purchasing with Attributes. Below the breadcrumb, the page title is 'Manage Purchasing with Attributes'. The main content is a process flow diagram with the following steps:

- Maintain Supplier Scheduled Order Order (grey box)
- Maintain Purchase Order (grey box)
- Maintain PO Line Profile (grey box)
- Receive Material (yellow oval)
- Inspect Purchasing Receipts (yellow oval)
- View Item Lots (yellow box, highlighted with a blue border and an arrow pointing to a callout box)
- Maintain Lot Attribute Order for Purchasing (yellow box)
- Edit Closed Lot Attribute Order (yellow box)
- Print Inventory Certificate of Analysis (yellow box)
- Manage Attribute Profiles (purple oval)
- Manage Purchase Orders (grey box)
- Manage Supplier Scheduled Orders (grey box)
- Purchasing Attributes (grey box)
- View PO Shipper Attributes (grey box)


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View Item Lot Attributes

Manage Materials with Lot Attributes

View Item Lot Attributes

- Use View Item Lots to

The screenshot shows the 'View Item Lot Attributes' window in QAD. The window title is 'View Item Lots'. The main table displays the following data:

Item Number	Description	Lot/Serial	Sequen	Attribute ID	Description	Label	Attribute Value	UM	Entered	Status
60041	Aluminum HousingMachined	AH20202	10	100220	Engineering Rev Text 3	Engineering Revisio	B		yes	Clear
60041	Aluminum HousingMachined	AH20202	70	100380	Supplier Text 30	Supplier	1051002		yes	Clear
60041	Aluminum HousingMachined	AH20202	72	100276	Manufacturer Lot Text 30	Manufacturer Lot	PSL3200343		yes	Clear

Below the table, a transaction record is visible:

Transaction Number	Transaction Type	Initial Value	Incoming Value	Attribute Value	UM	Datetime	Remarks	Validation	Result	Specifi
26552	RCT-PO		B	B		1/20/2014 6:13:20 PM		Yes	Conforming	



When you close a lot attribute order, it completes the update process.

The attributes of the associated item lot update to reflect the results of the lot attribute order.

Use View Item Lots to view and monitor changes to lot attribute values.

View Item Lot Transactions

Manage Materials with Lot Attributes

View Item Lot Transactions

- View Transaction by Item

The screenshot displays the 'View Item Lot Transactions' window in QAD. At the top, there are tabs for 'Processes', 'Maintain Lot Attribute Order', 'Maintain Item Profile', 'View Item Lots', and 'Generalized Codes Maintenance'. Below the tabs is a search bar with 'Item' selected and 'starts at' as the search criteria. The main area shows a list of items with columns for Item, Item Description, and Lot/Serial. Two items are listed: 60041 Aluminum Housing Machined (Lot: AH20202) and 80220 Olives, Fresh (Lot: FR10010). Below this, there are tabs for 'Item Lot Attributes', 'Inventory Detail', and 'Transactions by Item'. The 'Transactions by Item' tab is active, showing a table of transactions. A callout box labeled 'Item lot transaction history' points to this table. The table has columns: Item Number, Item Description, Transaction Number, Transaction Type, Date, Time, Site, Location, Lot/Serial, Reference, Order, and ID. Three transactions are visible for item 60041. Below the transactions, there is a 'Transaction Attributes' tab. A callout box labeled 'A attribute values and changes for selected transaction' points to this tab. It shows a table of attributes with columns: Sequence, Attribute ID, Description, Label, Datatype, Format, Initial Value, Incoming Value, Attribute Value, UM, Remarks, and Valid. Three attributes are listed: Engineering Rev Text 8, Supplier Text 30, and Manufacturer Lot Text 30.

You can reenter values for open lot attributes. To do so, access the modify function for the attribute. Enter a new value in place of the existing value and save the attribute.

Each time you edit the order or its attributes, another history entry is added to the third level Transaction Attributes tab. You can view changes to attribute values for transactions here.

Exercises

Manage Materials with Lot Attributes

Exercises

- Objective
 - Know how the attribute values for a lot can be maintained using lot attribute orders
- Use the function Maintain Lot Attribute Order to find the order created for the receipt of item 60046
- For the lot attribute order
 - Enter values for all of the attributes on each order
 - Values can be either conforming or non-conforming
 - Complete fields for the lot attribute order
 - Observe how the value of the 'Result' field changes depending on values for the order attributes
 - Change the Order Status to 'Closed' to update lot attribute values

Exercises

Manage Materials with Lot Attributes

Exercises

- Use View Item Lots to view the lots created for the receipt of item 60046
 - Lot attribute values
 - Transaction history for the lot and changes to attribute values

CHAPTER 7

Lot Attribute Profile Parameters

Lot Attribute Profile Parameters

QAD Item Attributes and Quality Control

Lot Attribute Profile Parameters

Functional Task-Based Training



Our Passion. Your Advantage.

Lesson Objectives

Lot Attribute Profile Parameters

Lesson Objectives

- Understand how to use profile attribute parameters to manage the input, specifications, and validation of values for lot attributes
- Understand how to use 'Specification Type' and specification details to develop valid specifications for an attribute



At the end of this section of training, you will understand the different parameters that make up lot attributes.

In learning this, you will understand how to use the different parameter and specification options. This allows you to usefully define item traits using attributes.

The Maintain Item Profile collection

Introduction to Lot Attributes

The Maintain Item Profile collection

- Item Profile for 04510 Olive Oil, level = lot

Browse to select and maintain an item profile

Browse with attributes for an item profile

Preview function to test attribute setup

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Input Method	Multipl
100200	Cultivar Text 30	Cultivar	Cultivar	Character	x(30)	Item	Active	yes	Lot	User	
70	100340	Production Date	Production Date	Date	MM/DD/YY	Item	Active	yes	Lot	User	
90	100139	Bottling Date	Bottling Date	Date	MM/DD/YY	Item	Active	yes	Lot	User	
95	100189	Country of Origin Text50	Country of Origin	Character	x(50)	Item	Active	yes	Lot	User	

The Maintain Item Profile browse collection allows you to create, modify, and view item profiles.

The second level Profile Attributes tab within the browse collection stores information on the attributes associated with each profile.

In the picture above, you can see the profile attributes associated with the selected item profile.

Principal Attribute Profile Parameters

Lot Attribute Profile Parameters

Principal Attribute Profile Parameters

QAD Item Attributes and Quality Control



Principal Lot Attribute Parameters

Lot Attribute Profile Parameters

Principal Lot Attribute Parameters

- Sequence
- Input method
- Required
- Validation
- Edit Specification
- Default Value
- Specification
- Measurement
- Specification Type

The settings for these parameters should be based on a good understanding of requirements and detailed analysis of how attribute values need to be evaluated.

Profile Attribute Sequence

Lot Attribute Profile Parameters

Profile Attribute Sequence

- Sequence determines the order attributes appear for a profile

The screenshot shows the 'Profile Attributes' window in QAD. On the left, a table lists attributes with columns for Sequence, Attribute ID, and Description. The first row is selected:

Sequence	Attribute ID	Description
10	100200	Cultivar Te
70	100340	Production
90	100139	Bottling Da
95	100189	Country of

The details for the selected attribute (ID: 100200) are shown on the right:

- Attribute ID: 100200
- Label: Cultivar
- Description: Cultivar Text 30
- Type: Character
- Format: x(30)
- Sequence: 10 (highlighted with a box and a callout label 'Sequence')
- Status: Active

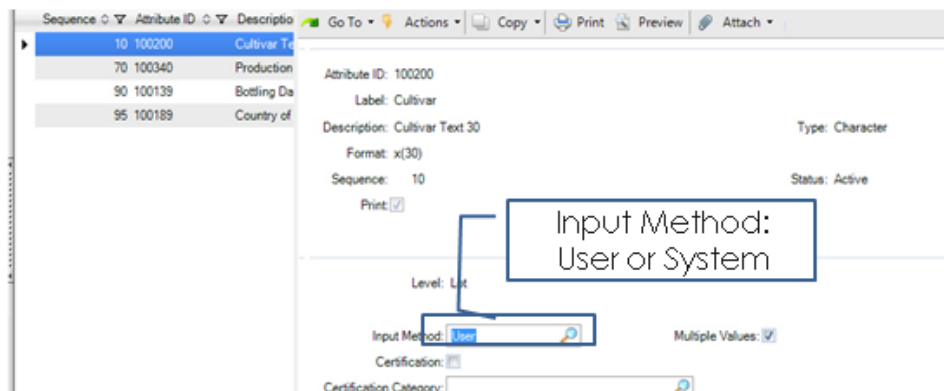
All profiles attributes have a sequence. This determines the order in which attributes print on reports.

Lot Attribute Input Method

Lot Attribute Profile Parameters

Lot Attribute Input Method

- Input Method determines whether attribute values are visible and can be entered during a purchasing or production receipt



Input Method	Visible During Receipt	Entry During Receipt	Entry with Lot Attribute or Quality Order
User	YES	YES	YES
System	NO	NO	YES



The lot attribute input method determines how the values are provided for the attribute.

The valid options here are User and System

All lot level and subplot level attribute can be entered using a lot attribute or quality order

Default Value

Lot Attribute Profile Parameters

Default Value

- The system uses the default value to assign a lot attribute value when no value is entered

The screenshot shows the 'Maintain Item Profile' window with the 'Profile Attributes' section open. A table lists attributes with columns for Sequence, Attribute ID, and Description. The attribute 'Arbequina, Frantoio, Leccino, Lucca, Picholine' is selected. The detailed view for this attribute shows the 'Default Value' field containing the same text, which is highlighted with a blue box. Other fields include 'Specification Type' (Membership), 'Specification' (Arbequina, Frantoio, Leccino, Lucca, Picholine), 'Test', 'Test Method', 'Value Required' (checked), 'Edit Specification' (checked), and 'Reference'.

Sequence	Attribute ID	Description
10	100200	Cultivar T...
70	100340	Production
90	100139	Bottling De...
95	100189	Country of

Each lot attribute has a Default Value. This is the value that the system gives to the attribute if no value is given by a user.

Date Attributes and Default Value

Lot Attribute Profile Parameters

Date Attributes and Default Value

- Default values for lot and item level attributes

For a lot level attribute the default value can be calculated for date attributes from either a transaction date or effective date

For an item level attribute set default value to User Defined to specify a fixed date

Memoricon	Label	Code
Eff Date	Effective Date	1
TranDate	Transaction Date	2
User Def	User Defined	3

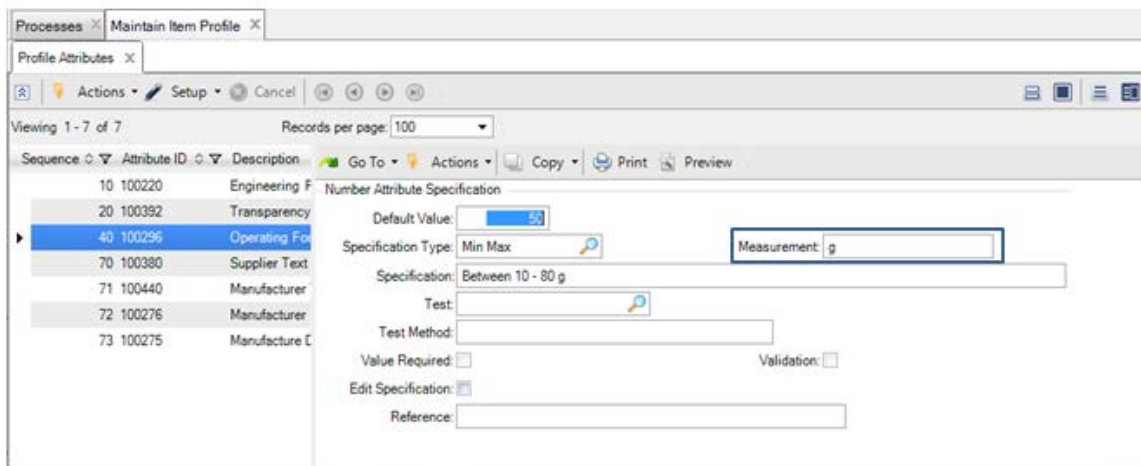
Each lot attribute has a Default Value. This is the value that the system gives to the attribute if no value is given by a user.

Measurement

Lot Attribute Profile Parameters

Measurement

- A 12 character field that describes the measurement for an attribute value, such as kg/m3



Measurement is the inspection or test measurement for the attribute. The purpose for this parameter is to store a short description of how the attribute value is measured.

Measurement does not apply for date and logical attributes.

Specification

Lot Attribute Profile Parameters

Specification

- Use the Specification parameter for the nominal specification for the attribute

The screenshot shows the 'Maintain Item Profile' window in QAD. The 'Profile Attributes' table lists the following attributes:

Sequence	Attribute ID	Description
10	100220	Engineering F
20	100392	Transparency
40	100296	Operating Fo
70	100380	Supplier Text
71	100440	Manufacturer
72	100276	Manufacturer
73	100275	Manufacture C

The 'Number Attribute Specification' form for the selected attribute shows the following fields:

- Default Value: 50
- Specification Type: Min Max
- Measurement: g
- Specification: Between 10 - 80 g
- Test: [Empty]
- Test Method: [Empty]
- Value Required:
- Validation:
- Edit Specification:
- Reference: [Empty]

Parameter for Value Required

Lot Attribute Profile Parameters

Parameter for Value Required

- Value Required parameter determines whether the value must be entered to close a lot attribute or quality order

The screenshot shows the 'Number Attribute Specification' dialog box in the QAD software. The dialog is open for attribute 50, 'Maturity In'. The 'Value Required' checkbox is checked and highlighted with a red box. Other fields include 'Default Value' (0.00), 'Specification Type' (Min Max), 'Specification' (Between 2 - 7 UC Davis), 'Test Method' (UC Davis), and 'Validation' (checked). The background shows a table of attributes with columns for Sequence, Attribute ID, and Description.

Sequence	Attribute ID	Description
10	100200	Cultivar Te
20	100250	Harvest De
30	100240	Grower Te
40	100310	Orchard Te
50	100280	Maturity In
60	100292	Oil Pct
70	100287	Moisture P
80	100100	Acidity Dec
95	100189	Country of

The Value Required parameter determines whether the value must be entered before closing a lot attribute or quality order.

Parameter for Validation

Lot Attribute Profile Parameters

Parameter for Validation

- Validation parameter determines whether the value and specification of the attribute determines the conformance of a lot

Check the validation when the attribute value should be compared to the Specification to determine if a lot is conforming or non-conforming

Sequence	Attribute ID	Description
10	100200	Cultivar Te
20	100250	Harvest De
30	100240	Grower Te
40	100310	Orchard Tr
50	100280	Maturity In
60	100292	Oil Pct
70	100287	Moisture P
80	100100	Acidity Dex
95	100189	Country of

Number Attribute Specification

Default Value: 0.00

Specification Type: Min Max

Specification: Between 2 - 7 UC Davis

Test Method: UC Davis

Value Required:

Validation:

Edit Specification:

Reference:

QAD 155

The Validation parameter determines whether the system checks the value for conformance.

Parameter for Edit Specification

Lot Attribute Profile Parameters

Parameter for Edit Specification

- Determines whether the specification can be overridden by a more specific profile (covered in lesson on Attribute Layer Priority)

The screenshot displays the 'Maintain Item Profile' window in QAD. On the left, a table lists profile attributes. The attribute 'Maturity In' (Sequence 50, Attribute ID 100280) is selected. On the right, the 'Number Attribute Specification' form is shown. The 'Edit Specification' checkbox is checked and highlighted with a blue box. Other fields include 'Default Value' (0.00), 'Specification Type' (Min Max), 'Specification' (Between 2 - 7 UC Davis), 'Test Method' (UC Davis), and 'Value Required' (checked).

Sequence	Attribute ID	Description
10	100200	Cultivar Te
20	100250	Harvest De
30	100240	Grower Te
40	100310	Orchard Tr
50	100280	Maturity In
60	100292	Oil Pct
70	100287	Moisture P
80	100100	Acidity De
95	100189	Country of

If Edit Specification is not checked, then a more specific, higher level profile cannot override the specification for this profile attribute

If Edit Specification is checked, then a more specific, higher level profile can override the specification for this profile attribute

Attribute Specification Type

Lot Attribute Profile Parameters

Attribute Specification Type

QAD Item Attributes and Quality Control

Specification Type

Lot Attribute Profile Parameters

Specification Type

- The details for an attribute specification are determined by its Specification Type

For all attributes except Logical attributes

Sequence	Attribute ID	Description
10	100200	Cultivar Te
20	100250	Harvest Da
30	100240	Grower Te
40	100310	Orchard Te
50	100280	Maturity In
60	100292	Oil Pct
70	100287	Moisture P
80	100100	Acidity Dec
95	100189	Country of

Number Attribute Specification
 Default Value: 0.00
 Specification Type: Min Max
 Specification: Between 2 - 7 UC Davis
 Test:
 Test Method: UC Davis
 Value Required: Validation:
 Edit Specification:
 Reference:

The Edit Specification parameter determines profile priority.

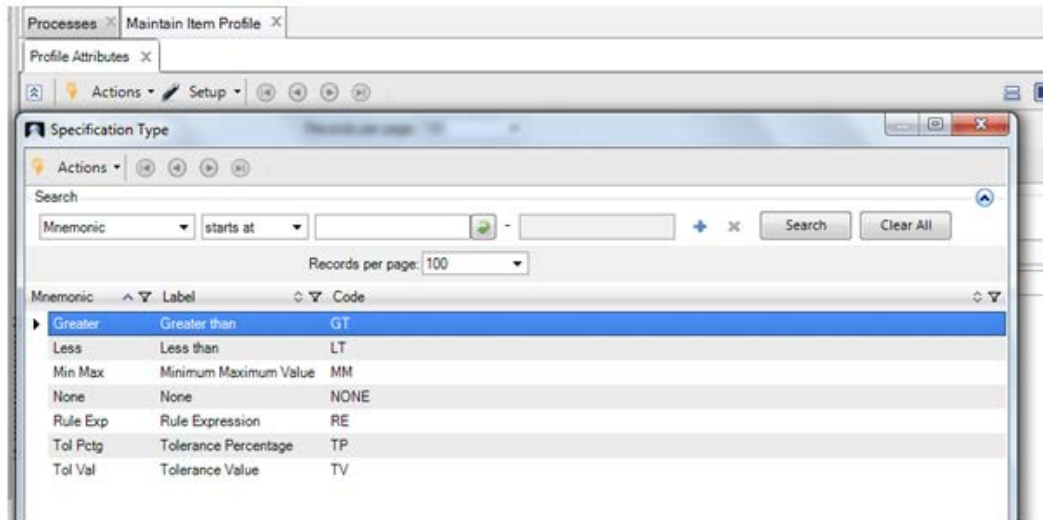
If Edit Specification is checked, then profiles will override test specifications when the profile is more specific.

Attribute Specification Types

Lot Attribute Profile Parameters

Attribute Specification Types

- Specification type for an attribute depend on its datatype and format



A lot attribute's specification type determines how the system validates an attribute for conformance. The types of specifications that are available depend on what type of datatype and format that the lot attribute uses.

Leave the specification type parameter as 'None' when there is no specification

Specification Type

Lot Attribute Profile Parameters

Specification Type

- Specification type options vary by datatype and format

Specification Type	Datatype and Format				
	Integer	Decimal	Decimal pct%	Character	Date
None	x	x	x	x	x
Greater	x	x	x	x	x
Less	x	x	x	x	x
Min Max	x	x	x	x	x
Rule Exp	x	x	x	x	x
Tol Val	x	x	x		
Tol Pct	x	x			
Membership				x	
Sysdate					x

- The following pages include representative examples of some of the specification types

Specification Type “Less”

Lot Attribute Profile Parameters

Specification Type “Less”

- Type 'Less' is supported with parameters for target value, maximum value, and maximum inclusive

The screenshot shows the 'Maintain Item Profile' window in QAD. On the left, a table lists profile attributes with columns for 'Input Method', 'Multiple Values', 'Cert', and 'User'. The 'System' attribute is selected. The main panel displays the 'Number Attribute Specification' configuration for a 'Less' type. The 'Default Value' is 0, and the 'Specification' is 'Less than 5 mg / 10 gm'. The 'UM' is 'mg/gm'. The 'Test Method' is 'Test'. The 'Value Required' and 'Edit Specification' checkboxes are checked. The 'Reference' field is empty. Below the configuration, there are input fields for 'Target Value' (set to 5), 'Maximum Number' (set to 5), and 'Maximum Inclusive' (unchecked).

Provides support for less than, less than or equal to, maximum . . .



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Specification parameters depend on the specification type that is used.

If the Specification Type is set to Less, then you can specify a maximum number and a target value.

The Maximum Inclusive option determines whether the maximum number is an acceptable value. If it is checked, then a value equal to the maximum is conforming.

Specification Type “Greater”

Lot Attribute Profile Parameters

Specification Type “Greater”

- Type 'Greater' is supported with parameters for target value, minimum value, and minimum inclusive

The screenshot shows the 'Maintain Item Profile' window in QAD. A table lists attributes with columns for Sequence, Attribute ID, and Description. The 'Number Attribute Specification' configuration panel is visible, showing the following settings:

- Default Value: 0.00%
- Specification Type: Greater
- Specification: Minimum 94%
- Test: (empty)
- Test Method: (empty)
- Value Required:
- Edit Specification:
- Reference: (empty)
- UM: (empty)
- Validation:
- Target Value: 0.00%
- Minimum Number: 94.00%
- Minimum Inclusive:

A callout box points to the 'Minimum Inclusive' field with the text: "Provides support for greater than, greater than or equal to, minimum, exceeds . . ."

The Greater specification type functions much like the Less specification type, except that it uses the opposite operation.

You must choose a Minimum Number and a Target Value. If you check Minimum Inclusive, a value which equals the Minimum Number is conforming.

Specification Type “Min Max”

Lot Attribute Profile Parameters

Specification Type “Min Max”

- Type ‘Min Max’ combines parameters used for ‘Less’ and ‘Greater’

The screenshot displays the QAD software interface for configuring a 'Number Attribute Specification'. The main window shows a table of specifications with columns for 'User', 'Input Method', 'Multiple Values', and 'Cert'. The 'System' user is selected. The 'Number Attribute Specification' configuration panel is open, showing the following details:

- Default Value: 0.0000
- Specification Type: Min Max
- Specification: 0.9150-0.9180 @ 15.5°C
- UM: (Unit of Measure)
- Test Method: (blank)
- Value Required:
- Edit Specification:
- Reference: (blank)
- Validation:

A detailed configuration dialog box is shown below the main panel, with the following fields:

- Target Value:
- Minimum Number:
- Minimum Inclusive:
- Maximum Number:
- Maximum Inclusive:

The Min Max specification type combines both Less and Greater. In this type, you must specify a Minimum Number, a Maximum Number, and a Target Value. Both Minimum Inclusive and Maximum Inclusive are options.

Specification Type “Membership”

Lot Attribute Profile Parameters

Specification Type “Membership”

- Membership is used for character attribute
- Specify included or excluded values in a comma separated list

The screenshot shows the 'Maintain Item Profile' window in QAD. On the left, a table lists attributes:

Sequence	Attribute ID	Description
10	100200	Cultivar T
70	100340	Production
90	100139	Bottling Da
95	100189	Country of

The right pane shows the configuration for the selected attribute (Sequence 10, Attribute ID 100200, Description Cultivar T). The 'Specification Type' is set to 'Membership'. The 'Specification' field contains the text: 'Arbequina, Frantoio, Leccino, Lucca, Picholine,'. Below this, there are fields for 'Include List' and 'Exclude List'. The 'Include List' field contains the same text as the 'Specification' field. A callout box points to the 'Include List' field with the text: '“Membership” for character attributes'.



The Membership specification type accepts a given number of alphanumeric strings which are acceptable values.

You can choose to create an Include list, which determines a set number of acceptable values. Alternately, you can create an Exclude list, which allows all values other than the listed strings.

In either case, you must separate values by commas.

Note: Although you can create an Include list and an Exclude list, the Include list always takes precedence over the Exclude list, and the Exclude list is disregarded.

Specification Type “Rule Expression”

Lot Attribute Profile Parameters

Specification Type “Rule Expression”

- A rule expression uses programming constructs and is verified when entered

The screenshot shows the 'Maintain Item Profile' window in QAD. A table lists various attributes with their IDs and descriptions. Attribute 76 (ID 21119) is selected, and its details are shown on the right. The 'Specification Type' is set to 'Rule Expression'. A text box points to the 'Specification Type: Rule Expression' label with the text: 'Use of Progress Software constructs to write specification for **attribute_value**'. Another text box points to the 'Rule Expression' field, which contains the following code: `(date(attribute_value) > today - 365 and date(attribute_value) < today + 30) or date(attribute_value) = 02/29/2008`.



The Rule Expression specification type evaluates values using Progress Software constructs.

Use ‘attribute_value’ as the variable that is the subject for the expression. This is an advanced function, and requires knowledge of Progress Software to use.

Specification Type “Sys Date”

Lot Attribute Profile Parameters

Specification Type “Sys Date”

- For a date attribute the Sys Date type can be used for a specification based on either an effective date or transaction date

The screenshot shows a software interface with a table of attributes on the left and a detailed specification form on the right. The table lists attributes such as 'Cultivar Text 30', 'Harvest Date', 'Grower Text 30', 'Orchard Text 50', 'Maturity Index Decimal', 'Oil Pct', 'Moisture Pct', 'Acidity Decimal', and 'Country of Origin Text50'. The 'Harvest Date' attribute is selected. The specification form on the right is titled 'Date Attribute Specification' and includes fields for 'Default Value' (TranDate), 'Interval Value(Day)' (0), 'Specification Type' (Sys Date), 'Specification' (Within 7 days of receipt), 'Test', 'Test Method', 'Value Required' (checked), 'Validation' (checked), 'Edit Specification' (checked), and 'Reference'. A blue box highlights the date specification section, which includes 'Minimum Date' (set to 1/10/2014), 'Interval Value(Day)' (7), 'Effective Date - 7 Days', 'Minimum Inclusive' (checked), 'Maximum Date' (set to TranDate), 'Interval Value(Day)' (0), 'Transaction Date = 0 Days', and 'Maximum Inclusive' (checked).

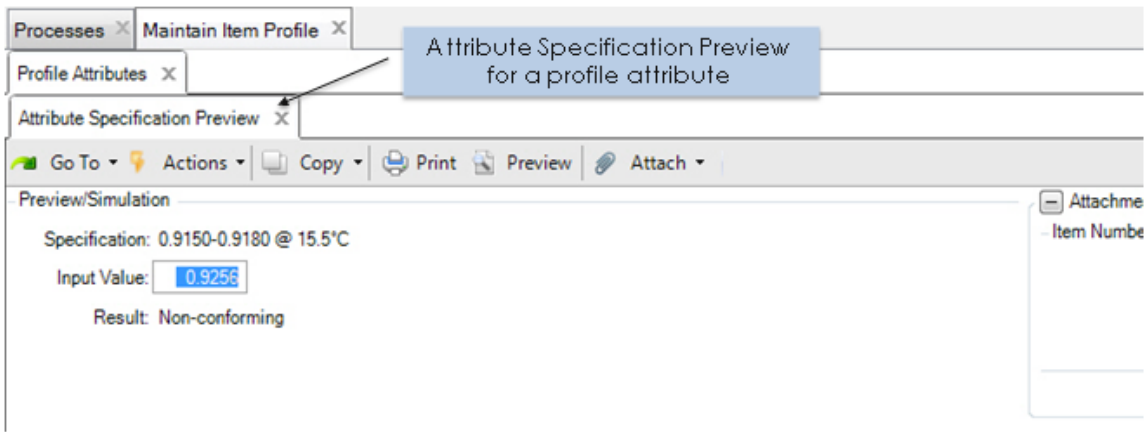
System date specifications are based on either ‘Effective Date’ or ‘System Date’

Validate Specification Setup with Values

Lot Attribute Profile Parameters

Validate Specification Setup with Values

- Use the Attribute Specification Preview frame to validate how a specification is setup for an attribute

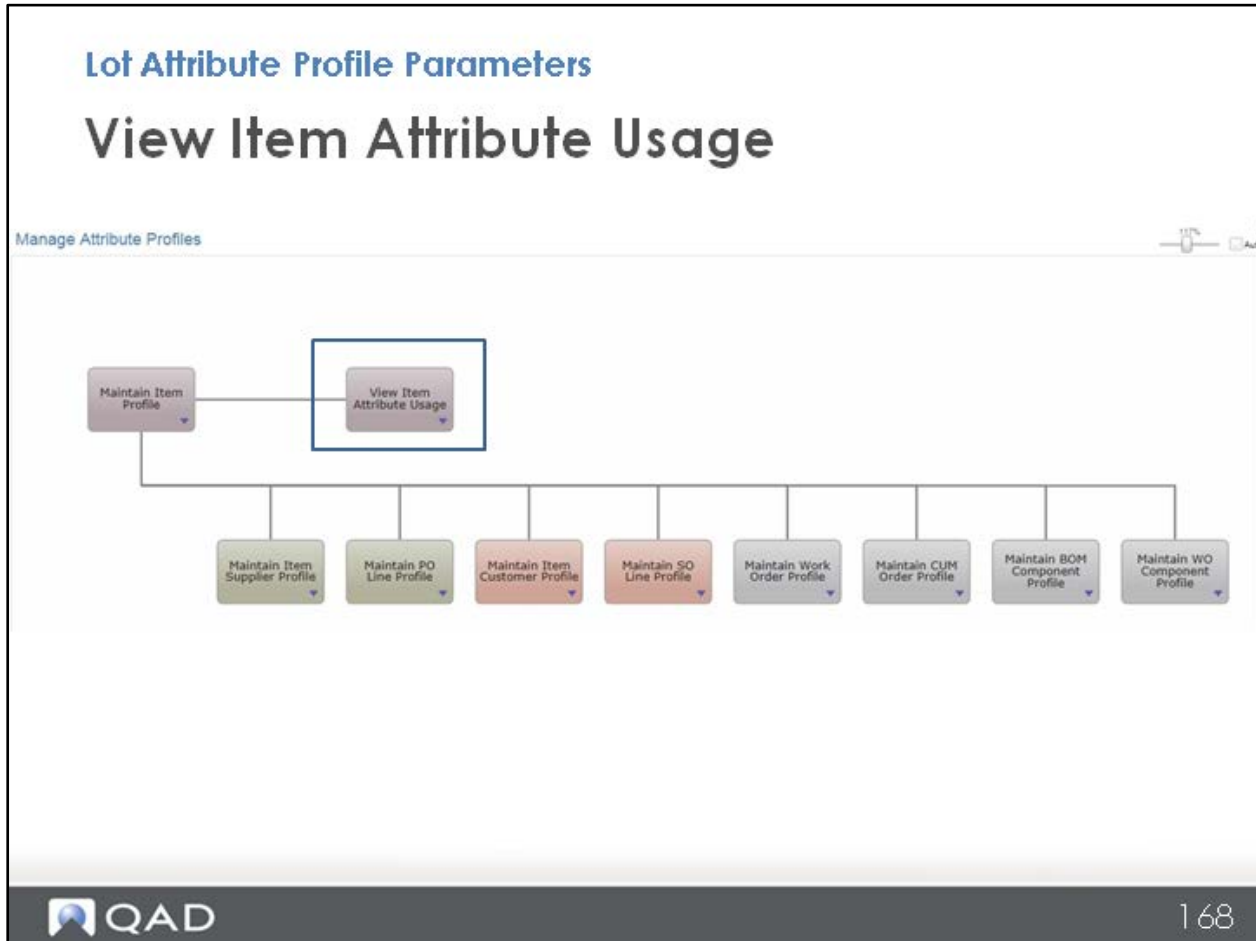


After entering a specification type and details for an attribute specification, you can validate the attribute specification by using the Attribute Specification Preview tab.

The tab will list the specification for the chosen attribute. Enter an Input Value and press Next to determine if that value is acceptable.

The system will then display whether that result conforms to the specification.

View Item Attribute Usage



Next, this guide covers the usage of item attributes. To begin, open View Item Attribute Usage in the process maps.

Access this option in the process maps through:

Home > Manage Enterprise Item Attributes > Set Up Item Attributes and Profiles > Manage Attribute Profiles

View Item Attribute Usage Collection

Lot Attribute Profile Parameters

View Item Attribute Usage Collection

- View attribute usage for purchasing, production, and sales

The screenshot displays the 'View Item Attribute Usage' application. At the top, there are three tabs: 'Purchasing Attributes', 'Sales Attributes', and 'Production Attributes'. Below the tabs is a search bar with a dropdown menu for 'Attribute ID' and a 'starts at' field. A table below the search bar shows a list of attributes with columns for Attribute ID, Description, Datatype, Format, Label Term, Long Label, and Medium Label. One attribute, 'Engineering Rev Text 8', is selected. A callout box labeled 'Attributes' points to the search bar. Another callout box labeled 'Item Profiles for selected attribute' points to a table showing item profiles for the selected attribute. A third callout box labeled 'Applications for selected attribute and Item' points to a table showing applications for the selected attribute and item.

Attribute ID	Description	Datatype	Format	Label Term	Long Label	Medium Label
100211	Density Decimal	Decimal	>>>>9.99	DENSITY	Density	
12	Density Integer	Integer	>>>>>>9	DENSITY	Density	
10	Engineering Rev Text 8	Character	x(8)	ENGINEERING_REVISION	Engineering Revision	Engineering Rev

Item	Item Description	Site	Reference	Sequence	Attribute	Label	Datatype
60042	Sensor P-Ultrasound			10	100220	8	Engineering Revision
60043	Touch Screen P-Ultrasound			10	100220	8	Engineering Revision
60045	Circuitboard Module P-Ultrasound			10	100220	8	Engineering Revision

In the View Item Attribute Usage browse collection, attributes are organized by their associated business functions.

The three top level tabs show attributes associated with purchasing, attributes associated with sales, and attributes associated with production.

The third level tabs show business operations associated with that organizational type.

Exercise

Lot Attribute Profile Parameters

Exercise

- Objective
 - Become familiar with the detailed parameters for lot attributes
 - Understand how define the specifications for lot attributes
- For items 60042, 60043, and 60046 for Pocket Ultrasound
 - Modify the specifications and/or specification types for attributes such as
 - Engineering Revision
 - Manufacturer Lot
 - Manufacturer and Manufacture Date
- Receive partial lot quantities for the purchase order lines
 - P1002239 lines 1, 2, 5 with quantity 10
 - P1002241 lines 1, 2, 5 with quantity 15

Note: Set the status parameter for attributes to 'Active'. The profile attributes will vary by item.

Exercise

Lot Attribute Profile Parameters

Exercise

- View lot attribute orders for items 60042, 60043, and 60046
- For item 80220 Olives, Fresh
 - Modify the status, specification type, and details for attributes for
 - Harvest date, acidity
 - Receive partial lot quantities for the purchase order lines
 - P1002232, line1 with quantity 10
 - P1002235, line1 with quantity 10
- View quality orders for 80220
 - Maintain Quality Order
 - Maintain Quality Order for Purchasing



Quality orders are created for this item because there is at least one test specification for the item

View lot attribute orders for items 60042, 60043, and 60046

Maintain Lot Attribute Order

Maintain Lot Attribute Order for Purchasing

View quality orders for 80220

Maintain Quality Order

Maintain Quality Order for Purchasing

CHAPTER 8

Managing Attribute Deviations

Deviations and Attribute Layer Priority

QAD Item Attributes and Quality Control

Deviations and Attribute Layer Priority

Functional Task-Based Training



Our Passion. Your Advantage.

Lesson Objectives

Deviations and Attribute Layer Priority

Lesson Objectives

- Learn how to manage deviations and exceptions for attributes and attribute specifications, from those defined for an item
- For example
 - Deviations for an item from a supplier or an item for customer
 - Deviation for a purchase order line or a sales order line

Customer and Sales Order Deviations

Item Attributes & Quality Control

Customer and Sales Order Deviations

- For printing and qualification of materials for allocation, picking, and shipment

The screenshot shows a QAD Sales Order form. At the top, it displays the QAD logo and address: East Hanover, NJ 07950, USA - TAX PURPOSE. It also shows 'Sold To' and 'Ship To' information for Wal-Mart in Bentonville, AR. The form includes fields for 'Salesperson' (John Hunter), 'Credit Terms' (30 days after invoice date), 'Ship Via' (FEDX), 'FOB Point', 'Resale', and 'Remarks'. A table lists the items ordered, with one item highlighted: '1 04510 Extra Virgin 500 ml Olive Oil' with a due date of 3/10/2014, quantity of 40.0 EA, price of 12.50, and extended price of 500.00. Below the item table, there is a table of attributes and specifications. The 'Bottling Date' attribute is highlighted with a red box, showing a deviation: 'Not more than 60 days before ship date' with a 'Customer' source.

Sold To	Ship To
Wal-Mart 702 S.W. 8th Street Waterfront Bentonville, AR 72716 USA - TAX PURPOSE	Wal-Mart 702 S.W. 8th Street Waterfront Bentonville, AR 72716 USA - TAX PURPOSE
Attention Samuel Green	Attention Samuel Green
Salesperson John Hunter	Credit Terms 30 days after invoice date
Ship Via FEDX	FOB Point Resale
Remarks	Currency USD

Ln	Item Number	Due Date	Quantity Ordered	Price	Extended Price
1	04510	3/10/2014	40.0 EA	12.50	500.00

Attribute	Specification	Source
Cultivar	Arbequina, Frantolo, Leccino, Lucca, Picholine,	Item
Production Date		Item
Bottling Date	Not more than 60 days before ship date	Customer

Deviations and Material Quality

Deviations and Attribute Layer Priority

Deviations and Material Quality

- Material quality can vary
 - For suppliers and for purchase orders
 - For customers and for sales orders
 - For materials required to issue to work orders
 - For materials to produce and receive from work orders

So far, you have covered how to handle the common concepts and situations which involve item attributes.

This section of the guide covers deviations from the norm. These deviations result from the number of ways that items, lots, requirements, and defaults can vary in the realistic course of business. Fortunately, QAD EE has the tools to adapt to these situations.

Common Deviations

Deviations and Attribute Layer Priority

Common Deviations

- Purchasing
 - Items and suppliers as well as purchase orders
- Sales
 - Items and customers as well as sales orders
- Production
 - Work orders and CUM orders
 - BOM and formula component / ingredients
 - Component materials for work orders
 - Make-to-order production for a sales order

The most common deviations come from three areas of business.

Purchasing creates deviations through the variations among items and suppliers, and purchase orders.

Sales creates deviations through the variations among items and customers, and sales orders.

In production, deviations result from the variations among orders and components, and the requirements of make-to-order production.

What's the Challenge?

Deviations and Attribute Layer Priority

What's the Challenge?

- When attributes and parameters appear on profiles at multiple levels, what takes priority?
 - The specifications for an item and attribute can appear on two or more levels
 - The item/engineering and a customer requirement for the same item and attribute can be different

So far, you have covered how to handle the common concepts and situations which involve item attributes.

This section of the guide covers deviations from the norm. These deviations result from the number of ways that items, lots, requirements, and defaults can vary in the realistic course of business. Fortunately, QAD EE has the tools to adapt to these situations.

Attribute Layers and Priority

Deviations and Attribute Layer Priority

Attribute Layers and Priority

QAD Item Attributes and Quality Control



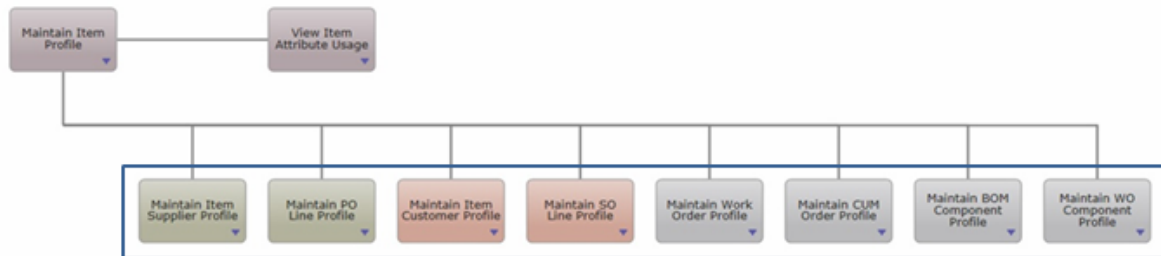
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Profiles for Items and Attributes

Deviations and Attribute Layer Priority

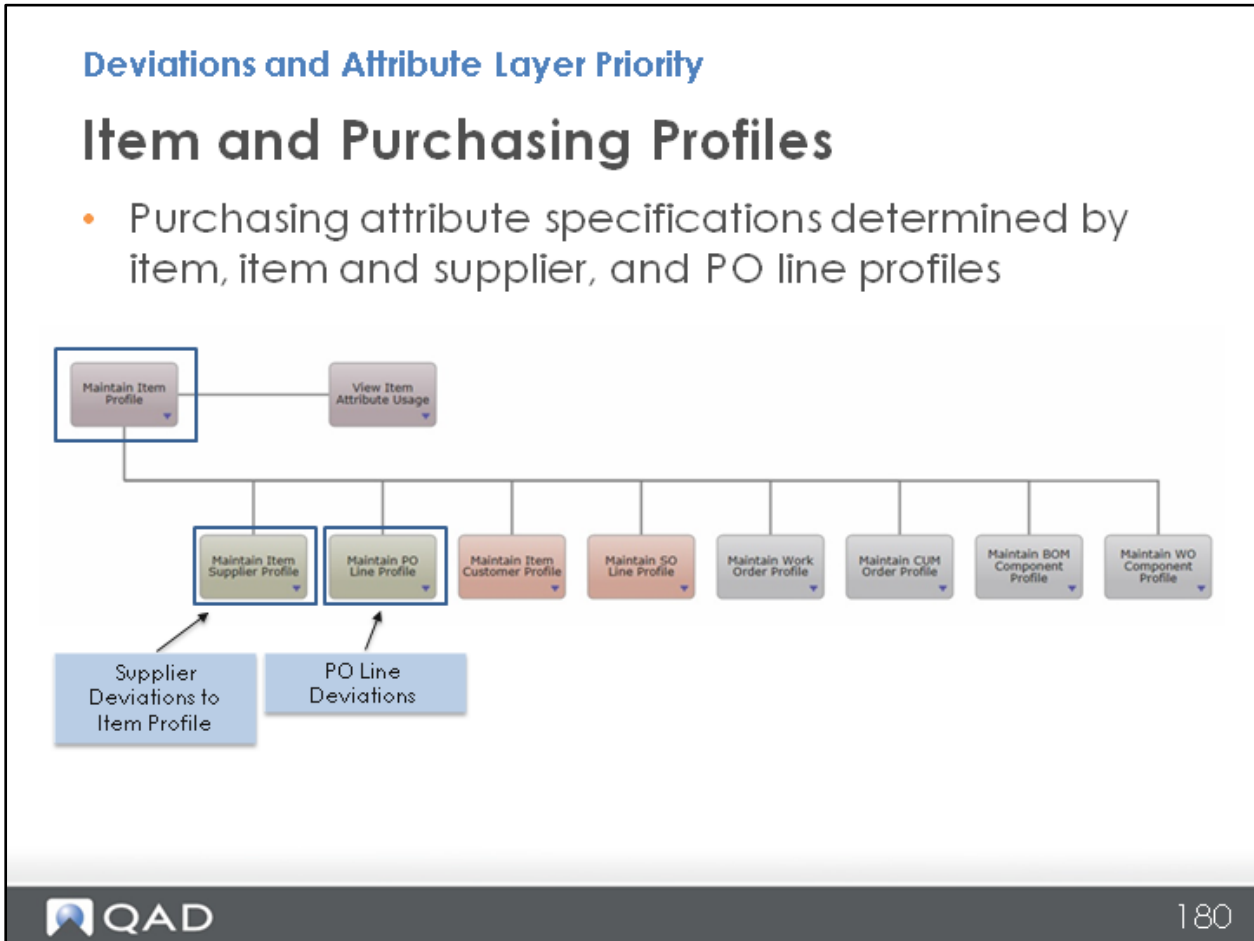
Profiles for Items and Attributes

- Solution is in the use for attribute profiles to view and manage deviations at different levels



Many deviations involve the different types of profiles which exist for items.

Item and Purchasing Profiles



Visualize three layers that can be used to maintain attribute parameters and specifications for purchasing:
 The first for an item, the second for an item and supplier, and a third for an item on a PO line.

Purchasing Layers

Deviations and Attribute Layer Priority

Purchasing Layers

- PO Line Profile
- Item and Supplier Profile
- Item Profile



Visualize three layers that can be used to maintain attribute parameters and specifications for purchasing.

The Item Profile layer is the most generic and applies to all instances of an item.

The Item Supplier Profile layer is more specific and applies when both conditions are met.

The PO Line Profile layer is the most specific of these and applies only to specific PO lines.

Deviations for an Item and Supplier

Deviations and Attribute Layer Priority

Deviations for an Item and Supplier

- Attribute from an item profile must have 'Edit Specification' = yes to modify specification

Item Supplier Profile

'Source' profile for the attribute

1. Create profile for item and supplier
2. Update attributes
3. Optionally add attribute(s)

Item Number	Description	Site	Description	Supplier	Name	Reference
60042	Sensor P-Ultrasound			10S1006	Hampton Electronics	
60043	Touch Screen			10S1005	Absolute Electronics Company	
60043	Touch Screen			10S1006	Hampton Electronics	
80103	Calcium Carbonate			10S1004	Sungro Chemicals	
80103	Calcium Carbonate			30S1004	Shanghai Chemical Manufacturers	

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level
10	100152	Calcium Carbonate Pct	Calcium Carbonate	Decimal	>>9.99%	Item	Active	yes	Lot
					>>9.99%	Item	Active	yes	Lot
						x(30) Supplier	Active	yes	Lot
						x(30) Item	Active	yes	Lot
						x(50) Supplier	Active	yes	Lot

It is often necessary to track different attributes when dealing with a certain supplier. In such cases, you can create an item supplier profile which contains alternate attributes.

In the graphic above, observe that several attributes have a Source of supplier. This indicates that several are specific to the supplier, whereas most apply to the item generally.

To create a new item supplier profile, click the Create button in the top right. Alternately, you can Modify an existing profile.

Item and Supplier Profile

Deviations and Attribute Layer Priority

Item and Supplier Profile

- Warning: Do not copy attributes from the item profile unless you intend to have all the copied attributes with source of 'Supplier'

The screenshot shows the 'Maintain Item Supplier Profile' window in QAD. The window title is 'Item Supplier Profile'. The interface includes a search bar with 'Item Number' and 'starts at' filters, and a 'Records per page' dropdown set to 100. A table lists items with columns for 'Item Number' and 'Description'. The selected item is 80103, Calcium Carbonate. The right pane shows details for this item, including 'Item Number: 80103', 'Site: Calcium Carbonate', 'Supplier: 10S1004', and 'Supplier Item: Sungro Chemicals'. A 'Reference' field is also present. A 'Copy Attributes' button is visible, with a callout box pointing to it containing the text 'Do not copy attributes'.

When creating or modifying an item supplier profile, begin by entering the appropriate Item Number and Supplier.

You are given the option of copying all attributes from the item, but you should avoid doing this. Item supplier profiles are intended to manage deviations and exceptions to item profiles, not replace them entirely.

Default Value and Specification

Deviations and Attribute Layer Priority

Default Value and Specification

- Default value is useful for attributes that are setup for characteristics such as supplier and country of origin

The screenshot displays the 'Maintain Item Supplier Profile' window in QAD. The 'Country of Origin Text50 - Country of Origin' attribute is highlighted in the list. A callout box indicates that the 'Edit Specification' checkbox is checked, which overrides the specification when set to 'yes' on the item profile. The 'Character Attribute Specification' form is also visible, showing fields for Specification Type, Specification, Test, Test Method, Value Required, Edit Specification, and Reference.

In the second level Profile Attributes tab, you can add attributes to the item supplier profile.

You can create alternate versions of the attributes in the generic item profile, or you can add entirely new attributes.

These attributes appear on lots whose item and supplier match this profile. Both the generic item profile and the item supplier profile add their attributes. If the same attribute comes from both profile, the higher priority item supplier attribute overrides the generic attribute.

Deviations for a PO Line

Deviations and Attribute Layer Priority

Deviations for a PO Line

- PO Line profile provides visibility of specifications for all PO lines

The screenshot displays the 'PO Line Profile' window. At the top, there are tabs for 'Supplier Profile' and 'Maintain PO Line Profile'. Below the tabs is a search bar with '60042' entered. A table lists purchase order lines with columns for Item Number, Description, Site, Purchase Order, Purchase Order Line, Supplier, Name, and Ship-To. Below the table is a 'Profile Attributes' section with a table of attributes. A callout box points to the 'Source' column in this table, which has 'Item' selected for each attribute.

Item Number	Description	Site	Purchase Order	Purchase Order Line	Supplier	Name	Ship-To	Status
60042	Sensor P-Ultrasound	10-100	P1002239	1	10S1005	Absolute Electronics Company	10-100	
60042	Sensor P-Ultrasound	10-100	P1002241	1	10S1006	Hampton Electronics	10-100	
60043	Touch Screen P-Ultrasound	10-100	P1002239	2	10S1005	Absolute Electronics Company	10-100	
60043	Touch Screen P-Ultrasound	10-100	P1002241	2	10S1006	Hampton Electronics	10-100	
60044	Battery, Lithium Ion P-Ultrasound	10-100	P1002239	3	10S1005	Absolute Electronics Company	10-100	
60044	Battery, Lithium Ion P-Ultrasound	10-100	P1002241	3	10S1006	Hampton Electronics	10-100	

Attribute	Datatype	Format	Source	Status	Print	Default
Character	x(8)		Item	Active	yes	G
Character	x(20)		Item	Active	no	3.0 - 60.0
Integer	>>>>>>9		Item	Active	yes	0

1. Create profile for item and supplier
2. Update attributes
3. Optionally add attribute(s)

As with suppliers, sometimes the requirements for a purchase order vary. Much like the item supplier profile, you can create a unique profile for a purchase order.

Create PO Line Profile*

Deviations and Attribute Layer Priority

Create PO Line Profile*

- A profile must be created for a PO line before an attribute can be modified or added

PO Line Profile

*prior to QAD EE 2015

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You can create or modify PO line profiles through the Maintain PO Line Profile browse collection. As with an item supplier profile, specify a PO Number, Item Number, and Supplier for your profile. Again, as with an item supplier profile, add attributes which you want to apply to this specific PO Line.

Supplier and Purchase Order Priority

Deviations and Attribute Layer Priority

Supplier and Purchase Order Priority

- What if there are profiles for an item, item and supplier, as well as PO line?
- What if the same attribute appears with different default values at different levels?
- What if the same attribute appears with different specifications at different levels?

In covering these variations, you have dealt with profiles that override other profiles.


These differing profiles utilize a set of layers and priorities. These control how profile attributes override one another.


Purchasing Layers

Deviations and Attribute Layer Priority

Purchasing Layers

- PO Line Profile
- Item and Supplier Profile
 - Item, Supplier, and Site
 - Item and Supplier
- Item Profile
 - Item and Site
 - Item

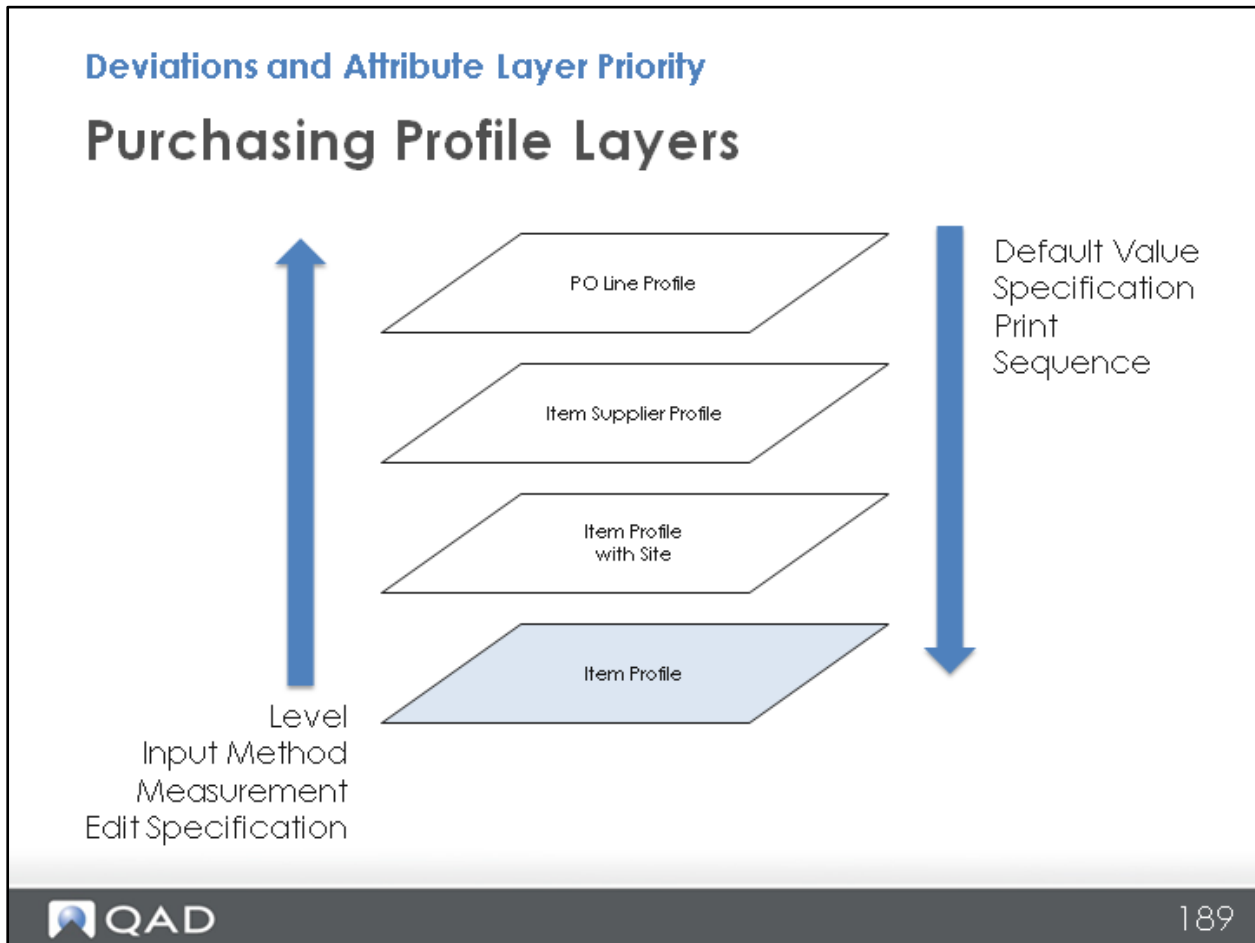



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In addition to these three, there are two more sub-layers. These apply if there is a site specified in either an Item Supplier Profile or Item Profile.

These sub-layers determine how different entries within a layer override one another. They will not, however, allow a layer to override a higher layer.

Purchasing Profile Layers



Field priority functions in both directions, depending on the field.

In the case of Default Value, Specification, Print, and Sequence, the highest layer has priority. This means that the field value of the highest layer cascades down.

In the case of Level, Input Method, Measurement, Edit Specification, the lowest layer has priority. This means that the field value of the lowest layer cascades up.

Exercise

Deviations and Attribute Layer Priority

Exercise

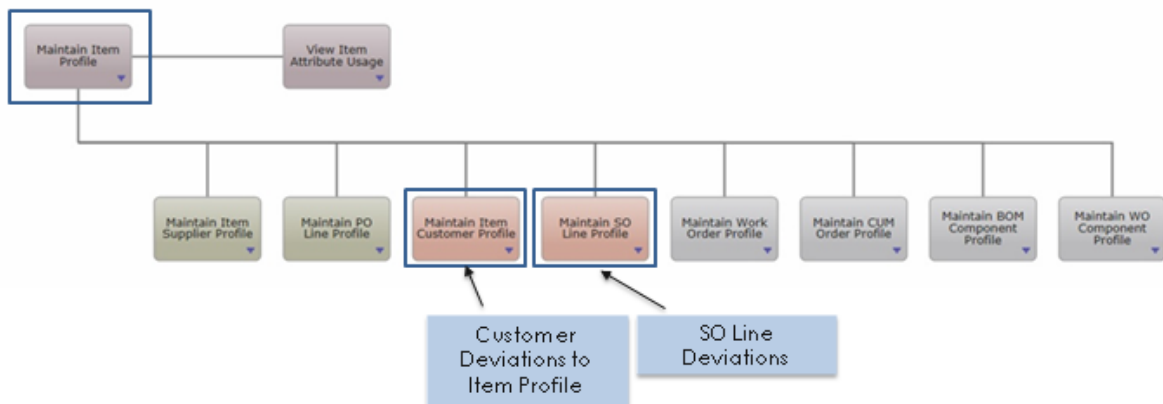
- Objective
 - Gain experience defining deviations for attribute values and specifications at multiple levels – for an item and supplier, and for a PO line
- Create an item supplier profile for:
 - Item 60046 CPU P-Ultrasound
 - Supplier 10S1006 Hampton Electronics
 - Revision with a default value B and specification C or greater
- Create an PO line profile for:
 - P1002241 line 5 for item 60046 CPU P-Ultrasound
 - Revision with a default value B and specification B or greater

Item and Sales Profiles

Deviations and Attribute Layer Priority

Item and Sales Profiles

- Sales attribute specifications determined by item, item and supplier, and SO line profiles



Visualize three layers that can be used to maintain attribute parameters and specifications for sales:


The first for an item, the second for an item and customer, and a third for an item on a SO line.


Sales Layers

Deviations and Attribute Layer Priority

Sales Layers

- SO Line Profile
- Item Customer Profiles
 - Item, Customer, Ship-to, Site
 - Item, Customer, Ship-to
 - Item, Customer, Site
 - Item, Customer
- Item Profile
 - Item and Site
 - Item



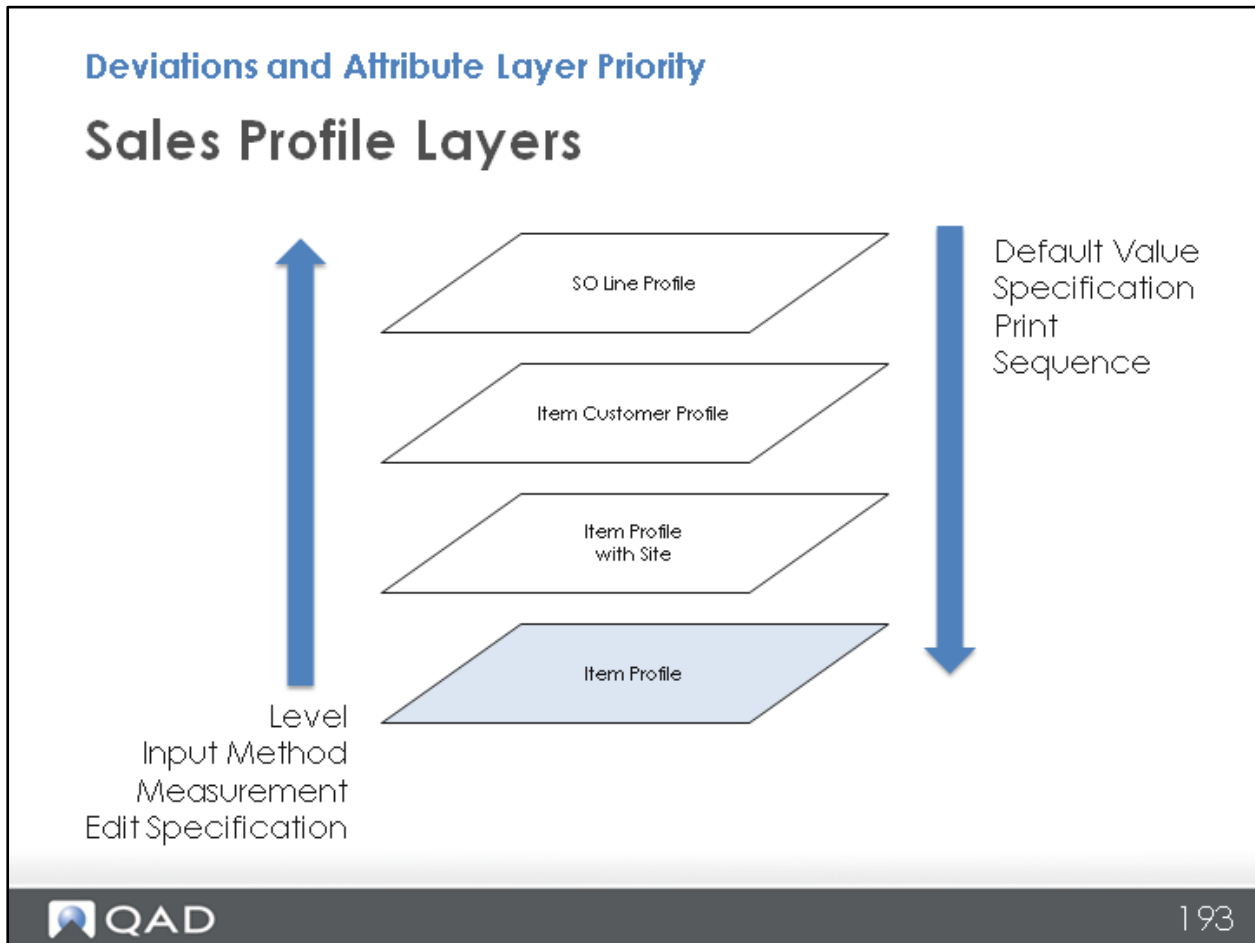

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Sales order lines and item customer combinations both support more specific profiles. SO Line Profiles and Item Customer Profiles both allow you to specify attributes to certain item combinations.

As before, these profiles also have layers and sub-layers which carry priority. In addition, Item Customer Profiles have the additional Ship-to sub-layer.

Priority follows the flow shown above.

Sales Profile Layers



Again, field values cascade up or down depending on the field type.

In the case of Default Value, Specification, Print, and Sequence, the highest layer has priority. This means that the field value of the highest layer cascades down.

In the case of Level, Input Method, Measurement, Edit Specification, the lowest layer has priority. This means that the field value of the lowest layer cascades up.

Exercise

Deviations and Attribute Layer Priority

Exercise

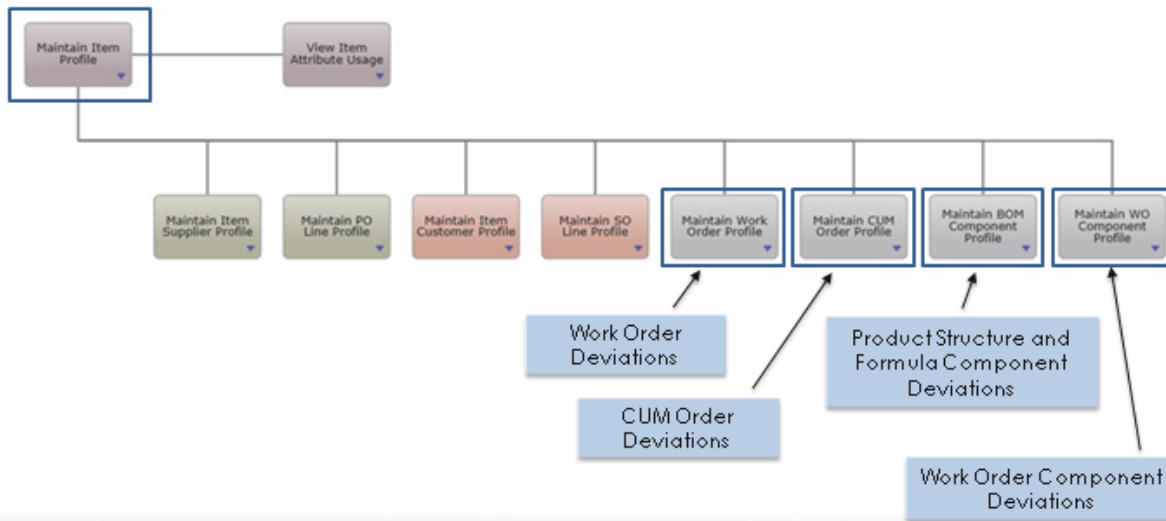
- Objective
 - Gain additional experience defining deviations for attribute values and specifications at multiple levels– for an item and customer
- For items 04510 and 04512 create item customer profile specifications for the 'Bottling Date' attribute
 - For Walmart, the bottling date should not be older than 30 days prior to the transaction (allocate, pick, ship) date
 - For Price Chopper, the bottling date should not be older than 1 year prior to the transaction date

Item and Production Order Profiles

Deviations and Attribute Layer Priority

Item and Production Order Profiles

- Profiles to support work orders, repetitive production, and product structures



Production profiles include two collections for managing deviations for what is produced and received:

- Maintain Work Order Profile
- Maintain CUM Order Profile

Production profiles also include collections for components and raw materials required for production:

- Maintain BOM Component Profile
- Maintain WO Component Profile

Production Component Layers

Deviations and Attribute Layer Priority

Production Component Layers

- WO Component Profile
- BOM Component Profile
- Item Profile
 - Item and Site
 - Item



The WO Component Profile and BOM Component Profile allow you to specify attributes that apply to specific production components.

The WO Component Profile layer has the highest priority. The next highest is the BOM Component Profile layer. The lowest priority layer for production components contains the Item Profile sub-layers.

Make-to-Order Production

Deviations and Attribute Layer Priority

Make-to-Order Production

- Work Order and CUM Order Profiles
 - Option to specify a sales order and SO line

The screenshot displays the QAD software interface. The main window is titled 'Maintain Work Order Profile' and shows a list of items with columns for Item Number, Description, and Status. A callout box labeled 'Work Order Profile' points to the top of this window. A secondary window titled 'Sales Order Detail' is open, showing a table with columns for Sales Order, Line, PO Number, Item Number, and Ship-To. A callout box labeled 'Sales Order and Line' points to the 'Sales Order' and 'Line' fields in the main window. The QAD logo is visible in the bottom left corner, and the number '197' is in the bottom right corner.

Make-to-Order production incorporates several of the priority layers which you have covered so far.

To process a Make-to-Order sales order, enter a sales order when entering or editing a work order profile.

The option to specify a sales order and SO line provides linkage to profiles defined for the SO line and customer

Make-to-Order Layers

Deviations and Attribute Layer Priority

Make-to-Order Layers

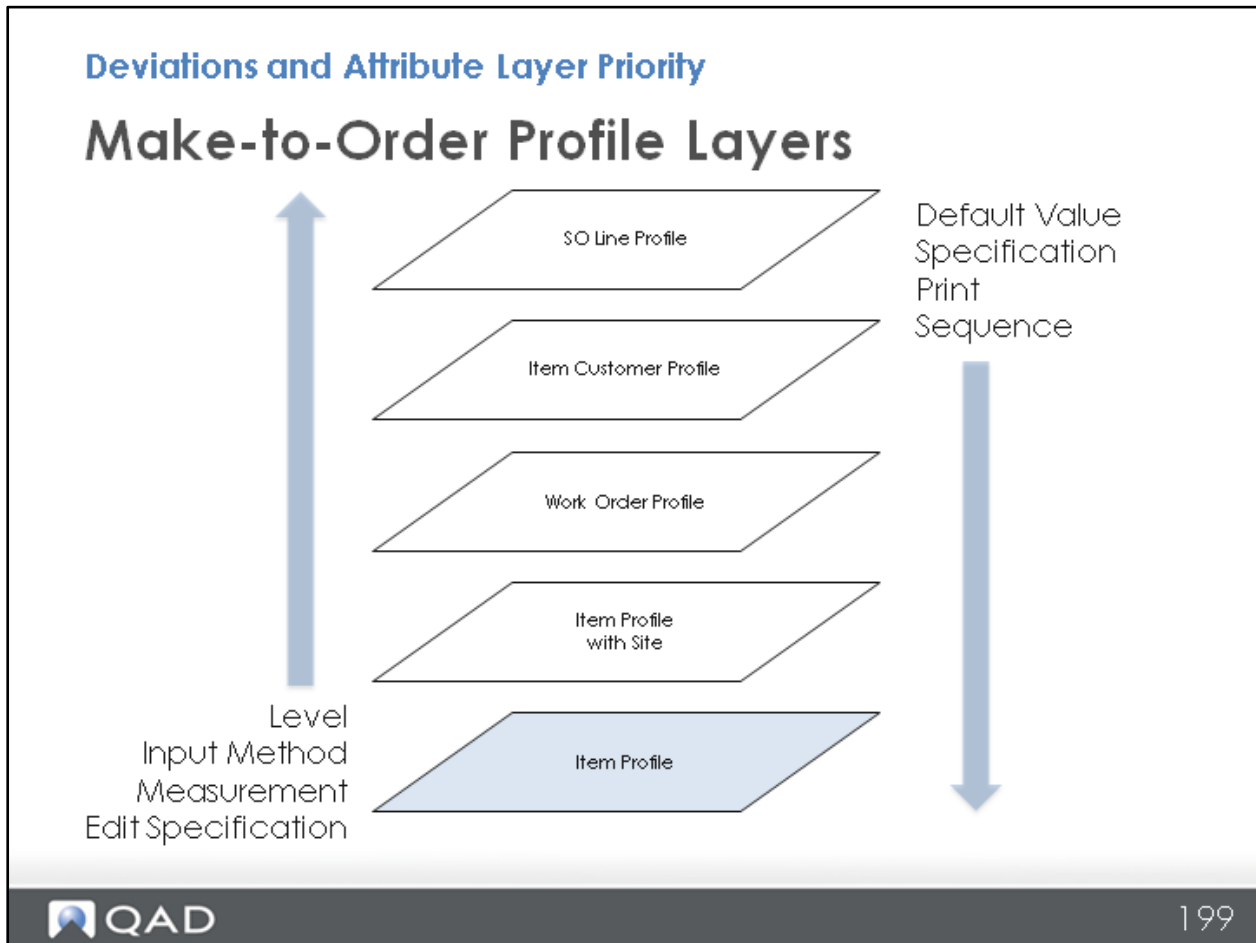
- SO Line
- Item Customer Profile
 - Item, Customer, Ship-to, Site
 - Item, Customer, Ship-to
 - Item, Customer, Site
 - Item, Customer
- Work Order or CUM Order Profile
- Item Profile
 - Item and Site
 - Item



A Make-to-Order line incorporates both an SO line and a work order or CUM order. As such, it combines priority layers for both concepts.

The SO Line Profile and Item Customer Profile have higher priority than the Work Order or CUM Order profile, as do their sub-layers. Item Profile, as always, is the most general concept and has the lowest priority.

Make-to-Order Profile Layers



Once again, values cascade up or down the layers of priority depending on the field type.

Exercise

Deviations and Attribute Layer Priority

Exercise

- Objective
 - Understand the relationship between deviations for a customer and/or sales order line can be applied to a work order or CUM order
- Steps
 - Find the sales order for item 04510 and Walmart
 - Find a work order for item 04510
 - Create a work order profile for the order for 04510
 - Specify the sales order for Walmart
 - View the attribute Source and Specification for the work order attributes

Exercise

Deviations and Attribute Layer Priority

Exercise

- Steps
 - Find the sales orders for item 04512 and Price Chopper
 - Find a work order for item 04512
 - Create a work order profile for the order for 04512
 - Specify the sales order for Price Chopper
 - View the attribute Source and Specification for the work order attributes

CHAPTER 9

Quality Control

Introduction Quality Control

QAD Item Attributes and Quality Control

Introduction Quality Control

Functional Task-Based Training



Our Passion. Your Advantage.

Business Tasks

Introduction to Quality Control

Business Tasks

- Document quality specifications and results
 - Support product genealogy
 - Support of lot attributes
 - With recognition of deviations to specifications
- Disposition material quality

Course Objectives

Introduction to Quality Control

Course Objectives

- Extend competency with QAD Item Attributes
- Obtain competency to demonstrate QAD Quality Control
- Gain sufficient experience and knowledge to lead and support a high-level conference room pilot



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Presumes basic competency with QAD Item Attributes

Course Lessons

Introduction to Quality Control

Course Lessons

- Quality Control test specifications
- Quality Control and inventory
- Quality Control and work-in-process
- Quality Control and make-to-order
- Certificates of Analysis with Quality Control and Lot Attributes
- Integration with QAD QMS for CAPA/NCR
- Troubleshooting Item Attributes and Quality Control

Quality Specifications and Item Attributes

QAD Item Attributes and Quality Control

Quality Specifications and Item Attributes

Functional Task-Based Training



Our Passion. Your Advantage.

Lesson Objectives

Quality Specifications and Item Attributes

Lesson Objectives

- Maintain a test specification document with specifications for one or more attributes
- Identify the test specification documents for an item
- Identify the items for a test specification document



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At the end of this section of training, you will be able to build test specifications. Test specifications are the instructions which direct quality control.

Test specifications contain attributes associated with a certain quality process. By associating them with items, you can attach those attributes to lots for that item.

Maintain Test Specifications

Quality Specifications and Item Attributes

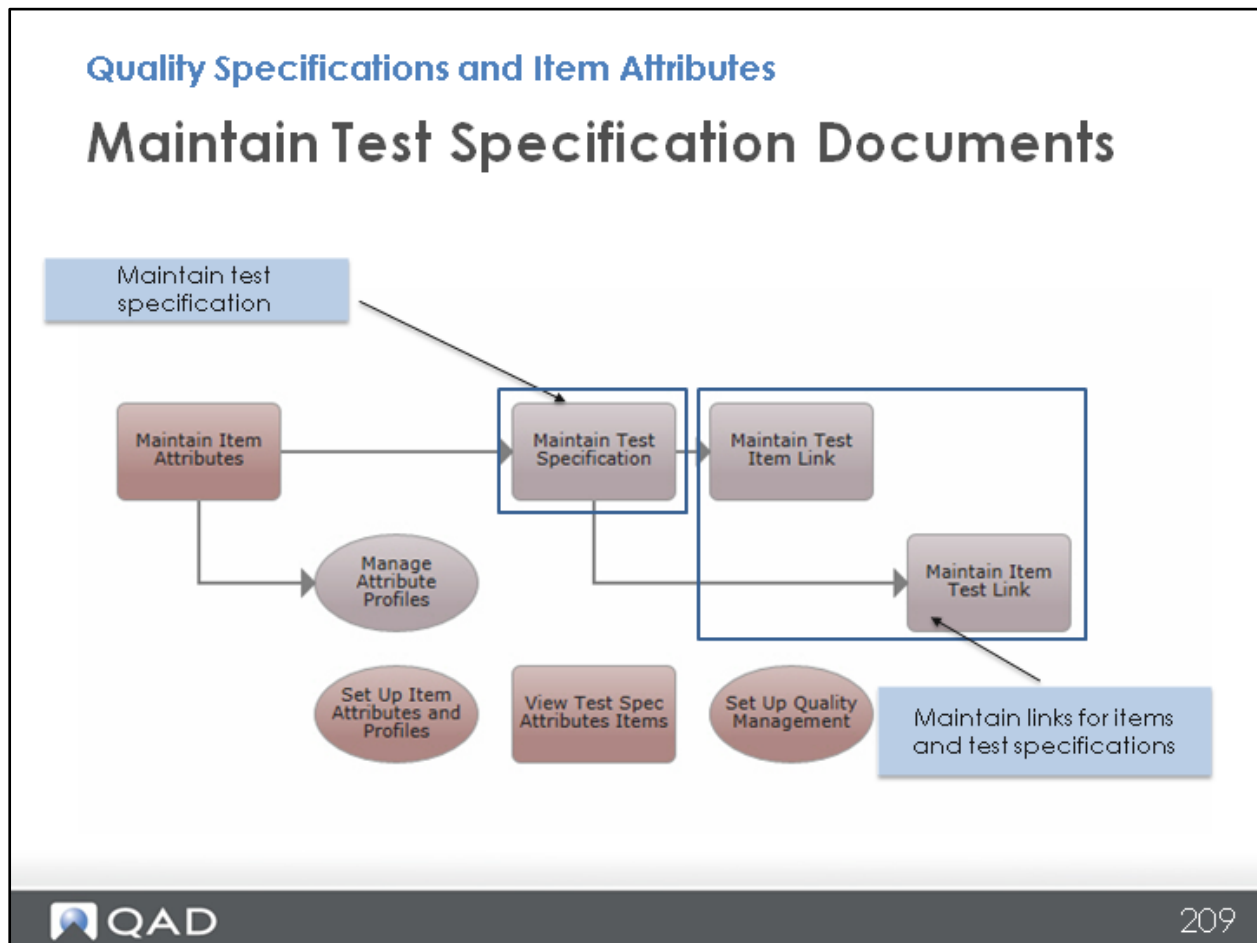
Maintain Test Specifications

QAD Item Attributes and Quality Control



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Maintain Test Specification Documents



Access the process maps which control test specifications here:

Home > Manage Enterprise Item Attributes > Set Up Item Attributes and Profiles > Manage Test Specifications

Test Specification Document Lifecycle

Quality Specifications and Item Attributes

Test Specification Document Lifecycle

- A test specification document has a test ID, revision and controlled by status code

The screenshot shows a software interface with a table of test specifications. The table has columns for Test ID, Description, Category, Revision, Status, Reference, Number of Samples, Sample Quantity, Unit of Measure, and Sample Percent. The data rows are:

Test ID	Description	Category	Revision	Status	Reference	Number of Samples	Sample Quantity	Unit of Measure	Sample Percent
T04510	EV Olive Oil Lab	Chemical Analysis	A	Released					
T05010	Hydration Tablet	Chemical Analysis	A	Released					
T60042	Sensor QA	Physical Properties	A	Released					
T60043	Touch Screen QA	Physical Properties	A	Released					
T70010	Enter Media Process	Chemical Analysis	A	Released					

Overlaid on the screenshot is a diagram titled "Typical Test Specification Status Lifecycle". The diagram shows a flow from Draft to Submitted (indicated by a dashed border) to Released to Obsolete.

```

graph LR
    Draft --> Submitted
    Submitted --> Released
    Released --> Obsolete
  
```

A test specification document is identified by its test ID and revision and controlled by using a status code. The diagram shows the typical lifecycle of a test specification.

Test Specifications and Attribute Profiles

Quality Specifications and Item Attributes

Test Specifications and Attribute Profiles

- Test specification document and item profile similarities
 - Use of item attributes and specifications
 - Capability to copy attributes
 - Common specification parameters and usage
- Differences
 - Test specifications are revision controlled
 - Attributes and test sample data can only be maintained when status is Draft



There are several key differences and similarities between Test Specifications and Attribute Profiles.

Each use item attributes to build specifications. In this way, each builds sets of attributes with values and conforming data. Each can copy attributes from other specifications or profiles. Each use the same type of attributes and have similar usages.

Where they differ, however, are in elements of their version control. Test specifications are controlled through revisions. Each specification can have multiple revisions, and only the revision in the Released status is used. The attribute data within them is only editable while the specification is in the Draft status.

Basic Scenario and Process Steps

Quality Specifications and Item Attributes

Basic Scenario and Process Steps

- Scenario
 - Specification for a completely new test ID and its initial revision
- Basic process steps
 - Manually create a test specification, its test sample data, and its attributes
 - Process similar to attribute profiles

There are multiple methods for creating a test specification.

The first is to create a test specification manually. This process is similar to attribute profiles; you add attributes and conforming values.

Test Specification Collection

Quality Specifications and Item Attributes

Test Specification Collection

The screenshot shows the QAD Test Specification Collection interface. It includes a search bar for Test ID and Revision, a table of test specifications, and an attribute specification preview window. Callouts highlight key features:

- Browse to select a test ID and revision:** Points to the search bar.
- Browse with the attributes for a test ID and revision and their specifications:** Points to the main table.
- Optional test sample data:** Points to the 'Test Sample Data' tab.
- Preview function to test attribute setup:** Points to the 'Attribute Specification Preview' window.
- Browse with items linked to the test ID:** Points to the 'Test Specification Item Links' tab.

Test ID	Description	Category	Revision	Status	Reference	Number of Samples	Sample Quantity	Unit of Measure
T04510	EV Olive Oil Lab	Chemical Analysis	A	Released				
		Chemical Analysis	A	Released				
		Physical Properties	A	Released				
		Physical Properties	A	Released				
		Chemical Analysis	A	Released				

Sequence	Attribute ID	Label	Attribute Status	Print	Default Value	Specification Type	UM	Specification	Specification Data
30	10032	Peroxide	Active	Yes	0	Less	meq/kg	Less than 20 meq/kg	Target Value: 0; M
40	100331	Polyphenols	Active	Yes	0	Less	mg/gm	Less than 5 mg / 10 g	Target Value: 0; M

Attribute Specification Preview

Test: T04510
Revision: A
Attribute: 100321
Source: Test

QAD 213

The test specification collection grants browse access to the attributes for a test ID and revision, sample data, and linked items.

Process Steps

Quality Specifications and Item Attributes

Process Steps

- Scenario to create a new specification and revision
 1. Create the test specification with a Test ID and Revision
 2. Create attributes for the test specification
 3. Validate attribute specifications
 4. Optionally add test sample data
 5. Optionally create links for the specification to one or more items

Create a New Test Specification

Quality Specifications and Item Attributes

Create a New Test Specification

- A test specification document has a Test ID and Revision that make it unique
- The status for a test ID and revision determine where it is in its lifecycle

The screenshot shows the 'Maintain Test Specification' window in QAD. The window has a search bar at the top with 'Test ID' and 'starts at' dropdowns. Below the search bar is a table of test specifications. The table has columns for 'Test ID', 'Description', and 'Cate'. The table contains the following data:

Test ID	Description	Cate
T04510	EV Olive Oil Lab	Cherr
T05010	Hydration Tablet	Cherr
T60042	Sensor QA	Physi
T60043	Touch Screen QA	Physi
T70210	Extra Virgin Process	Cherr
T70210P	Processing Olive Oil	Cherr
T80103	Calcium Carbonate Lab	Cherr
T80116	Magnesium Sulfate Lab	Cherr
T80124	Sodium Bicarbonate Lab	Cherr

Below the table is a form for editing a test specification. The form has the following fields:

- Test: T04520
- Revision: A
- Description: [Text Field]
- Category: [Dropdown Menu]
- Reference: [Text Field]
- Status: Draft
- Release Date: [Text Field]

A callout box labeled 'Document ID and Revision' points to the 'Test ID' and 'Revision' fields in the form.

A test specification is uniquely identified by its Test ID and its Revision.

The description is fixed for all test specification revisions that share the same Test ID

Different revisions are used to control changing versions of a specific test.

Manually Maintain Test Attribute Data

Quality Specifications and Item Attributes

Manually Maintain Test Attribute Data

- Use the create button to add one or more test specification attributes

The screenshot shows the 'Maintain Test Specification' window in QAD. The window has a title bar with 'Processes', 'Maintain Test Specification', and 'Maintain Item Test Link'. Below the title bar is a toolbar with 'Actions' and 'Setup' buttons. A table lists test specifications with columns for 'Attribute ID', 'Label', and 'Number Attribute Specification'. The table contains two rows: one for 'Peroxide' (Attribute ID: 100321) and one for 'Polyphenol' (Attribute ID: 40 100331). The 'Polyphenol' row is selected. To the right of the table is a detailed view for the selected attribute, showing fields for 'Default Value' (0), 'Specification Type' (Less), 'Specification' (Less than 20 meq/kg), 'Test Method' (EVT100-PX), 'Value Required' (checked), 'Reference', 'Target Value' (0), 'Maximum Number' (20), and 'Maximum Inclusive' (unchecked). A callout box labeled 'Test Specification Attribute' points to the 'Actions' column of the table.

After creating a test specification, you need to add attributes.

You can do this manually using the create button.

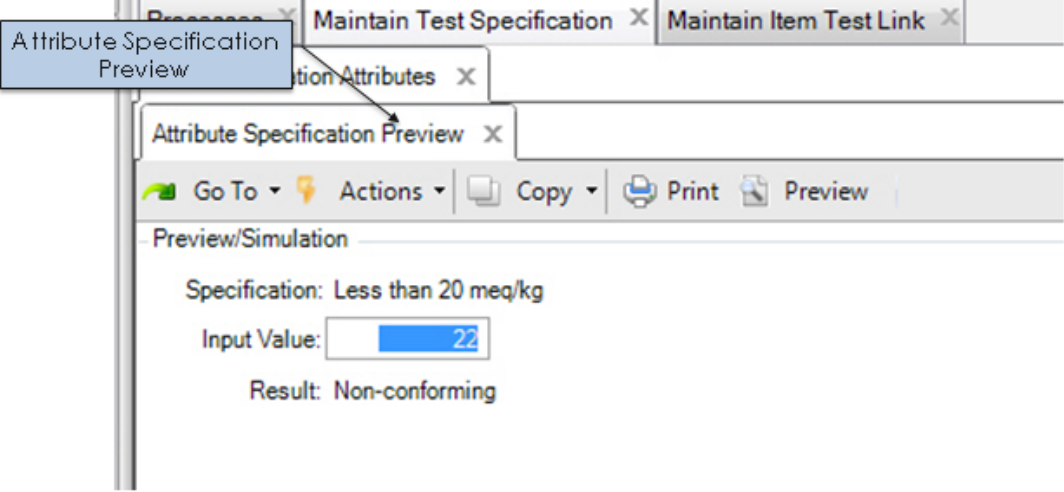
Enter the attribute as you would for an item profile.

Validate Specification Setup with Values

Quality Specifications and Item Attributes

Validate Specification Setup with Values

- Use the Attribute Specification Preview to validate the setup of a specification



The screenshot shows a software interface with several tabs at the top: 'Process...', 'Maintain Test Specification', and 'Maintain Item Test Link'. A callout box labeled 'Attribute Specification Preview' points to a window titled 'Attribute Specification Preview'. This window has a menu bar with 'Go To', 'Actions', 'Copy', 'Print', and 'Preview'. Below the menu bar, the text 'Preview/Simulation' is displayed. The main content area shows a 'Specification: Less than 20 meq/kg', an 'Input Value:' field containing the number '22', and a 'Result: Non-conforming'.

After creating an attribute, you can test it using the Attribute Specification Preview tab.

Enter a value in the Input Value field. Then, click Next. The system will inform you if the value conforms for the selected attribute.

Test Sample Plan for a Test Specification

Quality Specifications and Item Attributes

Test Sample Plan for a Test Specification

- Optionally add reference information for test sample processes

The screenshot shows the QAD software interface. The main window displays a table of test specifications with columns for Test ID, Description, Category, Revision, Status, Reference, Number of Samples, Sample Quantity, Sample Measurement, Sample Percent, and Sampling Pattern. A blue box highlights the 'Test Sample Plan (optional)' tab, and an arrow points to the 'Test Sample Plan' tab in the bottom pane. The bottom pane shows the details for a selected test specification:

Number of Samples:	1
Sample Quantity:	10
Sample Measurement:	KG per truck
Sample Percent:	0.00%
Sampling Pattern:	
Reference:	SMP 00020
Comments:	<input type="checkbox"/>

Alternative Scenarios and Processes

Quality Specifications and Item Attributes

Alternative Scenarios and Processes

QAD Item Attributes and Quality Control



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Alternate Scenarios for Test Specification

Quality Specifications and Item Attributes

Alternate Scenarios for Test Specification

- Need to create a new (draft) revision of an existing test ID and revision
- Need to create a completely new test ID and with an initial revision that is similar to an existing test ID and revision

Processes for a New Revision

Quality Specifications and Item Attributes

Processes for a New Revision

- Need to create a new (draft) revision of an existing test ID and revision
- Alternative process
 - Copy all elements from another test specification



There are multiple methods for creating a test specification.

The first is to create a test specification manually. This process is similar to attribute profiles; you add attributes and conforming values.

Alternately, you can copy attributes from test specifications or item profiles. In addition, you can copy all other elements from other test specifications as well.

Copy Button

Quality Specifications and Item Attributes

Copy Button

- Use the copy button at the top to create a new test ID and revision from an existing one

Generates a side tab user interface to copy the selected test specification and revision to create a new test specification and revision

Alternately, you can copy specifications using the Copy button. This opens a frame which copies the attributes of the test specification. This is a useful feature when creating new revisions of a test specification.

Copy an Entire Test Specification

Quality Specifications and Item Attributes

Copy an Entire Test Specification

- Specify the source and target test ID and revision
- Copies test sample data

Processes x Maintain Test Specification x Maintain Item Test Link x Test Specification Copy x

Go To Actions Copy Print Preview

Copy from Test ID: T70210
 Description: Extra Virgin Process
 Category: ChemicalAnalysis
 Revision: A
 Status: Release

Chemical Analysis

Copy to Test ID:

Description: Extra Virgin Process

Category:
 Revision:
 Status:

Description:

The above graphic demonstrates a copied test specification. As you can see, existing data from the test specification selected for the copy is displayed. You can then enter values that specify the Test ID that receives these values.

Alternate Scenarios

Quality Specifications and Item Attributes

Alternate Scenarios

- Copy attributes to a test ID and revision from another test ID and revision
- Test sample plan data is not copied – must be maintained manually

Add Test Spec Attributes with Copy

Quality Specifications and Item Attributes

Add Test Spec Attributes with Copy

- Use the options to copy attributes for another revision of a test ID or item

The screenshot shows the 'Maintain Test Specification' window in QAD. The left pane lists test specifications with columns for Test ID, Description, and Category. The right pane shows the details for Test ID T04512, Revision A. The Description is 'EV Olive Oil Lab' and the Category is 'ChemicalAnalysis'. The Status is 'Draft'. At the bottom of the right pane, there are two checkboxes: 'Copy Attributes from Test Specification' (checked) and 'Copy Attributes from Item Profile' (unchecked). A callout box points to the 'Copy' button in the list pane and the 'Copy Attributes from Test Specification' checkbox, with the text 'Copy from another Test Spec and Revision or from an Item'. Another callout box points to the 'Copy Attributes from Test Specification' checkbox with the text 'Copy Attributes from Test Specification: [checked]'.



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When creating test specifications, you can copy attributes from other test specifications or revisions. This can ensure greater accuracy as well as save time.

To do so, select one or more of the copy options when creating a test specification. The new test specification will have all attributes from the selected options.

Confirmation to Copy Attributes

Quality Specifications and Item Attributes

Confirmation to Copy Attributes

- The option provides the capability copy either all attributes or no attributes

The screenshot shows a software interface with a table of test specifications. A modal dialog box is open in the foreground, asking for confirmation to copy attributes. The table in the background has the following data:

Test ID	Description	Category	Sequence	Attribute	Label	Copy
T04510	EV Olive Oil Lab	Chem				
T06010	Hydration Tablet	Chem				
T60042	Sensor QA	Physi				
T60043	Touch Screen QA	Physi				
T70210	Extra Virgin Process	Chem				
T70210P	Processing Olive Oil	Chem				
T80103	Calcium Carbonate Lab	Chem	20	100233	Free Fatty Acid	Yes
T80116	Magnesium Sulfate Lab	Chem	30	100321	Peroxide	Yes
T80124	Sodium Bicarbonate Lab	Chem	40	100331	Polyphenols	Yes
T80126	Sodium Carbonate Lab	Chem	50	100370	Specific Gravity	Yes
T80220	Fresh Olive Lab Analysis	Chem	60	100395	Acidity	Yes
THV1001	Heavy Metals	Heav	70	100212	Density	Yes

When copying attributes, the system displays all attributes to be copied.

Verify that they are correct, and click Yes to confirm.

Exercise

Quality Specifications and Item Attributes

Exercise

- Objective
 - Understand the basic steps to maintain test specifications for an item
- Steps
 - Item 60041 Aluminum Housing does not have a test specification.
 - Create a new specification with test ID T60041 for that item
 - The nominal, default, and measured values for an attribute and its specification need to be considered when choosing an attribute
 - Create test attributes for:
 - Hardness with specification 27.5 +/- 0.5 GPa
 - Density with specification 2.6 to 2.8 g/cm³

Exercise

Quality Specifications and Item Attributes

Exercise

- For test specification T80220 for fresh olives
 - Change the specification status to Draft
 - Change status for attribute 100100 Acidity to Active
 - Create sample plan data
 - Change the specification status back to Released
- The current revision for test specification T70210 is 'A'
 - Describe how you would create a draft revision 'B' for that test specification
 - Create a new specification for T70210 revision 'B'

Note: The nominal, default, and measured values for an attribute and the specification for an attribute need to be considered when choosing an attribute with an appropriate datatype and format.

Test Specifications and Items

Quality Specifications and Item Attributes

Test Specifications and Items

QAD Item Attributes and Quality Control



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Test Specifications and Items

Quality Specifications and Item Attributes

Test Specifications and Items

- Test specification documents exist independently from items
- Link documents to items by test ID
 - Maintain Test Specifications
 - Test Specification Item Links
 - Maintain Test Item Links
 - Maintain Item Test Links

Test Specification Item Links

Quality Specifications and Item Attributes

Test Specification Item Links

- Link items to a test specification ID

The screenshot displays two overlapping windows from the QAD software. The top window is titled 'Maintain Test Specification' and shows a table of test specifications. The bottom window is titled 'Test Specification Item Links' and shows a table of links between test specifications and items.

Test ID	Description	Category	Revision	Status	Reference	Number of Samples	Sample Quantity
T04510	EV Olive Oil Lab	Chemical Analysis	A	Released			
T05010	Hydration Tablet	Chemical Analysis	A	Released			
T60042	Sensor QA	Physical Properties	A	Released			
T60043	Touch Screen QA	Physical Properties	A	Released			
T70010	Extra Virgin Process	Chemical Analysis	A	Released			

Test ID	Description	Item Number	Description	Site	Seq	Required Test	Category	Routing
T04510	EV Olive Oil Lab	04510	Extra Virgin 500 ml		0	No	Chemical Analysis	
T04510	EV Olive Oil Lab	04512	Extra Virgin 750 ml		0	No	Chemical Analysis	

Once created, you must link test specifications to items. This determines which items are tested and which item lots gain attributes from specifications.

Create Links to Items for Test Specifications

Quality Specifications and Item Attributes

Create Links to Items for Test Specifications

- Link items to a test specification ID
- 'Required Test' indicates whether test record must be completed

The screenshot shows the QAD software interface for maintaining test specification links. The top window, titled 'Maintain Item Test Link', displays a list of test specifications. The bottom window, titled 'Test Specification Item Links', shows a table of linked items and a form for adding or editing links.

Test ID	Description	Item Number
T04510	EV Olive Oil Lab	04510
T04510	EV Olive Oil Lab	04512

The form on the right contains the following fields:

- Test: T04510
- Category: ChemicalAnalysis
- Item Number: 04510
- Site: Extra Virgin 500 ml
- Routing:
- Work Center:
- Operation:



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To link a test specification to an item, click the Create button in the Test Specification Item Links tab.

Enter the Item Number that you wish to link to the test specification. If you specify a Site, then only items at the chosen site link to the test specification.

The Sequence option determines in which order test specifications appear on an attribute.

The Required Test option determines whether the test is mandatory.

Links for Work-in-Process Operations

Quality Specifications and Item Attributes

Links for Work-in-Process Operations

- For WIP specify item, routing, and operation

The screenshot displays two windows from the QAD software. The top window, titled 'Maintain Test Specification', shows a table of test specifications. The second record is selected: T70210P, Processing Olive Oil, Chemical Analysis, A, Released. A callout box labeled 'Test Specification Item Links' points to the 'Test Specification Item Links' tab in the bottom window. The bottom window, titled 'Test Specification Item Links', shows the details for test T70210P, including its category (ChemicalAnalysis), item number (70210), site, routing (70210), work center (5130), and the operation (30) linked to the test.

Test ID	Description	Item Num	Go To	Actions	Copy	Print	Preview
T70210P	Processing Olive Oil	70210					
T70210P	Processing Olive Oil	70210					
T70210P	Processing Olive Oil	70210					

Test: T70210P	Processing Olive Oil
Category: ChemicalAnalysis	
Item Number: 70210	Extra Virgin Olive Oil
Site:	
Routing: 70210	Operation: 30
Work Center: 5130	

In addition to a site, you can choose to link a test to a specific work-in-process operation.

To do so, specify a Routing and Operation. If you do, the test specification triggers only when those conditions are met.

Maintain Item Test Link collection

Quality Specifications and Item Attributes

Maintain Item Test Link collection

- Link one or more test specifications by test ID to an item

The screenshot shows the 'Maintain Item Test Link' interface in QAD. It consists of three stacked windows:

- Item Number:** A table listing items with columns for Item Number, Description, Site, Routing, Operation, Seq, Test ID, Description, and Category. A callout box points to this table with the text: "Test specifications for an item, routing, and operation".
- Linked Item Test Specs:** A table showing the relationship between items and test specifications, with columns for Test ID, Revision, Test Status, Description, Category, Required Test, Reference, Number of Samples, Sample Quantity, and Unit of Measure. A callout box points to this table with the text: "Status and revision for a test specification ID".
- Test Specification Attributes:** A table listing individual test specifications with columns for Sequence, Attribute ID, Description, Label Term, Data Type, Format, Default Value, Attribute Status, Active, Printable, and Field. A callout box points to this table with the text: "Attributes for a test specification and revision".

You can use the Maintain Item Test Link browse collection to view all the test links, sorted by item. From this browse collection, you can easily edit all relevant test specifications for a certain item.

Maintain Item Test Link

Quality Specifications and Item Attributes

Maintain Item Test Link

- Similar process with links from an item to one or more test specifications

The screenshot shows the QAD software interface. The main window is titled 'Maintain Item Test Link'. It displays a table of test specifications with columns for Test ID, Description, Item Num, Go To, Actions, Copy, Print, and Preview. The table contains three rows of data for Test ID T70210P, Description Processing Olive Oil, and Item Num 70210. A blue callout box labeled 'Maintain Test Specification' points to the window title. Another blue callout box labeled 'Test Specification Item Links' points to the 'Test Specification Item Links' tab in the window. The detailed view shows the following information:

Test: T70210P	Processing Olive Oil
Category: ChemicalAnalysis	
Item Number: 70210	Extra Virgin Olive Oil
Site:	
Routing: 70210	Operation: 30
Work Center: 5130	
Sequence: <input type="text" value="1"/>	
Required Test: <input type="checkbox"/>	

The QAD logo is visible in the bottom left corner, and the number 235 is in the bottom right corner.

When specifying a test for a work in process operation, you need to specify the routing and operation for that test.

Exercises

Quality Specifications and Item Attributes

Exercises

- Objective
 - Be able to link a test specification to one or more items
- Add a link for test specification THV1001 Heavy Metals and item 70110 Hydration E Tab

Quality Control and Inventory

QAD Item Attributes and Quality Control

Quality Control and Inventory

Functional Task-Based Training



Our Passion. Your Advantage.

Lesson Objectives

Quality Control and Inventory

Lesson Objectives

- Understand and able to demonstrate scenarios for quality and inventory
 - Inspect lot soon after receipt from a supplier or production
 - Re-inspect or re-test a lot in inventory
 - Inspect or test a lot to confirm compliance to specifications for a customer and sales order prior to shipment



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This section of training covers several common scenarios for quality control. These scenarios utilize the test specifications that you learned to create in the last session to create and utilize quality orders.

First, you will cover how the workflow for inspecting lots after receipt. This basic scenario provides an introduction to the higher level concepts of quality control.

Next, you will cover how to re-inspect inventory lots already within inventory. This scenario covers the manual creation of quality orders.

Finally, you will cover how to adjust quality orders to meet the specifications of a customer or sales order before shipment. This scenario demonstrates how you can customize a quality order to meet the unique requirements of a customer.

Introduction to Quality Records

Quality Control and Inventory

Introduction to Quality Records

QAD Item Attributes and Quality Control



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How are Quality Records Captured?

Quality Control and Inventory

How are Quality Records Captured?

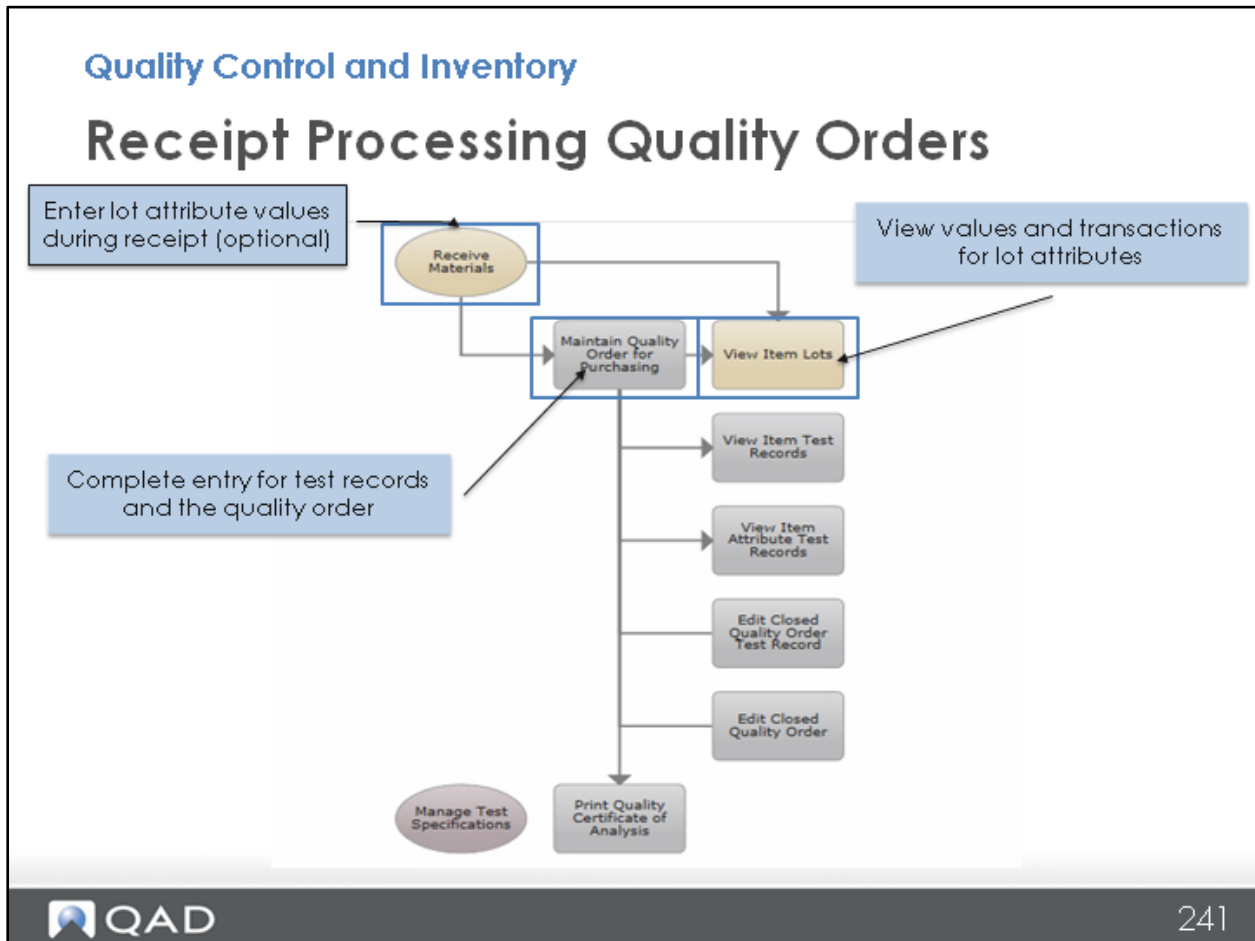
- Quality for inventory lots documented using quality orders
- Quality orders are automatically created for lot receipts from purchasing and from production

Quality orders direct the creation of quality records.

Each contains a number of test records, which contain the results for a test specification.

There are multiple instances for the creation of quality orders. First, this guide presents the automatic creation of quality orders from receipts.

Receipt Processing Quality Orders



Manage the quality orders created through receipts here:

Home > Manage Enterprise Item Attributes > Manage Purchasing with Attributes > Inspect Purchasing Receipts

Input Method

Quality Control and Inventory

Input Method

- Input Method determines whether attribute values are visible and can be entered during a purchasing or production receipt

The screenshot displays the 'Maintain Item Profile' window in QAD. A table defines the input methods for different attributes:

Input Method	Visible During Receipt	Entry During Receipt	Entry with Lot Attribute or Quality Order
User	YES	YES	YES
System	NO	NO	YES

The 'Profile Attributes' section shows an attribute with the following details:

- Attribute ID: 100200
- Label: Cultivar
- Description: Cultivar Text 30
- Type: Character
- Format: x(30)
- Sequence: 10
- Status: Active

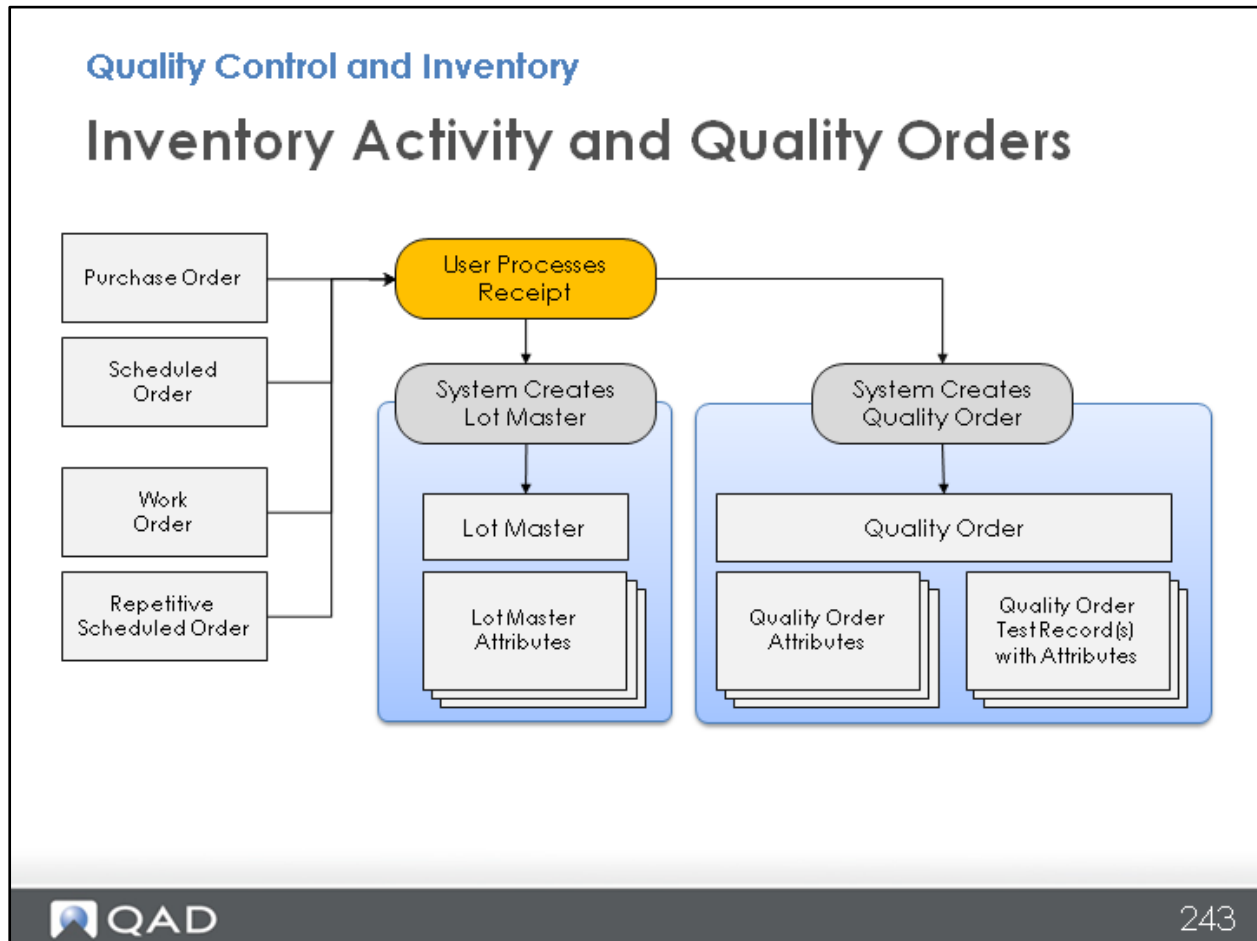
The 'Input Method' for this attribute is set to 'User'. A callout box highlights this setting with the text: 'Input Method: User or System'.

The Input Method of an attribute determines when and how users can provide it with a value.

If the input method is set to User, then you can view and enter the attributes at the time of transaction receipt. You can also enter the attributes through the lot attribute or quality order.

If the input method is set to System, then you can only enter attributes through the lot attribute or quality order.

Inventory Activity and Quality Orders



The diagram above depicts how the system processes lots and quality orders following a purchase order.

After the receipt of the purchase order, the system creates a lot master, generic to that item type, with associated lot attributes. Then, it also creates a quality order with attributes specific to a test specification.

Quality for inventory lots documented using quality orders

Contain one or more test records

Test records contain the results for a test specification and its attributes

PO Receipt with Lot and Test Attributes

Quality Control and Inventory

PO Receipt with Lot and Test Attributes

- Purchasing and production receipt support the optional entry of values for lot attributes

Purchase Order Receipts

Order: P1002232 Supplier: 1051001 Status: Packing Slip: 650023

Ln	Item Number	UM	Qty Open	UM	Receipt Qty	UM	Project	Due Date	T
1	80220	T	20.0	T	0.0	T		1/28/2014	

Line: 1 Unit Measure: T Site: 10-400 Loc: 030

Quantity: 5.0 ID: Lot/Ser: FR10010

Packing Qty: 0.0 OP: 0 Reference:

Cancel B/O: Supplier Lot:

Item Number: 80220 Multi Entry: Cho Attribute:

Supplier Item:

Requires data for Lot/Ser

The quality process for a receipt begins with the receipt of an item with an attached test specification.

The above image depicts the receipt of fresh olives, an item with an attached specification.

Entry when Input Method - User

Quality Control and Inventory

Entry when Input Method - User

- Display of attribute specification data determined by control file parameter

The screenshot shows the 'Purchase Order Receipts' window in the QAD software. The window title bar includes 'Purchase Order Receipts' and 'View Item Lots'. Below the title bar, there are buttons for 'Preview' and 'Attach'. The main content area is divided into two sections:

Item Information:

- Item Number: 80220
- Site: 10-400
- Lot/Serial: FR10010
- Quantity: 5.0
- UM: T
- Item Desc: Olives
- Location: 030
- Reference:

Transaction Attributes:

- Attribute ID: 100250
- Description: Harvest Date
- Label: Harvest Date
- Specification: Within 7 days of receipt
- Reference:
- Sequence: 20
- Level: Lot

At the bottom of the window, there is a 'Value' dropdown menu set to '1/18/2014', a 'Remarks' text box containing 'Manually entered date January 18, 2014', and a 'Validation' field.



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Enter Value and other fields for the attribute. Then click Next to save the information. After entering all attributes you intend to enter, click Back to finish saving the purchase order.

Note: Although you can not edit attributes with an Input Method of System at this time, you can open them and select them and click next to accept their default value. This changes the attribute to Entered and counts as having given a value, even if the default value for that attribute is blank.

PO Receipt with Attribute Selection

Quality Control and Inventory

PO Receipt with Attribute Selection

- Entry of attribute values support by a lookup browse

Purchase Order Receipts

The screenshot shows a software interface with a 'Purchase Order Receipts' window and a 'Profile Detail' window. The 'Purchase Order Receipts' window displays item details for 'Olives, Fresh' (Item Number: 30220, Site: 10-400, Lot/Serial: HL300454, Quantity: 2.0, UM: T). The 'Profile Detail' window is open for Attribute ID 100189, showing a search for 'Country of Origin' and a table of attributes.

Sequence	Attribute ID	Label	Description	Lot	User	UM	Valid
85	100189	Country of Origin	Country of Origin Text50		User	US	
91	100200	Culture	Cultural Text 30		User	Attribute	

The system provides you an option to view attributes with input method of User.

This detailed view of the Olives, Fresh item displays lot level attributes with input method of User.

View Item Lots

Quality Control and Inventory

View Item Lots

- Use the View Item Lots collection

Browse to select an item lot for a domain

Inventory detail for an item lot

Transaction history and attribute changes for an item lot

Browse with attribute data for an item lot

Transaction history for a selected lot attribute

The screenshot displays the QAD View Item Lots interface. At the top, there are tabs for 'Purchase Order Browse', 'Purchase Order Receipts', and 'View Item Lots'. A search bar contains '80220' and 'equals'. Below the search bar, there are tabs for 'Item Lot Attributes', 'Inventory Detail', and 'Transactions by Item'. The 'Inventory Detail' tab is active, showing a table of item lot attributes. The 'Transactions by Item' tab is also visible, showing a table of transaction history for a selected lot attribute.

Lot/Serial	Sequen	Attribute ID	Description	Label	Attribute Value	UM	Entered	Datatype	Form
FR10010	10	100200	Cultivar Text 30	Cultivar				no Character	x(30)
80220		20	100250	Harvest Date	Harvest Date		1/18/2014	yes Date	MM/DD
80220	30	100240	Grower Text 30	Grower				no Character	x(30)
80220	40	100310	Orchard Text 50	Orchard				no Character	x(50)
80220	50	100280	Maturity Index Decimal	Maturity Index	0.00			no Decimal	>>9.99
10010	60	100292	Oil Pct	Oil	0.00%			no Decimal	>>9.99
10010	70	100287	Moisture Pct	Moisture	0.00%			no Decimal	>>9.99
10010	80	100100	Acidiv. Decimal	Acidiv.	0.00			no Decimal	>>9.99

Item Lot Attribute History

Transaction Number	Transaction Type	Initial Value	Incoming Value	Attribute Value	UM	Datetime	Remarks	Validation
268951	RCT-PO					1/20/2014 5:49:02 PM	Manually entered date January 18, 2014	

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Use the View Item Lots collection to view lot attribute values, inventory, and transaction history with changes to lot attribute values.

Recording Values with Quality Orders

Quality Control and Inventory

Recording Values with Quality Orders

QAD Item Attributes and Quality Control



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Quality Orders

Quality Control and Inventory

Quality Orders

- Contain test records for tests linked to the item or manually added to the order
- Contain attributes from tests and various item profiles

Similarities with Lot Attribute Orders:

- Created automatically by receipts or created manually
- Contain lot attribute values
- Update lot master with attribute values

Quality Order Collection with Test Records

Quality Control and Inventory

Quality Order Collection with Test Records

- Quality order with test records and test record attributes

The screenshot illustrates the navigation process in QAD software. It shows three stacked windows:

- Top Window (Maintain Quality Order):** Displays a list of quality orders. A callout points to the search bar: "Browse to select and maintain a quality order for an item lot". Another callout points to a specific record: "Drill down to view the transaction source for the order".
- Middle Window (Quality Order Test Records):** Shows a list of test records associated with the selected quality order. A callout points to a record: "Browse to select a test record".
- Bottom Window (Test Record Attributes):** Displays the attributes for the selected test record. A callout points to a specific attribute row: "Browse to select a test record attribute".

The bottom window displays the following table of attributes:

Sequence	Attribute ID	Source	Label	Item ID	Description	Revision	Test Method	Value	Measurement	Specification	Specification Det
50	100280	Test	Maturity Index	T80220	Fresh Olive Lab Analysis	A	AG-875	0.00%		Between 2 - 7 UC Davis	Target Value 0%
60	100292	Test	Oil	T80220	Fresh Olive Lab Analysis	A	AG-875	0.00%	*	Between 16 - 23%	Target Value 0%
70	100287	Test	Moisture	T80220	Fresh Olive Lab Analysis	A	AG-875	0.00%	*	Between 55.0 - 65.0%	Target Value 0%

First, open the Maintain Quality Order Browse collection. Select the quality order that you intend to edit.

Navigation and Workflow Tasks

Quality Control and Inventory

Navigation and Workflow Tasks

- Browse and select the quality order for a lot
- View source for quality order
- Browse, select, and maintain test records
 - Maintain test record attributes
 - Maintain and complete test record
- Browse, select, and maintain values for quality order attributes
- Maintain and complete the quality order

You can control the five steps that were just outlined through the five QAD EE processes outlined above. This section of the guide will now demonstrate these steps in greater detail.

Quality Order Collection

Quality Control and Inventory

Quality Order Collection

- Quality order with quality order attributes that include non-test lot attributes and test attributes to update lot master

Processes | Maintain Quality Order X

Search (Item = 80220)
Item equals 80220 Search Clear All

Viewing 1 - 1 of 1 Records per page 100

Item	Description	Site	Lot	Sublot	Qty	Quality Order	Open	Type	Status	Quality Result	Completed By	Completed	NCR Number	Material Disposition	Disposition
80220	Olive, Fresh	10-400	HL300454		2.0	Q014120800001	12/8/2014	Quality	Open	Incomplete					

Quality Order Test Records x Quality Order Attributes x Printed Certificates Source x

Viewing 1 - 6 of 6 Records per page 100

Sequence	Attribute ID	Source	Label	Test ID	Description	Test Method	Value	Measurement	Specification	Specification Detail
10	100200	Item	Cultivar						Arbequina, Frantoio, Leccino, Leccio, Perfolina	Include List:Arbequina, Frantoio, Leccino, Leccio
50	100280	Test	Maturity Index	T80220	Fresh Olive Lab Analysis	AG-875	0.00 *		Between 2 - 7 UC Davis	Target Value 0; Minimum 2; Minimum Inclusive
60	100292	Test	Oil	T80220	Fresh Olive Lab Analysis	AG-875	0.00% *		Between 16 - 23%	Target Value 0%; Minimum 16%; Minimum Inclusive
70	100287	Test	Moisture	T80220	Fresh Olive Lab Analysis	AG-875	0.00% *		Between 55.0 - 65.0%	Target Value 0%; Minimum 55%; Minimum Inclusive
80	100100	Item	Acidity				0.00 *		Between 19 - 21	Target Value 2; Minimum 19; Minimum Inclusive
95	100189	Supplier	Country of Origin				US		US	Include List US;

Browse certificates of analysis
printed for a closed order

Browse to select a
quality order attribute

Select Quality Order on Collection

Quality Control and Inventory

Select Quality Order on Collection

- First step is to find and select the quality order for an item lot

The screenshot displays the QAD software interface for 'Maintain Quality Order'. The search bar contains '80220'. Below the search bar, a table lists quality orders. A callout box points to the search bar with the text 'Browse to select and maintain a quality order for an item lot'.

Item	Description	Site	Lot	Sublot	Qty	Quality Order	Open	Type	Status	Quality Result	Completed By	Completed	NCR Number
80220	Olive, Fresh	10-400	PL820454		2.0	QO1412300001	12/8/2014	Quality	Open				

Seq	Test ID	Test Description	Revision	Reference	Test Record ID	Required	Test Quantity	UM	Test Status	Test Result	Test Date	Tested By
10	T80220	Fresh Olive Lab Analysis	A		QO1412300001	Yes	2.0		Open	Not Entered		

Sequence	Attribute ID	Source	Label	Test ID	Description	Revision	Test Method	Value	Measurement	Specification	Specification Det
50	100200	Test	Moisture Index	T80220	Fresh Olive Lab Analysis	A	AG-875	0.00%		Between 2 - 7 UC Devs	Target Value 0%
60	100292	Test	Oil	T80220	Fresh Olive Lab Analysis	A	AG-875	0.00%		Between 15 - 23%	Target Value 0%
70	100287	Test	Moisture	T80220	Fresh Olive Lab Analysis	A	AG-875	0.00%		Between 55.0 - 65.0%	Target Value 0%



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First, open the Maintain Quality Order Browse collection. Select the quality order that you intend to edit.

Quality Order Source

Quality Control and Inventory

Quality Order Source

- Second step is to verify the source data for quality order

Drill down to view the transaction source for the order

Quality Order: QO1412080001

Purchasing Data

Supplier: 1051001	Taylor & Fulton Fruit Co.	Order Type:
Order: P1002232		Line Type:
Line: 1		Status:
Site: 10-400		Receiver: R1011277
Packing Slip:		
Receipt Date: 12/8/2014		
Receipt Quantity: 2.0		UM: T

Inventory Data

Transaction Type: RCT-PO	Number: 550617
Transaction Date: 12/8/2014	Time: 18:01

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In the second level Source tab, you can view information involving the creation of the quality order. Use this information to verify that you are accessing the correct quality order.

Navigate and Select Test Record

Quality Control and Inventory

Navigate and Select Test Record

- Next proceed to the test records for the quality order

The screenshot displays the QAD software interface. At the top, there's a search bar with 'Item equals 80220'. Below it, a table shows a single record for 'Fresh Olive Lab Analysis'. The 'Quality Order Test Records' tab is active, showing a table with columns: Seq, Test ID, Test Description, Revision, Reference, Test Record ID, Required, Test Quantity, UM, Test Status, Test Result, Test Date, and Tested By. A callout box points to the 'Test Record ID' column with the text 'Browse to select a test record'. Below this, the 'Test Record Attributes' tab is active, showing a table with columns: Sequence, Attribute ID, Source, Label, Test ID, Description, Revision, Test Method, Value, Measurement, Specification, and Specification Det. The table contains three records for 'Fresh Olive Lab Analysis'.

Select a test record in the second level Quality Order Test Records tab.

A test record is the collection of attributes associated with a certain test specification.

Navigate to Test Record Attributes

Quality Control and Inventory

Navigate to Test Record Attributes

- Then navigate to the test record attributes for each test record

The screenshot displays the QAD Quality Control and Inventory interface. It shows three stacked windows:

- Quality Order Test Records:** A table with columns: Seq, Test ID, Test Description, Revision, Reference, Test Record ID, Required, Test Quantity, UM, Test Status, Test Result, Test Date, Tested By. The first row is selected: 10 T80220, Fresh Olive Lab Analysis, A, Q7141000001, Yes, ZG, Open, Not Entered.
- Test Record Attributes:** A table with columns: Sequence, Attribute ID, Source, Label, Test ID, Description, Revision, Test Method, Value, Measurement, Specification, Specification Det. The first row is selected: 60 100292, Test, Oil, T80220, Fresh Olive Lab Analysis, A, AG-875, 0.00%, Between 15 - 23%, Target Value 0%.

A callout box with an arrow points to the 'Test Record Attributes' window, containing the text: "Browse to select a test record attribute".

In the third level Test Record Attributes browse, you can view the attributes associated with the selected test record.

Full Screen View of Test Record Attributes

Quality Control and Inventory

Full Screen View of Test Record Attributes

- This view shows test record attributes that require a value be entered

Processes x Maintain Quality Order x

Quality Order Test Records x

Test Record Attributes x

Actions Setup Cancel

Viewing 1 - 3 of 3 Records per page: 100

Sequence	Attribute ID	Source	Label	Test ID	Description	Revision	Test Method	Value	Measurement	Specification
50	100280	Test	Maturity Index	T80220	Fresh Olive Lab Analysis	A	AG-875	0.00 *		Between 2 - 7 UC Davis
60	100292	Test	Oil	T80220	Fresh Olive Lab Analysis	A	AG-875	0.00% *		Between 16 - 23%
70	100287	Test	Moisture	T80220	Fresh Olive Lab Analysis	A	AG-875	0.00% *		Between 55.0 - 65.0%

Values are highlighted with * when no value has been entered for an attribute that has Required 'Yes' or Validation 'Yes'

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The Value field shows the value given or defaulted to an attribute. If an asterisk is present, then a value has not been given to or accepted for that attribute, and that is a required and validating attribute.

Enter Test Record Attribute Values

Quality Control and Inventory

Enter Test Record Attribute Values

- Enter attribute values by using the modify button

The screenshot shows the QAD Quality Control and Inventory interface. On the left, a table lists test records with columns for Sequence, Attribute ID, and Source. The record with Sequence 60 and Attribute ID 100290 is selected. On the right, the detailed view for this attribute is shown, including fields for Sequence, Attribute ID, Label, Specification, Test ID, and Test Method. A callout box points to the 'Specification' field, stating 'Control display of specification using Quality Control File'. Below the specification, there are fields for Value, Result, Reference, and Remarks.

By modifying an attribute, you can provide a value to the attribute.

This Specification for that attribute may or may not appear based on the settings in the Quality Control File.

If the attribute is validating, the Result field will change to Conforming or Non-Conforming depending on the value. Otherwise, it will become blank.

Review Test Record Attribute Values

Quality Control and Inventory

Review Test Record Attribute Values

- Columns on the browse collection can be moved to view the value, measurement, specification, and parameters for each test attribute

The screenshot shows a software interface with a table of test records. The table has the following columns: Sequence, Attribute ID, Source, Label, Test ID, Description, Revision, Test Method, Value, Measurement, Specification, and Result. The data rows are:

Sequence	Attribute ID	Source	Label	Test ID	Description	Revision	Test Method	Value	Measurement	Specification	Result
50	100280	Test	Maturity Index	T80220	Fresh Olive Lab Analysis	A	AG-875	4.56		Between 2 - 7 UC Davis	Conforming
60	100292	Test	Oil	T80220	Fresh Olive Lab Analysis	A	AG-875	19.95%		Between 16 - 23%	Conforming
70	100287	Test	Moisture	T80220	Fresh Olive Lab Analysis	A	AG-875	61.08%		Between 55.0 - 65.0%	Conforming

A callout box labeled "Browse columns moved" points to the "Value" and "Result" columns in the table.

In the graphic above, columns have been moved to make the changes clear. You can see that the Value and Result fields have changed for each attribute.

Record Test Record Quantities

Quality Control and Inventory

Record Test Record Quantities

- Record the quantity destroyed and the quantity retained for the test records

Test: T80220 Fresh Olive Lab Analysis

Revision: A

Test Record ID: QT14120800001

Reference:

Status: Open

Test Result: Conform

Material Disposition: Accepted

Tested By: 10-EMP04

Verified By: 10-EMP03

Test Quantity: 2.0

Quantity Accepted: 0.0

Quantity Rejected: 0.0

Open Date: 12/8/2014

Disposition Date: 12/8/2014

Test Date: 12/8/2014

Verify Date: 12/8/2014

UM Desc:

Quantity Retained: 0.0

Quantity Destroyed: 0.0

Quantity Destroyed and Quantity Retained on closed test records update quality order quantities



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Test records have a Test Result of Not Entered until each required attribute has been entered.

The Test Result changes automatically to either Conforming or Non-conforming depending on the results for validating attributes.

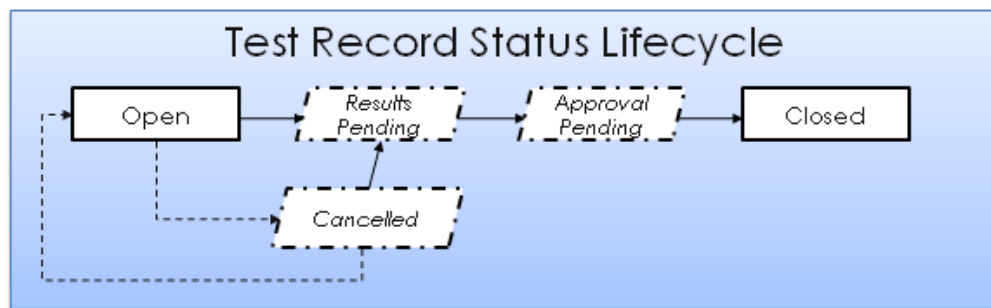
A person can manually change the Test Result. This is useful when a result of No Data or Inconclusive is appropriate.

Test Record Status

Quality Control and Inventory

Test Record Status

- Optionally use order Status to control what data can be modified for a test record
- Test record status can be changed from Cancelled when the Quality Order status is Open or Results Pending



Each test record Status which determines its position in the workflow.

The following statuses are available:

- **Open.** The default status when the test record is created. When the status is Open, subsequent receipts for the same item and lot will increment the order quantity for the Test Record. The status can be changed from Open to Results Pending, Approval Pending, Closed, or Cancelled.
- **Results Pending.** You can optionally change the status to Results Pending when the entire quantity for the test is available. When the status is Results Pending, the Test Quantity is not automatically updated by subsequent receipts for the item and lot.
- **Approval Pending.** You can optionally change the status to Approval Pending after the order results and the attribute values and results for the test record have been recorded. When the status is Approval Pending, the test record attribute values cannot be modified.
- **Cancelled.** Change the status to Cancelled when the test record is not required and will not be completed.

Note: If the status of a test record was changed to Cancelled by mistake, you can change the status when the Quality Order status is Open or Results Pending.

- **Closed.** Change the status to Closed when the test results and its attribute results are final. When the status is changed to Closed, the values for the test attributes can be copied to its quality order.
- **Closed Edit Pending.** The status that is assigned by the system when an administrator edits a closed order using the Edit Closed Test Record function. Using that function the status can then be changed back to Closed.

Complete the Test Record

Quality Control and Inventory

Complete the Test Record

- After completing the entry of test attribute values, update the result and material disposition of the test record, then change the status to closed

The screenshot shows the 'Quality Order Test Records' form in QAD. The form is for Test T80220, Revision A, with Test Record ID QT1412080001. The 'Test Result' is set to 'Conform', and the 'Material Disposition' is 'Accepted'. The 'Status' is 'Closed'. The 'Test Date' is 12/8/2014. The 'Tested By' is 10-EMP04 and the 'Verified By' is 10-EMP03. The 'Test Quantity' is 2.0, and the 'Quantity Accepted', 'Quantity Retained', and 'Quantity Destroyed' are all 0.0. The 'Open Date' is 12/8/2014 and the 'Verify Date' is 12/8/2014. The 'UM Desc' is blank. The 'Remarks' and 'Comments' fields are empty.

Annotations on the form:

- Values for Material Disposition setup as Generalized Codes (points to the Material Disposition dropdown)
- Test Date required when used for test attribute specifications (points to the Test Date dropdown)
- Result is normally 'Conforming' or 'Non-Conforming' (points to the Test Result dropdown)
- Normally Test Result is 'Conforming' or 'Non-Conforming and Status 'Closed'' (points to the Test Result and Status dropdowns)

Test records have a Test Result of either 'Not Entered' or 'Incomplete' until all attributes that are required or have validation have entered values.

The Test Result changes automatically to either 'Conforming' or 'Non-conforming' depending on the outcome of having validated attribute values.

A person can manually change the Test Result. This is useful when a result of 'No Data' or 'Inconclusive' is appropriate.

Option to Copy Values from Test to Order

Quality Control and Inventory

Option to Copy Values from Test to Order

- Copy attribute values when status 'closed' and test result is conforming or non-conforming

The screenshot displays the QAD software interface. At the top, there are tabs for 'Processes' and 'Maintain Quality Order'. Below the tabs, a window titled 'Quality Order Test Records' is open. The window shows a list of test records on the left and a detailed view of a selected record on the right. The selected record is 'Test: T80220' with a description of 'Fresh Olive Lab Analysis'. The status is 'Closed'. A dialog box is overlaid on the screen, asking 'Copy test record attribute values to quality order?' with 'Yes' and 'No' buttons. The dialog box is positioned over the 'Test Quantity' and 'Quantity Accepted' fields. The 'Quantity Accepted' field shows '0.0' and the 'Quantity Rejected' field shows '0.0'. The 'Test Result' is 'Conform'. The 'Material Disposition' is 'Accepted'. The 'Tested By' is '10-EMP04' and the 'Verified By' is '10-EMP03'. The 'Open Date', 'Disposition Date', 'Test Date', and 'Verify Date' are all '12/8/2014'. The 'Remarks' field is empty. The QAD logo is visible in the bottom left corner, and the number '263' is in the bottom right corner.

After closing the quality order, the system prompts you to copy the test records attributes to the quality order. Click Yes to confirm the copy of attribute values.

Attribute Values Updated from Test Record

Quality Control and Inventory

Attribute Values Updated from Test Record

- Quality order attribute values have been updated by closing the test record

Browse and select a quality order attribute

Quality Order attributes from one or more test records and non-test attributes

Sequence	Attribute ID	Source	Label	Test ID	Description	Test Method	Value	Measurement	Specification	Result
10	100290	Item	Cultivar				Arbequina		Arbequina, Frantoio, Leccino, Lucca, Picholine	Conforming
50	100280	Test	Maturity Index	T80220	Fresh Olive Lab Analysis	AG-875	4.56		Between 2 - 7 UC Davis	Conforming
60	100292	Test	Oil	T80220	Fresh Olive Lab Analysis	AG-875	19.95%		Between 16 - 23%	Conforming
70	100287	Test	Moisture	T80220	Fresh Olive Lab Analysis	AG-875	61.08%		Between 55.0 - 65.0%	Conforming
80	100100	Item	Acidity				0.00 *		Between .19 - .21	Not Entered
95	100189	Supplier	Country of Origin				US		US	Conforming

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The second level Quality Order Attributes tab in the Maintain Quality Order browse collection displays the attributes on the quality order.

The Source field displays the source of that attribute. Attributes from a test specification have a Source value of Test.

Exercises

Quality Control and Inventory

Exercises

- Objective
 - Understand the process of recording results for test records for a quality order and how attribute values for a test can be copied to a quality order
- Steps
 - Receive purchase order P1002235 line 1 for item 80220 Olives, Fresh for
 - Lot quantity = 1
 - Find the quality order created by the PO receipt then
 - Enter values for all of the test record attributes with result conforming or non-conforming
 - View the Test Result for the test record
 - Complete the test record and change the test record status to 'Closed' and copy attribute values
 - View the attribute values on the quality order



Values for quantity destroyed and quantity retained should be zero (0).

Test Record Exception Scenarios

Quality Control and Inventory

Test Record Exception Scenarios

QAD Item Attributes and Quality Control



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Test Record Exception Scenarios

Quality Control and Inventory

Test Record Exception Scenarios

- Typical scenarios
 - Cancel a test record
 - Delete a test record
 - Create a test record
- Atypical scenarios
 - Not appropriate for all implementations
 - Close a test record with result 'No Data'
 - Close a test record with result 'Inconclusive'

Create a test record when more than one test record is required for a test specification or when a test is required for a test specification is not linked to the item.

Closing a test record with No Data or Inconclusive are not typical and may not be appropriate for an implementation.

Cancel a Test Record

Quality Control and Inventory

Cancel a Test Record

- Status field can be changed to Cancelled when a test is not performed

The screenshot displays the QAD Quality Order Test Records interface. The main window shows a test record for 'Fresh Olive Lab Anal' with the following details:

- Test: T80220
- Revision: A
- Test Record ID: TRC1401200004
- Reference: [Empty field]
- Status: **Open** (highlighted by a callout box)
- Test Result: Conform
- Material Disposition: Approved
- Tested By: 10-EMPO4
- Open Date: 1/20/2014
- Disposition Date: 1/22/2014
- Test Date: 1/22/2014
- Verified By: [Empty field]
- Test Quantity: [Empty field]
- Quantity Accepted: [Empty field]
- Quantity Rejected: [Empty field]
- Remarks: [Empty field]
- Comments: [Empty field]

A callout box with a blue border and arrow points to the 'Status' dropdown menu, containing the text: "Change the Status to 'Cancelled' when a test is not performed".

A test that is normally required but not performed can be cancelled. To do so, switch the Status field of an open test record to Cancelled.

Close a Test Record with 'No Data'

Quality Control and Inventory

Close a Test Record with 'No Data'

- In exceptional cases, you can close a test record with the test result set to either 'No Data' or 'Inconclusive'

The screenshot displays the QAD Quality Order Test Records interface. The main record shown is for Test ID T80220, titled 'Fresh Olive Lab Analysis'. The 'Test Result' is set to 'Conform' and the 'Status' is 'Closed'. Other fields include 'Material Disposition: Approved', 'Tested By: 10-EMPO4', 'Verified By: 10-EMPO2', 'Test Quantity: 5.0', and 'Quantity Accepted: 5.0'. The 'Open Date' is 1/20/2014, 'Disposition Date' is 1/22/2014, 'Test Date' is 1/22/2014, and 'Verify Date' is 1/22/2014. The 'Quantity Retained' and 'Quantity Destroyed' are both 0.0.

Annotations on the screenshot:

- A callout box on the left states: "Values for Test Result are maintained in Language Detail". An arrow points from this box to the 'Test Result' dropdown menu.
- A callout box at the bottom states: "Alternately set Test Result to 'No Data' or 'Inconclusive' then set Status 'Closed'". An arrow points from this box to the 'Status' dropdown menu.

Alternately, you can set the Status to Closed and set the Test Result to 'No Data' or 'Inconclusive'. This is appropriate when the test was complete, but did not provide definitive results.

Closing a test record with No Data or Inconclusive are not typical and may not be appropriate for an implementation.

Delete a Test Record

Quality Control and Inventory

Delete a Test Record

- When a test is not completed, it can be deleted if the link to the item is not required

The screenshot shows the QAD Quality Order Test Records interface. The main record displayed is for Test ID T80220, 'Fresh Olive Lab Anal'. The record details include:

- Test: T80220
- Revision: A
- Test Record ID: TRC1401200004
- Reference: [Empty field]
- Status: [Dropdown menu]
- Test Result: Conform
- Material Disposition: Approved
- Tested By: 10-EMPG4
- Verified By: 10-EMPG2
- Test Quantity: 5.0
- Quantity Accepted: 5.0
- Quantity Rejected: 0.0
- Open Date: 1/20/2014
- Disposition Date: 1/22/2014
- Test Date: 1/22/2014
- Verify Date: 1/22/2014
- UM Desc: [Empty field]
- Quantity Retained: 0.0
- Quantity Destroyed: 0.0

A callout box with the text "A test record can be deleted if it is not set up as Required" points to the "Delete" button in the bottom right corner of the record details area. The "Delete" button is highlighted with a blue box.

You can delete Test Records which are not set as required. This is useful when a special quality order does not necessitate certain tests.

Create a Test Record

Quality Control and Inventory

Create a Test Record

- Manually create a test record when a test is performed multiple times or for a different test ID and revision

The screenshot shows the QAD Quality Order Test Records interface. A callout box points to the 'Create' button in the top right corner of the 'Quality Order Test Records' window. Below the main window, a 'Test Master Data' window is open, displaying a table of test records.

Test ID	Description	Category	Revision	Status	Reference	Number of Samples	Sample
T70210	Extra Virgin Process	Chemical Analysis	A	Released			
T70210P	Processing Olive Oil	Chemical Analysis	A	Released			
T80103	Calcium Carbonate Lab	Chemical Analysis	A	Released			
T80103	Calcium Carbonate Lab	Chemical Analysis	B	Draft		1	
T80116	Magnesium Sulfate Lab	Chemical Analysis	A	Released			
T80124	Sodium Bicarbonate Lab	Chemical Analysis	A	Released			
T80126	Sodium Carbonate Lab	Chemical Analysis	A	Released			
T80200	Fresh Olive Lab Analysis	Chemical Analysis	A	Released			
T847001	Heavy Metals	Heavy Metals / Isotopics	A	Released			

You can create test records manually using the Create button in the second level Quality Order Test Records tab.

Create a test record when more than one test record is required for a test specification or when a test is required for a test specification is not linked to the item.

Completing Quality Orders

Quality Control and Inventory

Completing Quality Orders

QAD Item Attributes and Quality Control



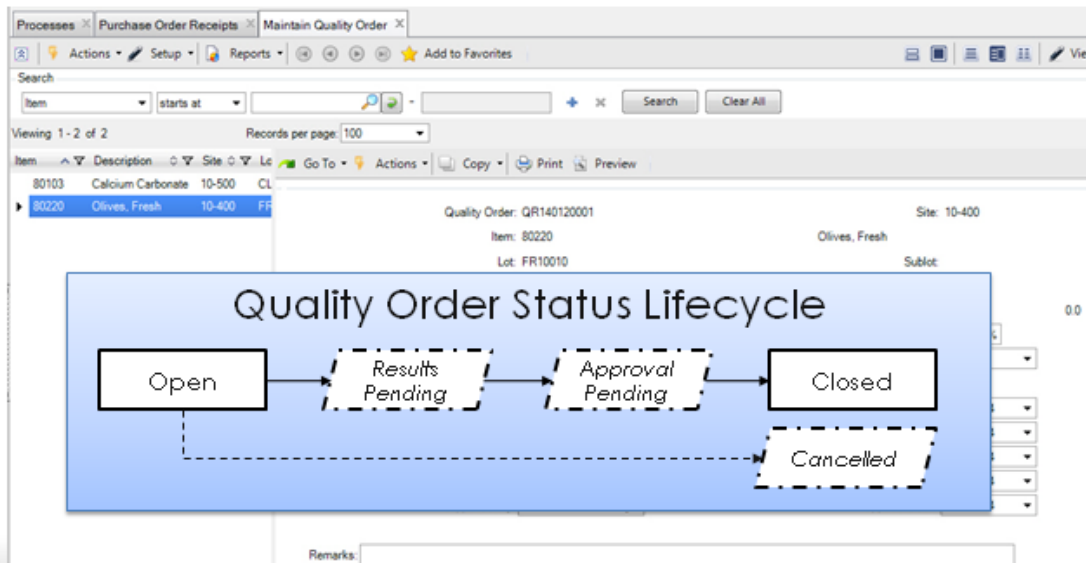
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Quality Order Status

Manage Materials with Lot Attributes

Quality Order Status

- Optionally use order Status to control what data can be modified



Each quality order has an Order Status which determines its position in the workflow. The following statuses are available:

- Open.** The default status when the order is created. When the status is Open, subsequent receipts for the same item and lot will increment the order quantity for the Quality Order. The status can be changed from Open to Results Pending, Approval Pending, Closed, or Cancelled.
- Results Pending.** You can optionally change the status to Results Pending when the entire lot quantity has been received. When the status is Results Pending, the Order Quantity is not automatically updated by subsequent receipts for the item and lot.
- Approval Pending.** You can optionally change the status to Approval Pending after the order results and the attribute values and results for the lot attribute order have been recorded. When the status is Approval Pending, its test records cannot be modified, the quality order attribute values cannot be modified, and the Order Quantity is not automatically updated by subsequent receipts for the item and lot.
- Cancelled.** Change the status to Cancelled when the quality order is not required and will not be completed. Once cancelled, an order cannot be re-opened.

- **Closed.** Change the status to Closed when the order results and its attribute results are final. When the status is changed to Closed, transactions are processed to scrap the quantity destroyed, transfer the quantity retained, and optionally transfer the remaining quantity or update its inventory status. You cannot set closed orders to any other status and you cannot edit the values in their fields.
- **Closed Edit Pending.** The status that is assigned by the system when an administrator edits a closed order using the Edit Closed Quality Order function. Using that function the status can then be changed back to Closed.

Quality Order Attributes

Quality Control and Inventory

Quality Order Attributes

- Attributes with values copied from test records
- Lot attributes from profiles

Quality Order attributes from one or more test records and optionally non-test attributes

Browse and select a quality order attribute

Value appears as * when no value has been entered for an attribute that has Required 'Yes' or Validation 'Yes'

Sequence	Attribute ID	Source	Label	Test ID	Description	Test Method	Value	Measurement	Specification	Result
10	100290	Item	Cultivar				Arbequina		Arbequina, Frantoio, Leccino, Lucca, Picholine	Conforming
50	100280	Test	Maturity Index	T80220	Fresh Olive Lab Analysis	AG-875	4.56		Between 2 - 7 UC Davis	Conforming
60	100292	Test	Oil	T80220	Fresh Olive Lab Analysis	AG-875	19.95%		Between 16 - 23%	Conforming
					Fresh Olive Lab Analysis	AG-875	61.08%		Between 55.0 - 65.0%	Conforming
							0.00*		Between 19 - 21	Not Entered
							US		US	Conforming

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After entering all test attributes, review the remaining attributes to verify their accuracy.

Enter Non-Test Attribute Values

Quality Control and Inventory

Enter Non-Test Attribute Values

- Quality order attributes include lot attributes defined for an item that do not appear on a test specification

The screenshot displays the 'Quality Order Attributes' maintenance window. On the left, a table lists attributes with columns for Sequence, Attribute ID, and Source. The attribute with Sequence 40 and Attribute ID 100310 is selected. The right pane shows the details for this attribute, including its Source (Item), Label (Orchard), and Specification. Below the details, there are input fields for Value (Saratoga Campbell Hills), Level (Lot), Result (Not Ent), Reference, and Remarks.

Sequence	Attribute ID	Source
10	100200	Item
20	100250	Item
30	100240	Item
40	100310	Item
50	100280	Test
60	100292	Test
70	100287	Test
80	100100	Test
85	100142	Test
95	100189	Supplier

Inventory Attributes

Sequence: 40 Source: Item
 Attribute ID: 100310 Orchard Text 50
 Label: Orchard
 Specification:

Test ID: Test Method:

Value: Saratoga Campbell Hills
 Level: Lot
 Result: Not Ent U.M.
 Reference:
 Remarks:

Enter non-test attributes manually. These are the attributes which do not have a source of Test. The method is the same as for entering Test attributes.

Review Attribute Values and Results

Quality Control and Inventory

Review Attribute Values and Results

- Review and confirm quality order attribute values before closing a quality order

The screenshot shows the 'Quality Order Attributes' window in QAD. The table displays the following data:

Sequence	Attribute ID	Source	Label	Test ID	Description	Test Method	Value	Measurement	Result	Specification
10	100200	Item	Cultivar				Arbequina		Conforming	Arbequina, Frantoio, Leccino, Lucca, Picholine,
50	100280	Test	Maturity Index	T80220	Fresh Olive Lab Analysis	AG-875	4.56		Conforming	Between 2 - 7 UC Davis
60	100292	Test	Oil	T80220	Fresh Olive Lab Analysis	AG-875	19.95%		Conforming	Between 16 - 23%
70	100287	Test	Moisture	T80220	Fresh Olive Lab Analysis	AG-875	61.08%		Conforming	Between 55.0 - 65.0%
80	100100	Item	Acidity				0.19		Conforming	Between 19 - 21
95	100189	Supplier	Country of Origin				US		Conforming	US

A callout box with the text "Browse columns moved" has an arrow pointing to the table.

Observe that, in the above graphic, the result for Grower and Orchard are blank. This is because Validation for those attributes is set to No.

Quality Order Quantities

Quality Control and Inventory

Quality Order Quantities

- The total quantity destroyed and the total quantity retained is determined by quantities recorded on closed test records

Quantity Destroyed and Retained From Test Records

Quality Order: QO1412080001	Site: 10-400
Item: 80220	Olives, Fresh
Lot: HL300454	Sublot:
Order Quantity: 2.0	Unit of Measure: T
Total Qty Destroyed: 0.0	Total Quantity Retained: 0.0
Grade:	Assay: 0.00%
Manufacture Date: 12/8/2014	Expire Date:
Order Status: Open	Date Open: 12/8/2014
Quality Result: Conform	Effective Date: 12/9/2014
Material Disposition:	Disposition Date:
NCR Number:	

The quantities destroyed and retained are processed by inventory transactions after the quality order status is changed Closed.

Before closing the order, enter additional information as appropriate.

These attributes do not directly affect the quality control process, and your business needs will determine where they are necessary.

Quality Order Inventory Detail Attributes

Quality Control and Inventory

Quality Order Inventory Detail Attributes

- Optionally enter values for the inventory detail attributes for the item, site, lot and quantity

Quality Order: QO1412080001
 Item: 80220
 Lot: HL300454
 Site: 10-400
 Olives, Fresh
 Sublot:
 Unit of Measure: T
 Order Quantity: 2.0
 Total Qty Destroyed: 0.0
 Total Quantity Retained: 0.0
 Grade:
 Assay: 0.00%
 Manufacture Date: 12/8/2014
 Expire Date:
 Order Status: Open
 Quality Result: Conform
 Material Disposition:
 NCR Number:
 Date Open: 12/8/2014
 Effective Date: 12/9/2014
 Disposition Date:

Inventory detail attributes and manufacture date

Values for the inventory detail attributes for grade, assay, and expire date are updated after the quality order status is changed Closed.

Complete the Quality Order

Quality Control and Inventory

Complete the Quality Order

- Confirm and/or update the quality order result and material disposition for the quality order

Quality Order: QO1412080001
 Item: 80220
 Lot: HL300454
 Order Quantity: 2.0
 Total Qty Destroyed: 0.0
 Grade:
 Manufacture Date: 12/8/2014
 Order Status: Open
 Quality Result: Conform
 Material Disposition:
 NCR Number:

Site: 10-400
 Olives, Fresh
 Sublot:
 Unit of Measure: T
 Total Quantity Retained: 0.0
 Assay: 0.00%
 Expire Date:
 Date Open: 12/8/2014
 Effective Date: 12/9/2014
 Disposition Date:

Result is normally 'Conforming' or 'Non-Conforming' and Status is 'Closed'

Values for Quality Result are maintained in Language Detail

Values for Material Disposition setup as Generalized Codes

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Before closing the order, enter additional information as appropriate. The result can also be set to 'No Data' or 'Inconclusive'.

To close a quality order, change the Order Status to Closed.

The status can also be set to 'Cancelled'.

Transfer Quantities from Inspection

Quality Control and Inventory

Transfer Quantities from Inspection

- Transfer of the inspection quantity (not retained or destroyed) from the inspection location, with support to update inventory status

Quantity to Transfer calculated from the order, destroyed, and retained quantities

Item	Description	Site	Lot	Total Quantity to Transfer
80103	Calcium Carbonate	10-500	CL	
80220	Olives, Fresh	10-400	FR	

Item Number: 80220
Description: Olives, Fresh
Order Quantity: 5.0
Total Quantity Destroyed: 0.0
Total Quantity Retained: 0.0
Total Qty Available to Transfer: 5.0
Total Quantity to Transfer: 5.0

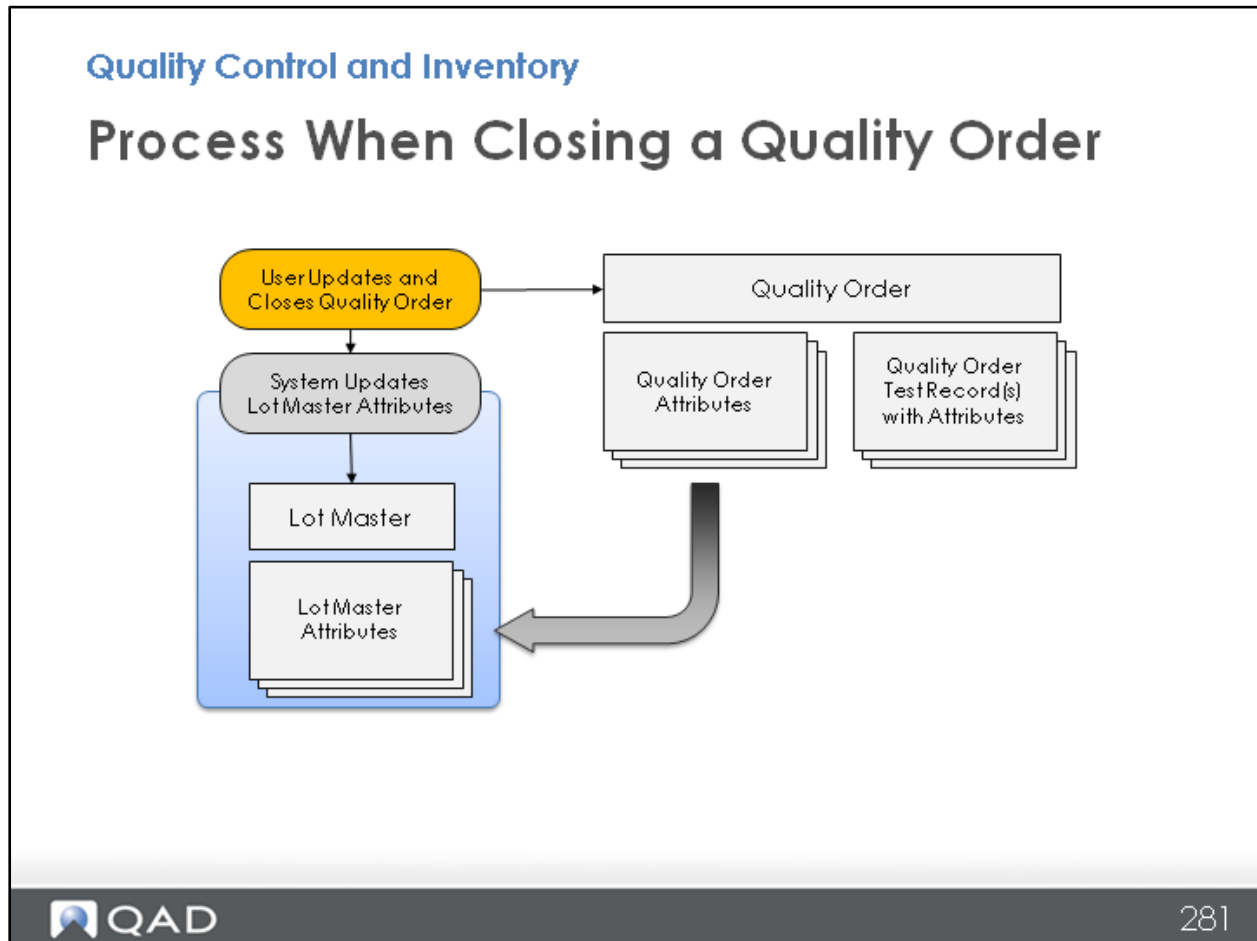
From: Site: 10-400, Location: 030, Lot/Serial: FR10010, Reference: , Status: N-Y-N, Loc Qty Avail: 5.0
To: Site: 10-400, Location: 030, Lot/Serial: FR10010, Reference: , Status:

When closing a lot, you have the option to transfer material quantities and/or update the inventory status for the quantity remaining after inspection.

When processing the transfer of inventory, select the source and destination locations for the transfer transaction.

This transaction is preceded by a transaction to scrap the total quantity destroyed and a transaction to transfer the total quantity retained.

Process When Closing a Quality Order



After closing a quality order, if the test's results are Conforming or Non-Conforming, you can update the lot master attributes with the values of the quality order attributes. If the test's results are Cancelled, No Data, or Inconclusive, or if the test record is deleted, then the attributes do not update.

View Item Lot Attribute Values

Quality Control and Inventory

View Item Lot Attribute Values

- View current values for lot attributes

The screenshot displays the QAD Quality Control and Inventory system interface. At the top, the title 'Quality Control and Inventory' is followed by the main heading 'View Item Lot Attribute Values'. A bullet point indicates the purpose: 'View current values for lot attributes'.

The interface shows a browser window with several tabs: 'Processes', 'Purchase Order Receipts', 'Maintain Quality Order', and 'View Item Lots'. The 'View Item Lots' tab is active. Below the tabs, there is a search bar with a dropdown menu set to 'Item' and a search button. The search results show three items: 60041 Aluminum Housing Machined, 80103 Calcium Carbonate, and 80220 Olives, Fresh. The '80220 Olives, Fresh' item is selected, and a callout box labeled 'Lot Master Attributes' points to the 'Item Lot Attributes' tab.

The 'Item Lot Attributes' tab is active, showing a table of attributes for the selected lot. The table has columns for Item Number, Description, Lot/Serial, Sequence, Attribute ID, Description, Label, Attribute Value, UM, and Entered. The data is as follows:

Item Number	Description	Lot/Serial	Sequence	Attribute ID	Description	Label	Attribute Value	UM	Entered
80220	Olives, Fresh	FR10010	10	100200	Cultivar Text 30	Cultivar	Arbequina		ye
80220	Olives, Fresh	FR10010	20	100250	Harvest Date	Harvest Date	1/18/2014		ye
80220	Olives, Fresh	FR10010	30	100240	Grower Text 30	Grower	Dominican Farms		ye
80220	Olives, Fresh	FR10010	40	100310	Orchard Text 50	Orchard	Saratoga Campbell Hills		ye
80220	Olives, Fresh	FR10010	50	100280	Maturity Index Decimal	Maturity Index	4.56		ye
80220	Olives, Fresh	FR10010	60	100292	Oil Pct	Oil	19.00%		ye
80220	Olives, Fresh	FR10010	70	100287	Moisture Pct	Moisture	59.80%		ye

The QAD logo is visible in the bottom left corner, and the page number '282' is in the bottom right corner.

You can see the results of this process in the View Item Lots browse collection. Access lot attributes in the second level Item Lot Attributes tab.

View Item Lots with Inventory History

Quality Control and Inventory

View Item Lots with Inventory History

- Review transactions and changes to lot attribute values

The screenshot displays the QAD software interface for viewing item lots. The main window shows a list of item lots for 'Olives, Fresh' with columns for Item Number, Item Description, Lot/Serial, Transaction Number, Transaction Type, Date, Time, Site, Location, Lot/Serial, Reference, and Order. A callout box labeled 'Transactions' points to the 'Transactions by Item' tab. Below this, a 'Transaction Attributes' window is open, showing a table of attributes for a specific transaction. A callout box labeled 'Transaction Attribute Data' points to this table.

Item Number	Item Description	Transaction Number	Transaction Type	Date	Time	Site	Location	Lot/Serial	Reference	Order
80220	Olives, Fresh	268551	RCT-PO	1/20/2014	17:49	10-400	030	FR10010		P1002232
80220	Olives, Fresh	268564	ISS-CHL	1/22/2014	21:04	10-400		FR10010		
80220	Olives, Fresh	268565	RCT-CHL	1/22/2014	21:04	10-400		FR10010		
80220	Olives, Fresh	268566	ISS-TR	1/22/2014	21:05	10-400	030	FR10010		QR14012000
80220	Olives, Fresh	268567	RCT-TR	1/22/2014	21:05	10-400	030	FR10010		QR14012000

Sequence	Attribute ID	Description	Label	Datatype	Format	Initial Value	Incoming Value	Attribute Value	UM	Re
10	100205	Culture Text 30	Culture	Character	x(30)			Arborea		
20	100250	Harvest Date	Harvest Date	Date	MMDDYY	1/18/2014		1/18/2014		Ms
30	100240	Grower Text 30	Grower	Character	x(30)	Dominican Farms		Dominican Farms		

In the second level Transactions by Item tab, the system displays the history of transactions which edited attribute data. This includes quality orders which updated the quality item lot.

Exercises

Quality Control and Inventory

Exercises

- Objective
 - Understand the process of completing a quality order after its test records have been completed
- Steps
 - Complete and close the quality order for the lot received on purchase order P1002235 line 1 for item 80220 Olives, Fresh
 - Enter values for all of the non-test quality order attributes
 - View the attribute values on the quality order
 - View the Quality Result for the quality order
 - Complete order and change the order status to 'Closed'
 - View the attribute values for the item lot after closing the quality order

Test Quantities Destroyed and Retained

Quality Control and Inventory

Test Quantities Destroyed and Retained

QAD Item Attributes and Quality Control



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Test Record Quantities

Quality Control and Inventory

Test Record Quantities

- Test record quantities for closed test records impact quality order quantities and transaction processing

Quality Order Test Records

Viewing 1 - 1 of 1 Records per page: 100

Seq Test ID Test Description Go To Actions Copy Print Preview

0 T80220 Fresh Olive Lab Anal

Test: T80220 Fresh Olive Lab Analysis

Revision: A

Test Record ID: TRC1401200004

Reference: Status:

Test Result:

Material Disposition:

Tested By:

Verified By:

Test Quantity:

Quantity Accepted:

Quantity Rejected:

Open Date:

Disposition Date:

Test Date:

Verify Date:

UM Desc:

Quantity Retained:

Quantity Destroyed:

Quantity Retained and Quantity Destroyed accumulated to Quality Order

Next, this guide demonstrates the impact of test record quantities on quality order quantities and inventory.

When closing a quality order, you can enter a Quantity Accepted and Quantity Rejected. These fields are for reference, to provide a record of test results.

Quality Order Quantity Destroyed

Quality Control and Inventory

Quality Order Quantity Destroyed

- Quantity destroyed calculated from test records with status closed and the test record
 - Result is not 'No data'
 - Result is not 'Inconclusive'
- Quantity destroyed issued as scrap when the quality order status is changed to closed and the quality order
 - Result is not 'No data'
 - Result is not 'Inconclusive'

The Quantity Destroyed is calculated for a test record when that test record is closed and its Result is not set to No Data or Inconclusive.

This quantity is subject to scrap when the quality order is closed and its result is not set to No Data or Inconclusive.

Quality Order Quantity Retained

Quality Control and Inventory

Quality Order Quantity Retained

- Quantity retained calculated from test records with status closed and the test record
 - Result is not 'No data'
 - Result is not 'Inconclusive'
- Quantity retained is transferred when the quality order status is changed to closed and the quality order
 - Result is not 'No data'
 - Result is not 'Inconclusive'



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The Quantity Retained is calculated for a test record when that test record is closed and its Result is not set to No Data or Inconclusive.

This quantity is subject to transfer when the quality order is closed and its result is not set to No Data or Inconclusive.

Quality Order Quantities

Quality Control and Inventory

Quality Order Quantities

- Quantity destroyed processed with scrap transaction and quantity retained processed with transfer transaction

Quality Order: GO1412080001 Site: 10-400
 Item: 80220 Olives, Fresh
 Lot: HL300454 Sublot:
 Order Quantity: 2.0 Unit of Measure: T
 Total Qty Destroyed: 0.000000000 Total Quantity Retained: 0.0
 Grade: Assay: 0.00%
 Manufacture Date: 12/8/2014 Expire Date:
 Order Status: Open Date Open: 12/8/2014
 Quality Result: Conform Effective Date: 12/9/2014
 Material Disposition: Disposition Date:
 NCR Number:
 Created By: Approved By:

Quantity Destroyed accumulated from test records – subject to scrap

Quantity Retained accumulated from test records – subject to transfer

The quantity of items which are destroyed require a scrap transaction.

The quantity of items which are retained require a transfer transaction.

Retesting with Quality Orders

Quality Control and Inventory

Retesting with Quality Orders

QAD Item Attributes and Quality Control



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Scenarios for Quality and Inventory

Quality Control and Inventory

Scenarios for Quality and Inventory

- Inspect inventory lot after receipt from either a supplier or from production
- **Re-inspect or re-test a lot in inventory**
- Inspect or re-test a lot to confirm compliance to specifications for a customer and sales order prior to shipment

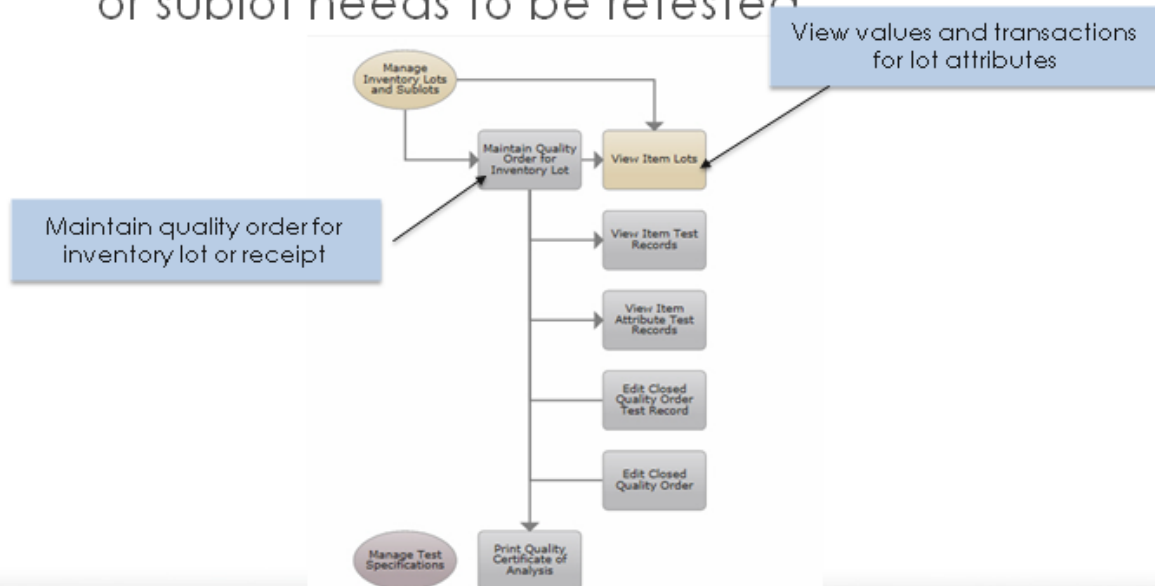
Next, this guide covers the creation of a quality order for the re-inspection of a lot in inventory.

Maintain Quality Order to Re-Test Inventory

Quality Control and Inventory

Maintain Quality Order to Re-Test Inventory

- Manually create a quality order when a lot or subplot needs to be retested



Access the tools for inventory inspection within the process maps here:

Home > Manage Enterprise Item Attributes > Manage Inventory with Attributes > Inspect Inventory

Quality Order for an Existing Lot

Quality Control and Inventory

Quality Order for an Existing Lot

- Restriction that only one quality order with status 'Open' for an item lot and domain

The screenshot shows the 'Maintain Quality Order' form in the QAD software. The form is titled 'Quality Order' and includes the following fields:

- Quality Order: (Text field)
- Site: 10-400 (Text field)
- Item: 80220 (Text field)
- Lot: FR10010 (Text field)
- Sublot: (Text field)
- Order Quantity: (Text field)
- Unit of Measure: (Text field)
- Total Qty Destroyed: (Text field)
- Total Quantity Retained: (Text field)
- Grade: (Text field)
- Assay: (Text field)
- Manufacture Date: (Text field)
- Expire Date: (Text field)
- Order Status: (Text field)
- Date Open: (Text field)
- Quality Result: (Text field)
- Effective Date: (Text field)
- Material Disposition: (Text field)
- Disposition Date: (Text field)

A text box at the bottom of the form reads: "Create then select site, item, and lot".

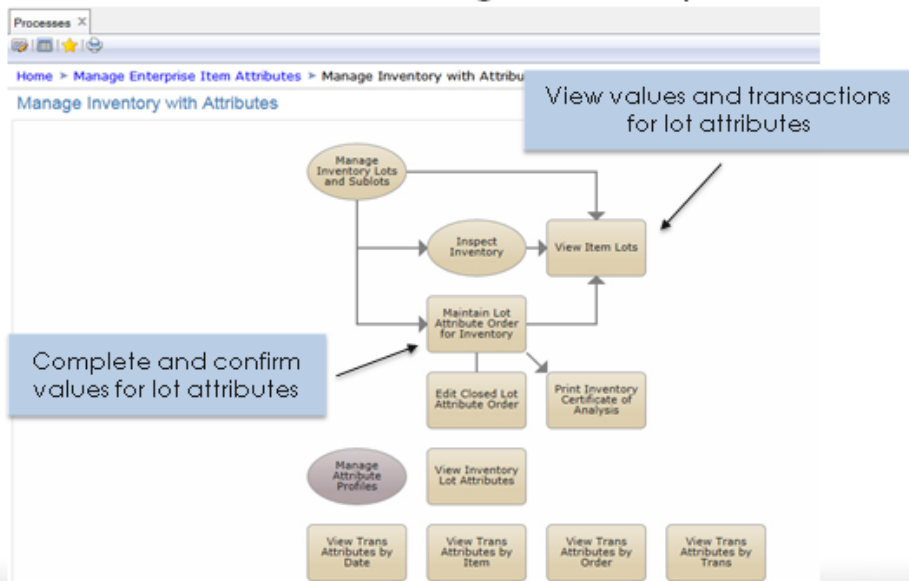
Create a the quality order for the re-inspection through the Maintain Quality Order browse collection. Select the Item, Site, and Lot matching the lot which you intend to re-inspect. This creates a new quality order for that lot and all quantities for that lot, across all inventory locations.

Maintain Lot Attribute Order to Update Lot

Quality Control and Inventory

Maintain Lot Attribute Order to Update Lot

- Manually create a lot attribute to update values for lot attributes when retesting is not required



Access the tools to update lots within the process maps here:

Home > Manage Enterprise Item Attributes > Manage Inventory with Attributes

Testing for Compliance to Sales Order

Quality Control and Inventory

Testing for Compliance to Sales Order

QAD Item Attributes and Quality Control



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Scenarios for Quality and Inventory

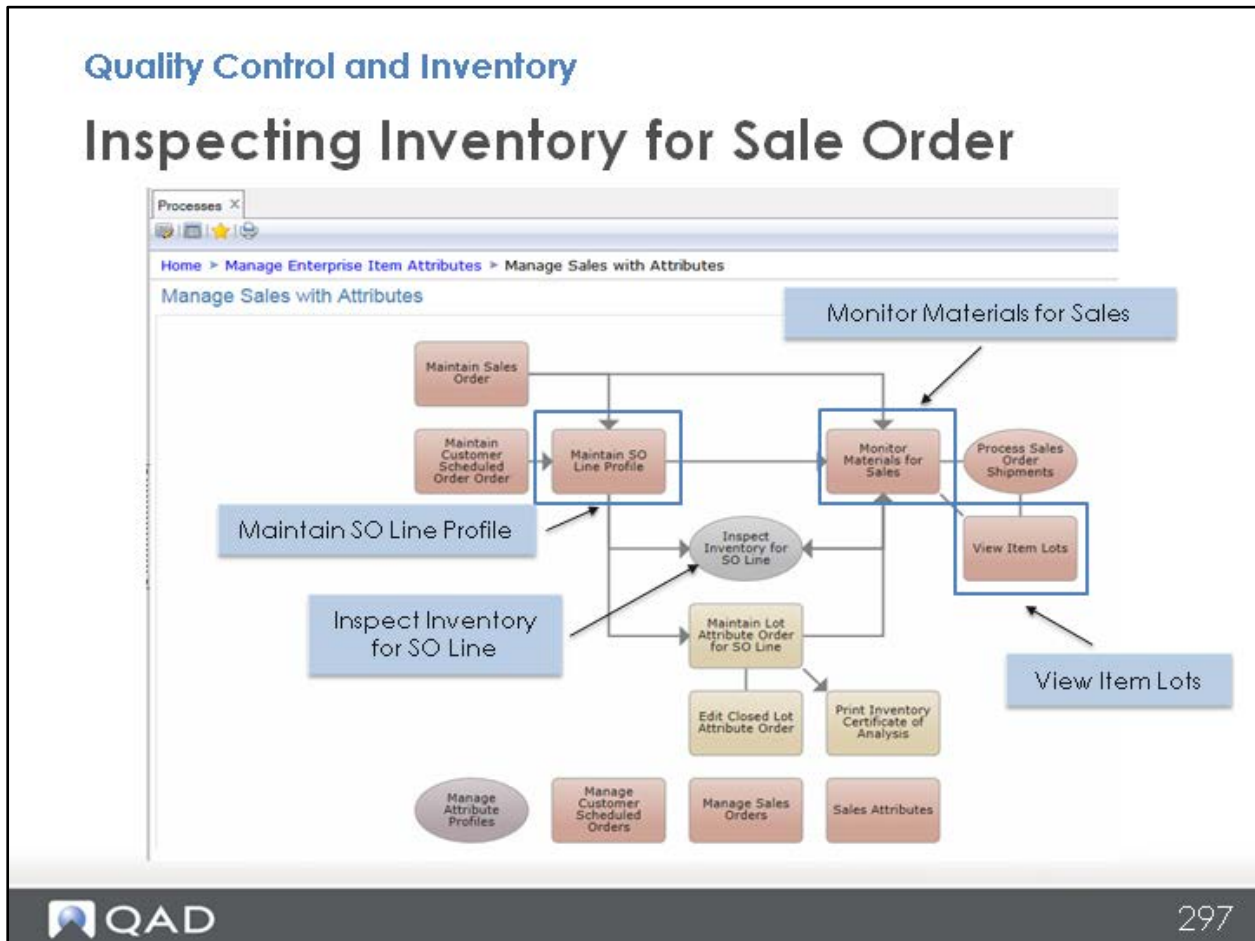
Quality Control and Inventory

Scenarios for Quality and Inventory

- Inspect inventory lot after receipt from either a supplier or from production
- Re-inspect or re-test a lot in inventory
- **Inspect or re-test a lot to confirm compliance to specifications for a customer and sales order prior to shipment**

Finally, this guide discusses the quality control scenario for testing lots prior to sales.

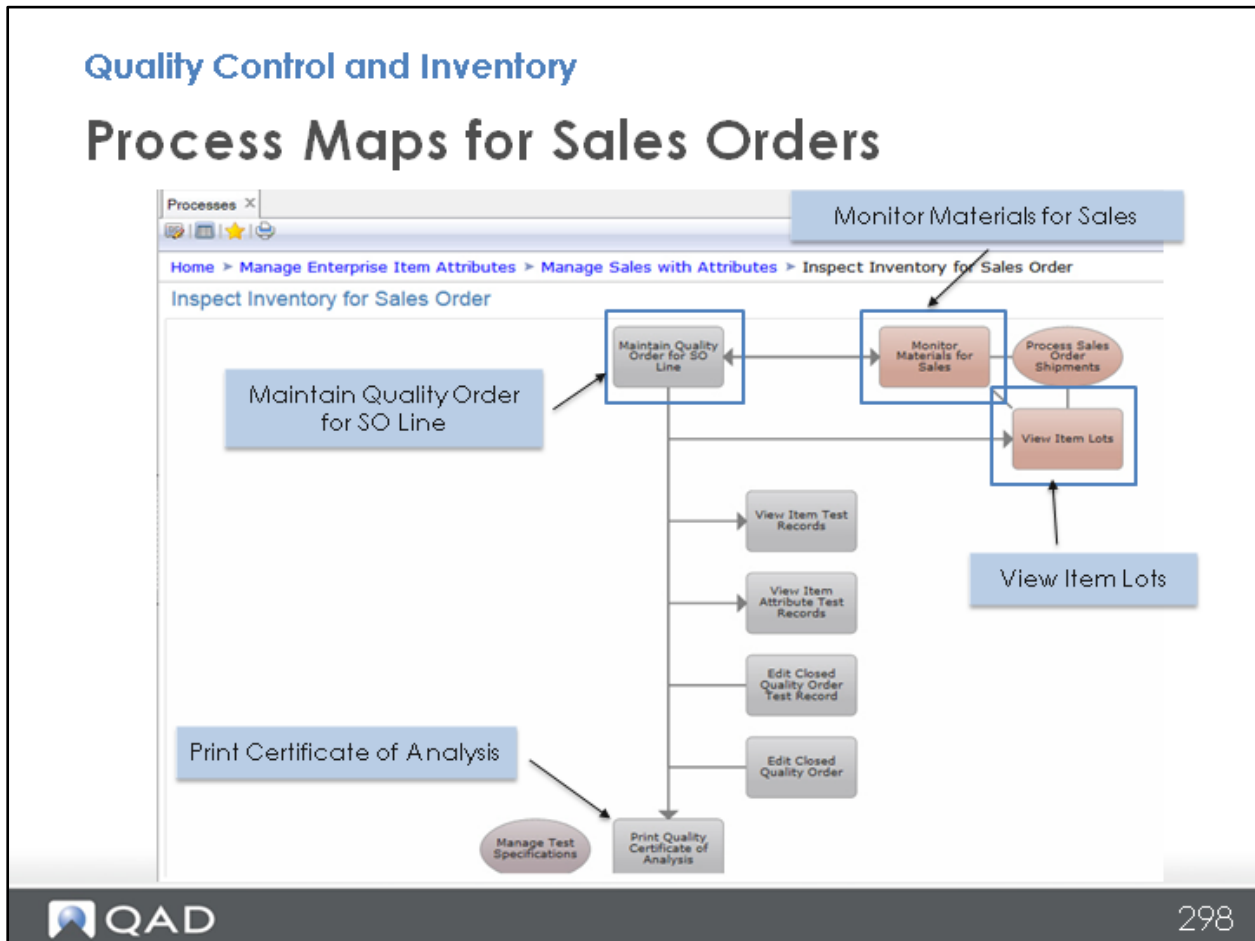
Inspecting Inventory for Sale Order



You can find the functions common to inspecting lots for sale within the process maps here:

Home > Manage Enterprise Item Attributes > Manage Sales with Attributes

Process Maps for Sales Orders



You can find the functions more specifically geared toward Sales Orders within the process maps here:

Home > Manage Enterprise Item Attributes > Manage Sales with Attributes > Inspect Inventory for Sales Order

Quality Order for a Lot and SO line

Quality Control and Inventory

Quality Order for a Lot and SO line

- Use the Maintain Quality Order for SO Line for an existing lot

1. Use the Create button
2. Select site, item, and lot
3. Lookup and select sales order and line

To create a quality order for both a lot and SO line, first select the Item, Site, and Lot. Then, create the order. Then, specify the Sales Order and Line for which you are inspecting.

Customer and SO Line Specifications

Quality Control and Inventory

Customer and SO Line Specifications

- Quality order attribute specifications

Processees | Maintain Quality Order for SO... | Maintain SO Line Profile | View Item Lots | Work Order Receipt

Actions | Setup | Reports | Add to Favorites

Search

Item starts at - Search Clear All

Showing 1 - 1 of 1 Records per page: 100

Item	Description	Site	Sales Order	Sold-To	Sold To Name	Ship-To	Ship To Name	Line	Quality Order
104510	Extra Virgin 500 ml	10-400	SO20010	10C1000	Wal-Mart	10C1000	Wal-Mart	1	QR140129005

Atribute specifications for customer and SO line

Quality Order Attributes | Quality Order Test Records | Certificates | Source

Actions | Setup

Showing 1 - 6 of 6 Records per page: 100

Sequence	Attribute ID	Source	Label	Test ID	Description	Test Method	Value	UM	Sp
10	100200	Item	Cultivar				Frantoio, Leccino, Taggiasca *		Art
30	100321	Test	Peroxide	T04510	EV Olive Oil Lab	EVT100-PX	0 *	mg/kg	Le
40	100331	Test	Polyphenols	T04510	EV Olive Oil Lab	EVT100-PP	0 *	mg/gm	Le
70	100340	Item	Production Date				1/09/2014		
90	100139	Item	Bottling Date				1/09/2014 *		
95	100189	Custome	Country of Origin						US



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Quality order attribute specifications include customer and SO line specifications for attributes from profiles as well as test records. Attributes gained through this type of order have a Source value of Customer. They otherwise function much like other quality orders.

Monitor Materials for Sales

Quality Control and Inventory

Monitor Materials for Sales

- Monitor available and allocated inventory for conformance to customer specifications
- Drill down to determine why a lot is non-conforming

Monitor Materials for Sales

Sales Order Lines

SO	Date	Site	Name	Ship-To	Action Status	Line	Item Number	Description	UM	Consignment	Scheduled	Complete Status	Due Date	Quantity On Hand
SO20011	1/17/2014	10C1004	Price Chopper	10C1004		1	04510	Extra Virgin 500 ml EA	EA	No	No		3/14/2014	
SO20010	1/17/2014	10C1000	Wal-Mart	10C1000		1	04510	Extra Virgin 500 ml EA	EA	No	No		3/10/2014	

Available Item Lots

Item Number	Item Description	Site	Location	LotSerial	Reference	Unit of Measure	Quantity Shipped	Quantity Available	Quantity On Hand	Conforming	Inventory Status
04510	Extra Virgin 500 ml Olive Oil	10-400	010	EV50010	EA	EA	0.0	10	10.0	Non-conforming	Y-Y-Y
04510	Extra Virgin 500 ml Olive Oil	10-400	010	EVO-W1001	EA	EA	0.0	20	20.0	Conforming	Y-Y-Y

Lot A attributes with Customer and Order Specifications

Sequence	Attribute ID	Description	Label	Attribute Value	UM	Validation	Result	Source	Specification	Reference	Datatype	Format
10	100200	Cultivar Text30	Cultivar	Francis, Leconte, Teppesca		yes	Conforming	Item	Alequina, Francis, Leconte, Lucia, Picholine		Character	x(30)
70	100340	Production Date	Production Date	1/30/2014		no		Item			Date	MM/DD/Y
90	100139	Bottling Date	Bottling Date	1/30/2014		no	Conforming	Customer	Not more than 60 days before ship date		Date	MM/DD/Y
95	100189	Country of Origin Text50	Country of Origin	US		no	Conforming	Customer	US, ES, IT, AU		Character	x(50)

QAD 301

The Monitor Materials for Sales browse collection provides a more thorough view of materials for orders than View Item Lots. The conformance of attributes calculates dynamically based on the current values and specifications which relate to these attributes.

Sales orders are organized here to provide insight into current available allocations. Use this browse collection to plan shipping allocations.

Exercise

Quality Control and Inventory

Exercise

- Objective
 - See how quality control can be applied to a make-to-stock item to determine conformance to deviations for a customer and/or sales order line
- Create an item customer profile for
 - Item 01050 Pocket Ultrasound
 - Customer 10C1004 Price Chopper
 - Attribute 100275 manufacture date where value is not older than 1 year before the transaction date
- Create a SO line profile for
 - Sales order SO20011 line 4 for Price Chopper
 - Attribute 100221 firmware is greater than or equal to 'F.7.21'

Exercise

Quality Control and Inventory

Exercise

- Create a work order for Item 01050 Pocket Ultrasound for site 10-100, then receive a lot quantity 2 from the work order
- Complete the quality order created by the receipt of the work order quantity 2
 - Manufacture date = today
 - Firmware = 'F.7.24'
- Use Monitor Materials for Sales with SO2001 1 line 4 and view the available to allocate

CHAPTER 10

Quality Control and Work-In-Process

Quality Control and Work-In-Process

QAD Item Attributes and Quality Control

Quality Control and Work-In-Process

Functional Task-Based Training



Our Passion. Your Advantage.

Lesson Objectives

Quality Control and Work-In-Process

Lesson Objectives

- Quality and WIP for discrete and repetitive production
 - Test or inspect quantity for a work order operation
 - Test or inspect a quantity for a CUM order operation, allowing for multiple test records

By the end of this training, you will be able to process quality for work orders.

This means that you will be able to process and explain how test records attach to both work orders and repetitive cum orders. This allows you to test ongoing processes, and to attach multiple records to repetitive processes where necessary.

Recording Values for WIP Test Records

Quality Control and Work-In-Process

Recording Values for WIP Test Records

QAD Item Attributes and Quality Control



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Quality Records for WIP Operations

Quality Control and Work-In-Process

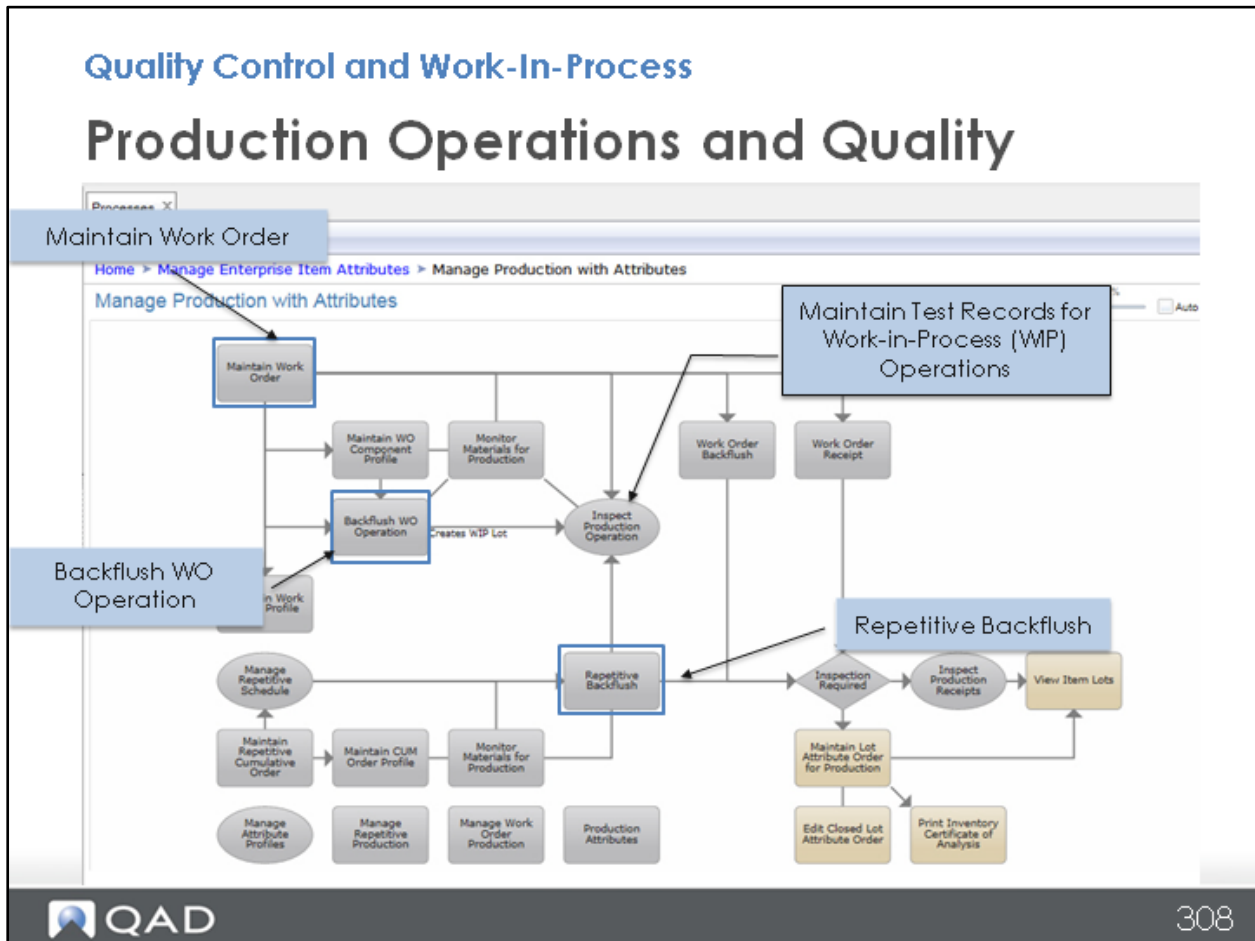
Quality Records for WIP Operations

- Quality for WIP operations documented using test records
- Test records are directly linked to
 - Work order operations
 - CUM order operations

This section of training continues the discussion of how quality control functions for work-in-process operations.

As with other records, quality control utilizes test records to contain attributes. Here, they are linked directly to work orders and CUM orders.

Production Operations and Quality



Quality control for work in process operations requires working with work orders, production operations, and backflush operations.

Find the process maps to control these operations here:

Home > Manage Enterprise Item Attributes > Manage Production with Attributes

Quality Records for WIP Operations

Quality Control and Work-In-Process

Quality Records for WIP Operations

- For work orders
 - Test records are created for work order operations except when using WIP Lot Trace
- For CUM orders
 - Test records are created when using repetitive backflush
- When using WIP Lot Trace
 - Test records are created for WIP lot numbers by both work order backflush or repetitive backflush

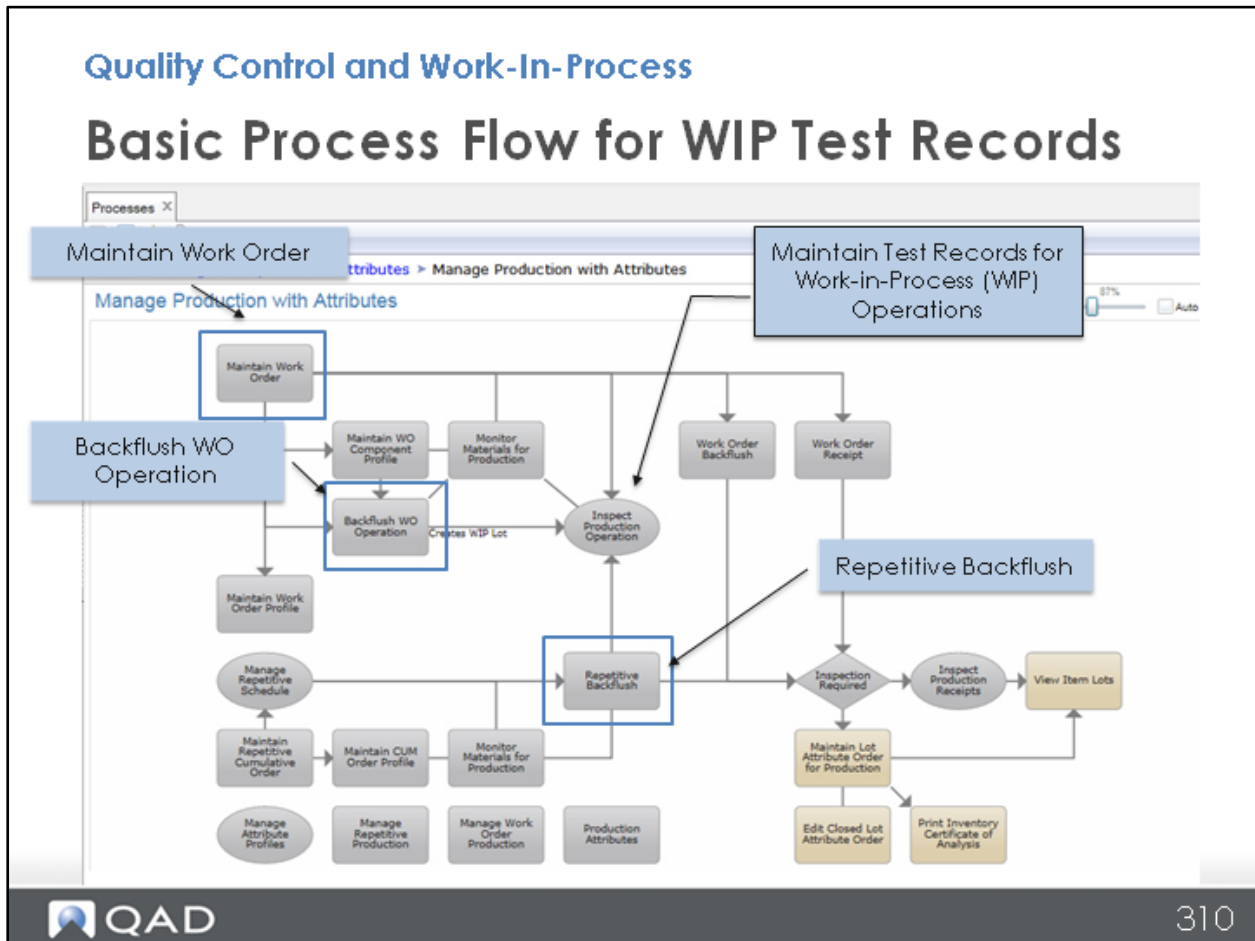
The creation of records for work-in-process operations triggers at different circumstances, depending on the type of order.

Work orders create test records for operations which do not use the WIP Lot Trace function.

CUM orders create test records at the time of the repetitive backflush.

Orders using the WIP Lot Trace function create test records during both work order backflushes and repetitive backflushes.

Basic Process Flow for WIP Test Records

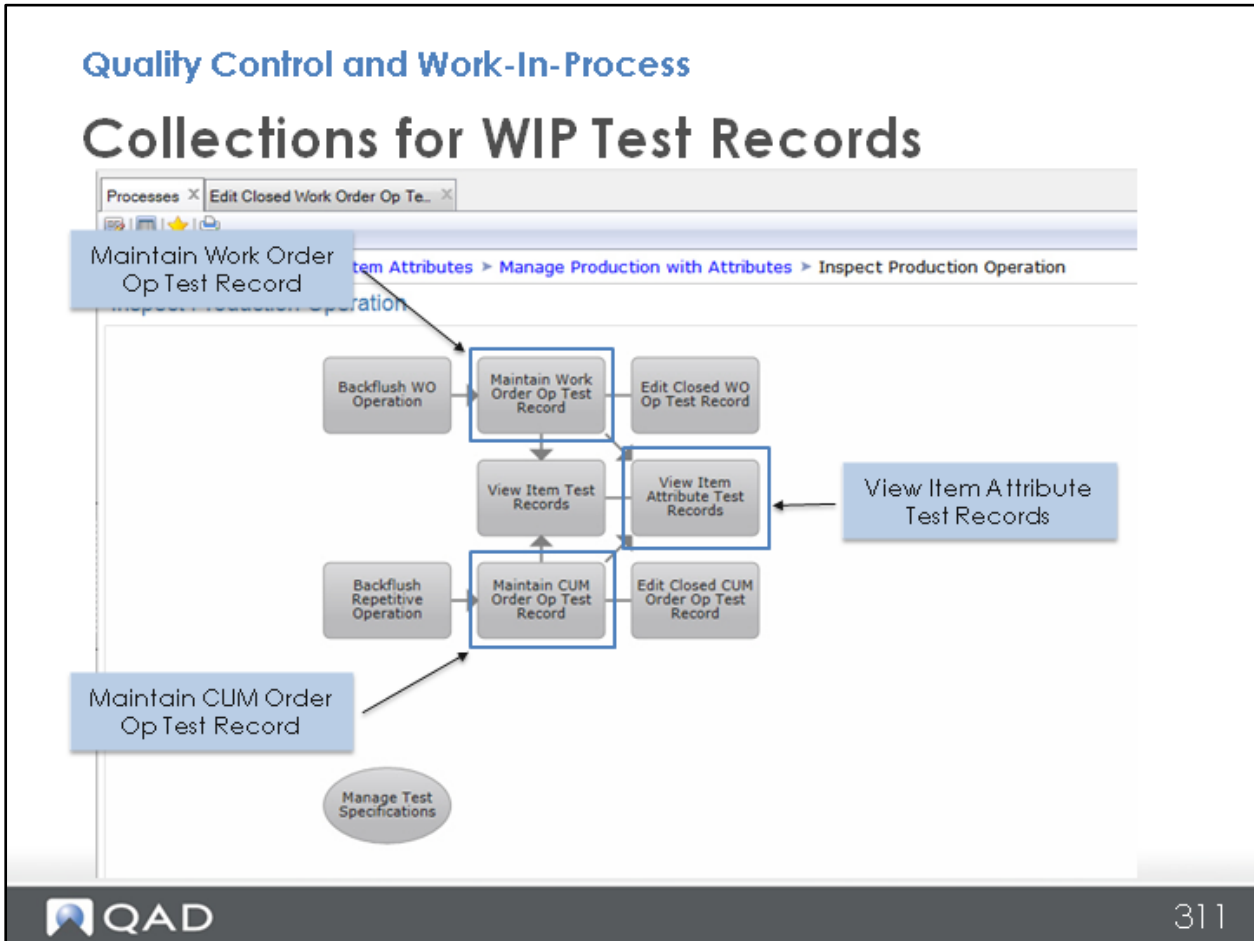


You can maintain these orders through the browse collections for work orders and CUM orders.

Find these functions within the process maps here:

Home > Manage Enterprise Item Attributes > Manage Production with Attributes

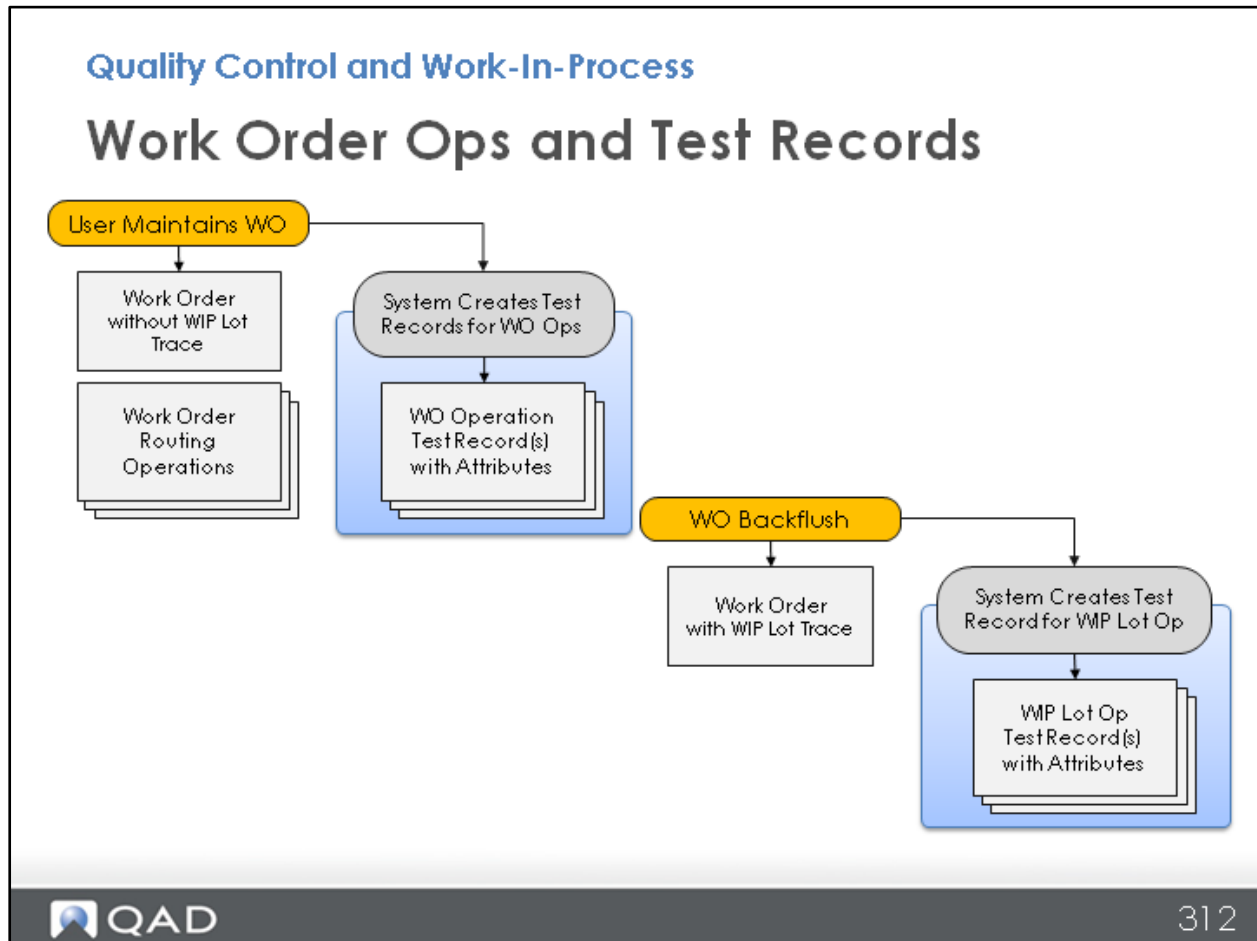
Collections for WIP Test Records



Functions dealing more specifically with the inspection of test records for WIP operations can be found within the process maps here:

Home > Manage Enterprise Item Attributes > Manage Production with Attributes > Inspect Production Operation

Work Order Ops and Test Records



When a work order does not have an attached WIP lot trace, the system creates test records for it automatically. These attach wherever there a test specification links to an item at one of that work orders routing operations.

If a WIP lot trace exists, these records instead generate at the point of a work order backflush.

Work Order Op Test Records

Quality Control and Work-In-Process

Work Order Op Test Records

- Test records for work-in-process operations are directly associated with the work order (or CUM order) and operation

The screenshot displays three overlapping windows from the QAD software interface:

- Maintain Work Order Op Test:** Shows a table of work order operations. A callout points to the 'Work Order ID' column.
- Test Records:** Shows a table of test records. A callout points to the 'Test Record ID' column.
- Attributes:** Shows a table of test attributes. A callout points to the 'Attribute ID' column.

Additional callouts include:

- 'Browse and select a work order operation' pointing to the 'Work Order ID' column in the first window.
- 'Browse and select an operation test record' pointing to the 'Test Record ID' column in the second window.
- 'Browse and select a test record attribute' pointing to the 'Attribute ID' column in the third window.
- 'View details for the operation' pointing to the 'Operation' column in the first window.

The QAD logo is visible in the bottom left corner, and the page number '313' is in the bottom right corner.

The image above depicts test records attached to work orders. Observe that each has an associated Operation, which describes to where in the work process the test specification attached.

Test Record Source

Quality Control and Work-In-Process

Test Record Source

- Confirm information for the work order and operation

Work order operation

View details for the operation

Description	Site	Work Order	ID	Status	Operation	Description	Op Status	Work Center	Description
Extra Virgin Olive Oil	10-400	214100	2014001	R	30 Malaxing			5130	Malaxing Mixer
70210 Extra Virgin Olive Oil	10-400	214100	2014001	R	40 Separation			5140	Separator / Extractor
70210 Extra Virgin Olive Oil	10-400	214100	2014001	R	50 Racking and Filtering			5150	Racking / Filtering

Prod Op Test Records

Work Order: 214100 ID: 2014001 Type:

Item: 70210 Extra Virgin Olive Oil

Site: 10-400 Status: R

Production Line:

Quantity Ordered: 100.0 Order Date: 4/9/2014

Quantity Completed: 0.0 Release Date: 4/9/2014

Quantity Rejected: 0.0 Due Date: 4/9/2014

Operation: 30 Malaxing

WIP Lot/Serial: Reference:

Enter the test records for work orders and CUM orders using the same process as for other test records.

Test Record Attributes

Quality Control and Work-In-Process

Test Record Attributes

- Browse, select, update, and review test record attribute values and results

Maintain Work Order Op Test Record

Processes x Maintain Work Order Op Test. x

Prod Op Test Records x

Test Record Attributes x

Actions Setup

Viewing 1 - 4 of 4 Records per page: 100

Sequence	Attribute ID	Source	Label	Test ID	Description	Revision	Test Method	Value	UM	Specification	Specif
50	100370	Test	Specific Gravity	T70210P	Processing Olive Oil	A	EVP-100-10	0.9166		0.9150-0.9180 @ 15.5°C	Target
60	100395	Test	Viscosity	T70210P	Processing Olive Oil	A	EVP-100-20	88	mPa.s @ 20°C	84 +/- 1.0 mPa.s (84 cP) at 20°C	Target
70	100212	Test	Density	T70210P	Processing Olive Oil	A	EVP-100-30	922	kg/m3 @ 20°C	920 +/- 2 kg/m3 @ 20°C or 7.8 lbs/U.S. Gallon	Target
80	100335	Test	Processing Temperature	T70210P	Processing Olive Oil	A	EVP-100-40	77	Fahrenheit	Less than 86°F [30°C]	Target

Browse and select a test record attribute

QAD 315

Enter Test Record Attribute Data

Quality Control and Work-In-Process

Enter Test Record Attribute Data

- Work-in-process test record attribute entry is identical to test records for quality orders

The screenshot displays a software interface with a table of test records and a detailed view of a selected record.

Sequence	Attribute ID	Source
50	100370	Test
60	100395	Test
70	100212	Test
80	100335	Test

The detailed view for the selected record (Sequence: 50, Attribute ID: 100370) shows the following information:

- Test Record ID: TRC1402130025
- Inventory Attributes:
 - Sequence: 50
 - Attribute ID: 100370
 - Label: Specific Gravity
 - Specification: 0.9150-0.9180 @ 15.5°C
 - Source: Test
 - Specific Gravity Dec4
- Test ID:
- Test Method: EVP-100-10
- Value:

Test record attribute specification, value, and result

Complete Work-in-Process Test Record

Quality Control and Work-In-Process

Complete Work-in-Process Test Record

- Review / update test result and material disposition then close the test record

Work-in-Process operation test record

Test: T70210P	Processing Olive Oil
Revision: A	Status: Closed
Test Record ID: TRC1401300021	
Reference:	
Test Result: NonConf	Open Date: 1/30/2014
Material Disposition: Approved	Disposition Date: 2/13/2014
Tested By: 10-EMP01	Test Date: 2/13/2014
Verified By: 10-EMP04	Verify Date: 2/13/2014
Test Quantity: 40.0	UM Desc:
Quantity Accepted: 40.0	Quantity Retained: 0.0
Quantity Rejected: 0.0	Quantity Destroyed: 0.0
Remarks: <input type="text"/>	
Comments: <input type="text"/>	

Enter the test records for work orders and CUM orders using the same process as for other test records.

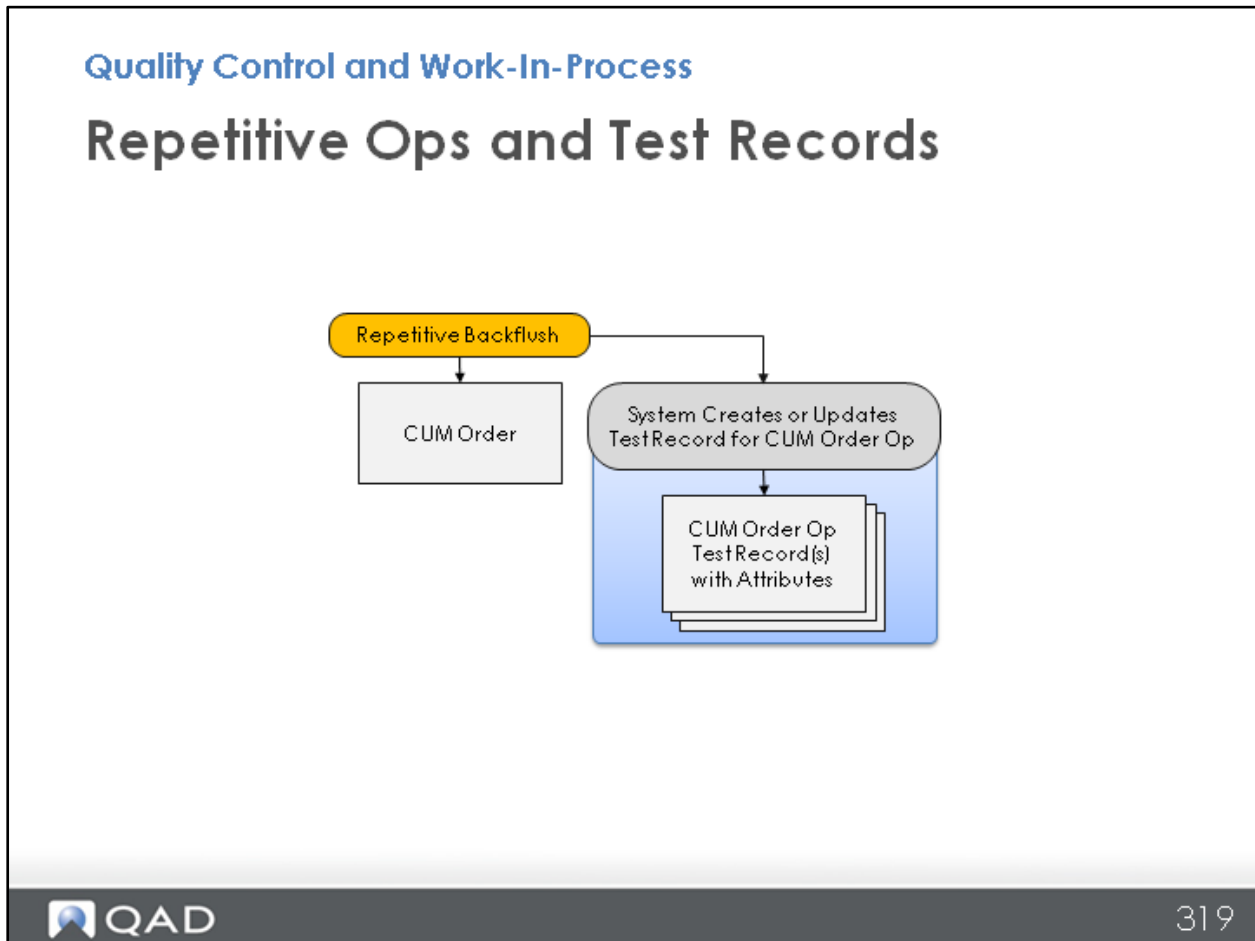
Exercises

Quality Control and Work-In-Process

Exercises

- Objective
 - Understand how the process of recording test results for a WIP operation and how the test record attributes and test records are similar to those for quality orders
- Steps
 - Find the released work order for item 70210 Extra Virgin Olive Oil for quantity = 100
 - Find and select the test record for the operation 30 and test T70210P
 - Enter values for all of the test record attributes
 - View the Test Result for the test record
 - Complete the test record by changing the test record status to 'Closed'

Repetitive Ops and Test Records



Test records for CUM orders trigger differently than those created for work orders. Whereas work order test records involve distinct work operations, CUM order test records deal with repetitive processes.

These trigger at each repetitive backflush. As a result, this process repeats with each subsequent backflush.

If the order is open, subsequent backflushes update the test record. If the order is closed, a new order is created instead.

Backflush to Create Test Record

Quality Control and Work-In-Process

Backflush to Create Test Record

- Process a repetitive backflush quantity of 1 HL to create a work-in-process test record

The screenshot displays the 'Backflush Transaction' window in QAD. The window title bar includes tabs for 'Processes', 'Item Master Maintenance', 'Planning and Scheduling Work...', 'Work Order Browse', 'Backflush Transaction', and 'Maintain'. The main content area shows the following details:

- Employee: 10-EMP01 Alex Erikson
- Document: Effective: 1/30/2014 Shift: Site: 10-400
- Item Number: 70210 Extra Virgin Olive Oil
- Operation: 30 Malaxing
- Line: 4000 Fruit Processing
- Routing: 70210 BOM Code: 70210 ID: 2336681

Below the document information, there are several input fields and options:

- Center: 5130
- Machine: Malaxing Mixer
- UOM: HL
- Conversion: 1.0000
- Qty Processed: 1.0
- Qty Scrapped: 0.0
- Qty Rejected: 0.0
- Reject To Op: 30
- Actual Run Time: 0.0
- Earning Code: [empty]
- Reason Code: [empty]
- Reason Code: [empty]
- Modify Backflush:
- Multi Entry:
- Multi Entry:
- Move Next Op:
- Start Time: [empty]
- Elapsed or Stop Time: [empty]

A blue callout box on the left side of the screen contains the text: "Backflush quantity = 1". At the bottom of the window, there are 'Back' and 'Next' buttons.



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To demonstrate this process, begin with a repetitive backflush operation. The graphic above depicts a repetitive backflush for extra virgin olive oil.

For demonstration purposes, this backflush has a quantity of 1.

Test Record Created by Backflush Qty

Quality Control and Work-In-Process

Test Record Created by Backflush Qty

- Work-in-Process test record created by repetitive backflush transaction

The screenshot displays the QAD software interface for maintaining test records. It shows a list of test records for 'Extra Virgin Olive Oil' (Item Number 70210). A callout box highlights a test record with a quantity of 1. Below the list, the 'Test Record Attributes' table provides detailed information for each test.

Seq	Test ID	Revision	Description	Required	Test Record ID	Open Date	Reference	Test Quantity	UM	Test Status	Test Result
10	T70210P	A	Processing Olive Oil	No	TRC140100019	1/20/2014		1.0		Open	Not Entered

Sequence	Attribute ID	Source	Label	Test ID	Description	Revision	Test Method	Value	UM	Specification
50	100370	Test	Specific Gravity	T70210P	Processing Olive Oil A		EVP-100-10	0.0000 *		0.9150-0.9180 @ 15.5°C
60	100395	Test	Viscosity	T70210P	Processing Olive Oil A		EVP-100-20	0*	mPa.s @20°C	84 +/- 1.0 mPa.s (84 cP) at 20°C
70	100212	Test	Density	T70210P	Processing Olive Oil A		EVP-100-30	0*	kg/m3 @ 20°C	920 +/-2 kg/m3 @ 20°C or 7.8
80	100335	Test	Processing Temperatu...	T70210P	Processing Olive Oil A		EVP-100-40	0*	Fahrenheit	Less than 86°F [30°C]

The Maintain CUM Order Op Test Records browse collection lists test records created for CUM orders. Here, you can see a test record attached to this CUM ID with a quantity of 1.

Backflush to Update Open Test Record

Quality Control and Work-In-Process

Backflush to Update Open Test Record

- Process a second repetitive backflush quantity of 2 HL update the work-in-process test record quantity

Processes × Item Master Maintenance × Planning and Scheduling Work... × Work Order Browse × Backflush Transaction × Maintair

Go To Actions Copy Print Preview Attach

Employee: 10-EMP01 Alex Erikson
 Document:
 Effective: 1/30/2014 Shift: Site: 10-400
 Item Number: 70210 Extra Virgin Olive Oil
 Operation: 30 Malaxing
 Line: 4000 Fruit Processing
 Routing: 70210 BOM Code: 70210 ID: 2336681

Machine: Malaxing Mixer
 Olive Oil Production
 UM: HL Conversion: 1.0000
 Reason Code: Multi Entry:
 Reason Code: Multi Entry:
 Modify Backflush: Move Next Op:
 Start Time:
 Elapsed or Stop Time:

Qty Processed: 2
 Qty Scrapped: 0.0
 Qty Rejected: 0.0
 Reject To Op: 30
 Actual Run Time: 0.0
 Earning Code:

Back Next

Another backflush transaction occurs. This time, with a quantity of 2.

Test Record with Updated Quantity

Quality Control and Work-In-Process

Test Record with Updated Quantity

- Test record quantity is incremented by the second backflush transaction

The screenshot displays the SAP Quality Control interface. At the top, the breadcrumb trail includes 'Processes', 'Item Master Maintenance', 'Planning and Scheduling Work...', 'Work Order Browse', 'Backflush Transaction', 'Maintain Item Test Link', and 'Maintain CUM Order Op Test...'. The search bar shows 'Item Number' and 'starts at'. Below the search bar, the 'Viewing 1 - 1 of 1' section shows a table with columns: Item Number, Description, Site, Cum ID, Production Line, Status, Routing Code, Operation, BOMFormula Code, WIP Lot/Serial, and Description. The first row shows Item Number 70210, Description Extra Virgin Olive Oil, Site 15-400, Cum ID 228661, Production Line 4000, Status B, Routing Code 70210, Operation 30, and Description Following.

The 'Prod Op Test Records' section shows a table with columns: Seq, Test ID, Revision, Description, Required, Test Record ID, Open Date, Reference, Test Quantity, UM, Test Status, and Test Result. The first row shows Seq 10, Test ID T70210P, Revision A, Description Processing Olive Oil, Required No, Test Record ID TRC1401300019, Open Date 1/30/2014, Test Quantity 3, UM, Test Status Open, and Test Result Not Entered. A callout box with an arrow points to the 'Test Quantity' column, containing the text 'Test record quantity = 3'.

The 'Test Record Attributes' section shows a table with columns: Sequence, Attribute ID, Source, Label, Test ID, Description, Revision, Test Method, Value, UM, and Specification. The first row shows Sequence 50, Attribute ID 100378, Source Test, Label Specific Gravity, Test ID T70210P, Description Processing Olive Oil, Revision A, Test Method EVP-100-10, Value 0.0000, UM, and Specification 0.9150-0.9160 @ 15.5°C. The second row shows Sequence 60, Attribute ID 100395, Source Test, Label Viscosity, Test ID T70210P, Description Processing Olive Oil, Revision A, Test Method EVP-100-20, Value 0, UM mPa.s @20°C, and Specification 84 +/- 1.0 mPa.s (84 cP) at 2. The third row shows Sequence 70, Attribute ID 100212, Source Test, Label Density, Test ID T70210P, Description Processing Olive Oil, Revision A, Test Method EVP-100-30, Value 0, UM kg/m3 @ 20°C, and Specification 920 +/- 2 kg/m3 @ 20°C or 7. The fourth row shows Sequence 80, Attribute ID 100335, Source Test, Label Processing Temperature, Test ID T70210P, Description Processing Olive Oil, Revision A, Test Method EVP-100-40, Value 0, UM Fahrenheit, and Specification Less than 86°F [30°C].

The QAD logo is visible in the bottom left corner, and the number 323 is in the bottom right corner.

Because a test record for this CUM ID is open, the backflush updates the record. The additional quantity of 2 adds to the original quantity of 1. The test record now has a quantity of 3.

Multiple Test Records for a Repetitive OP

Quality Control and Work-In-Process

Multiple Test Records for a Repetitive OP

- For example a test record for one shift per day
- Test Record Status code
 - Test quantity updated by backflush when status is 'Open'
- Freeze the test quantity for a specific test record by changing status to
 - Pending Results
 - Pending Approval

The Status of the test record determines whether the quantity of the test record updates from subsequent backflushes.

You can freeze the test quantity for a record by changing its Status. Choose a status which is appropriate to your reason for freezing the record.

Use Test Record Status to Freeze Qty

Quality Control and Work-In-Process

Use Test Record Status to Freeze Qty

- Changing the test record status from open will freeze the quantity for the test record

The screenshot displays the QAD software interface. On the left, a 'Language Code' window is open, showing a table of test record statuses:

Mnemonic	Label	Code
ApproveP	Approval Pending	3
Canceled	Canceled	4
Closed	Closed	1
ClosedEP	Closed Edit Pending	5
Open	Open	0
ResultsP	Results Pending	2

The main window shows the details for Test T70210P, Revision A, with Test Record ID TRC1401300019. The status is 'Open'. The test quantity is 3.0, and the quantity accepted and rejected are both 0.0. The open date is 1/30/2014.

Changing the test status from open prevents the test quantity for the test record from updating.

Backflush to Create New Test Record

Quality Control and Work-In-Process

Backflush to Create New Test Record

- Process another repetitive backflush quantity 2 HL

Employee: 10-EMP01 Alex Erikson
 Document:
 Effective: 1/30/2014 Shift: Site: 10-400
 Item Number: 70210 Extra Virgin Olive Oil
 Operation: 30 Malaxing
 Line: 4000 Fruit Processing
 Routing: 70210 BOM Code: 70210 ID: 2336681

Work Center: 5130 Machine: Malaxing Mixer
 Olive Oil Production
 UM: 1.0000 Conversion: 1.0000
 Reason Code: Multi Entry:
 Reason Code: Multi Entry:
 Modify Backflush: Move Next Op:
 Start Time:
 Elapsed or Stop Time:

Quantity: 2.0
 Qty Scrapped: 0.0
 Qty Rejected: 0.0
 Reject To Op: 30
 Actual Run Time: 0.0
 Earning Code:

Back Next



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Another backflush is processed for extra virgin olive oil.

This time, the status of the test record has been changed from Open.

Multiple Test Records

Quality Control and Work-In-Process

Multiple Test Records

- Maintain as many test records as required for a repetitive CUM order operation

First test record status 'Results Pending' test quantity = 3

Seq	Test ID	Revision	Description	Required	Test Record ID	Open Date	Reference	Test Quantity	UM	Test Status	Test Result	Material Dispo
10	T70210P	A	Processing Olive Oil	No	TRC1401300018	1/30/2014		3.0		Results Pending	Not Entered	
10	T70210P	A	Processing Olive Oil	No	TRC1401300020	1/30/2014		2.0		Open	Not Entered	

Second test record status 'Open' test quantity = 2

Instead of updating the previous test record, a new test record has been created for the CUM ID.

Exercises

Quality Control and Work-In-Process

Exercises

- Objective
 - Understand how multiple test records for a single test specification can be maintained for a CUM order operation
- Steps
 - Find production line 4000 for site 10-400 and add item 70210 for the line
 - Create an Advanced Repetitive CUM order for item 70210 for site 10-400 and production line 4000
 - Use the Production Scheduling Workbench to schedule production quantities of 50 to be produced on Thursdays for the next 4 weeks

Exercises

Quality Control and Work-In-Process

Exercises

- Steps (continued)
 - Backflush a quantity of 10 for operation 30
 - Examine the operation test records for the CUM order
 - Backflush an additional quantity of 5 for operation 30
 - Find the operation test record for that operation and change the test record status to 'Results Pending'
 - Backflush an additional quantity of 15 for operation 30
 - Examine the operation test records for the CUM order

CHAPTER 11

Quality Control and Make-to-Order

Quality Control and Make-to-Order

QAD Item Attributes and Quality Control

Quality Control and Make-to-Order

Functional Task-Based Training



Our Passion. Your Advantage.

Lesson Objectives

Quality Control and Inventory

Lesson Objectives

- Understand the functional support and options available for make-to-order (MTO) production, from customer management, production, quality control, and materials management
- Use the Item Attributes and Quality Control functions to
 - Manage production to support customer MTO requirements
 - Assure quality to MTO requirements
 - Manage materials to MTO requirements

Challenges with Make-to-Order

Quality Control and Make-to-Order Production

Challenges with Make-to-Order

- Capturing customer order specifications
- Communicating customer specifications to production and quality
- Keeping current with changes to customer requirements and specifications
- Including customer specifications together with production and quality processes



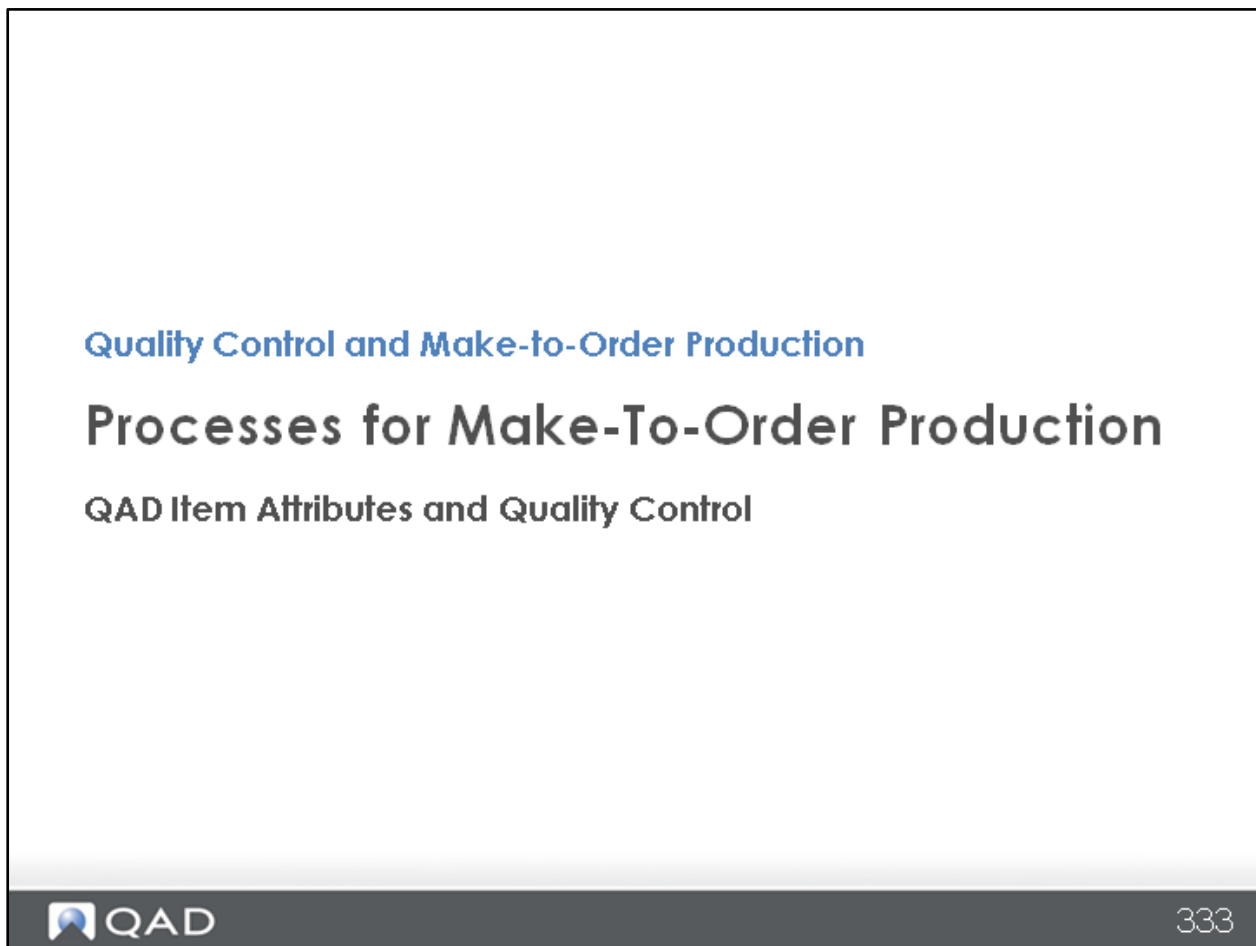
332

This section of training covers how the quality control process covers make-to-order production methods.

The overall challenges of Make-to-Order involve the difficulty of meeting the unique specifications of customers.

QAD EE's quality control functionality offers options to meet these needs.

Processes for Make-To-Order Production



The following processes show how functions can be used to support make-to-order manufacturing

Fundamental Make-to-Order Tasks

Quality Control and Make-to-Order Production

Fundamental Make-to-Order Tasks

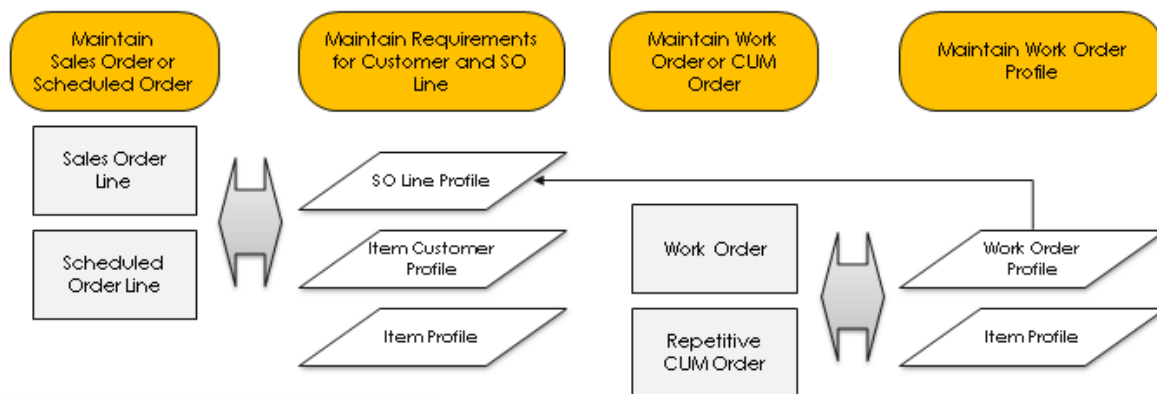
- Capture and document customer requirements for an order line
- Maintain production order with requirements for a customer order line
- Verify quality of production quantities to test specifications and customer specifications
- Monitor conformance of inspected inventory to customer order line specifications

Manage Orders and Customer Requirements

Quality Control and Make-to-Order Production

Manage Orders and Customer Requirements

- Use item customer, SO line, and work order (or CUM order) profiles to manage requirements



There are three groups of profiles which assist you in managing customer requirements.

The item customer profile deals generally with specifications unique to a customer. The SO line and scheduled order line profiles deal with specifications unique to a sales transaction. Finally, work order and CUM order profiles deal with specifications unique to production orders.

Fundamental Make-to-Order Tasks

Quality Control and Make-to-Order Production

Fundamental Make-to-Order Tasks

- **Capture and document customer requirements for an order line**
- Maintain production order with requirements for a customer order line
- Verify quality of production quantities to test specifications and customer specifications
- Monitor conformance of inspected inventory to customer order line specifications

Customer Specification for Bottling Date

Quality Control and Make-to-Order Production
Customer Specification for Bottling Date

Processes x | Maintain Item Customer Profile x | Profile Attributes x

Maintain Item Customer Profile | Customer specification for attributes

Attribute	Format	Source	Status	Print	Active
MM/DD/YY	Item	Active	yes		yes
MM/DD/YY	Customer	Active	yes		yes
x(50)	Customer	Active	yes		yes

Date Attribute Specification

Default Value: TranDate - Interval Value(Day): 1
 1/9/2014

Specification Type: Sys Date

Specification: Not more than 60 days before ship date

Test:
 Test Method:
 Value Required: Validation:
 Edit Specification:
 Reference:

Minimum Date: TranDate - Interval Value(Day): 60
 Transaction Date - 60 Days

Minimum Inclusive:
 Maximum Date: N/A Interval Value(Day): 0
 N/A
 Maximum Inclusive:

QAD 337

The above graphic shows an attribute within the Maintain Item Customer Profile browse collection.

This attribute has a specification unique to that customer.

Sales Order with Attribute Visibility

Quality Control and Make-to-Order Production

Sales Order with Attribute Visibility

The screenshot shows a web browser window with the following elements:

- Browser Tabs:** Monitor Materials for Sales, Sales Order Print - Viewer
- Page Title:** Sales Order Print
- QAD Logo:** East Hanover, NJ 07950, USA - TAX PURPOSE
- Sales Order Header:** Sold To, Ship To, Purchase Order (10C1000)
- Customer Information:** Sold To (Wal-Mart, Bentonville, AR), Ship To (Wal-Mart, Bentonville, AR), Attention: Samuel Green
- Order Details:** Salesperson: John Hunter, Credit Terms: 30 days after invoice date, Ship Via: FEDX, FOB Point, Resale, Currency: USD
- Item Table:**

Ln	Item Number	Due Date	Quantity Ordered	Price	Extended Price
1	04510	3/10/2014	40.0 EA	12.50	500.00
- Attributes and Specifications:**

Attribute	Specification	Source
Cultivar	Arbequina, Frantoio, Leccino, Lucca, Picholine,	Item
Production Date		Item
Bottling Date	Not more than 60 days before ship date	Customer

Annotations in the image include a callout box for "Sales Order Print" pointing to the browser tab, and another callout box for "Customer specification" pointing to the attribute table.

Page 1 of 3 Zoom: 100%

QAD 338

To meet the attribute needs of customers, QAD EE allows you to print attributes on sales orders. This provides documented notification of attribute data within your existing documentation infrastructure.

Fundamental Make-to-Order Tasks

Quality Control and Make-to-Order Production

Fundamental Make-to-Order Tasks

- Capture and document customer requirements for an order line
- **Maintain production order with requirements for a customer order line**
- Verify quality of production quantities to test specifications and customer specifications
- Monitor conformance of inspected inventory to customer order line specifications

Work Order Profile with SO Line

Quality Control and Make-to-Order Production

Work Order Profile with SO Line

- Create a work order profile to capture customer requirements for a specific sales order line

The screenshot shows the 'Maintain Work Order Profile' window in the QAD software. The window title is 'Maintain Work Order Profile'. The main area displays a table with two rows of data for 'Extra Virgin 500 ml Olive C'. The second row is selected, and its details are shown in a form below. The form includes fields for 'Sales Order' (SO20010), 'Line' (1), 'Item Number' (04510), 'Site' (10-400), 'Status' (RELEASED), and 'Reference'. Callout boxes highlight the 'Maintain Work Order Profile' window title and the 'Sales Order' field.

Number	Description	Work Order: 1013	WO ID: 2336682
0	Extra Virgin 500 ml Olive C	Sales Order: SO20010	Line: 1
0	Extra Virgin 500 ml Olive C	Item Number: 04510	Extra Virgin 500 ml
		Site: 10-400	Status: RELEASED
		Reference:	

Work order profiles can be linked to a specific sales order line.

This connects the attributes on the sales order, as well as those from the customer named in the sales order.

Work Order Profile Attributes

Quality Control and Make-to-Order Production

Work Order Profile Attributes

- Visibility of customer and sales order specifications for a work order or CUM order

Maintain Work Order Profile

Work Order ID	Description	Site	Work Order ID	ID	Type	Work Order Status	Order Date	Due Date	Quantity Ordered	Prod Line
04510	Extra Virgin 500 ml Olive Oil	10-400	1013	2036602	R		1/30/2014	1/31/2014	200.0	30
04510	Extra Virgin 500 ml Olive Oil	10-400	214101	2014002	R		1/17/2014	3/5/2014	200.0	30

Work Order Profile Attributes

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Specification
10	100200	Cultivar Text 30	Cultivar	Character	x(30)	Item	Active	yes	Lot	Arbequina, Frantoio, Leccino, Lucca, Pict
70	100340	Production Date	Production Date	Date	MM/DD/YY	Item	Active	yes	Lot	
90	100139	Bottling Date	Bottling Date	Date	MM/DD/YY	Customer	Active	yes	Lot	Not more than 60 days before ship date
95	100189	Country of Origin Text 50	Country of Origin	Character	x(50)	Customer	Active	yes	Lot	US, ES, IT, AU

Customer specifications

The graphic above demonstrates a work order linked to a sales order. Observe that several attributes have a Source value of Customer. This indicates that the customer named in the sales order has additional specifications.

Visibility of Component Attributes

Quality Control and Make-to-Order Production

Visibility of Component Attributes

The screenshot displays a web browser window with the QAD logo and the title "Work Order Release/Print". The browser tabs include "Customer Profile", "Work Order Maintenance", "Maintain Work Order Profile", and "Work Order Release/Print - Vie...". The page content is as follows:

Work Order Picklist

Work Order ID	1013	Issue Date	1/30/2014
Batch	2336682		
Item Number	04510	Rev	Work Order Due Date 1/31/2014
Extra Virgin 500 ml Olive Oil			
Remarks		Sales/Job	
Qty Ordered	200.0	EA	Deliver To

Item Number	Rev	Site Location	Lot/Serial Ref	Required Qty to Issue	UM	Issued By
70210		10-400		1.0	HL	
Extra Virgin Olive Oil						
<u>Attribute</u>		<u>Specification</u>				<u>Source</u>
Cultivar		Arbequina, Frantoio, Leccino, Lucca, Picholine,				Item
Free Fatty Acid		Less than 0.8%				Item
Peroxide		Less than 20 meq/kg				Item
Poly phenols		Less than 5 mg / 10 gm				Item
Specific Gravity		0.9150-0.9180 @ 15.5°C				Item
Viscosity		84 +/- 1.0 mPa.s (84 cP) at 20°C				Item
Density		920 +/-2 kg/m3 @ 20°C or 7.8 lbs/U.S. Gallon				Item
Processing Temperature		Less than 86°F [30°C]				Item

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As with sales orders, attribute data can be printed on work orders. This allows you to keep attribute data visible within your existing documentation flow.

Visibility of Attribute Specifications

Quality Control and Make-to-Order Production

Visibility of Attribute Specifications

The screenshot shows a web browser window displaying the QAD 'Work Order Release/Print' interface. The browser tabs include 'Customer Profile', 'Work Order Maintenance', 'Maintain Work Order Profile', and 'Work Order Release/Print - Vie...'. The page title is 'Work Order Release/Print' and the QAD logo is visible. The interface shows a 'Work Order Profile' for Work Order 1013, ID 2336682, with a quantity ordered of 200.0. A 'Reference' section shows 'Sales Order SO20010 Line 1'. A table below lists attribute specifications with their sources.

Attribute	Specification	Source
Cultivar	Arbequina, Frantoio, Leccino, Lucca, Picholine,	Item
Production Date		Item
Bottling Date	Not more than 60 days before ship date	Customer
Country of Origin	US, ES, IT, AU	Customer

Annotations in the image include:

- A box labeled 'Traceability to Sales Order' with an arrow pointing to the 'Sales Order SO20010 Line 1' reference.
- A box labeled 'Customer specifications' with an arrow pointing to the 'Customer' source column in the attribute specifications table.

QAD logo and page number 343 are visible at the bottom of the screenshot.

Attributes can be selected and printed both for components as well as final products.

Fundamental Make-to-Order Tasks

Quality Control and Make-to-Order Production

Fundamental Make-to-Order Tasks

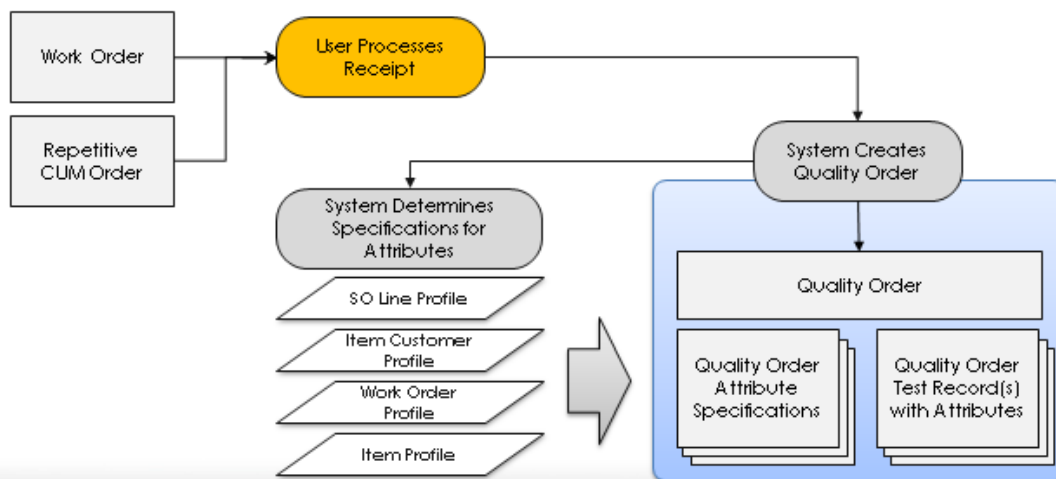
- Capture and document customer requirements for an order line
- Maintain production order with requirements for a customer order line
- **Verify quality of production quantities to test specifications and customer specifications**
- Monitor conformance of inspected inventory to customer order line specifications

Produce and Receive Quantities

Quality Control and Make-to-Order Production

Produce and Receive Quantities

- Quality orders from work orders gain attributes from SO lines and item customer profiles as well as test specifications



After receiving a lot from production which triggers a quality order, the quality order gains attributes. These come from the test specification as well as from matching profiles.

Quality Order with Customer Specifications

Quality Control and Make-to-Order Production

Quality Order with Customer Specifications

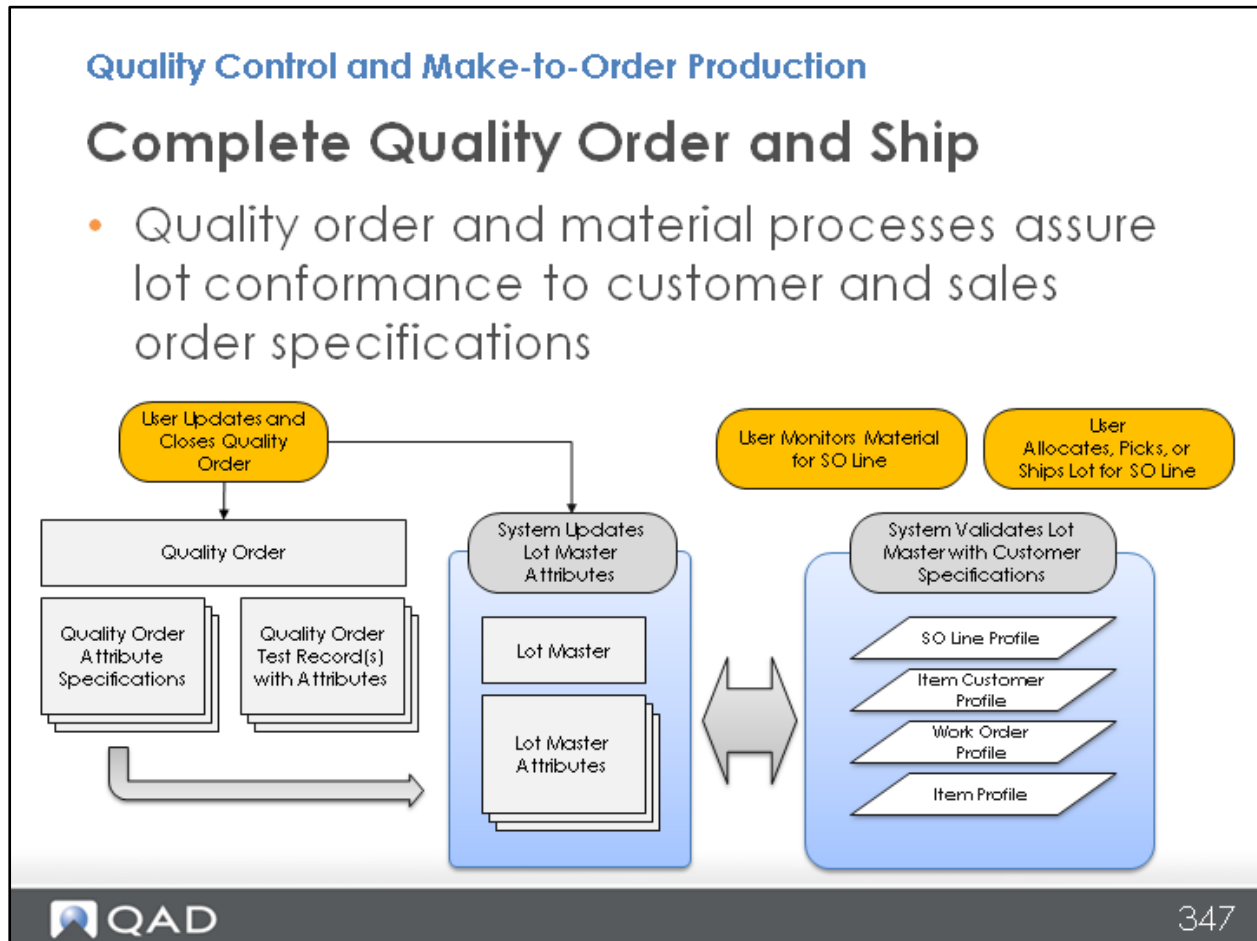
- Customer and sales order line specifications visible on quality order

The screenshot shows the QAD software interface. The main window is titled 'Maintain Quality Order' and displays a table of quality orders. A secondary window, 'Quality Order Attributes', is open below it, showing a detailed table of specifications for a quality order. The 'Quality Order Attributes' table has the following data:

Sequence	Attribute ID	Source	Label	Test ID	Description	Test Method	Value	UM	Specification	Spe
10	100200	Item	Cultivar				Frantoio, Leccino, Taggiasca		Arbequina, Frantoio, Leccino, Lucca, Picholine, Incl.	
30	100321	Test	Peroxide	T04510	EV Olive Oil Lab	EVT100-PX	0 *	mg/kg	Less than 20 meq/kg	Targ
40	100331	Test	Polyphenols	T04510	EV Olive Oil Lab	EVT100-PP	0 *	mg/gm	Less than 5 mg / 10 gm	Targ
70	100340	Item	Production Date				1/29/2014			Nonv
90	100139	Customer	Bottling Date				1/29/2014 *		Not more than 60 days before ship date	Mini
95	100189	Customer	Country of Origin						US, ES, IT, AU	Incl.

The above graphic demonstrates a quality order with multiple attribute sources. Observe that the Source values come from item profiles, test specifications, and item customer profiles.

Complete Quality Order and Ship



In addition the multiple attribute sources that QAD EE supports, it also supports unique customer specifications by providing options for monitoring materials.

After closing a quality order for a sales order, the user must validate that the right materials available and ship them.

Fundamental Make-to-Order Tasks

Quality Control and Make-to-Order Production

Fundamental Make-to-Order Tasks

- Capture and document customer requirements for an order line
- Maintain production order with requirements for a customer order line
- Verify quality of production quantities to test specifications and customer specifications
- **Monitor conformance of inspected inventory to customer order line specifications**

Monitor Materials for Sales

Quality Control and Make-to-Order Production

Monitor Materials for Sales

- Monitor available and allocated inventory for conformance to customer specifications
- Drill down to determine why a lot is non-conforming

The screenshot displays the QAD Monitor Materials for Sales interface. It is divided into three main sections:

- Sales Order Lines:** A table showing sales orders with columns for Sales Order, Order Date, Sold-To, Name, Ship-To, Action Status, Line, Item Number, Description, UM, Consignment, Scheduled, Complete Status, and Due Date.
- Available Item Lots:** A table showing available item lots with columns for Item Number, Item Description, Site, Location, Lot/Serial, Reference, Unit of Measure, Quantity Shipped, Quantity Available, Quantity On Hand, Conforming, and Inventory Status.
- Lot Attributes with Customer and Order Specifications:** A table showing lot attributes with columns for Sequence, Attribute ID, Description, Label, Attribute Value, UM, Validation, Result, Source, Specification, Reference, Date, and Format.

The QAD logo is visible in the bottom left corner, and the number 349 is in the bottom right corner.

The Monitor Materials for Sales browse collection provides a more thorough view of materials for orders than View Item Lots. The conformance of attributes calculates dynamically based on the current values and specifications which relate to these attributes.

Sales orders are organized here to provide insight into current available allocations. Use this browse collection to plan shipping allocations.

Exercises

Quality Control and Make-to-Order Production

Exercises

- Objective
 - Complete the key steps for capturing customer deviations to specifications and using them to drive the specifications for production and quality control
- Steps
 - Print sales order SO20011
 - Find the work order for Item 01050 for site 10-100 with quantity = 20
 - Create a work order profile for the order and reference and reference sales order SO20011 and line 4
 - Print the work order with its attribute values

Exercises

Quality Control and Make-to-Order Production

Exercises

- Steps (continued)
 - Receive a lot with quantity = 10 from the work order
 - Find the quality order for the work order receipt
 - Enter conforming values for test record attributes and close the test record
 - Enter conforming values for the quality order attributes and close the quality order
 - Use Monitor Materials for Sales and View Item Lots
 - How does the item lot and its attribute values measure up to the customer requirements?

CHAPTER 12

Certificate of Analysis

Certificates of Analysis

QAD Item Attributes and Quality Control

Certificates of Analysis

Functional Task-Based Training



Our Passion. Your Advantage.

Lesson Objectives

Certificates of Analysis

Lesson Objectives

- Print a certificate of analysis (COA) for a lot where
 - Results are from an approved document, either
 - Closed quality order
 - Closed lot attribute order
- Configure profiles to determine the attributes and categories that appear on a COA



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When you finish this section, you will be able to build certificates of analysis. You will know how to mark attributes for inclusion in certificates. You can then print certificates including those attributes.

This provides control over your reporting process. When complete, you can create comprehensive reports on your quality control process from within QAD EE.

What Is a Certificate of Analysis?

Certificates of Analysis

What Is a Certificate of Analysis?

- Evidence of quality control and compliance for material
- Document of the test results for material characteristics, specifications, and acceptance criteria



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This section of training covers certificates of analysis. These printed reports provide documentation for a lot's attributes and information on how they were obtained. These are the published product of the quality control process.

Completing certificates of analysis combines the data types that you have used so far. A certificate provides a full view of the quality control process. You can see each subject that you have covered present in the final product.

Main Business Cases

Certificates of Analysis

Main Business Cases

- Print a certificate of analysis, without regard to a specific customer order, for an item lot
- Print a certificate of analysis for a sales order line item, for an item lot



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There are two common circumstances for a certificate analysis that this training focuses on. The first involves printing common certificates for a lot, not specific to a certain order. The second involves a certificate made for a specific sales order.

Both print based off of closed quality orders.

Setup Requirements to Print Certificates

Certificates of Analysis

Setup Requirements to Print Certificates

QAD Item Attributes and Quality Control



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Certificate of Analysis Control

Certificates of Analysis

Certificate of Analysis Control

- Parameters determine values for print parameters for Certificate of Analysis functions

Processes x Certificate of Analysis Control x

Actions Copy Print Preview

Certificate of Analysis Control

Certificate of Analysis Sequence ID: COA

Print Grade:

Print Assay Percent:

Print Expiration Date:

Print Manufacture Date:

Leave as **not selected** to exclude inventory detail attributes and the 'fixed' manufacture date from printing on a certificate of analysis

QAD 357

The Certificate of Analysis Control browse offers general options for the printing of Certificates of Analysis.

These deal with the printing of certain regulatory attributes as well as a fixed manufacture date. For the moment, leave these unchecked.

Setup Attributes 04510 Olive Oil

Certificates of Analysis

Setup Attributes 04510 Olive Oil

- Verify that attributes are configured with Certification "yes" on an item profile

Maintain Item Profile

Item Profile without test attributes
Attributes have certificate = no

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Certification	Certificate Category	Input M
10	100000	Cultivar Text 30	Cultivar	Character	x(30)	Item	Active	yes	Lot	no		User
70	100340	Production Date	Production Date	Date	MMDDYY	Item	Active	yes	Lot	no		User
90	100139	Bottling Date	Bottling Date	Date	MMDDYY	Item	Active	yes	Lot	no		User
95	100189	Country of Origin Text50	Country of Origin	Character	x(50)	Item	Active	yes	Lot	no		User

In order to print on certificates of analysis, attributes must be on the item's profile and have a Certification value of Yes.

This often requires you to copy attributes from a test specification to an item profile.

Also specify a Certification Category to organize attribute specifications and results by category.

Copy Test Attributes to 04510

Certificates of Analysis

Copy Test Attributes to 04510

- For item 04510 attributes on a test specification need to be copied to the item profile

Maintain Item Profile

Copy attributes from a test specification

Item Number: 04510
Extra Virgin 500 ml

Site:

Reference:

Copy Attributes from Test Specification:

Copy Attributes from Item Profile:

Copy Attributes from Test Specification

Copy from Test ID: T04510
Revision: A

Sequence	Attribute	Label	Copy
10	100200	Cultivar	
70	100340	Production Date	
90	100139	Bottling Date	
95	100189	Country of Origin	

QAD 359

To copy attributes to an item profile, first enter the Maintain Item Profile browse. Select and Modify the attribute. Check the Copy Attributes from Test Specification option and click Next.

Select the correct Test ID and Revision, and click Next.

Verify that the attributes are correct and confirm the copy.

Certification and Certification Category

Certificates of Analysis

Certification and Certification Category

- Set up attributes with Certification parameter to “yes” and optionally specify a Certification Category

The screenshot shows the 'Maintain Item Profile' window in QAD. On the left, a table lists attributes with columns for Sequence, Attribute ID, and Description. The attribute with ID 100321 is selected. On the right, a detailed view for this attribute is shown, including fields for Label, Description, Type, Format, Sequence, Print, Level, Input Method, Certification, Certification Category, and Label. The 'Certification' checkbox is checked, and the 'Certification Category' is set to 'ChemicalAnalysis'.

Sequence	Attribute ID	Description
10	100200	Cultivar Te
70	100340	Production
90	100139	Bottling Da
95	100189	Country of
125	100321	Peroxide In
135	100331	Polyphenol

Attribute ID: 100321
 Label: Peroxide
 Description: Peroxide Integer
 Type: Integer
 Format: >>>>>>9
 Sequence: 125
 Status: Active
 Print:
 Level: Lot
 Input Method: System
 Certification:
 Certification Category: ChemicalAnalysis
 Label: Chemical Analysis

Each attribute can have a Certification Category. These determine how the attributes are sorted on a certificate of analysis.

Certification attributes without a Certification Category will not be placed under a specific category on a certificate of analysis.

Verify Profile Attributes

Certificates of Analysis

Verify Profile Attributes

- Check that the attributes for an item are correctly configured

The screenshot shows the 'Maintain Item Profile' window in QAD. The main table lists items with columns for Item, Description, Site, and Reference. Below this, the 'Profile Attributes' window is open, showing a table of attributes. The table has columns for Sequence, Attribute ID, Description, Label, Datatype, Format, Source, Status, Print, Level, Certification, and Certificate Category. The 'Certification' column shows 'yes' for several attributes, and the 'Certificate Category' column shows 'ChemicalAnalysis' for some.

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Certification	Certificate Category
10	100200	Cultivar Text 30	Cultivar	Character	x(30)	Item	Active	yes	Lot	yes	
70	100340	Production Date	Production Date	Date	MM/DD/YY	Item	Active	yes	Lot	yes	
90	100139	Bottling Date	Bottling Date	Date	MM/DD/YY	Item	Active	yes	Lot	yes	
100	100189	Country of Origin Text50	Country of Origin	Character	x(50)	Item	Active	yes	Lot	yes	
125	100321	Peroxide Integer	Peroxide	Integer	>>>.>>>.>>9	Item	Active	yes	Lot	yes	ChemicalAnalysis
135	100331	Polyphenols Integer	Polyphenols	Integer	>>>.>>>.>>9	Item	Active	yes	Lot	yes	ChemicalAnalysis

The above graphic now shows that the item profile contains a number of certification attributes. They have a Certification value of Yes, and several have a Certificate Category value.

These attributes will print on certificates of analysis for lots matching this item.

Exercises

Certificates of Analysis

Exercises

- Objective
 - Understand the basic steps for defining the attributes that should print on a certificate of analysis
- Duplicate the steps on the preceding pages for item 04510 Extra Virgin 500 ml Olive Oil to print specifications and results for
 - 100200 Cultivar
 - 100139 Bottling Date
 - 100189 Country of Origin
- Leave the Certificate Category blank

Printing and Reprinting Certificates

Certificates of Analysis

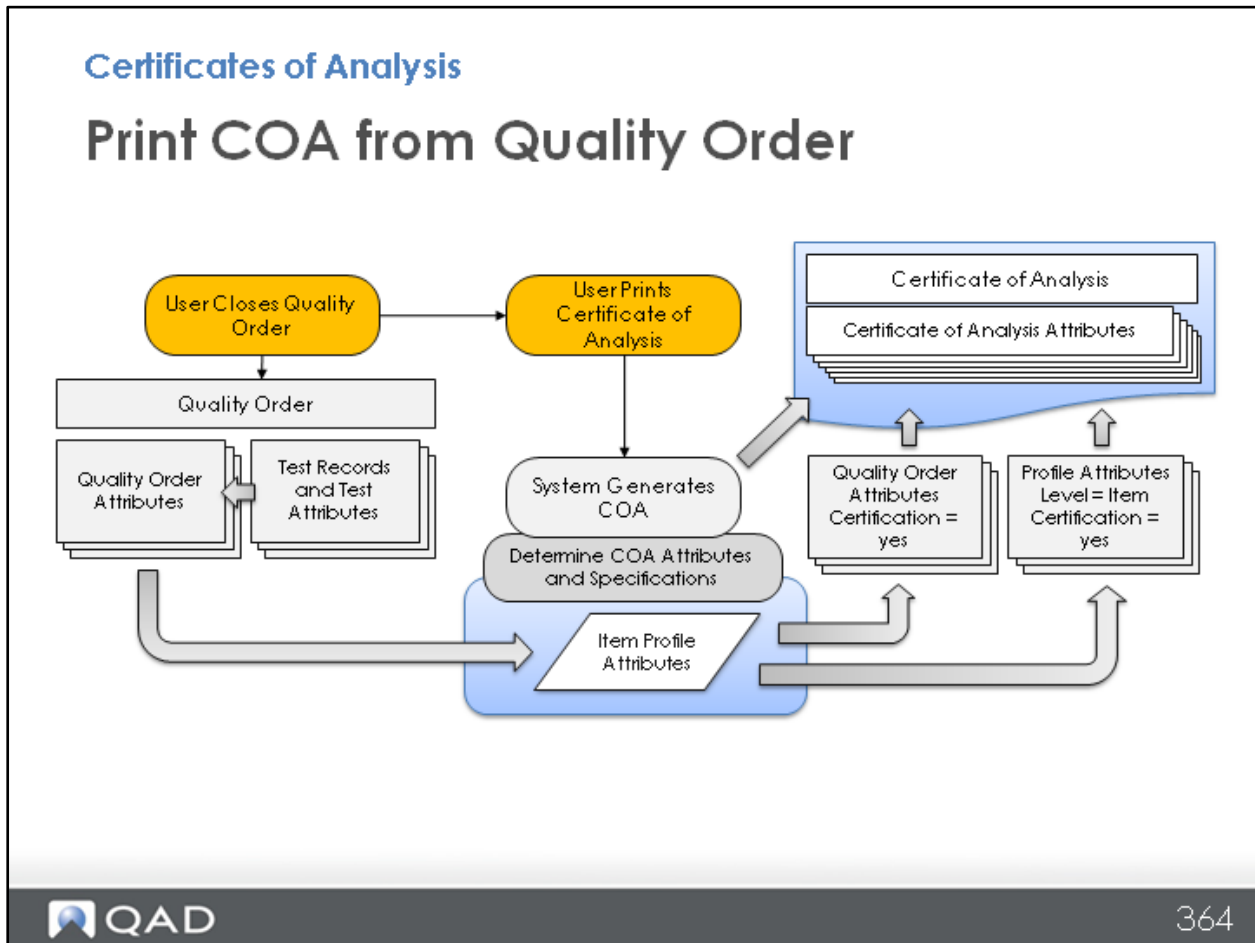
Printing and Reprinting Certificates

QAD Item Attributes and Quality Control



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Print COA from Quality Order



Users can print certificates of analysis off of closed quality orders. These contain item level attributes from the item profile and lot level attributes from the quality order. In each case, the attributes must have a Certification Value of Yes.

Reports Drop Down for Certificates

Certificates of Analysis

Reports Drop Down for Certificates

- Use the Reports drop down widget for the quality order or lot attribute order

The screenshot displays two windows from the QAD software. The top window is titled 'Maintain Quality Order' and shows a table with columns: Lot, Sublot, Qty, Quality Order, Open, Type, Status, Quality Result, and Completed By. The bottom window is titled 'Quality Order Attributes' and shows a table with columns: Sequence, Attribute ID, Source, Label, Test ID, Description, Test Method, Value, UM, and Specification.

Sequence	Attribute ID	Source	Label	Test ID	Description	Test Method	Value	UM	Specification
10	100200	Item	Cultivar		Frantoio, Leccino, Taggiasca				Arbequina, Frantoio, Leccino
30	100321	Test	Peroxide	T04510	EV Olive Oil Lab	EVT100-PX	15	meq/kg	Less than 20 meq/kg
40	100331	Test	Polyphenols	T04510	EV Olive Oil Lab	EVT100-PP	4	mg/gm	Less than 5 mg / 10 gm
70	100340	Item	Production Date				1/30/2014		
90	100139	Customer	Bottling Date				1/30/2014		Not more than 60 days before
95	100189	Customer	Country of Origin				US		US, ES, IT, AU



365

You can print certificates of analysis for quality orders through the Maintain Quality Order browse collection. Open the Reports drop down menu and select the Certificate of Analysis Print option.

Note:

The Reports option is available only on the Maintain Quality Order and Maintain Quality Order for SO Line. It is not available on the Maintain Quality Order for Production and Maintain Quality Order for Purchasing.

Certificate Print for Simulation

Certificates of Analysis

Certificate Print for Simulation

QAD

Certificate of Analysis
Olives, Fresh
SIMULATION

Certificate	Simulation ID	Certificate Date	2/28/2014	Quality Order	OO14022800001
Item	80220	Lot	FR10220	Reference	
Grade					
Manufacturer	2/28/2014				

	Test Method	Specification	Units	Result
Biological Analysis				
Maturity Index	AG-875	Between 2 - 7 UC Davis		4.50
Chemical Analysis				
Oil	AG-875	Between 16 - 23%		22.00%
Moisture	AG-875	Between 55.0 - 65.0%		59.50%
Acidity	AG-875	Between .19 - .21		0.20
Physical Properties				
Cultivar		Arbequina, Frantoio, Leccino,		Arbequina

Page 1 of 1 Zoom: 100%

QAD 366

After running a certificate of analysis, the system then generates a simulation of the complete certificate. Use this simulation to verify that the certificate runs with the correct attributes.

Attribute measurement appears in the Units column.

Attribute value appears in the Result column.

Certificate Output

Certificates of Analysis

Certificate Output

Quality Order × Sales Order Browse × Maintain Item Profile × Certificate of Analysis Print - VL ×

Refresh

Page 1 100%

Company address data

QMI -USA Division
30 Ridgedale Avenue
East Hanover, NJ 07950
USA - TAX PURPOSE

- Page 1 of 1 - Approved By Kelly Ireland

QAD 367

The footer for each Certificate of Analysis contains identifying information for the printing company and identifies the employee who signed off on the quality order.

Certificate with Customer Order Data

Certificates of Analysis
Certificate with Customer Order Data

Quality Order x Sales Order Browse x Maintain Item Profile x Certificate of Analysis Print - VL... x

Refresh

Page 1 100%

Customer and sales order

Certificate of Analysis
Extra Virgin 500 ml
SIMULATION

Value appears as Result

CERTIFICA	Simulation ID	Certificate Date	1/31/2014	Quality Order	QR140130006
Customer	Wal-Mart	Sales Order	SO20010	Line	1
Item	04510	Lot	EVO-W1001	Reference	

Certificate Category

Certificate Category	Test Method	Specification	Units	Result
Cultivar		Arbequina, Frantoio, Leccino,		Frantoio, Leccino, Taggiasca
Production Date				1/30/2014
Bottling Date		Not more than 60 days before ship		1/30/2014
Country of Origin		US, ES, IT, AU		US
Chemical Analysis				
Peroxide	EVT100-PX	Less than 20 meq/kg	meq/kg	15
Polyphenols	EVT100-PP	Less than 5 mg / 10 gm	mg/gm	4

Measurement appears as Units

Page 1 of 1 Zoom: 100%

QAD 368

Certificates of analysis can print for quality orders which are linked to a certain sales order. In this case, they also print data on the associated customer and sales order line.

Attribute measurement appears in the Units column.

Attribute value appears in the Result column.

Certificate of Analysis Print Controls

Certificates of Analysis

Certificate of Analysis Print Controls

- Update Report Filter Criteria
 - No to print a simulation copy
 - Yes to print permanent copy that can be reprinted
- Reprint Last Certificate
 - No to print a new COA for a quality order
 - Yes to reprint the last COA for a quality order

Exercises

Certificates of Analysis

Exercises

- Objective
 - Understand the basic steps for defining the attributes that should print on a certificate of analysis
- Steps
 - Find the work order for item 05010 Hydration Essentials and receive a lot quantity of 200
 - Find the quality order for the lot created for item 05010
 - Enter conforming values for the test record attributes
 - Close the test records and close the quality order
 - Print two certificates of analysis for the quality order for item 05010
 - One for sales order SO20010 line 3
 - One for sales order SO20011 line 3

Alternate Cases for Lot Attribute Orders

Certificates of Analysis

Alternate Cases for Lot Attribute Orders

- Steps (optional)
 - Print two certificates of analysis from a closed lot attribute order
 - One without specifying a sales order and line
 - One with a valid sales order and line



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In addition to quality orders, you can also print certificates of analysis for lot attribute orders. Consider how the common use cases which you have covered for quality orders could also apply to quality orders.

Discussion

Certificates of Analysis

Discussion

- How would you advise an implementation team if they said certificates of analysis should never be printed from lot attribute orders?

CHAPTER 13

Integration with QAD QMS for CAPA/NCR

Integration with QAD QMS for CAPA/NCR

QAD Item Attributes and Quality Control

Integration with QAD QMS for CAPA/NCR

Functional Task-Based Training



Our Passion. Your Advantage.

What is CAPA and NCR?

Certificates of Analysis

What is CAPA and NCR?

- CAPA
 - Acronym for corrective action and preventive action
 - Describes the specific activities to address and to prevent a non-conformance
- NCR
 - Acronym for non-conformance report
 - A report that includes analysis for a material non-conformance and a statement of actions that should be taken as a result of the non-conformance

Integration Objectives

Certificates of Analysis

Integration Objectives

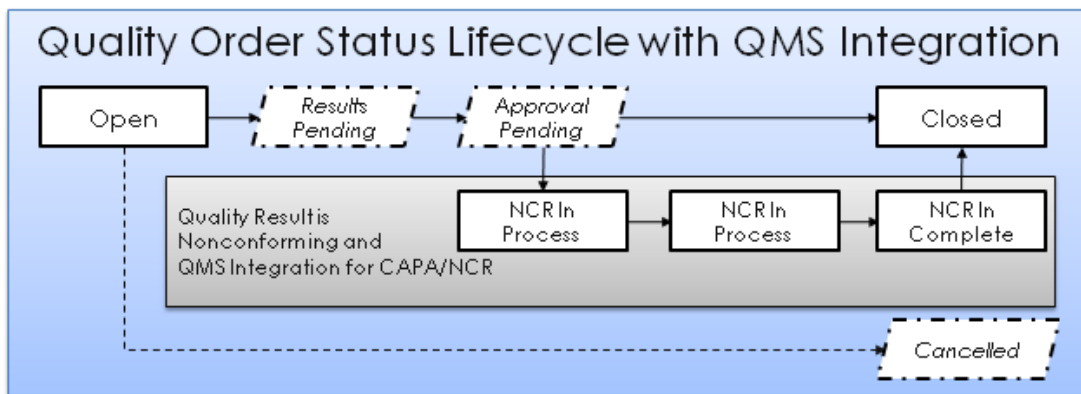
- Objective
 - Eliminate redundancy and duplicate data entry
 - Assure the initiation of nonconformance reports
- QAD Enterprise Applications
 - Quality orders with quality result of nonconforming provide the source data for NCR
- QAD QMS
 - Manage NCR and CAPA

Quality Order Status with NCR / CAPA

Certificates of Analysis

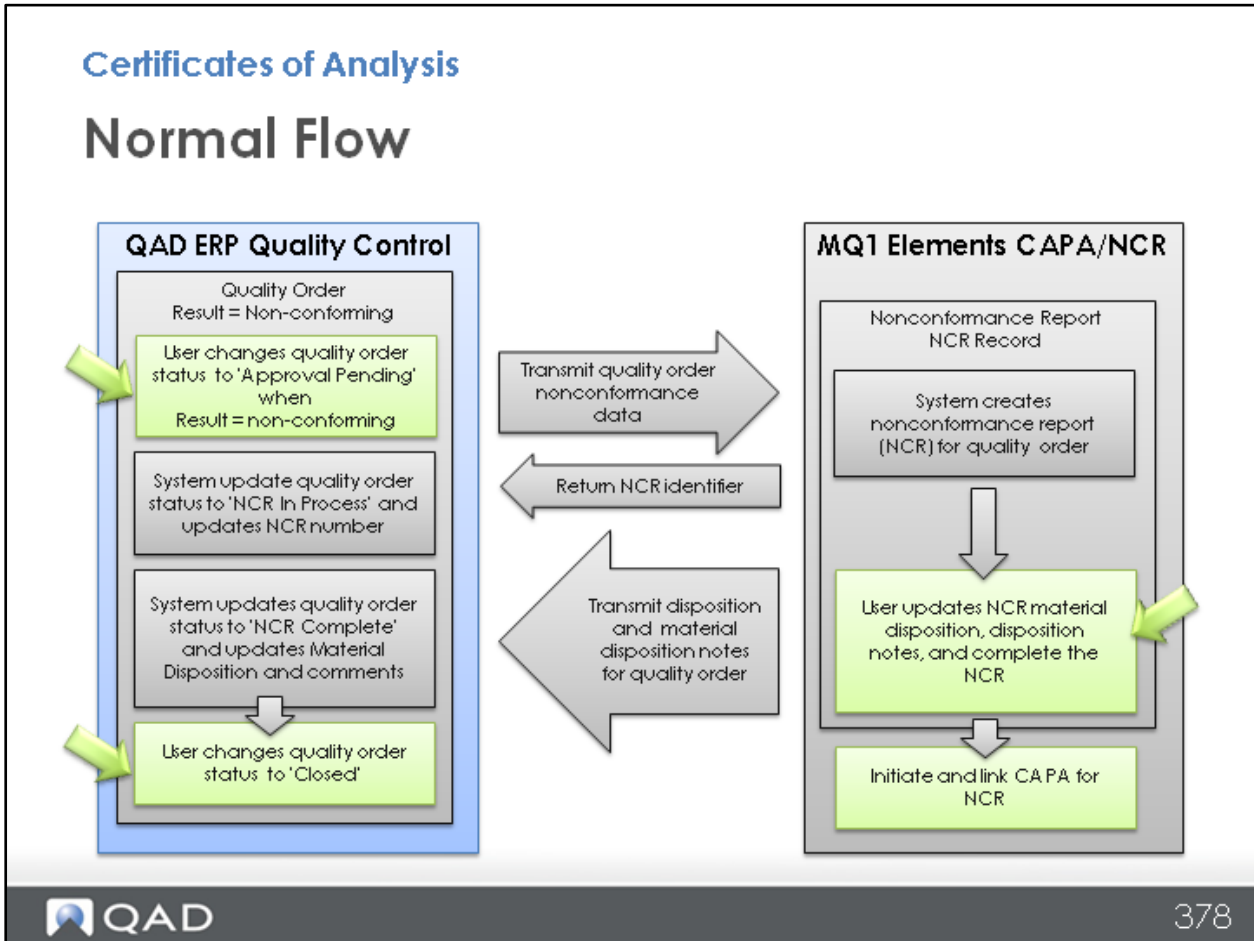
Quality Order Status with NCR / CAPA

- Process initiated when
 - Quality order status is changed to Approval Pending and
 - Quality Result is nonconforming



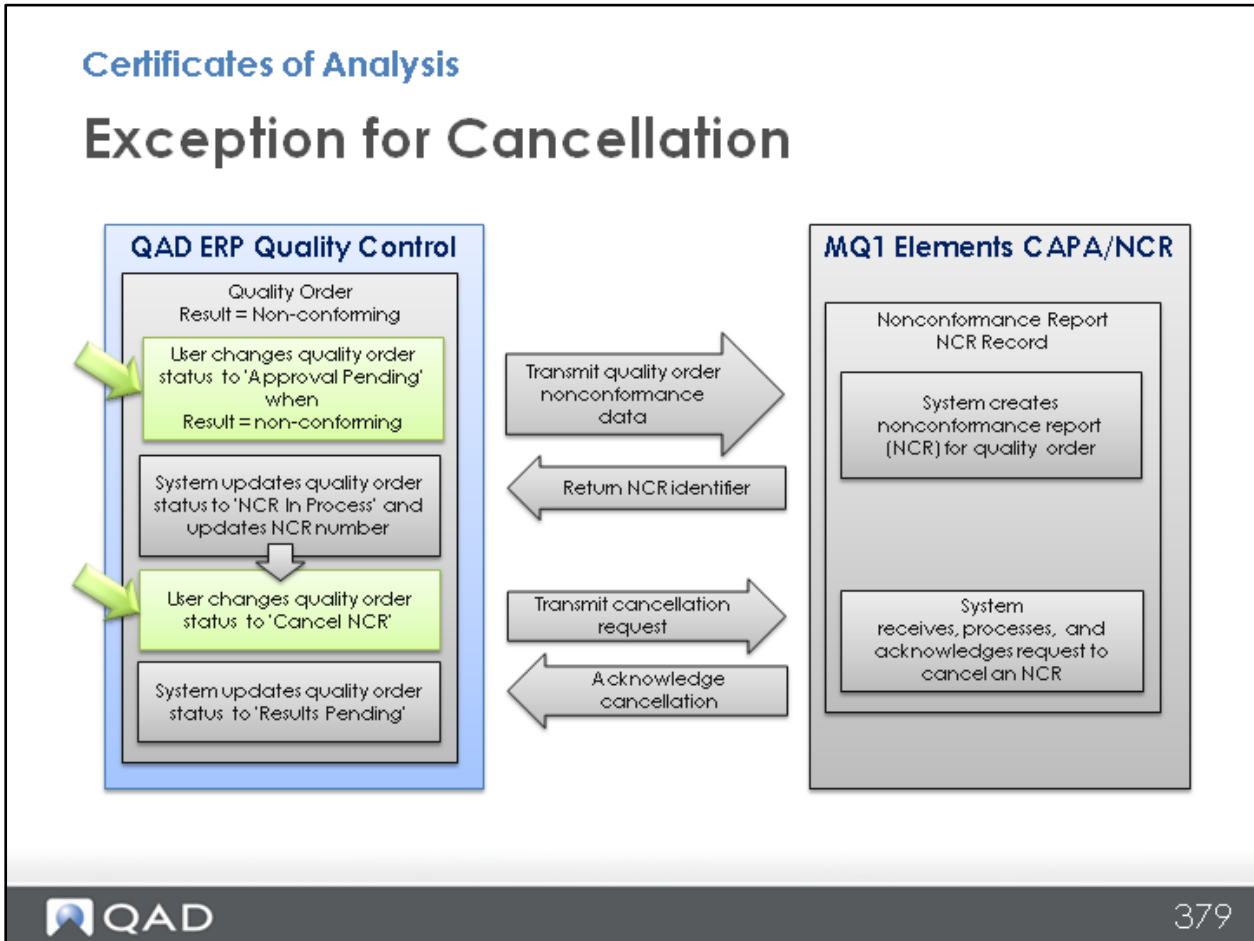
QAD transmits information for the quality order and nonconforming attributes to QAD QMS

Normal Flow



Quality Control provides
 Non-conformance data for item and attribute(s)
 QAD QMS provides
 NCR number and material disposition

Exception for Cancellation



The ability to cancel an NCR is provided in the event that a quality order status was accidentally changed to Approval Pending and its result was non-conforming

CHAPTER 14

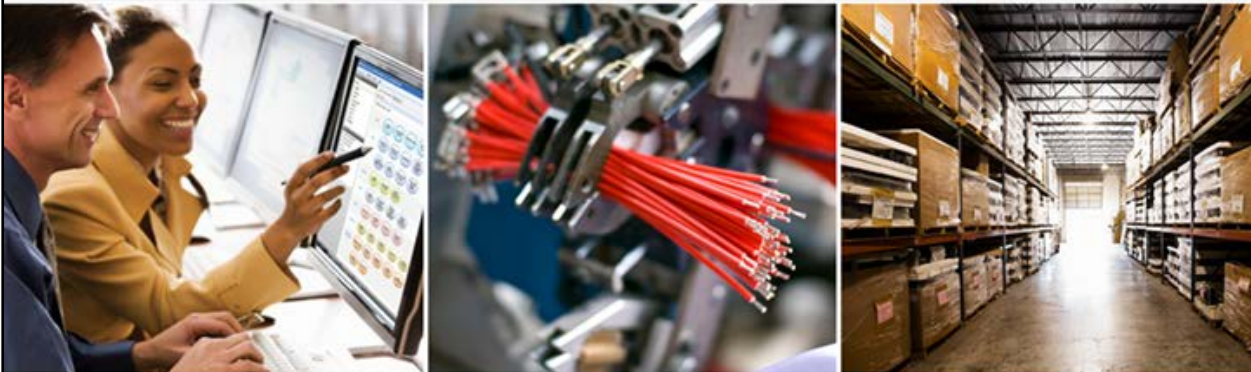
Troubleshooting

Troubleshooting

QAD Item Attributes and Quality Control

Troubleshooting

Functional Task-Based Training



Our Passion. Your Advantage.

Topics

Troubleshooting

Topics

- Phased implementation and changeover from the original quality module
- Transaction errors
- Unexpected result outcomes

Maintenance and transactions functions are included in the release but must be added to the menu manually

Transaction Errors

Troubleshooting

Transaction Errors

QAD Item Attributes and Quality Control



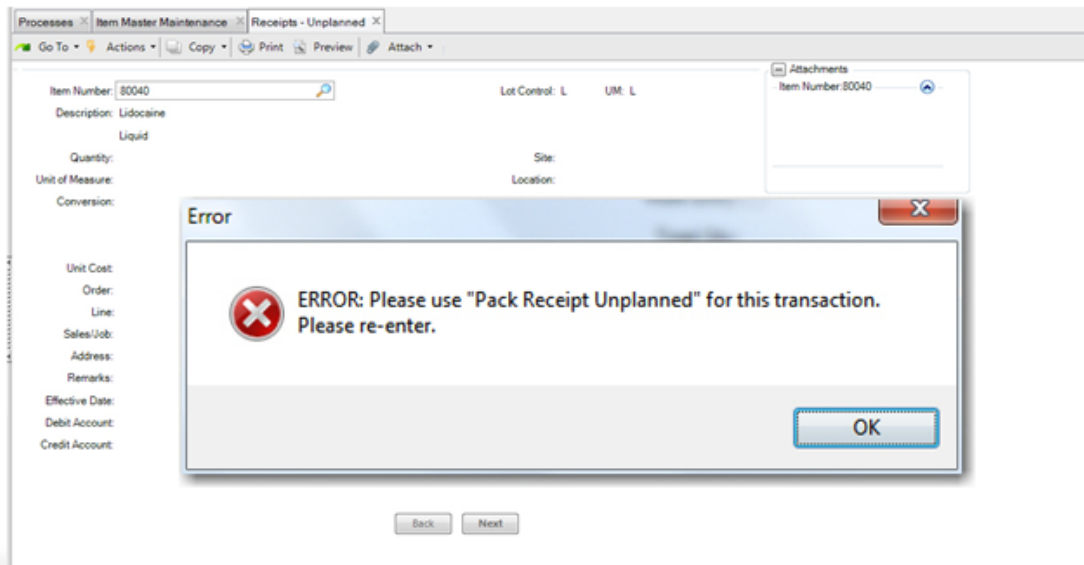
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Error with Inventory and Allocation Functions

Troubleshooting

Error with Inventory and Allocation Functions

- Functions for allocations, picking, and inventory result in an ERROR condition



Errors will occur when an item is set up with Serial Control = "Mandatory"

Serialization Errors

Troubleshooting

Serialization Errors

- New item master parameter for Serialization is not supported with the 'add-on' – Serial Control parameter should be 'N'ever

The screenshot shows the 'Item Master Maintenance' form for item 04510. The 'Item Inventory Data' section is expanded, showing the 'Serial Control' dropdown menu set to 'Never'. A blue callout box with the text 'Serial Control must be Never' has an arrow pointing to the 'Never' option. Other fields include 'Lot Control' set to 'L', 'Site' set to '10-400', and 'Location' set to '010'. The 'Attachments' pane on the right shows the item number and description.

The Serial Control parameter is used by the Serialization module which is not yet available. It requires different sets of functions for inventory transactions, allocations, and picklists that support 'Pack' quantities.

Unexpected Outcomes – Test Results

Troubleshooting

Unexpected Outcomes – Test Results

QAD Item Attributes and Quality Control



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Possible Outcomes

QAD Item Attributes and Quality Control

Possible Outcomes

- Test Record result does not appear to be consistent with the results for its attributes
- Quality Order or Lot Attribute order result does not appear to be consistent with the results for its attributes
- Lot Master result in View Item Lots does not appear to be consistent with the results for its attributes

General Problem

QAD Item Attributes and Quality Control

General Problem

- A lot, a quality order, or a test record has a result of 'Conforming' and one or more of its attributes have result of 'Non-Conforming'
- Why?

Root Cause

Quality Control and Make-to-Order Production

Root Cause

- The attribute parameters that determine the result for the attribute and the result for a lot, a quality order, lot attribute order, or test record are independent
 - Specification type and specification details
 - Validation

Root Cause Details

QAD Item Attributes and Quality Control

Root Cause Details

- Specification parameters
 - Specification type and specification details determine whether the value for an attribute has result of 'conforming' or 'non-conforming'
- Validation
 - Validation determines whether the attribute result is included when determining the result for an item lot, quality order, lot attribute order, or test record

The Conflict

Quality Control and Make-to-Order Production

The Conflict

- Specification type can be set up to determine that an attribute is non-conforming
- Validation can be setup to disregard the result for an attribute

Why Setup an Attribute That Way?

QAD Item Attributes and Quality Control

Why Setup an Attribute That Way?

- Collect values for the attribute to monitor process data
- May not have determined whether the attribute value has an impact on quality
- Provide visibility of values and whether or not they are conforming and not have the attribute result determine whether a test record or lot is conforming or non-conforming

Why Setup an Attribute That Way?

QAD Item Attributes and Quality Control

Why Setup an Attribute That Way?

- May not be certain that the measurements for the attribute value are reliable or accurate
- The attribute value may not impact the quality of the lot, for example the attribute may store the record of the carrier or type of container used for the material

Original Quality Module

Troubleshooting

Original Quality Module

QAD Item Attributes and Quality Control



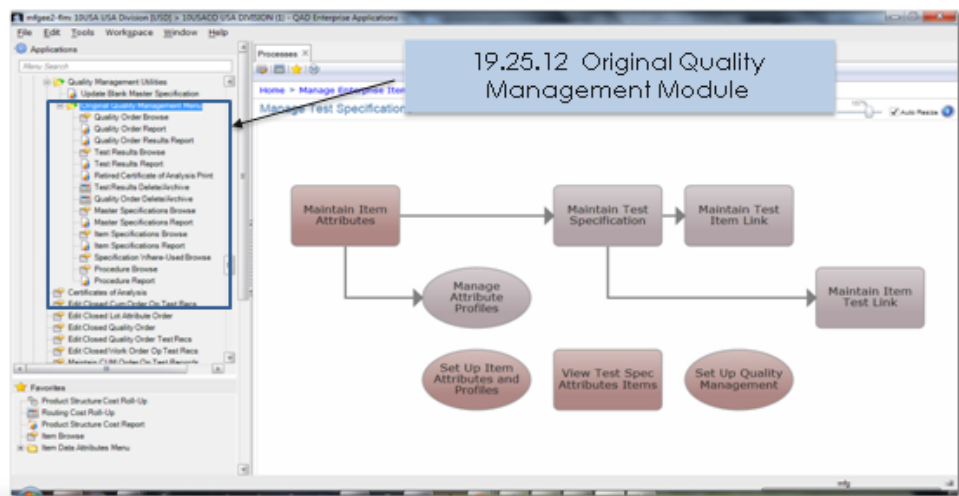
393

Location of Original Quality Module

Troubleshooting

Location of Original Quality Module

- Prior to 2015 EE, the SAQ 19.25.12 menu for the original quality management module only includes functions for browses and reports



Many but not all functions in the original Quality Management module can be found on menu 19.25.12

Missing Maintenance Functions

Troubleshooting

Missing Maintenance Functions

- Quality Management maintenance and transaction entry functions
 - Are included in releases prior to 2015 EE
 - Have been removed from the menu to prevent unintended use
 - Must be added to the menu manually

Maintenance and transactions functions are included in the release but must be added to the menu manually

Questions?

QAD Item Attributes and Quality Control

Questions?

- Troubleshooting



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CHAPTER 15

IAQ Technical Reference

Overview

IAQ Technical Reference

Overview

- Standard QAD EE Pieces
 - Progress
 - Schema, System Data, Code
 - .NetUI Artifacts
 - Browse Collections
 - Process Maps
 - Reports
 - Qxtend
 - Qdoc Schemas
- ... But, with enhancements

Course Lessons

IAQ Technical Reference

Course Lessons

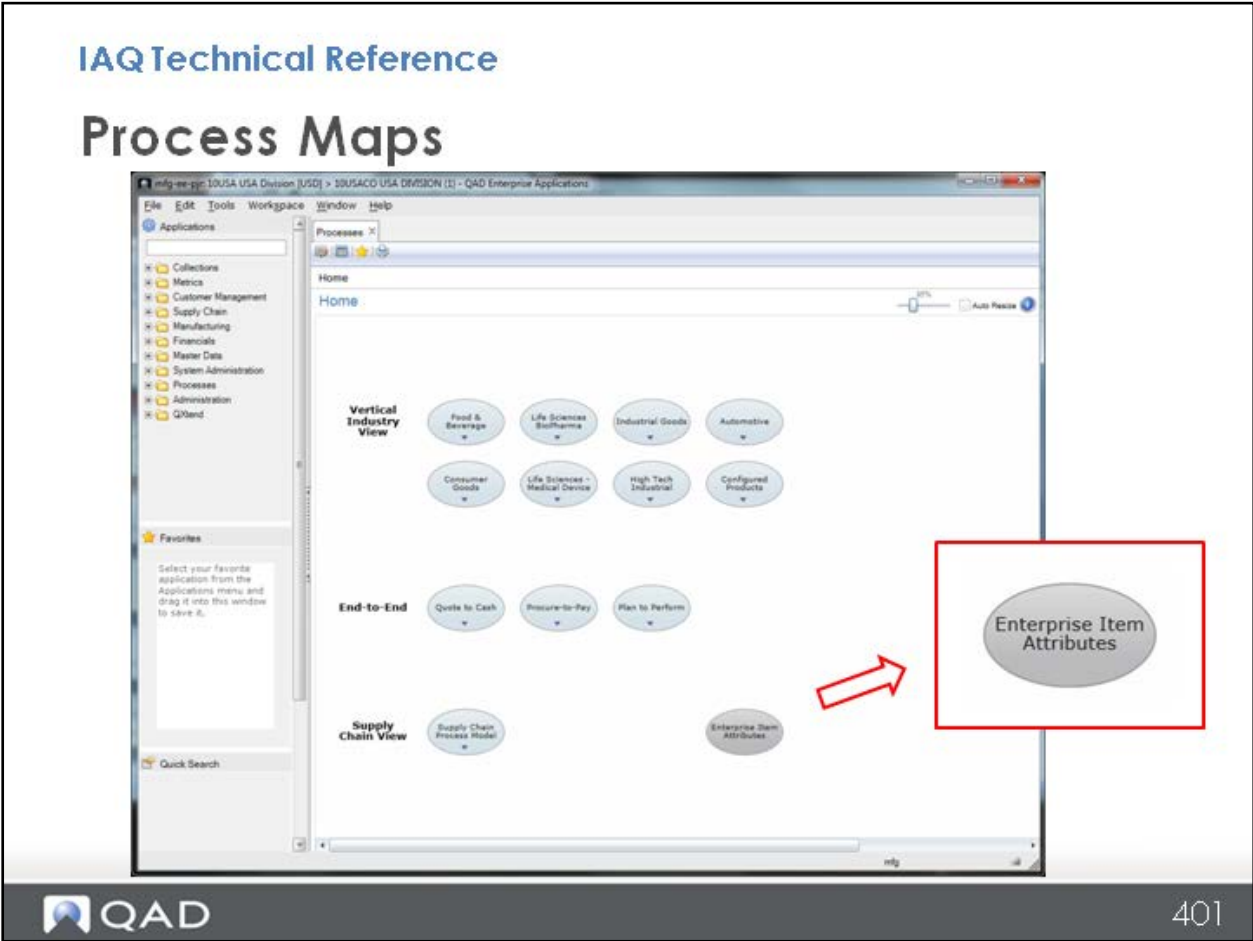
- Process Maps
- Browse Collections
- Security
- Entity-Relationship Diagrams
- Hand-Crafted Browsers
- Data Loads & Migrations
- Packages & Installations
- Environments & Code Repositories
- Automated Testing

IAQ Process Maps

IAQ Technical Reference

IAQ Process Maps

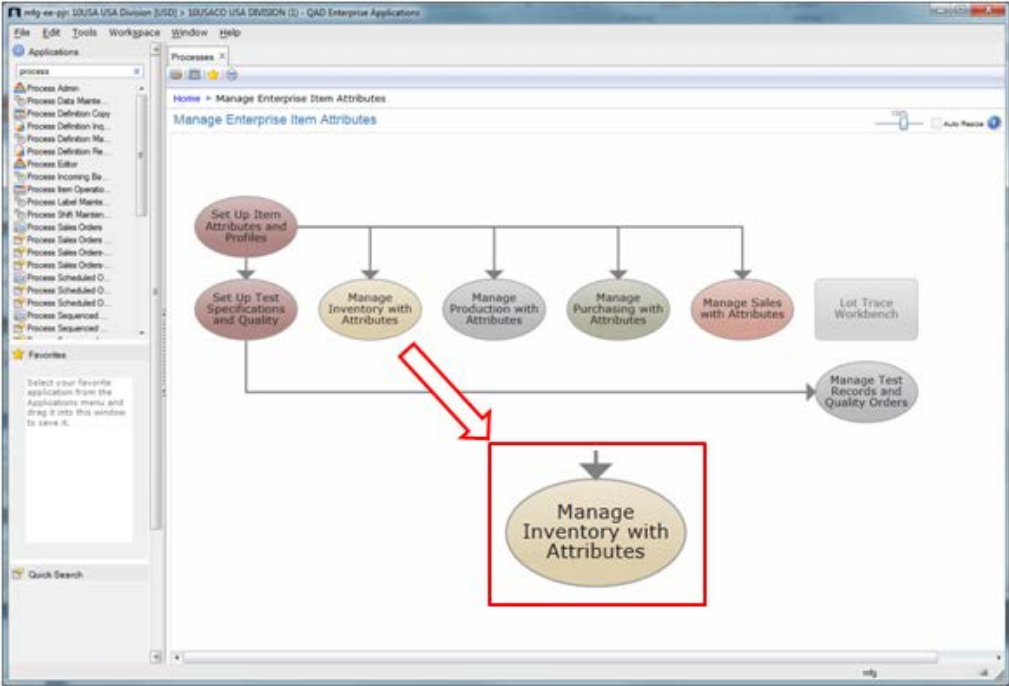
Process Maps



Process Maps

IAQ Technical Reference

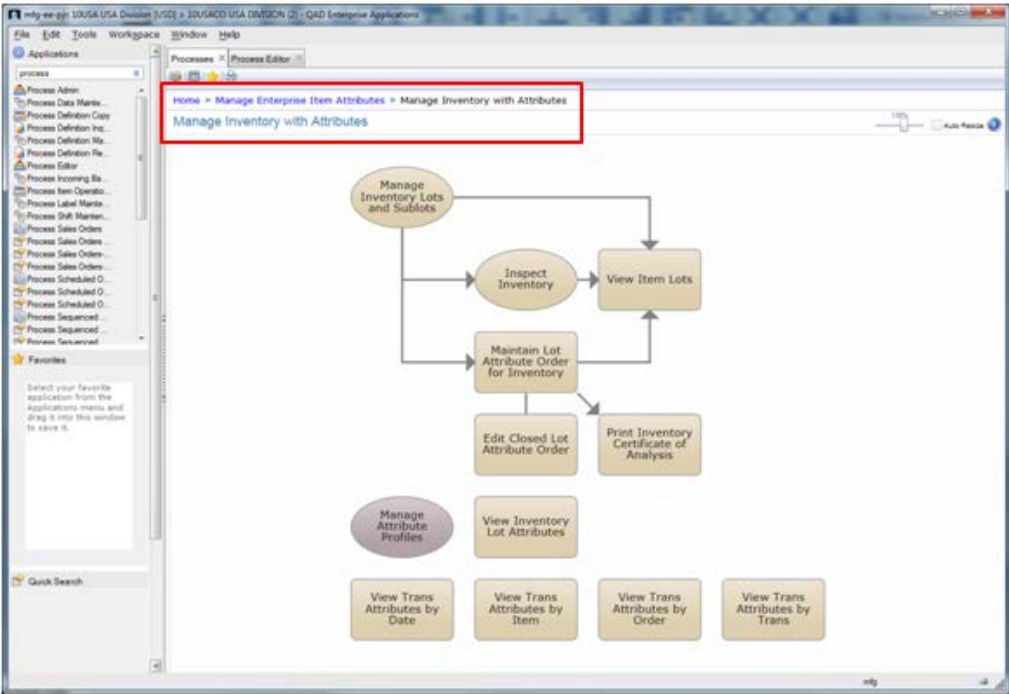
Process Maps



Process Maps

IAQ Technical Reference

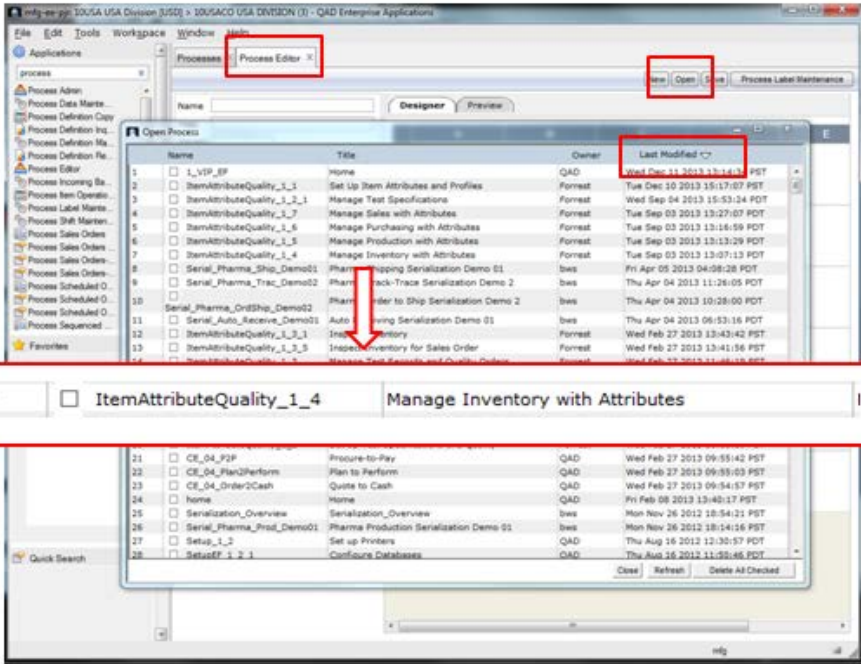
Process Maps



Process Maps

IAQ Technical Reference

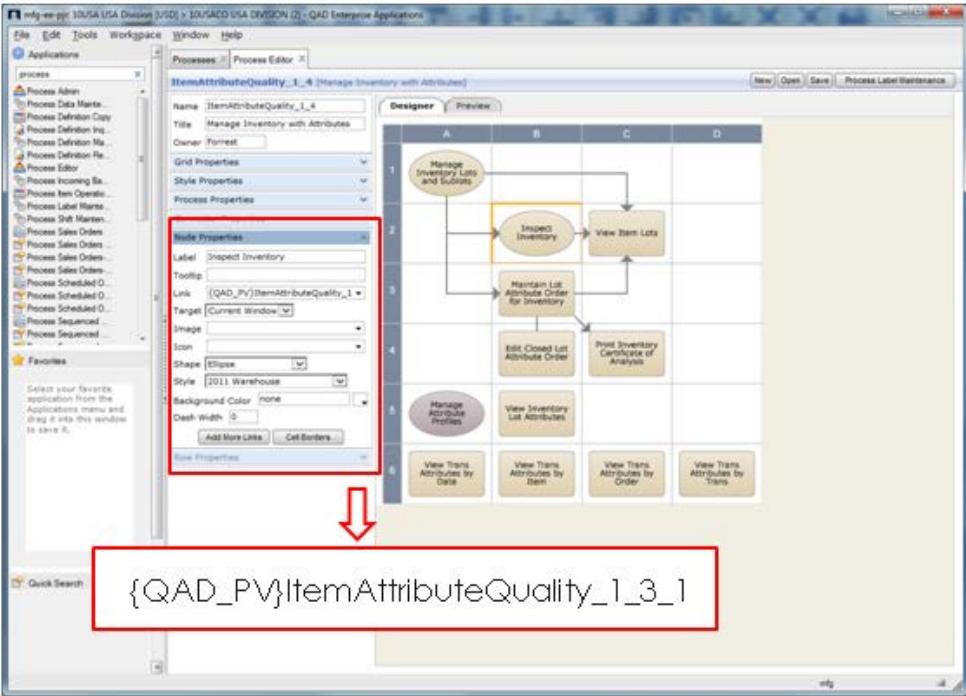
Process Maps



Process Maps - Links

IAQ Technical Reference

Process Maps - Links



Process Maps - Links

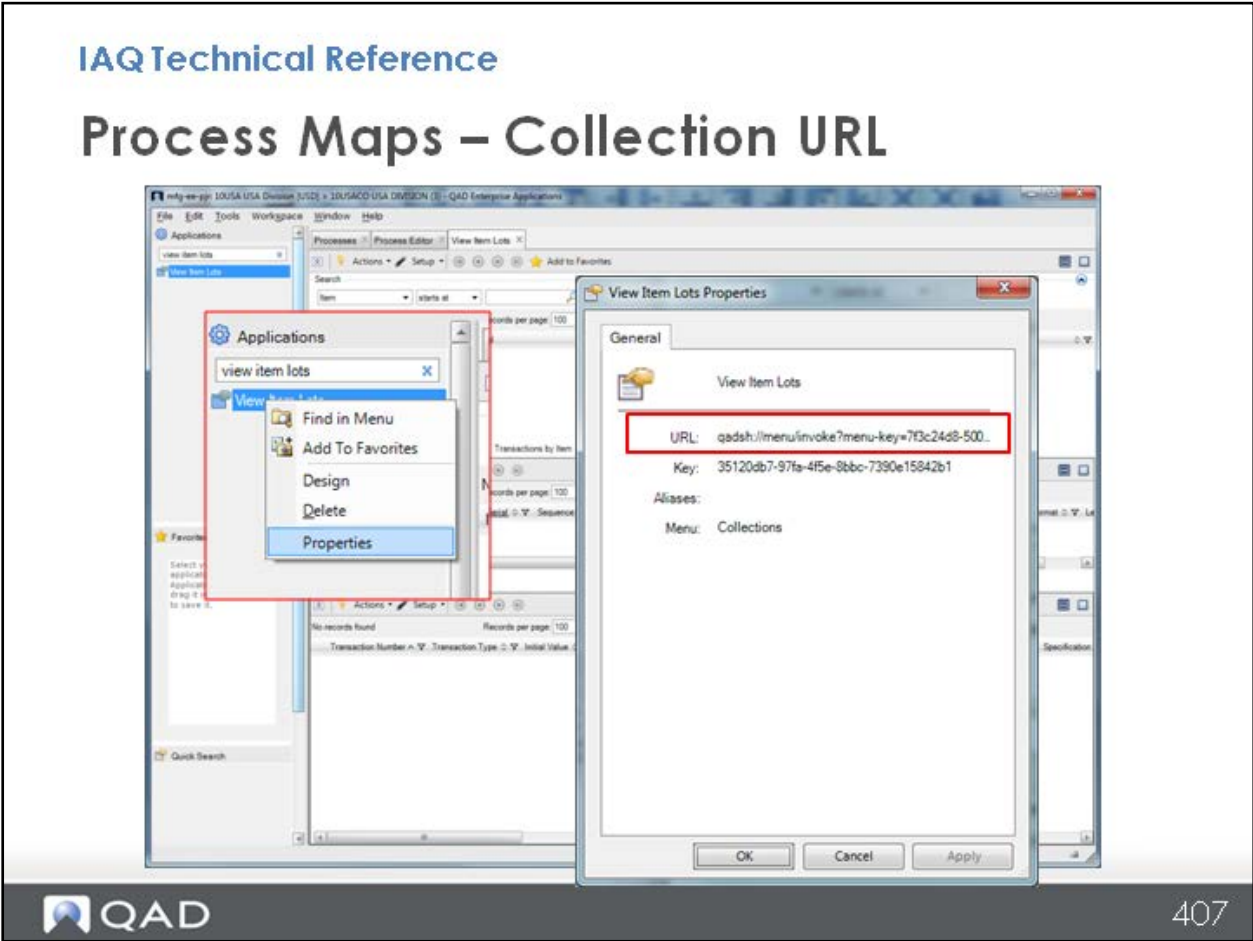
IAQ Technical Reference

Process Maps - Links

The screenshot shows the QAD Process Editor interface. The main window displays a process map for 'ItemsAttributeQuality_1_4 (Manage Inventory with Attributes)'. The process map is a flowchart with nodes such as 'Manage Inventory Lots and Sublots', 'Inspect Inventory', 'View Item Lots', 'Maintain Lot Attribute Order for Inventory', 'Edit Closed Lot Attribute Order', 'Print Inventory Certificate of Analysis', 'Manage Attribute Profiles', 'View Inventory Lot Attributes', and 'View Trans Attributes by Data'. The 'Node Properties' panel on the left is highlighted with a red box, showing the 'Link' property set to 'qadsh://menu/invoke?menu-key=7f3c24d8-5007-11dc-8314-0800200c9a66&menu-item-key=35120db7-97fa-4f5e-8bbc-7390e15842b1'. A red arrow points from this URL to a text box below the screenshot.

qadsh://menu/invoke?menu-key=7f3c24d8-5007-11dc-8314-0800200c9a66&menu-item-key=35120db7-97fa-4f5e-8bbc-7390e15842b1

Process Maps – Collection URL



Process Maps - Troubleshooting

IAQ Technical Reference

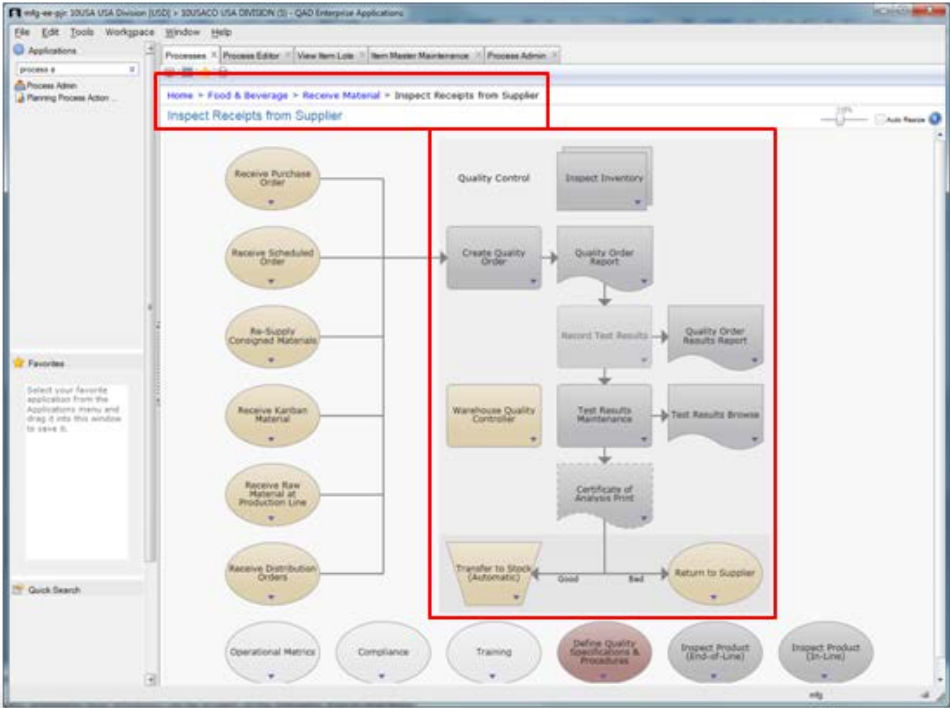
Process Maps - Troubleshooting

- Nodes do not work anymore
 - Behavior
 - Objects are not highlighted
 - Cannot Double-Click
 - Reason: Links are Invalid
 - Menu item is removed from the menu
 - Program name for the menu item has changed
 - Browse Collection has a new XML filename

Process Maps – Existing Quality

IAQ Technical Reference

Process Maps – Existing Quality



Process Maps

IAQ Technical Reference

Process Maps

The screenshot displays the QAD Enterprise Applications interface. On the left is a navigation pane with categories like 'Applications', 'Collections', 'Metrics', 'Customer Management', 'Supply Chain', 'Manufacturing', 'Financials', 'Master Data', 'System Administration', 'Processes', 'Administration', and 'QAd'. The main workspace shows a 'Home' page with several process map icons. The 'End-to-End' section contains three icons: 'Quote to Cash', 'Purchase-to-Pay', and 'Plan to Perform', which are enclosed in a red rectangular box. Two red arrows point from this box to a larger red rectangular box on the right containing the 'Enterprise Item Attributes' icon. Other sections include 'Vertical Industry View' with icons for Food & Beverage, Life Sciences/BiPharma, Industrial Goods, Automotive, Consumer Goods, Life Sciences - Medical Device, High Tech Industrial, and Configured Products. The 'Supply Chain View' includes 'Supply Chain Process Model' and 'Enterprise Item Attributes'.

Process Maps – More Info

IAQ Technical Reference

Process Maps – More Info

The screenshot shows a web browser displaying the QAD Document Library. The page title is "Process Maps in QAD .NET UI". The content includes an introduction to process maps, a list of sections (Using the Process Viewer, Editing Process Maps from the Process Viewer, Using the Process Editor, Process Map Configuration Settings, Using Process Admin), and a list of related documents on the left sidebar.

Process Maps in QAD .NET UI

Processes, or process maps, are graphical models of workflows that link to programs, browsers, and other process maps. This chapter describes how to view and edit process maps with the Process Viewer and Process Editor. Starting with QAD .NET UI 2013 – Enterprise Edition, the Process Viewer and Process Editor use HTML5. Be sure to upgrade your system to use the most recent version of Internet Explorer available for your version of Windows. For instance, if running Windows 7 or Windows Vista, upgrade to Internet Explorer 9, which supports HTML5.

This chapter includes the following sections:

- Using the Process Viewer**
Describes how to view the process maps within the Process Viewer.
- Editing Process Maps from the Process Viewer**
Describes how to edit a process map from the Process Viewer.
- Using the Process Editor**
Describes how you can use the Process Editor to build graphical models of workflows that link to programs, browsers, and other process maps.
- Process Map Configuration Settings**
Describes how to configure the process map environment in the client session configuration file (client-session.xml).
- Using Process Admin**
Describes how to set the administrative settings for the Process Editor.

Left sidebar navigation includes: QAD Enterprise Edition, QAD Standard Edition, QAD .NET UI, 2013 EE, Release Notes, Introduction to Enterprise Applications, Change Summary, Introduction, QAD .NET User Interface Overview, Programs in QAD .NET UI, Browsers in QAD .NET UI, **Process Maps in QAD .NET UI**, Character User Interface, Admin Guide, Admin Training Guide, Training Guide, 2013 EE (2.9.6), 2012.1 EE, 2012 EE (2.9.3), 2012 EE (2.9.4), 2011.1 EE (2.9.3.79), 2.9.4, 2.9.3.

<http://www.qad.com/documentlibrary>

Browse Collections

IAQ Technical Reference

Browse Collections

Browse Collections

IAQ Technical Reference

Browse Collections

- Background
- UI Behavior
- Maintenance Transactions
- Customizing

Browse Collections - Background

IAQ Technical Reference

Browse Collections - Background

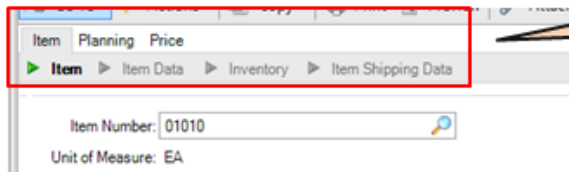
- UI Requirements
 - Everything starts with a browse
 - Multi-screened transactions
 - Create children & grandchildren
 - Scrolling window (s) ?
 - F1 + F4?
 - Utilize tabs
 - Options?

Browse Collections – Tab Examples

IAQ Technical Reference

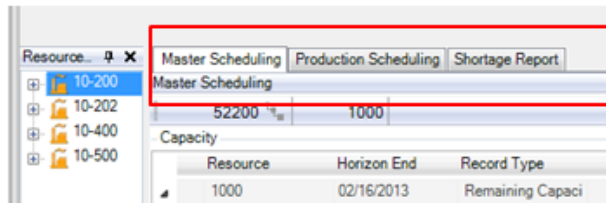
Browse Collections – Tab Examples

- Item Master Maintenance



.NetUI configured tabs

- Native .Net



Flexible, but required .Net programming

Browse Collections – Tab Examples

IAQ Technical Reference

Browse Collections – Tab Examples

- Browse Collection

The screenshot displays two windows from the QAD software. The top window, titled 'Enter Item Inventory Data', shows a list of items with columns for Item Number, Description, and Unit Measure. The items listed are 01010 (Medical Ultrasound), 01011 (Supplies Kit), and 01012 (Sterile Probe Covers, 20). Below the list, a red box highlights the 'Item Site Inventory Data' tab in the browser's tab bar. A callout bubble points to this tab with the text: 'Typically links browses & functions to parent browses'. The bottom window shows a detailed view of item 01010, with columns for Item Number, Site, Description, Unit of Measure, ABC Class, Average Interval, and Cycle Count Interval.

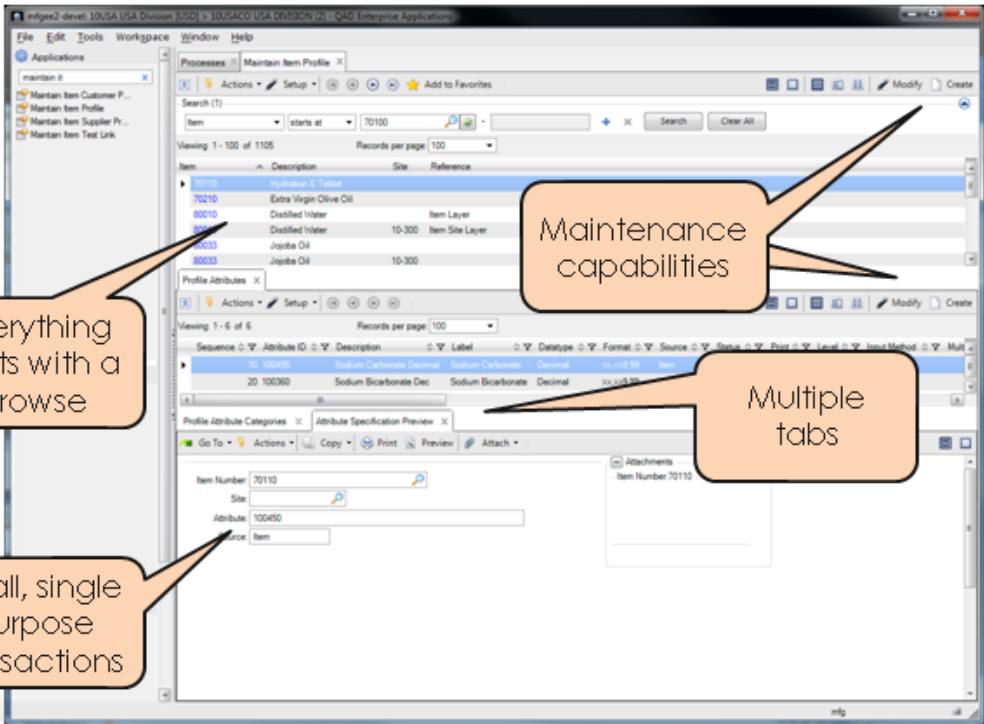
Item Number	Description	Unit Measure
01010	Medical Ultrasound	EA
01011	Supplies Kit	
01012	Sterile Probe Covers, 20	BX 20

Item Number	Site	Description	Unit of Measure	ABC Class	Average Interval	Cycle Count Interval
01010	10-100	Medical Ultrasound	EA	A	90	30

Browse Collections

IAQ Technical Reference

Browse Collections



Everything starts with a browse

Maintenance capabilities

Multiple tabs

Small, single purpose transactions



Browse Collections – Selected Approach

IAQ Technical Reference

Browse Collections – Selected Approach

- Main access to transactions
- Advantages
 - Everything begins with browse
 - Supports tabbing
 - Reduce long-running transactions
- Disadvantages & Limitations
 - New navigation for user
 - CHUI installations
- .NetUI enhancements

Browse Collections – User’s View

IAQ Technical Reference

Browse Collections – User’s View

The screenshot displays the 'Maintain Quality Order' window in QAD Enterprise Applications. It features a search bar at the top, a table of quality orders, and a detailed view of a specific test record below. Three callout boxes provide annotations: 'Lots of information' points to the main data table; 'Refreshed after update' points to a refresh button; and 'Which Button?' points to a button in the detailed view.

Item	Site	Description	Lot	Sublot	Qty	Quality Order	Order Type	Status	Quality Result	Comp
PD300100101		Milk, Whole, Pasteurized	10-100	lot-090601	0.1	QO12090500036	5/8/2012	Quality Open	Not Entered	
PD300100101		Milk, Whole, Pasteurized	10-100	lot-090601	0.1	QO12090800009	5/8/2012	Quality Open	Not Entered	
PD300100101		Milk, Whole, Pasteurized	10-100	lot-090604	0.1	QO12090800001	5/8/2012	Quality Open	Not Entered	
PD300100101		Milk, Whole, Pasteurized	10-100	lot1	0.1	QO13062200001	5/22/2013	Quality Open	Not Entered	

Seq	Test ID	Test Description	Revision	Reference	Test Record ID	Required	Test Quantity	Test Status	Test Result	Test
1	POT1010	Whole Milk Spec	B		QT12090500023	Yes		Cancelled	Not Entered	
2	POT1012	Whole Milk Vitamin Spec	A		QT12090500024	No	0.1	Open	Not Entered	



Browse Collections - Maintaining

IAQ Technical Reference

Browse Collections - Maintaining

The screenshot displays the QAD software interface. The main window is titled 'Browse Collection Maintenance' and has a menu bar with 'File', 'Edit', 'Tools', 'Workspace', 'Window', and 'Help'. The 'Open' button in the menu bar is highlighted with a red box. Below the menu bar, there are fields for 'Collection Name' and 'Location'. A 'Load existing collection' dialog box is open in the foreground, showing a list of collection names. The selected item is '\$MANTAIN_ITEM_TEST_PROFILE'. The list includes:

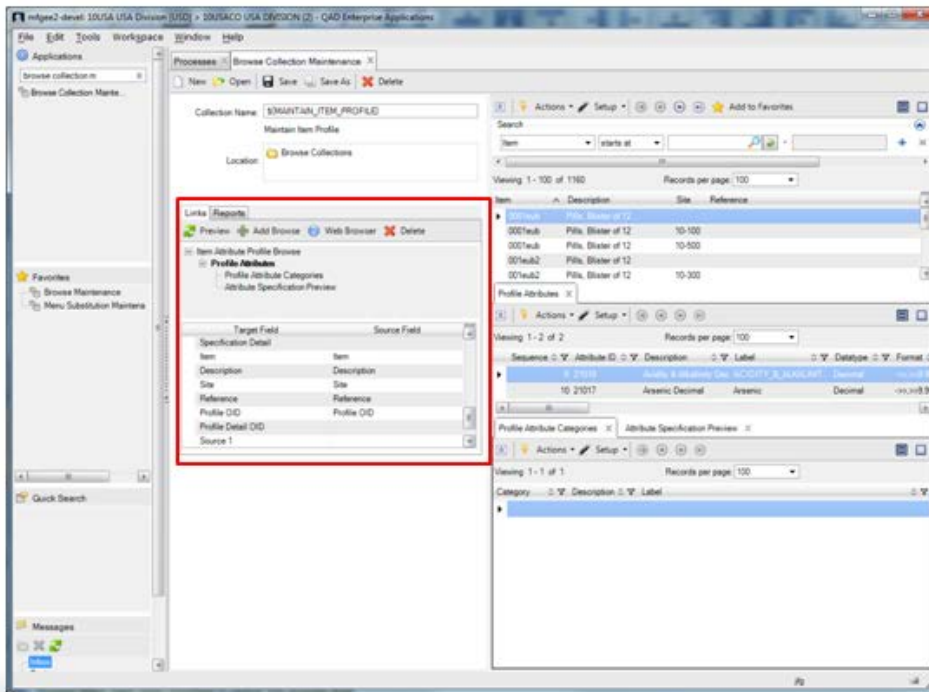
- \$ADD_FLOW_LINES
- \$MANTAIN_BOM_COMPONENT_PROFILE
- \$MANTAIN_CUM_ORDER_OP_TEST_RECORDS
- \$MANTAIN_CUM_ORDER_PROFILE
- \$MANTAIN_ECCommerce_REPOSITORY_DATA
- \$MANTAIN_ITEM_CUSTOMER_PROFILE
- \$MANTAIN_ITEM_TEST_PROFILE**
- \$MANTAIN_ITEM_SUPPLIER_PROFILE
- \$MANTAIN_ITEM_TEST_LINK

At the bottom of the screenshot, there is a QAD logo on the left and the number '420' on the right.

Browse Collections

IAQ Technical Reference

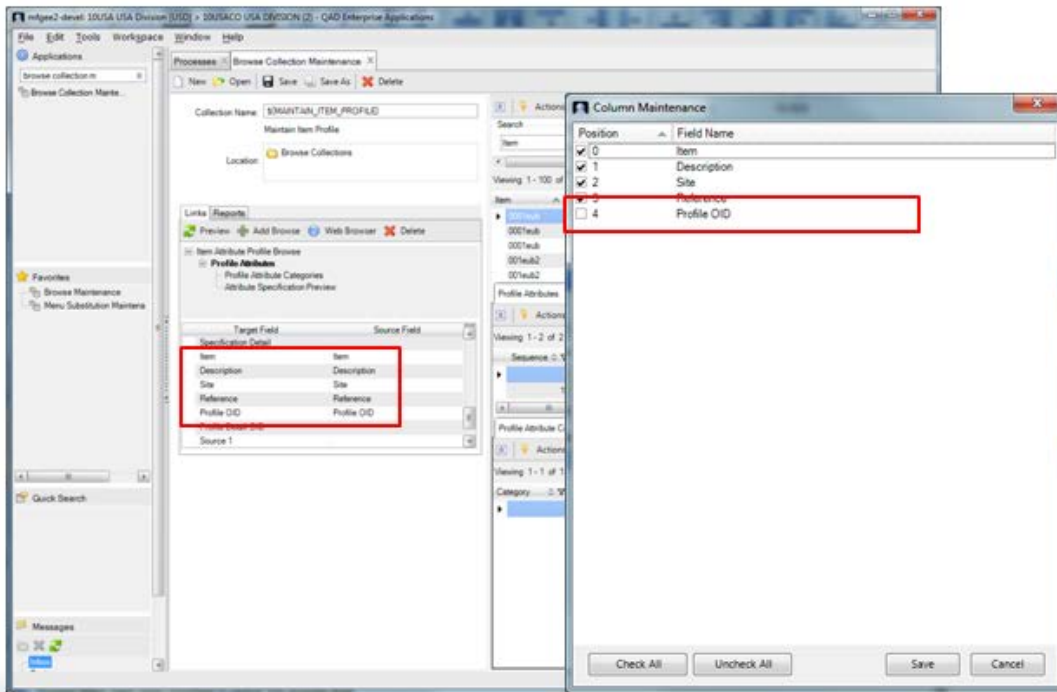
Browse Collections



Browse Collections

IAQ Technical Reference

Browse Collections



Browse Collections – Browse Links

IAQ Technical Reference

Browse Collections – Browse Links

The screenshot shows the 'Maintain Item Profile' window in the QAD Enterprise Applications. The window title is 'Maintain Item Profile' and it includes a 'Progress Editor' tab. The main area is divided into two panes. The left pane shows a list of attributes with columns for 'Sequence', 'Attribute ID', and 'Description'. The right pane shows the details for the selected attribute (Attribute ID 82250), including 'Label', 'Description', 'Type', 'Format', 'Sequence', and 'Status'. A callout box points to the 'Label' field, stating 'Key info filled from browse'. The status is 'Active'. At the bottom, there are buttons for 'Delete', 'Back', and 'Next', and the text 'Modifying existing record'.

Sequence	Attribute ID	Description
10	82232	Chlorogen
20	82235	HPLC Calk
30	82250	Yeast and
40	800005	Organic
90	800001	Country of
94	83008	Fair Trade

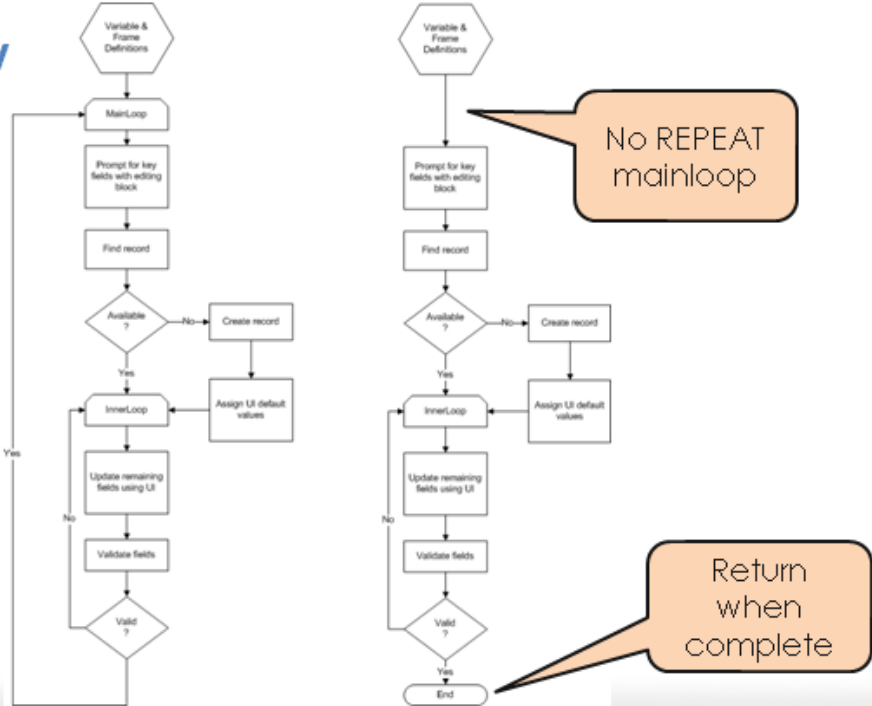
Attribute ID: 82250
Label: Yeast and Mold Count
Description: Yeast and Mold integer
Type: Integer
Format: ->000,000
Sequence:
Status: Active

Browse Collections – Maintenance Flow

IAQ Technical Reference

Browse Collections – Maintenance Flow

- CHUI flow
 - Old
 - New



Browse Collection - Special Condition

IAQ Technical Reference

Browse Collection - Special Condition

The screenshot displays a software interface with a table of records. The table has columns for Test ID, Description, Category, Revision, Status, Reference, Record Sample Results, and Sample Attribute Data. A single record is visible with Test ID 'zzD01', Description 'Test sugars', Category 'Food Analysis', and Revision '01'. Below the table, there are tabs for 'Test Specification Attributes', 'Test Sample Data', and 'Test Spec Item Links'. The 'Test Specification Attributes' tab is active, showing a table with columns for Attribute ID, Description, Label, Data Type, Format, Source, Status, Print, and Default Value. A single record with the label 'Test' is shown. Below this, there is a section for 'Attribute Specification Preview' which shows 'No records found'. The QAD logo is in the bottom left corner, and the number '427' is in the bottom right corner.

Search (1)
Test ID starts at z - Search

Viewing 1 - 1 of 1
Records per page: 100

Test ID	Description	Category	Revision	Status	Reference	Record Sample Results	Sample Attribute Data
zzD01	Test sugars	Food Analysis	01	Active			

Test Specification Attributes | Test Sample Data | Test Spec Item Links

Viewing 1 - 1 of 1
Records per page: All

Attribute ID	Description	Label	Data Type	Format	Source	Status	Print	Default Value
		Test						

Attribute Specification Preview

No records found
Records per page: 100

Default Value | UM | Specification Type | Specification | Test ID | Revision | Input method | Required | Inventory Up

Callouts:
- "New entry" points to the top record in the first table.
- "Child: 1 of 1?" points to the 'Test' record in the second table.
- "Does this record exist?" points to the 'No records found' message.

QAD 427

Browse Collections - Drawbacks

IAQ Technical Reference

Browse Collections - Drawbacks

- Screens & Real Estate
 - Lots of information
 - Next/Back
 - Bottom of Maintenance Screens
- CHUI customers?
 - Programs can be changed for CHUI
 - Easy for parent data
 - More complex for children
 - Services help

Browse Collections – CHUI Example

IAQ Technical Reference

Browse Collections – CHUI Example

The screenshot displays the QAD Enterprise Applications interface. The main window is titled "Maintain Test Specification" and shows a list of test specifications. The list includes columns for Test ID and Description. The selected test is T80060, "Simethicone Lab".

Test ID	Description
T70050	Simethicone 125 mg
T80060	Simethicone Lab
T80060	Simethicone Lab
T80060	Simethicone Lab
T80124	Sodium Bicarbonate
T80126	Sodium Carbonate L
T80066	Sorbitol Lab Test
splater test	splater test for paint
sticky test	sticky test
tasty	tasty desc
ts4-test1	Taylor's test 1
ts1	ts1's test
tslen1	test
tsb0425	test
tsb13	test
Twin_Analysis	Test
001test	Test 001test
001test	Test 001test
test0419	test 0419
tsb-test2	test 2
tsb-0627	test tsb-0627
ts1Test2	test tsb-12
tsb0426-1	test tsb-12
tsb12	test tsb-12
ts1ts1	test tsb-12

The detailed view for Test T80060 shows the following information:

- Test: T80060
- Revision: C
- Description: Simethicone Lab
- Category: physical properte
- Reference:
- Status: Draft
- Release Date: 9/6/2013
- Released By: mfg
- Obsolete Date:
- Obsoleted By:
- Comments:
- Copy Attributes from Test Specification:
- Copy Attributes from Item Profile:

Buttons at the bottom of the detailed view include Delete, Back, and Next. The status at the bottom of the window is "Modifying existing record".

Browse Collections – CHUI


IAQ Technical Reference

Browse Collections – CHUI

The screenshot shows three overlapping windows of the QAD Enterprise Applications 2007.1 Test Specification Maintenance interface. The top window is partially obscured by the middle window, which is in turn obscured by the bottom window. The bottom window is the active one, showing the following details:

- Test: t80060
- Revision: C
- Description: Simethicone Lab
- Category: physical propertie Physical Properties
- Reference:
- Status: Draft
- Release Date: 09/06/13
- Released By: mfg
- Obsolete Date:
- Obsolete By:
- Comments: No
- Copy Attributes from Test Specification: No
- Copy Attributes from Item Profile: No

At the bottom of the active window, it indicates "Modifying existing record" and provides keyboard shortcuts: F1=Go 2=Help 3=Ins 4=End 5=Delete 7=Recall 8=Clear.


430

Browse Collections – NetUI Changes

IAQ Technical Reference

Browse Collections – NetUI Changes

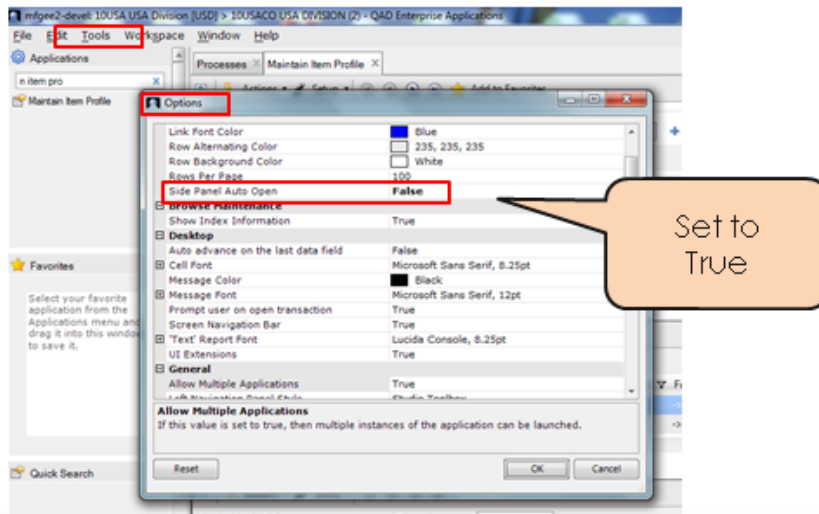
- Buttons
 - Create record when Browse is empty
 - Create Child when Child Browse is empty
 - View button (2014 and beyond)
 - Disable buttons
- Auto-refresh of browses
- Sizing of the middle browse

Browse Collections - Troubleshooting

IAQ Technical Reference

Browse Collections - Troubleshooting

- Browse doesn't refresh
- Transactions Open in New Window



Browse Collections - Record Locking

IAQ Technical Reference

Browse Collections - Record Locking

- Create or modify mode will lock database records
- Hybrid view mode will often lock data records
- Using functions from multiple browses can result in record locking

One of the most common problems that users encounter when first using browse collections is record locking, where the locked record is locked by the user by her or himself.

Locked records prevent users from accessing or editing certain records. This happens because the records are in use by the system.

There are two common causes of record locking. The first is entering create or modify mode with a record. The second is to access different browses within the same collection.

Collection Modify and Lock Record

IAQ Technical Reference

Collection Modify and Lock Record

The screenshot shows the 'Maintain Item Profile' window in the 'Modify' state. The window title is 'Maintain Item Profile' and it displays the following information:

- Item Number: 80220
- Description: Olives, Fresh
- Site: [Empty field]
- Reference: [Empty field]

The 'Profile Attributes' table is displayed below the item details:

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Input Method	Multiple Values
10	100200	Cultivar Text 30	Cultivar	Character	x(30)	Item	Active	yes	Lot	User	
20	100250	Harvest Date	Harvest Date	Date	MMDDYY	Item	Active	yes	Lot	User	
30	100240	Grower Text 30	Grower	Character	x(30)	Item	Active	yes	Lot	User	
40	100310	Orchard Text 50	Orchard	Character	x(50)	Item	Active	yes	Lot	User	
50	100280	Maturity Index Decimal	Maturity Index	Decimal	>>0.30	Item	Active	yes	Lot	System	
60	100292	Oil Pct	Oil	Decimal	>>9.99%	Item	Active	yes	Lot	System	

Annotations in the image:

- 'Item Profile' points to the 'Maintain Item Profile' window title.
- 'Item Profile in 'Modify' state' points to the top right of the window.
- 'Profile Attributes' points to the attribute table.

QAD 434

When you create or modify a record, that record enters the modify state. While in the modify state, a record is locked. Accessing it elsewhere while result in an error.

Select a Related Detail Record

IAQ Technical Reference

Select a Related Detail Record

Select an attribute for the Item Profile when in 'Modify' state

Item Number: 80220 Olives, Fresh

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Input Method	Multiple Values
10	100200	Cultivar Text 30	Cultivar	Character	x(30)	Item	Active	yes	Lot	User	
20	100250	Harvest Date	Harvest Date	Date	MMDDYY	Item	Active	yes	Lot	User	
30	100240	Grower Text 30	Grower	Character	x(30)	Item	Active	yes	Lot	User	
40	100310	Orchard Text 50	Orchard	Character	x(50)	Item	Active	yes	Lot	User	
50	100280	Maturity Index Decimal	Maturity Index	Decimal	>>9.99	Item	Active	yes	Lot	System	
60	100290	Oil Pct	Oil	Decimal	>>9.99%	Item	Active	yes	Lot	System	

QAD 435

While a record is in the modify state, the records in more detailed levels of its browse collection are also locked.

Detail Record Locked with Master

IAQ Technical Reference

Detail Record Locked with Master

Press Modify button or double-click the attribute

Item Number: 80220 Olives, Fresh
Site:
Reference:

Sequence	Attribute ID	Description
10	100200	Cultiva
20	100250	Harvest
30	100340	Grower
40	100310	Orchard
50	100280	Return
60	100292	Oil Pct

if_attr_mstr in use by netl.105 on vmf011. Wait or press Cancel to stop. (Cancel)

QAD 436

Attempting to modify or create a record in a lower level browse of a locked attribute will result in an error.

Profile Attribute View Options

IAQ Technical Reference

Profile Attribute View Options

The screenshot shows the QAD Enterprise Applications interface. The main window displays a list of items with columns for Item, Description, Site, and Reference. Below this, a 'Profile Attributes' table is visible, showing columns for Sequence, Attribute ID, Description, Label, Datatype, Format, Source, Status, Print, Level, Input Method, and Multiple Values. The table contains several rows of data, including 'Cultivar Text 30', 'Harvest Date', 'Grower Text 30', 'Orchard Text 50', 'Maturity Index Decimal', and 'Oil Pct'. Two callouts are present: 'Tile View selector' pointing to a button in the top right of the main window, and 'Full Screen View selector' pointing to a button in the top right of the Profile Attributes window.

Sequence	Attribute ID	Description	Label	Datatype	Format	Source	Status	Print	Level	Input Method	Multiple Values
10	100200	Cultivar Text 30	Cultivar	Character	x(30)	Item	Active	yes	Lot	User	
20	100250	Harvest Date	Harvest Date	Date	MMDDYY	Item	Active	yes	Lot	User	
30	100340	Grower Text 30	Grower	Character	x(30)	Item	Active	yes	Lot	User	
40	100310	Orchard Text 50	Orchard	Character	x(50)	Item	Active	yes	Lot	User	
50	100280	Maturity Index Decimal	Maturity Index	Decimal	>>5.30	Item	Active	yes	Lot	System	
60	100292	Oil Pct	Oil	Decimal	>>9.99%	Item	Active	yes	Lot	System	

When using QAD EE, you have multiple options for viewing browses and browse collections.

The Tile View presents all levels of a browse collection, at once, tiled downward by hierarchy. This option provides the most complete view of the browse hierarchy.

The Full Screen View expands the selected browse to fill the screen. This minimizes higher level browses and hides lower level browses. This option makes the browse significantly easier to use.

Profile Attribute View Options

IAQ Technical Reference

Profile Attribute View Options

Item Profile in 'Modify' state but hidden when in Tile view

Press Modify button or double-click the attribute

Sequence	Attribute ID	Description
10	100200	Control T4
70	100340	Production
80	100139	Bottling Da

Cancel

QAD 438

Note that minimizing higher level browses may hide that a record is in the modify state. Lower level records are still locked when the higher level record is in the modify state, even when it is hidden.

Browse Collections - Wrap-Up

IAQ Technical Reference

Browse Collections - Wrap-Up

- Utilizing Browse Collections for Application Development
 - Everything starts with a browse
 - Small, sole-purpose transactions
 - Eliminates F1, F4 flow
 - Supports tabbing
- Similar screens
 - Customer Service Center
 - Financials (Supplier, etc.)
 - QRA (TPM)

IAQ Security

QAD Technical Reference

IAQ Security

Security

IAQ Technical Reference

Security

- Security for browse collections
- Menu identification to secure a browse collection
- Menu identification to secure collection programs

Security for Browse Collections

IAQ Technical Reference

Security for Browse Collections

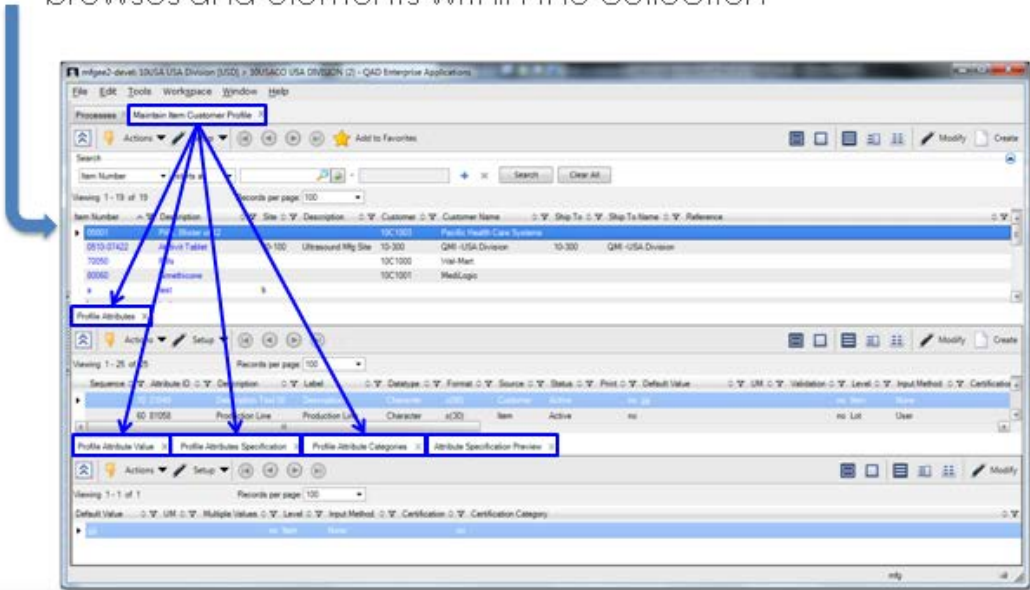
- Menu-based security for browses and programs
 - Secure top-level browse for browse collection
 - Secure programs that can be launched from a browse collection
- Supports segregation of duties to selectively restrict access to collection programs

Top-Level Browse Security

IAQ Technical Reference

Top-Level Browse Security

- Determines whether a user can access any of the other browses and elements within the collection



Security Analysis

IAQ Technical Reference

Security Analysis

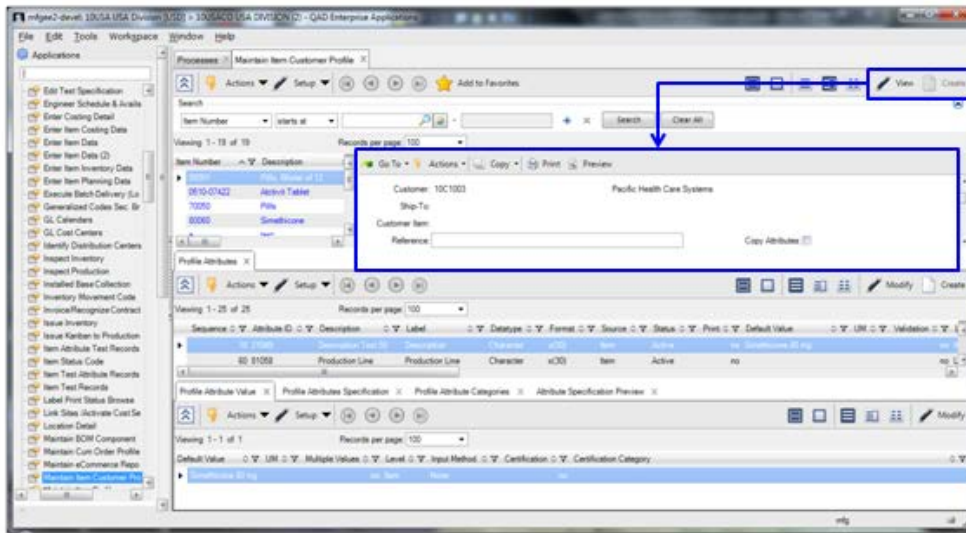
- Top level browse
- Programs linked to browses contained in a collection
- Programs that can be launched from a collection
- Programs shared across multiple collections

Browse Linked Programs

IAQ Technical Reference

Browse Linked Programs

- Need to secure programs linked to browses in a collection

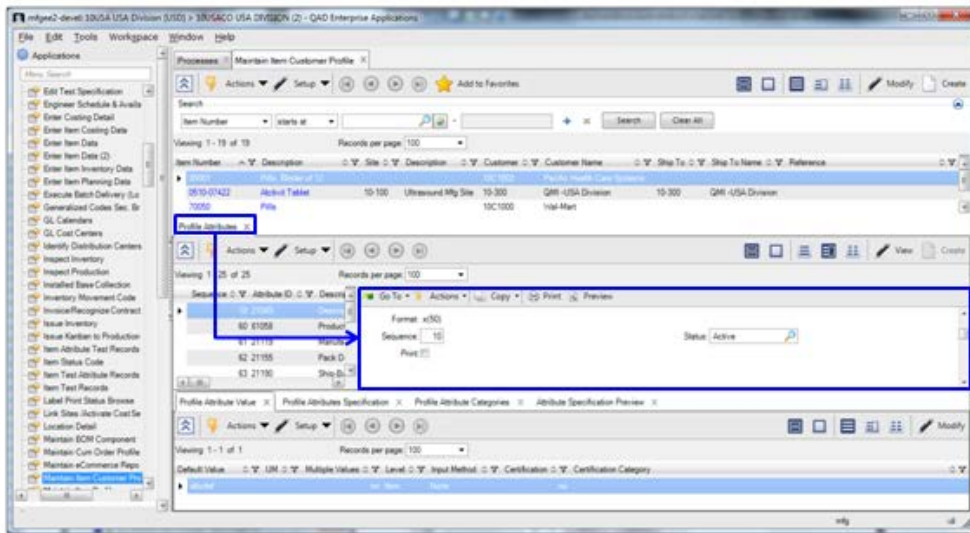


Browse Linked Programs

IAQ Technical Reference

Browse Linked Programs

- Need to secure programs can be linked to all browses in a collection



Security Considerations

IAQ Technical Reference

Security Considerations

- Secure top-level browses
 - Prevents use by casual users to browse data without launching programs
 - Requires menu-level security setup to prevent access to linked programs from the 'Applications' search widget
- Secure individual programs for browse collections
 - Permits flexible use of browse collections by casual users
 - Prevents access to programs from the 'Applications' search widget

A

Identify Top-Level Browse and Program

IAQ Technical Reference

Identify Top-Level Browse and Program

The screenshot shows the 'Browse Properties' dialog box in the QAD Enterprise Applications software. The dialog box is open over a table of data. The 'General' tab is selected, showing the following information:

Program:	ca050
Table:	pt_mstr
Field:	pt_desc
Label:	Description
Format:	x(24)
Type:	character

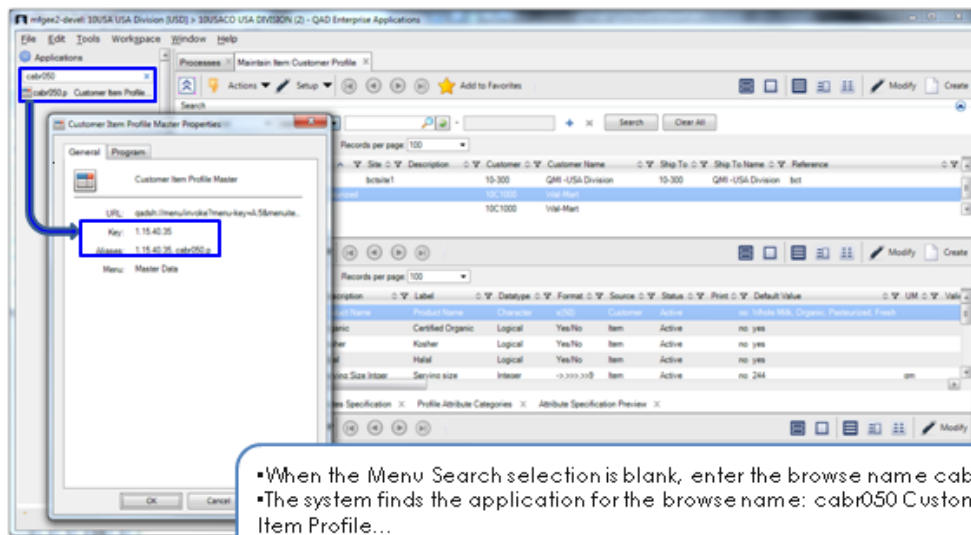
A blue callout box with the text 'Properties includes abbreviated program name' points to the 'Program' field in the dialog box.

- Place cursor over a column label in a browse, access the right-click menu, then select Properties to view the browse properties
- View the browse properties to identify an abbreviated program name for the browse
- The actual browse name for the program 'ca050' consists of the first two characters 'ca', the characters 'br', followed by the three digits of the program name '050' and '.p'
- The browse for program ca050 is 'cabr050.p'

Identify Application and Menu

IAQ Technical Reference

Identify Application and Menu



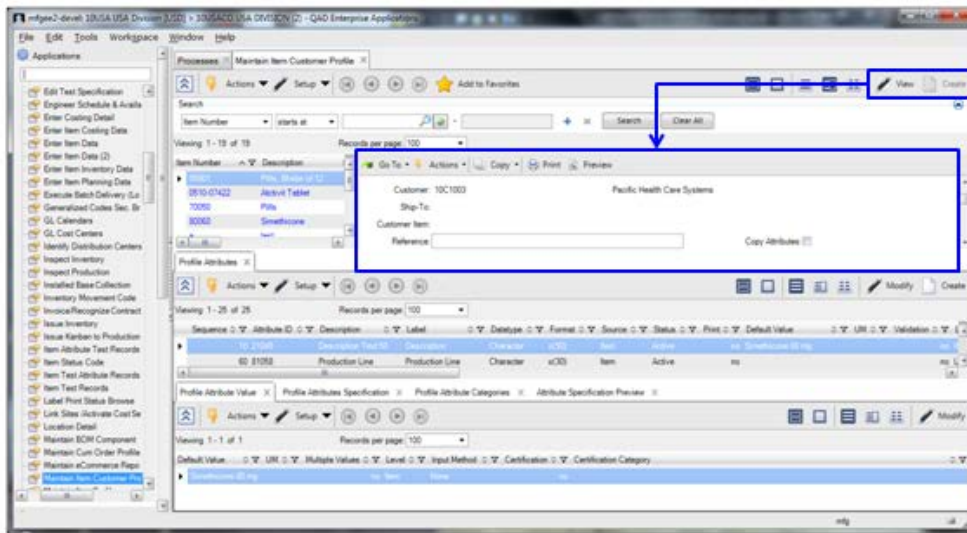
- When the Menu Search selection is blank, enter the browse name cabr050.p
- The system finds the application for the browse name: cabr050 Customer Item Profile...
- Place cursor over the application 'cabr050.p Customer Item Profile...'; access the right-click menu for the application, then select Properties to view the application properties
- View the application properties menu to find the menu and selection for the browse -- 1.15.40.35

Initiate Program Linked to Top-Level Browse

IAQ Technical Reference

Initiate Program Linked to Top-Level Browse

- Initiate program using modify, create, or double click on a browse row



Identify Program Linked to Top-Level Browse

IAQ Technical Reference

Identify Program Linked to Top-Level Browse

Ctrl-F inside a linked program to view field properties

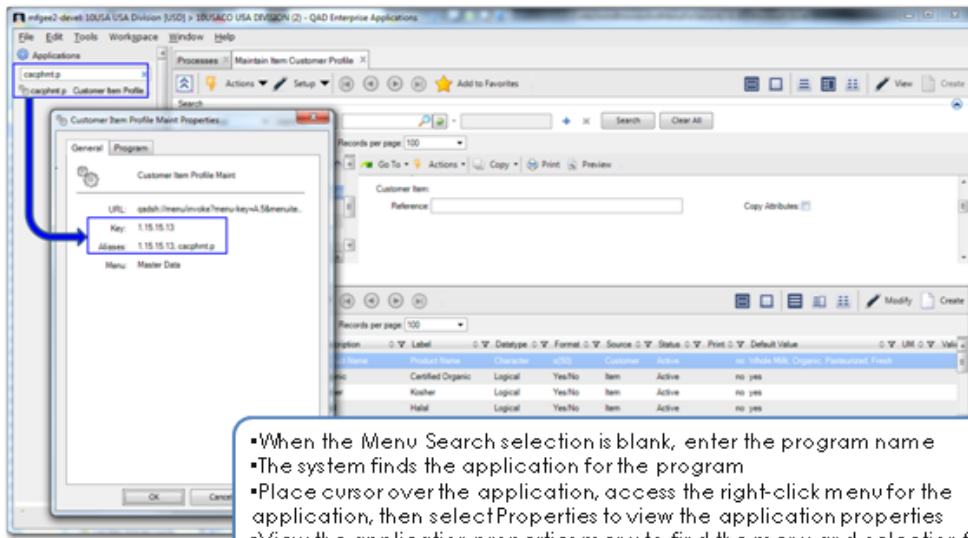
Properties includes program

- Place cursor over a column label in a browse, access the right-click menu, then select Properties to view the browse properties
- View the browse properties to identify a program name

Identify Menu for the Linked Program

IAQ Technical Reference

Identify Menu for the Linked Program

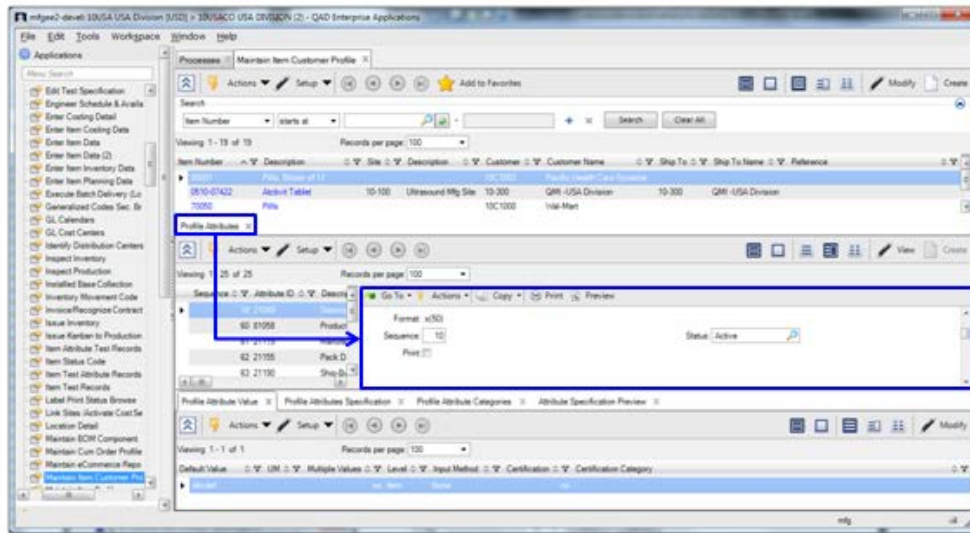


- When the Menu Search selection is blank, enter the program name
- The system finds the application for the program
- Place cursor over the application, access the right-click menu for the application, then select Properties to view the application properties
- View the application properties menu to find the menu and selection for the browse

Repeat for other Browses and Linked Programs

IAQ Technical Reference

Repeat for other Browses and Linked Programs



Identify 'Program' for other Linked Programs

IAQ Technical Reference

Identify 'Program' for other Linked Programs

The screenshot shows the QAD Enterprise Applications interface. A table lists linked programs with columns for Sequence, Attribute ID, Description, and Label. A 'Properties' dialog box is open, showing details for the selected program. Annotations include:

- Ctrl-F inside a linked program to view field properties**: Points to the search bar in the Properties dialog.
- Identify the linked program**: Points to the 'Program' field in the Properties dialog, which contains the value 'csp4mp'.

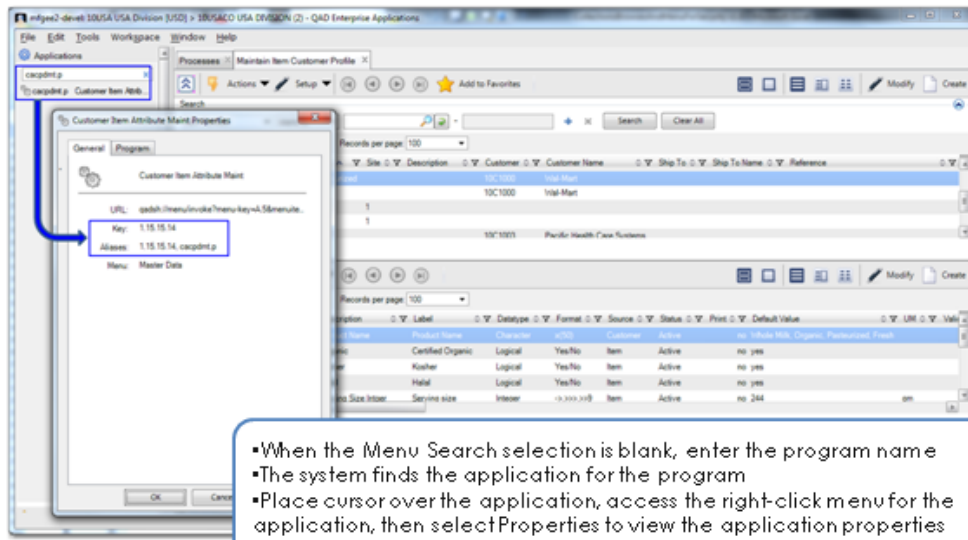
Instructions provided in the image:

- Place cursor over a column label in a browse, access the right-click menu, then select Properties to view the browse properties
- View the browse properties to identify an program name

Identify Menu for other Linked Programs

IAQ Technical Reference

Identify Menu for other Linked Programs

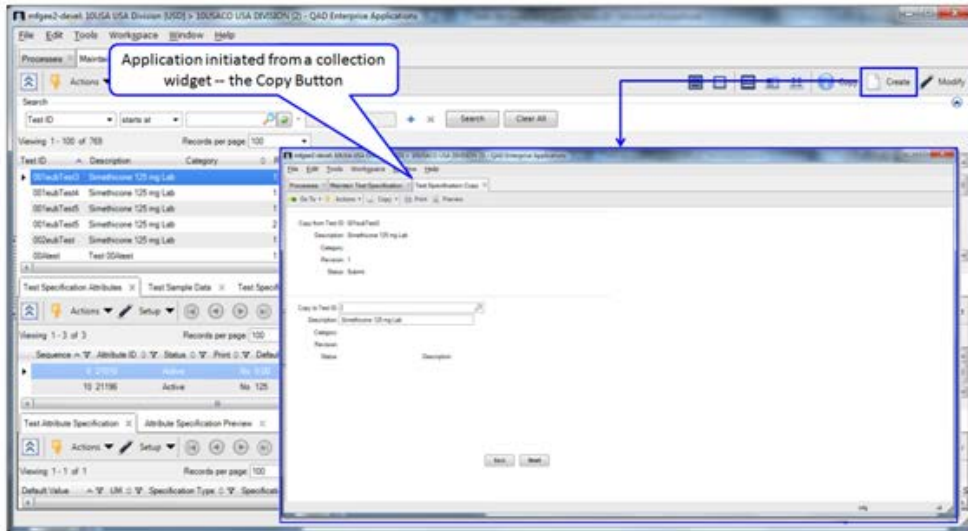


- When the Menu Search selection is blank, enter the program name
- The system finds the application for the program
- Place cursor over the application, access the right-click menu for the application, then select Properties to view the application properties
- View the application properties menu to find the menu and selection for the browse

Repeat for other Collection Programs

IAQ Technical Reference

Repeat for other Collection Programs

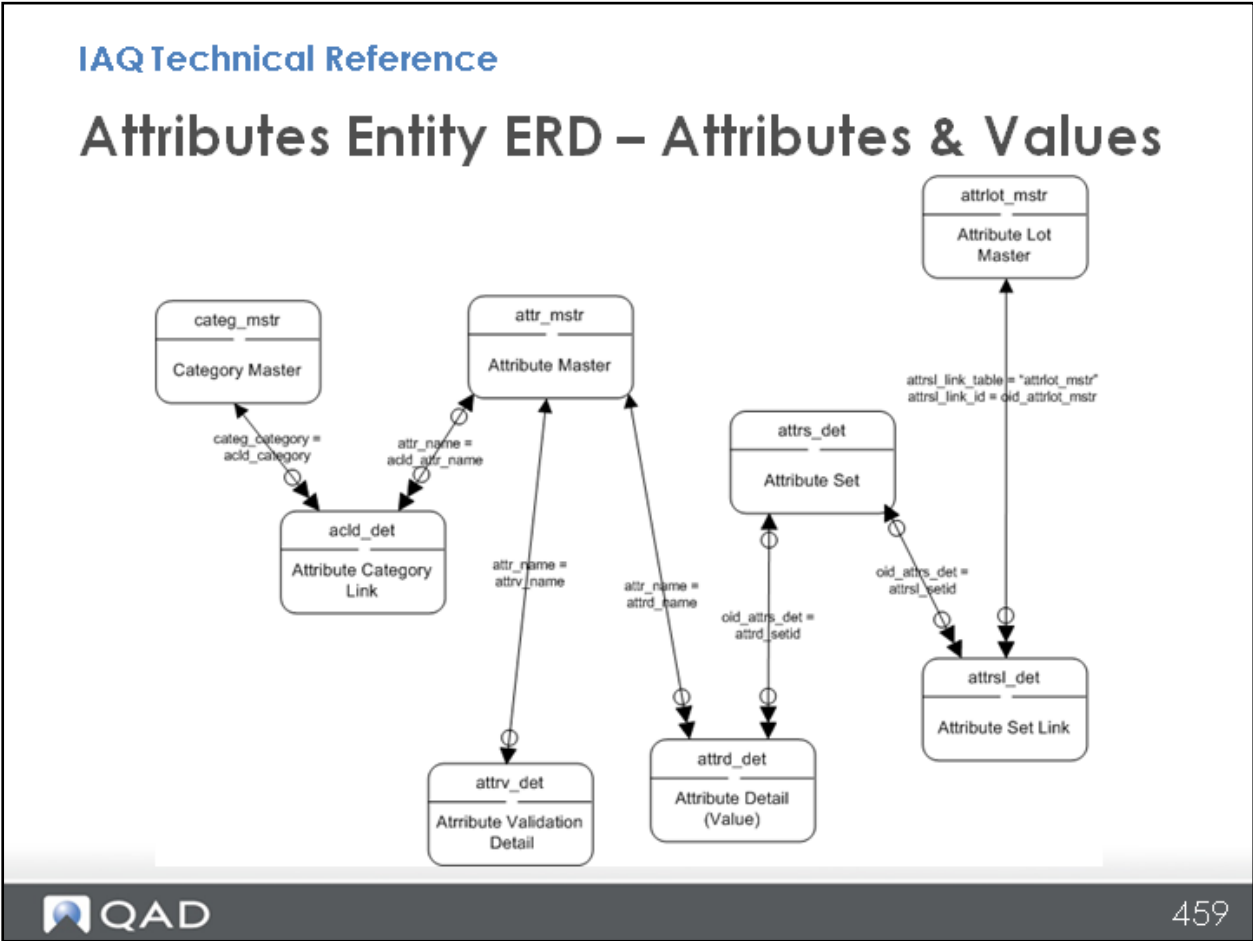


Entity-Relationship Diagrams

IAQ Technical Reference

Entity-Relationship Diagrams

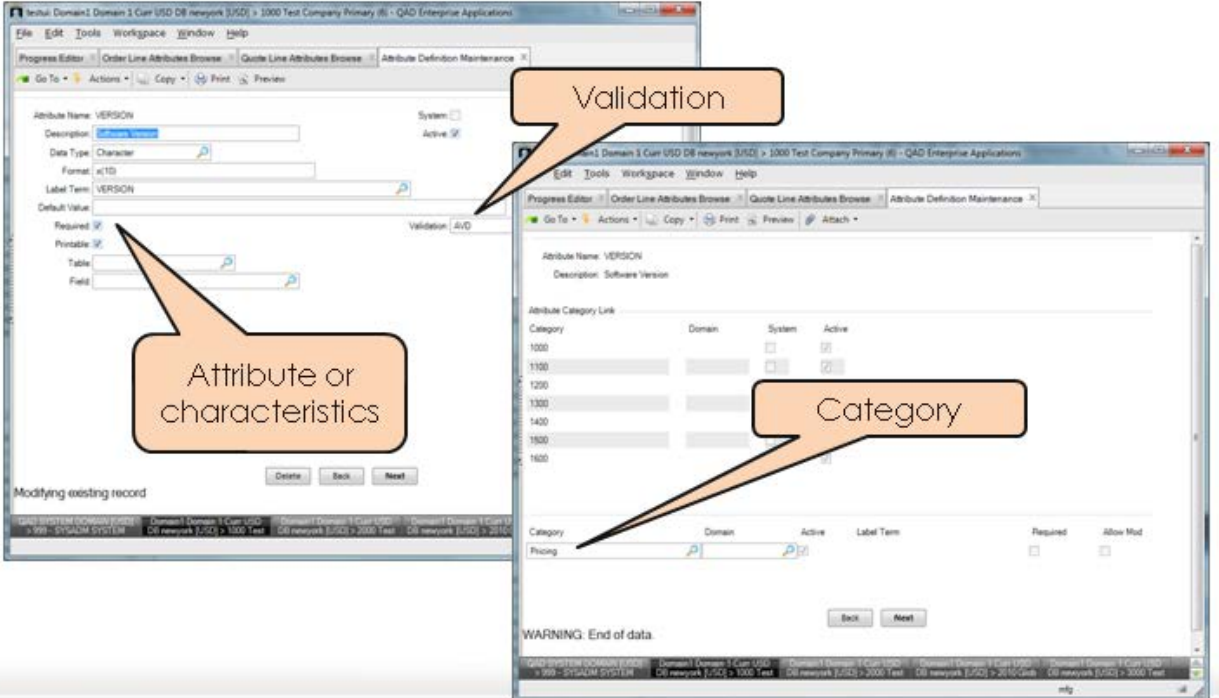
Attributes Entity ERD – Attributes & Values



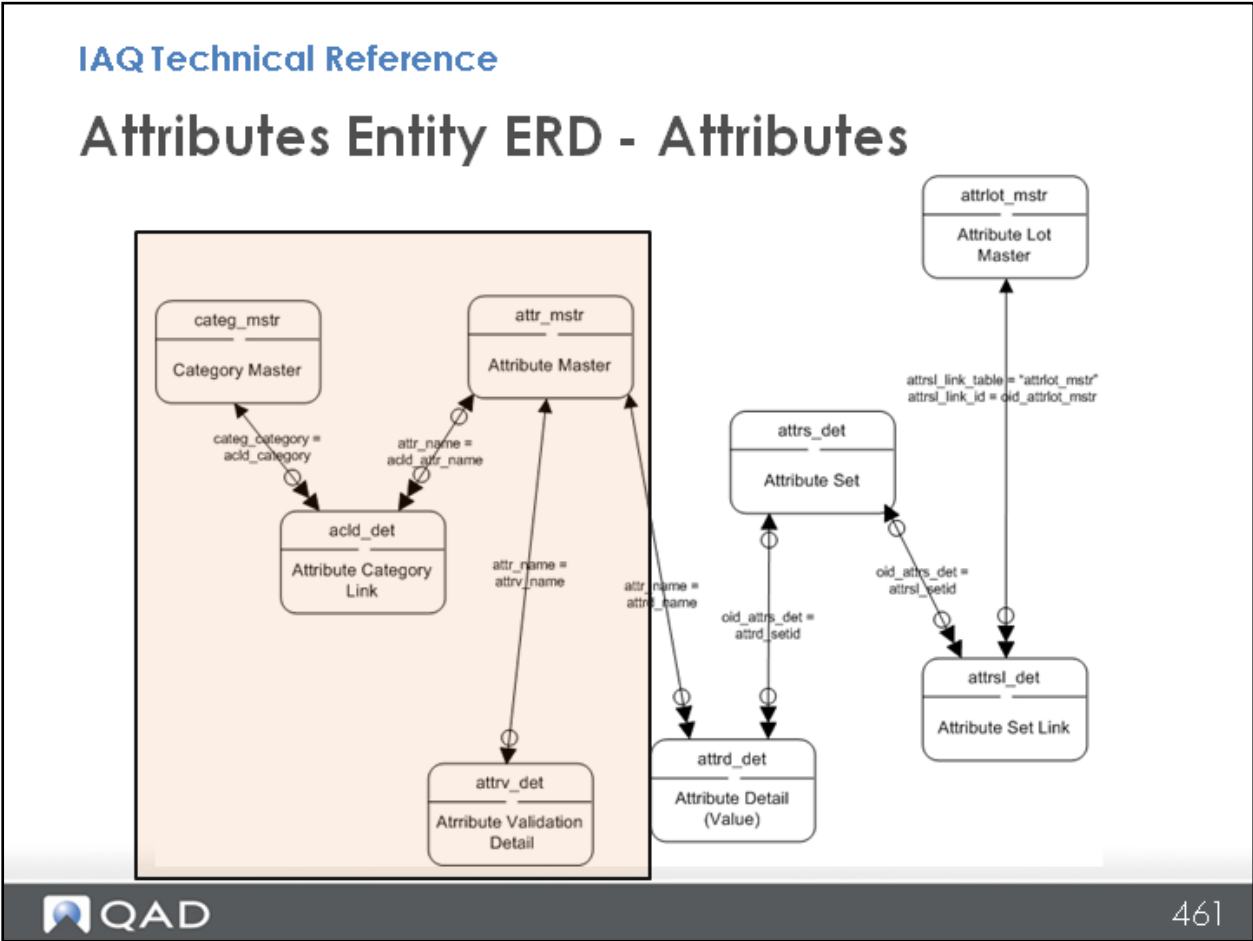
Attributes Entity ERD - Attributes

IAQ Technical Reference

Attributes Entity ERD - Attributes



Attributes Entity ERD - Attributes



Attributes Entity ERD - Values

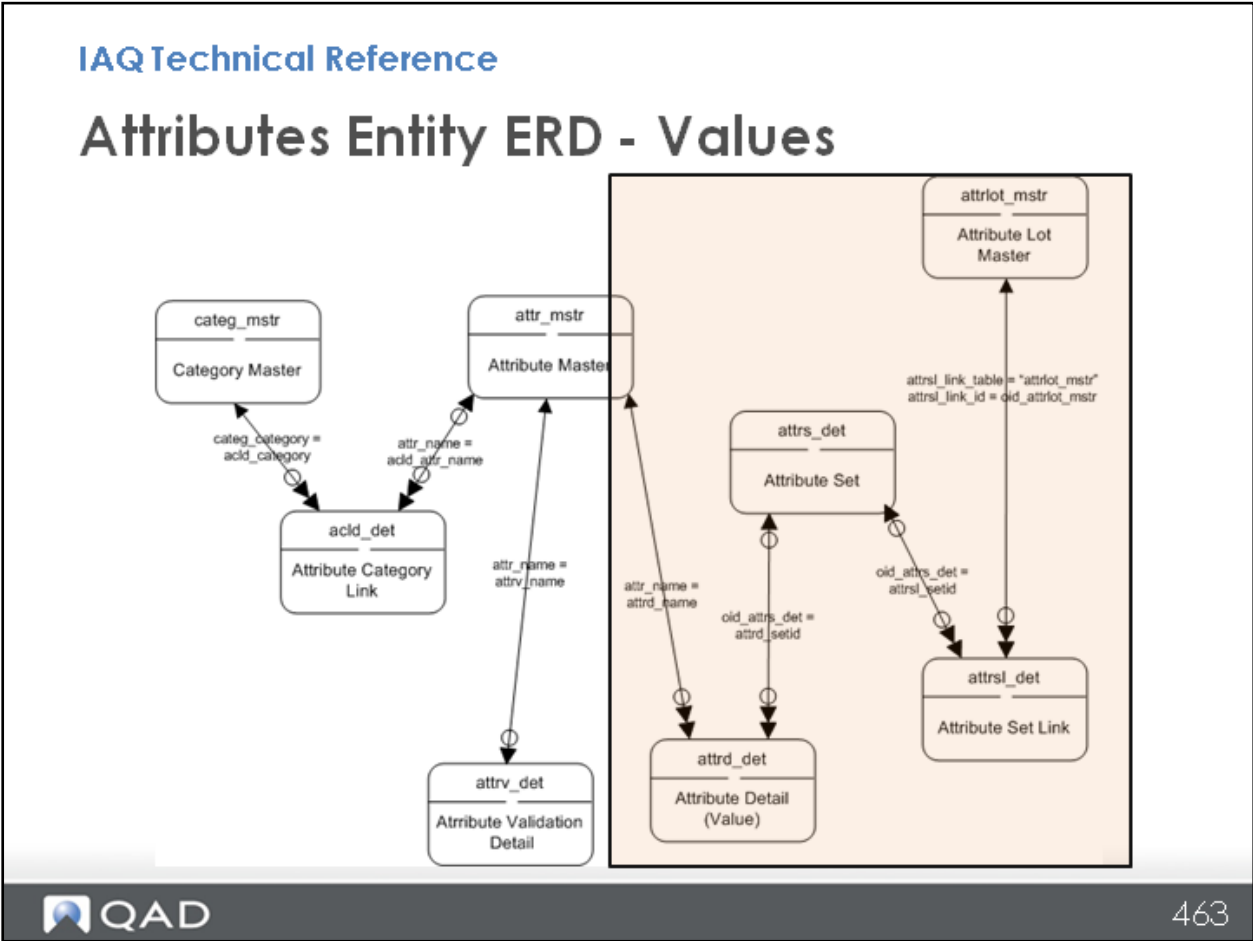
IAQ Technical Reference

Attributes Entity ERD - Values

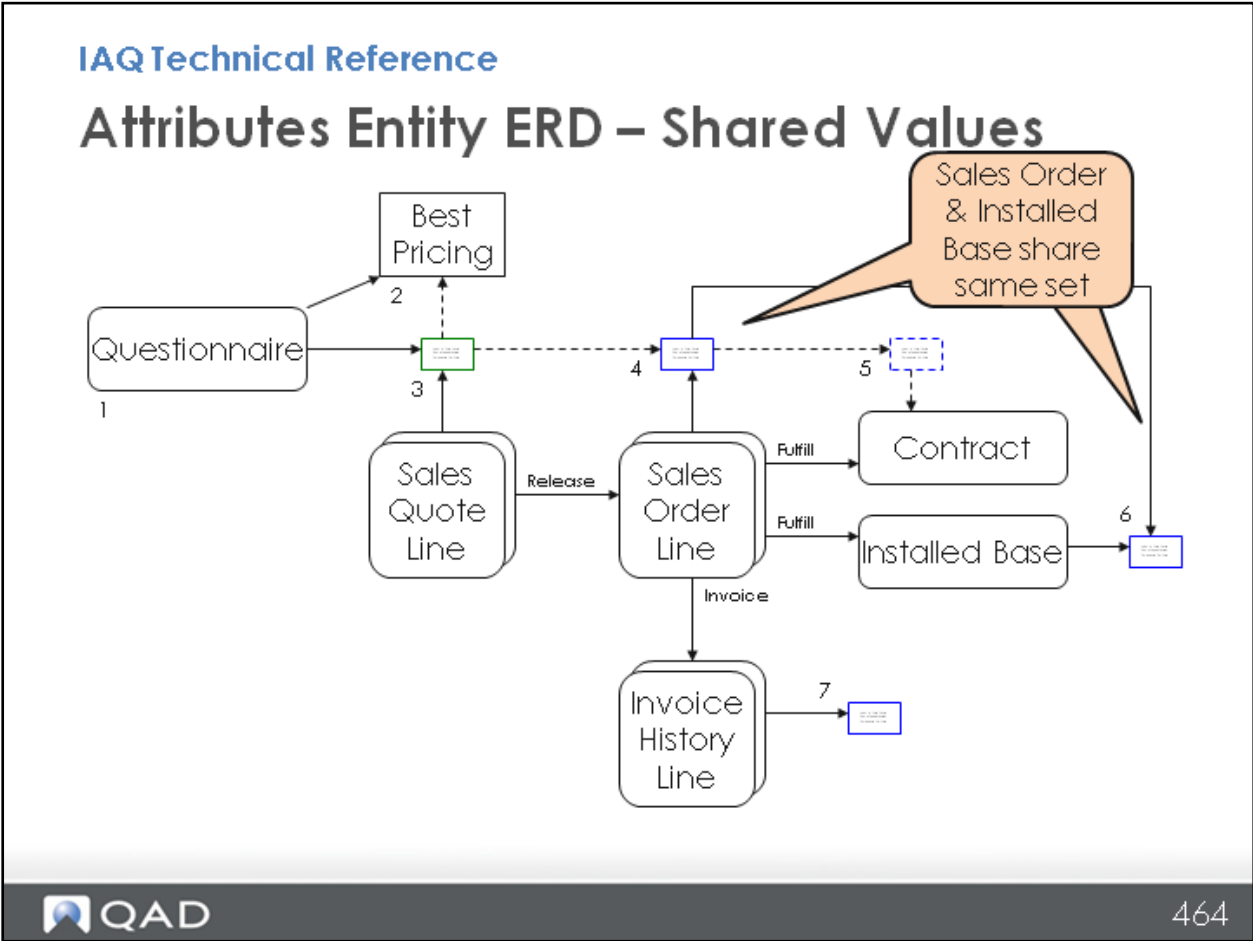
The screenshot displays the 'Item Lot Attributes' window in QAD Enterprise Applications. The main table shows the following data:

Item Number	Description	Lot/Serial	Sequence	Attribute ID	Description	Label	Attribute Value	UM	Entered	D
PD300100102	Cream, Heavy Pasteurized	C1001	1	81009	Vitamin A Percent	VITAMIN_A	5.22%		yes	D
PD300100102	Cream, Heavy Pasteurized	C1001	3	81032	Iron Percent	IRON	1.00%		yes	D
PD300100102	Cream, Heavy Pasteurized	C1001	3	81103	Vitamin C Percent	VITAMIN_C	1.00%		yes	D
PD300100102	Cream, Heavy Pasteurized	C1001	4	81014	Cholesterol Integer	CHOLESTEROL	24		yes	Int
PD300100102	Cream, Heavy Pasteurized	C1001	5	81063	Saturated Fat Decimal	FAT_SAT	4.88		yes	D

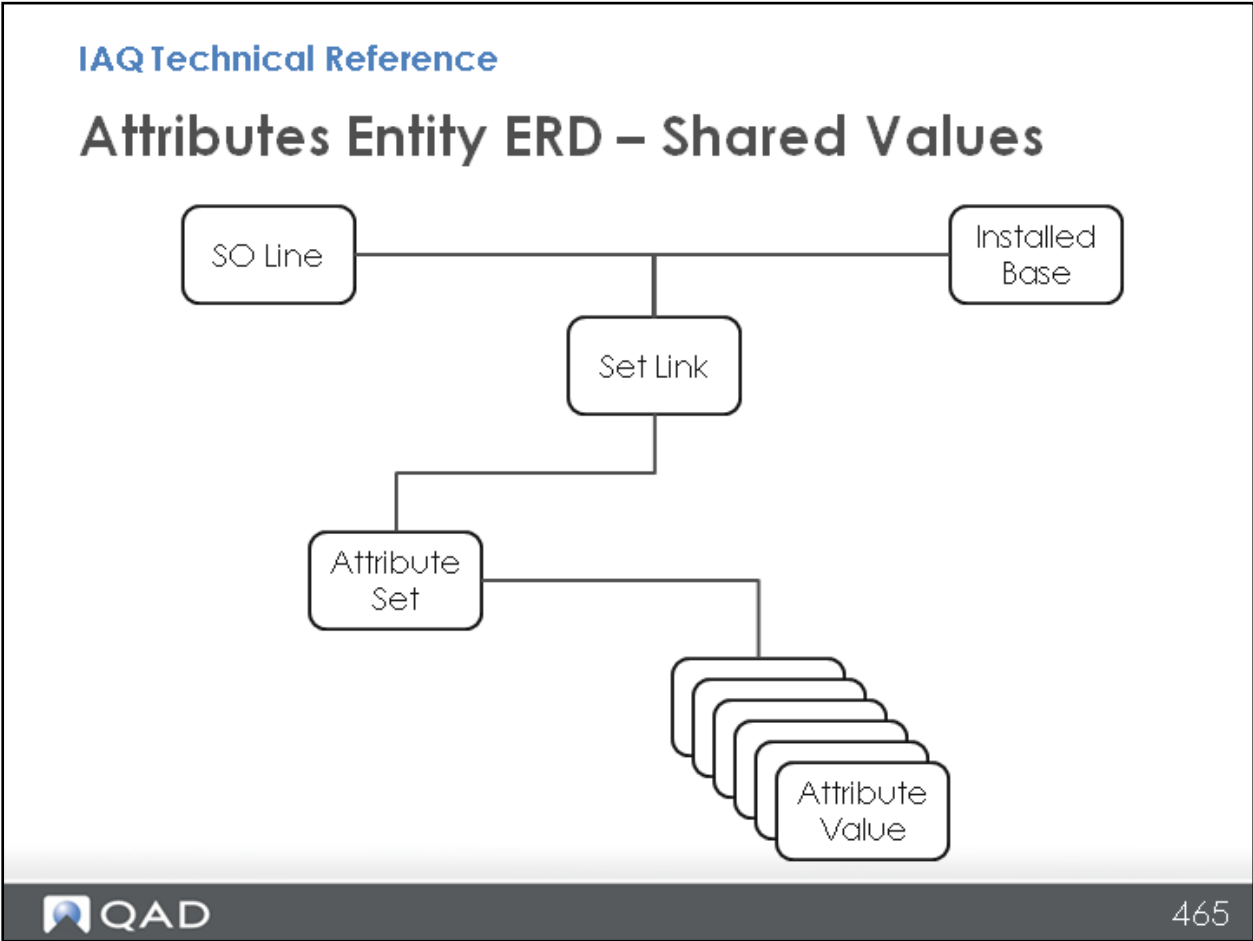
Attributes Entity ERD - Values



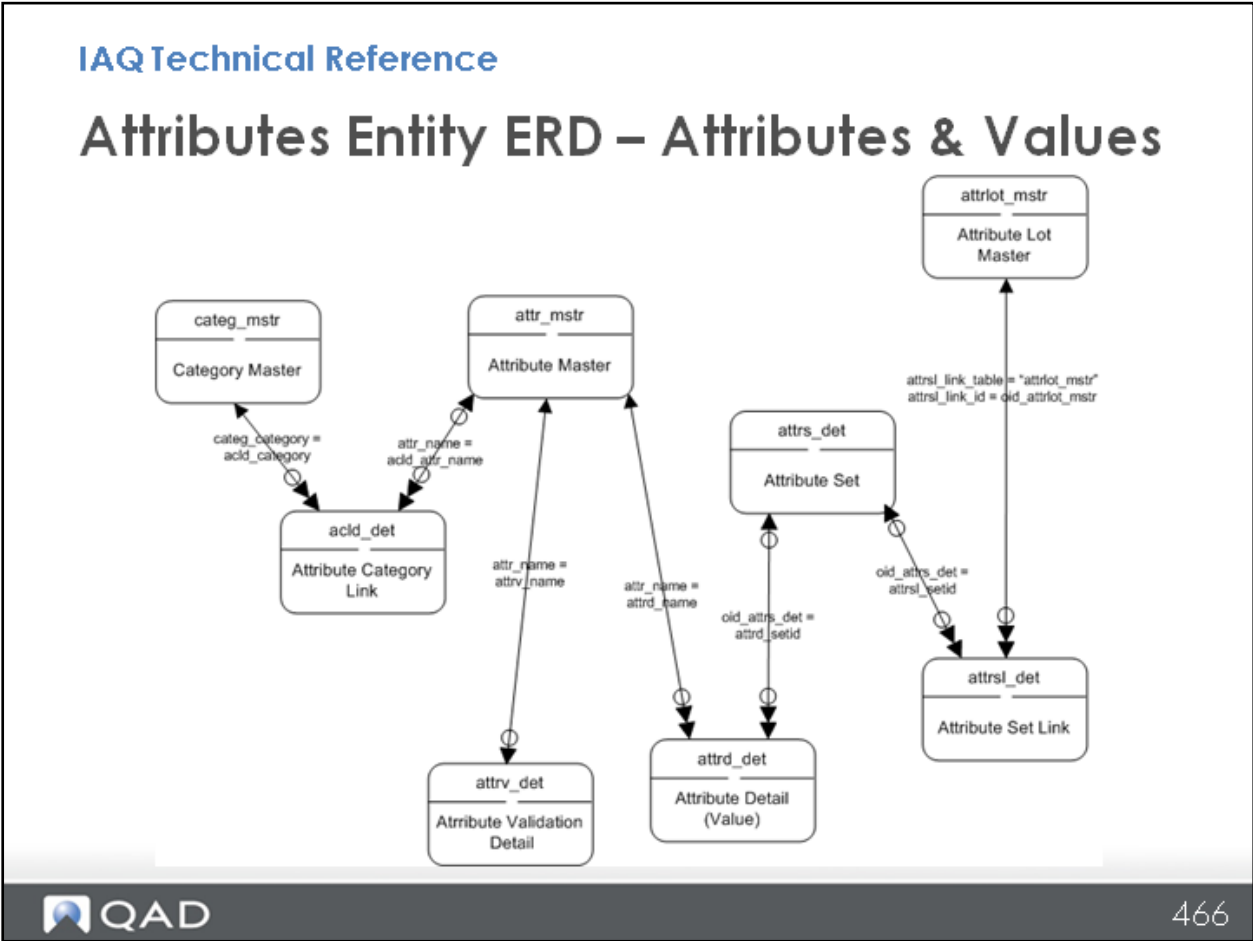
Attributes Entity ERD – Shared Values



Attributes Entity ERD – Shared Values




Attributes Entity ERD – Attributes & Values



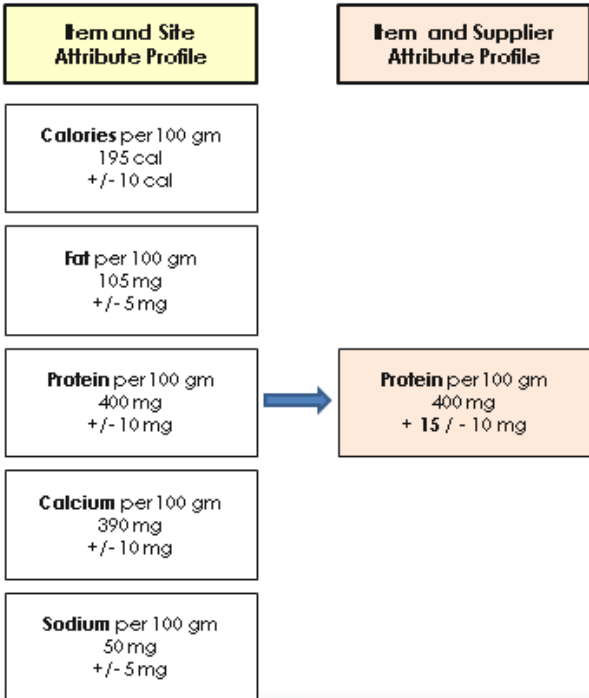
Profiles Example

IAQ Technical Reference Profiles Example

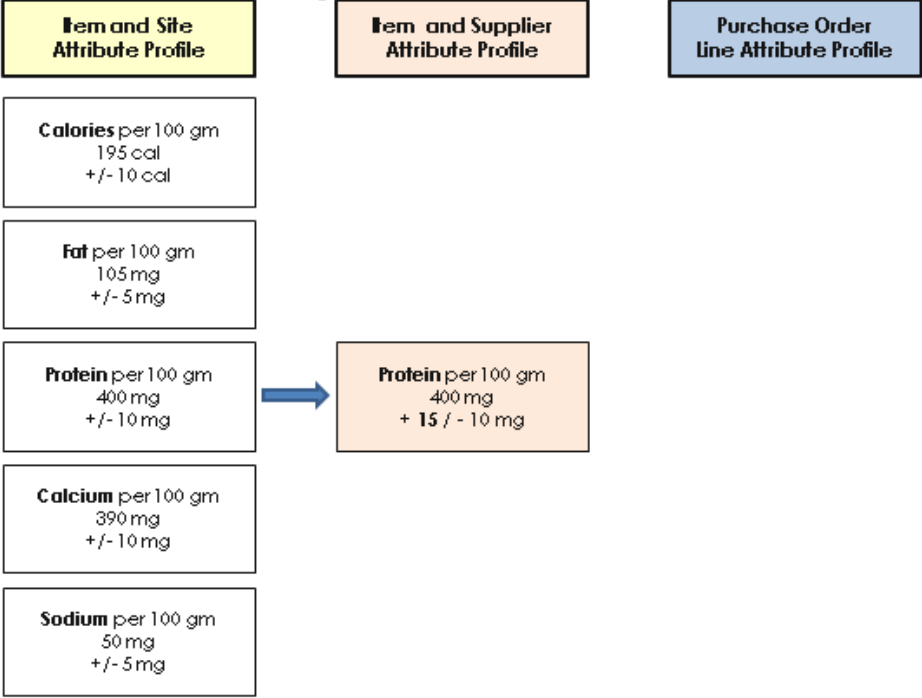
Item and Site Attribute Profile
Calories per 100 gm 195 cal +/- 10 cal
Fat per 100 gm 105 mg +/- 5 mg
Protein per 100 gm 400 mg +/- 10 mg
Calcium per 100 gm 390 mg +/- 10 mg
Sodium per 100 gm 50 mg +/- 5 mg



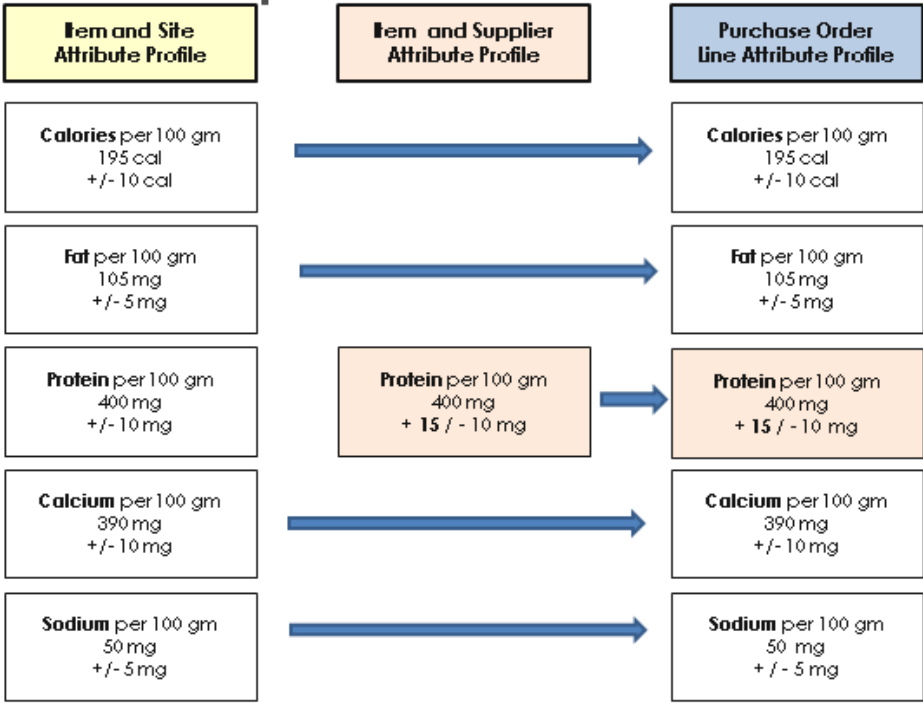
IAQ Technical Reference Profiles Example



IAQ Technical Reference Profiles Example



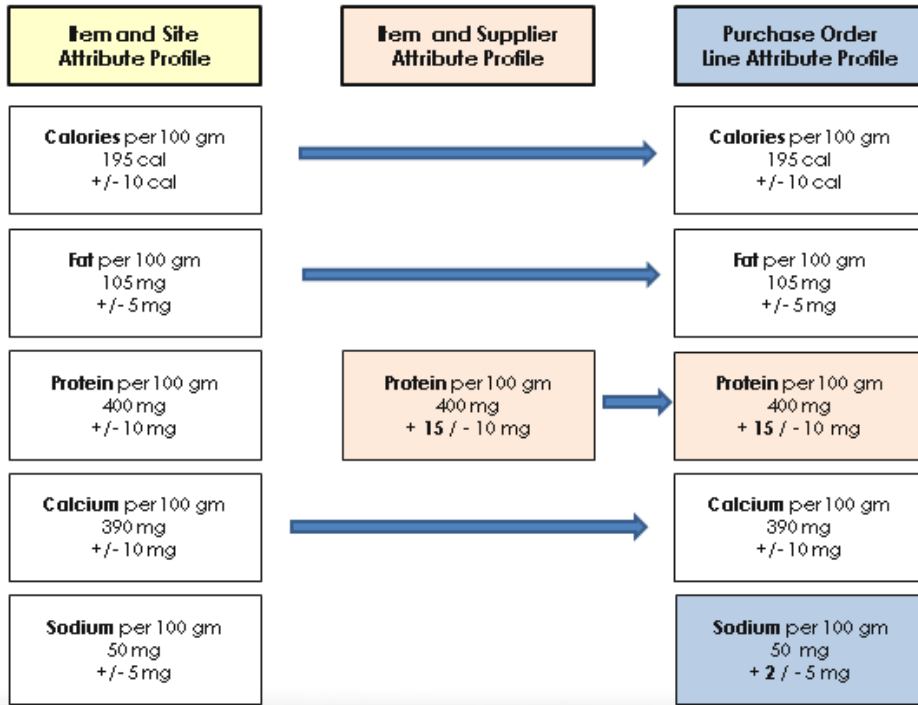
IAQ Technical Reference Profiles Example



Color-coating shows the source of the specification



IAQ Technical Reference Profiles Example



Color-coating shows the source of the specification

IAQ Technical Reference Profiles Example

Item and Site Attribute Profile	Item and Supplier Attribute Profile	Purchase Order Line Attribute Profile
Calories per 100 gm 195 cal +/- 10 cal		Calories per 100 gm 195 cal +/- 10 cal
Fat per 100 gm 105mg +/- 5mg		Fat per 100 gm 105mg +/- 5mg
Protein per 100 gm 400 mg +/- 10 mg	Protein per 100 gm 400 mg + 15 / - 10 mg	Protein per 100 gm 400 mg + 15 / - 10 mg
Calcium per 100 gm 390 mg +/- 10 mg		Calcium per 100 gm 390 mg +/- 10 mg
Sodium per 100 gm 50 mg +/- 5 mg		Sodium per 100 gm 50 mg + 2 / - 5 mg
		Vitamin D 6% MDR



Color-coating shows the source of the specification

Profiles - Setup

IAQ Technical Reference

Profiles - Setup

- Item / Site
- Item / Supplier (Purchasing)
- Item / Customer (Sales)
- Item / Site / Production Line (Production)
- Item / Site / BOM Component (Production)
- Test Specification (Quality)



Profiles - Operational

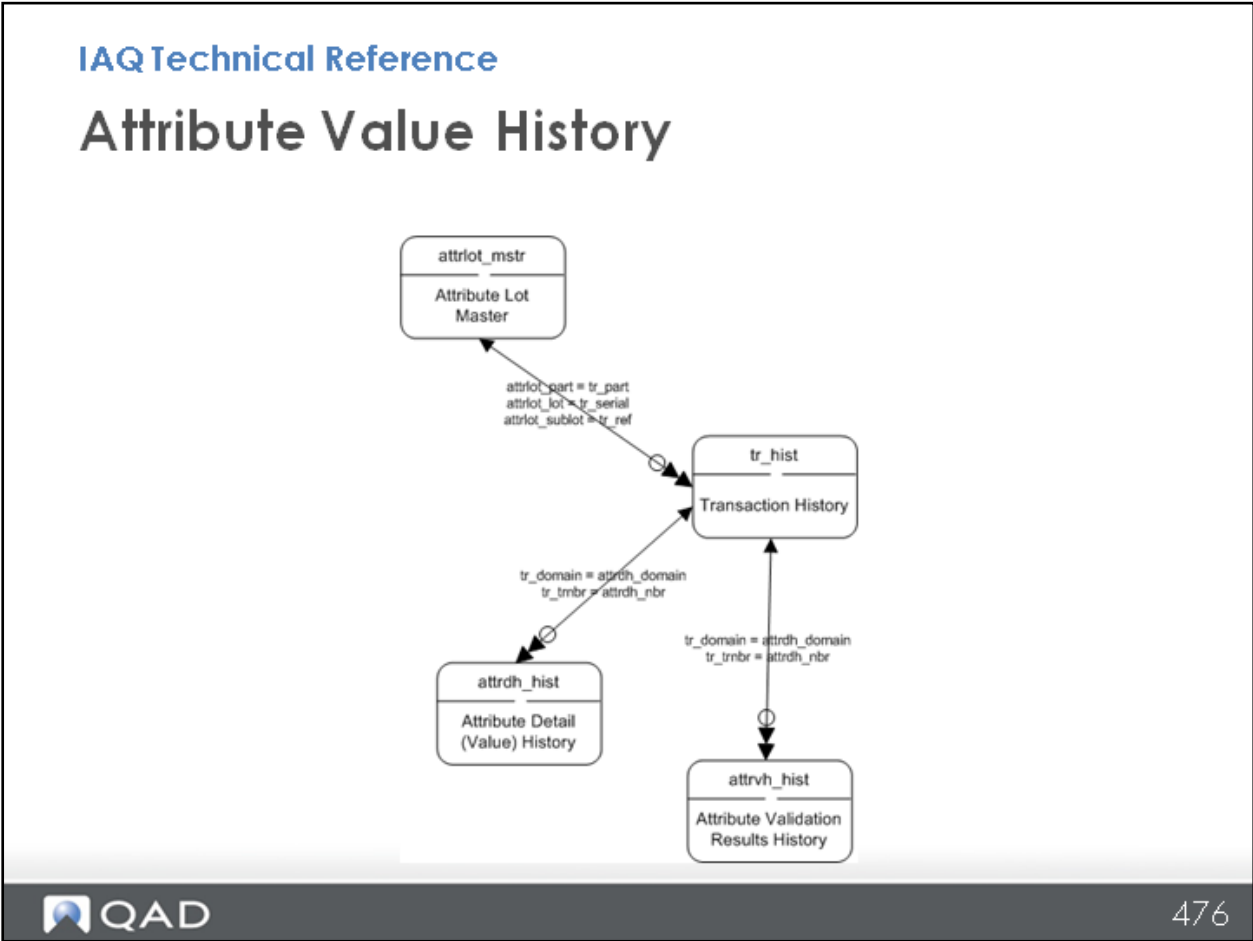
IAQ Technical Reference

Profiles - Operational

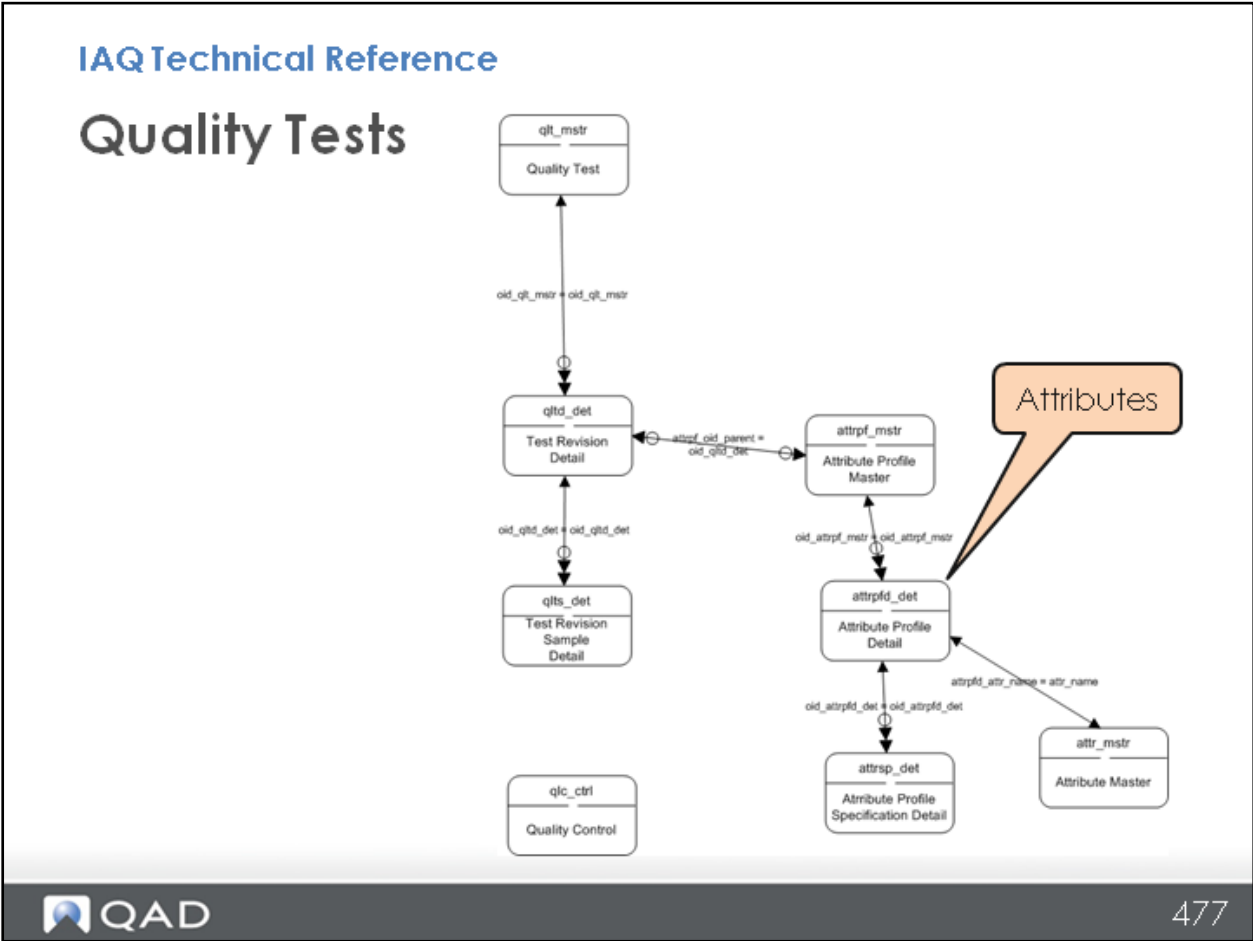
- Sales Order Line
- Purchase Order Line
- Cum Order
- Work Order
- Work Order Component
- Quality Order
- Lot Attribute Order



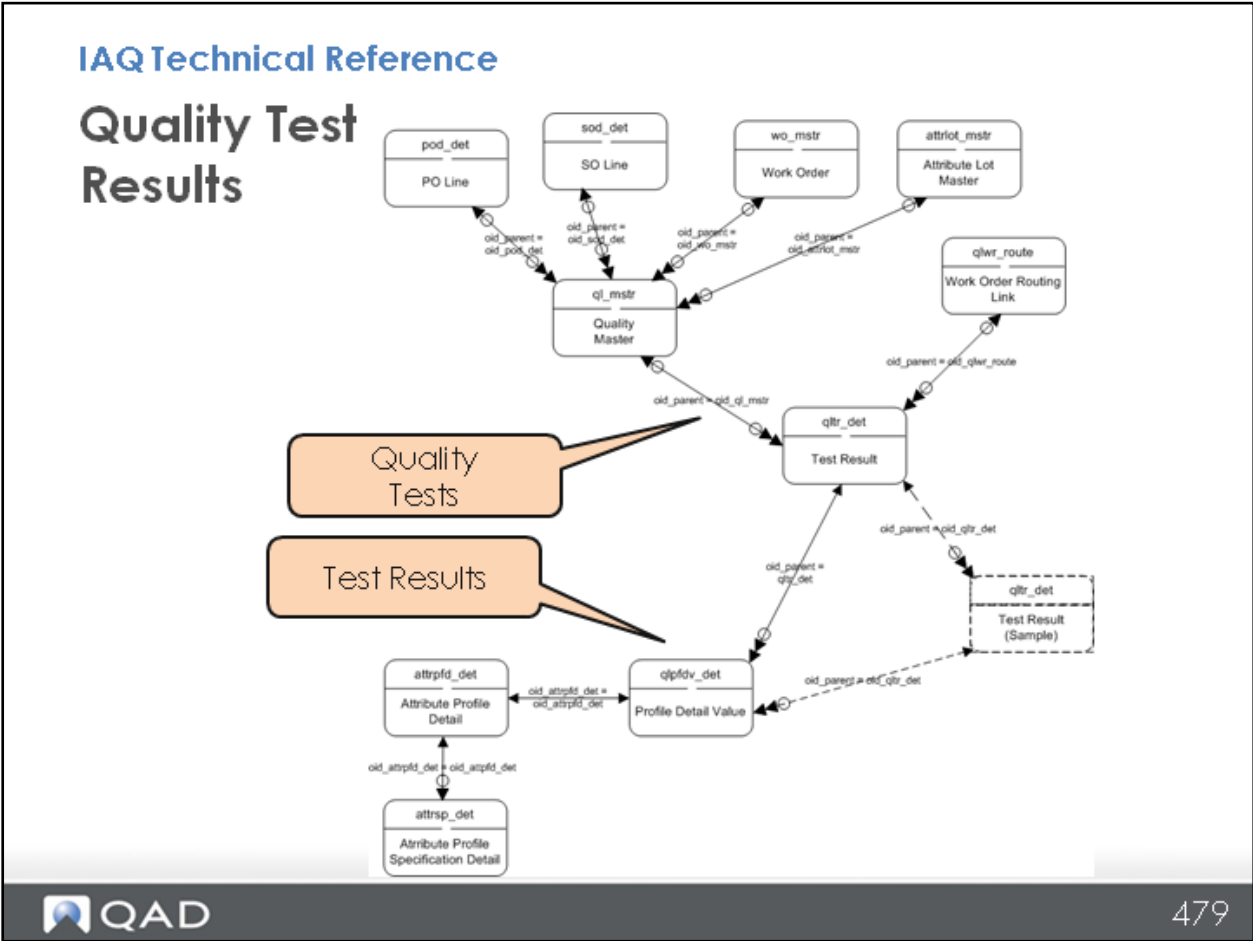
Attribute Value History



Quality Tests



Quality Test Results



Quality Test Results

IAQ Technical Reference Quality Test Results

The screenshot displays the QAD software interface for Quality Test Results. It features a menu bar (File, Edit, Tools, Workspace, Window, Help) and a toolbar with 'Maintain Quality Order' highlighted. Below the toolbar is a search bar and a table of items. The table has columns: Item, Description, Site, Lot, Qty, Quality Order, and Open. The data rows are:

Item	Description	Site	Lot	Qty	Quality Order	Open
70050	Pills	10-100	lotwo0213e	11.0	QO13021300001	2/13/2013
70050	Pills	10-100	PL10010	200.0	QO13021100007	2/11/2013
70050	Pills	10-100	honesalot	1.0	QO13120500001	12/5/2013

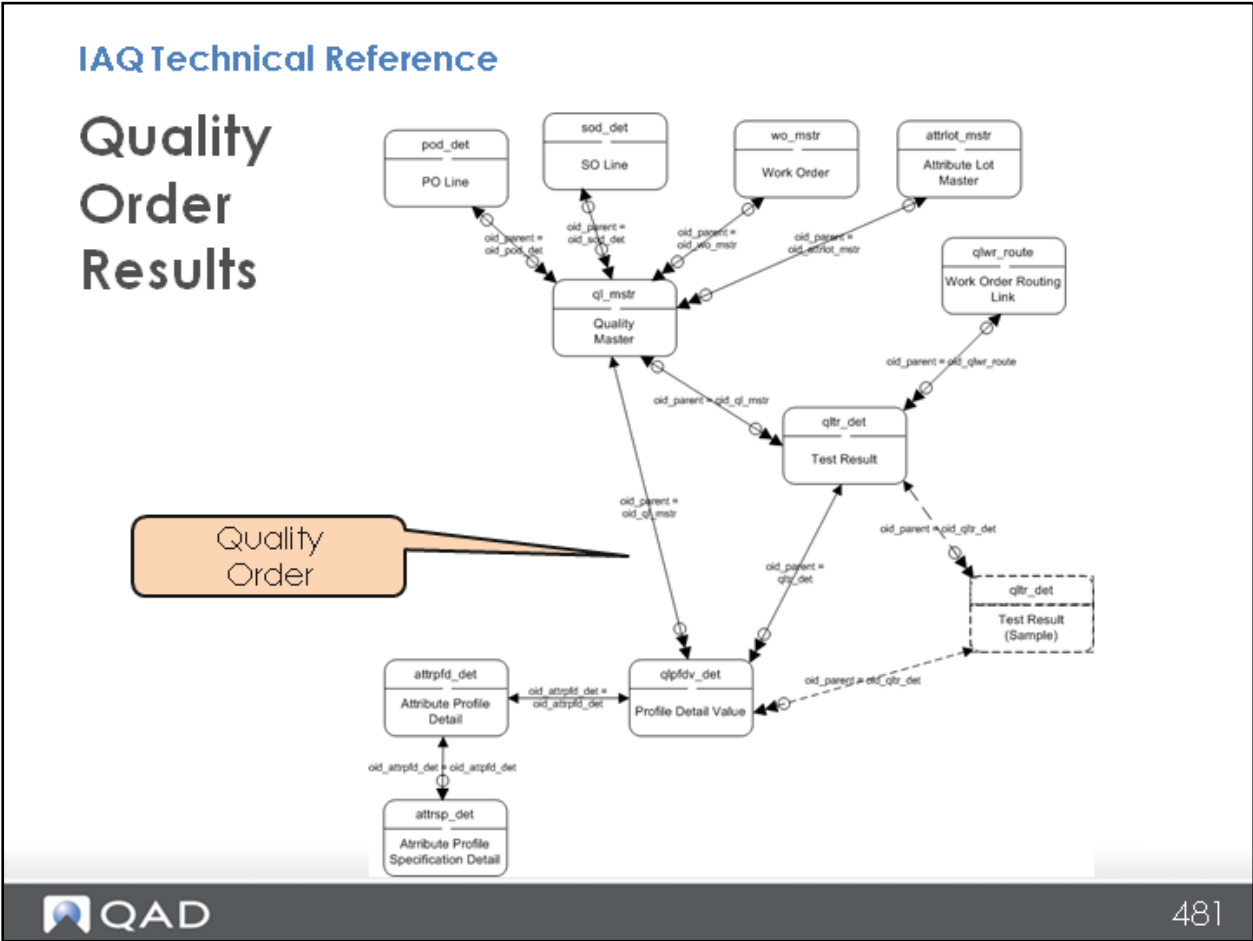
Below the items table is a section for 'Quality Order Test Records' with columns: Seq, Test ID, Test Description, Revision, Reference, Test Record ID, Required, and Test. The data row is:

Seq	Test ID	Test Description	Revision	Reference	Test Record ID	Required	Test
3	T70050	Simethicone 125 mg Lab	A		QT13021100007	Yes	

At the bottom is a section for 'Test Record Attributes' with columns: Sequence, Attribute ID, Source, Label, Test ID, Description, and Revision. The data rows are:

Sequence	Attribute ID	Source	Label	Test ID	Description	Revision
10	21195	Test	SIMETHICONE	T70050	Simethicone 125 mg L	A
11	81005	Test	Calcium	T70050	Simethicone 125 mg L	A
12	21056	Test	DEXTROSE	T70050	Simethicone 125 mg L	A
14	21116	Test	MALTODEXTRIN	T70050	Simethicone 125 mg L	A
15	21211	Test	SUCROSE	T70050	Simethicone 125 mg L	A

Quality Order Results



Quality Test Results

IAQ Technical Reference

Quality Test Results

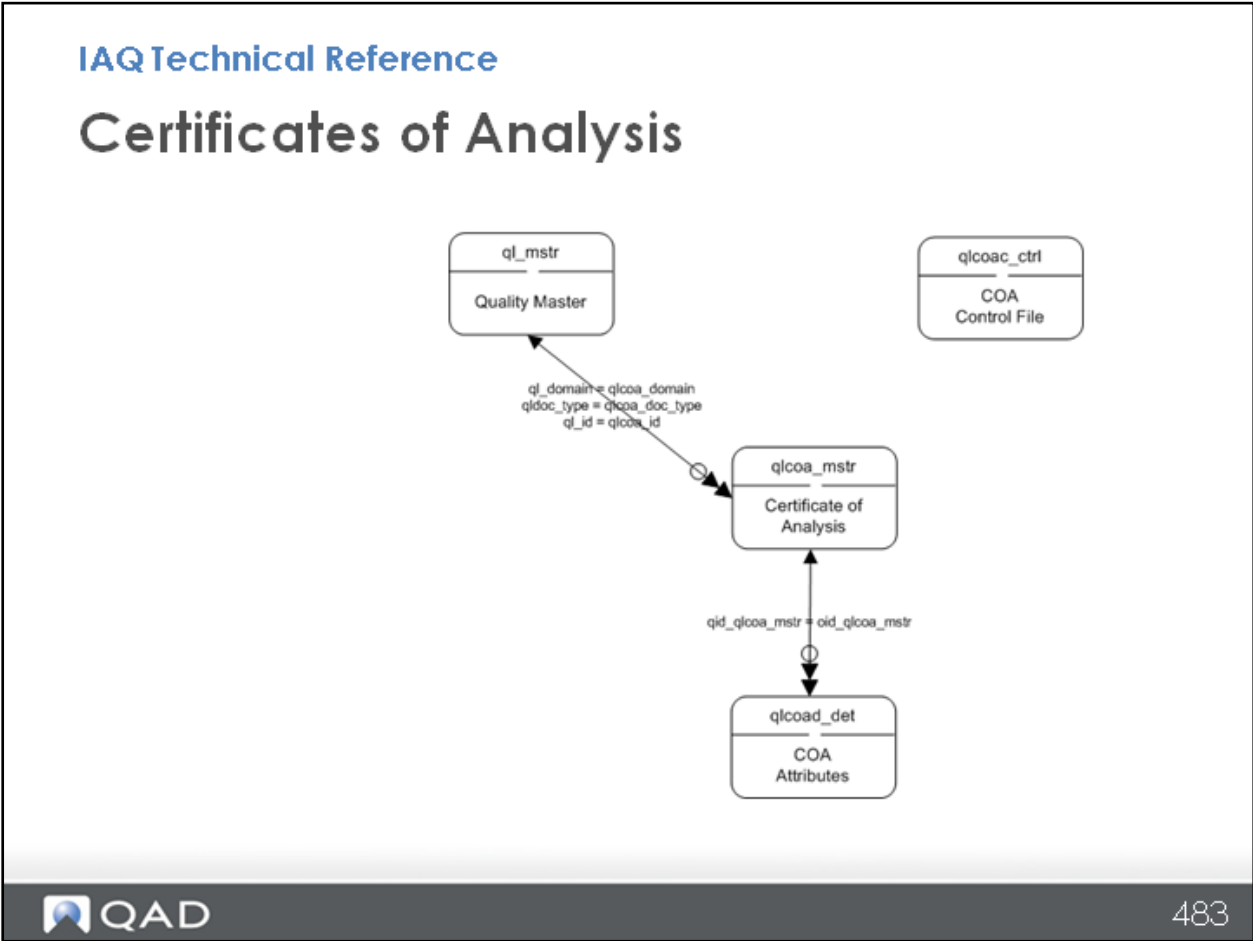
The screenshot shows the QAD software interface. The top window is titled 'Maintain Quality Order' and displays a table of items. The second window is titled 'Quality Order Attributes' and displays a table of test records for item T70050.

Item	Description	Site	Lot	Sublot	Qty	Quality Order	Open
70050	Pills	10-100	lotwo0213e		11.0	QO13021300001	2/13/2013
70050	Pills	10-100	PL10010		200.0	QO13021100007	2/11/2013
70050	Pills	10-100	newlot		4.0	QO13120500001	12/5/2013

Sequence	Attribute ID	Source	Label	Test ID	Description	Test Met
10	21196	Test	SIMETHICONE	T70050	Simethicone 125 mg Lab	
11	81005	Test	Calcium	T70050	Simethicone 125 mg Lab	
12	21056	Test	DEXTROSE	T70050	Simethicone 125 mg Lab	
14	21116	Test	MALTODEXTRIN	T70050	Simethicone 125 mg Lab	
15	21211	Test	SUCROSE	T70050	Simethicone 125 mg Lab	
16	21171	Test	POLYDIMETHYL_SILOXANE	T70050	Simethicone 125 mg Lab	
18	21063	Test	D-SORBITOL	T70050	Simethicone 125 mg Lab	
30	21037	Test	CHLORIDES	T70050	Simethicone 125 mg Lab	
31	21217	Test	SULPHATE	T70050	Simethicone 125 mg Lab	



Certificates of Analysis



Hand-Crafted Browsers

IAQ Technical Reference

Hand-Crafted Browsers

Overview

IAQ Technical Reference

Overview

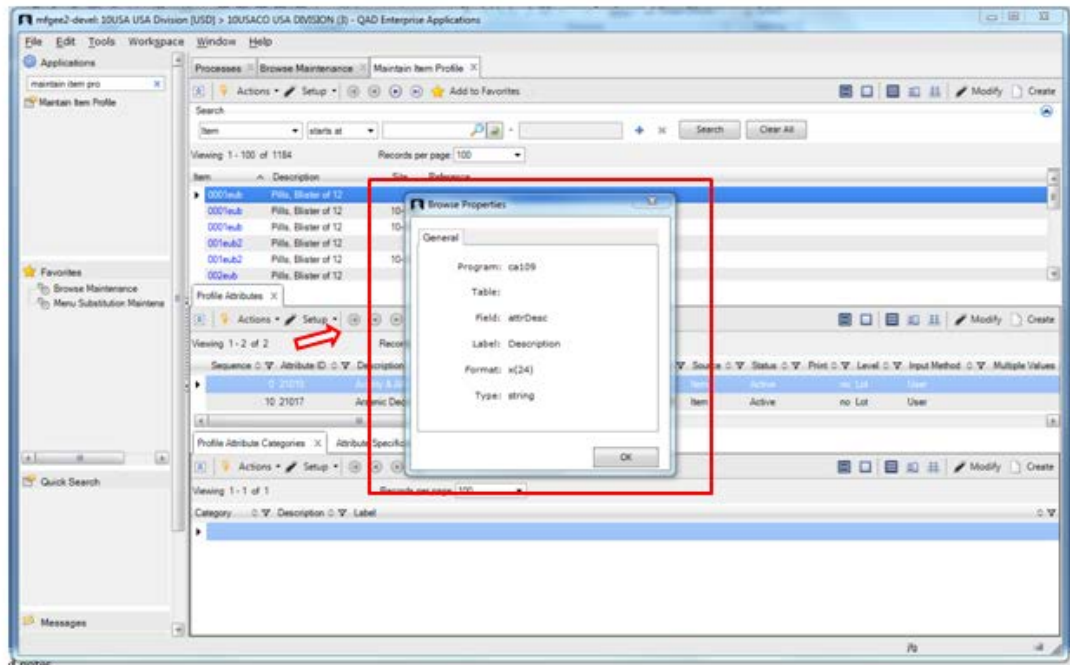
- Why?
 - Limitations of Browse Maintenance
 - Examples
 - Multiple queries needed
 - Browse of schedule receipts require rows of PO's and WO's
 - Data from more than 1 record of same table
 - Browse with Customer Sold-To Address & Customer Ship-To Address on same row
 - Data in the browse come from recursively reading a table
 - Browse of shipper contents

Attribute
Specification
source

Hand-Crafted Browsers – Profile Source

IAQ Technical Reference

Hand-Crafted Browsers – Profile Source



IAQ Technical Reference Profiles Example

Item and Site Attribute Profile

Calories per 100 gm
195 cal
+/- 10 cal

Fat per 100 gm
105 mg
+/- 5 mg

Protein per 100 gm
400 mg
+/- 10 mg

Calcium per 100 gm
390 mg
+/- 10 mg

Sodium per 100 gm
50 mg
+/- 5 mg

Item and Supplier Attribute Profile

Protein per 100 gm
400 mg
+ 15 / - 10 mg

Purchase Order Line Attribute Profile

Calories per 100 gm
195 cal
+/- 10 cal

Fat per 100 gm
105 mg
+/- 5 mg

Protein per 100 gm
400 mg
+ 15 / - 10 mg

Calcium per 100 gm
390 mg
+/- 10 mg

Sodium per 100 gm
50 mg
+ 2 / - 5 mg

Vitamin D
6% MDR



Color-coating shows the source of the specification

Hand-Crafted Browsers

IAQ Technical Reference

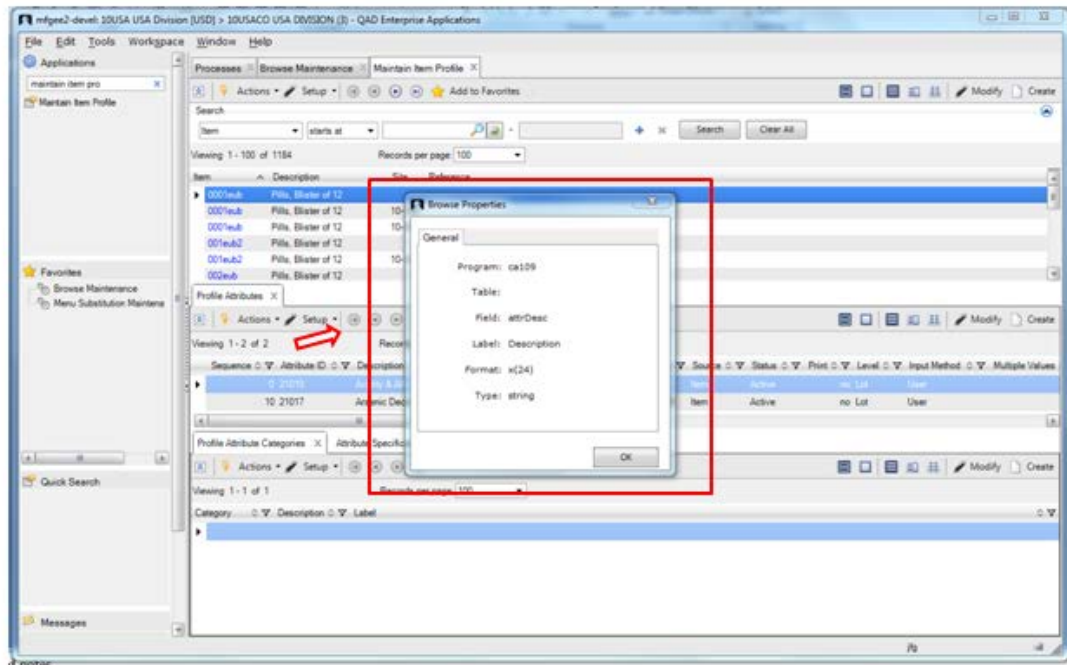
Hand-Crafted Browsers

- Steps
 - Create Browse Definition
 - Used as placeholder
 - Call Progress Program
 - Pre-Processor Definitions
 - Use !RunProc: tag
 - /*!RunProc:<xxnnn>.p*/
 - Query engine will call program
 - Browse Definition is NOT used for display
 - Program defines columns
 - Program resides in us/<xx>/directory

Hand-Crafted Browsers

IAQ Technical Reference

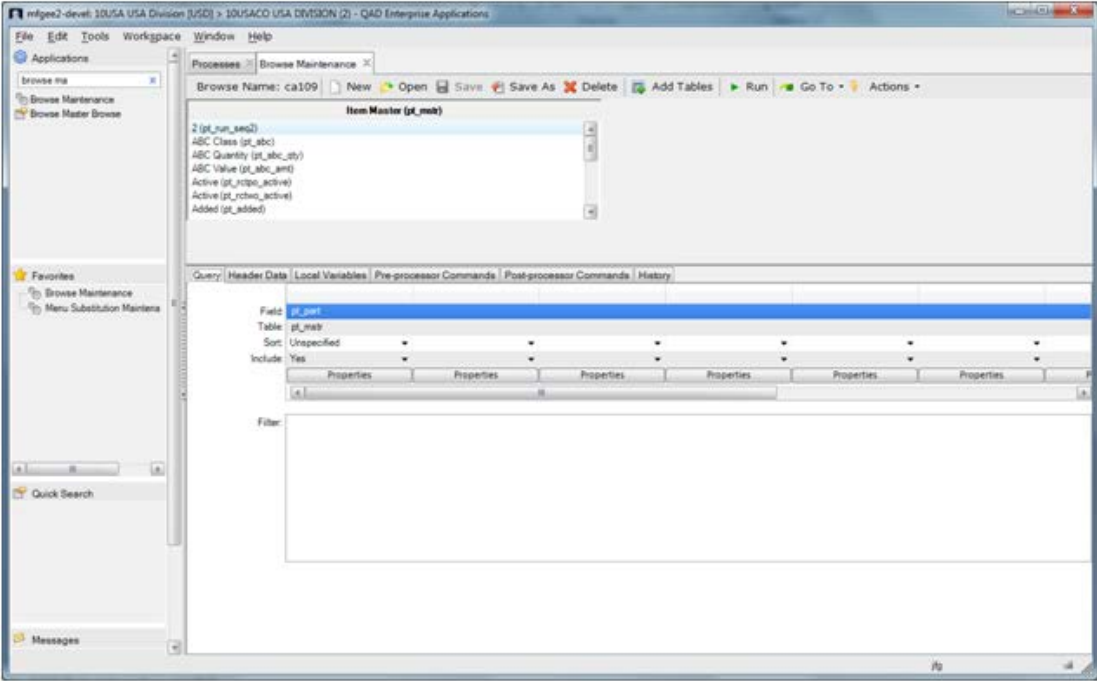
Hand-Crafted Browsers



Hand-Crafted Browsers

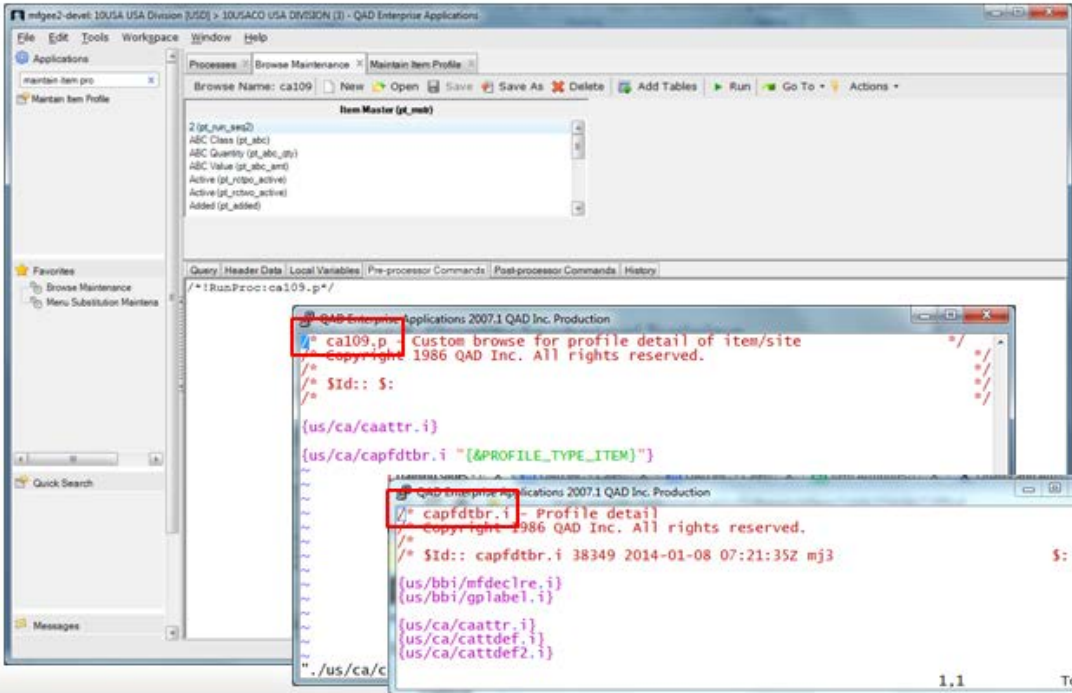
IAQ Technical Reference

Hand-Crafted Browsers



Hand-Crafted Browsers

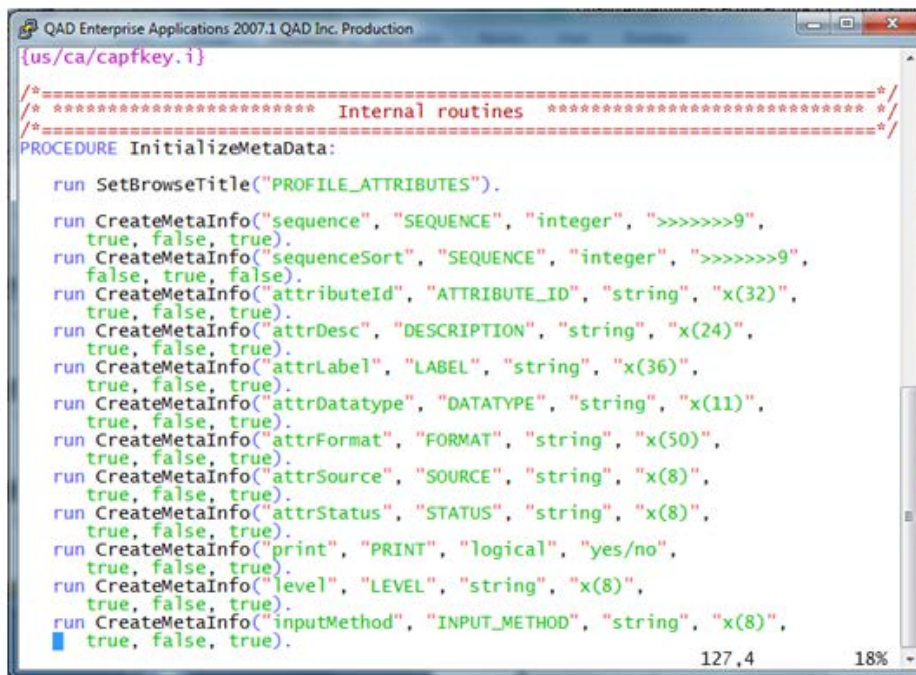
IAQ Technical Reference Hand-Crafted Browsers



Hand-Crafted Browsers

IAQ Technical Reference

Hand-Crafted Browsers



```

QAD Enterprise Applications 2007.1 QAD Inc. Production
{us/ca/capfkey.i}

/*=====*/
/* ***** Internal routines ***** */
/*=====*/
PROCEDURE InitializeMetaData:

  run SetBrowseTitle("PROFILE_ATTRIBUTES").

  run CreateMetaInfo("sequence", "SEQUENCE", "integer", ">>>>>>9",
    true, false, true).
  run CreateMetaInfo("sequenceSort", "SEQUENCE", "integer", ">>>>>>9",
    false, true, false).
  run CreateMetaInfo("attributeId", "ATTRIBUTE_ID", "string", "x(32)",
    true, false, true).
  run CreateMetaInfo("attrDesc", "DESCRIPTION", "string", "x(24)",
    true, false, true).
  run CreateMetaInfo("attrLabel", "LABEL", "string", "x(36)",
    true, false, true).
  run CreateMetaInfo("attrDatatype", "DATATYPE", "string", "x(11)",
    true, false, true).
  run CreateMetaInfo("attrFormat", "FORMAT", "string", "x(50)",
    true, false, true).
  run CreateMetaInfo("attrSource", "SOURCE", "string", "x(8)",
    true, false, true).
  run CreateMetaInfo("attrStatus", "STATUS", "string", "x(8)",
    true, false, true).
  run CreateMetaInfo("print", "PRINT", "logical", "yes/no",
    true, false, true).
  run CreateMetaInfo("level", "LEVEL", "string", "x(8)",
    true, false, true).
  run CreateMetaInfo("inputMethod", "INPUT_METHOD", "string", "x(8)",
    true, false, true).
  
```

Hand-Crafted Browsers

IAQ Technical Reference

Hand-Crafted Browsers

- Notes
 - Browse programs reside in us/xx
 - Previous version reside in .NetUI directories
 - No special compile required
 - Previous versions compiled with mkdtd
 - Browse Definition
 - Placeholder
 - Allows browse to be a standard browse
 - Browse Links
 - Menu
 - Security

Hand-Crafted Browsers

IAQ Technical Reference

Hand-Crafted Browsers

- More Information
 - Brian Wintz Custom Browse Creation 01.doc
 - Custom Browsers-20120905.ppt
 - Using a Custom Browse as a Standard Browse
 - Custom browse – paging

 - Memory Leaks in the AppServer and Custom browsers

More Information – Hand-Crafted Browsers

IAQ Technical Reference

More Information – Hand-Crafted Browsers

- More Information

Course Name: Customer Management: Custom Browse - 2010.1 Functional Detail

Status: Active

Description: This QBit focuses on how to create custom browsers as part of QAD 2010.1 EE.

Course Objectives

After this presentation you will have a high level understanding of how to create custom browsers.

The custom browse is a program which is deployed in an appshell directory which follows the standard two letter followed by three number browse naming convention. The custom browse does not have any of the standard browse record definitions, such as brw_mstr or vue_mstr. The reason for using custom browsers is to overcome limitations with the use of standard browse. With a standard browse the same database record cannot be referenced more than once and the use of qad_wkfl as a location for temporary storage of complex data leads to difficult problems. A key advantage of using custom browsers is that they can process complex data. As an example, a Sales Order Tracking browse can be developed which merges information from existing sales orders as well as from inventory history. Since the resulting data contains records whether a sales order or inventory history or both exist, it cannot be formulated as a standard browse query. Furthermore, the data returned by a custom browse need not result from a database query, such as displaying list of files from a directory or data from an external system. There are some limitations to these custom browsers. Currently these custom browsers can only be run from the .Net AppShell, attempting to launch from a character session will result in a Progress error. Operational metrics cannot currently make use of custom browsers.



Data Loads and Migrations

IAQ Technical Reference

Data Loads and Migrations

Overview

IAQ Technical Reference

Overview

- Initial Data Load
 - Attributes
 - Item Profiles
 - Test Specifications
- Daily Operational Data
 - Lot Attribute Orders
 - Test Results

Data Loads and Migrations

IAQ Technical Reference

Data Loads and Migrations

- CIM
 - Navigate CHUI screens
- Qxtend Qdocs
 - API's
 - Communicating With Other Products
 - Shop Floor Controllers
 - Test Equipment
 - Quality
 - CEBOS MQ1 Elements

Data Loads and Qdocs – Qdocs List

IAQ Technical Reference

Data Loads and Qdocs – Qdocs List

- **Attributes**
 - ItemAttributeMaintenance
- **Labels**
 - LabelMasterMaintenance
- **Categories**
 - MaintainItemAttributeCategory
- **Profiles- Setup**
 - MaintainItemProfile
 - MaintainItemCustomerProfile
 - MaintainItemSupplierProfile
 - MaintainBOMComponentProfile
- **Profiles – Orders**
 - MaintainCumOrderProfile
 - MaintainPoLineProfile
 - MaintainSoLineProfile
 - MaintainWoProfile
 - MaintainWOComponentProfile



The directory where the QXtend inbound schemas reside is under the tomcat directory .../qxi/WEB-INF/schemas/QADEE/custom

In our R&D environments they are located in /tomcat/webapps/qxi/WEB-INF/schemas/QADEE/custom

In the QPC environments they are located in /tomcat/8090/webapps/qxi/WEB-INF/schemas/QADEE/custom

At one early adopter who had multiple environments they had separate directories for “qxitest”, “qxival”, and “qxiprod”, each having their own copy of the schemas directory.

So directory structure depends on how the customer’s installation is configured.

Data Loads and API's - Qdocs List

IAQ Technical Reference

Data Loads and API's - Qdocs List

- Tests
 - MaintainQualityTestSpec
 - MaintainQualityTestSpecStatus
 - TestProfileApi
 - MaintainItemTestLink
 - MaintainTestItemLink
 - BulkLoadQualityTestSpec
- Lot Attribute Order
 - CreateOpenLotAttributeOrder
- Test Results
 - MaintainQualityOrderAttributes
 - MaintainProdOpAttributes

Data Loads - Excelerator

IAQ Technical Reference

Data Loads - Excelerator

- Choose Qdoc
 - Schema
 - Name
 - Version
 - Receiver
- Tailor the Qdoc
 - Qdoc Settings

Data Loads - Troubleshooting

IAQ Technical Reference

Data Loads - Troubleshooting

- Excelerator
 - Qxtend Settings
 - Show Errors
- Qxtend
 - Receivers Not Defined
 - Logs
 - Requests Log
 - Responses Log

Packages and Installation

IAQ Technical Reference

Packages and Installation



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Packages and Installations

IAQ Technical Reference Packages and Installations

Package Name	Version	Installation Date
netui-module-progress	1.0.26.0	Oct 9, 2013 3:06 AM
netui-module-progress-trunk	1.0.27.0	
netui-module-saq-2013-encrypted-installer		
netui-module-saq-2013-encrypted-installer-vm	2.2.2.39523	Feb 13, 2014 11:10 PM
netui-module-saq-2013-unencrypted-installer		
netui-module-saq-2013-unencrypted-installer-vm	2.2.2.39523	Feb 13, 2014 11:10 PM
netui-module-saq-encrypted-installer-vm	2.2.2.39394	Feb 13, 2014 11:09 PM
netui-module-saq-unencrypted-installer-vm	2.2.2.39394	Feb 13, 2014 11:09 PM

[netui-module-saq-2013-encrypted-installer-vm](#)

[netui-module-saq-encrypted-installer-vm](#)



Packages and Installations

The screenshot shows a web browser window displaying the QAD Package Repository interface. The page title is "IAQ Technical Reference Packages and Installations". The browser address bar shows the URL: packages.qad.com/packages/netui-module-saq-2013-encrypted-installer-vm/2.2.2.39523/ui. The page header includes "QAD Package Repository" with navigation links for Search, Login, Configuration, and Help. A breadcrumb trail reads "Search » Packages » netui-module-saq-2013-encrypted-installer-vm » 2.2.2.39523".

Package details are listed on the left:

- Name: *Installer netui-module-saq-2013-encrypted-2.2.2.39523 (vm)*
- Build Date: *Feb 13, 2014 11:10 PM*
- Build Host: *coli21.qad.com*
- Publish Date: *Feb 13, 2014 11:10 PM*
- Publish User: *mj3*
- Compressed Size: *59.69 MB*
- Uncompressed Size: *61.12 MB*
- Dependencies:
- Metadata: [Package Repository](#)

On the right, an "Attributes" table is shown with a red border around it:

Attributes	
released	true

Below the details, there are three buttons: "Download Package" (highlighted with a red box), "List Resources", and "Manage Snapshots". An "Administer" link is also present.

The Windows taskbar at the bottom shows the time as 8:38 PM on 3/20/2014. The QAD logo is in the bottom left corner, and the number "505" is in the bottom right corner.

Packages and Installations

IAQ Technical Reference

Packages and Installations

- Download package
- Unzip package
- Check the contents

Unzip results in QPC environment

```
[root@qaddemo data]# pwd
/dr01/installs/saq2.2.pl_encrypted/data
[root@qaddemo data]# ls
installer
install.exe
install.inf
install.sh
netui-module-saq-encrypted-installer-vm.version
packages
SAQandLTWE_UC_2012.1.pdf
SAQ_RNs_2012.1EE_v2.2_Patch1.pdf
Serialization_IC_v022_patch1.pdf
utcompile.opcode
```

Packages and Installations

IAQ Technical Reference

Packages and Installations

- `./install.sh`

```
[root@qaddemo data]# ./install.sh -i silent -Dconfig.src=$QDT -Dconfig.env=$ENV -  
Dusr.start.script=$CUSTOM_STARTUP_SCRIPT -Dusr.stop.script=$CUSTOM_STOP_SCRIPT -  
Dqxi.home=$QXI_HOME -Dqxo.server=$QXO_SERVER
```

```
[root@qaddemo tmp]# tail -f installation.root.log
```

or with **DEBUG** option :

```
[root@qaddemo data]# ./install.sh -i silent -Dconfig.src=$QDT -Dconfig.env=$ENV -  
Dusr.start.script=$CUSTOM_STARTUP_SCRIPT -Dusr.stop.script=$CUSTOM_STOP_SCRIPT -  
Dqxi.home=$QXI_HOME -Dqxo.server=$QXO_SERVER -Dloglevel=DEBUG
```

Packages and Installations

IAQ Technical Reference

Packages and Installations

- Installation Log

```

.....
1550621 [-156] INFO ANT: 12:24:18 Installing Progress promsgs file
1550767 [-156] INFO ANT: 12:24:18 Installing queries
1550962 [-156] INFO ANT: 12:24:18 Installing query programs
1551013 [-156] INFO ANT: 12:24:18 Installing trigger programs
1551272 [-156] INFO ANT: 12:24:19 Completed
1551273 [main] INFO ANT: Target "mkt-compile" ended.
1551273 [main] INFO ANT: Target "sync-topic-15" started.
1551561 [-158] INFO ANT:
PROPATH=/dr01/qadapps/qdt/envs/live/configs,/dr01/qadapps/qea/fin/qxtend,/dr01/qadapps/qea/fin/pa
tch,/dr01/qadapps/qea/qra,/dr01/qadapps/qea/qra/qra.pl,/dr01/qadapps/qea/fin,/dr01/qadapps/qea/fi
n/qadfin.pl,/dr01/qadapps/qea,/progress/dlc
1551582 [-158] INFO ANT: ExecuteAction started: synchronize Topic15
1570980 [-158] INFO ANT: ExecuteAction ended: synchronize Topic15
1570980 [-158] INFO ANT: Return status: 0
1571011 [main] INFO ANT: Target "sync-topic-15" ended.
1571118 [main] INFO Installer: End installer stage [Install].
1571915 [main] INFO Installer: Begin installer stage [PostInstall].
1571915 [main] INFO Installer: End installer stage [PostInstall].
1572789 [main] INFO InstallerHost: INSTALLATION SUCCESSFUL.

```

Packages and Installations

IAQ Technical Reference

Packages and Installations

- - Troubleshooting
 - Permission Issues
 - DB's cannot come down
 - Files cannot be copied

Environments and Code Repositories

IAQ Technical Reference

Environments and Code Repositories

Environments and Code Repositories

IAQ Technical Reference

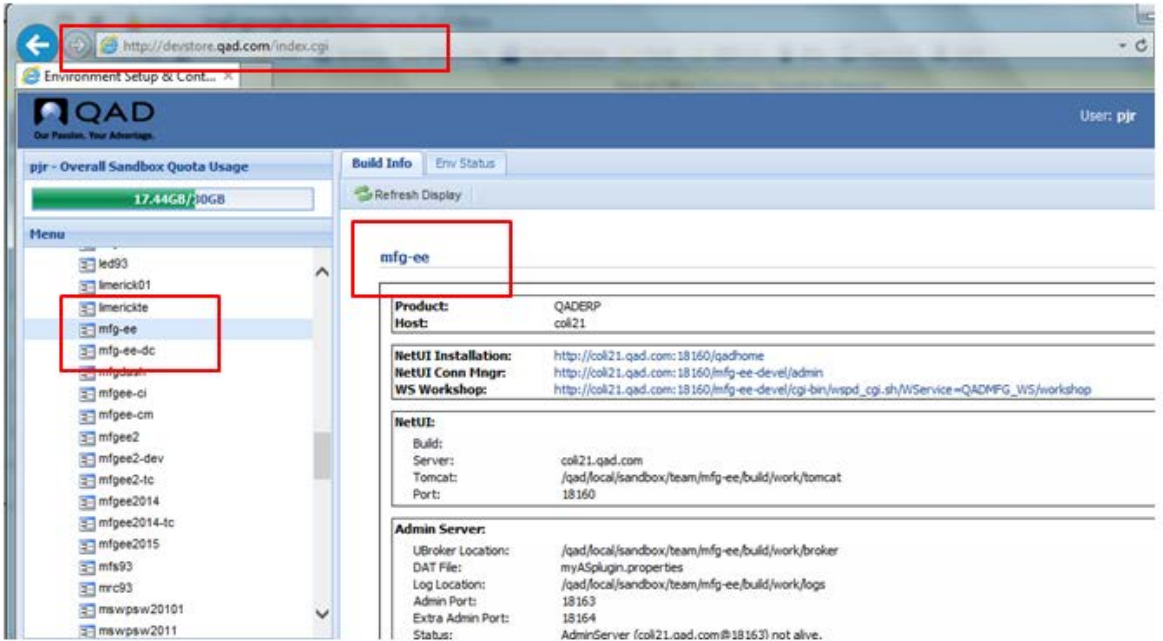
Environments and Code Repositories

- Versions
 - EE 2012.1
 - Public Env: mfg-ee, mfgee2 (development)
 - SVN: mfg-ee, mfgee2 (development)
 - EE 2013.1
 - Public Env: saq2013_1
 - SVN: saq2013_1
 - EE 2014
 - Public Env: mfgee2014
 - SVN: mfgee2014

Environments – Public DDE environments

IAQ Technical Reference

Environments – Public DDE environments



Environments – Public DDE environments

IAQ Technical Reference

Environments – Public DDE environments

```

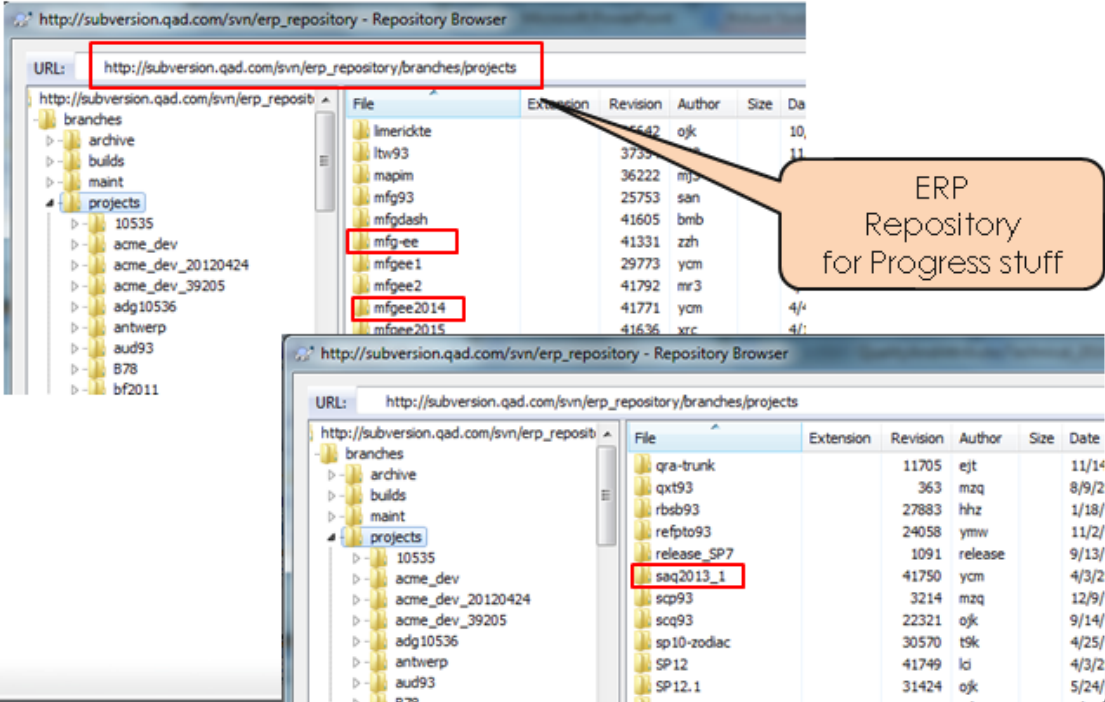
coli49: /qad/local/sandbox/team$ ls
acme ee2012_1 limerichte saq2013_1
acme_dev ee2012_ora Merge saq20131oc
blf93 ee2013 mfgdash saq2013_1-oe
bomfile ee2013_1 mfg-ee saq20131tc
branches.ddt ee2014 mfgee2 saq2013_1-tc
build_scp_trunk.sh erp-11 mfgee2014 scq93
bulldog2 erp-12 mfgee2014-tc sp1093
catskills erp-trunk mfgee2015 sp1093dev
cfo93 erp-trunkmuu mfgee2-dev sp1193
cfo93_before_2013ee.readme file.lst mfgee2-tc sp1293
cm93rpt fin93 mfgee-ci sp1293bc
compilefin.ini fin93-eam mfgee-cm sp1293dev
compilefin.log fin93-fit mfg-ee-dc sp1293-oe11
compilefin.pf fin93-oe11 mfs93 sp1393
costaccount ft493 mrc93 sp1493
costaccounting ft693 mswpsw20101 sp1493dev
costaccounting2012_1 Helium mswpsw2011 sp893
costaccounting-dev hew93 mswpsw20111 sp893dev
costaccounting-ee hew93-dev mswpsw2012 sp993
crm2012ee hww93 mswpsw20121 srn93
crm2013_lee hww93dev mswpsw2013 st2013_1
csp2012ee il9-de mswpsw20131 st2013_1-oe10
css93 il9-ee2012 mswrefactor2013_1 st2014

```

Code Repositories – Subversion

IAQ Technical Reference

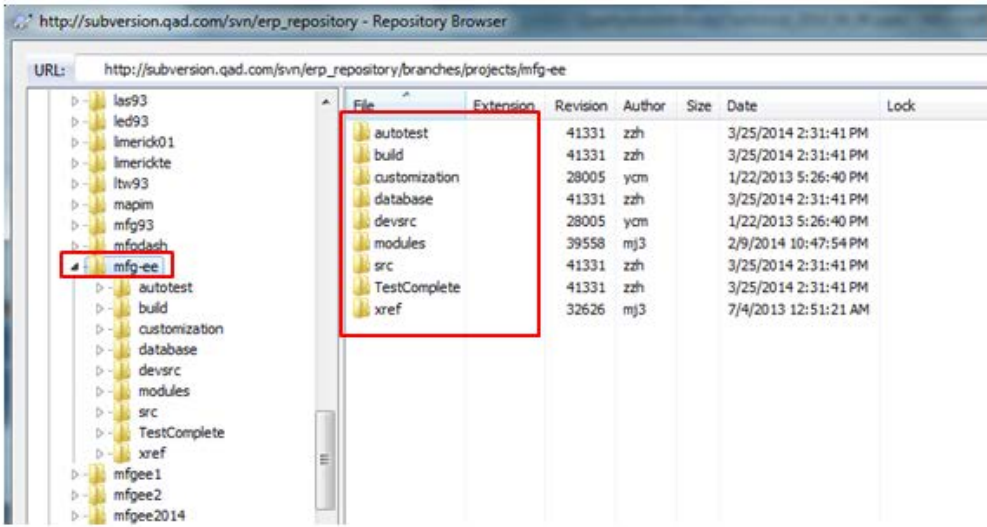
Code Repositories – Subversion



Code Repositories – Subversion

IAQ Technical Reference

Code Repositories – Subversion



Code Repositories – Subversion

IAQ Technical Reference

Code Repositories – Subversion

The screenshot shows a web browser window titled "Repository Browser" with the URL `http://subversion.qad.com/svn/module_repository/cat/trunk/src`. The left sidebar shows a tree view of the repository structure, with "cat" and "src" highlighted. The main area displays a table of files and folders:

File	Extension	Revision	Author
browse-collection		8984	xqd
custom		8984	xqd
installer		8984	xqd
menu-collection		8984	xqd
mkdtd		8984	xqd
process-map		8984	xqd
report		8984	xqd
deployment.properties	.properties	8214	zzh
netui-module-customization.jar	.jar	4547	jvz
package-specification.xml	.xml	4547	jvz

An orange callout box with a pointer to the "browse-collection" folder contains the text: "Module Repository for .NetUI stuff".

Environments – Private DDE Environments

IAQ Technical Reference

Environments – Private DDE Environments

The screenshot displays the QAD DevStore interface for creating a new private environment. The browser address bar shows the URL `http://devstore.qad.com/index.cgi`. The left sidebar shows a tree view with the following structure:

- Setup
- Management
 - Public Environments
 - Private Environments
 - New Private Environment
 - Use Existing private Environment
 - mfg-ee
 - 01 Complete
 - mfg-ee-dc
 - 04 Complete
 - mfg-ee-ci
 - 03 Complete
 - mfg-ee2
 - 02 Complete
 - backup
 - 02 Custom
 - Non Framework Related
 - api

The main content area shows the 'Create new Private Environment' form. The 'General Options' section includes:

- Host Type: Windows Linux
- Host Name:
- Duration (days):
- Duration (hours):
- Send Me Build Completion email:
- Also Send Email To:

The 'Linux' section includes:

- Use code from:
- Use data from:

Other sections include 'Special Request...', 'Subversion Options', and 'Directory Options'.

IAQ Automated Testing

IAQ Technical Reference

IAQ Automated Testing

Automated Testing

IAQ Technical Reference

Automated Testing

- OEUnit
 - Unit Tests
 - <http://qdn/display/QRA/OEUnit+for+OpenEdge+unit+testing>
- TestComplete
 - Functional Tests
 - Business Cycle Tests

Automated Testing

IAQ Technical Reference

Automated Testing

- Quality Matrix
 - <http://qdn/display/MFG/Quality+Matrix+Summary++Test?src=search>

