QAD Enterprise Application Enterprise Edition

Training Guide

Periodic Costing

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QAD 2015 Enterprise Edition
April 2016

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Change Summary

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

Date/Version	Description	Reference
April 2016/2016 EE	Rebranded for QAD 2016 EE	--
September 2015/2015 EE	Initial version	--

About This Course

Course Description

This course introduces the basic knowledge about periodic costing and shows how to set up periodic costing and calculate cost in key business events. This course is structured as the follows:

- Introduction to Periodic Costing
- Business Considerations
- Periodic Costing Setup
- Periodic Costing Initialization
- Periodic Costing Calculation
- PC Calculation in Key Business Events:
    - Purchasing/AP
    - Work Order and Repetitive Order
    - Sales Order
    - Inventory Control
- Intersite Transfers
- PC Adjustments
- PC Accounting Close

Audience

- Implementation consultants
- Key users
- Support consultants
- Pre-sales personnel

Prerequisites

- An understanding of manufacturing, purchasing, sales, and inventory control functionalities
- An understanding of standard costing principles
- An understanding of basic financial functionality

Course Credit and Scheduling

This course is valid for 24 credit hours and is typically taught in 3 days.

Virtual Environment Information

Use the hands-on exercises in this book with QAD EA Enterprise Edition 2015 learning environment in the 10USA > 10USACO workspace. 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

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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.

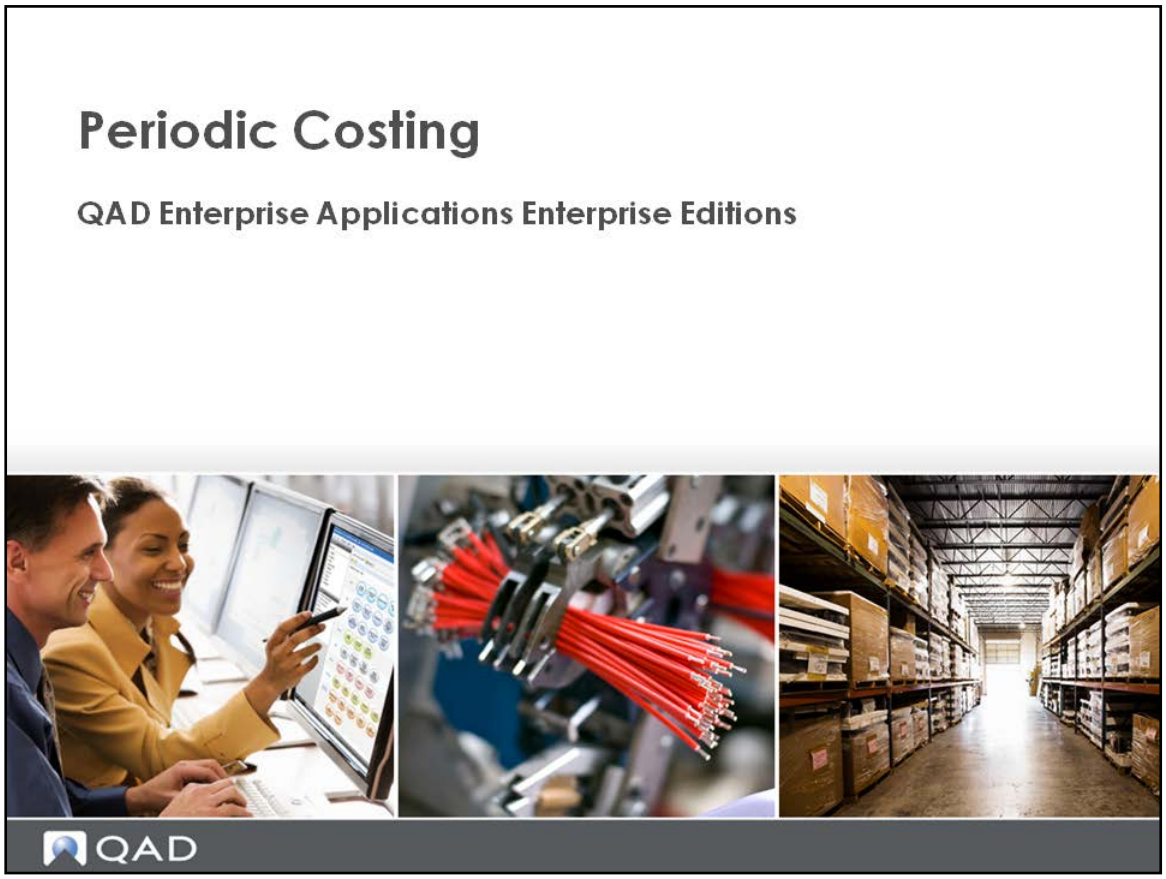
QAD Support

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.

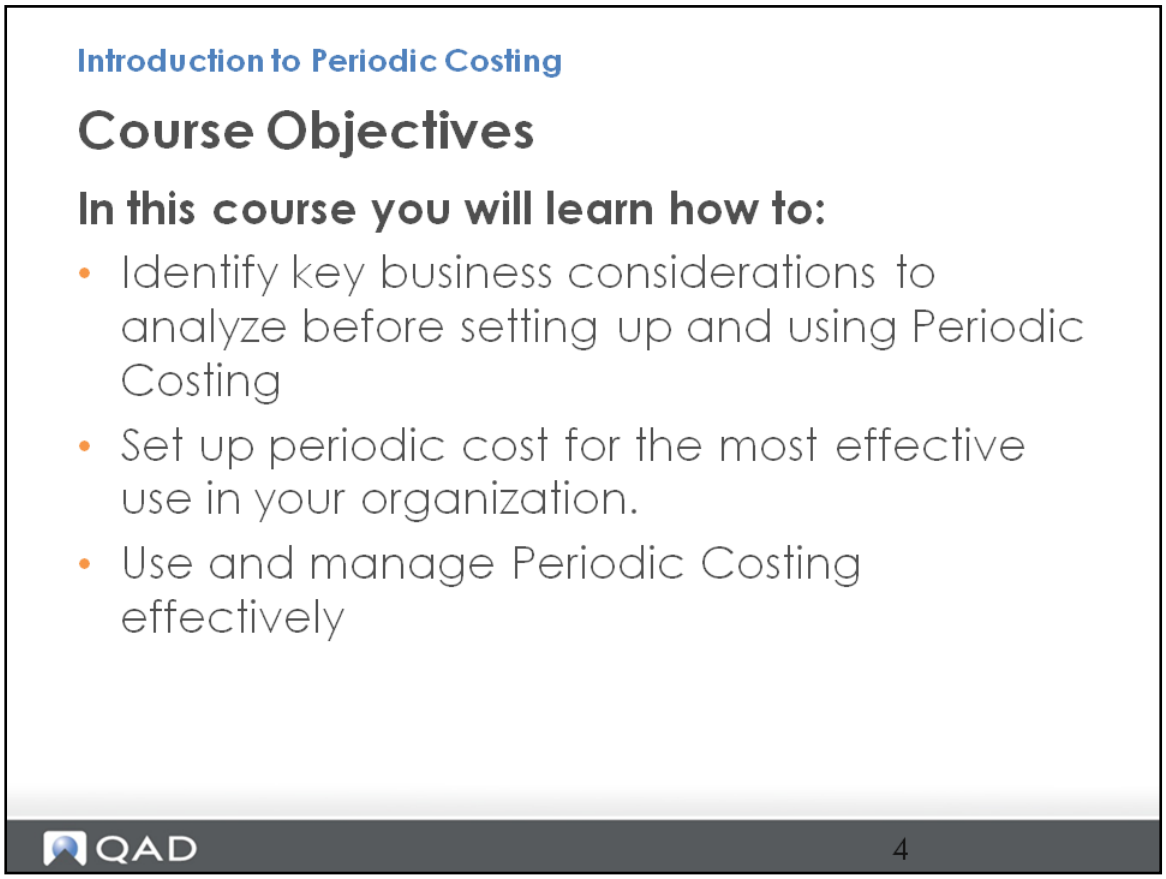
CHAPTER 1

Introduction to Periodic Costing

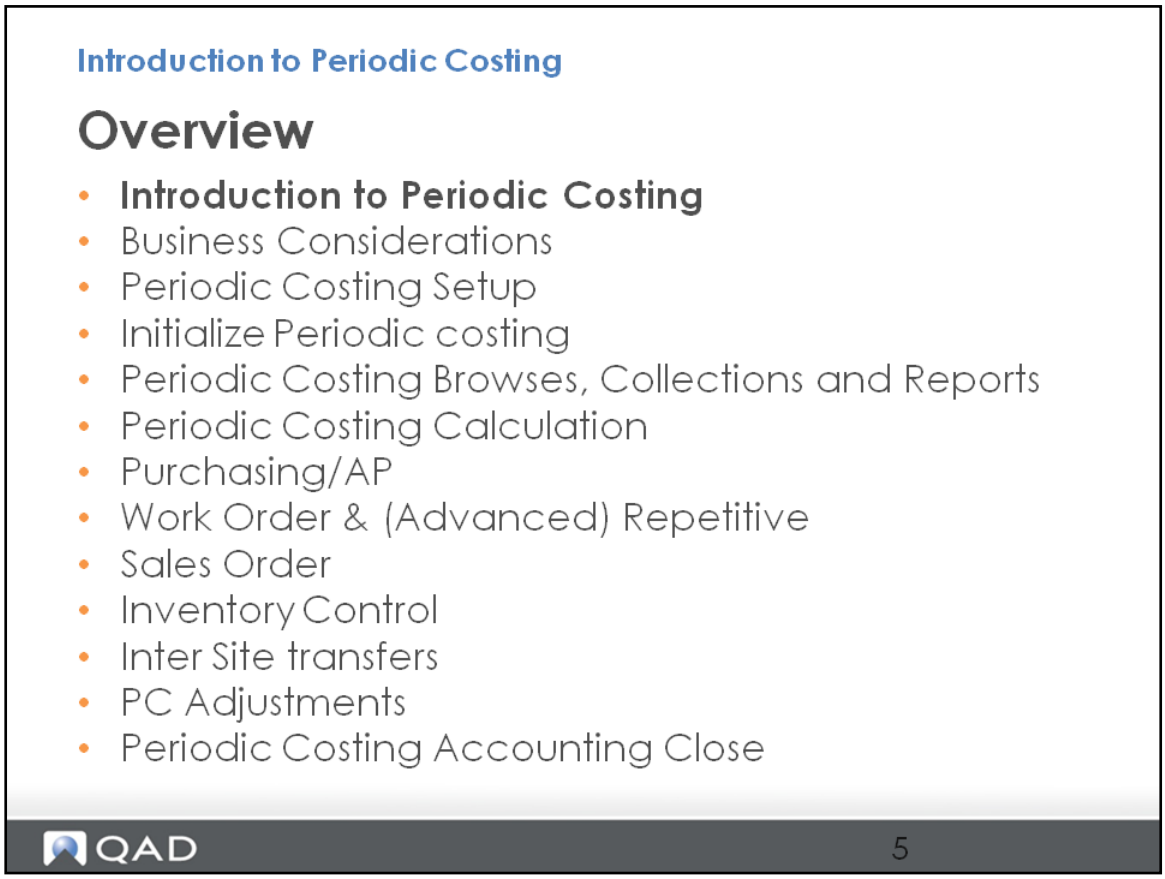
Introduction to Periodic Costing



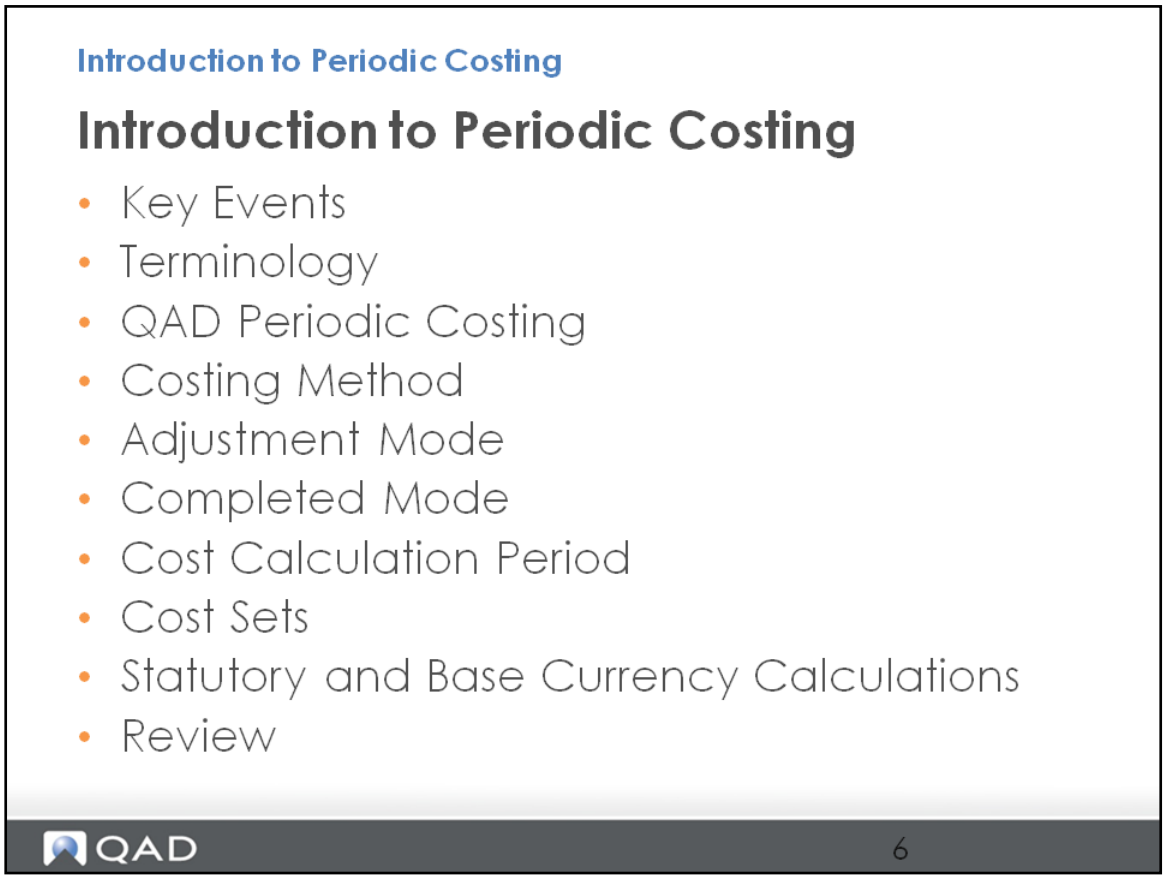
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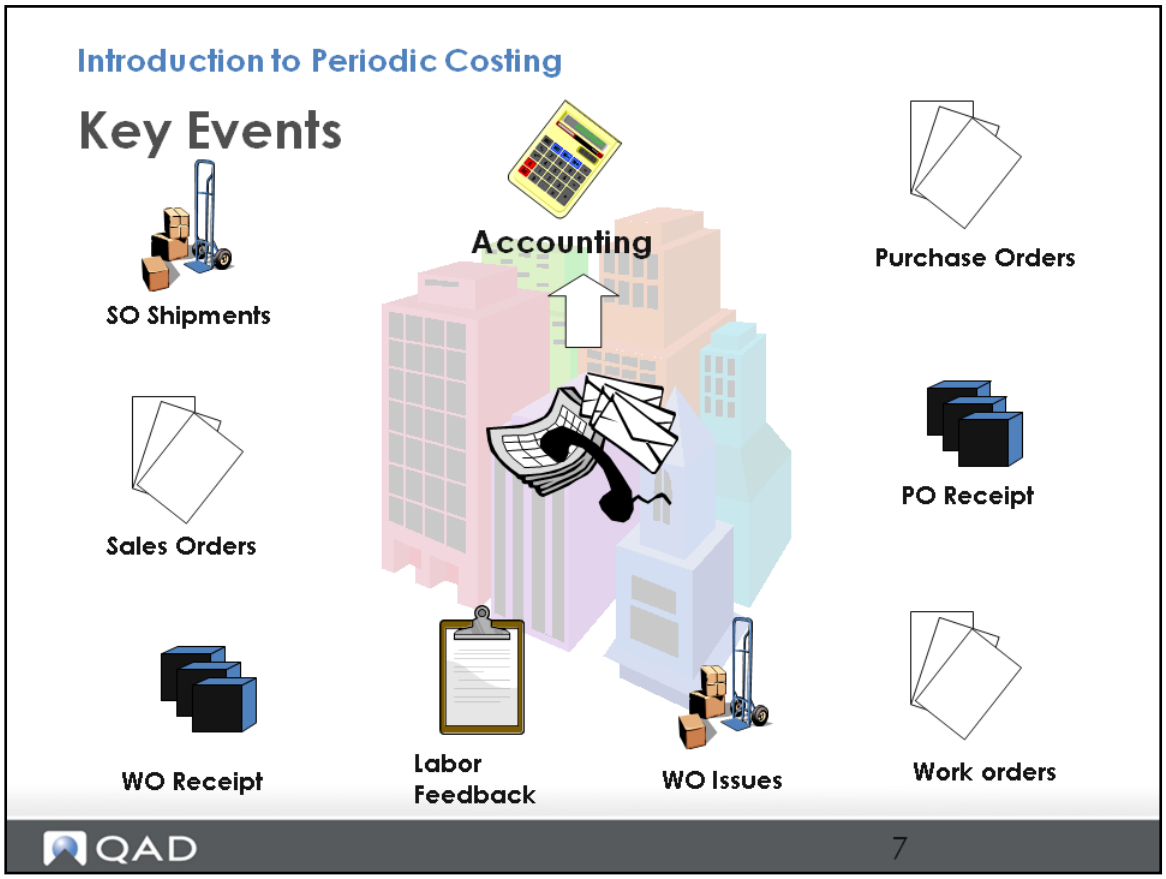
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Business Considerations
Periodic Costing Setup
Initialize Periodic costing
Periodic Costing Browses, Collections and Reports
Periodic Costing Calculation
Purchasing/AP
Work Order & (Advanced) Repetitive
Sales Order
Inventory Control
Inter Site transfers
PC Adjustments
Periodic Costing Accounting Close
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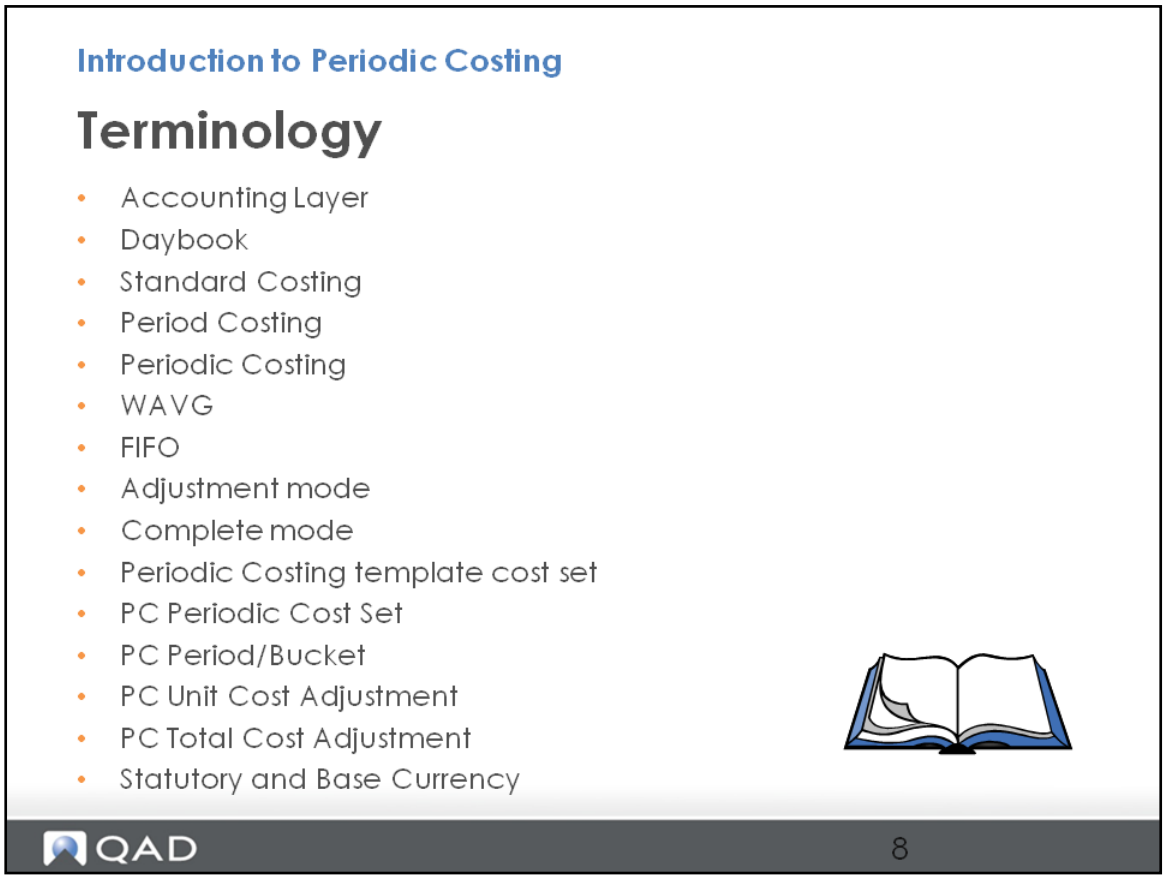
Introduction to Periodic Costing



Key Events


Introduction to Periodic Costing
Key Events
Accounting
SO Shipments
Purchase Orders
Sales Orders
PO Receipt
WO Receipt
Labor Feedback
WO Issues
Work orders
QAD
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Terminology



Accounting Layer: Accounting layers provide different ways to segregate transactions posted to a single GL account in order to facilitate reporting requirements. The posting of transactions is controlled by associating daybook types with one of the three system-defined accounting layers: the primary layer, the secondary layer, and the transient layer.

Daybook: Daybooks, also known as journals, are system- or user-defined views of the general ledger, and contain all transactions.

Standard Costing: Costs are pre-established and all transactions valued at that cost. Deviations between base settings and actuals transacted are reported as variances.

Period Costing: In QAD applications, period costing omits the valuation of inventory transactions and uses the values of the incoming and outgoing GL transactions from accounts payable and invoicing functions. Costs are expensed in the period in which they are incurred.

Periodic Costing: Periodic Costing is a cost method for inventory valuation that calculates item unit costs based on the actual value of inventory and shop floor transactions that occurred at a certain period. As the name implied, this calculation is done per period.

WAVG: The abbreviation of Weighted Average. It is a calculation method of periodic costing. WAVG considers the previous period cost and the average of the cost incurred during this period.

FIFO: The abbreviation of First in First Out. It is a calculation method of periodic costing. FIFO considers the receipt date of items for the existing inventory and assumes that the oldest (first) receipts in stock of the item are issued first.

Adjustment mode: Adjustment mode means that the operational module generates GL transactions at the standard cost at the same time as the transaction happens. The Periodic Costing calculation then revalues all of these transactions and creates adjustment GL transactions.

Complete mode: In complete mode, the system does not post any standard cost transactions. It only posts periodic inventory costs to the GL at the end of the period. As opposed to adjustment mode, the complete mode only produces one type of financial book based on periodic cost.

Periodic Costing template cost set: Within Periodic Costing, you can define a template cost set for Period Costing that includes several detailed periodic (child) cost sets. The template cost set acts like an umbrella cost set that holds the cost set definition to be applied to all detailed periodic cost sets. Periodic Costing uses only one template cost set for one domain.

PC Periodic Cost Set: A detailed periodic cost set for every combination of cost-calculating period and currency. Each detailed periodic cost set assumes all the elements defined for the template cost set . This means that the attributes in the element you define in the parent template flow to child templates. You set up one periodic template cost set; therefore, all detailed periodic cost sets do not require specific settings. You use the Periodic Cost Set Maintenance to apply the template cost set to the detailed periodic cost sets.

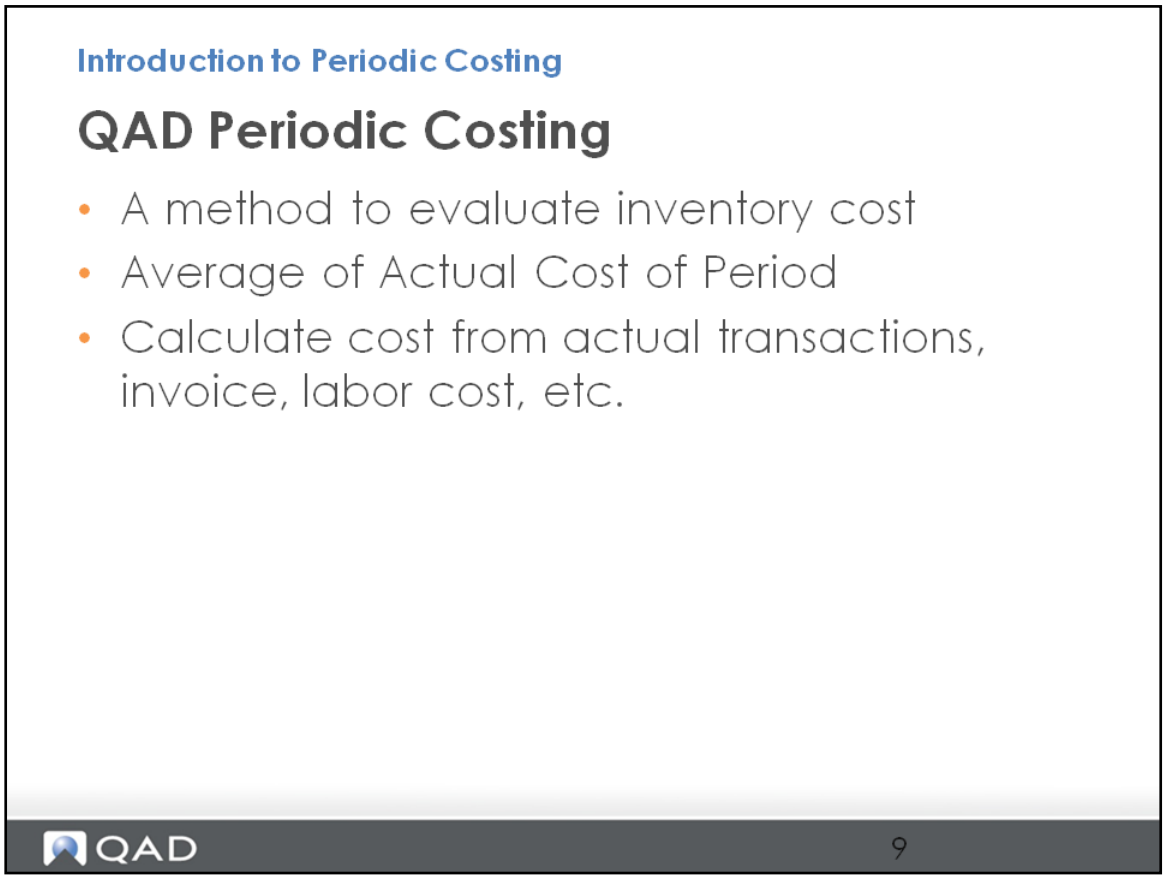
PC Period/Bucket: PC Period or called Bucket is the cost-calculation period of periodic costing. The concept of cost-calculation periods only applies to the FIFO valuation method. For Periodic Costing, costs are expensed in the period in which they are incurred. Using Periodic Costing features, you can define as many periods, or buckets, as there are days in a GL calendar period. The system uses the periods to determine the time buckets in which all transactions are summarized and averaged during FIFO cost calculations.

PC Unit Cost Adjustment: You adjust the unit cost of a prior period and revalue the inventory accordingly.

PC Total Cost Adjustment: You add to or subtract from inventory value in the currently open period.

Statutory and Base Currency: The statutory currency is normally the local currency of the country in which the organization must produce its declarations and financial reports. In Periodic Costing, the system calculates, stores, and reports item costs in base and in statutory currencies, if defined, for each period. For example, you can maintain the rates or total amounts of the labor and burden for each periodic cost period in base currency and in statutory currency when Periodic Costing is enabled.

QAD Periodic Costing



Periodic Costing is a cost method for inventory valuation that calculates item unit costs based on inventory and shop floor transactions.

Periodic Costing does not substitute for, overlap with, or conflict with current costing methods in QAD solutions, such as standard costing or average costing. The goal of Periodic Costing is to use the actual costs from the actual transactions, invoices, BOM, routings, purchase prices, expenses, labor costs, and other actual costs.

Periodic Costing does not use the concept of variances because it always calculates based on actual values. The costs are recalculated for each period and a new actual cost is defined according to what happened during that period, so that all value is posted to inventory and WIP accounts. Periodic Costing calculations consider the transactions that affect the value of inventory and WIP.

Periodic Costing uses the following cost-calculation formulas:

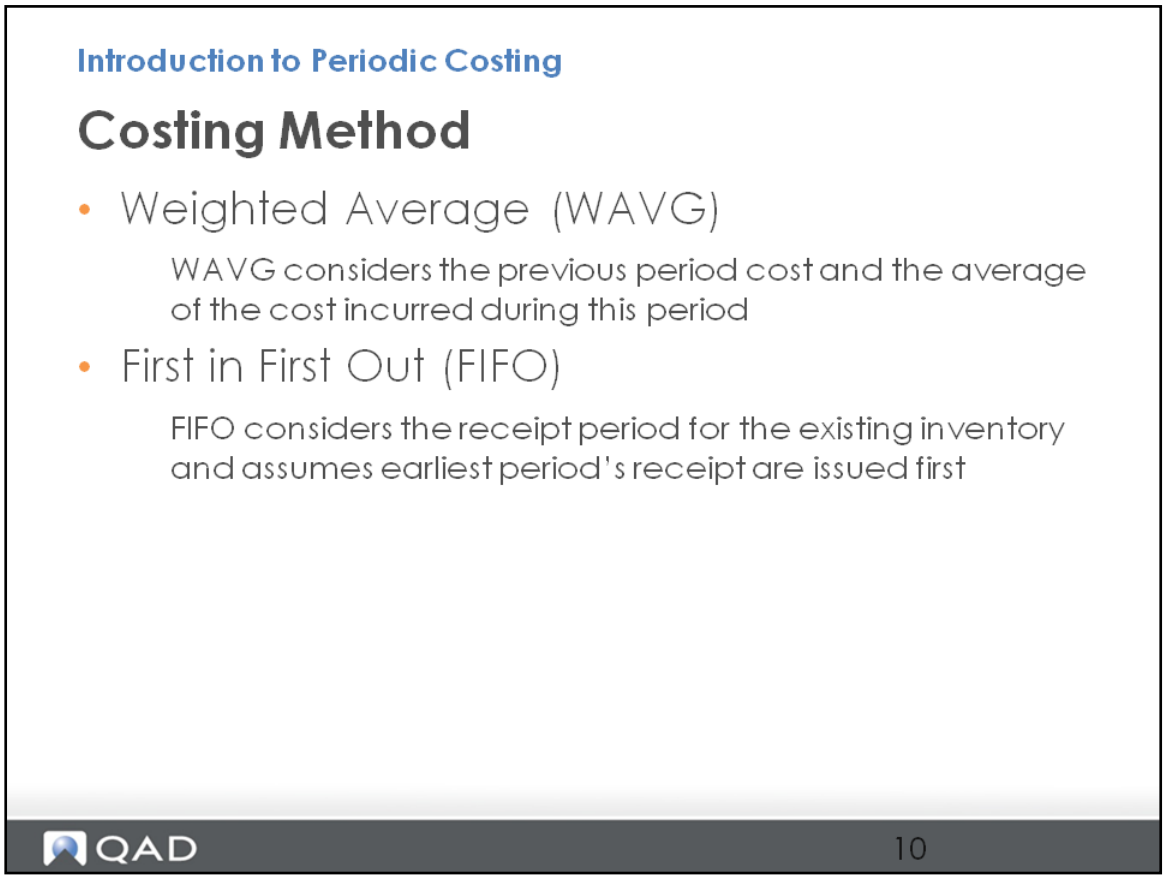
- Weighted Average (WAVG
- First ln First Out (FIFO)

The costing methods support:

- Local legal requirements in certain countries
- International Financial Reporting Standards (IFRS) guidelines
- Business practices in corporations with regards to inventory valuations

The period can be any length up to an entire GL period. Under most circumstances, periodic costing considers the beginning balance of the item while it is performing calculations. It then generates, in batches, GL transactions based on the calculations.

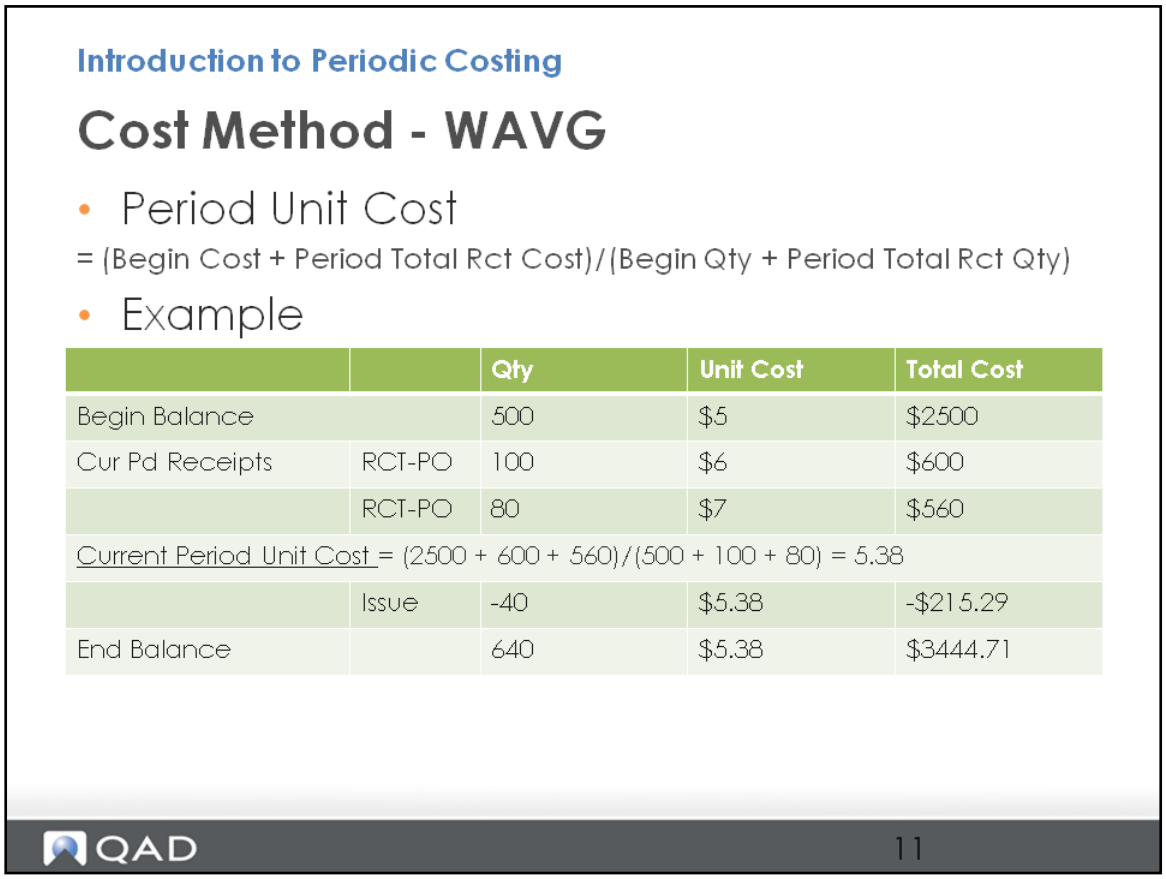
Costing Method



Weighted Average (WAVG) considers the previous period cost and the average of the cost incurred this period. WAVG assumes that the material or production of a given kind is so intermingled that an issue cannot be made from a particular lot and the cost should, therefore, represents an average of the entire supply.

First in First Out (FIFO) is conventionally defined as a formula for valuing inventories based on the assumption that the earliest purchases or production are used first and hence inventory value is made up of the most recent purchases or production at the most recent prices. FIFO assumes that the various inventory items are used in the order in which they are received. Closing inventories consists of the last items purchased or produced. When issued, the issue price is calculated by working forwards from the oldest item or batch of items received.

Cost Method - WAVG

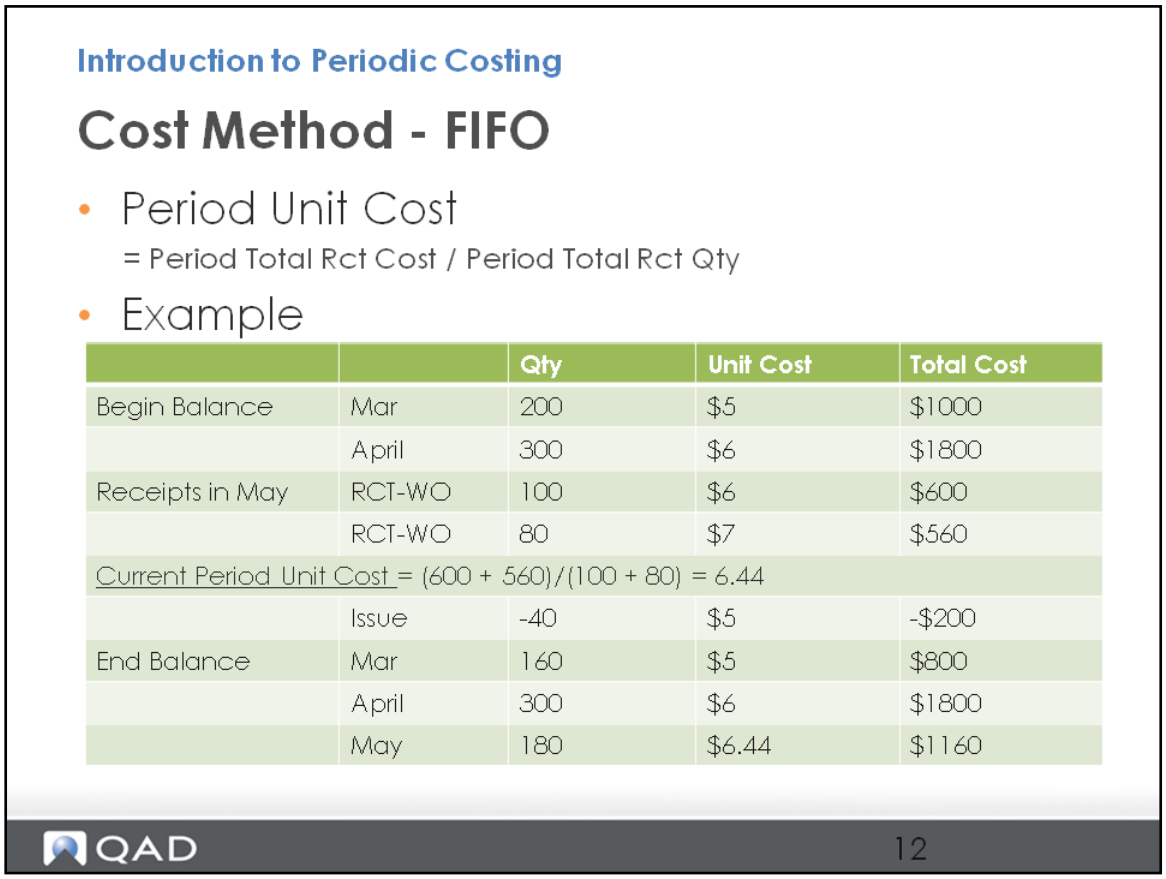


The calculation considers the previous period cost and the average of the cost incurred this period. The calculation is as follows:

*This period material cost = (Sum of this period (receipt quantity * receipt cost) / (this period receipt quantity)*

*Unit cost = (This period material cost * this period receipt quantity + last period unit cost * last period item quantity balance + this period material cost adjustment) / (this period receipt quantity + last period item quantity balance)*

Cost Method - FIFO



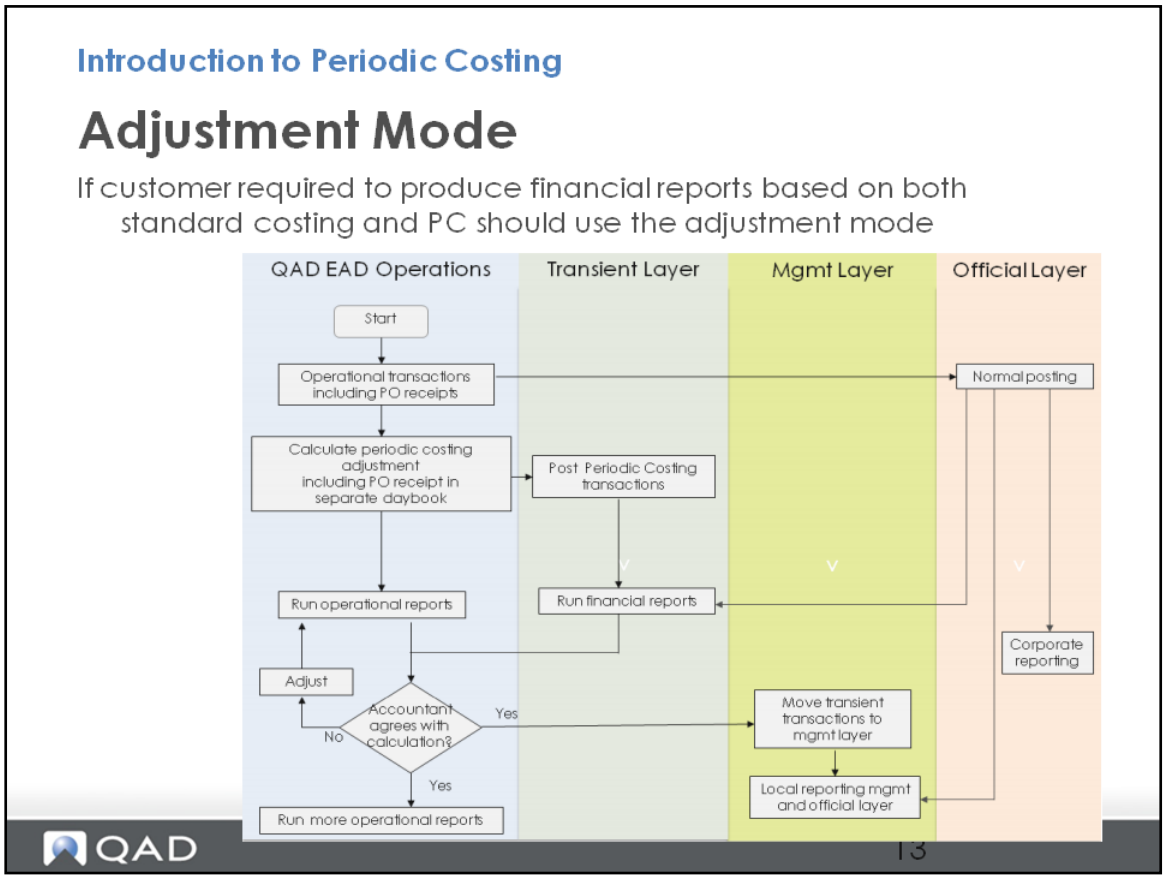
		Qty	Unit Cost	Total Cost
Begin Balance	Mar	200	$5	$1000
	April	300	$6	$1800
Receipts in May	RCT-WO	100	$6	$600
	RCT-WO	80	$7	$560
Current Period Unit Cost = (600 + 560)/(100 + 80) = 6.44				
	Issue	-40	$5	-$200
End Balance	Mar	160	$5	$800
	April	300	$6	$1800
	May	180	$6.44	$1160

The First In, First Out (FIFO) method considers the receipt date of items for all existing inventory. This method assumes that the oldest (first) item in stock is issued first.

For FIFO, there are key differences in theoretical calculations and the QAD approach. In the QAD solution, the system averages the unit costs by cost calculation period, by dividing total value of received goods by the total quantity received. The system maintains the received quantity by cost calculation period and consumes the inventory from the oldest periods first and then chronologically period by period up to the most recent period.

The FIFO method provides a good indication of the balance sheet value of ending inventory. However, in an economy with rising prices, it also increases net income because older inventory is used to value the cost of goods sold—potentially increasing the tax amount that a company should pay.

Adjustment Mode

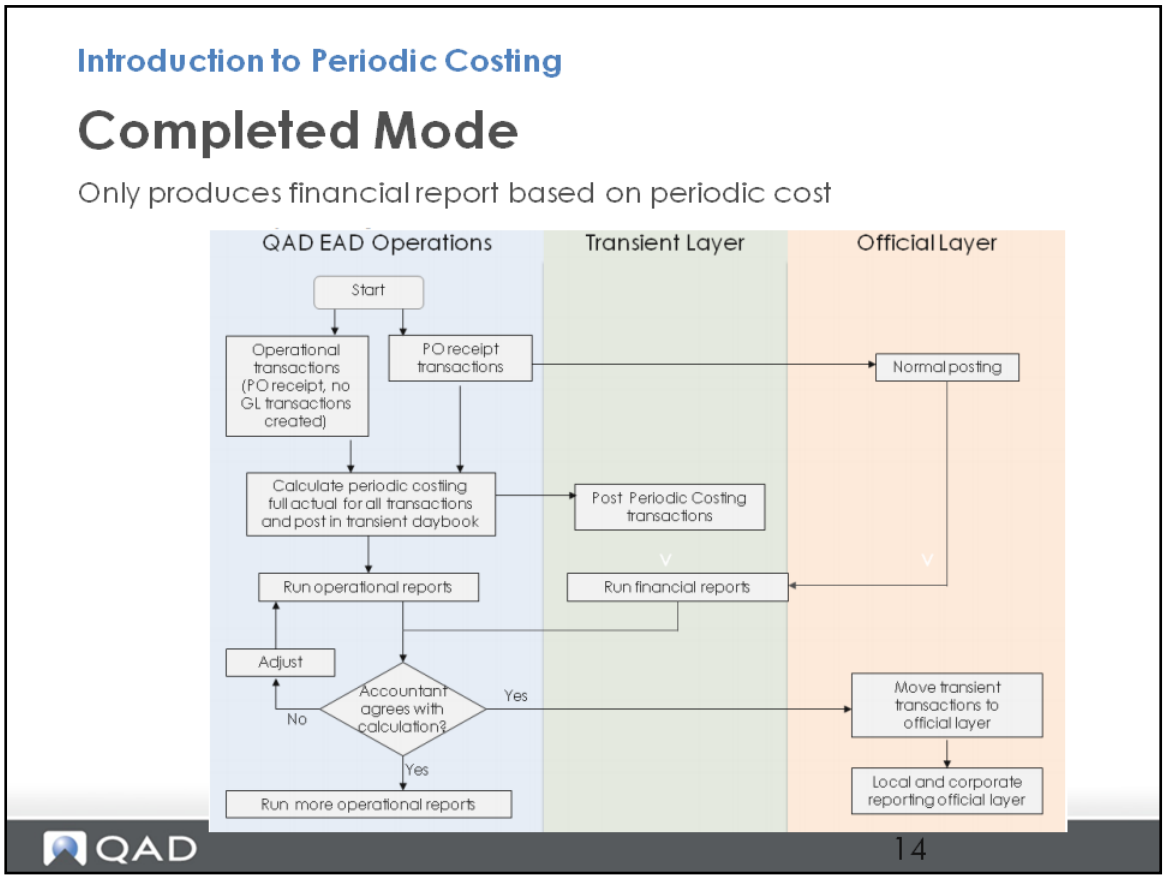


Adjustment mode means that the operational module generates GL transactions at the standard cost at the same time as the transaction happens. The Periodic Costing calculation then revalues all of these transactions and creates adjustment GL transactions.

When you use adjustment mode, you have instantaneous costing data from standard costs. The system creates general ledger transactions when you create inventory transactions. It creates period cost transactions at the end of the period.

The system posts standard cost transactions to the official layer, and it posts the periodic cost transactions to the transient and management layer once the period closes. Corporate reporting is through the official layer and local reporting is through a combination of the management and official layers.

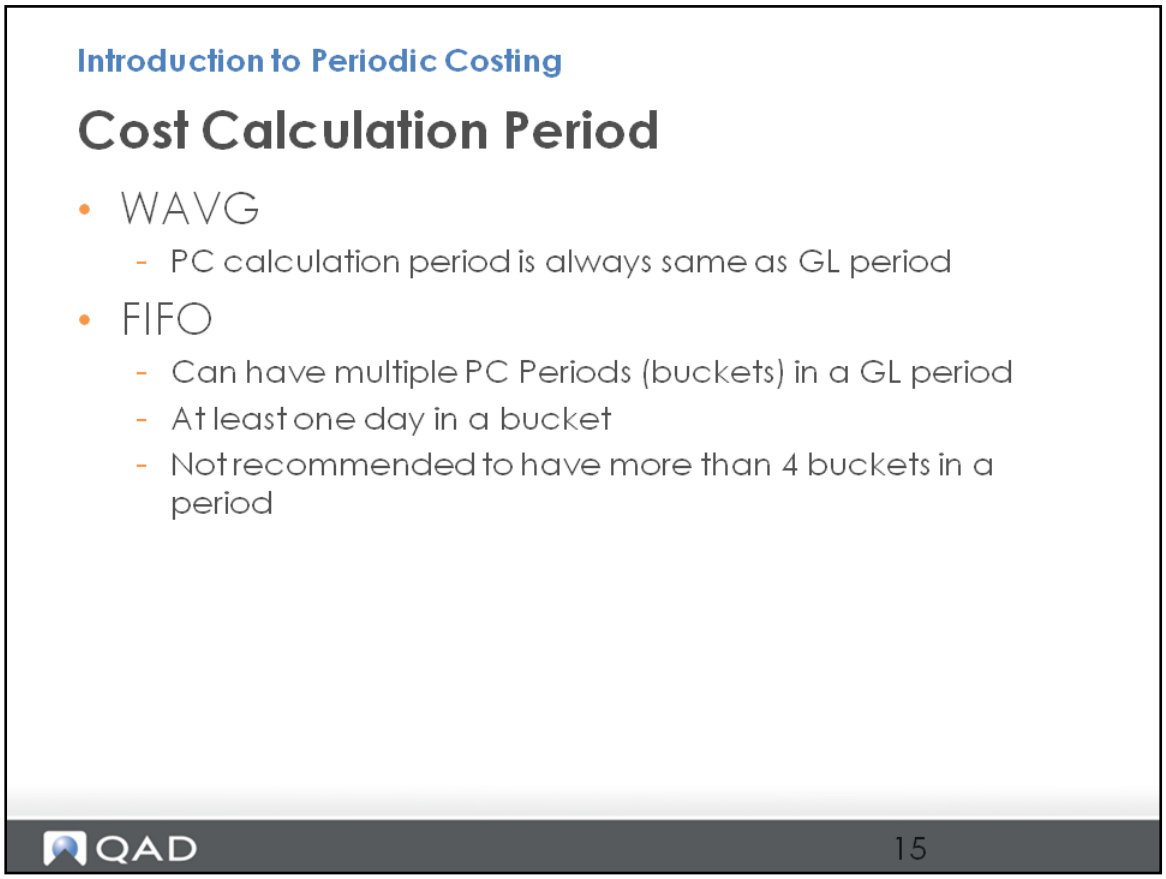
Completed Mode



In complete mode, the system does not post any standard cost transactions. It only posts periodic inventory costs to the GL at the end of the period. As opposed to adjustment mode, the complete mode only produces one type of financial book based on periodic cost.

In complete mode, only the Periodic-Cost-based transactions are calculated at the end of the period. These transactions are posted to the transient layer. Once the period is closed, the PC transactions are moved from the transient layer to the official layer.

Cost Calculation Period

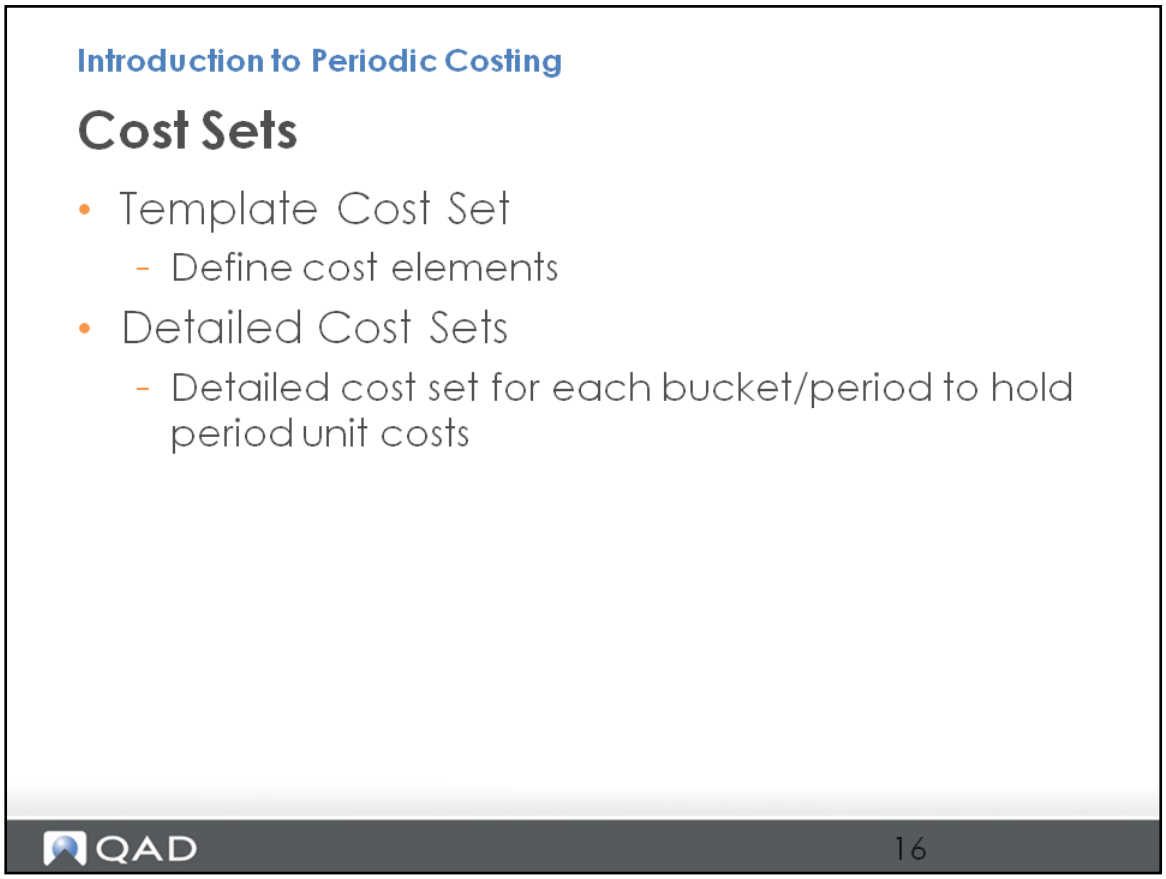


The cost calculating periods by default are set up based on GL calendar periods. For WAVG, only one Periodic Costing period can be used per GL calendar period; however, when using FIFO as the Periodic Costing method, you can split the GL calendar into multiple buckets. You choose the number of buckets as long as there is a minimum of one bucket per GL calendar period and no more than one bucket per calendar day. The buckets may not overlap.

The system maintains a cost set for every cost calculating period. So, if you want to use the complete GL period for each costing period, you do not have to define additional records.

For FIFO, avoid from using too many buckets in a period. Otherwise, PC Calculation can take longer because the system reconciles each bucket.

Cost Sets



Within Periodic Costing, you define a Period Costing template cost set that includes several detailed periodic (child) cost sets. The template cost set acts like an umbrella cost set that holds the cost set definition to be applied to all detailed periodic cost sets.

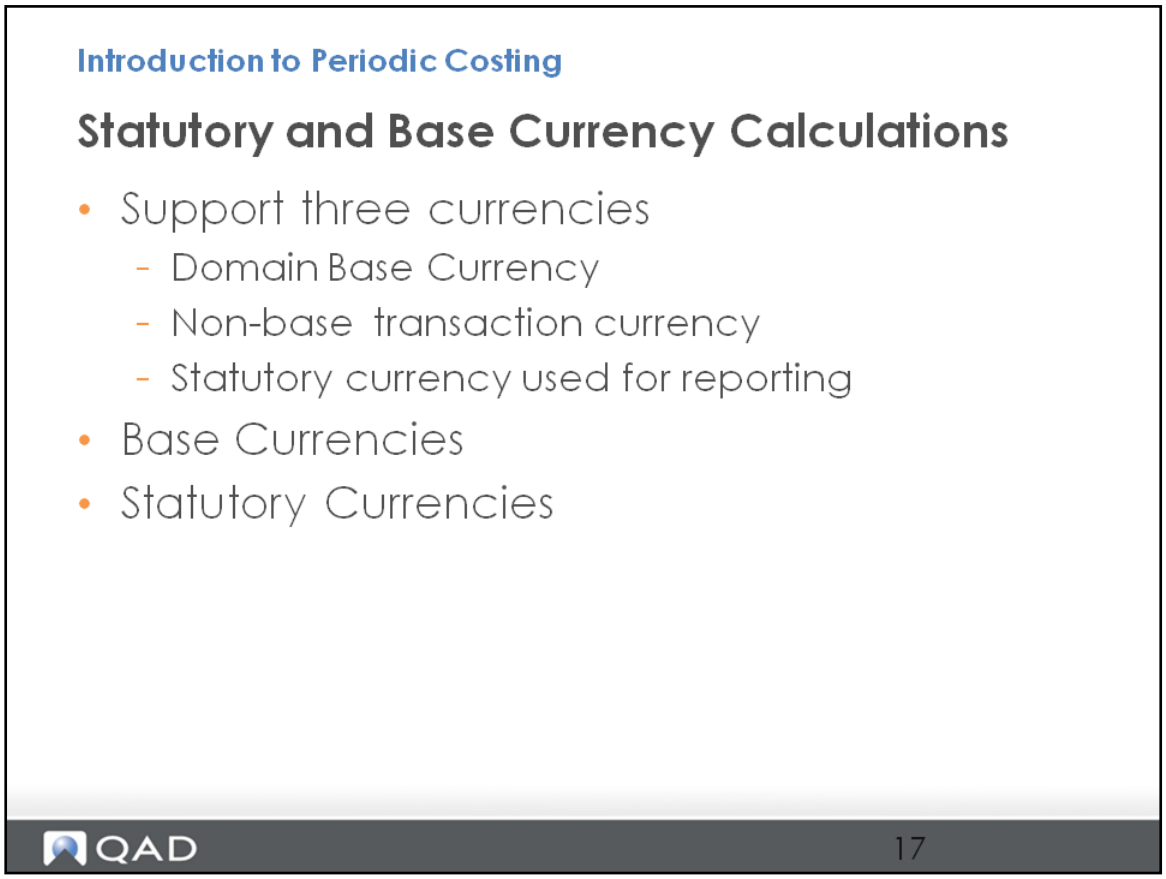
Periodic Costing uses only one template cost set for one domain.

The system maintains a detailed periodic cost set for every combination of cost-calculating period and currency.

Each detailed periodic cost set assumes all the elements defined for the template cost set. This means that the attributes in the element you define in the parent template flow to child cost sets.

You set up one template periodic cost set; therefore, all detailed periodic cost sets do not require specific settings. You use the Periodic Cost Set Maintenance to apply the template cost set to the detailed periodic cost sets.

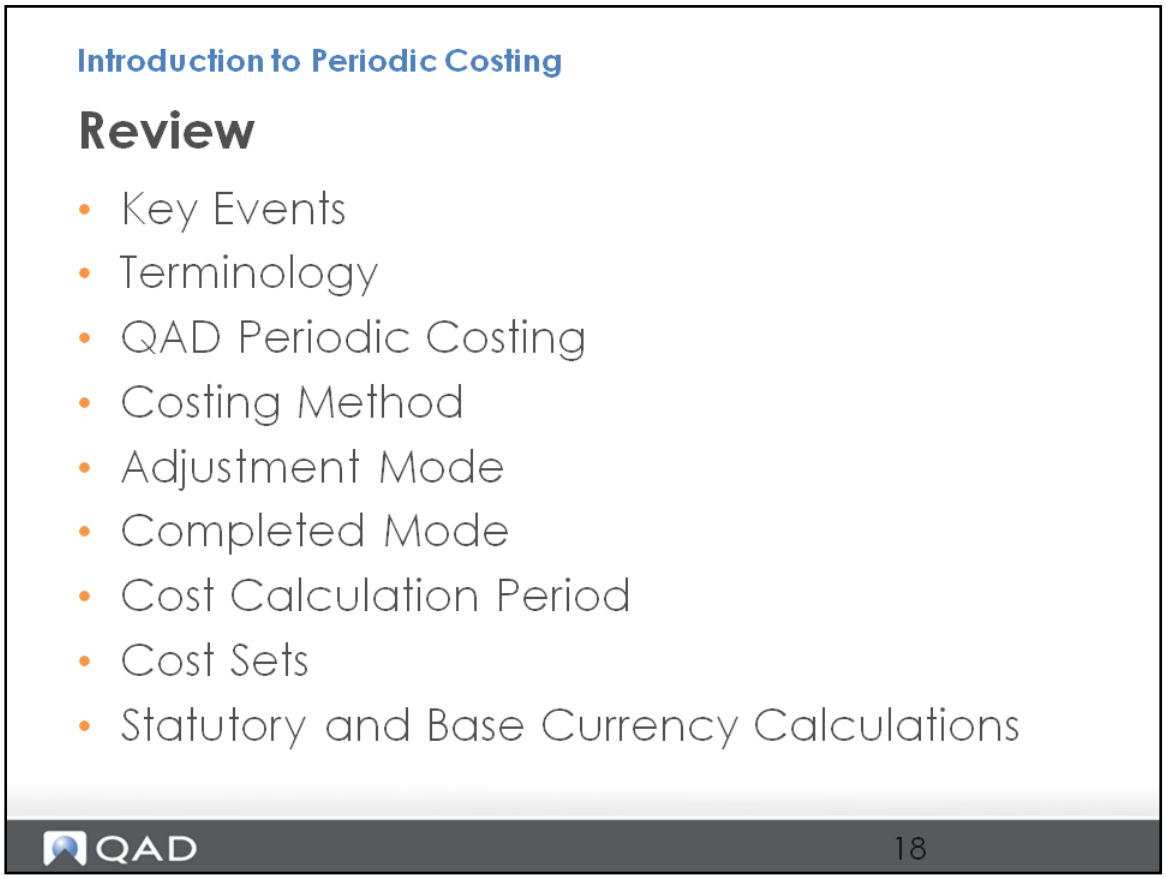
Statutory and Base Currency Calculations



In Periodic Costing, the system calculates, stores, and reports item costs in base and in statutory currencies, if defined, for each period. For example, you can maintain the rates or total amounts for the labor and burden for each periodic cost period in base currency and in statutory currency when Periodic Costing is enabled.

For either local reporting or management purposes, companies use Periodic Costing as a legal requirement, calculating based on the local country currency (base or statutory). For management purposes, data are also required to be available in the company consolidation currency (statutory or base respectively).

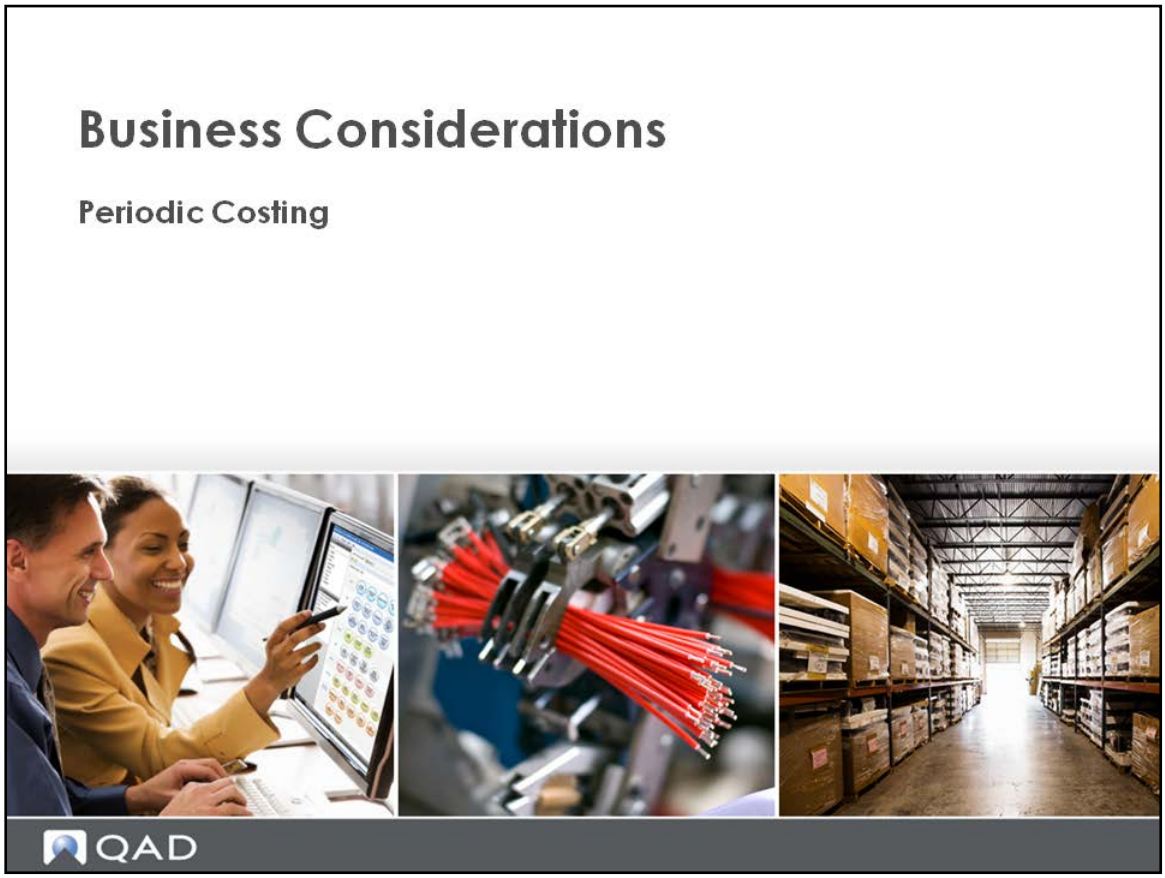
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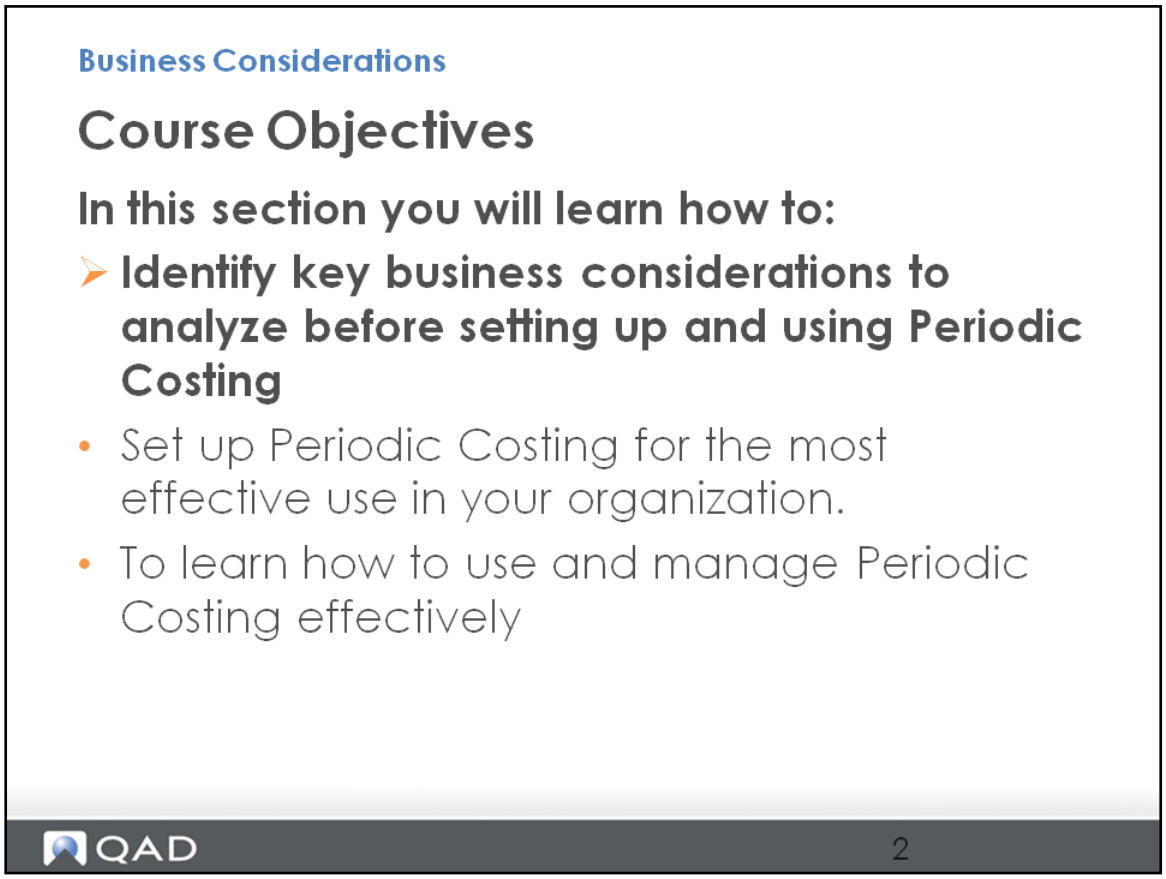
CHAPTER 2

Business Considerations

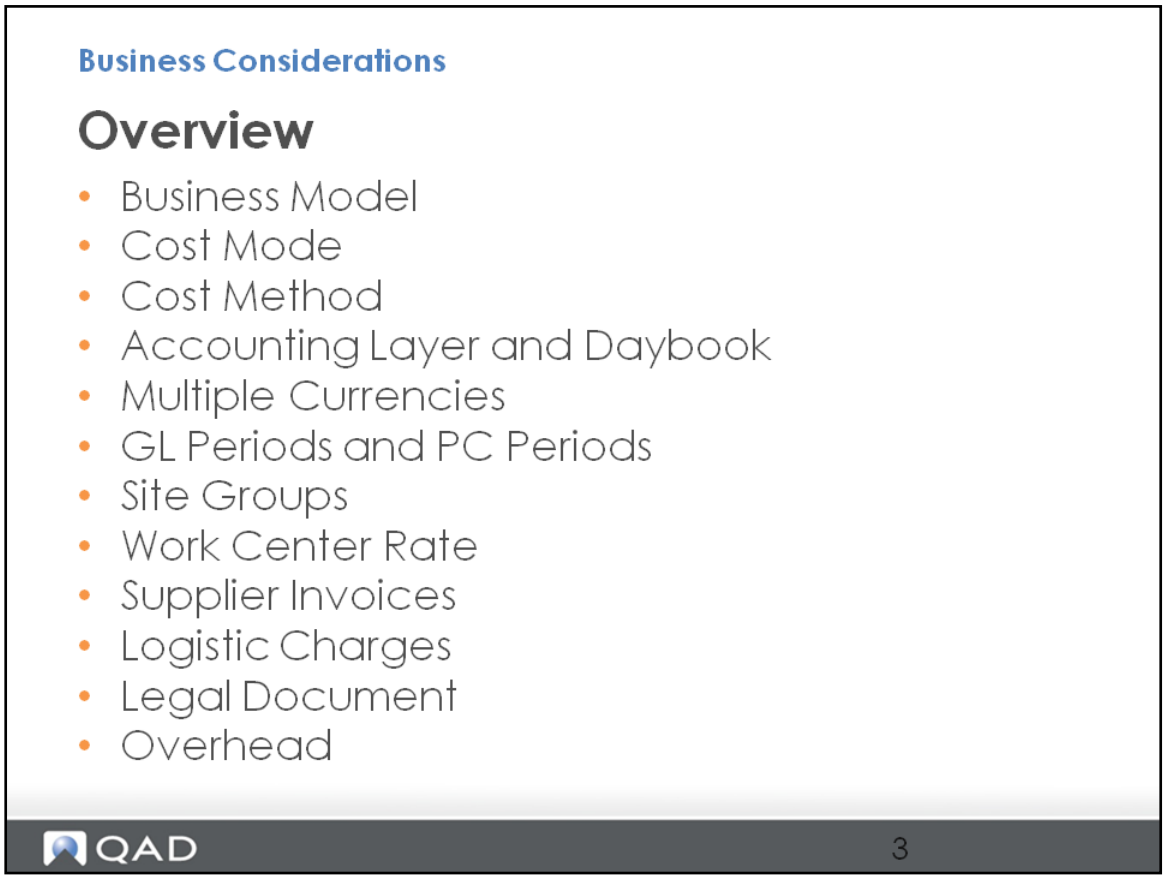
Business Considerations



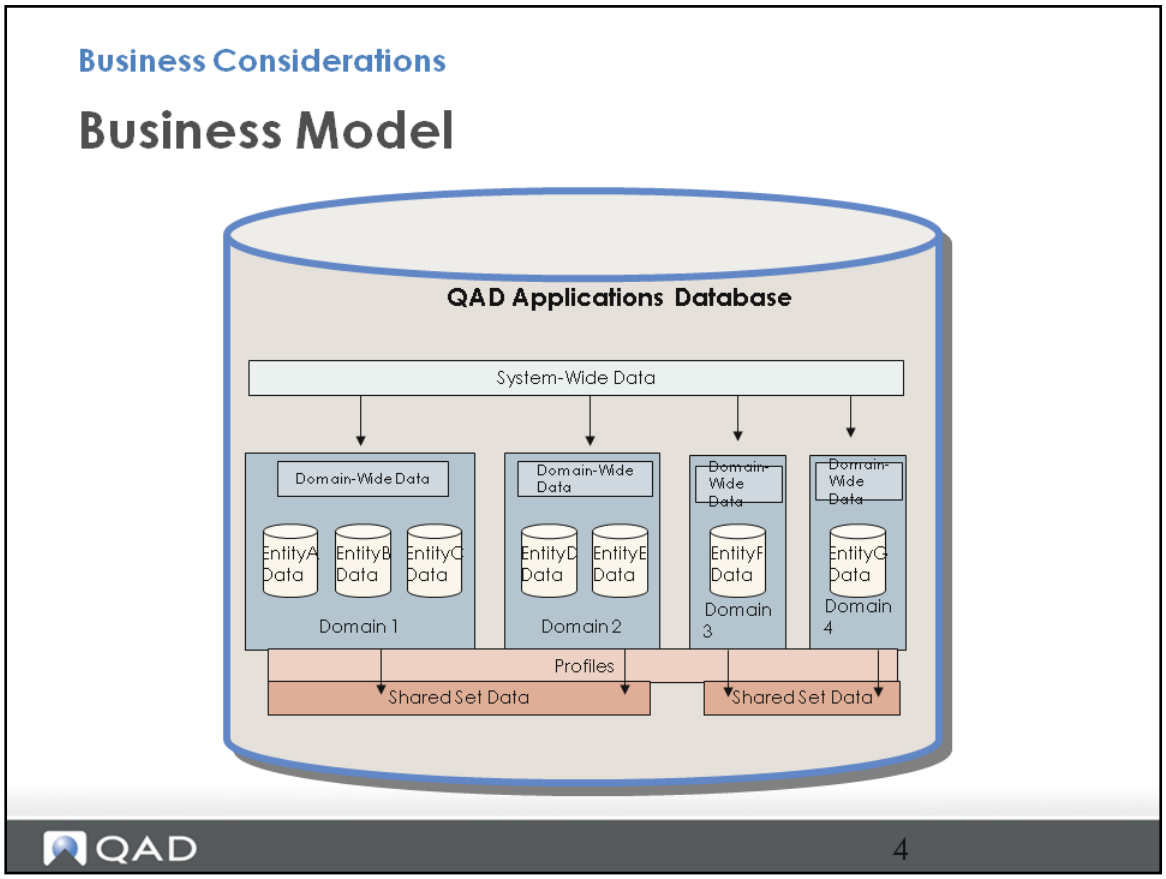
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Business Model



Definition

The domain represents the base unit of the system and comprises one or more entities.

One domain has one base currency and one statutory currency. Domain has its own GL calendar.

The entity is responsible to close the GL period. An entity is an independent financial unit within a domain, and is used to generate financial reporting of a business unit (for example, a legal entity or autonomous branch or operation). Create entities within the domain for the organizations and entities your system requires.

Why Consider?

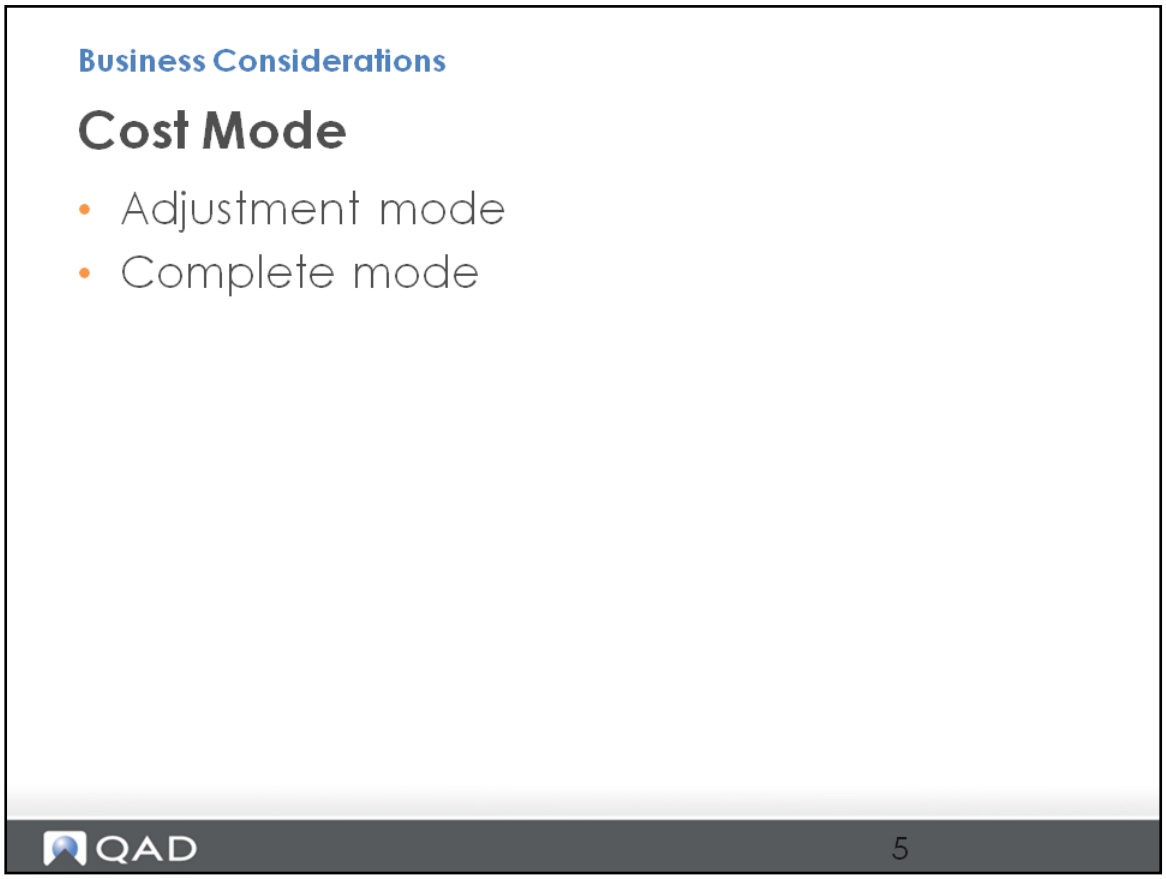
The setup of Periodic Costing is by domain. This means that all Periodic Costing considerations should be consistent for all entities and sites within the same domain. If you need different costing methods by entity, consider creating additional domains.

In some companies, for different entity/site they have different finance team to manage the costing data. In that case, consider using different domain for different entity/site.

Setup Implications

Set up properly domains and entities in Domain Maintenance and Entity Maintenance.

Cost Mode



Definition

You can use either Adjustment Mode or Complete Mode.

In Adjustment Mode, the system uses the standard costing.

The operational module generates GL transactions at the standard cost at the same time as the transaction happens.

The Periodic Costing calculation then revalues all of these transactions and creates adjustment GL transactions.

In Complete Mode, the system does not use the standard costing.

The system does not post any standard cost transactions except purchase receipts.

At the end of the period, the Periodic Costing calculates the cost based on transaction history.

Why Consider?

For the customers who have requirements to produce financial reports based on both standard cost and Periodic Cost (WAVG or FIFO), use the adjustment mode for Periodic Costing.

Multinational companies can use standard costing to meet their management accounting, internal audit, and corporate requirements, while also using Periodic Costing functions for legal (end of period) accounting or actual costs requirements.

Typically, complete mode is used by local companies operating in locations where standard costing is prohibited. In some countries, the complete mode may be a preferred best practice.

Setup Implications

When you use adjustment mode, set Create GL Transactions to Yes in Inventory Accounting Control (36.9.2).

If you use complete mode, set Create GL Transactions to No.

Cost Method



Definition

You can use either weighted average or first in first out method.

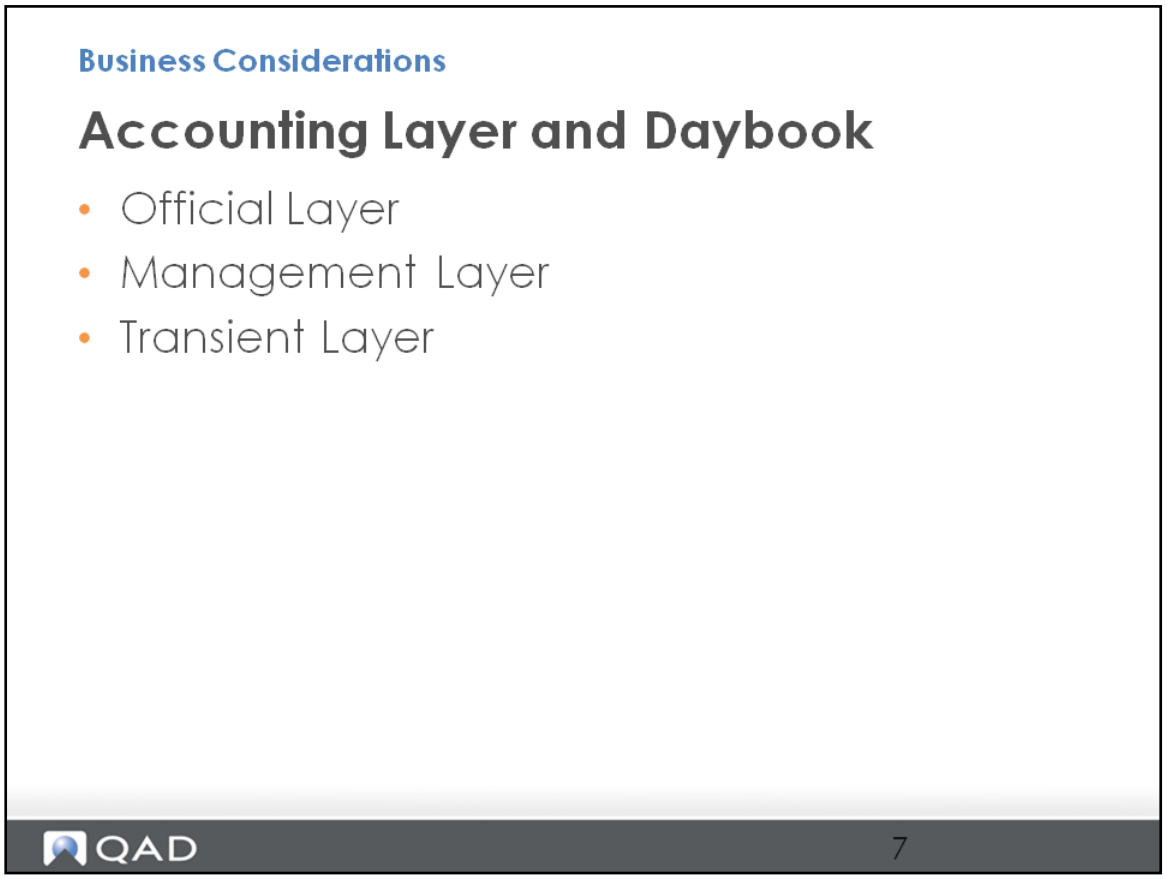
- WAVG considers the previous period cost and the average of the cost incurred during this period.
- FIFO considers the receipt date of items for the existing inventory and assumes that the oldest (first) receipts in stock of the item are issued first.

Why Consider?

When you use Periodic Costing, the calculation method used for determining the cost of inventory items can have significant effects on related calculations of COGS and gross margin.

The FIFO method provides a good indication of the balance sheet value of ending inventory. However, in an economy with rising prices, it also increases net income because older inventory is used to value the cost of goods sold—potentially increasing the tax amount that a company should pay.

Accounting Layer and Daybook



Definition

Accounting layer and daybook hold the posted GL transactions.

Why Consider?

Different cost modes use different types of accounting layer and daybooks.

Periodic costing calculates the cost in a transient layer daybook and moves the results to the management layer or official layer daybook based on the cost mode.

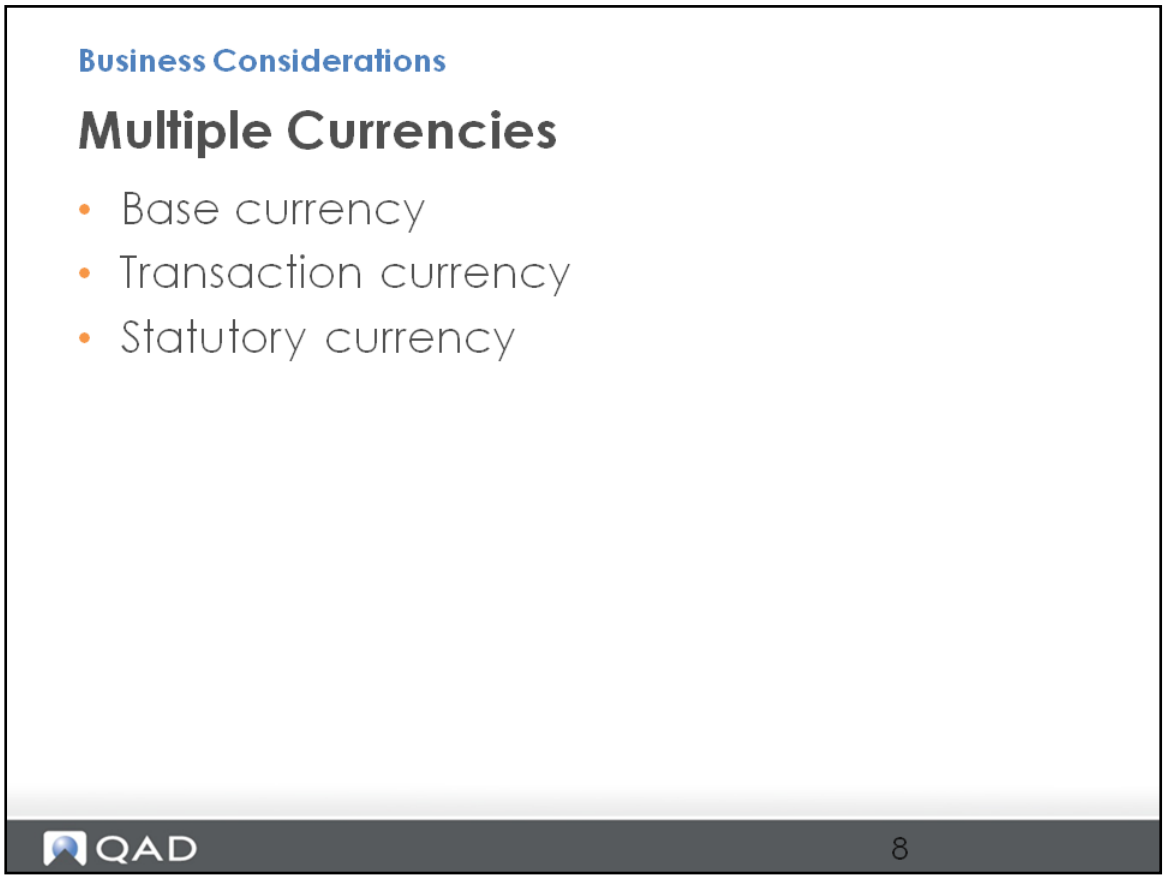
Setup Implications

Set up a transient layer daybook for periodic costing calculations.

If use adjustment mode, set up a specific management layer and daybooks for final calculated results.

If use complete mode, set up a specific official layer daybook for the final results.

Multiple Currencies



Definition

One domain can only have one base currency and one statutory currency.

In Periodic Costing, the system calculates, stores, and reports item costs in base and in statutory currencies, if defined, for each period.

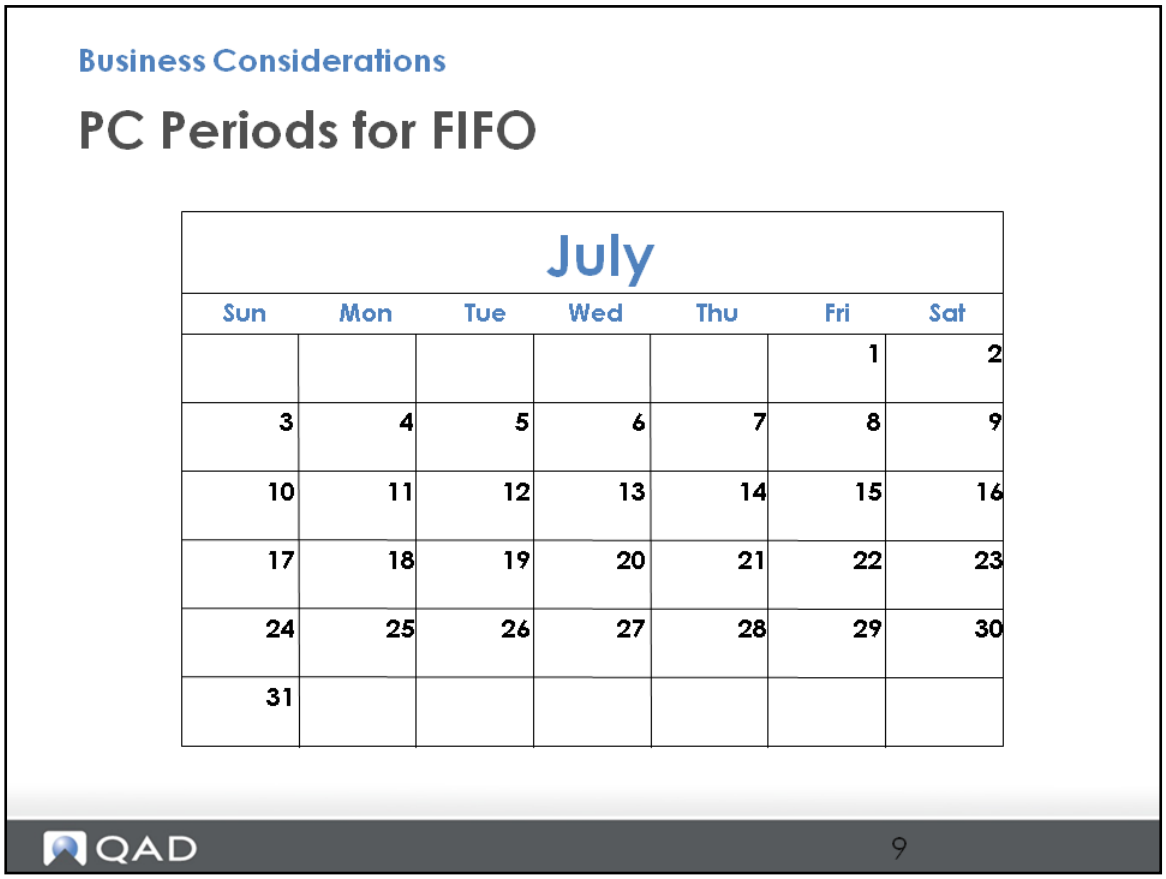
Why Consider?

For either local reporting or management purposes, companies use Periodic Costing as a legal requirement, calculating based on the local country currency (base or statutory). For management purposes, it is necessary to have data available in the company consolidation currency (statutory or base respectively).

Setup Implications

Specify the base currency and statutory currency in Domain Maintenance.

PC Periods for FIFO



Definition

For WAVG, only one Periodic Costing period can be used per GL calendar period.

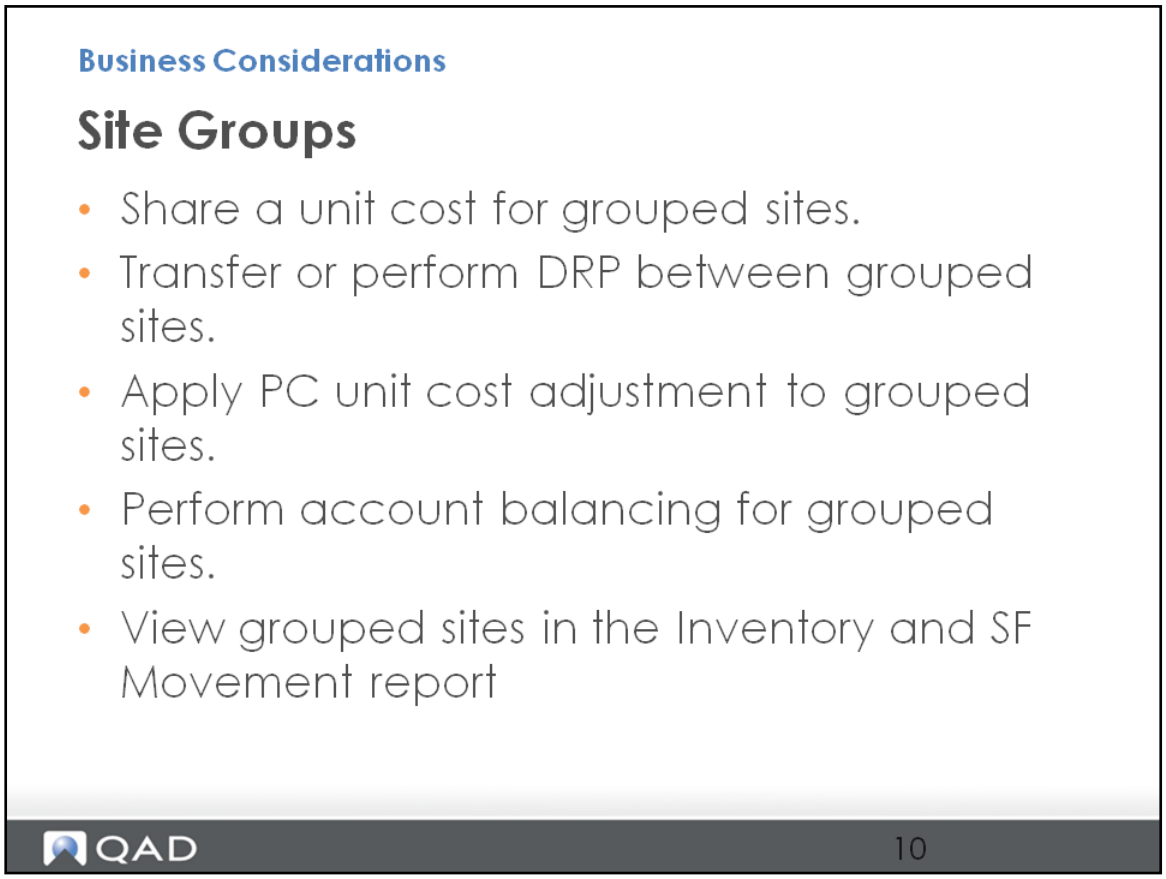
For FIFO, you can split the GL calendar into multiple buckets. You choose the number of buckets as long as there is a minimum of one bucket per GL calendar period and no more than one bucket per calendar day. The buckets cannot overlap.

Why Consider?

The system maintains a cost set for every cost-calculation period. PC period setup affects the Periodic Costing Calculation performance.

QAD recommends that you do not run the Periodic Costing calculation for less than ten days, even though you can define a period as one day using the FIFO method. If you run the calculation every day, the calculations are extended as they are calculated daily. You are required to reconcile each PC Period (e.g. correct negative closing inventory) independently, which means that more periods result in more reconciliation effort.

Site Groups



Definition

You can group sites in Periodic Costing so that the groups share a unit cost.

PC considers all sites within one group as one. Distribution Order shipments between sites in a group are considered as local transfers.

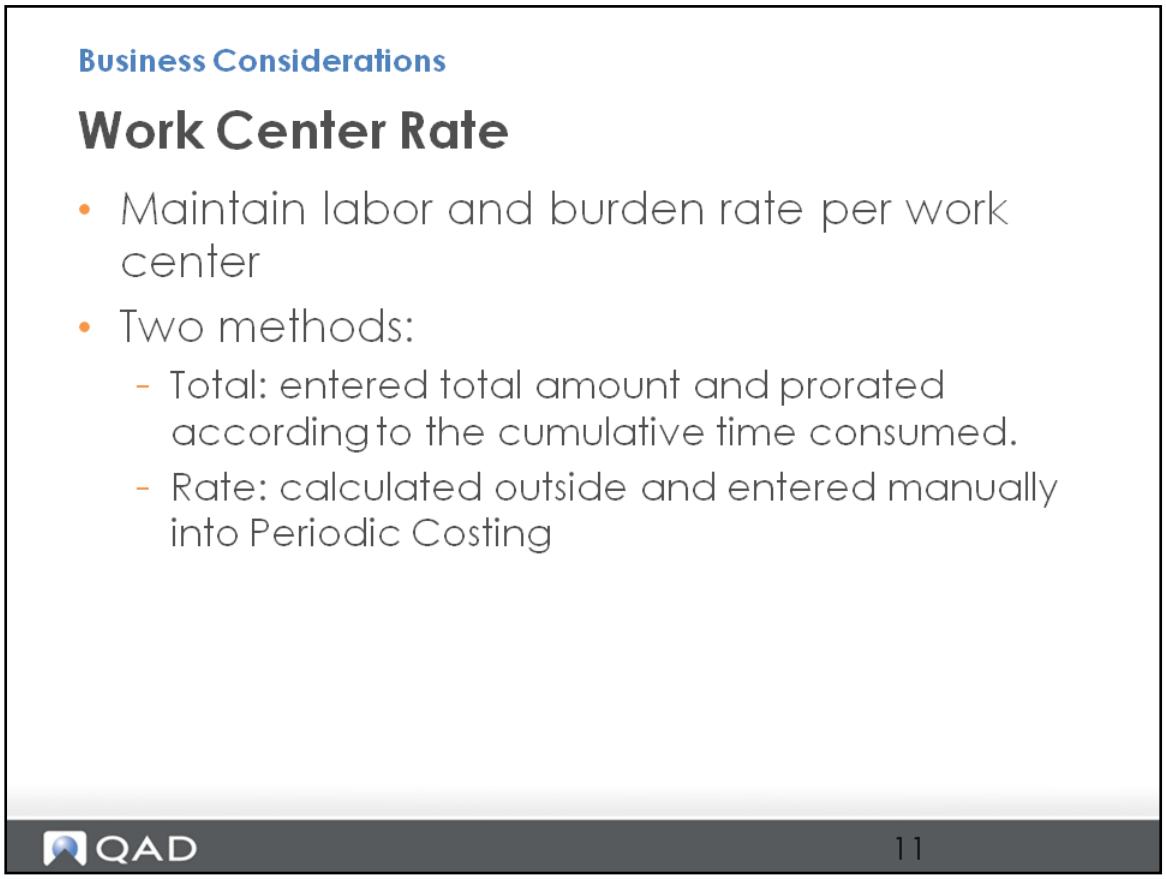
Why Consider?

Site group is useful when you want to apply a unit cost to all your factories, warehouses, or distribution centers because there are no compelling business reasons to apply site-specific unit costs. The system calculates one set of costs for the grouped sites as a whole by aggregating inventory and shop floor transactions and adjustments for all sites within the group.

Setup Implications

Make sure that the sites in a group belong to the same GL Entity.

Work Center Rate



Definition

Periodic Costing calculation uses the calculated or entered labor and burden rates to revalue the labor transactions for the work orders to absorb into WIP. Make sure that these values for rates or totals are provided for each PC Cost Calculation Period before PC Calculation is executed.

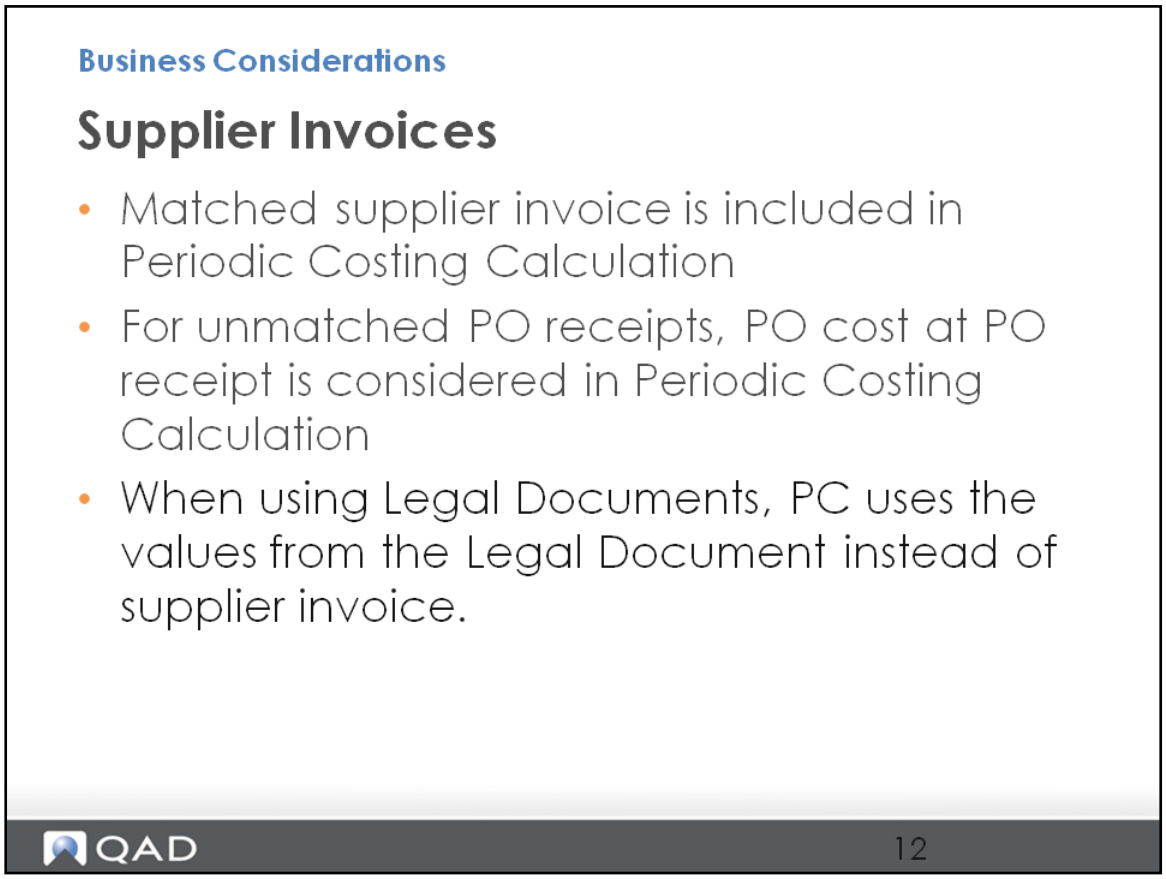
Why Consider?

It is important to determine to use total method or rate method.

Setup Implications

Periodic Costing does not require you to provide rates or totals per department.

Supplier Invoices



Definition

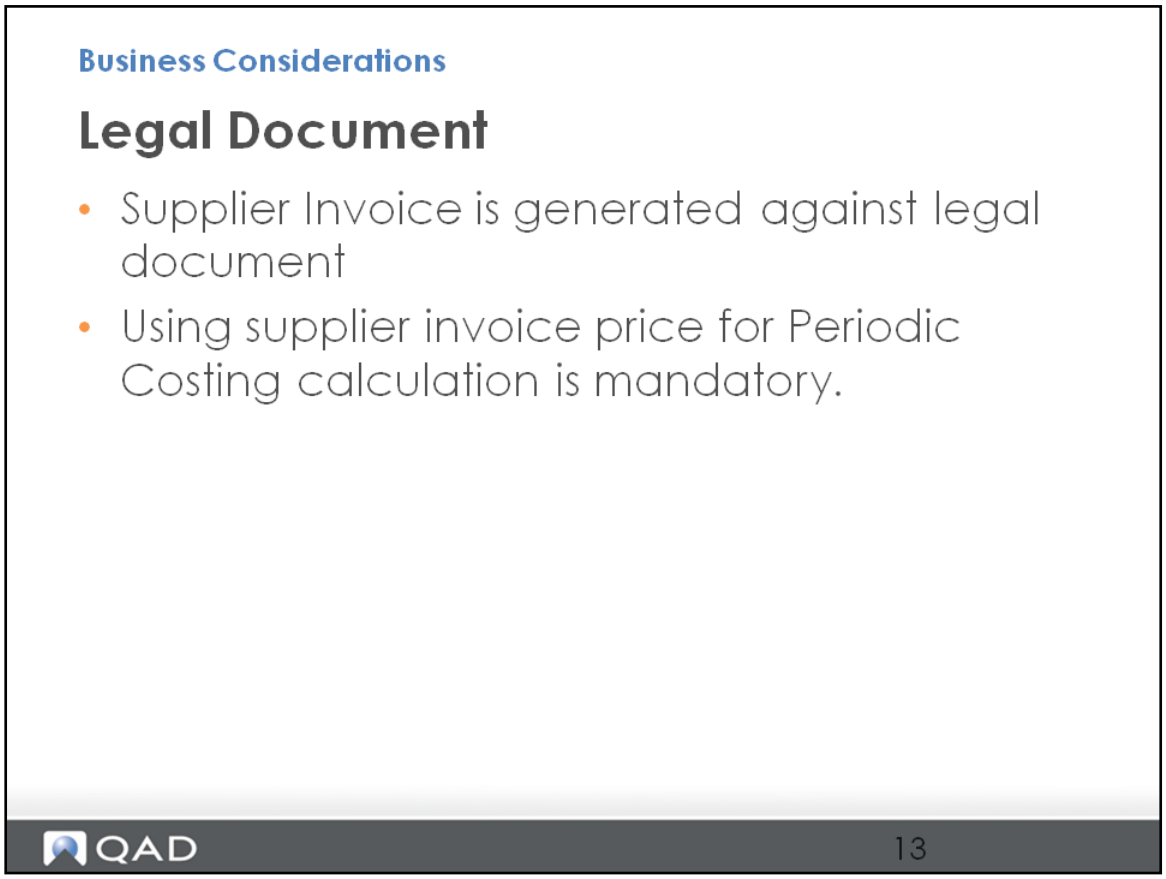
If you receive raw materials and match invoices to them in the current period, Periodic Costing calculates the unit cost at the invoice price, deducting recoverable taxes and including logistics expenses.

Why Consider?

It is mandatory to determine whether to use supplier invoice price (not PO price) for inventory valuation.

Some countries—for example, Brazil—require that the system use supplier invoice prices, not PO prices, at PO receipt for inventory valuation for periodic cost calculations.

Legal Document



Definition

Supplier Invoice is generated against legal document.

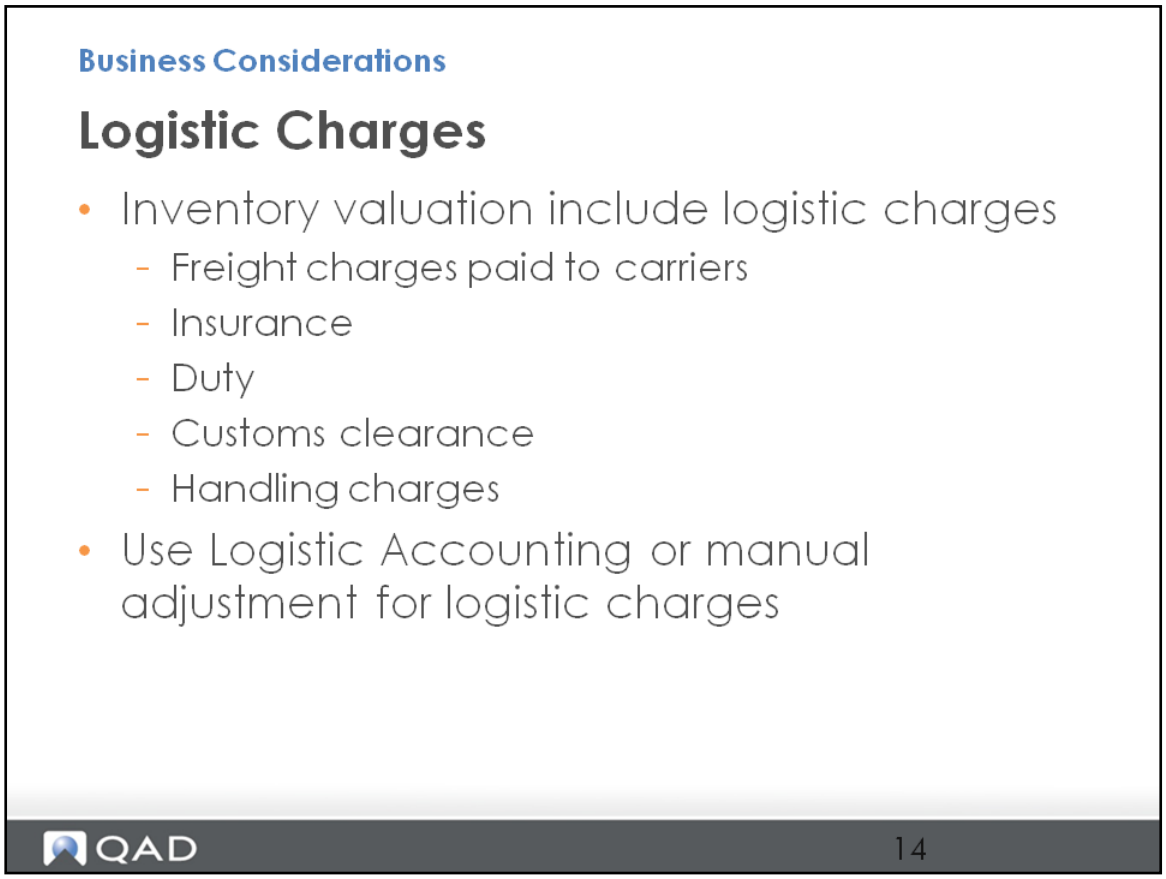
Why Consider?

Some countries—for example, Brazil—require that the system use supplier invoice prices, not PO prices, at PO receipt for inventory valuation for periodic cost calculations. If the supplier invoice functionality is enabled, the output displays all purchase orders that do not have matched invoices. In these countries, the period cannot be closed if the matching invoice is not available. It requires you to match the invoices manually.

Setup Implications

Enable the Legal Document functionality in the Purchasing Control (Fiscal Confirm Required).

Logistic Charges



Definition

Logistics charges are the costs incurred when a product is moved from one location to another. These costs can include, not only the freight charges paid to carriers, but also insurance, duty, customs clearance, handling charges, and so on.

Why Consider?

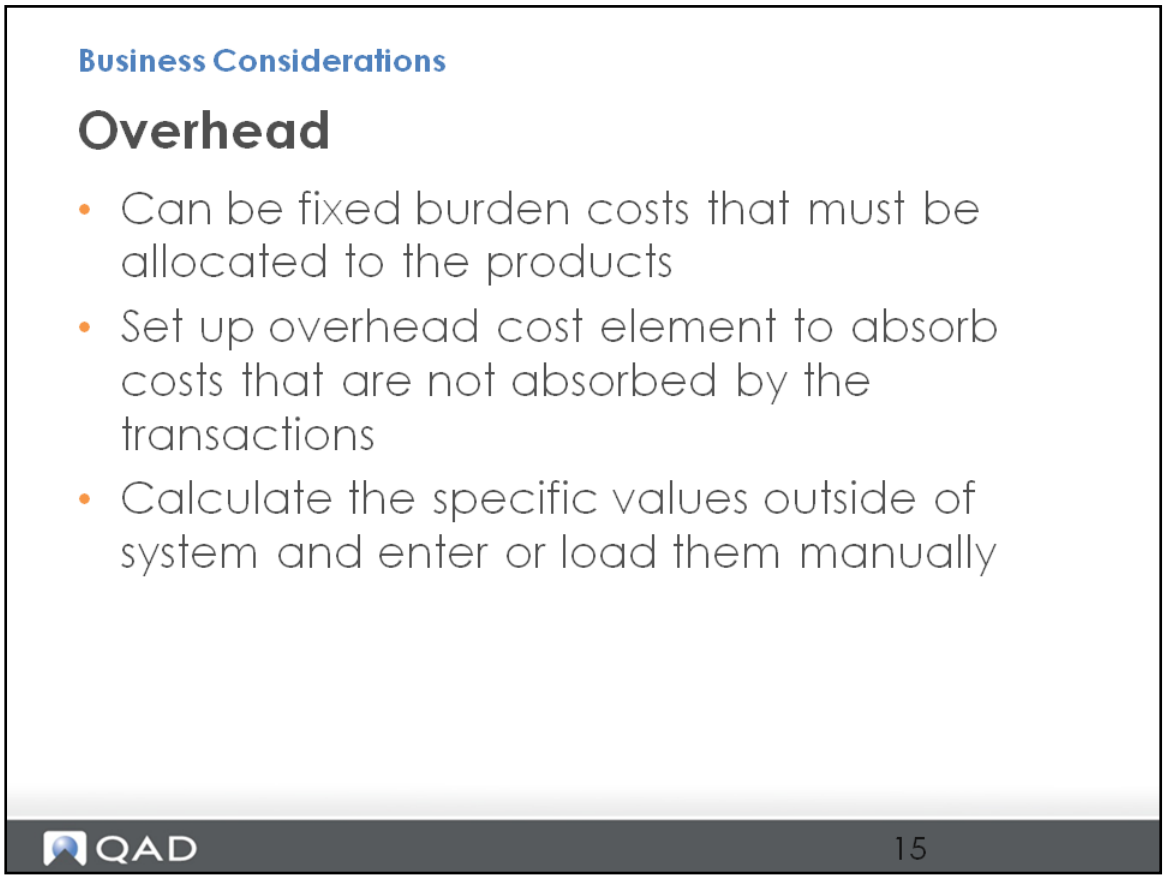
If you use Logistic Accounting module, the logistic charges can be defined as the material cost elements. Periodic Costing can capture the logistic charges from the module.

If you do not use Logistic Accounting module, use PC Cost Adjustment to enter the logistic manually .

Setup Implications

Use cost management function to set up cost elements for logistic charges. Use logistic accounting functions to set up logistic charge code and link it to the cost element.

Overhead



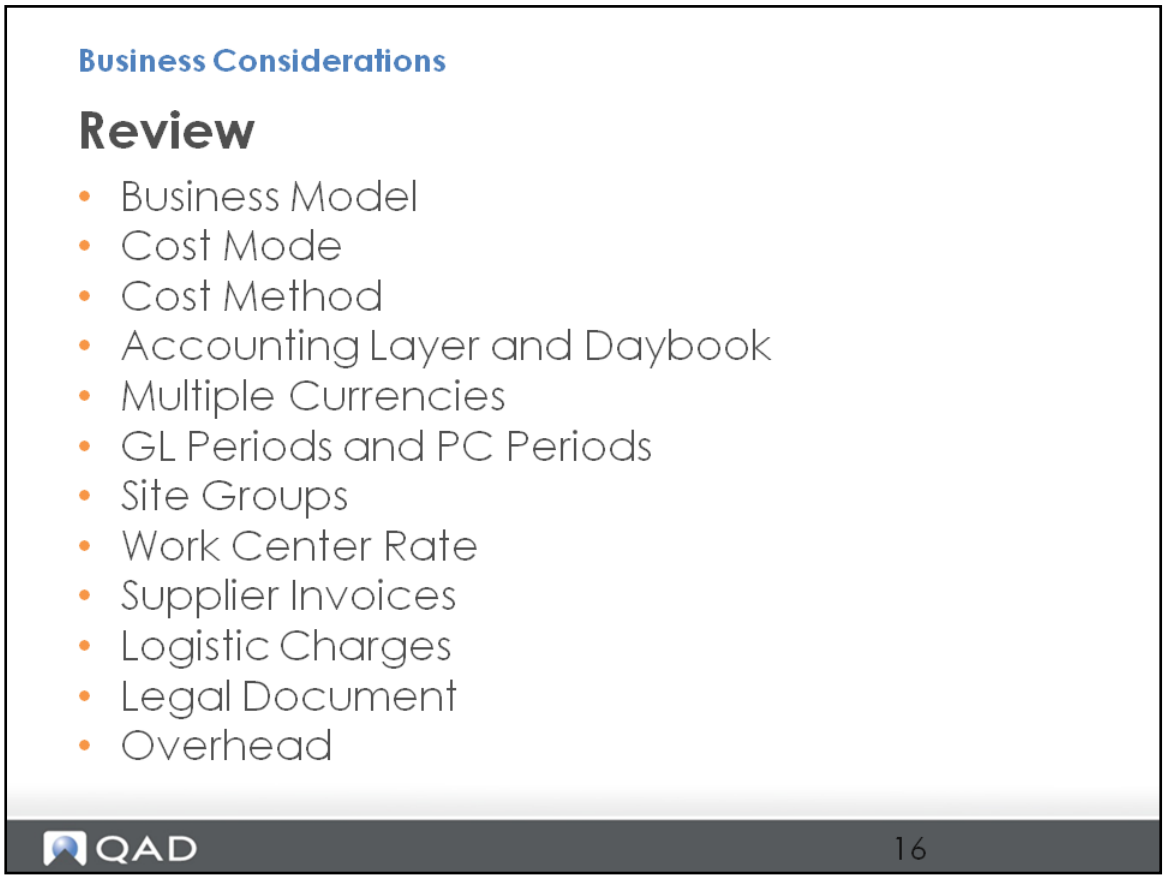
Definition

Overhead costs are classified as either fixed or variable. Fixed overhead costs do not vary with changes in production output and cannot be avoided in the short term. These costs require to be paid even if production output is zero. Some examples are rent, insurance premiums, and interest payments. Variable overhead costs, also called burden, change with the volume of production output.

Why Consider?

Overhead values that are included in the Item Unit Cost are required to be loaded for every item each period as total cost adjustments.

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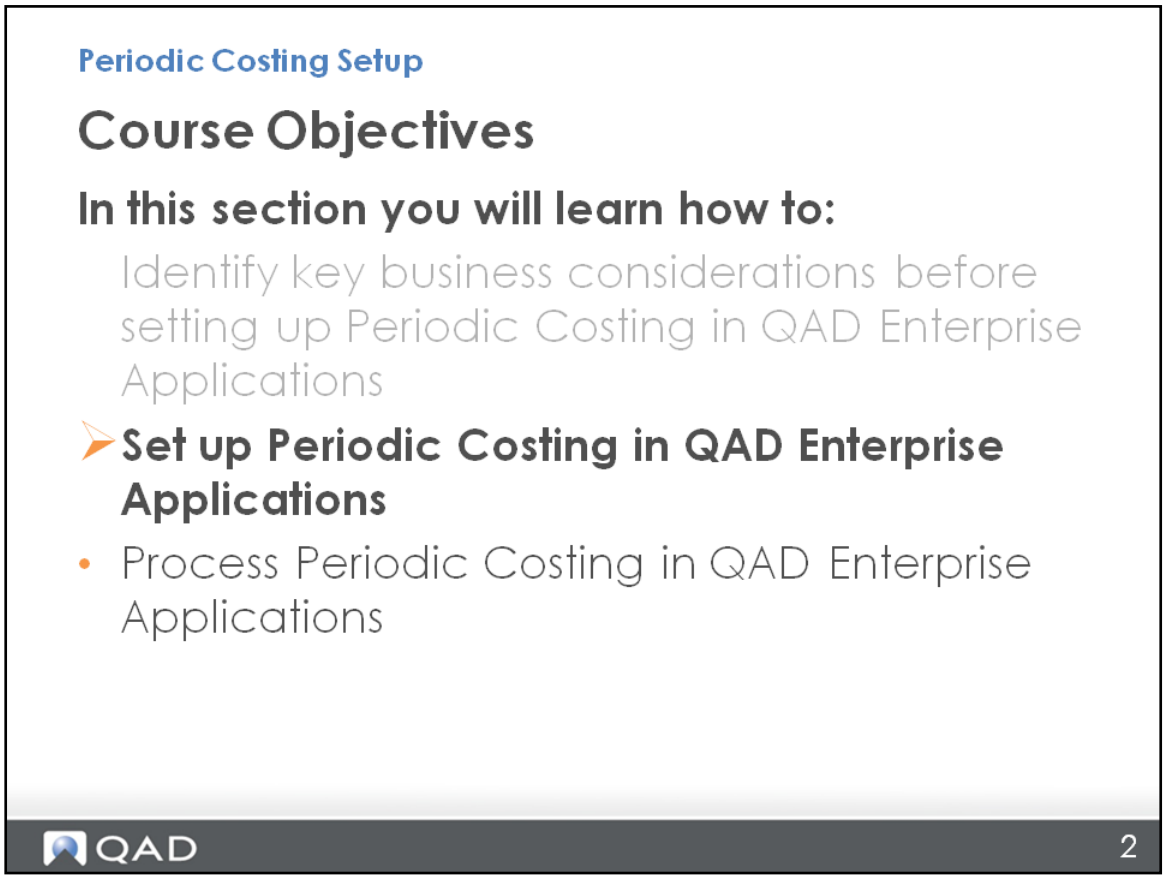
CHAPTER 3

Periodic Costing Setup

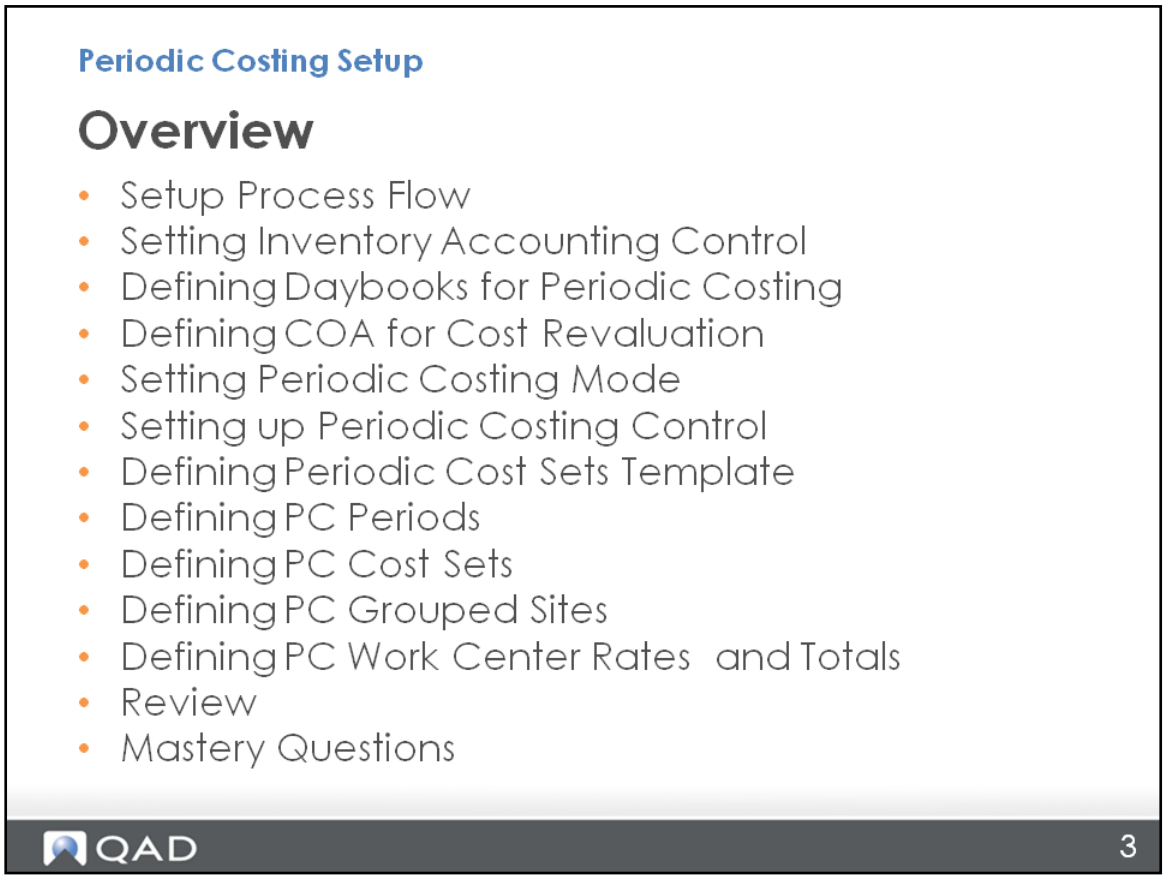
Periodic Costing Setup



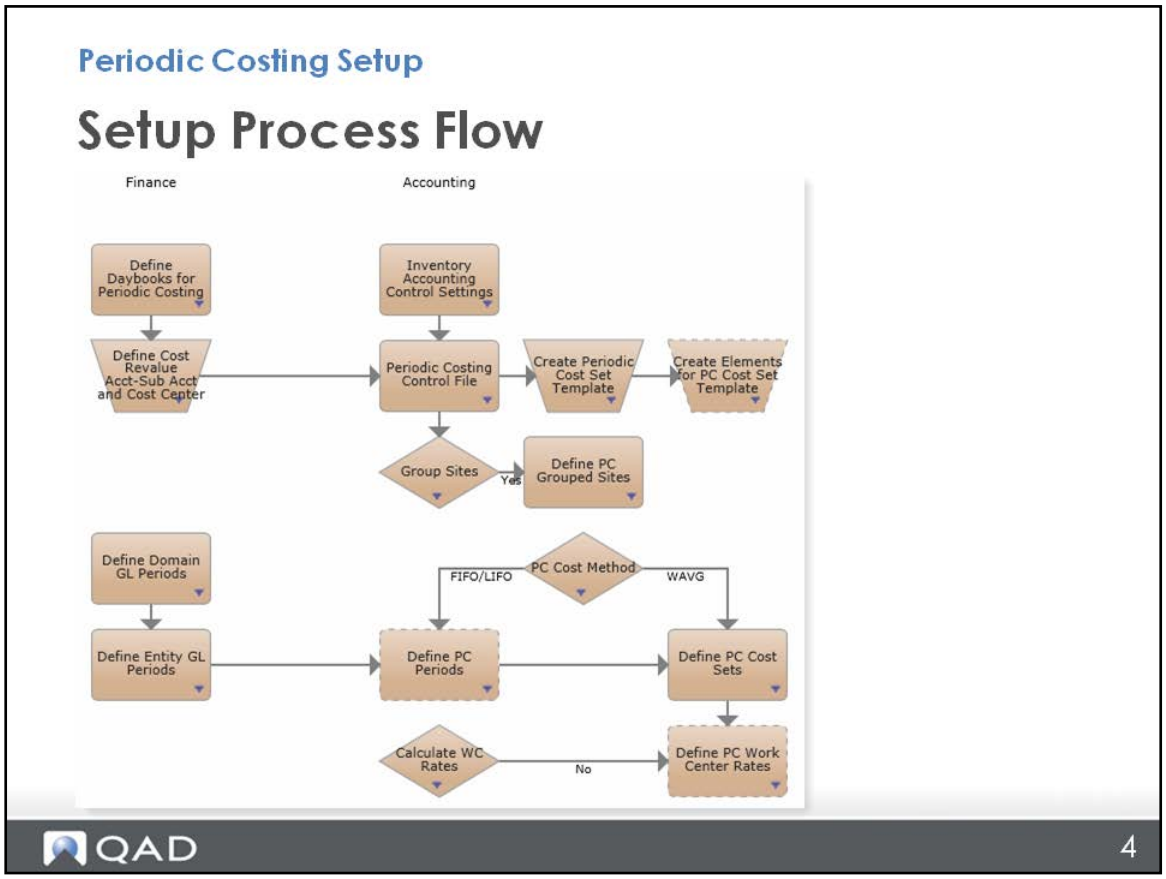
Course Objectives



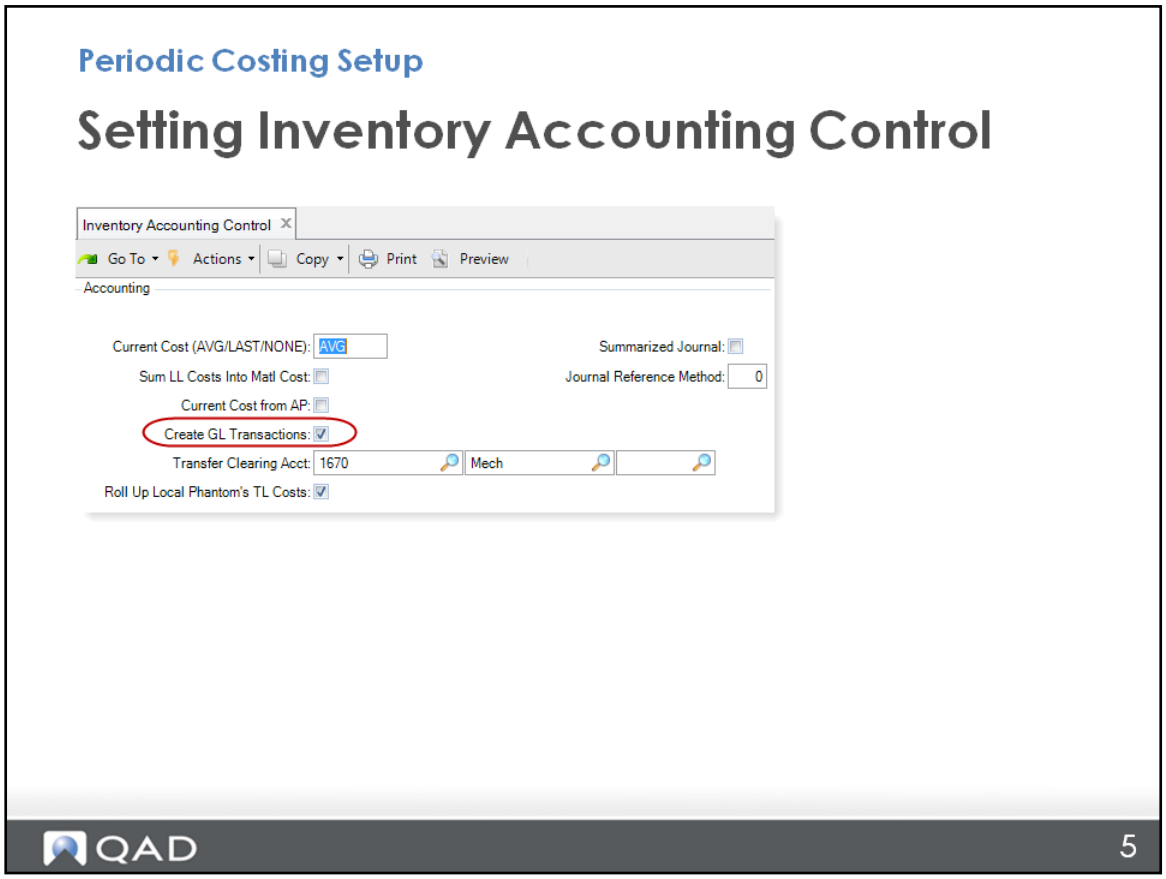
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Setup Process Flow



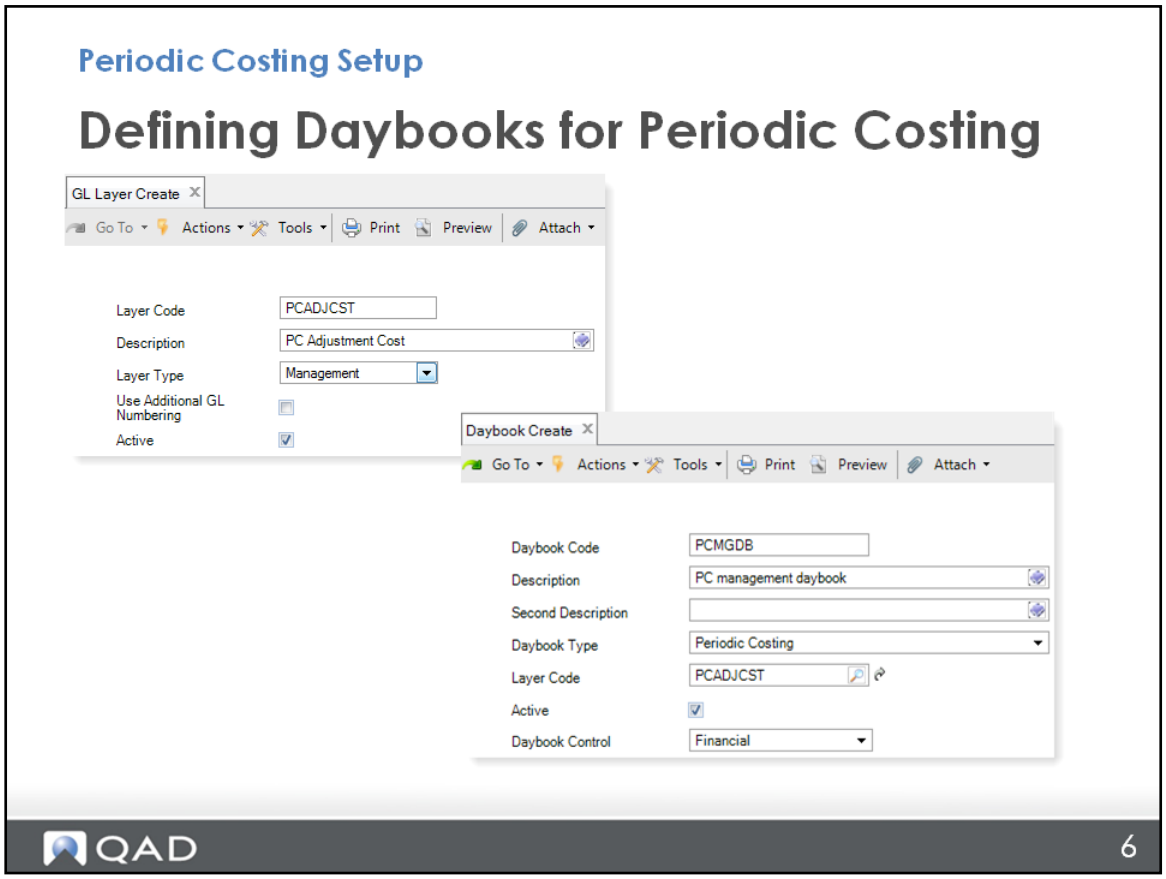
Setting Inventory Accounting Control



When using adjustment PC mode, set Create GL Transactions to Yes.

When using complete PC mode, set Create GL Transactions to No.

Defining Daybooks for Periodic Costing

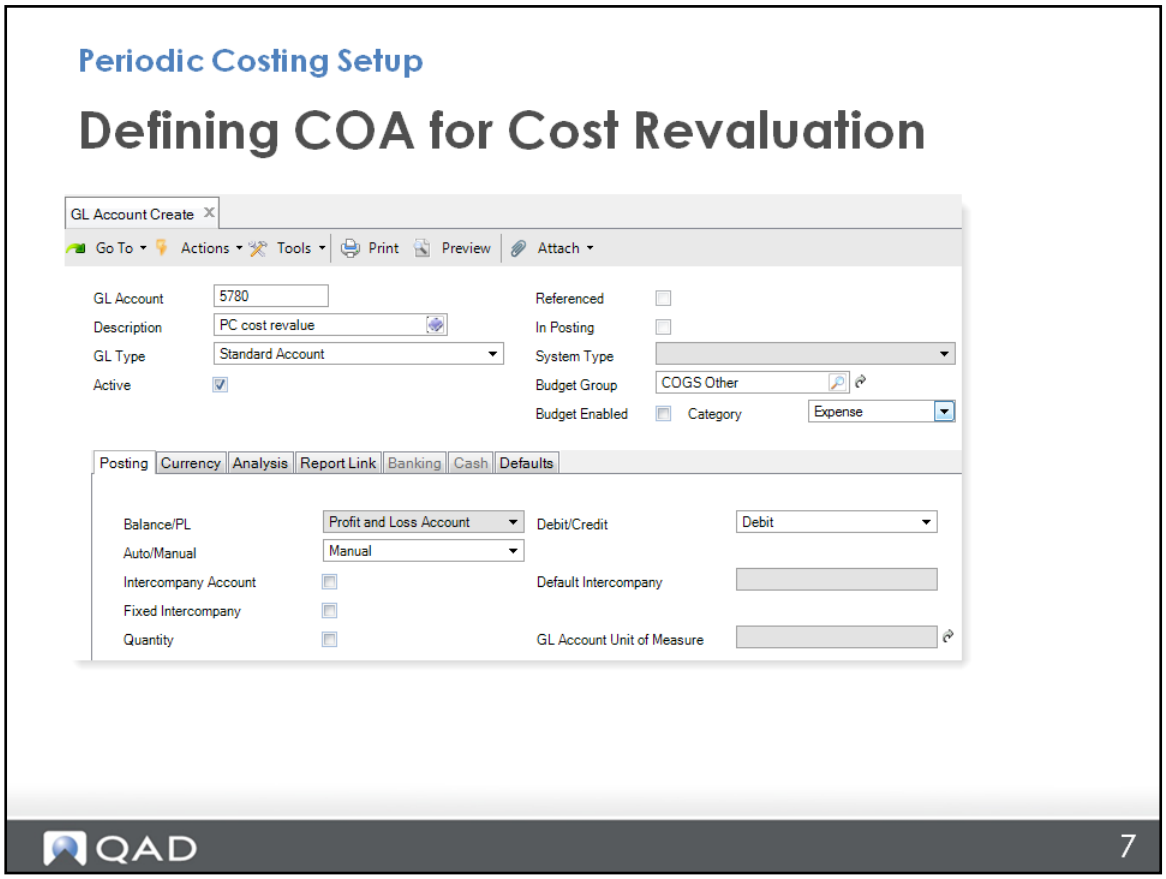


If using FIFO, create a specific management layer for periodic costing final GL transactions.

Create the following two daybooks by the Periodic Costing daybook type in Daybook Create:

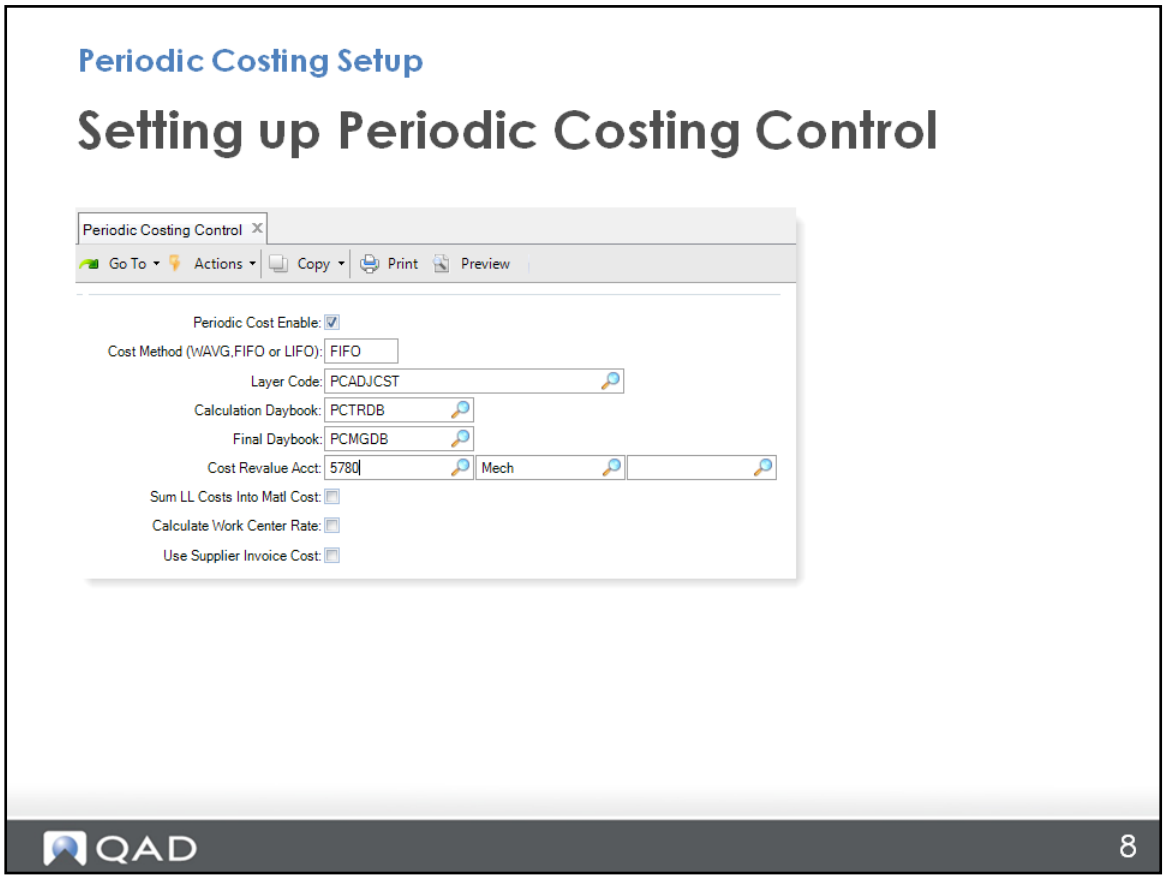
- PC calculation daybook: This daybook is for Periodic Costing transactions that the system creates during PC calculations. The layer code is Transient and the Daybook Control is Operational.
- PC final daybook: This daybook is for finalizing Periodic Costing transaction postings for the cost calculation period. The layer is Official when using complete mode or Management when using adjustment mode. The Daybook Control is Financial.

Defining COA for Cost Revaluation



Set GL Type to Standard and Category to Expense.

Setting up Periodic Costing Control

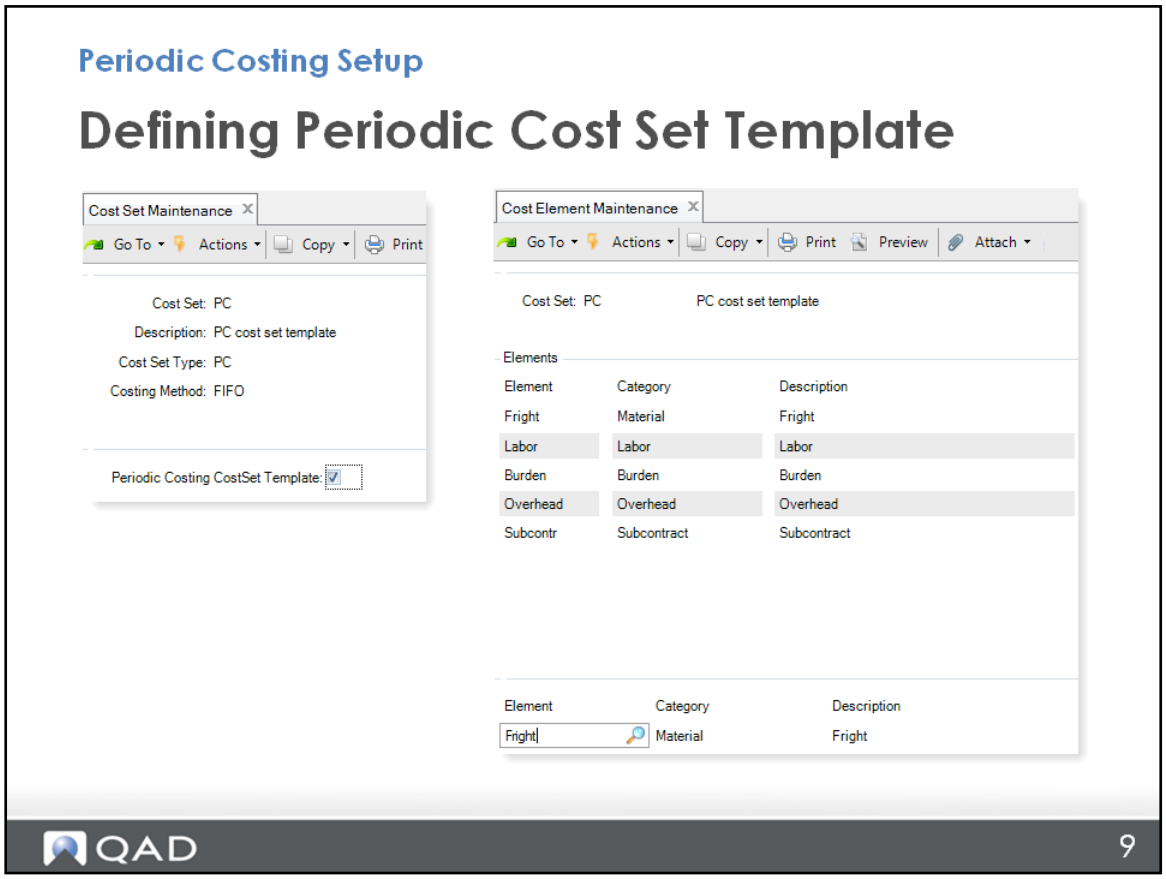


Before setting up the Periodic Costing Control, decide the GL period upon which Periodic Costing starts. Then, based on your decision, close all sub-ledgers for all periods prior to the starting period. For example, to start Periodic Costing from January 2015, close all sub-ledgers for all periods prior to January 2015.

Also, ensure that all sub-ledgers are closed for **all entities within the domain** for the same periods. Periodic Costing operates on domain level, not on entity level.

Only one Periodic Costing method can be set up. Once you have chosen a specific method, you cannot change the method after the system creates Periodic Costing GL transactions. This requirement is according to IFRS guidelines.

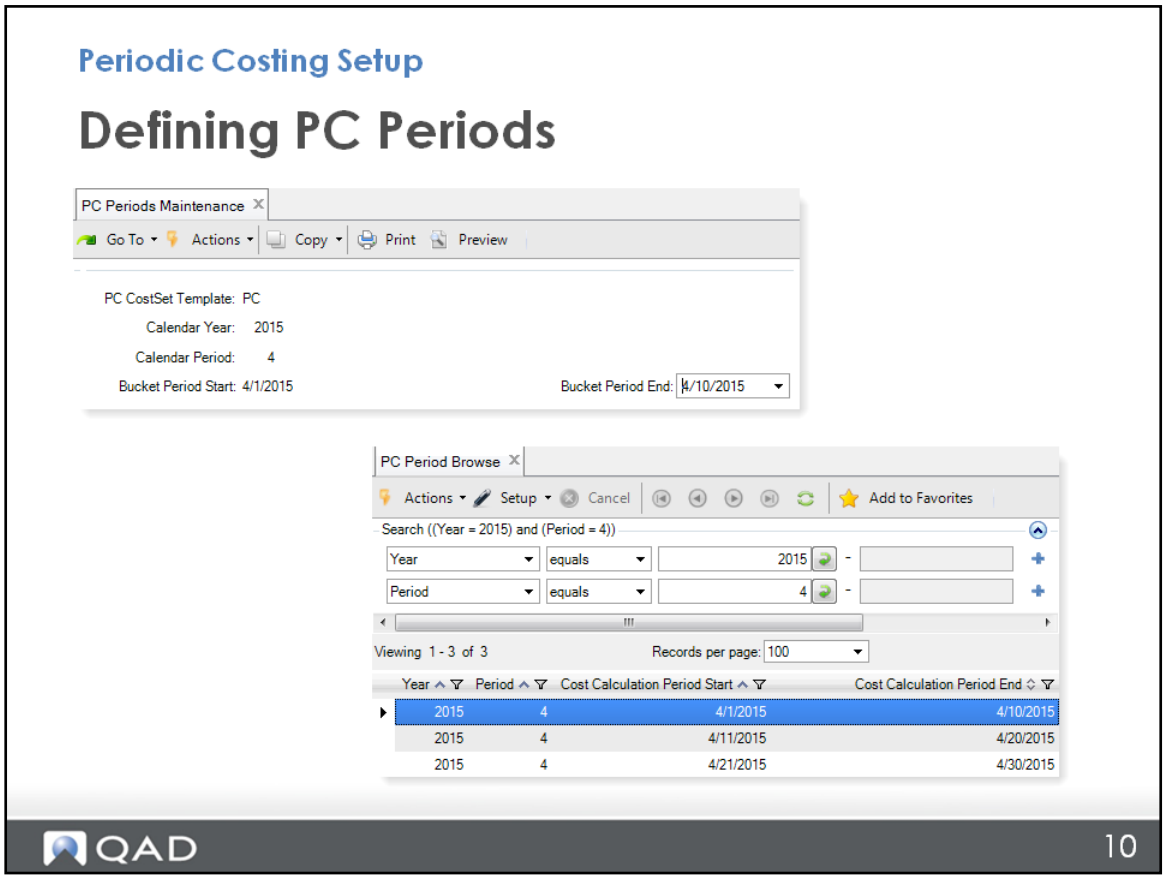
Defining Periodic Cost Set Template



Set Cost Set Type to PC and use the cost set as the template.

You can also set up multiple cost elements for material and overhead cost category in this cost set. You are not allowed to set multiple elements for the labor, burden, and subcontract elements when you enter costs in PC Work Center Rate Maintenance (30.5.3.1) or when you enter Periodic Costing adjustment transactions. When your Periodic Costing cost group has multiple elements for the labor, burden, and subcontract categories, Periodic Costing cannot properly calculate and absorb the labor/burden. When the system displays a warning indicating that there are multiple elements for these categories, ensure that you correct the multiple elements before you run the calculation.

Defining PC Periods



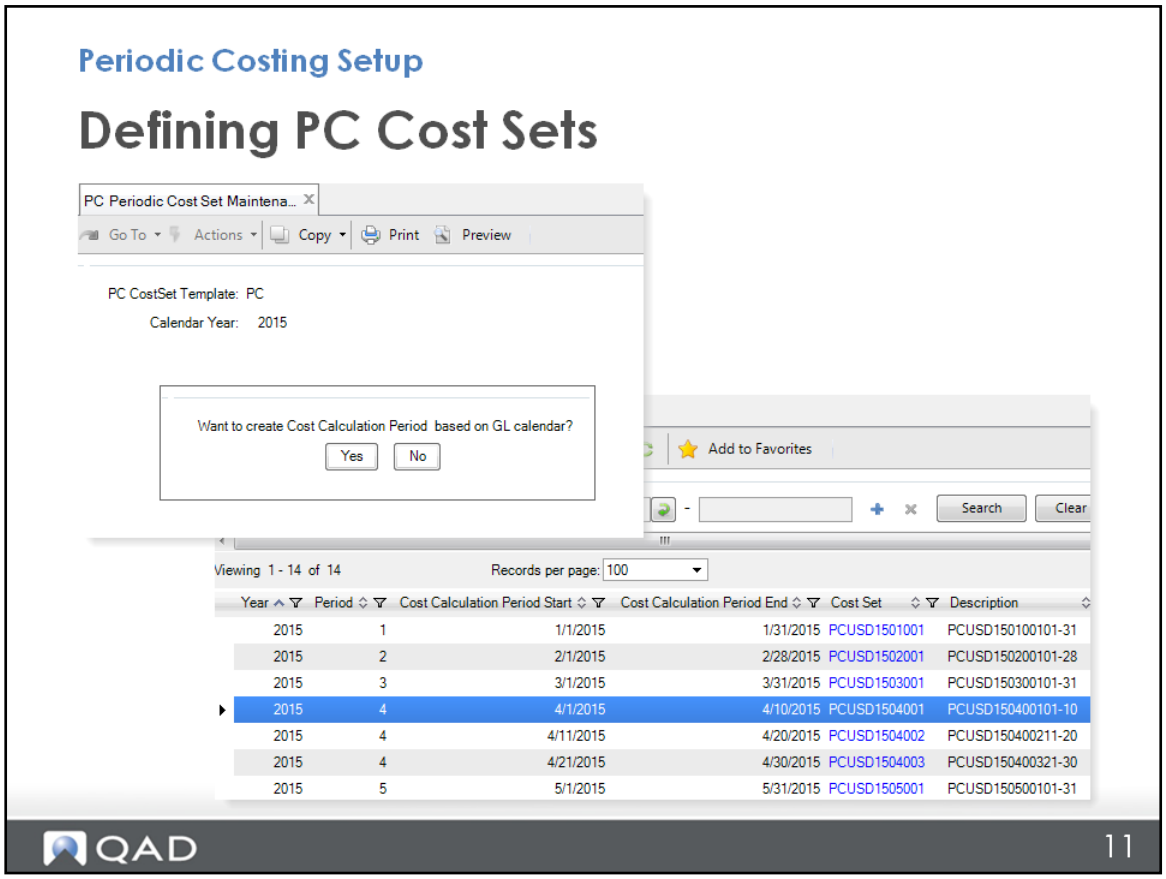
The periods per GL period only apply to FIFO calculations and have a minimum period length of one day and a maximum length of one GL period.

The system uses these periods to determine the time periods (buckets) for cost calculations. The system maintains a cost set for every cost calculating period.

You can redefine periods during the GL calendar year as required, as long as no Periodic Costing transactions exist and the GL period is open.

QAD recommends that you do not run the Periodic Costing calculation for less than ten days, even though you can define a period as one day using the FIFO method. If you run the calculation every day, the calculations are extended as they are calculated daily. You are required to reconcile each PC Period (e.g. correct negative closing inventory) independently, which means that more periods result in more reconciliation effort.

Defining PC Cost Sets



Use PC Periodic Cost Set Maintenance (30.5.1.4) to specify a detailed (child) cost set for a template cost set.

This function creates the detailed Cost Sets for the year entered. It uses the Template Cost Set and then creates a Cost Set for each combination of Currency (Base and Statutory), GL Period, and PC Period.

The detailed cost set code, e.g. PCUSD1501001, is the codes combination by:

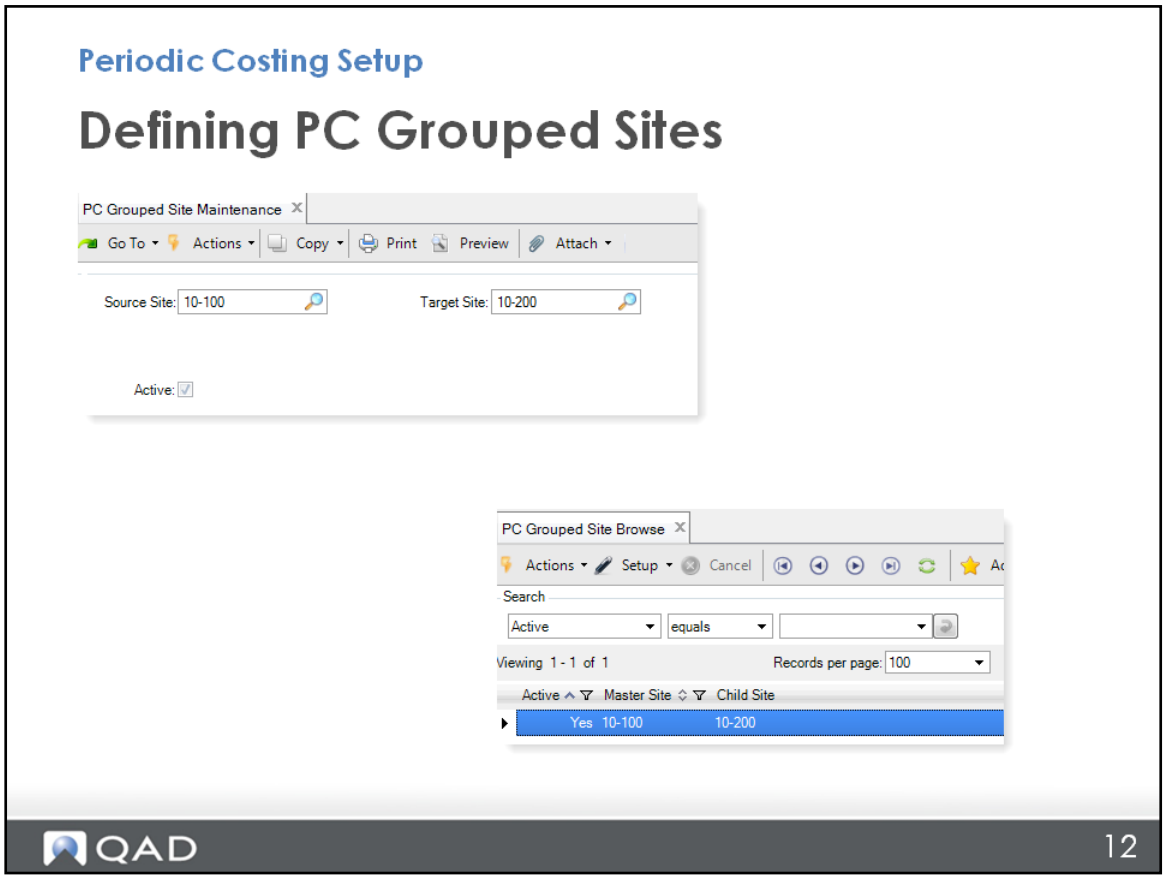
- Template cost set, e.g. PC
- Currency, e.g. USD
- Two characters of the fiscal year, e.g. 15
- Two characters for the GL period, e.g. 01
- Three-digit numbers, e.g. 001

For WAVG, you can run PC Periodic Cost Set Maintenance (30.5.1.4) to have the system automatically create PC periods that are the same as GL periods. For FIFO, you can run PC Periods Maintenance (30.5.1.1) first when you have multiple buckets in one GL period; then run PC Periodic Cost Set Maintenance.

The last three-digit numbers vary from WAVG to FIFO. For WAVG, they are always 001. For FIFO, the last three-digit numbers depend on how many buckets are defined in PC Periods Maintenance (30.5.1.1). For example, if there are three buckets, the number can be 001~003.

If you create a detailed cost sets for a template cost set, you cannot delete the template until you delete the detailed costs sets first.

Defining PC Grouped Sites

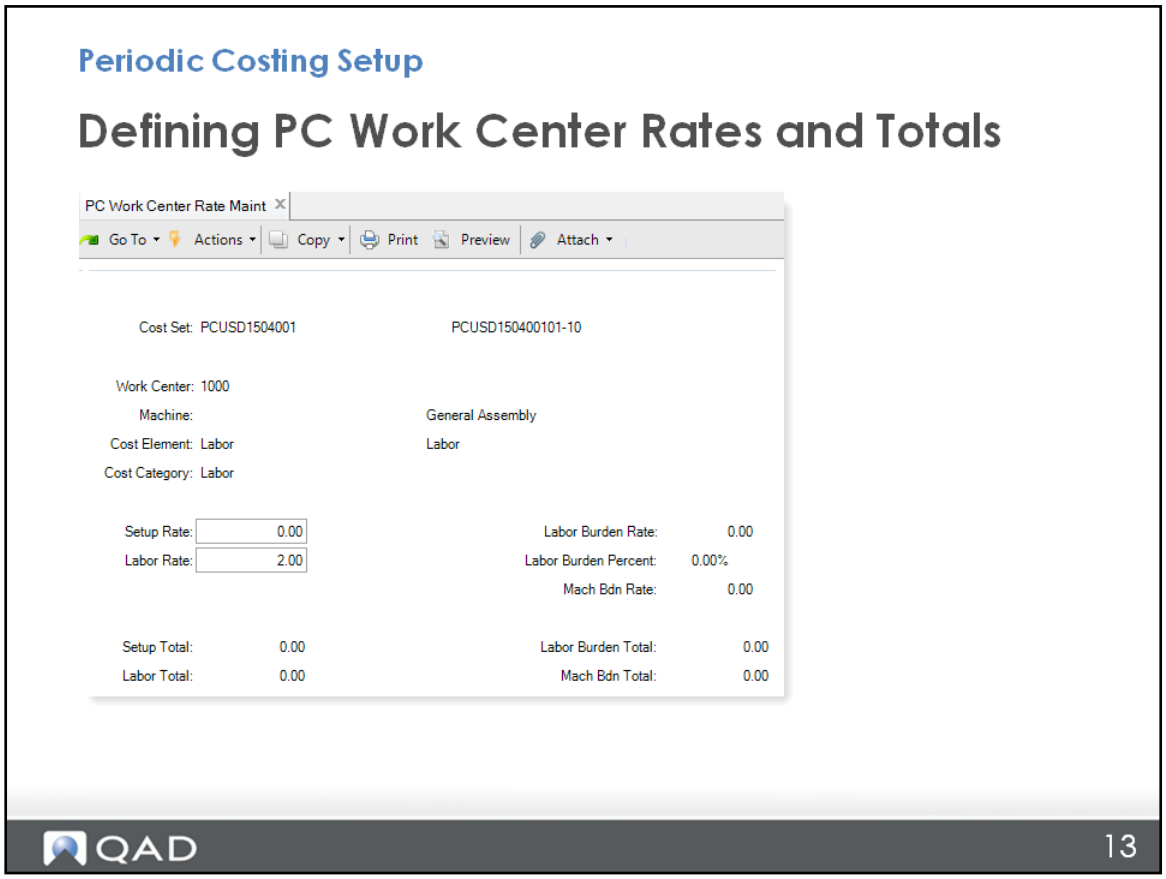


Use PC Grouped Site Maintenance (30.5.1.13) to set up sites that are treated as one site for calculating the PC cost. The system considers transactions in all sites within the group as if they all were in one site for Periodic Costing.

The source site is the master site and the target site refer to the source site for the cost.

Note: See section 06 - PC Periodic Costing Calculation for details on how the PC calculation treats grouped sites.

Defining PC Work Center Rates and Totals



Use PC Work Center Rate Maintenance (30.5.3.1) to define setup and labor rates, as well as labor burden and machine burden rates, used in Periodic Costing calculations for a specified cost set.

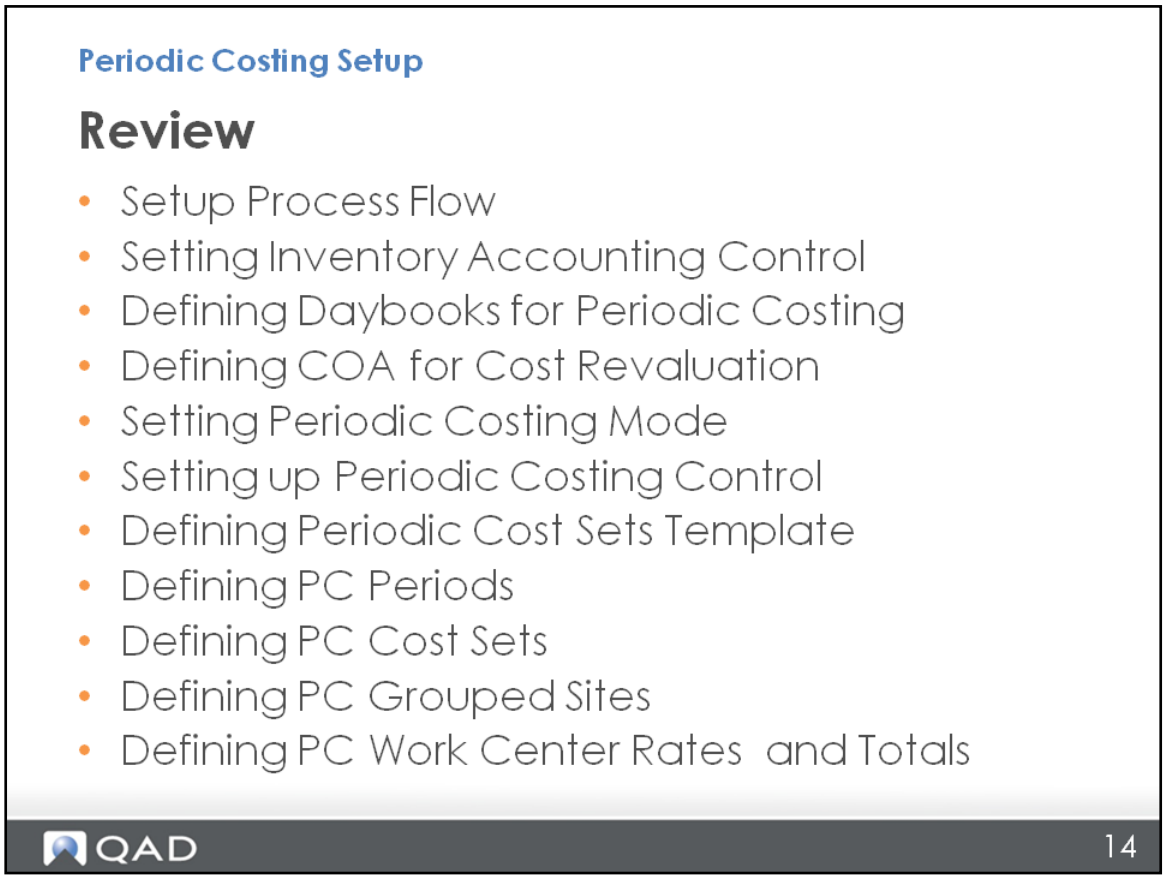
The field Calculate Work Center Rate in Periodic Costing Control determines you directly provide work center rates or provide a total value. If you provide the total value, during the periodic cost calculation, the system calculates the work center rates based on the number of labor hours (setup and run) in the operation history. Work Center Rates or Totals have to be entered or loaded for the Cost Set before running PC Calculation for the Period.

You can use PC Work Center Rate Copy (30.5.3.5) to copy rates or totals from one cost set to another.

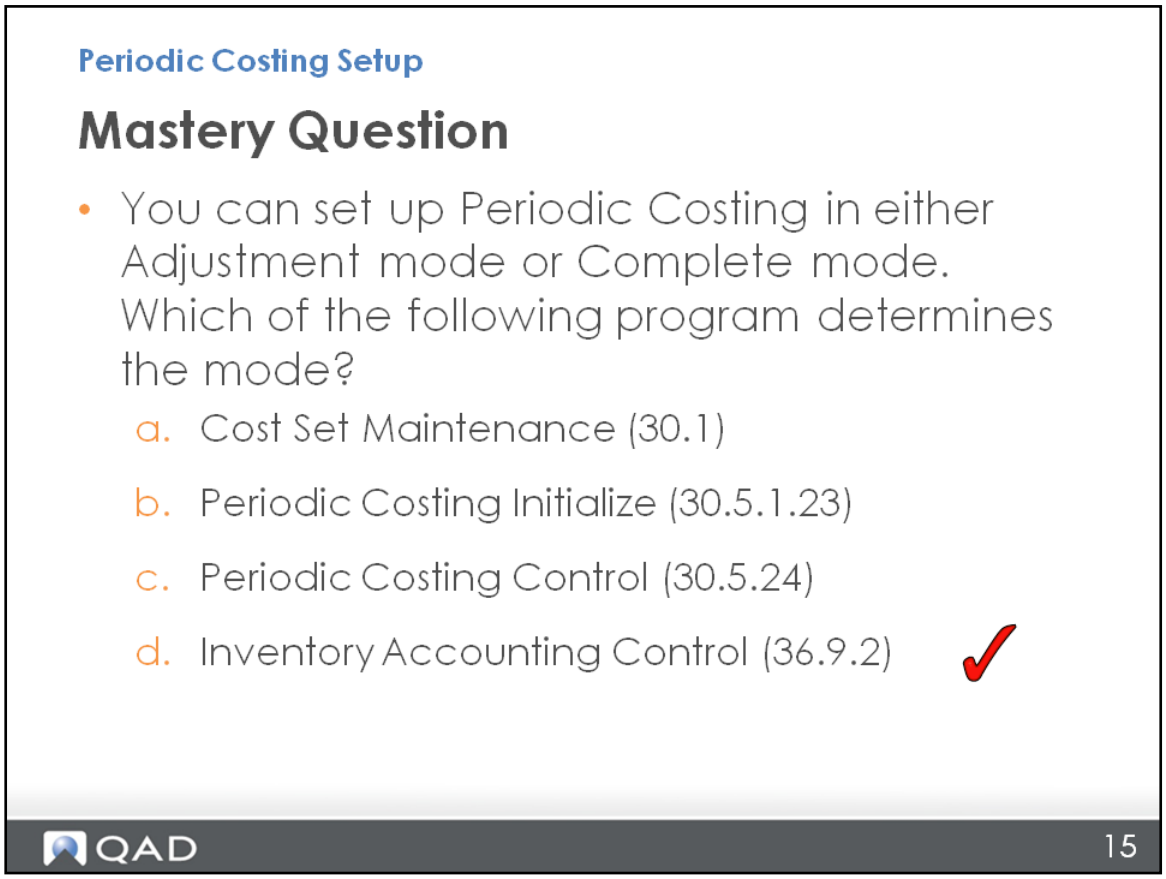
You can use PC Work Center Rate Update (30.5.3.13) to update the labor rates and burden rates that you established in PC Work Center Rate Maintenance by a percentage change.

The work center rate or totals data can also be loaded from XML file. Refer to the Periodic Cost User Guide for details.

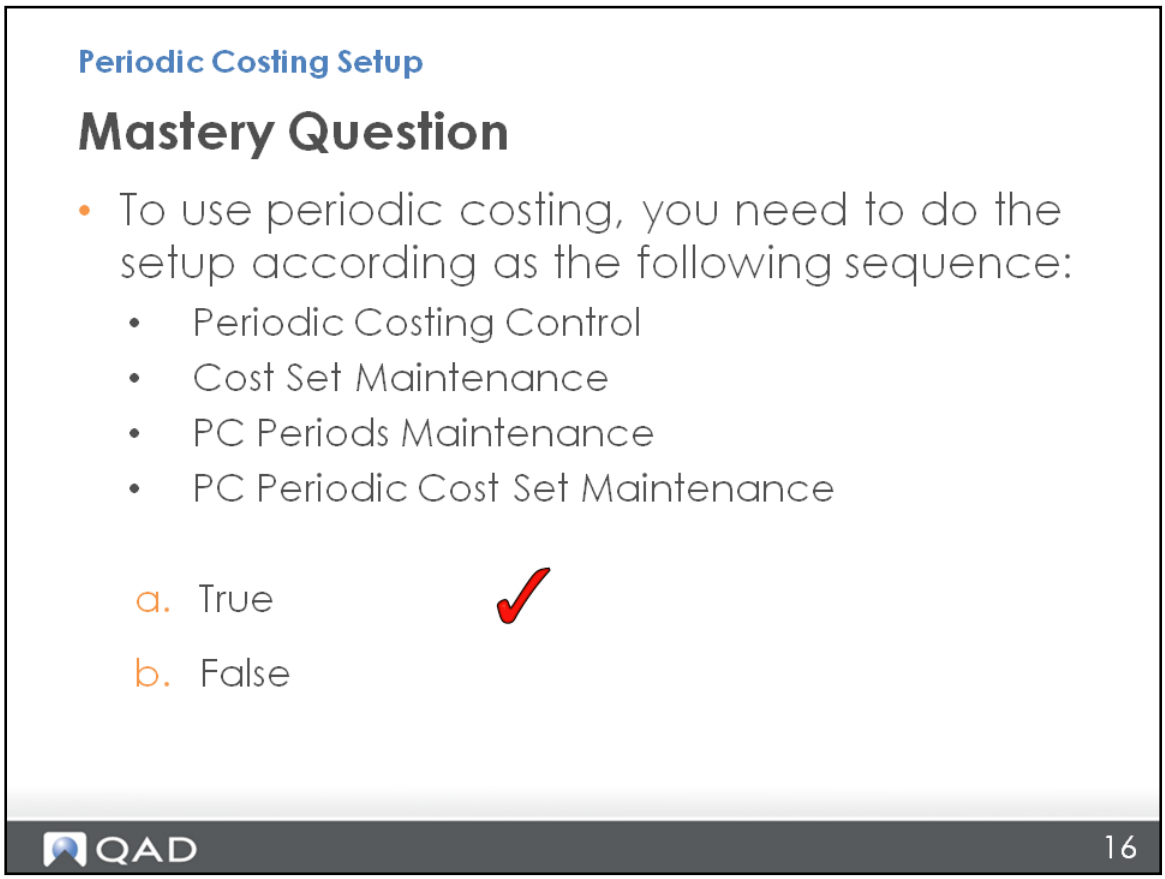
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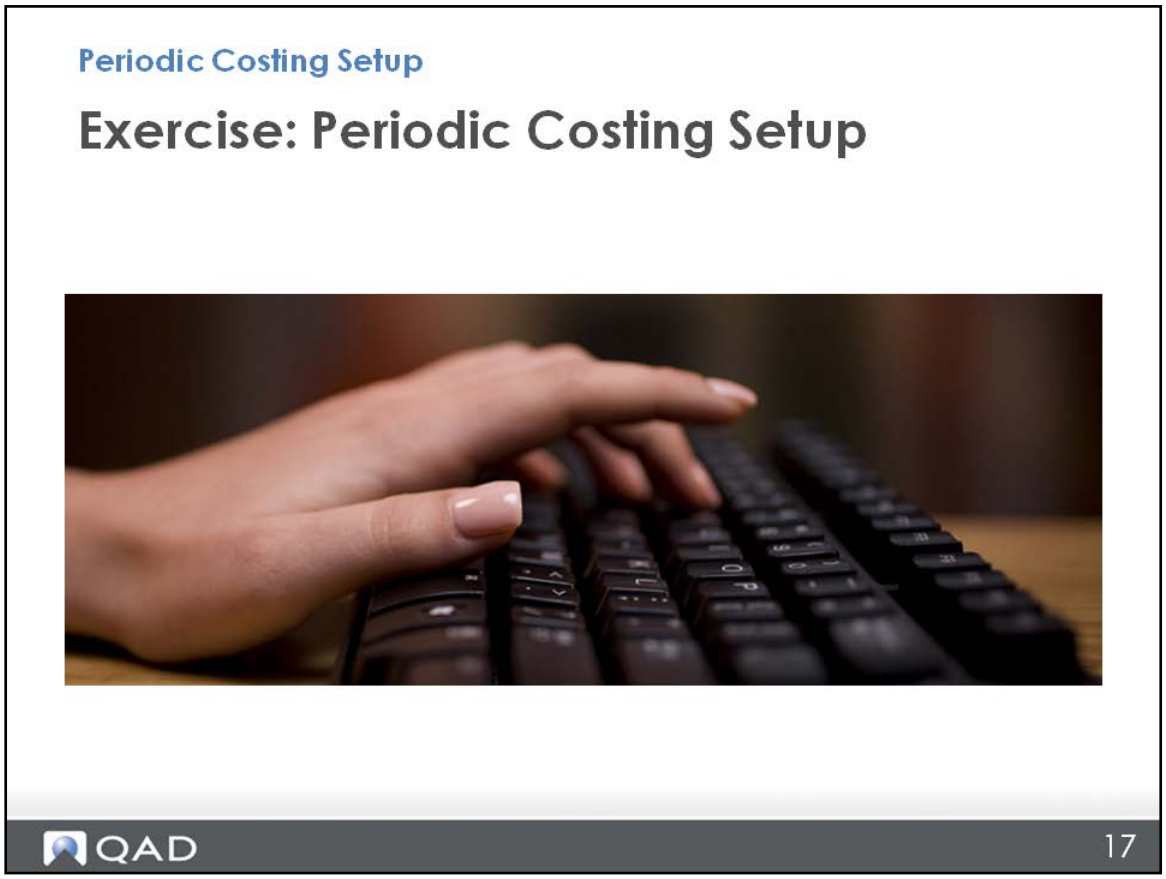
Mastery Question



Mastery Question



Exercise: Periodic Costing Setup

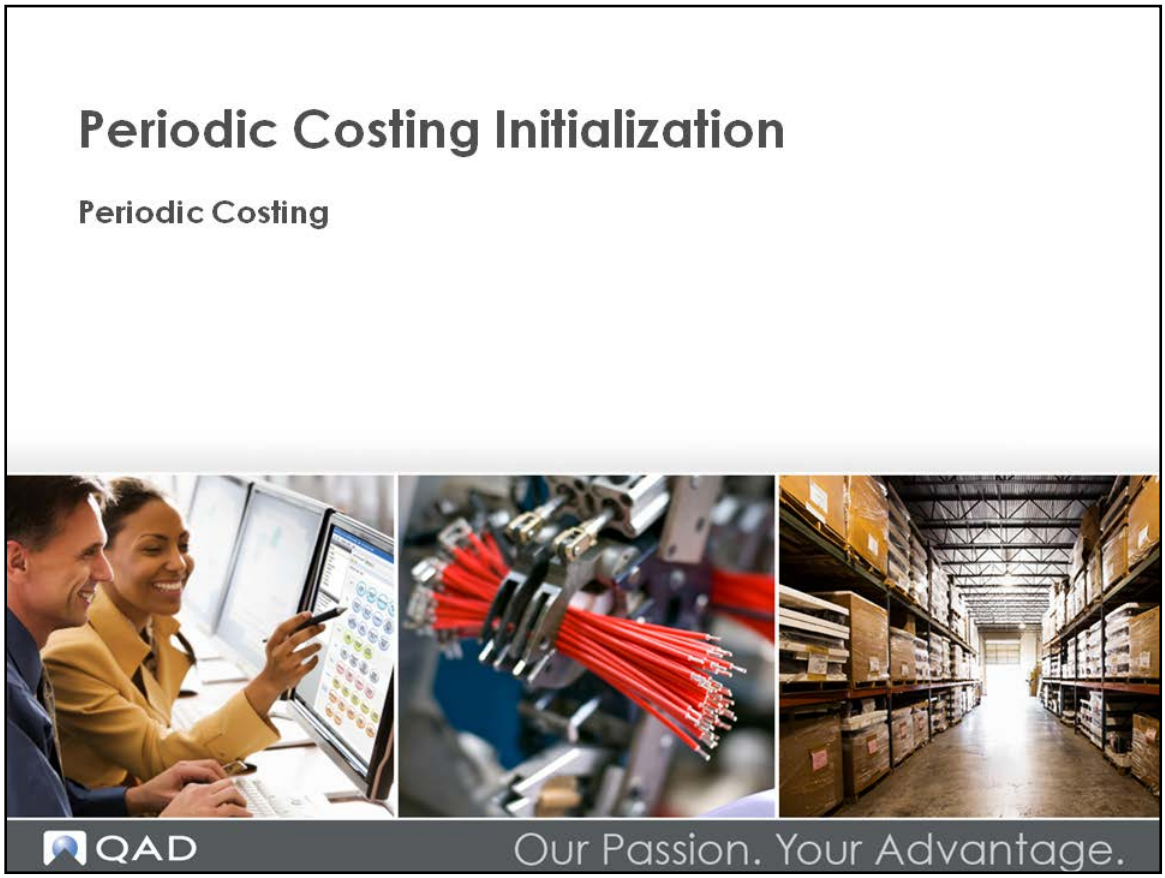


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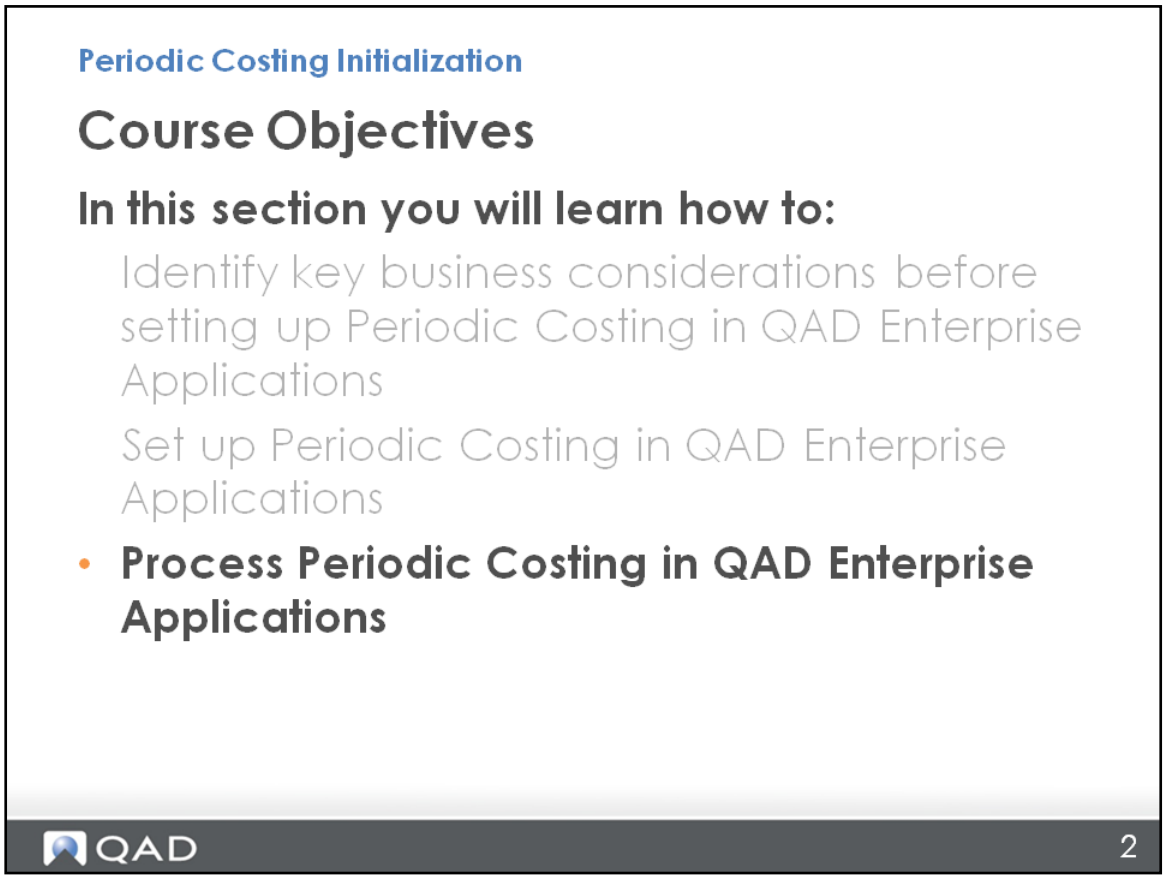
CHAPTER 4

Periodic Costing Initialization

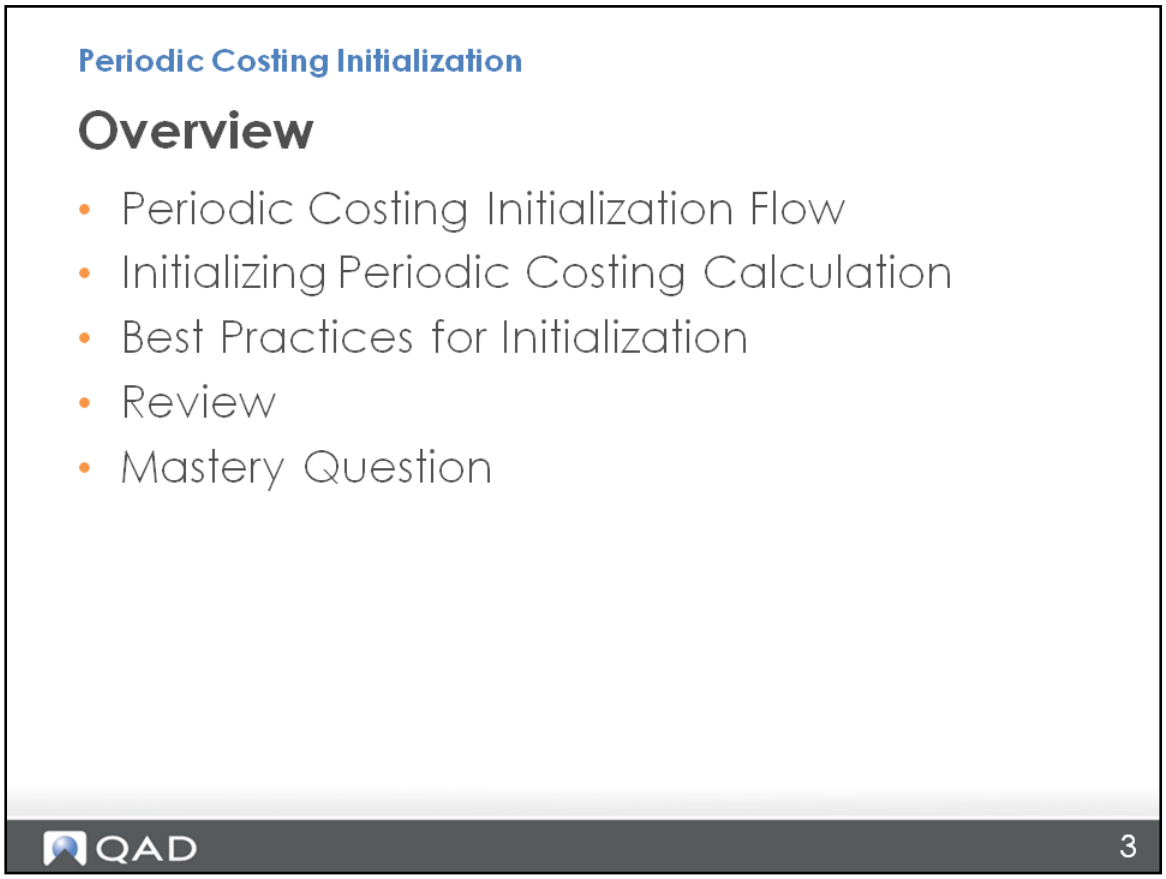
Periodic Costing Initialization



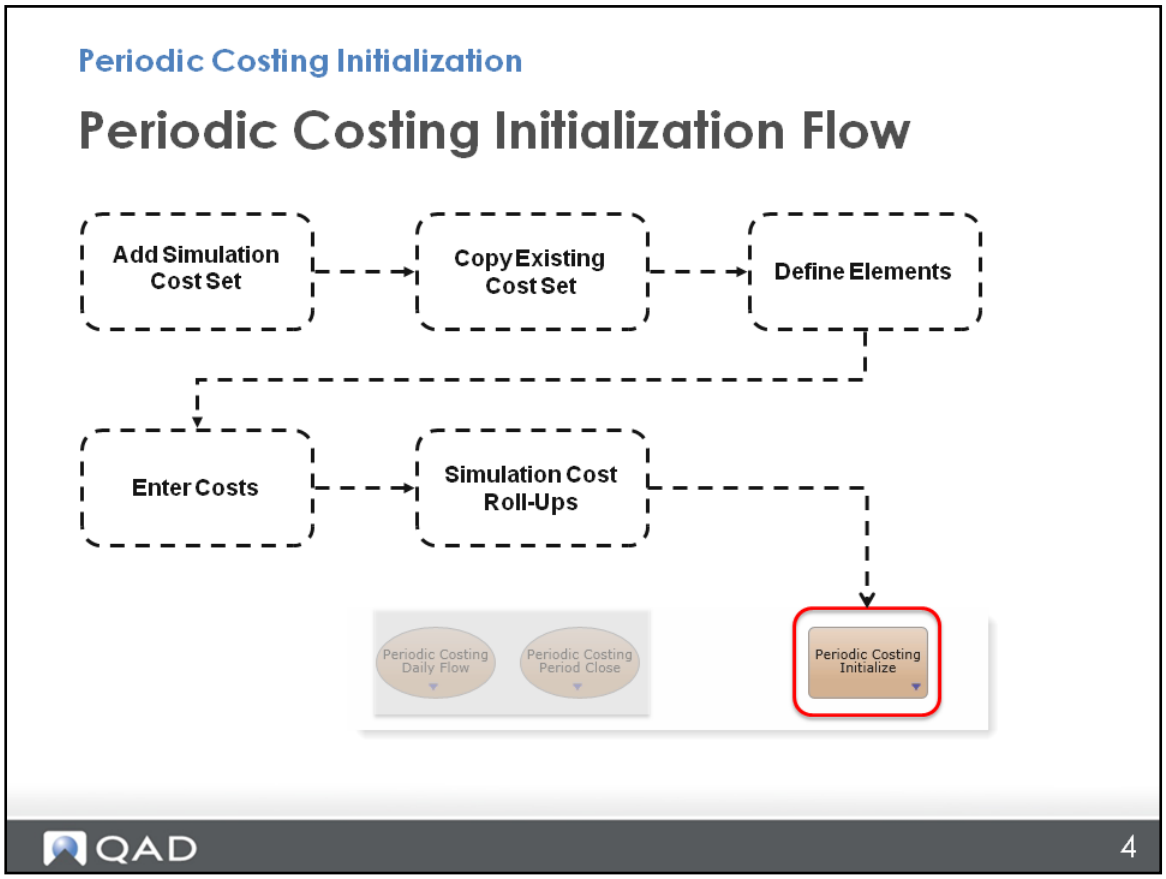
Course Objectives



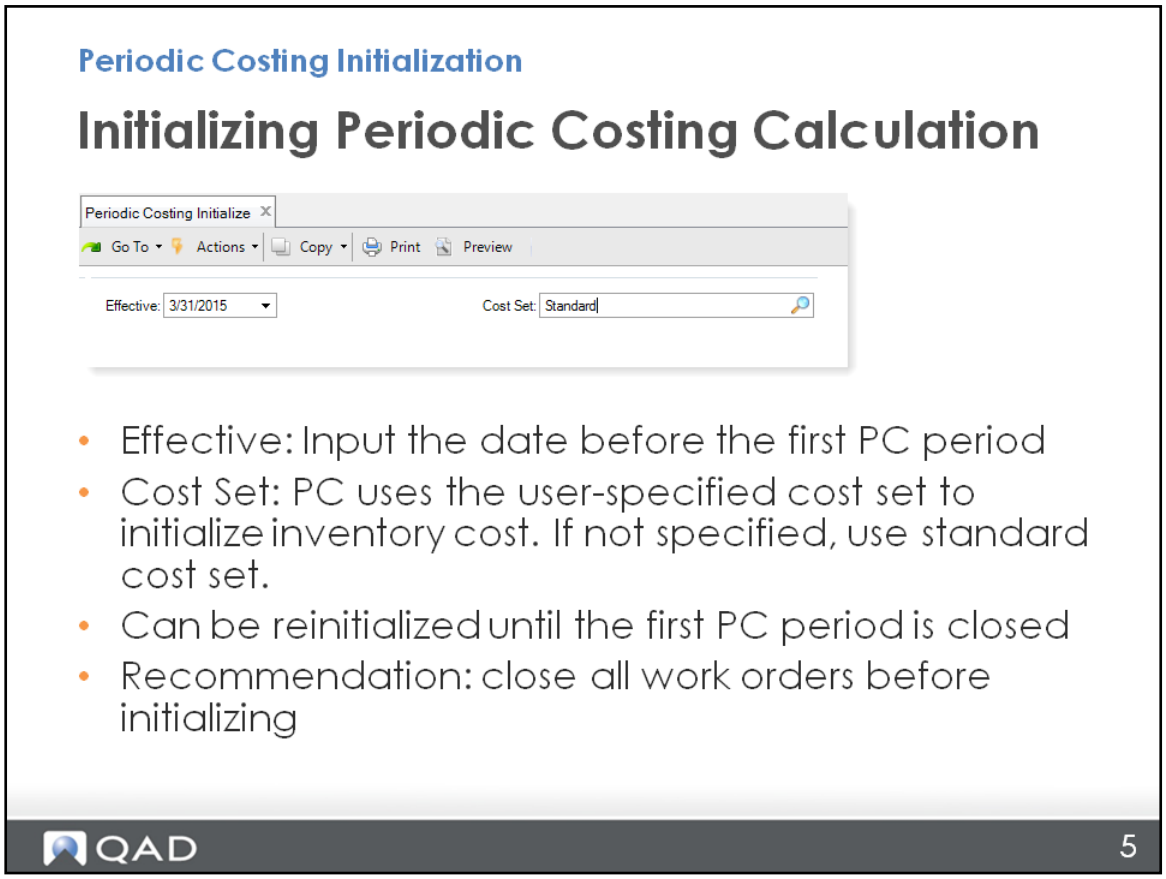
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Periodic Costing Initialization Flow



Initializing Periodic Costing Calculation



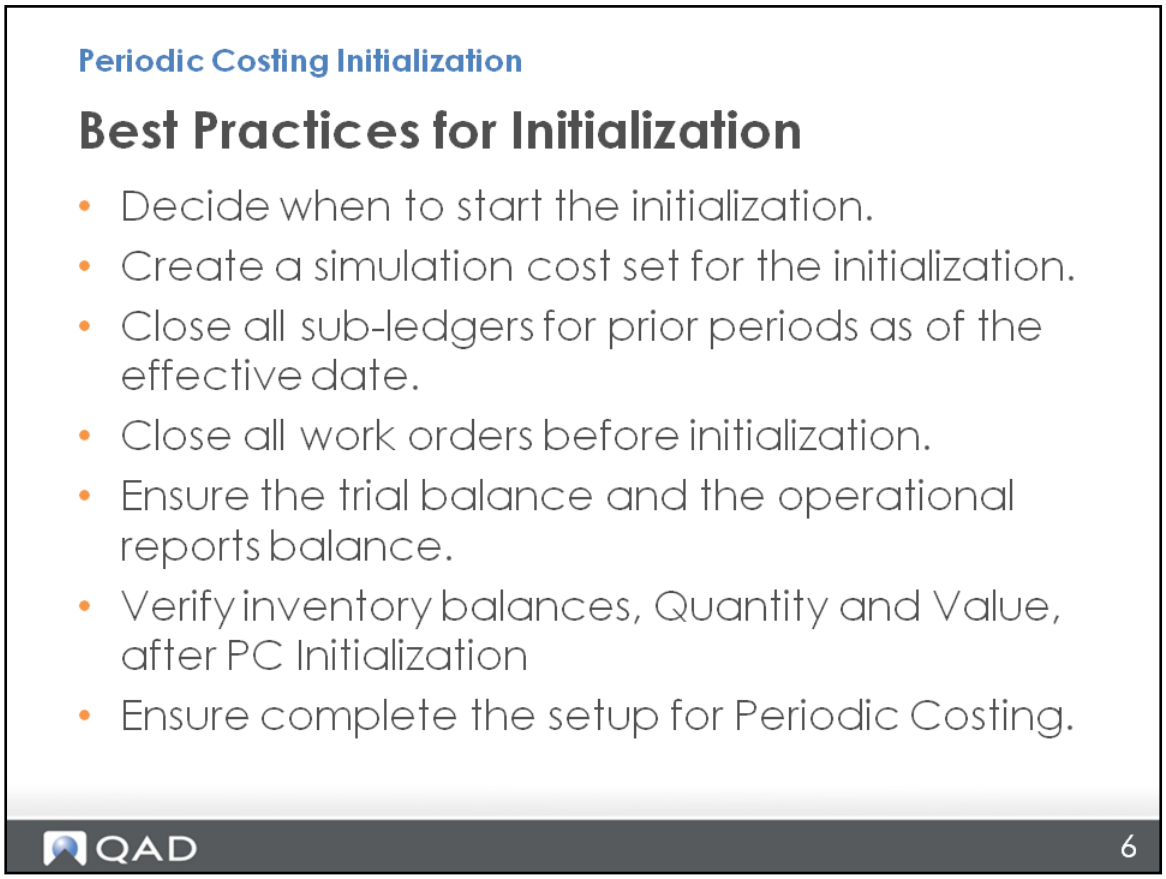
Periodic Costing Initialization only needs to be run once before using PC for the first time. Subsequent uses do not require initialization.

You initialize Periodic Costing once after installing and setting up Periodic Costing; however, you can reinitialize, if necessary. For example, if your company wants to start Periodic Costing from April, you can enter 03/31 as the initialize date, and as long as you have not closed April, you can reinitialize the calculation. Once a close is done on a Periodic Costing sub-ledger, you cannot reinitialize it.

The system calculates and stores initial data for the first periodic cost calculation and copies the cost set given into the PC Cost set for the period of the date of the initialization effective date. The system automatically finds the last period for the last GL period, obtains the current GL period, and identifies all periods that you set up for the calculation in PC Cost Calc. Period Maintenance.

It is mandatory to initialize Periodic Costing before you run the Periodic Costing calculation for the first time. You initiate the inventory balance and quantity on hand as a beginning for the first periodic cost period for the cost calculation.

Best Practices for Initialization



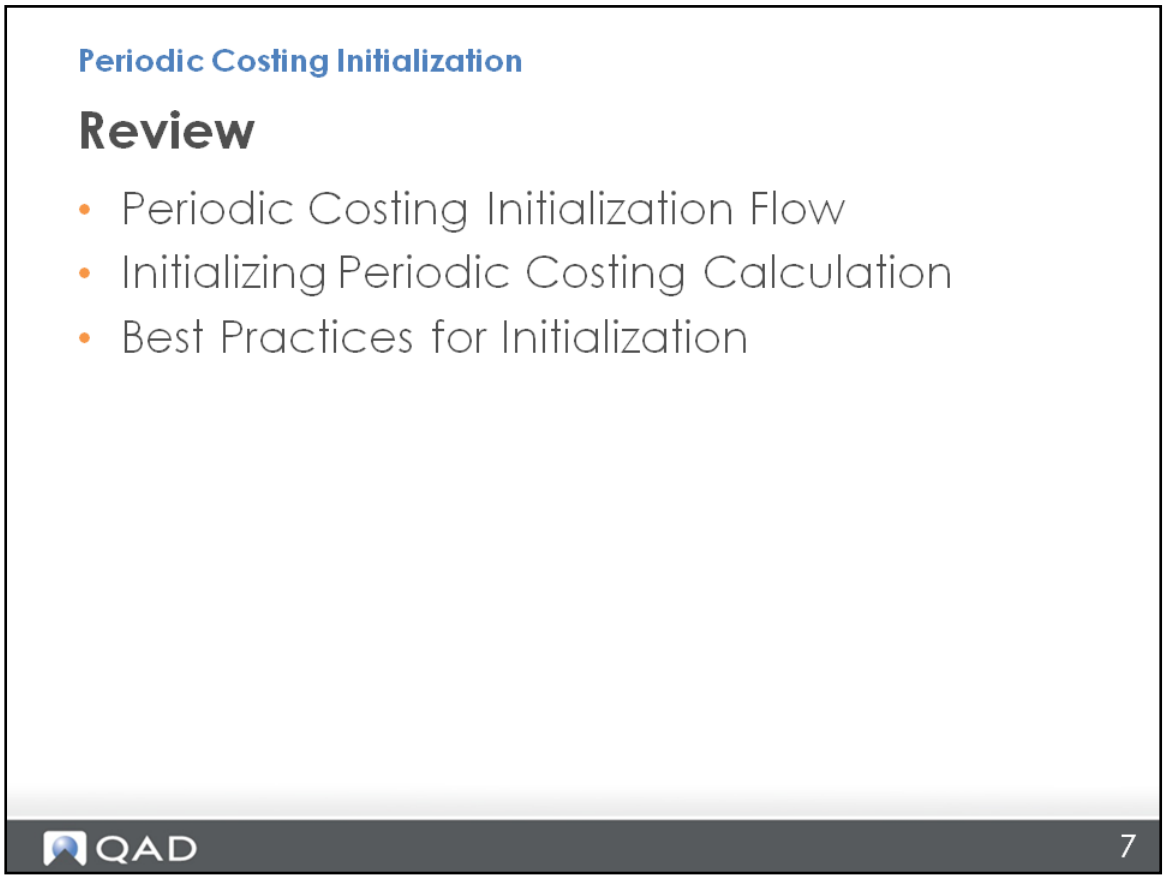
Before you initialize Periodic Costing, consider the following best practices:

- Decide when to start the initialization.
  If you intend to initialize on the first day of the period, for example, enter the last date of the previous period as the initialization date.
- Create a simulation cost set for the initialization process.
  QAD recommends that you create a simulation cost set by copying the standard cost set and verifying that data is correct in the simulated cost set. You can also enter a current cost set or a standard cost set.
- Close all sub-ledgers for prior periods as of the effective date for the initialization.
- Close all work orders before initialization.
  When work orders are not closed, the WIP costs can be inaccurate.
- Ensure that the trial balance and the operational reports balance before beginning Periodic Costing. Also verify inventory balances, Quantity, and Value, after PC Initialization as these data will be the opening balances when PC runs.
- Ensure that you have completed the setup for Periodic Costing.

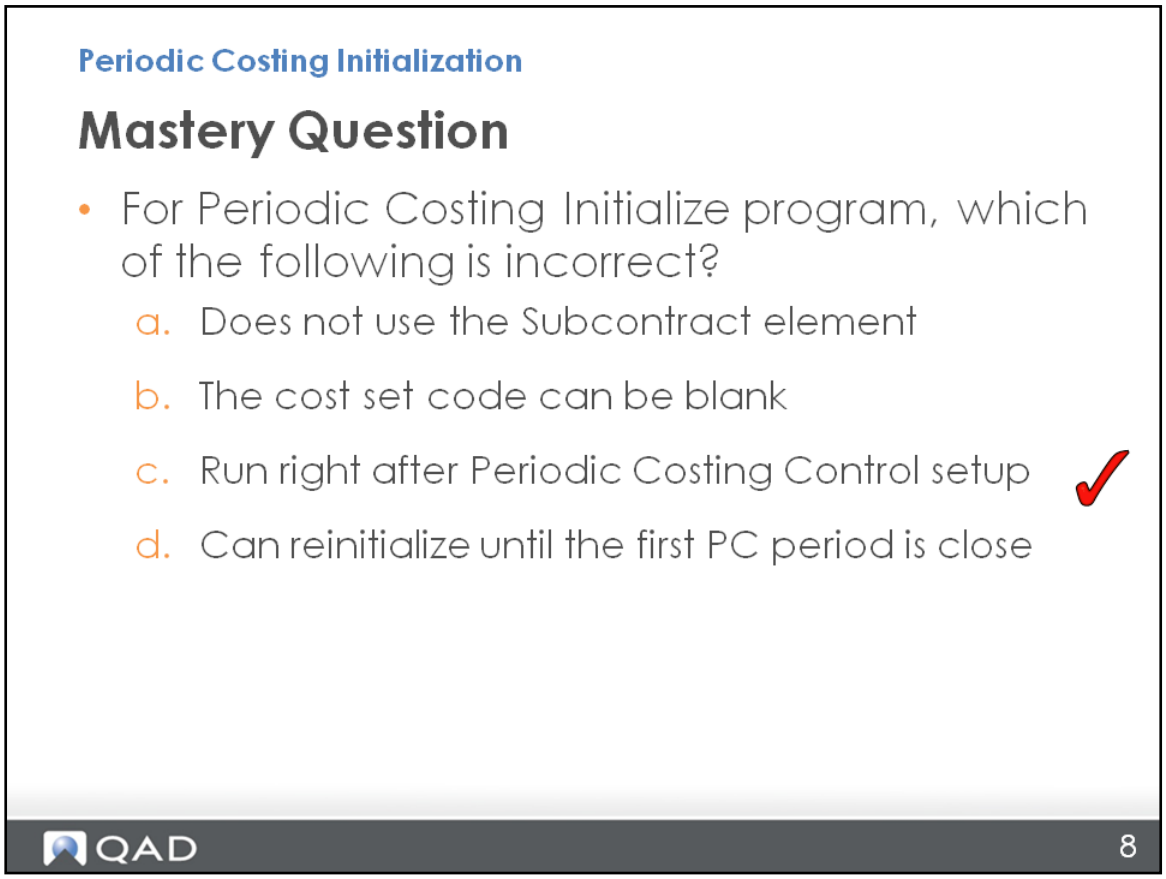
Notes:

- The system does not use the Subcontract element in the initialize program.
- You can now use PC Unit Cost Adjustment (30.5.5.1) to create a prior period for new items that you added after Periodic Costing initialization. See the detail information in PC Unit Cost Adjustment.

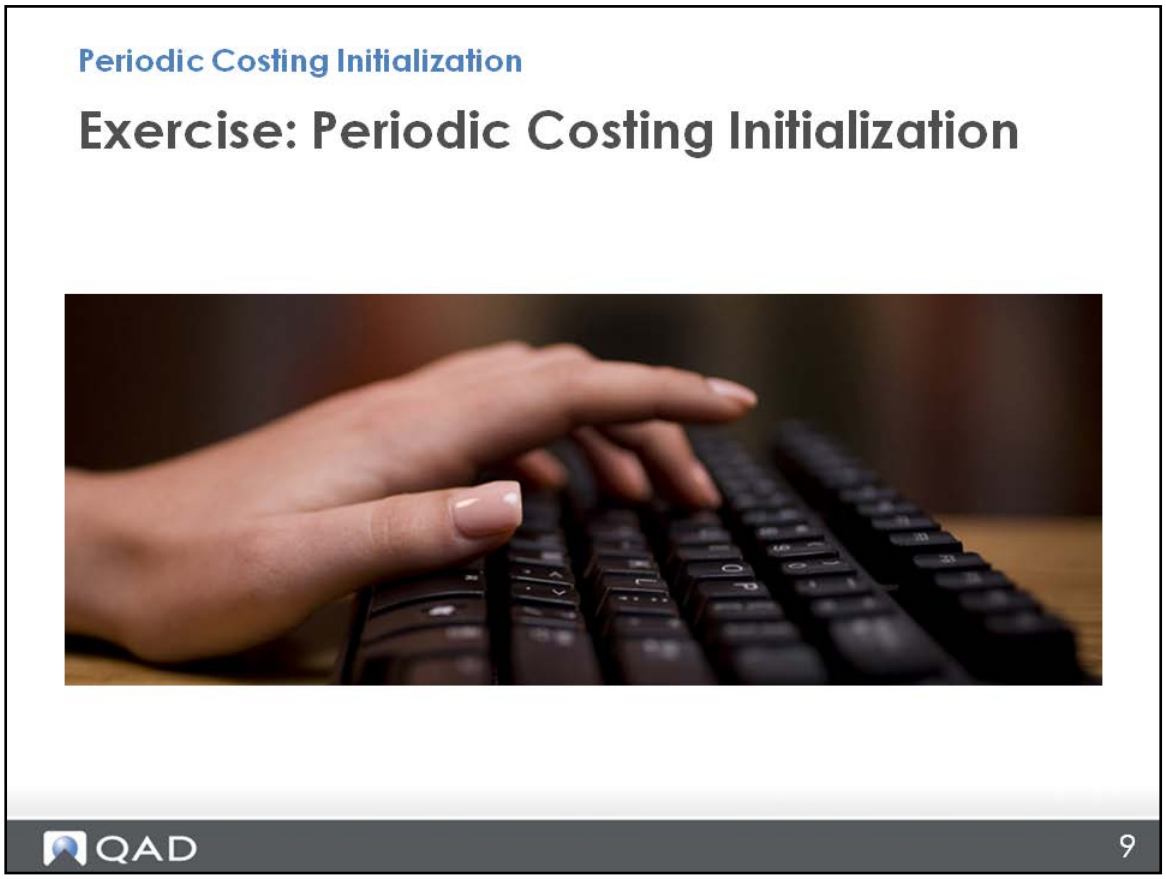
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Exercise: Periodic Costing Initialization

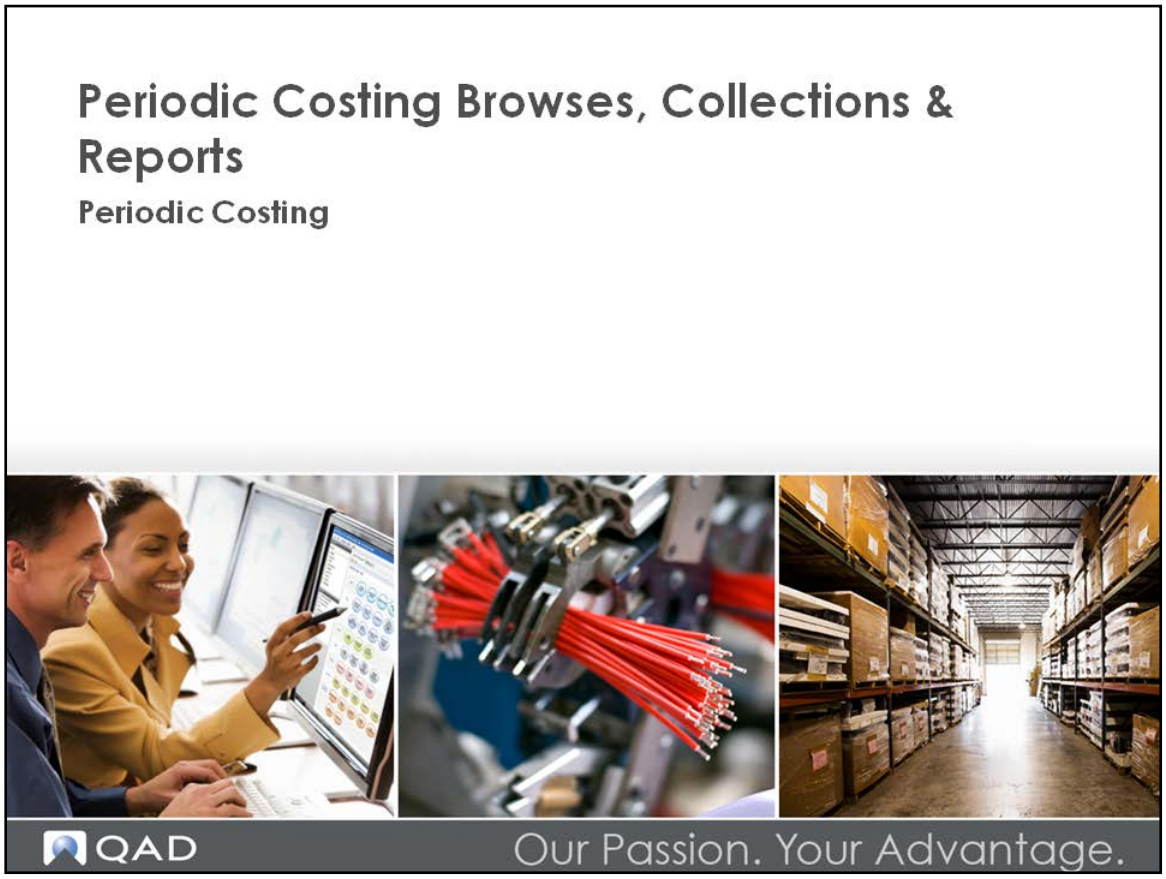


Finish the corresponding exercise at the end of this training guide.

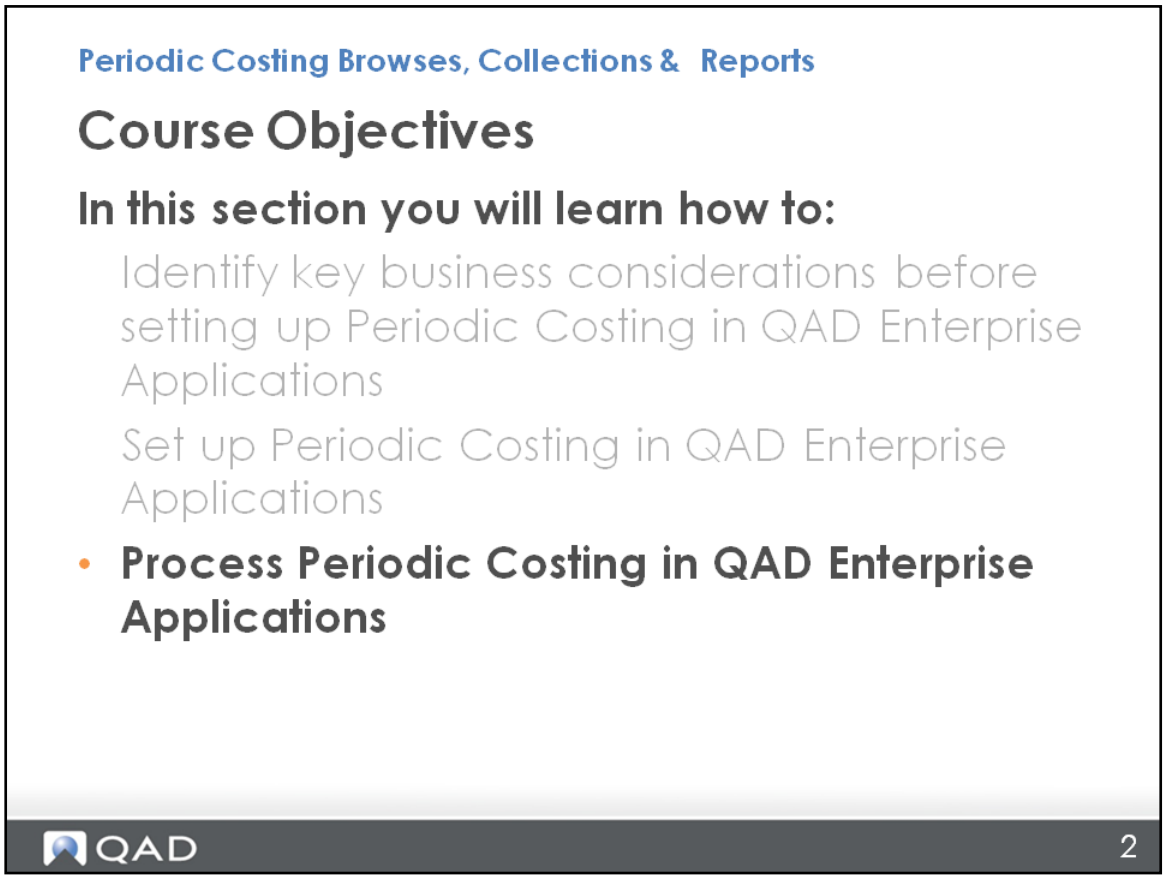
CHAPTER 5

Browses, Collections, and Reports

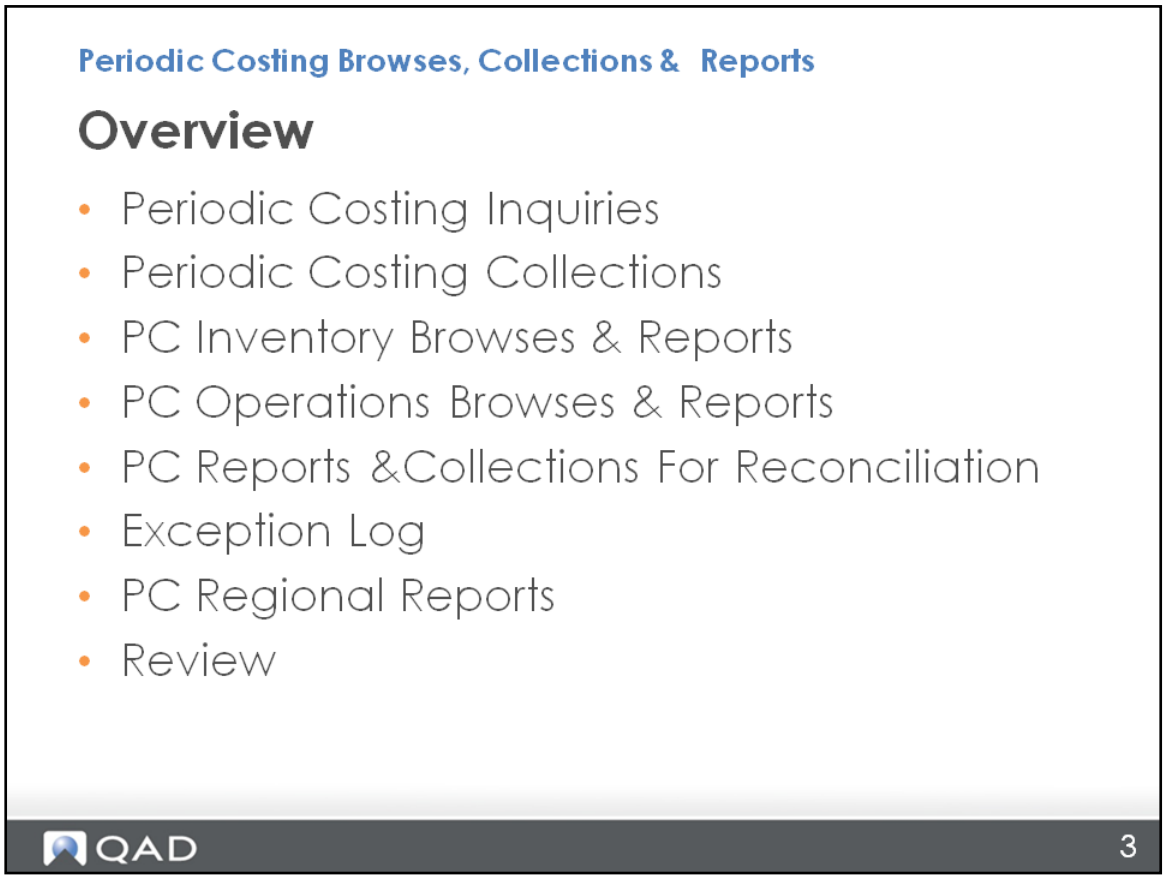
Browses, Collections & Reports



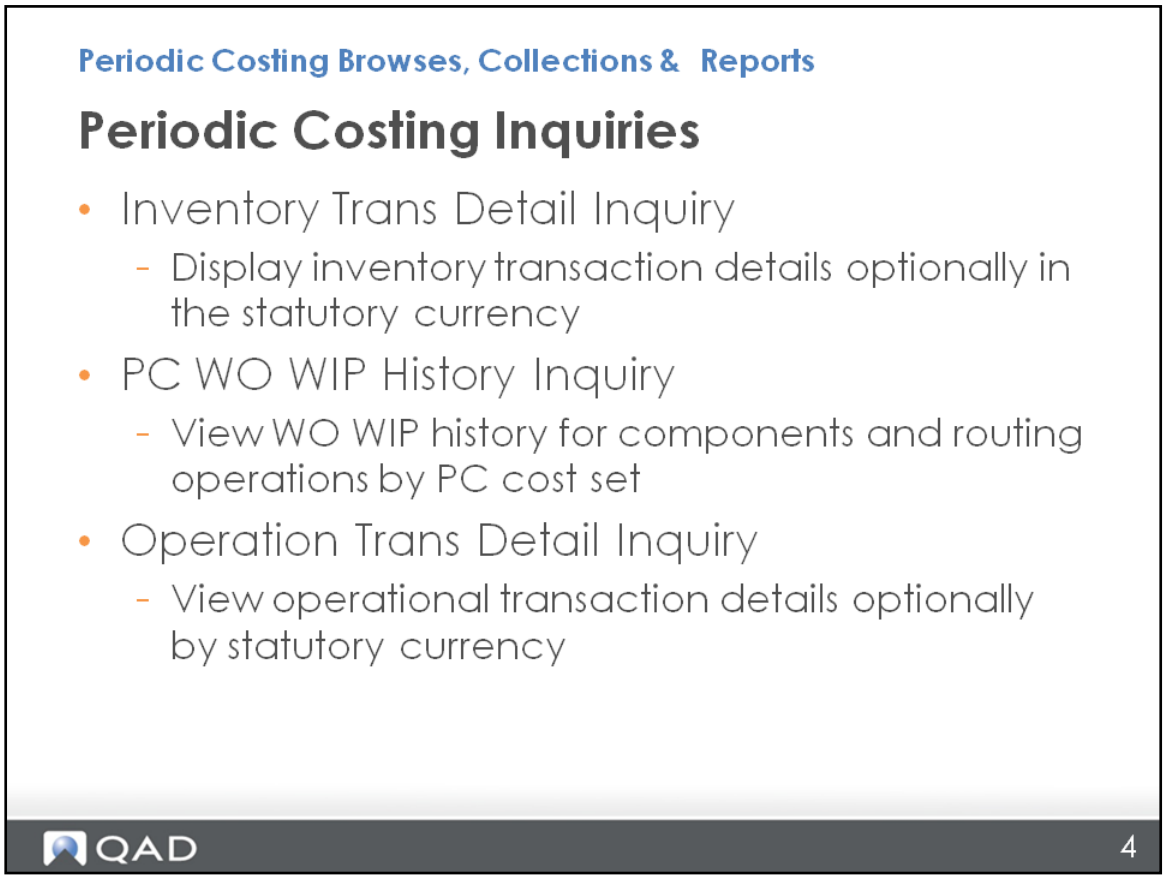
Course Objectives



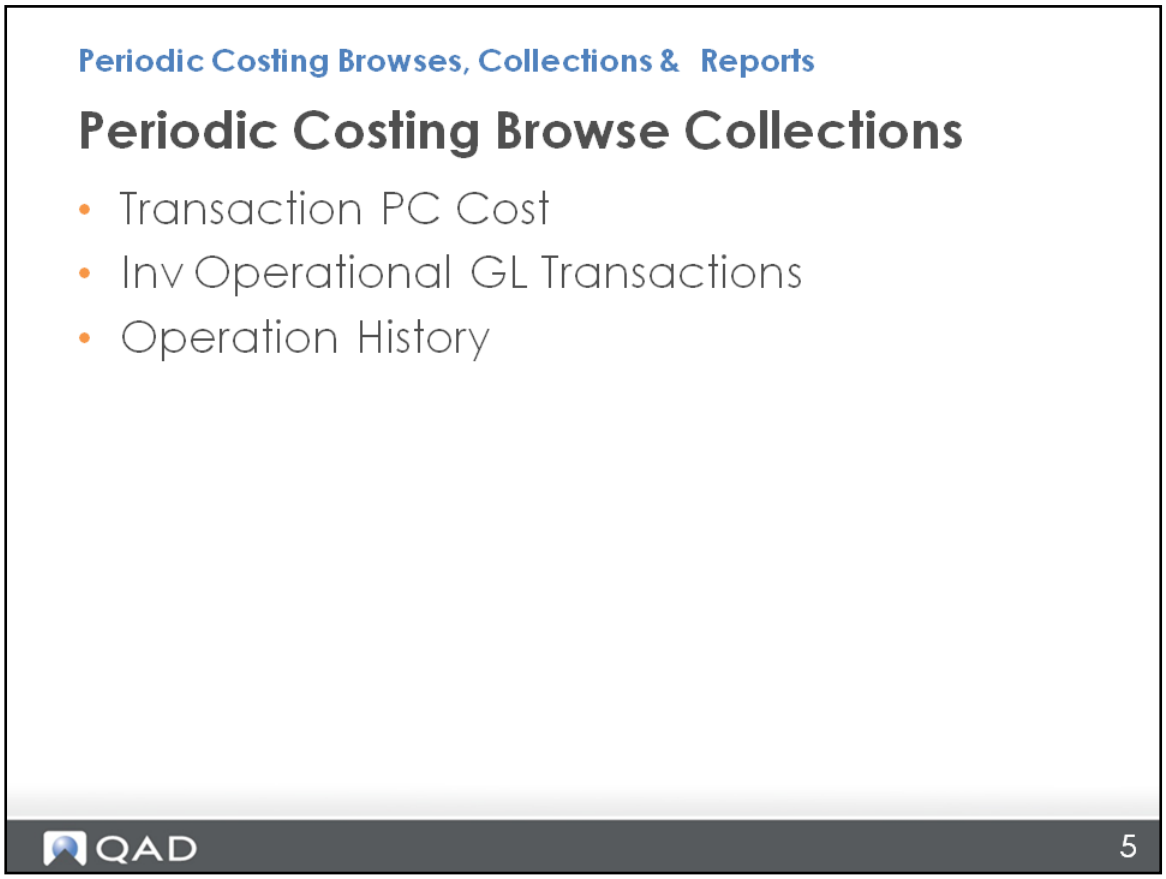
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Periodic Costing Inquiries



Periodic Costing Browse Collections



Transaction PC Cost Browse Collection

This browse collection contains a list of inventory transactions by number and type, effective date, item number and description, order number, site and location, and quantity changed. It also shows the transaction price, standard amount, PC unit cost, and amount for each transaction, as well as the entity, address, shipper number, ID, and operation.

When you run PC calculation, you can determine which transactions are not processed by PC calculation. Use Transaction PC Cost Browse to select records by using the condition “Sequence contains 000000000” to select all transactions that were not processed by PC calculation.

From the top-level browse, you can drill down by right-clicking Inventory Transaction Number.

Inv Operational GL Transactions Browse Collection

This browse collection lists all operational GL transactions for the inventory transactions. The top-level browse lists the transaction number, GL reference and reference ID, GL transaction type, account, sub-account, cost center (CC), project, base currency debit and credit, document, order, date, item number and description.

Operation History Browse Collection

This browse collection provides a consolidated view of all transaction information for a work order. The top-level browse lists items by item number, ID, operation and description, the work center, the machine, quantity ordered, and completed.

PC Inventory Browses & Reports



Inv Detail by PC Cost Browse (30.5.13.2)

This browse displays PC unit cost and total cost per site and location with inventory for the item. It displays the cost set; cost calculation period start/end; item number, site, and location; material, labor, burden, overhead, and subcontract costs; cost total; current quantities unconsumed; quantity on hand; and total cost.

Inventory Trans By Item Report (30.5.13.14)

This report is similar to Inventory Trans by Item Report (3.21.14). It displays data by a range of item numbers, effective dates, dates, order, site, sales/job, or transaction type. You can optionally display in statutory currency.

Inventory Trans By Order Report (30.5.13.15)

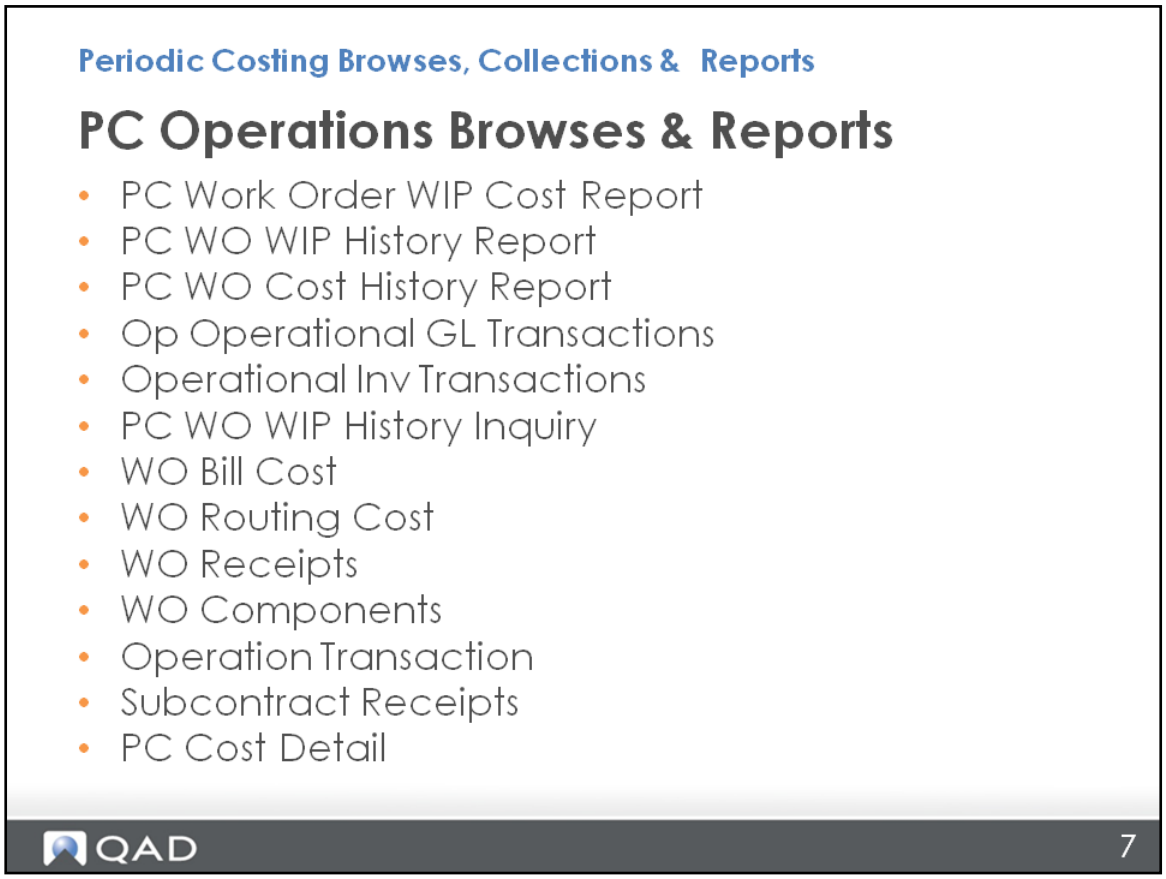
This report is similar to Inventory Trans by Order Report (3.21.13). It displays a similar search criteria by a range of order, transaction date, item, site, or sales/job. You can specify a transaction type or, optionally, display in statutory currency.

Item Transaction Report (30.5.13.17)

Use Item Transaction Report is a .NET UI-only report that includes an extensive filter that lets you choose data to display. The top menu bar also lets you specify report settings such as footer or header search criteria,

the short date format and date separator, or decimal settings. You can also view the schedule or history from the top menu bar and output to Excel or PDF.

PC Operations Browses & Reports



Op Operational GL Transactions (30.5.15.14)

Use Op Operational GL Transactions (30.5.15.14) to view GL transaction data. The data include the transaction number, GL reference, effective date, reference ID, GL transaction type, account, sub-account, cost center, project, BC debit and credit, documents, orders, item number, site, entity, ID, and operation.

Operational Inv Transactions (30.5.15.24)

Use Operation Inv Transactions (30.5.15.24) to view inventory operational transactions. You can view the transaction number, GL reference and reference ID, GL transaction type, account and sub-account, cost center, project, BC debit, credit, and more.

WO Receipts and WO Components

Use the WO Receipts (30.5.15.25) to report WO receipt data. The data include the transaction number, effective date, transaction type, date, order, item number and description, site, location, location quantity change, transaction price, standard amount, Periodic Costing unit cost and amount, entity, address, and cost set.

Operation Transaction

Use Operation Transaction (30.5.15.27) to view transaction data. The data include the WO number and ID; item number; operation number and description; transaction number and type; effective date; employee; setup and run time; quantity completed, rejected, reworked, and scrapped; labor and burden cost standard; Periodic Costing amount; labor type; PO and receiver number; work center, department, and machine; and sequence number.

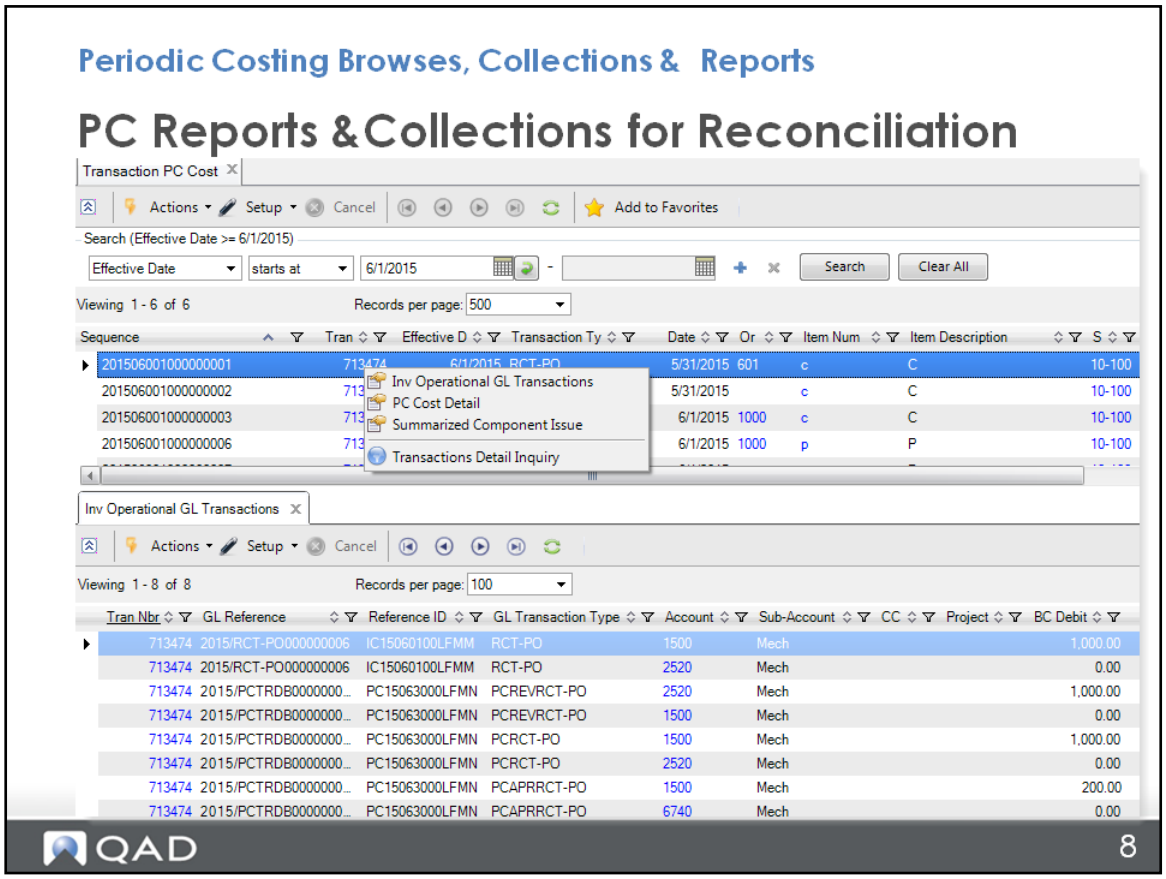
Subcontract Receipts

Use Subcontract Receipts (30.5.15.28) to view subcontract receipt data. The data include the transaction number, effective date, transaction type, date, order, item number and description, site, location, location quantity change, transaction price, standard amount, Periodic Costing unit cost and amount, entity, address, shipper number, operation ID, and flag. The Flag field indicates when the RCT-PO transaction is for a subcontract PO and there is a related SUBCNT operation transaction in the operation history.

PC Cost Detail

Use PC Cost Detail (30.5.15.29) to view Periodic Costing details, including the transaction number and type, cost set and cost element, and level data.

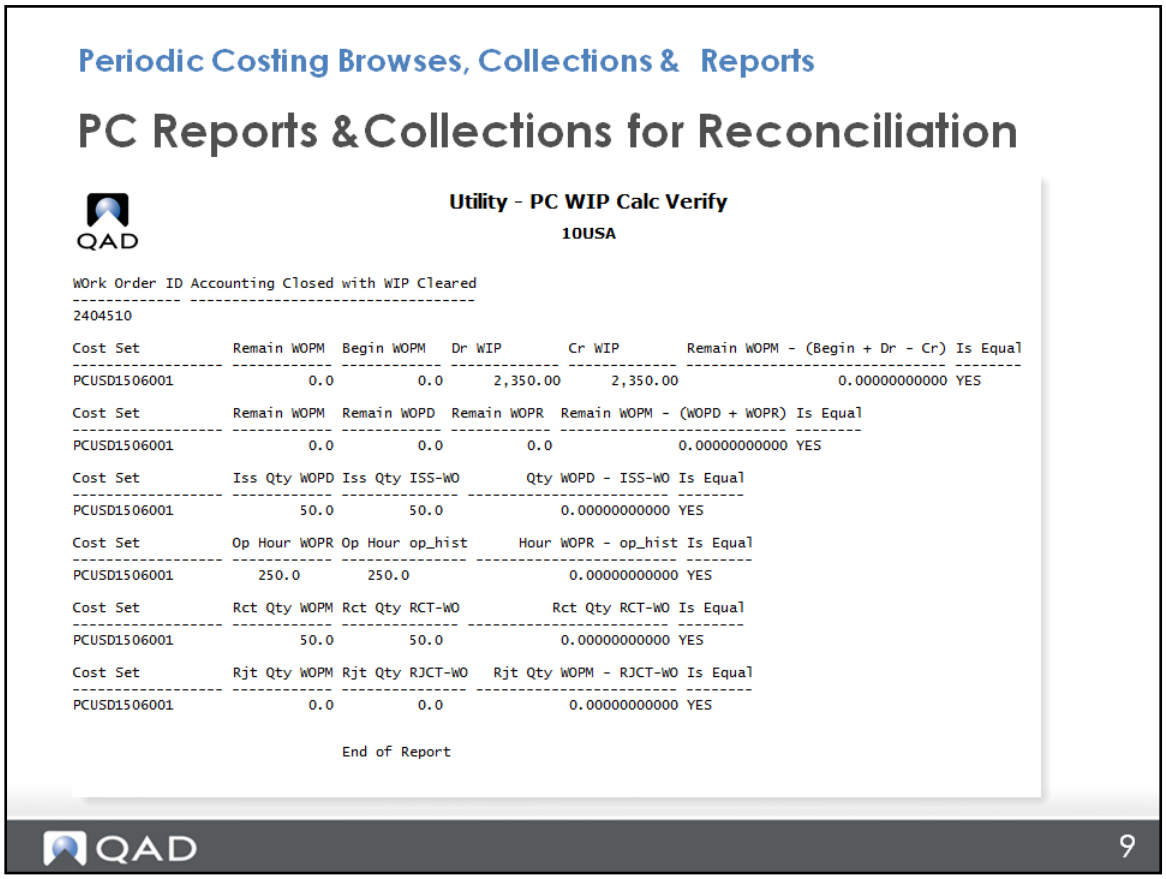
PC Reports &Collections for Reconciliation



You can use PC reports and collections to reconcile the calculated results. For example, in the Transaction PC cost collections you can access the supporting browses by right-click the blue data in the top-level browse. When you do, a button displays. Click the button and the supporting browse of the same name displays below the top-level browse. For example right-click the Trans NBR, you can open the following browses:

- Inv Operational GL Transactions
- PC Cost Detail
- Summarized Component Issue
- Transaction Detail Inquiry

PC Reports &Collections for Reconciliation



You can use utilities to verify and balance Data.

For example, Use PC WIP Calc Verification (30.5.7.25.2) to verify that the values added to and subtracted from WIP by the operational transactions add up to the same amount as the value posted to GL.

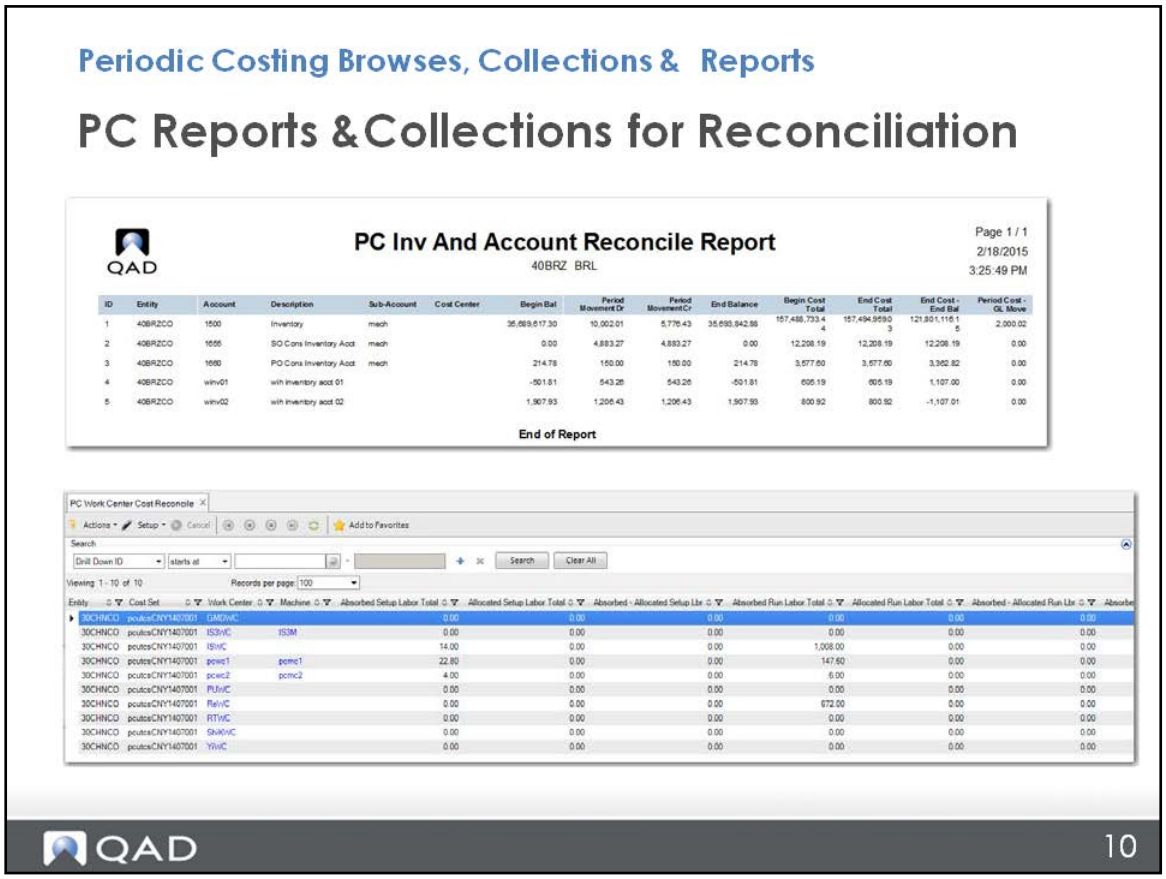
You specify a WO order ID; then, verify work order WIP data. The report lets you review WIP value added to and subtracted from the work order and for each component and operation.

Use PC Inv Verification (30.5.7.25.1) to verify that the operational inventory transactions add up to the same amount as the value posted to GL.

You can specify a part number, site, year period, and a filename for the output file that holds inventory balance by item, site, location from the operational transactions compared to the Periodic Costing calculated inventory balance.

Use PC Journal Validation (30.5.7.25.3) to verify that all data from Periodic Costing is posted correctly to GL. You can review and validate Periodic Costing journal postings. The report has no input criteria. The report runs for the earliest open Periodic Costing period. Once you run the report, it displays the entity at the top of the report, then data for the account, sub-account, cost center, project, Periodic Costing GL amount, Periodic Costing Journal entry amount, variance amount, whether the variance is equal or not, and the post data.

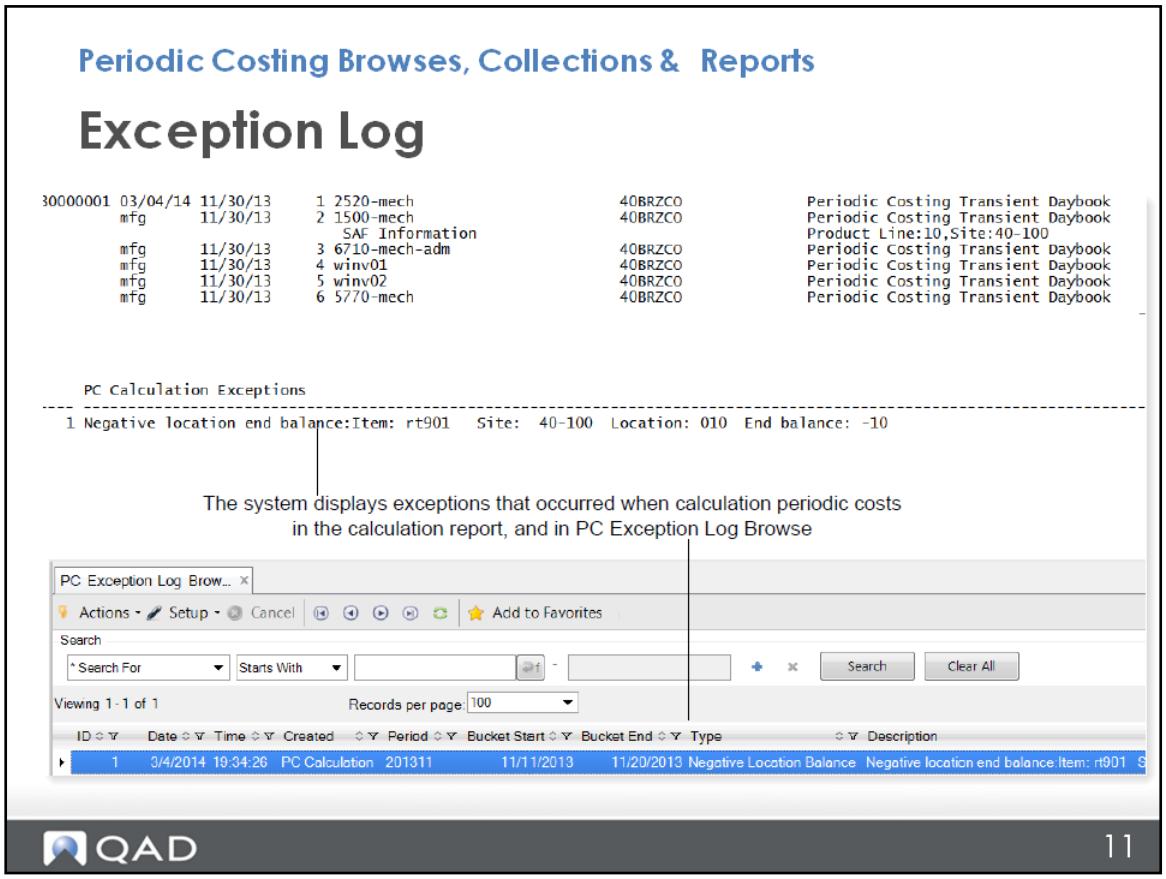
PC Reports &Collections for Reconciliation



Use PC Inv Cost and Account Reconcile (30.5.17.10) to review operational inventory movements and GL account movements. You can set criteria for data to display. The system displays the ID, entity account, sub-account, cost center, beginning and ending balances, period movement debit and credit, beginning/ending total cost, ending cost, ending balance, and more.

Use PC Work Center Cost Reconcile (30.5.17.14) to display absorbed versus allocated work center cost data. The browse displays the entity; cost set; work center; machine; absorbed and allocated setup labor totals, run labor totals, and labor and machine burden totals.

Exception Log



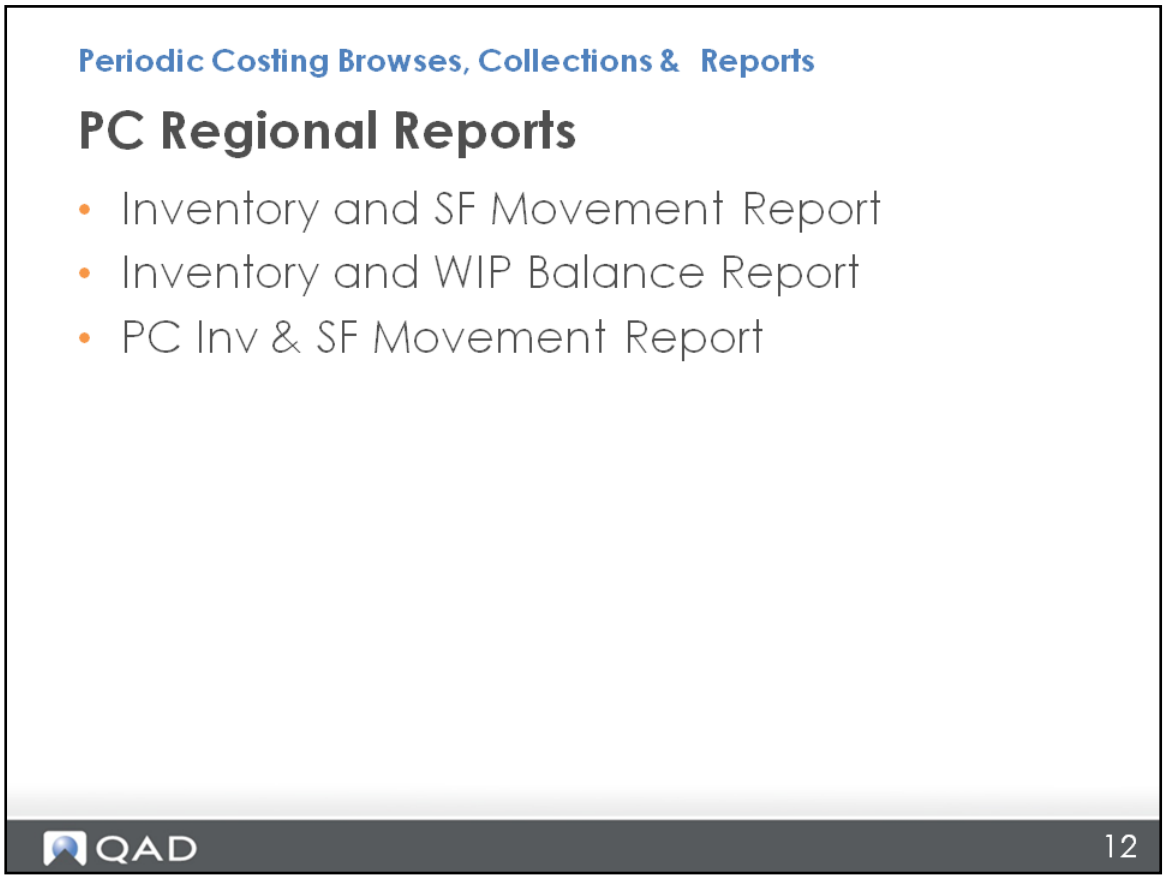
The Periodic Costing calculation program generates exceptions at the end of the calculation display that shows transactions that could not be processed as expected so that you can identify the reason and make corrections. You can use the program-supplied exception log or the PC Exception Log Browse (30.5.7.2) to view the transactions that can cause unbalanced accounts or postings to the Discrepancy Account.

The exceptions that display at the end of the calculation report also show you when the quantity for the period is negative as this causes PC unit cost to be negative. Other reasons that the calculation encounters exceptions can include errors such as:

- Integration tables that are missing or not correctly retrieved; for example, logistic charges are not identified in RCT-LA transactions
- Supplier invoices not found during RCT-PO calculation
- Unit cost calculations that end up with the wrong negative value
- References to cost elements that do not exist
- Negative Inventory balances
- Negative WO WIP balance that could not be absorbed into inventory

See Periodic Costing User Guide for more details.

PC Regional Reports

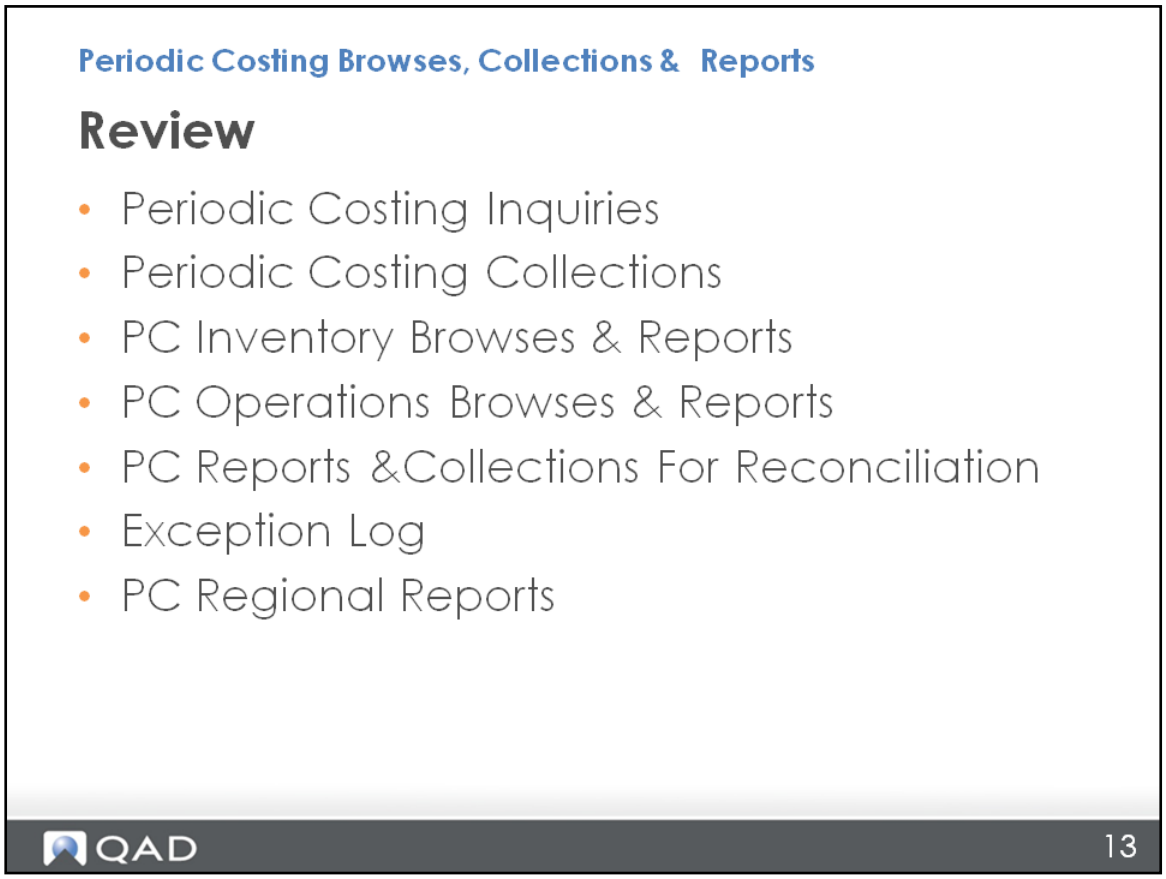


Inventory and SF Movement Report (30.5.19.1) reports movement of inventory and production. It displays all movements of both inventory and production transactions. Inventory and WIP balance per item and site display per period. Information regarding costing per transaction, document number, and type of transaction also display.

Inventory and WIP Balance Report (30.5.19.2) reports inventory by item and account. It displays the inventory by account and contains information regarding company and items such as fiscal class, unit of measure, company address, company fiscal code, and others. Not only the inventory balance, but also WIP balance is displayed in this report.

PC Inv & SF Movement Report (30.5.19.4) is the same as Inventory and SF Movement Report. It is used for large amounts of transactions that are impossible to process through QRF.

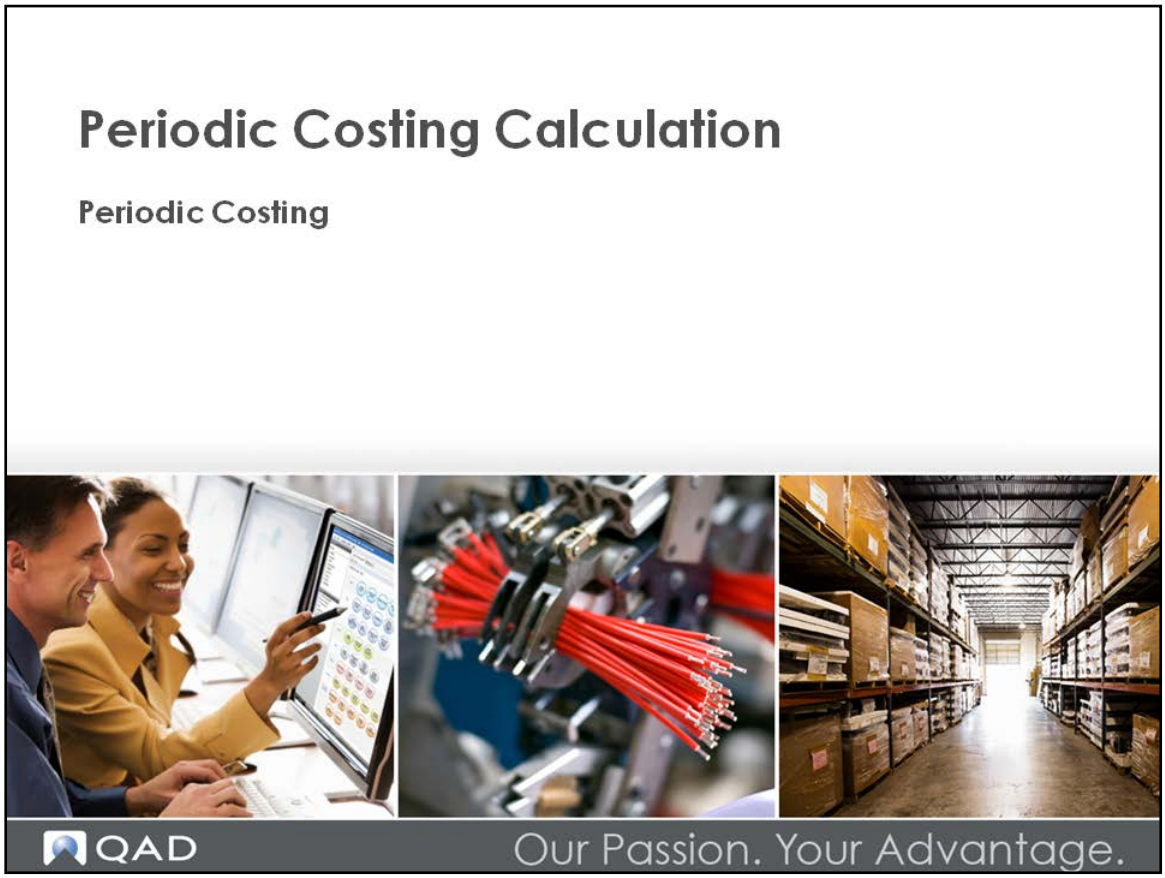
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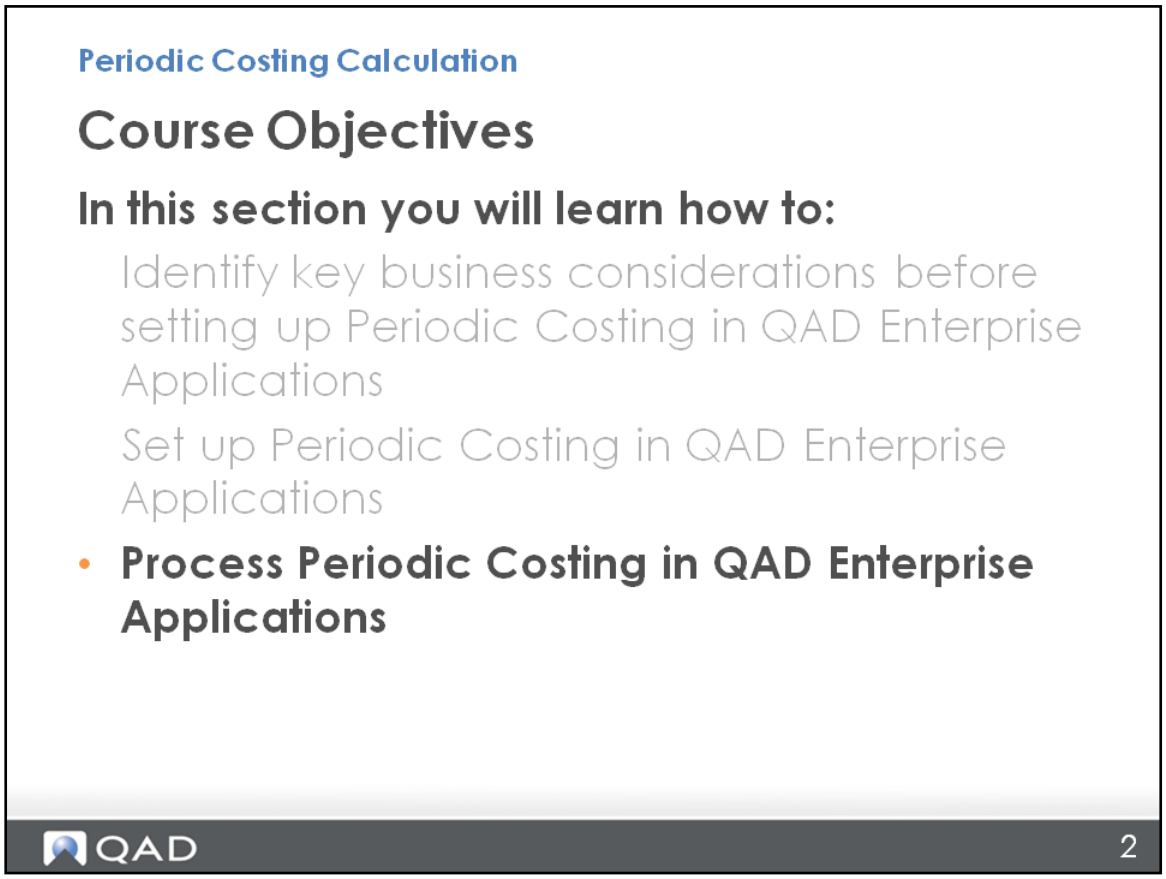
CHAPTER 6

Periodic Costing Calculation

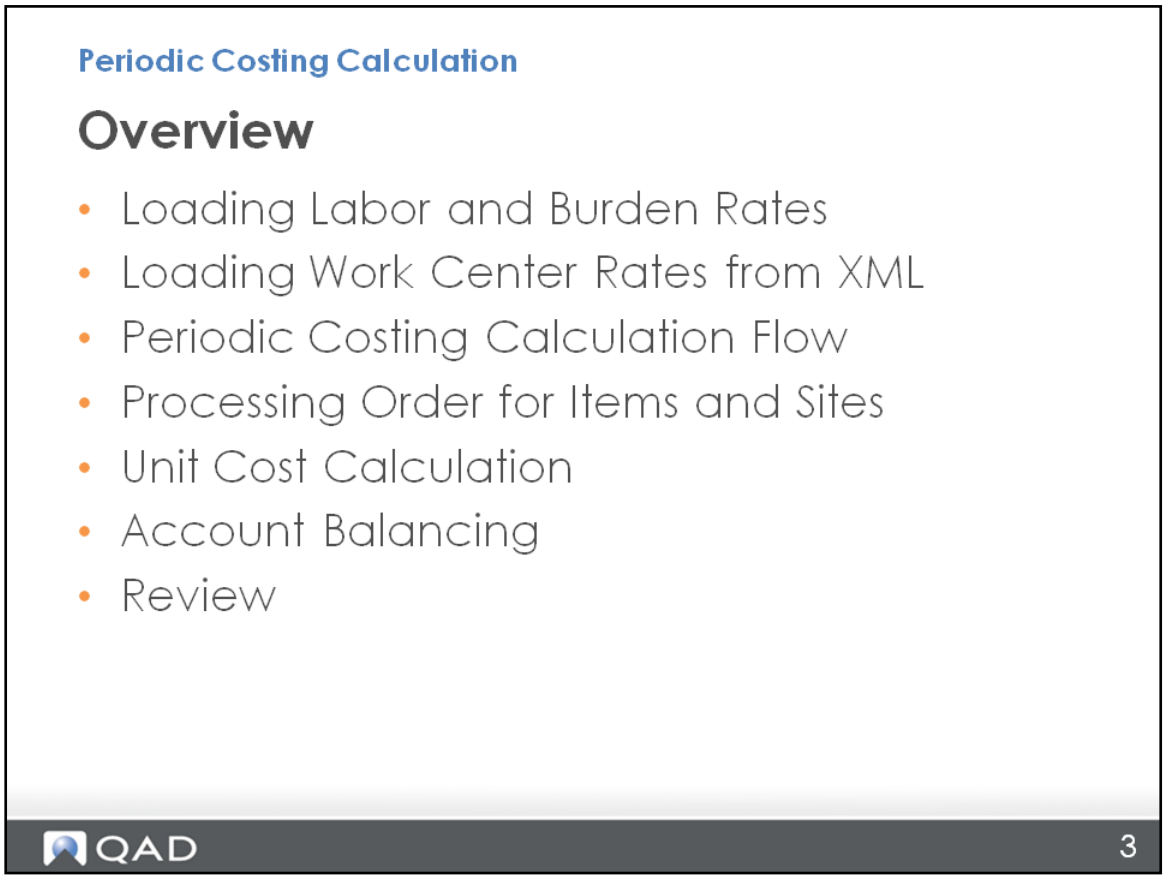
Periodic Costing Calculation



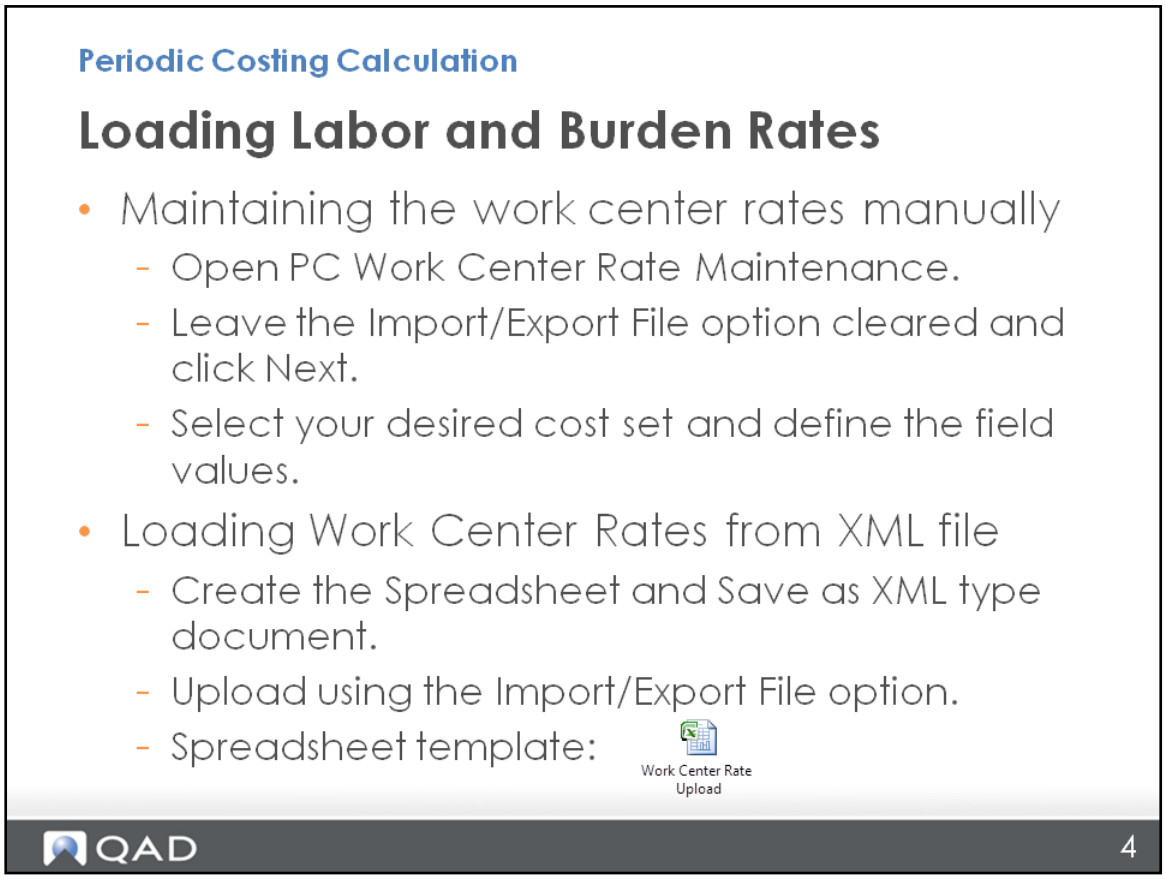
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Loading Work Center Rates from XML
Periodic Costing Calculation Flow
Processing Order for Items and Sites
Unit Cost Calculation
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Loading Labor and Burden Rates



The following procedure applies to loading Rates and Total for Labor and Burden values. Given the setting of the control file, the system maintains either the Rates or the Totals.

To maintain the work center rates manually:

1. Open PC Work Center Rate Maintenance.
2. Leave the Import/Export File option cleared and click Next.
3. Select your desired cost set and define the field values.

To load Work Center Rates from XML file:

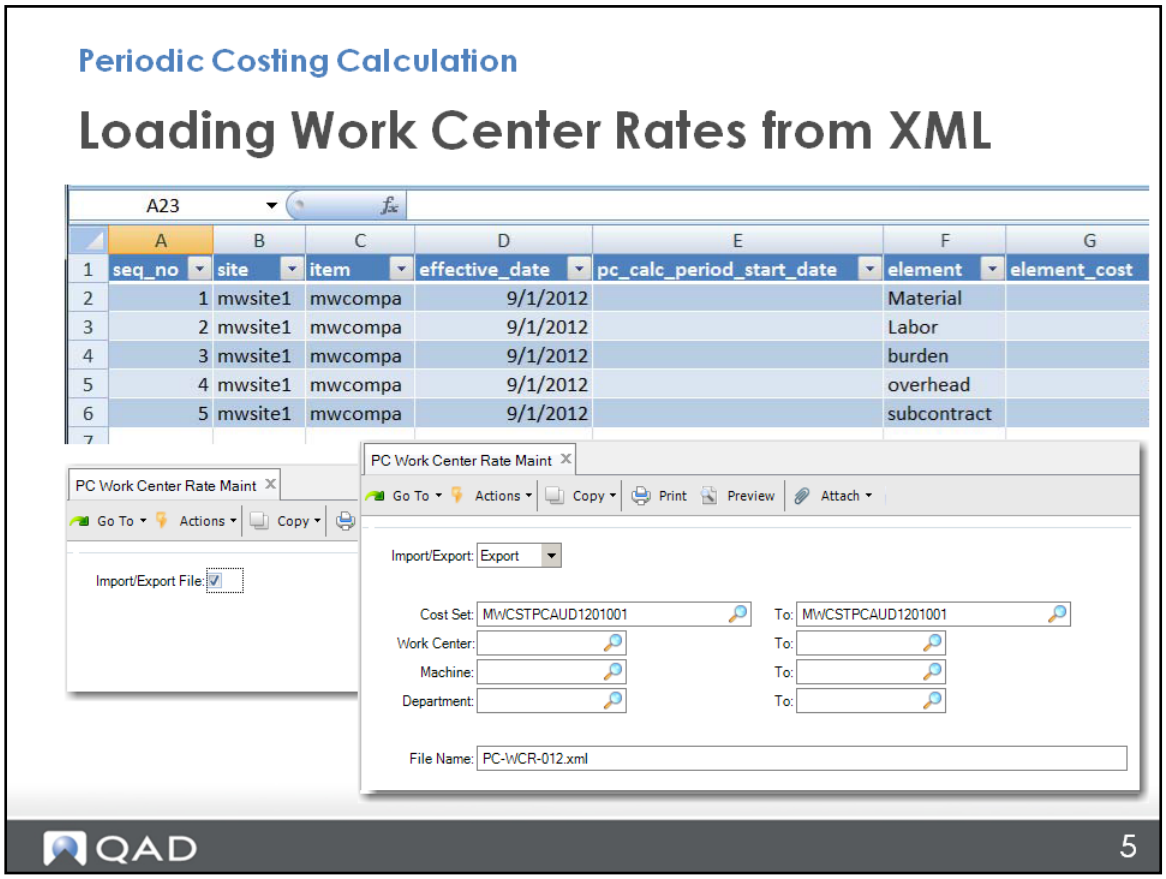
1. Create the Spreadsheet and Save as XML type document
2. Upload using the Import/Export File option

Notes:

- Double-click and save the embedded spreadsheet template attached in the slide.

- For QAD internal, you can access the template file from https://qdn.qad.com/display/MFG/PC+Work+Center+Rate+Calculation.

Loading Work Center Rates from XML



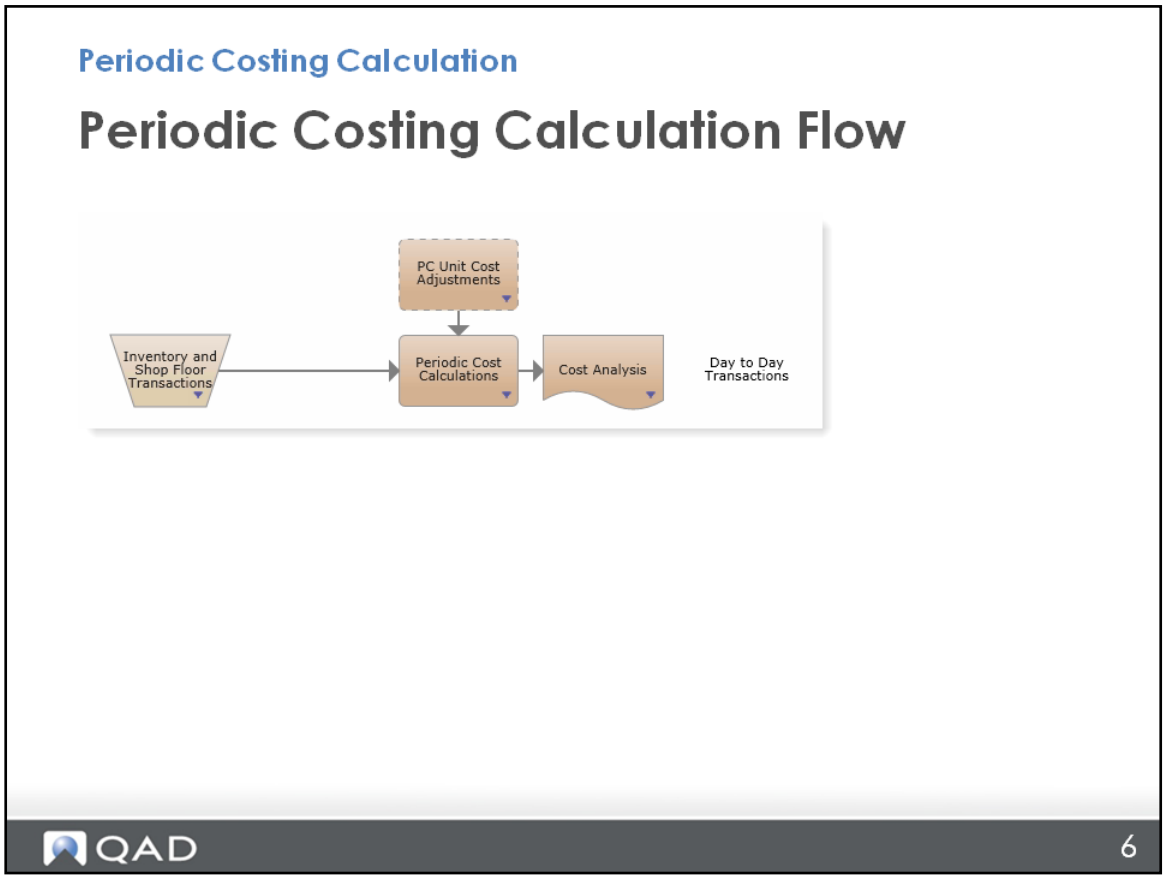
To load work center rates from an XML file:

1. Export/Import PC Work Center Rates
   You can maintain the work center rate data in batch using the Import/Export File option on PC Work Center Rate Maintenance (30.5.3.1). The rate data is exported to an XML file. You can modify the XML file in Microsoft Excel and import it into QAD Enterprise Edition to finish the maintenance at one time for mass amounts of data.

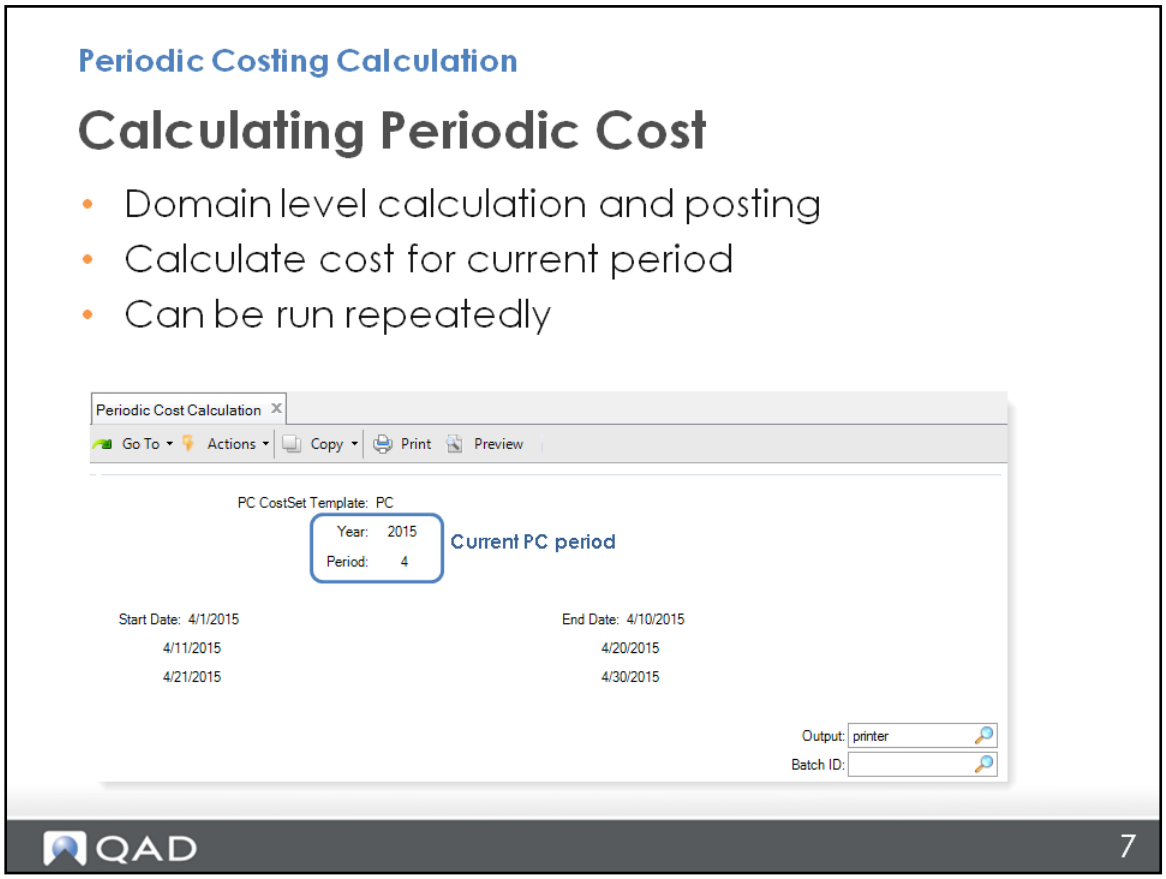
2. Editing the Exported Data
   In the exported XML file, you can add, edit, and delete records. All the changes are not validated until you import the file into QAD Enterprise Edition.
   Open the XML file with Microsoft Excel or an XML editor. When prompted, select As an XML table and click OK.
   Edit the records in the worksheet and save the file as an XML file when you finish editing.

3. Importing Work Center Rate Data to QAD EE
   Check the Import/Export File option. Select Import in the Import/Export field and specify the range for the data that you want to import, using the Cost Set, Work Center, Machine, or Department field.
   In the File Name field, specify the XML file

Periodic Costing Calculation Flow



Calculating Periodic Cost

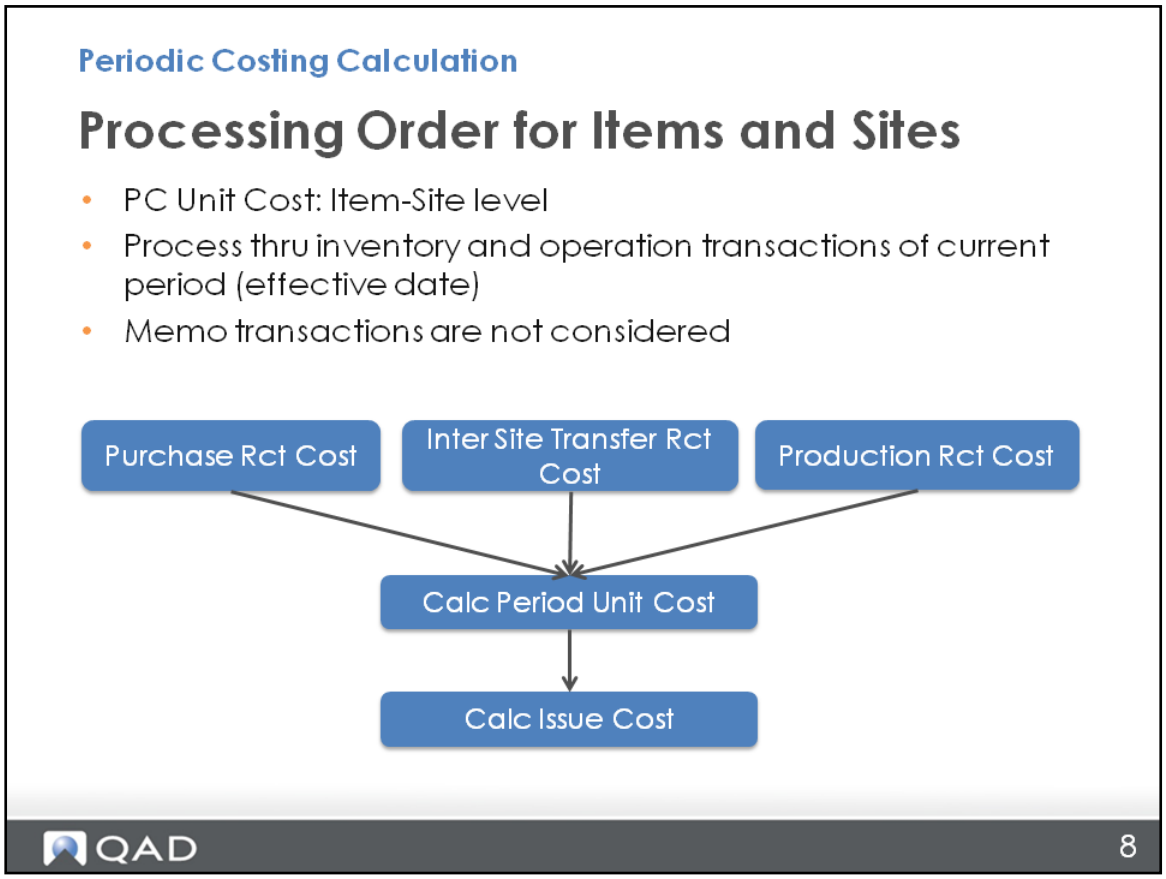


Periodic Costing considers the transactions for all entities and sites within the same domain. Each time it calculates the cost for current GL period regardless of the number of PC periods defined.

Periodic Costing does not use the concept of variances because it always calculates based on actual values; that is, because costs are recalculated for each period, and a new actual cost is defined according to what happened during that period, all value is posted to inventory and WIP accounts. Periodic Costing calculations take into consideration transactions that affect the value of inventory and WIP.

You can execute Periodic Cost Calculation (30.5.7.1) for the first open period of the Periodic Cost sub-ledger. This means that, as soon as the period that just ended is closed, you can begin running Periodic Costing calculation for the current period. It is a good practice to run PC during the period to validate that the transactions are entered correctly. By doing this activity during the period, there is less work load after the period has ended.

Processing Order for Items and Sites



The PC unit cost is calculated per each item site combination. Periodic Costing calculates the cost for all items and sites within a domain in the same calculation run. It determines the order of processing based on the following rules:

Periodic Costing calculation processes in the order of purchased items (components and raw materials) first, then subassemblies, and finally finished items. It looks at all component issues to determine the correct order so that the cost of components is always determined before it calculates the cost of the parent item.

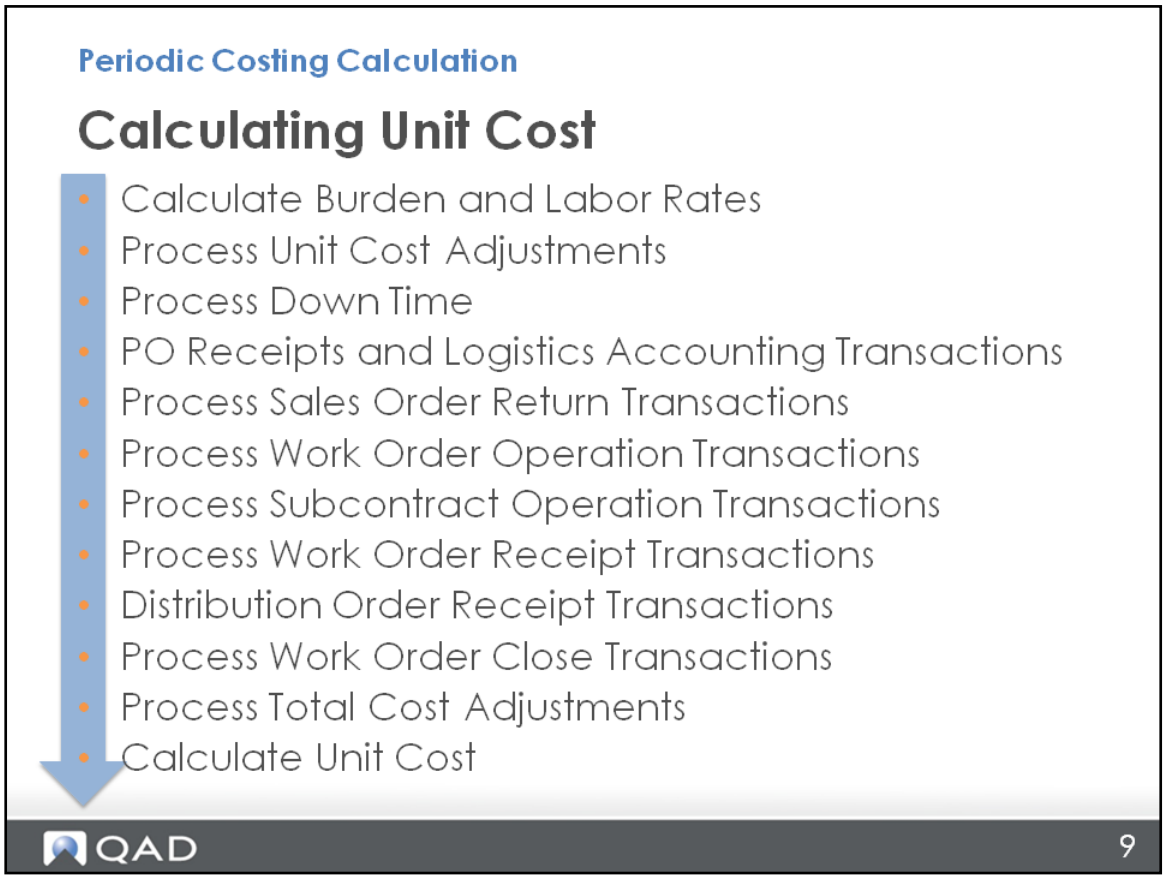
Periodic Costing calculation processes each item through all the sites where it is used before moving on to the next item.

The logic determines the site-processing order by looking at the quantity transferred between sites When using grouped sites, the system considers each group of sites as one for the purpose of this logic.

The Periodic Costing calculation uses inventory transaction history and operation transaction history records when processing. It uses the effective date of each transaction to determine if the transaction should be included in the Periodic Costing calculation. The system considers only transactions that affect inventory or WIP accounts. Memo type transactions are only considered when processing SSM Call Invoice records.

Each transaction processed is assigned a sequential number. This number can be seen on some reports and browses. A record where the sequence number is equal to 0 (zero) indicates that the record was not processed by the Periodic Costing calculation.

Calculating Unit Cost



Calculate Burden and Labor Rates

When you set fields to calculate work center rates, the system calculates the labor and burden rates from the entered total values for labor and burden. The system calculates the labor and burden rates by work center and machine through dividing the total value by the number of hours. The system only calculates productive hours for this calculation. The down time is not calculated.

Process Unit Cost Adjustments

The system processes any unit cost adjustments— transaction type PCCST-AD —as the first step in the logic to calculate the periodic cost for an item, The system applies the unit cost adjustment by changing the value of the opening stock balance.

Process Down Time

The system reverses all down time transactions, which are not processed during the rest of the Periodic Costing calculation.

PO Receipts and Logistics Accounting Transactions

The Periodic Costing values for RCT-PO, ISS-PRV, and RCT-LA are based on the invoice value and the tax value obtained from Accounts Payable. The system includes non-recoverable taxes in the value of the receipt.

When the invoice is not matched, the system uses the PO cost. When you select the Use Supplier Invoices field in the Periodic Costing Control (30.5.24), the system uses only supplier invoice cost. When the invoice does not exist, then the cost of the receipt is 0 (zero).

There is a variation on calculation of negative RCT-PO and ISS-PRV for the WAVG and FIFO methods. In the WAVG method, the system still considers both negative RCT-PO and ISS-PRV as receipts, and they affect the unit cost calculation. In the FIFO method, the system considers it as an issue, and it does not affect the unit cost calculation. The cost for that transaction is based on the cost calculation period cost of the item from where it is picked.

Process Sales Order Return Transactions

Sales order returns can be receipts when the original ISS-SO transaction occurred in the prior cost calculation period. The system then values the SO return in the previous period and, therefore, it impacts the unit cost calculation. The system then uses the cost of the current period and considers it an issue when the corresponding ISS-SO transaction occurs in the current cost calculation period.

Process Work Order Operation Transactions

The system calculates the Periodic Costing value for WO operation labor and burden using the rates defined in Periodic Costing work center rates and the time tracked with the operation history transactions. The system summarizes these WIP calculations by WO lot, WO operation, WO department, WO work center, and machine. The PCLABORT transaction type stores the summarized Periodic Costing calculated rates and the standard reversed costs. When only one operation history record exists for the WO lot, WO operation, WO department, or WO work center; then, the system does not create a summarized record. The system adds the value as WIP for the work order.

Process Subcontract Operation Transactions

The Periodic Costing value of the WO subcontract costs are tracked on the operation history transactions (SUBCNT). The system calculates the value for the SUBCNT operation history transaction by retrieving the actual subcontract costs from the purchase order receipt transactions (RCT-PO).

Process Work Order Receipt Transactions

The RCT-WO and RCT-FAS transaction history transactions have the standard transactions reversed. The receipt quantity updates the inventory location for the current cost period.

When there are WO issue transactions for the item against the same WO, the system considers them rework and they are processed before the RCT-WO. Rework work orders add WIP value to the WO.

Any scrap or rejected quantity cannot go into inventory; therefore, the system prorates the scrap or rejected amount by the received-to-inventory quantity and applies them to the item cost. The system reverses the standard scrap values.

The system calculates the value of a WO receipt by prorating the total value of each component and operation to give an approximate value of quantity received. Note that, during proration, the value of the cost calculated does not exceed the available WIP value.

Distribution Order Receipt Transactions

This area manages inventory transfers and distribution orders that transfer from one site to another when the sites are not within the same site group (intersite transfers). The system reads transaction history records with receipt activities that have a transaction quantity (tr_qty_loc) greater than 0 (zero). The value for these transactions read from the issuing site’s Periodic Costing cost.

When the system has not processed the issuing site, then for WAVG, the cost is from the previous period. For FIFO, the cost is from the earliest period with an unconsumed quantity. In both cases, once the issuing site's cost is known, then the system makes a correction and the difference is then booked to the discrepancy account.

Process Work Order Close Transactions

The system adds any remaining WIP balance for the work order to the item receipt value. Note that the system checks to ensure that a negative WIP balance does not cause the item's cost to be negative. In this case, the system posts the amount that causes the cost to be negative to discrepancy.

Process Total Cost Adjustments

The last calculation step that affects the unit cost of the item is to apply any total cost adjustments, (PCTOT-AD) to the accumulated inventory value up to this point. There must be a positive inventory on hand balance to apply the adjustment. The adjustment can be positive or negative and, in both cases, the remaining value must be positive. This rule applies to each cost element independently.

Calculate Unit Cost

The system calculates the unit cost of the item at the site or group of sites by taking the sum of value received and dividing it by the sum of quantity received. For WAVG, this includes the opening balance. For FIFO, it strictly includes the quantity and value received during the cost calculation period.

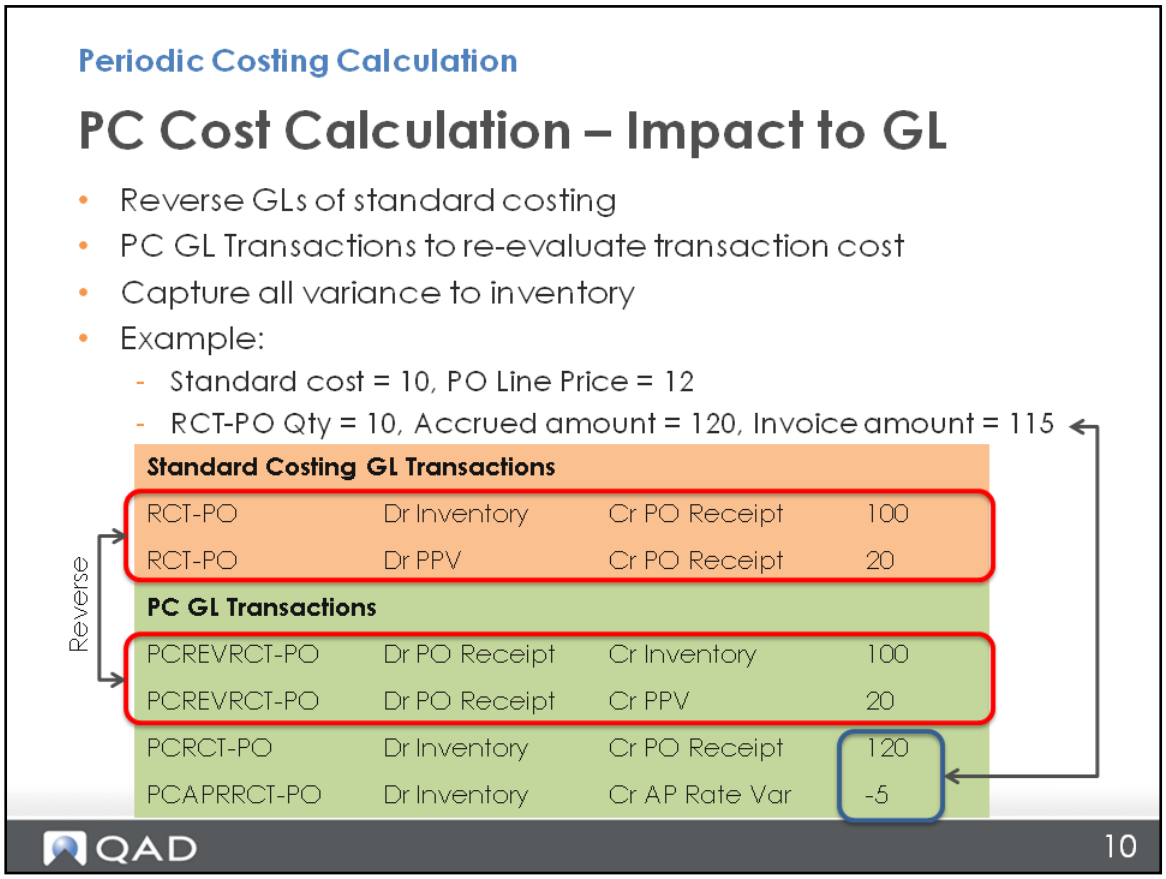
When the Periodic Costing unit cost calculation results in negative values for any of the cost elements, the system creates the PCCSTCOR transaction to reset unit cost. This logic is applied to both the costs of this level and the lower level, none of them can be negative. The system resets the unit cost to the cost of the prior period. The system records the actual calculated unit cost before the reset. You can view the Periodic Costing cost detail of PCCSTCOR for the unit cost before the unit cost is reset in the Periodic Costing cost calculation in the Transaction PC Cost drill-down.

For grouped sites, note the following:

- All receipts in grouped sites are included in the unit cost calculation before issues are processed.
- Grouped sites cannot be set up as cross entities; that is, you cannot add sites from other entities to a grouped site in PC Grouped Site Maintenance (30.5.1.13).
- You cannot post to discrepancies for WO closes when there is receipt quantity in other grouped sites.
- The system processes summarized transactions for grouped sites.
- When the unit cost calculation results in 0 (zero) or negative, the system resets the unit cost of the group to that of the latest period with costs. It posts cost deviations to discrepancy when there is no order receipt quantity or revalues costs when there is order quantity and logs exceptions.
- When there is no order receipt quantity, and therefore, no unit cost for the period, the system sets the unit cost of the group to that of the latest period with cost and logs exception.
- When there is no previous period with cost, the system logs the exception if the calculation needs that prior period cost.
- FIFO inventory stacks are at the grouped site level. You can only add and remove sites in a group when previous PC cost exists.

- The system reverses the PC total adjustment (PCTOT-AD) when there is no receipt quantity in any site in the group. The system posts to discrepancies when there is no order receipt quantity in any site in the group.
- You can only add and remove sites in a group when previous PC cost exists.
- For negative PC total cost adjustments (PCTOT-AD), the system considers total TL and LL cost of grouped sites.
- PC calculation first processes the grouped site with most transfer out quantity.

PC Cost Calculation – Impact to GL



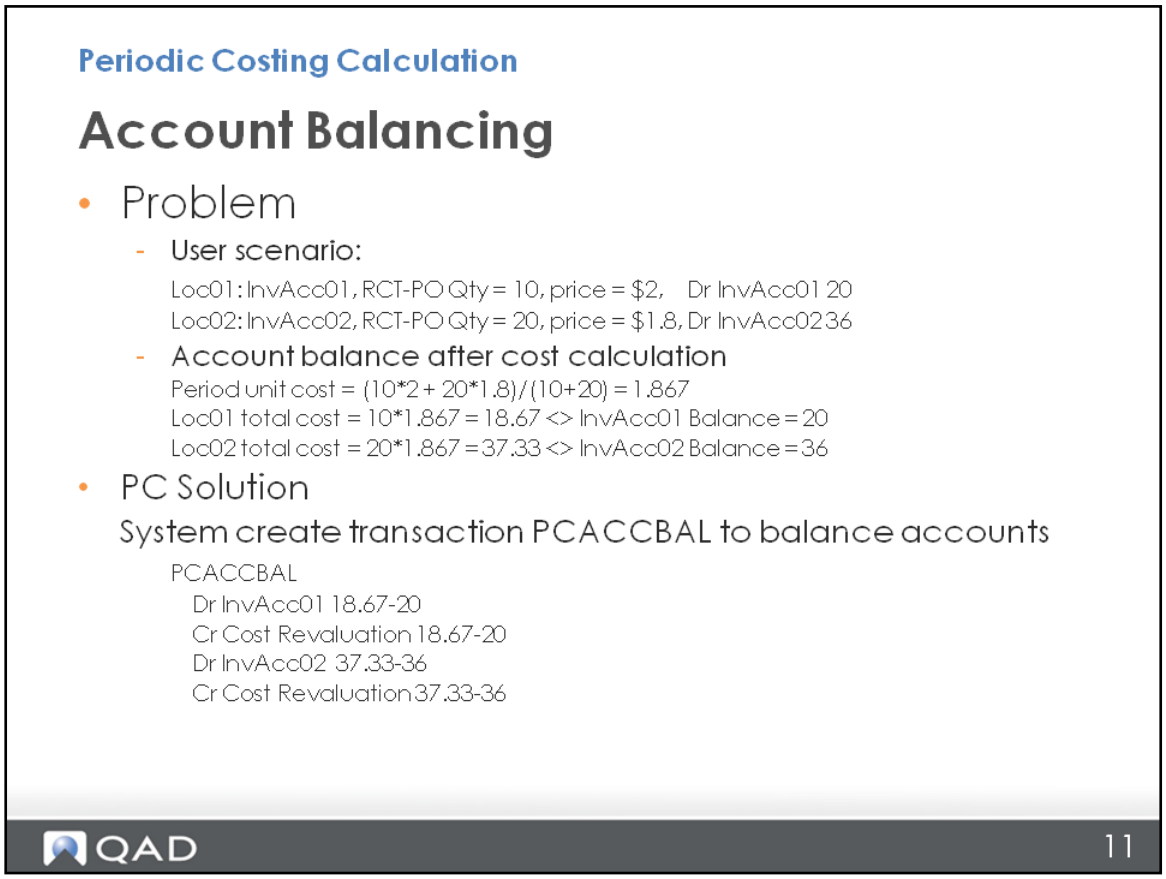
When the Periodic Costing setup is in Adjustment mode, the calculation creates an equivalent reversal GL transaction for all standard cost inventory and operations transactions in GL. The system posts these reversals to the Periodic Costing daybook that you defined in the Periodic Costing Control (see Periodic Costing Control).

When either adjustment or complete mode is in use, the system creates additional GL transactions for the calculated periodic cost of the transaction. Exceptions include ISS-WO transactions and inventory transfers within the same site.

The system creates a summarized GL unposted transaction for accounts up to the analysis level (SAF, when SAF is enabled for the account) for posting. All GL posting lines have the same daybook, daybook number (voucher), and GL reference ID; and the effective date is the last day of the cost calculation period.

The system determines the accounts that it uses for the Periodic Costing GL transactions following the same rules as in standard costing. For more information on standard costing, see QAD Costing User Guide.

Account Balancing



Periodic Costing ensures that the inventory account is evenly balanced when you:

Make changes to the inventory account during the period.

Have different accounts for different locations.

The Periodic Cost calculation program creates adjustment transactions to balance the amount in each inventory account for an item based on the calculated cost of the item. This results in the GL account balance accurately stating the inventory value associated with the account. It also ensures that the accounts are balanced when you summarize the inventory quantity in the locations for that account and multiply the summary by the calculated periodic cost for the item and that the summary is equal to the account balance for the item.

You define a cost revalue account to offset inventory accounts balancing transactions. You define the cost revalue account in the Cost Revalue Account field in Periodic Costing Control (30.5.24). The system only uses this GL account for rebalancing, and it should always have a zero balance.

Account Balancing for Grouped Sites

Periodic Costing performs account balancing across all sites in the group.

Example For an account balance for a grouped site, you have site1 and site2 grouped. The following data exist for the sites:

Grouped Site Data:	**Account**	**Receipt Data**
Site 1	InvAcc1	RCT-PO 10 * $1
Site 2	InvAcc2	RCT-PO 10 * $1

Result of PC calculation:

Account	**Unconsumed**	**Qty**	**Unit Cost**	**Total Cost**
site1 loc1	InvAcc1	10	1.5	15
site1 loc2	InvAcc2	10	1.0	10

Account balance transactions:

Site 1: PCACCBAL PC Amount = 10*25/20 - 15 = -2.50

Dr InvAcc1: -2.50

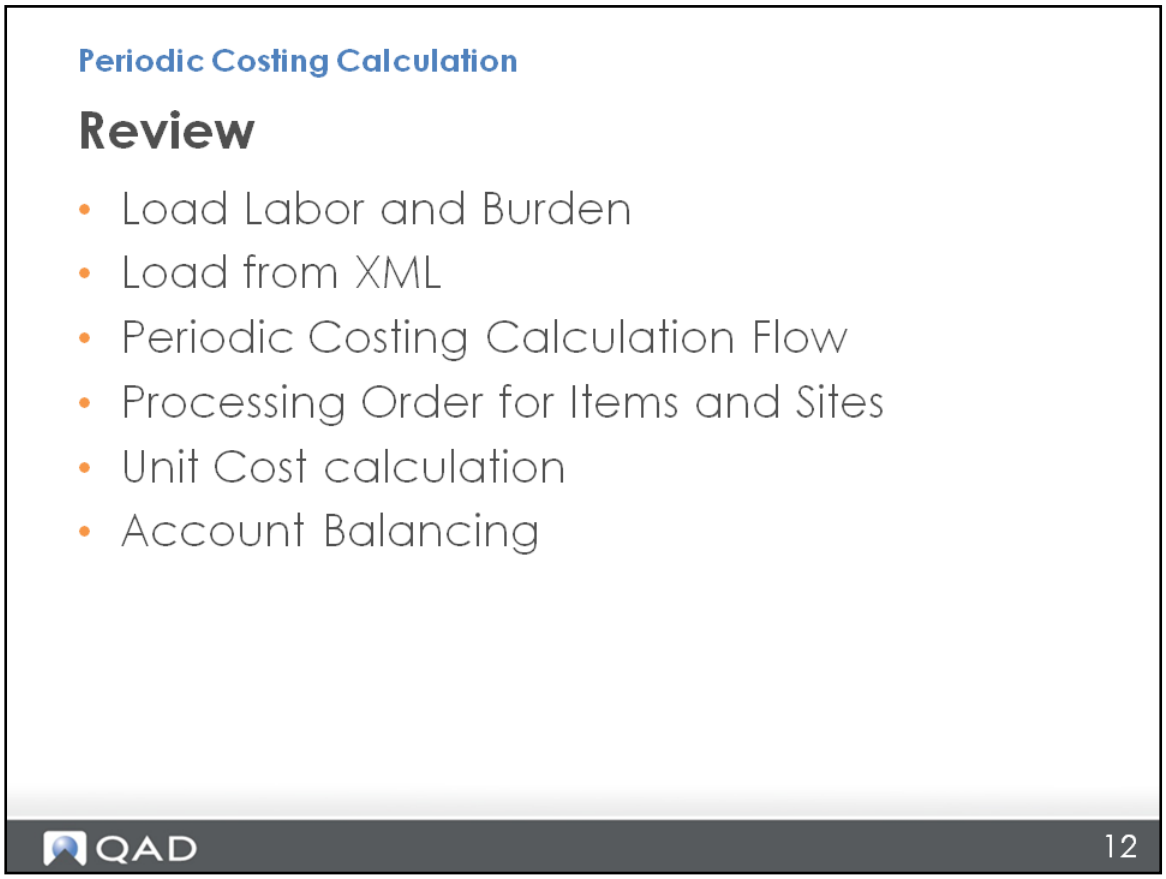
Cr Offset: -2.50

Site 2: PCACCBAL PC Amount = 10*25/20 - 10 = 2.50

Dr InvAcc2: 2.50

Cr Offset: 2.50

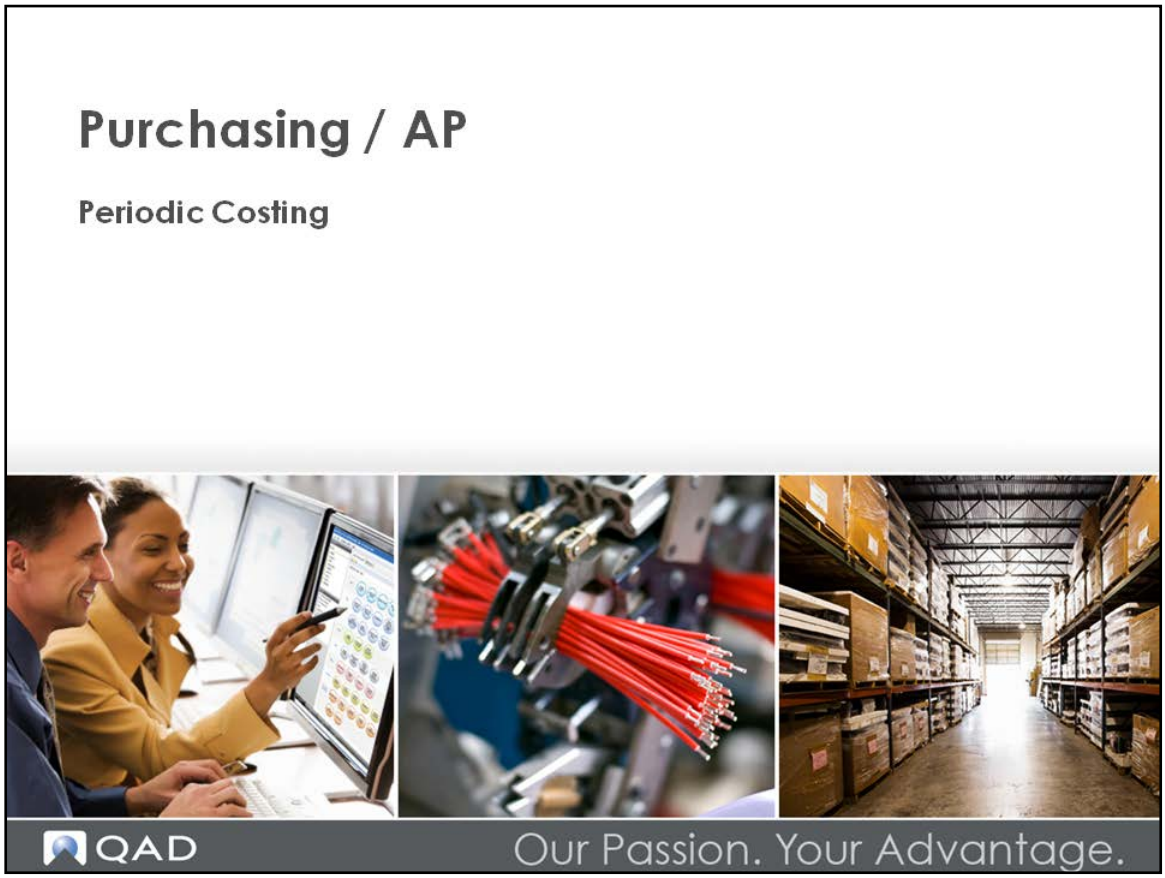
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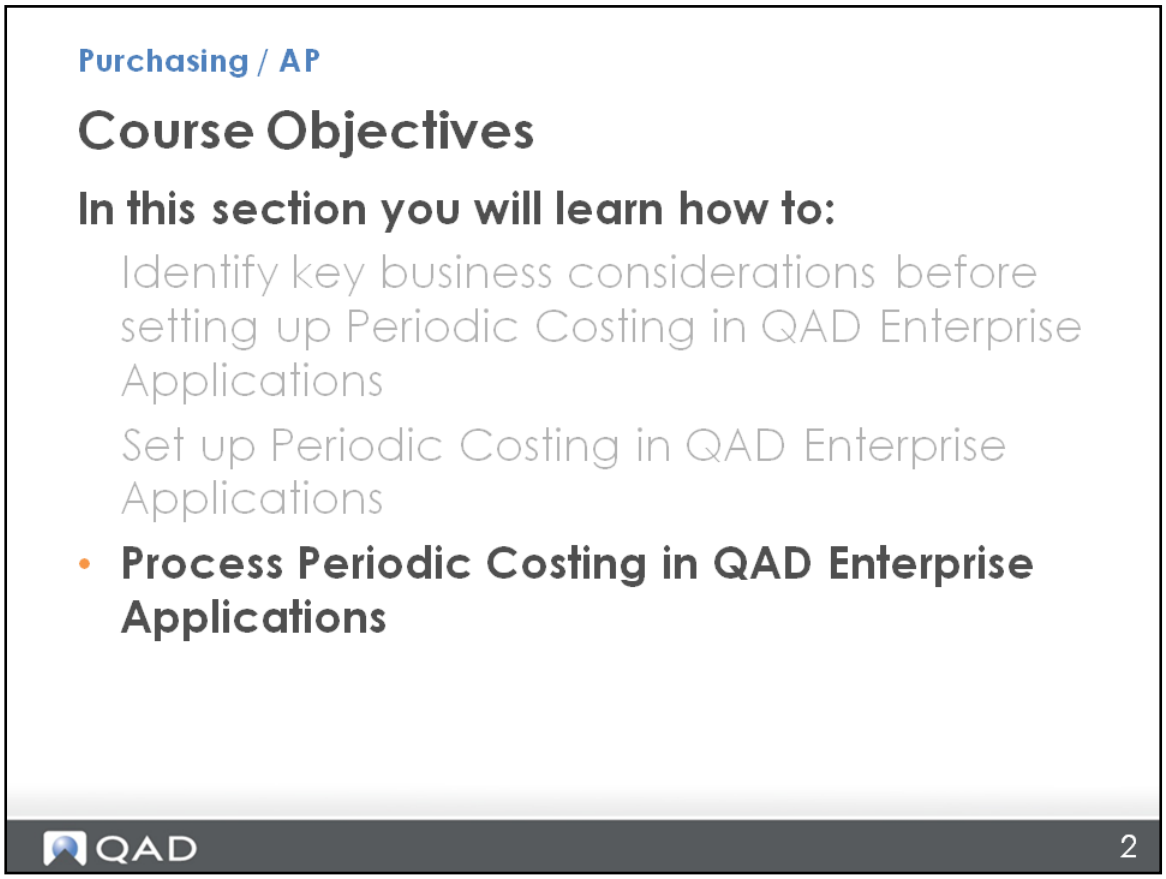
CHAPTER 7

Purchasing/AP

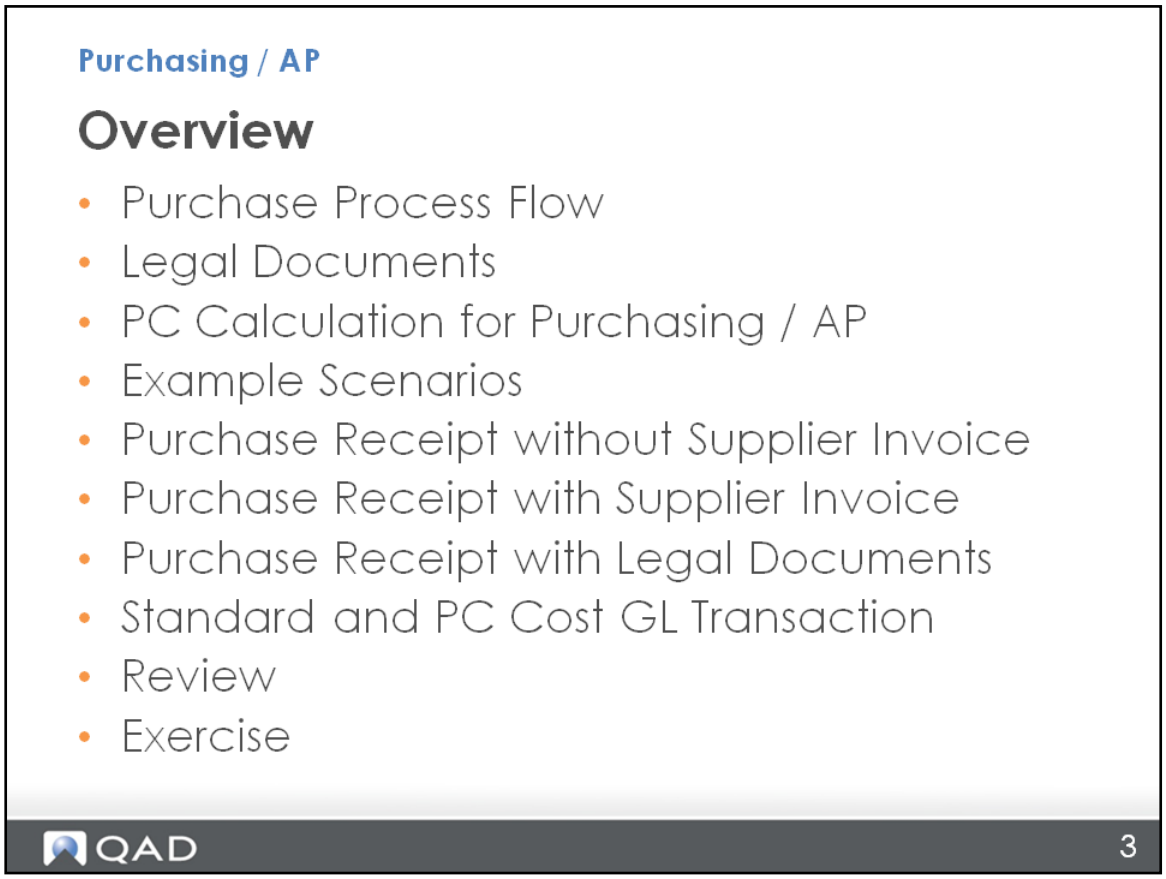
Purchasing / AP



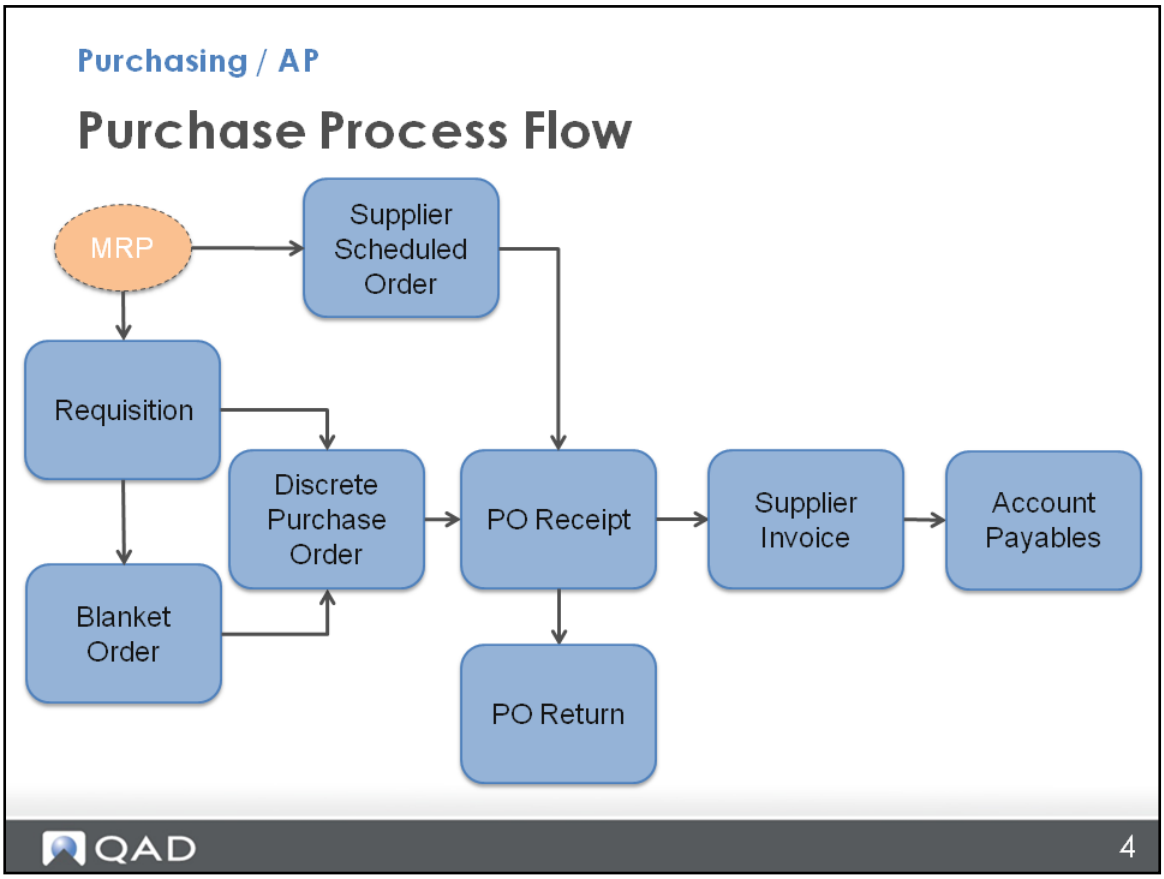
Course Objectives



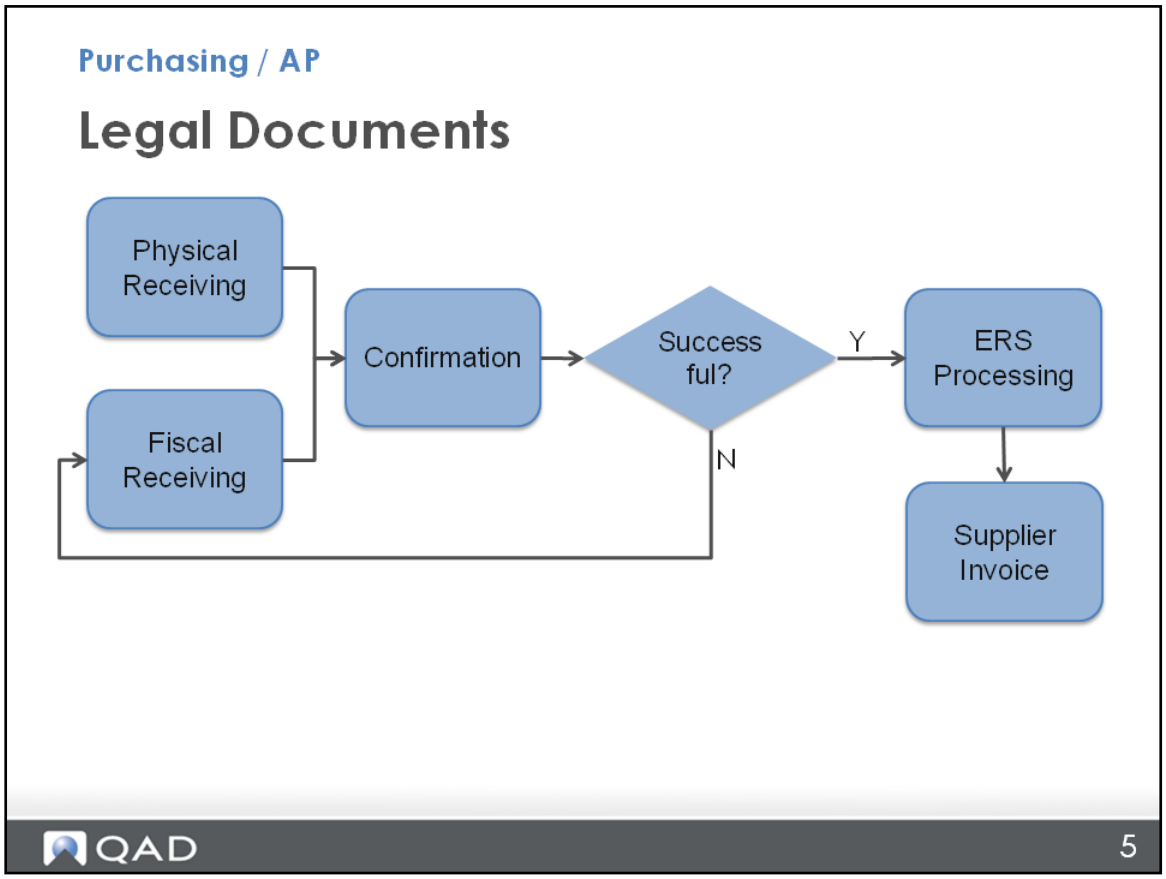
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Purchase Process Flow



Legal Documents



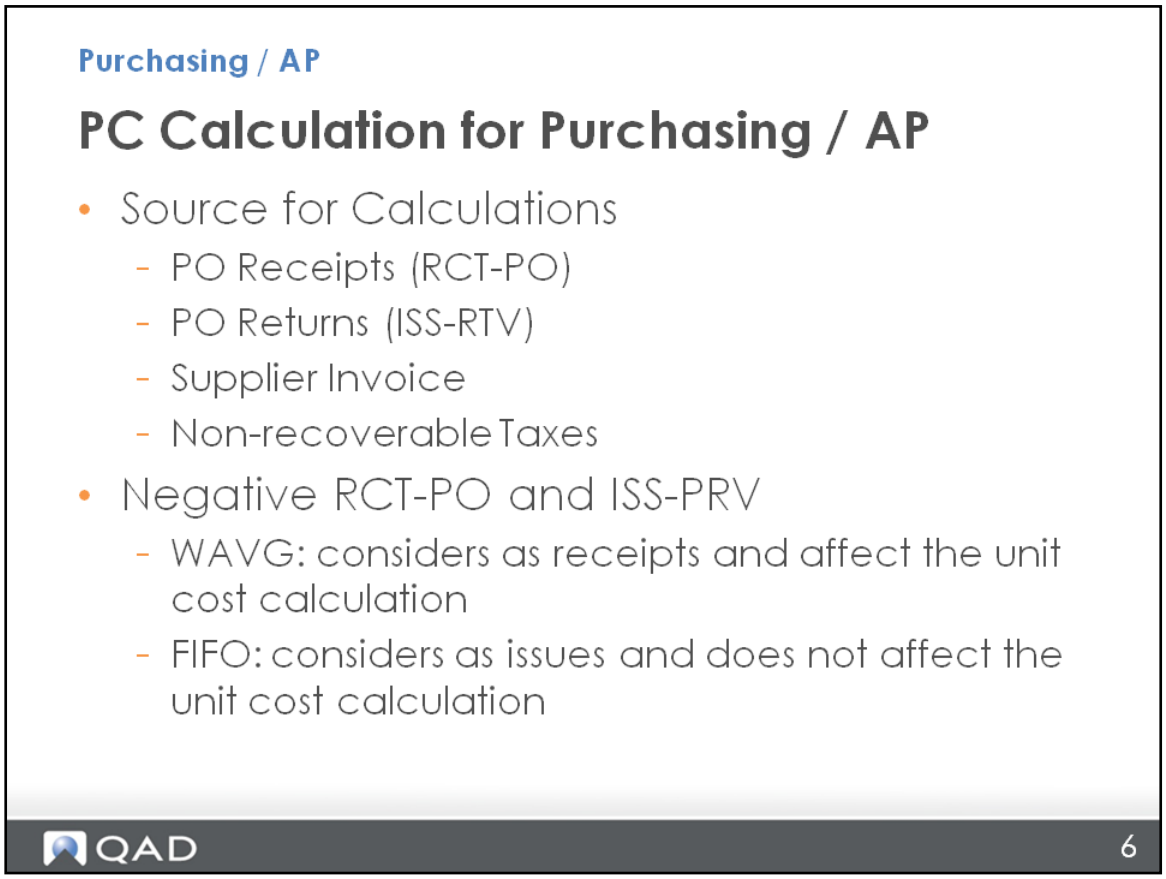
In the system, you can enable Fiscal Receiving for the purchase process. If Fiscal Receiving is enabled, Fiscal Receiving becomes mandatory for the standard receiving process. You must perform both the physical and fiscal receiving, and finish the confirmation process to complete the receiving.

Use Fiscal Receiving (5.20.1) to process the recording and the confirmation of received fiscal documents (legal documents). Fiscal Receiving supports scenarios where it is necessary to use a legal document as an invoice. Fiscal Receiving lets you:

- Record fiscal document information effectively, such as item numbers, quantities, costs, and taxes from shipping documents.
- Process verification of the physical amount against the amount described on the fiscal document.

The verification process is regarded as a receiver-matching process performed in the operational module; thus, Fiscal Receiving is used to partially automate the processing of supplier payments in the financial module.

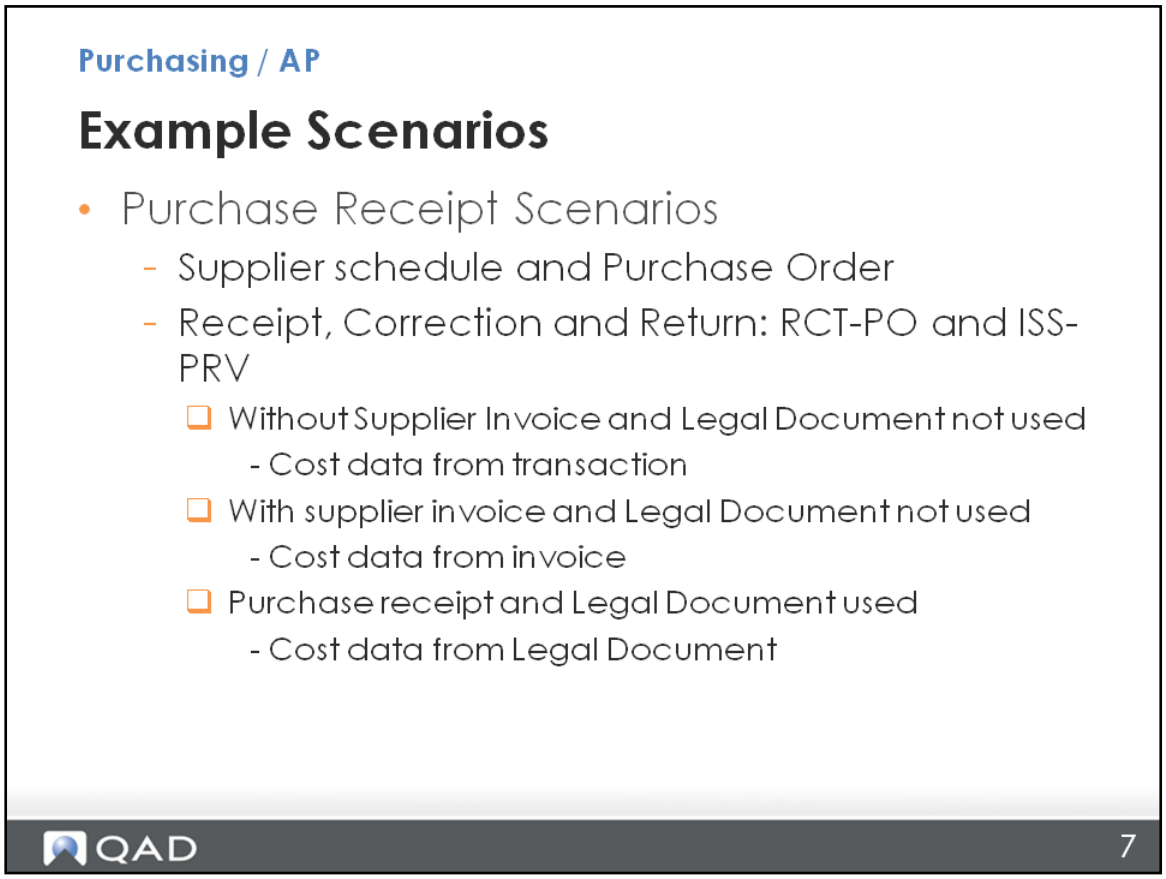
PC Calculation for Purchasing / AP



The Periodic Costing value for RCT-PO, ISS-PRV, and RCT-LA is based on the invoice value and the tax value is obtained from Accounts Payable. The system includes non-recoverable taxes in the value of the receipt. When the invoice is not matched, the system uses the PO cost. When you set the Use Supplier invoices field in the Periodic Costing Control (30.5.24), the system uses only supplier invoice cost. When the invoice does not exist, then the cost of the receipt is 0 (zero).

There is a variation on calculation of negative RCT-PO and ISS-PRV for the WAVG and FIFO methods. In the WAVG method, the system still considers both negative RCT-PO and ISS-PRV as receipts, and they affect the unit cost calculation. In the FIFO method, the system considers it as an issue, and it does not affect the unit cost calculation. The cost for that transaction is based on the cost calculation period cost of the item from where it is picked.

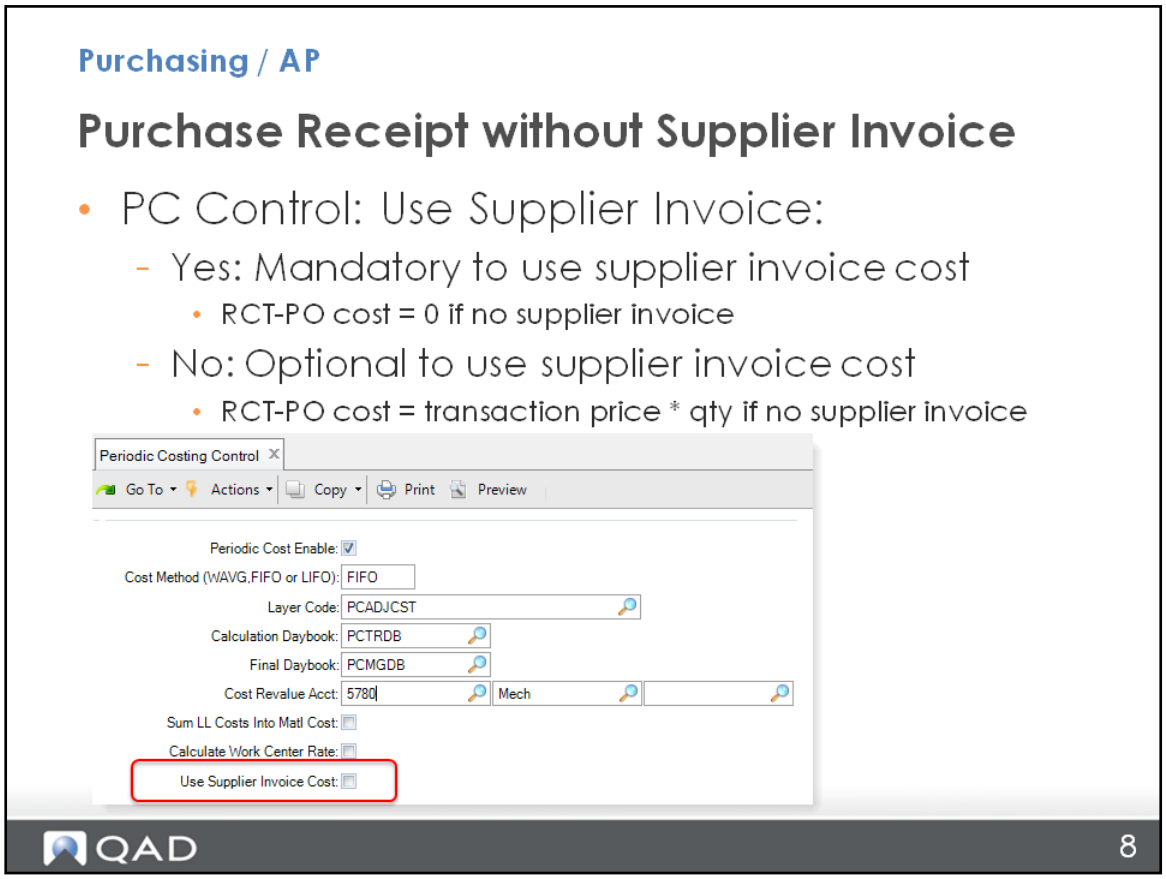
Example Scenarios



Purchase Receipt Scenarios:

- Without Supplier Invoice and not Fiscal Confirm Required
  Cost data from transaction
- With supplier invoice and not Fiscal Confirm Required
  Cost data from invoice
- Purchase receipt and Fiscal Confirm Required
  Cost data from Legal Document

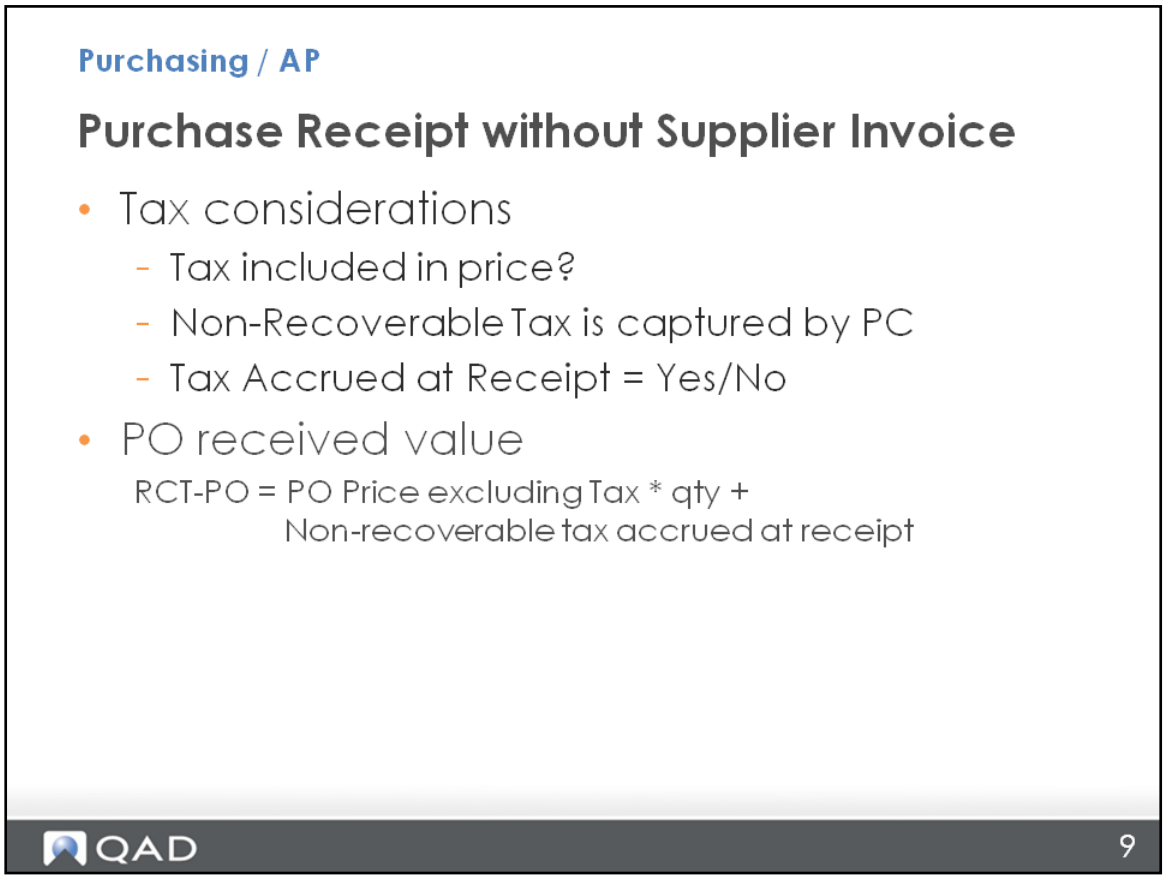
Purchase Receipt without Supplier Invoice



In Periodic Costing Control, if you set the Use Supplier Invoice to Yes, using supplier invoice price as the cost become mandatory. If there is no matched supplier invoice yet, the cost of PO receipts is zero.

If you set the Use Supplier Invoice to No, using supplier invoice price as the cost is optional. If system cannot find a matched supplier invoice, the cost of PO receipts = Unit price on PO * Quantity received.

Purchase Receipt without Supplier Invoice

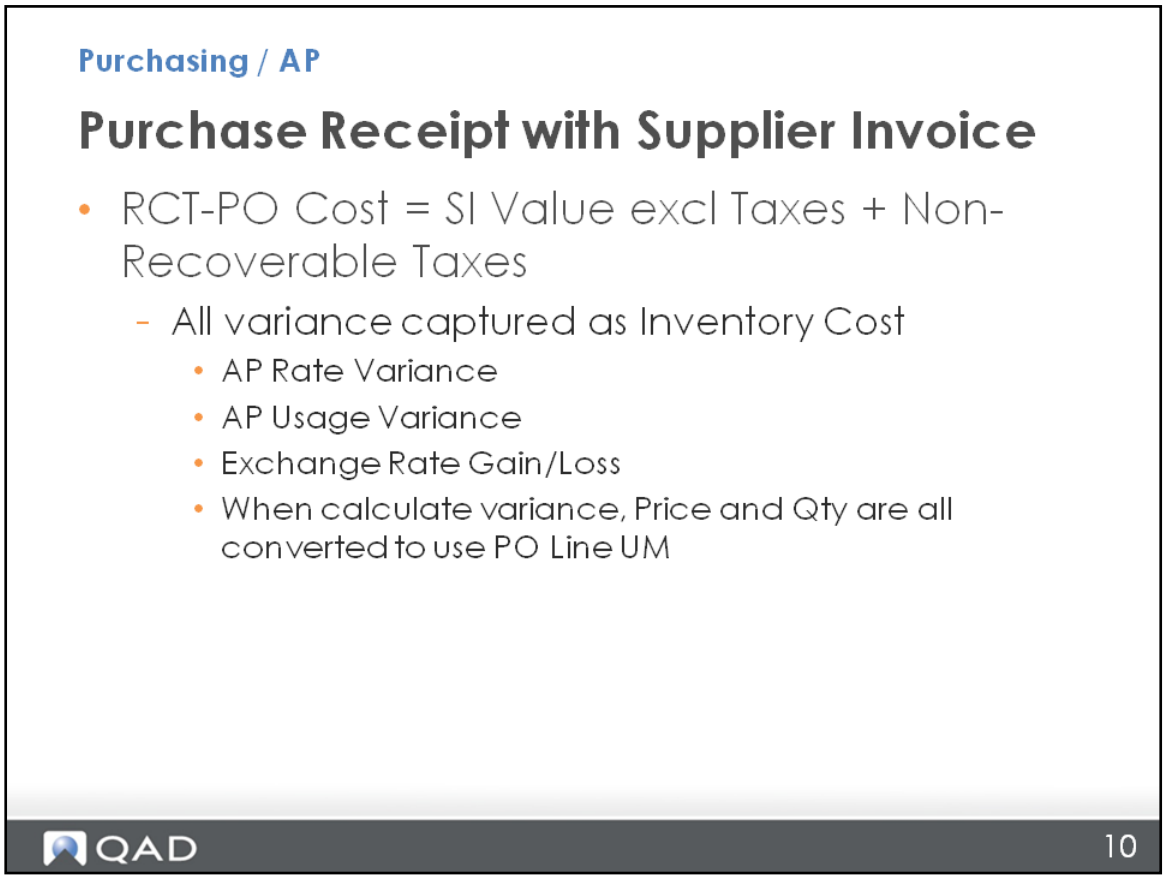


For the purchase order receipts without matched supplier invoice, below three factors will affect the periodic costing cost calculation:

- Tax include. It affects the tax amount calculation.
- Non-recoverable Tax. Periodic Costing only captures Non-Recoverable Tax.
- Tax Accrued at Receipt. If the tax is accrued at invoice (Tax Accrued at Receipt = No), the tax amount is not considered during cost calculation.

If the tax is accrued at receipt, the PC cost is the total PO receipts (exclude tax) amount plus the non-recoverable tax amount. Otherwise, it is only the total PO receipts (tax exclusive) amount.

Purchase Receipt with Supplier Invoice



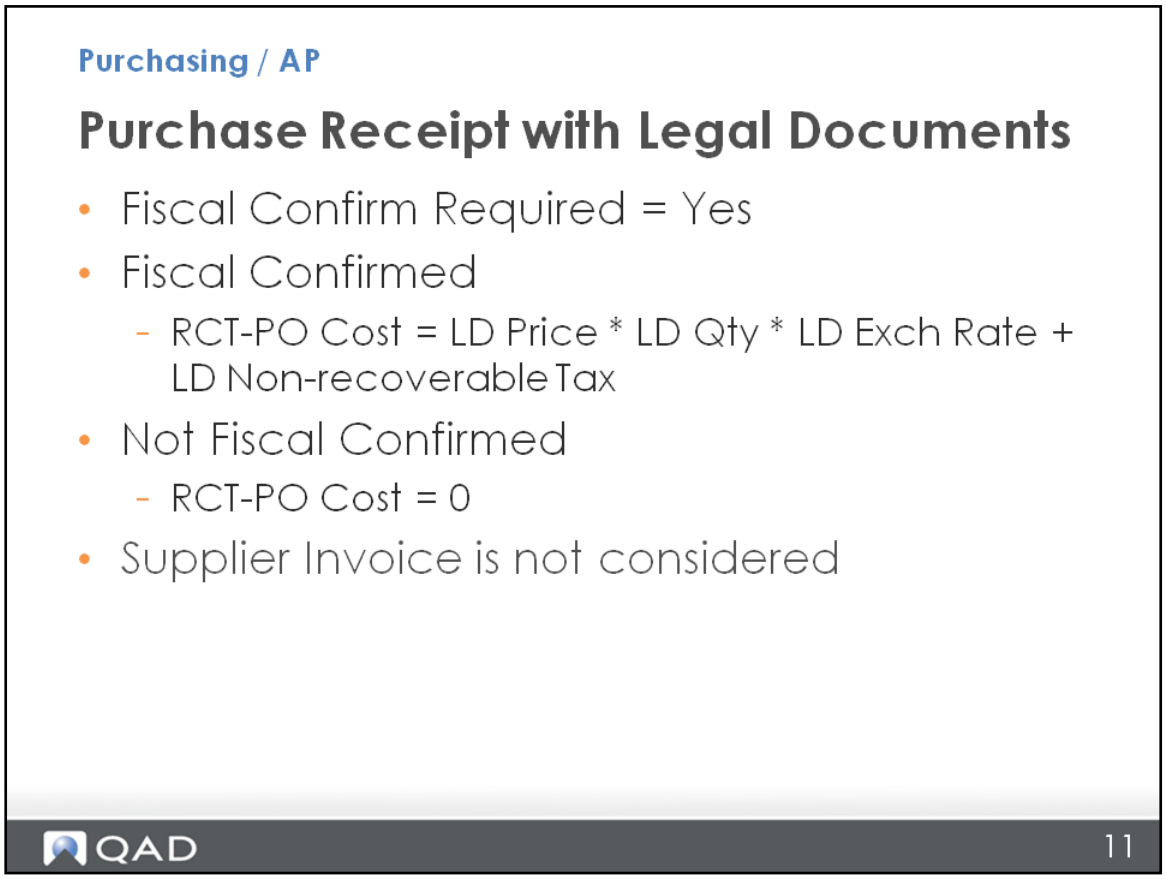
For the purchase order receipts with a supplier invoice matched, the Periodic Costing uses the total supplier invoice amount for the PC cost during cost calculation.

During cost calculation, the periodic costing considers below AP variances and convert the price and quantity to the PO line unit of measure:

- AP Rate Variance
- AP Usage Variance
- Exchange Rate Gain/Loss
- Logistic charge Inbound Variance

The system also considers the non-recoverable tax in supplier invoice during calculation.

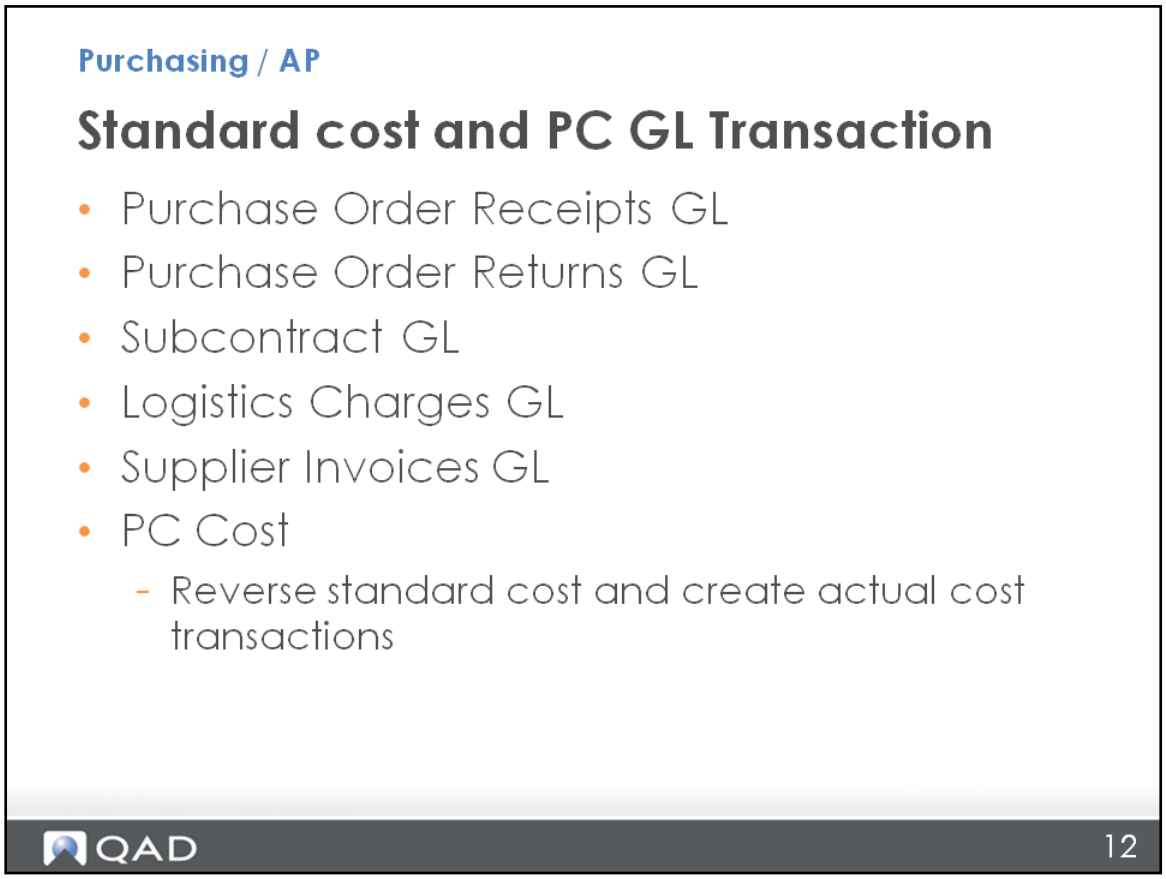
Purchase Receipt with Legal Documents



If you enable the legal document in the Purchase Control (Fiscal Confirm Required = Yes), the periodic costing checks the legal document instead of the PO receipts or supplier invoice during cost calculation.

Periodic costing considers only the fiscal confirmed PO receipts and uses the price on legal document for the cost calculation. Otherwise, the PC cost is zero.

Standard cost and PC GL Transaction



Standard Cost GL Transactions:

In Purchasing, material variances are identified as purchase variances: Purchase Price Variance and Purchase Gain/Loss due to exchange rate fluctuations. Both of the variances indicate that the cost of the material purchased do not match the established standards.

Standard cost GL transaction:

- Debits Inventory
- Credits Applied Overhead
- Debits Purchase Price Variance
- Credits PO Receipts Accrual

Returns to suppliers are processed in Purchase Order Returns (5.13.7). It is required that the purchase order exists in the database for a return to process, regardless of whether the status is Open. The return transaction reverses the inventory and GL effects of the receipt, if any, and can optionally reopen the PO or the PO line.

Standard cost GL transaction with a negative:

- Debits Inventory
- Credits Applied Overhead
- Debits Purchase Price Variance
- Credits PO Receipts Accrual

Subcontract POs reference a valid item number, but rather than receiving the item into inventory. They are received into manufacturing as a cost of production. If no work order number is specified, the process stops. The entire PO cost is reported as a cost of production and accrued. However, if the PO references a valid work order and operation, additional transactions are generated to issue the cost to WIP and to calculate variances, if any. The WIP value is added to the WO on the SUBCNT transaction in the Operation History table. The SUBCNT transaction will have DR WIP and Credit Cost of Production.

The PO Receipts transaction for subcontract uses the PO unit cost as the GL amount. A subcontract rate variance accounts for any difference between the PO unit cost and the standard unit cost for this operation as recorded on the Work Order Routing (16.13.13).

The final transactions are actually work order transactions. As such, they create GL transactions of type WO with a description of SUB [op number], where [op number] is the work order operation.

Subcontract PO Receipt (RCT-PO):

- DR Cost of Production

CR PO Receipts Subcontract issue to WIP:

- DR WIP
- CR Cost of Production

Inbound logistics charges can include freight, duty, insurance, and so on. You can indicate whether an inbound logistics charge is taxable and assign default tax parameters.

To accrue inbound logistics charges and include them in the cost of purchased items, associate a separate cost element with each logistics charge code used for inbound purposes. When modifying the cost element, you may also specify PO price variance account and AP rate variance account information. You cannot assign the same cost element to more than one logistics charge.

Purchase Order Receipts

- DR Inventory
- CR Inbound Accrual

Purchase Order Returns

- DR Inbound Expense
- CR Inventory

Supplier Invoice logistic charges matching

- DR Inbound Accrual
- DR Inbound Variance
- CR Accounts Payable

The system matches the purchase order quantity and price with the receiver quantity and price and the invoice quantity and price. Variances are calculated and the receivers are marked as closed. This process is commonly known as a three-way match.

AP Rate Variance

AP Rate Variance occurs when a discrepancy exists between an item's PO cost and its invoice cost.

AP rate variance: (Invoice Unit Cost - PO Unit Cost) * Invoice Qty

AP Usage Variance

AP Usage Variance occurs when a discrepancy exists between an item's PO receipt quantity and its invoice quantity.

AP usage variance: (Invoice Qty - Qty Received) * PO Unit Cost

Purchase Gain/Loss

The Purchase Gain/Loss account is used to track variances resulting from exchange rate fluctuations between the effective dates of the PO receipt and the matching of the supplier invoice.

It is calculated at Supplier Invoice Create.

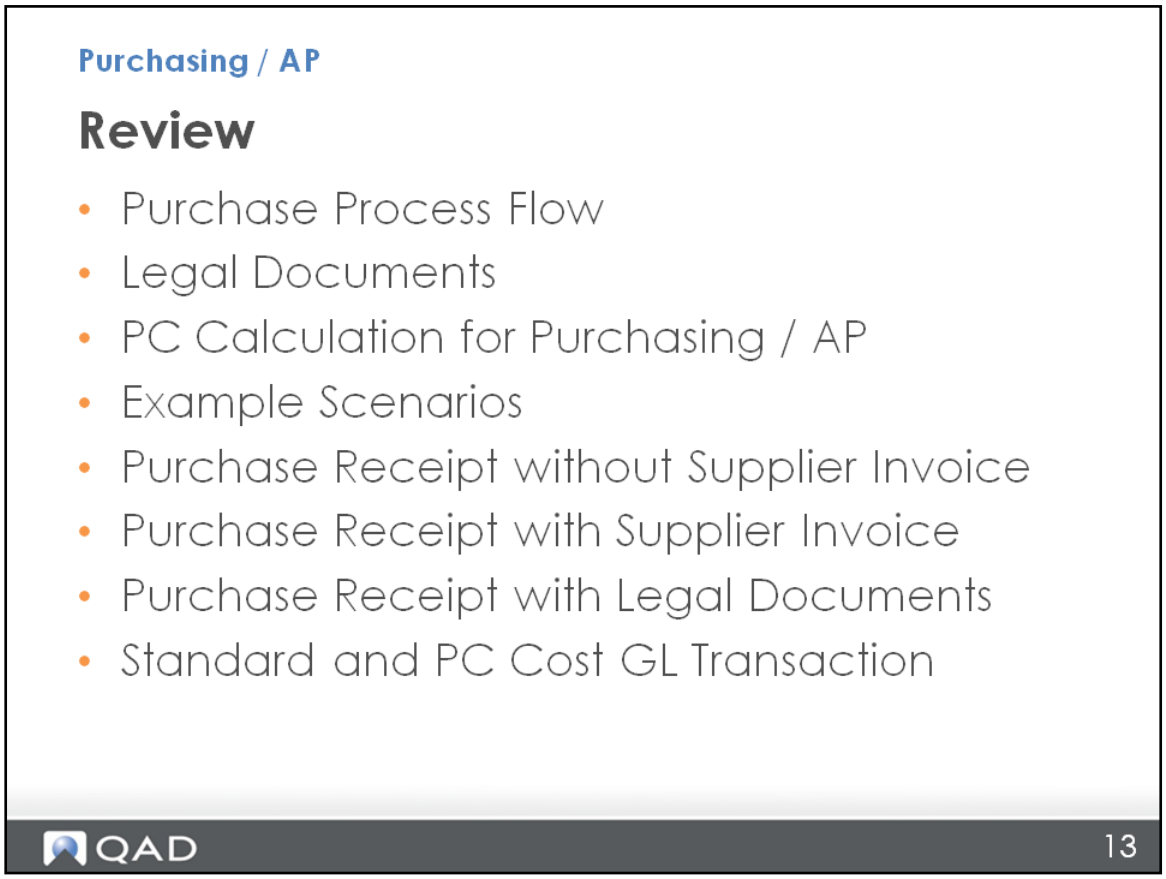
Purchase Gain/Loss = (Invoice Exchange Rate – PO Receipt Exchange Rate) * PO Unit Price * Invoice Qty

PC Cost GL Transaction:

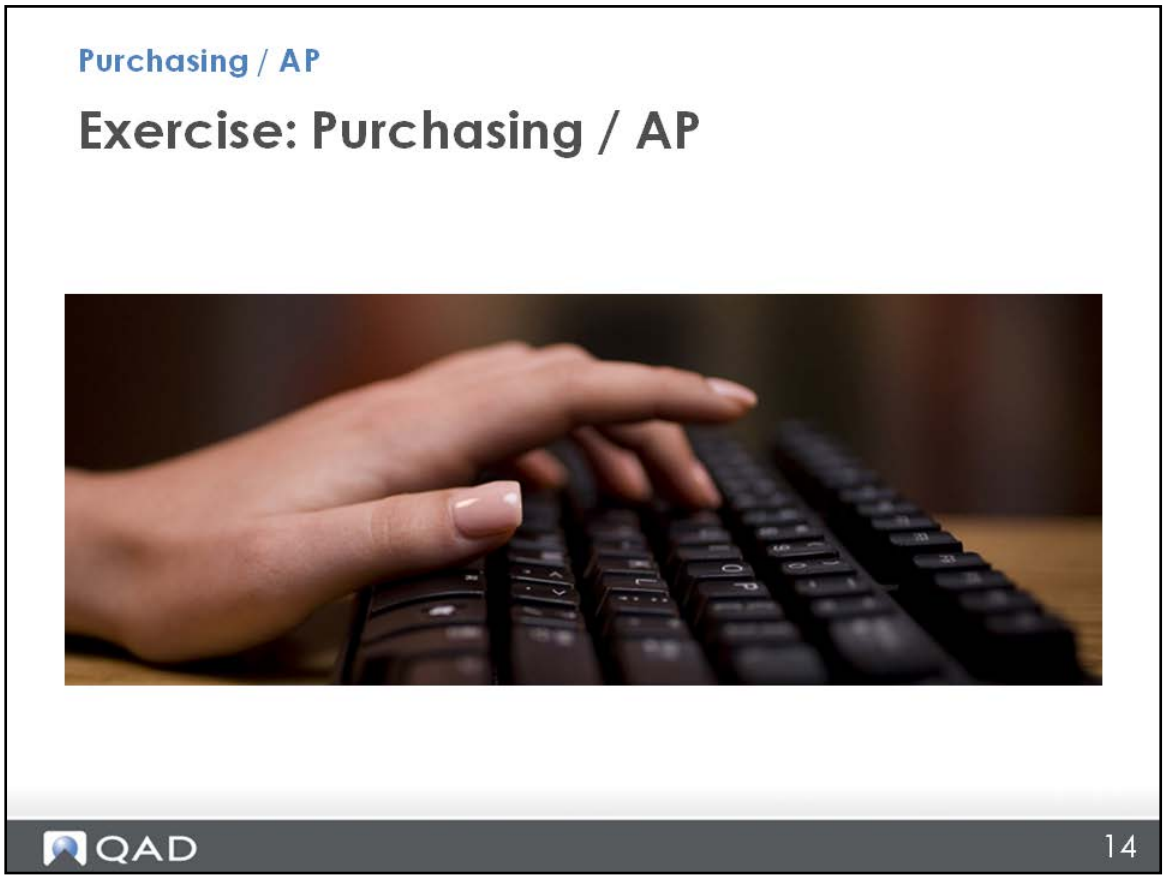
In adjustment mode, Periodic Costing reverse the standard cost GL transaction first and create a new actual cost GL transaction and post it to the management layer.

In complete mode, the system keeps the standard cost GL transaction generation. Periodic Costing reverses the standard cost GL transaction first, create a new actual cost GL transaction, and post it to the official layer.

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Exercise: Purchasing / AP



Finish the corresponding exercise at the end of this training guide.

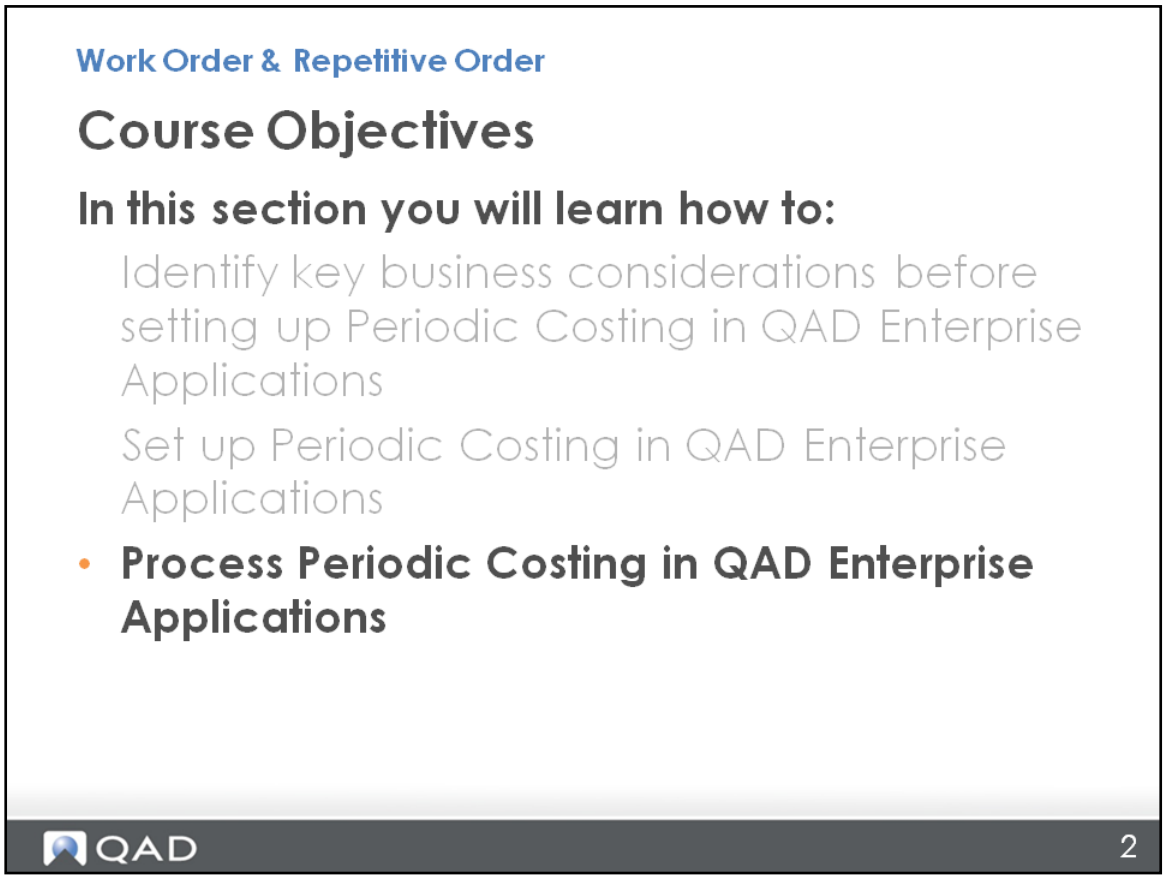
CHAPTER 8

Work Order and Repetitive Order

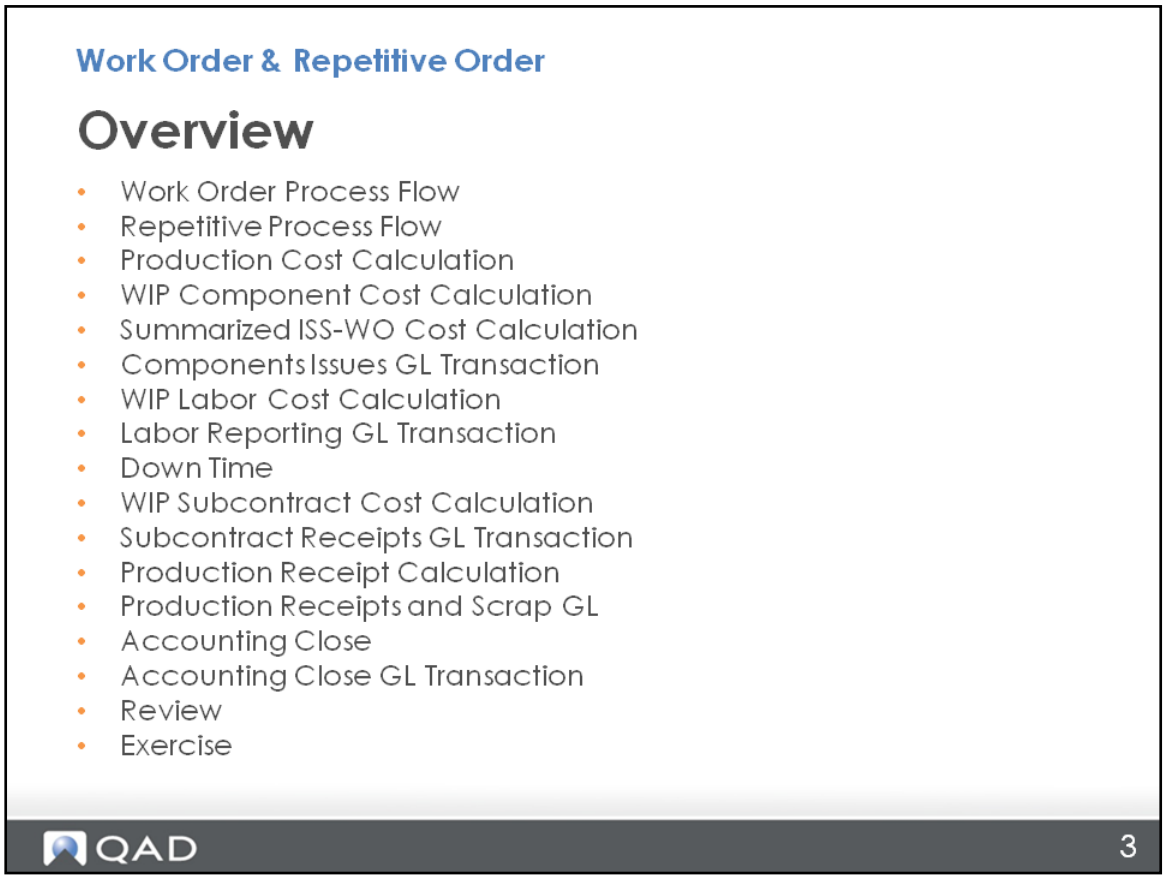
Work Order & Repetitive Order



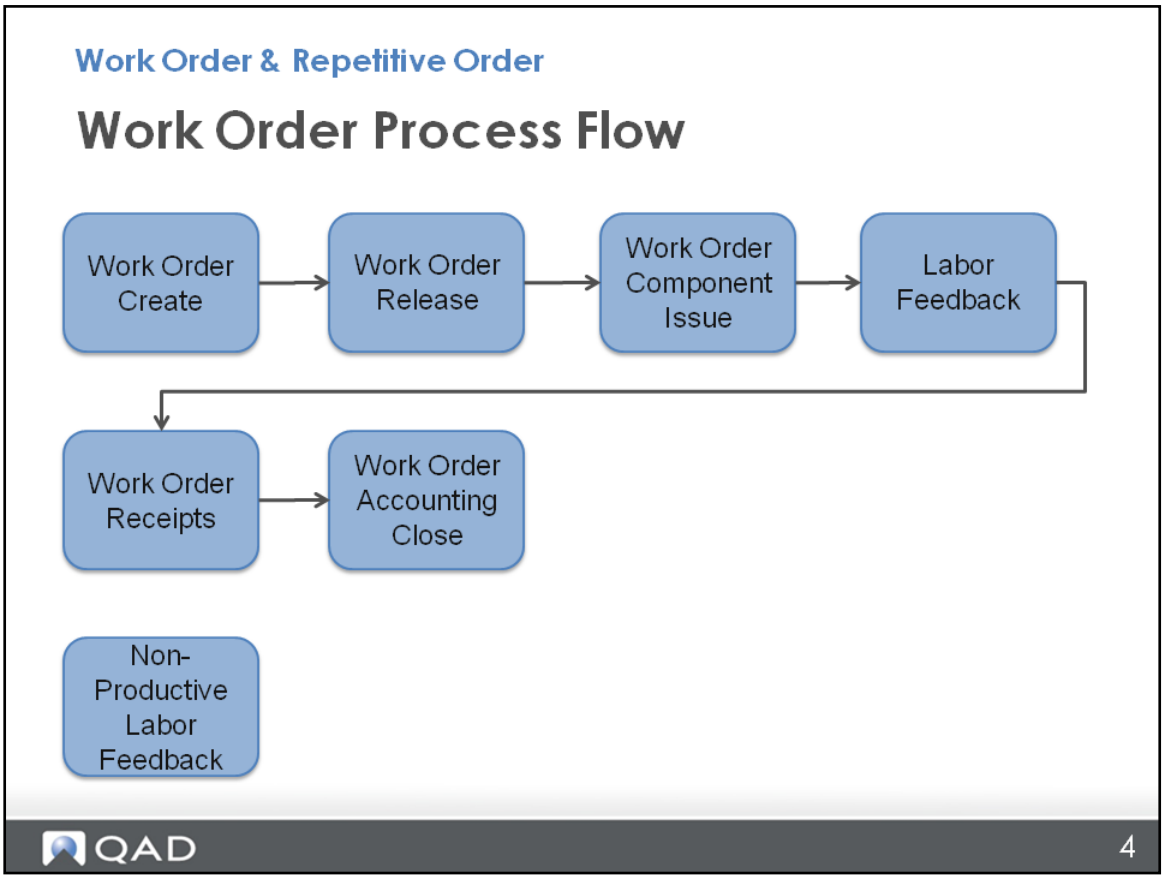
Course Objectives



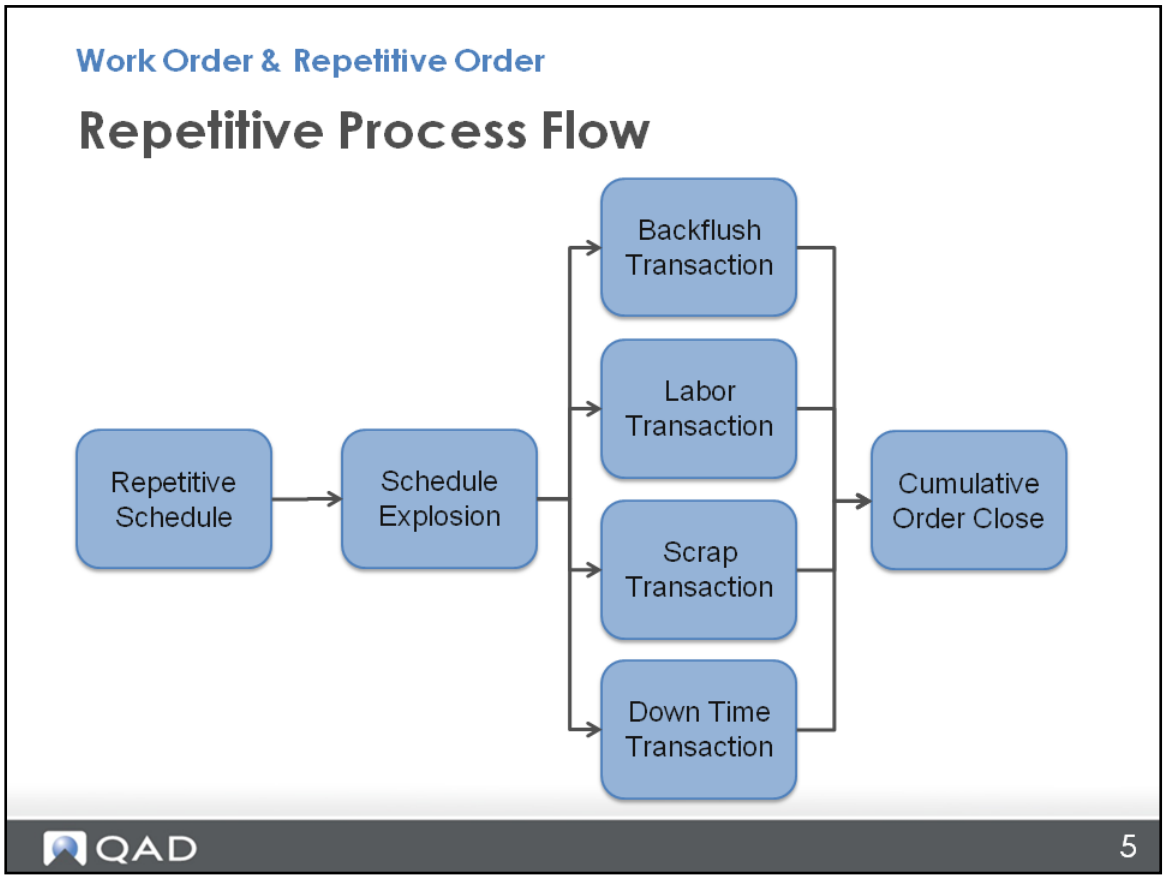
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Subcontract Receipts GL Transaction
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Production Receipts and Scrap GL
Accounting Close
Accounting Close GL Transaction
Review
Exercise
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3

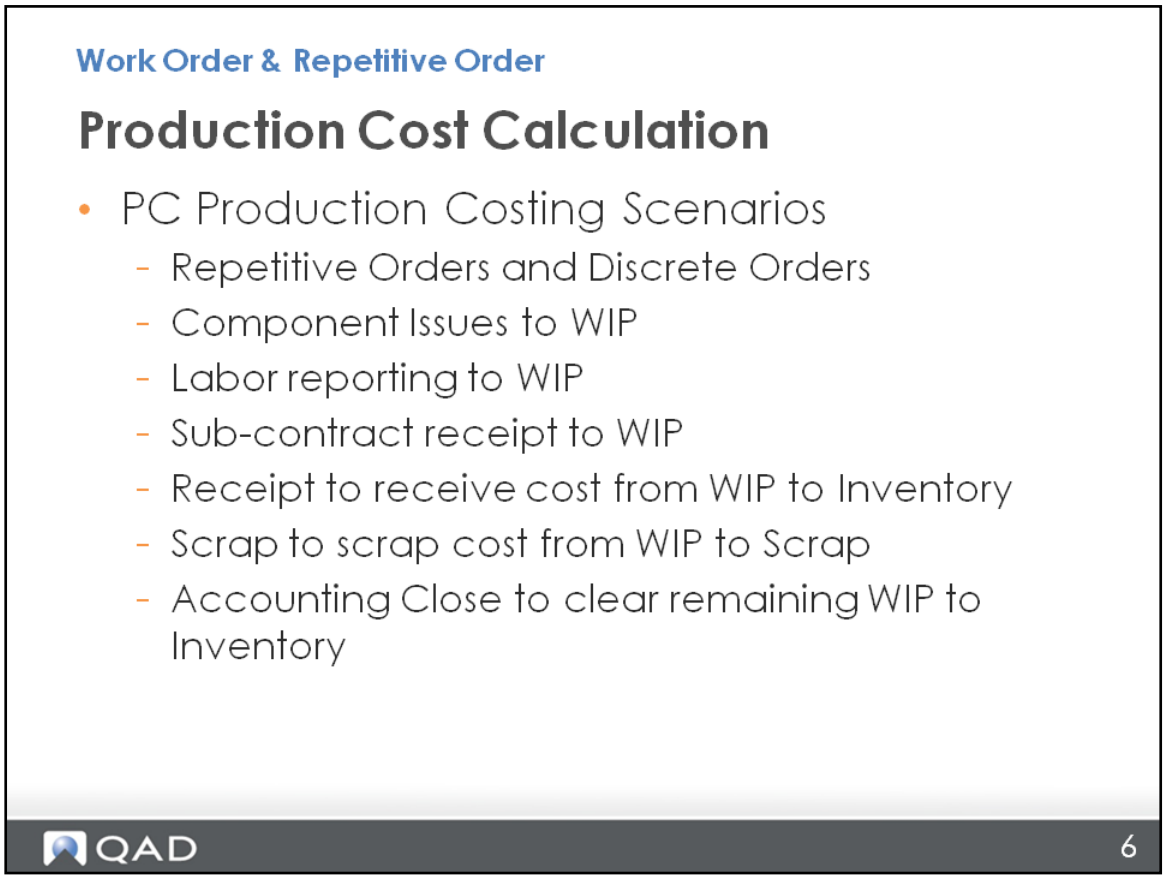
Work Order Process Flow



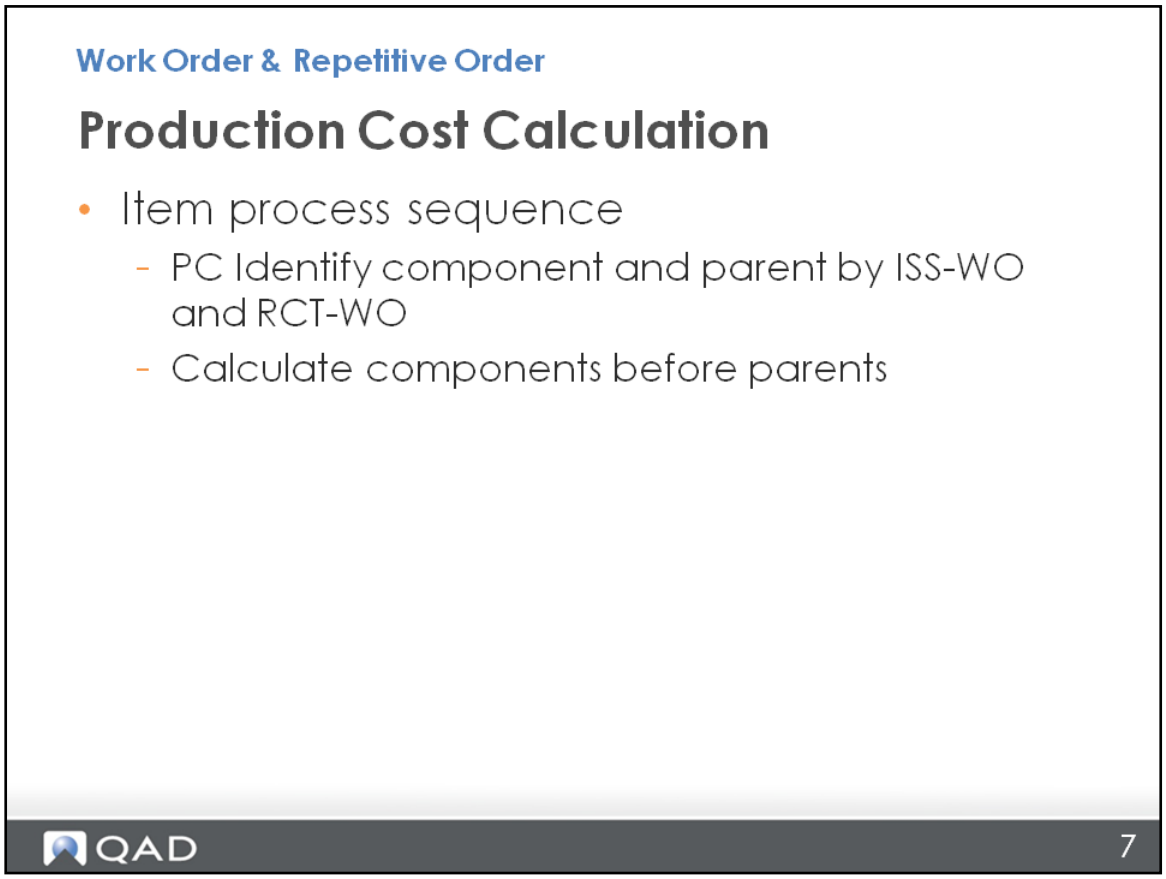
Repetitive Process Flow



Production Cost Calculation



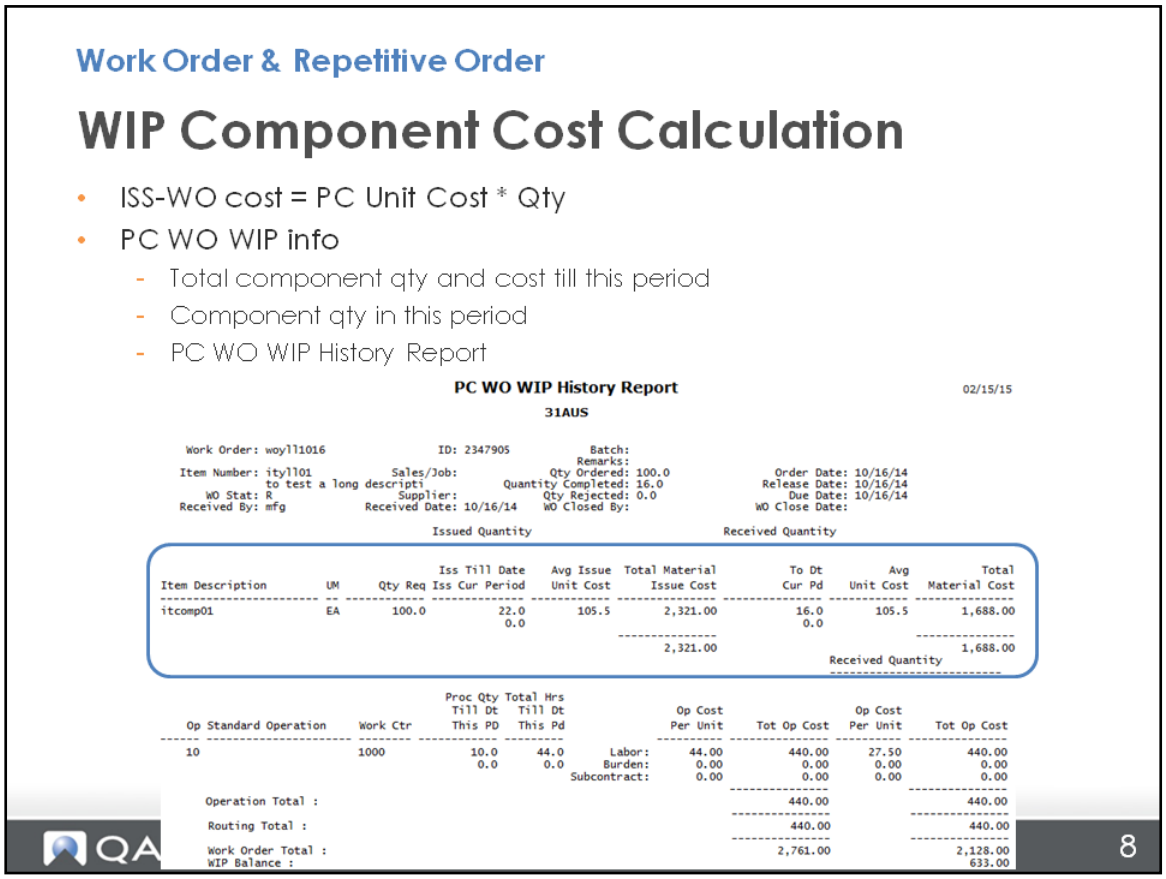
Production Cost Calculation



Periodic costing calculates the cost for all the components first and then all the parent items. During calculating the periodic cost,

- If the inventory transaction type is ISS-WO, the system handles it as a component.
- If the inventory transaction type is RCT-WO, the system handles it as a parent item.

WIP Component Cost Calculation



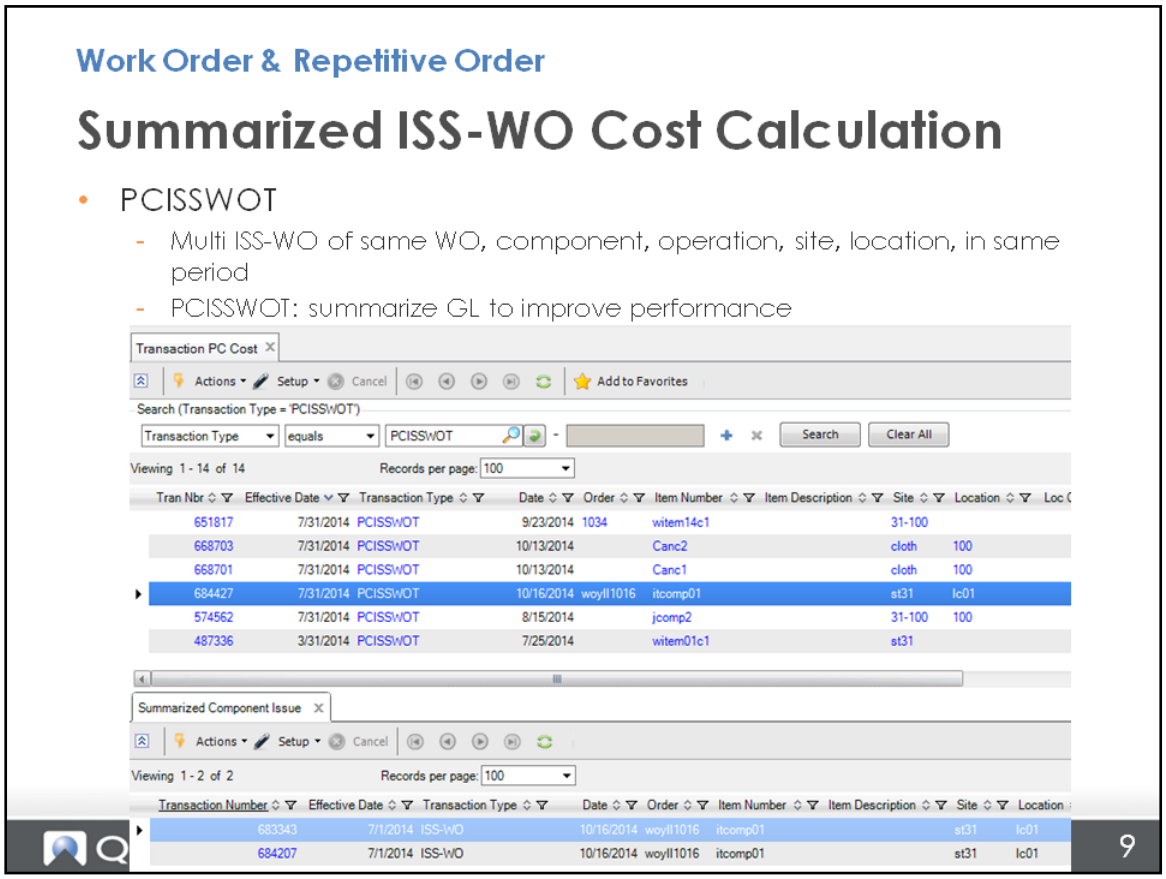
For work order, the materials are issued using Work Order Component Issue (16.10) or Work Order Receipt Backflush (16.12). For repetitive schedules, the materials are issued using Backflush Transaction (18.22.13).

In Periodic Costing, the value for WO issue components is from the calculated unit cost for the component. The issued components cost is the PC unit cost multiplied by the issued quantity.

Use PC WO WIP History Report or Operation History Browse Collection to check the work order WIP cost information:

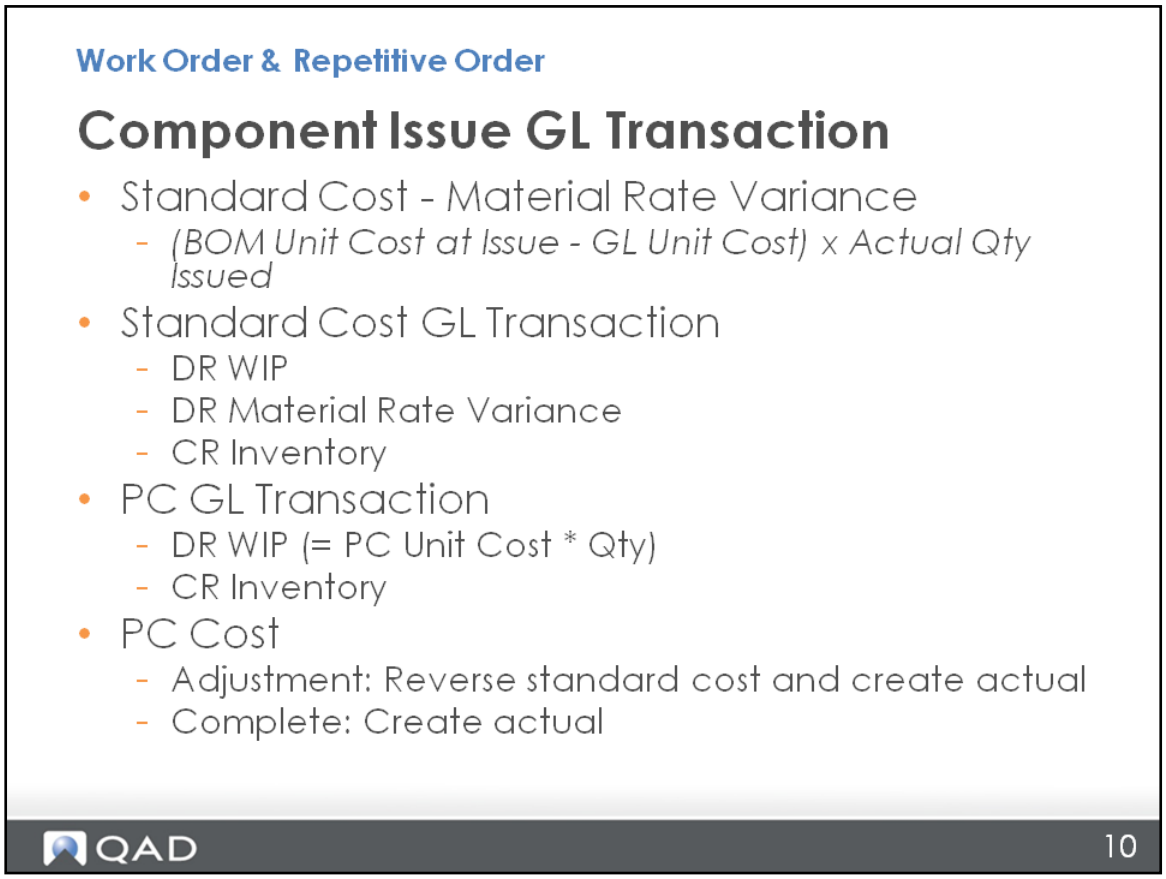
- Component qty in this period
- Total component qty and cost till this period

Summarized ISS-WO Cost Calculation



The system summarizes these WIP calculations by WO lot, WO operation, and WO component issue location. The PCISSWOT transaction stores the summarized component costs from PC calculation. When only one transaction history record exists for the WO lot, WO operation, or WO issue location, then the system does not summarize the costs. The summarized PCISSWOT transaction history records both the reversed standard costs and the lately calculated Periodic Costing component costs. The system stores the WIP values as cost for the work order.

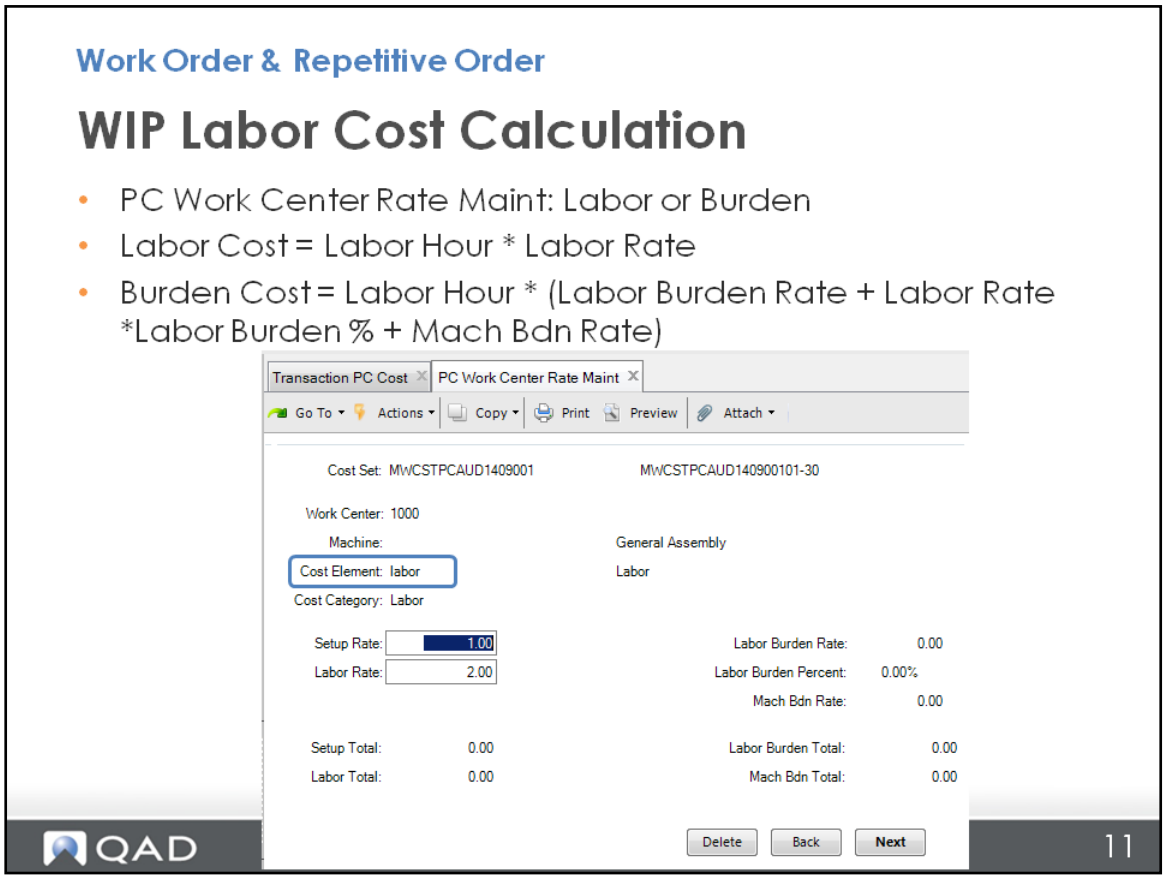
Component Issue GL Transaction



For work order, if the cost of the components issued does not match the frozen cost in the work order bill, a material rate variance is generated. The system compares the total GL cost of the item issued (it might be a substitute) to the frozen cost. The discrepancy is removed from WIP (credit WIP) and booked as a material rate variance.

For repetitive schedule order, the rate variances are calculated as the difference between the current GL standard cost for the component and the GL standard cost captured in the cumulative work order.

WIP Labor Cost Calculation



For work order, use the following menu to record the quantity completed and the actual labor time spent on a particular work order and operation:

- Labor Feedback Work Order (16.20.1)
- Labor Feedback Employee (16.20.2)
- Labor Feedback Work Center (16.20.3)
- Operation Complete Transaction (16.20.5)

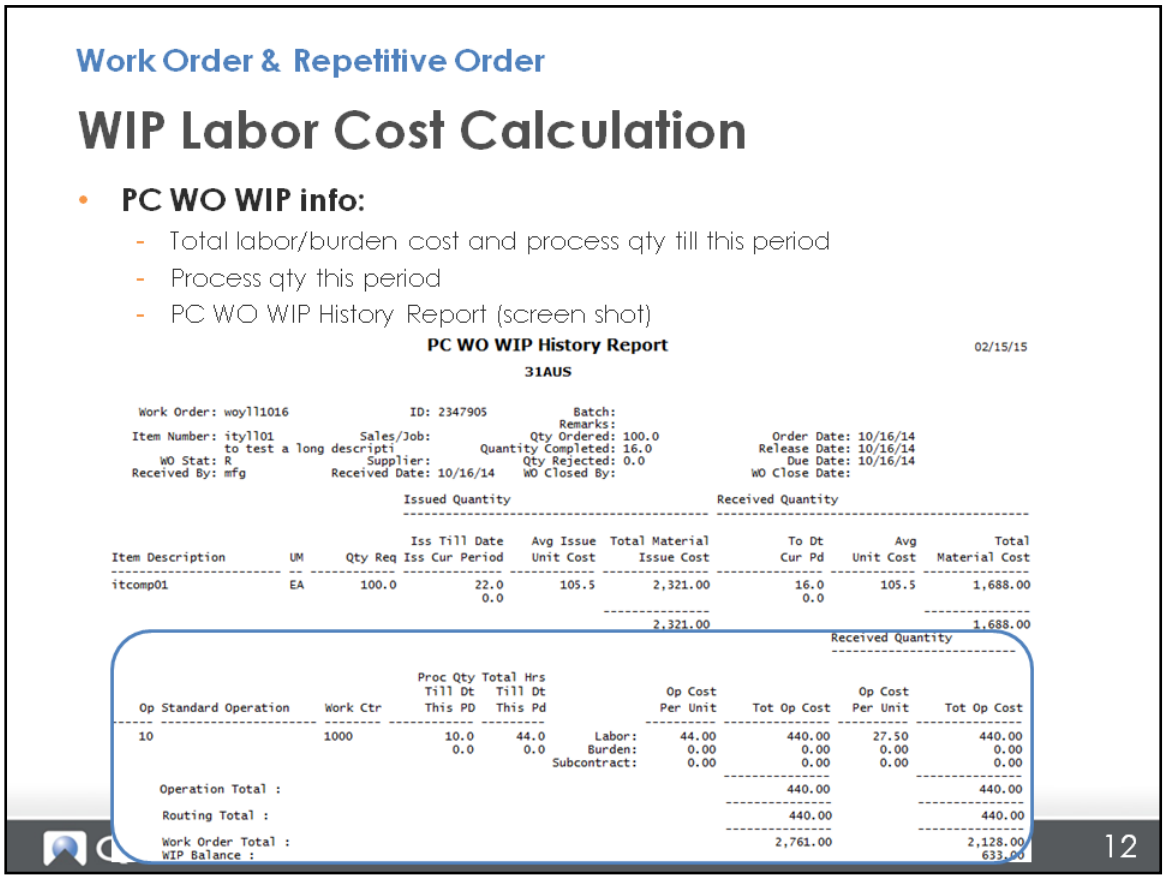
For repetitive, it is reported by

- Backflush Transaction (18.22.13)
- Setup Labor Transaction (18.22.15)
- Run Labor Transaction (18.22.14).

The system calculates the Periodic Costing value for WO operation labor and burden using the rates defined in Periodic Costing work center rates and the time tracked with the operation history transactions.

Note: Ensure that you enter the PC Work Center Rates for each Period and each Work Center machine before running PC. Otherwise, no Labor Cost is calculated.

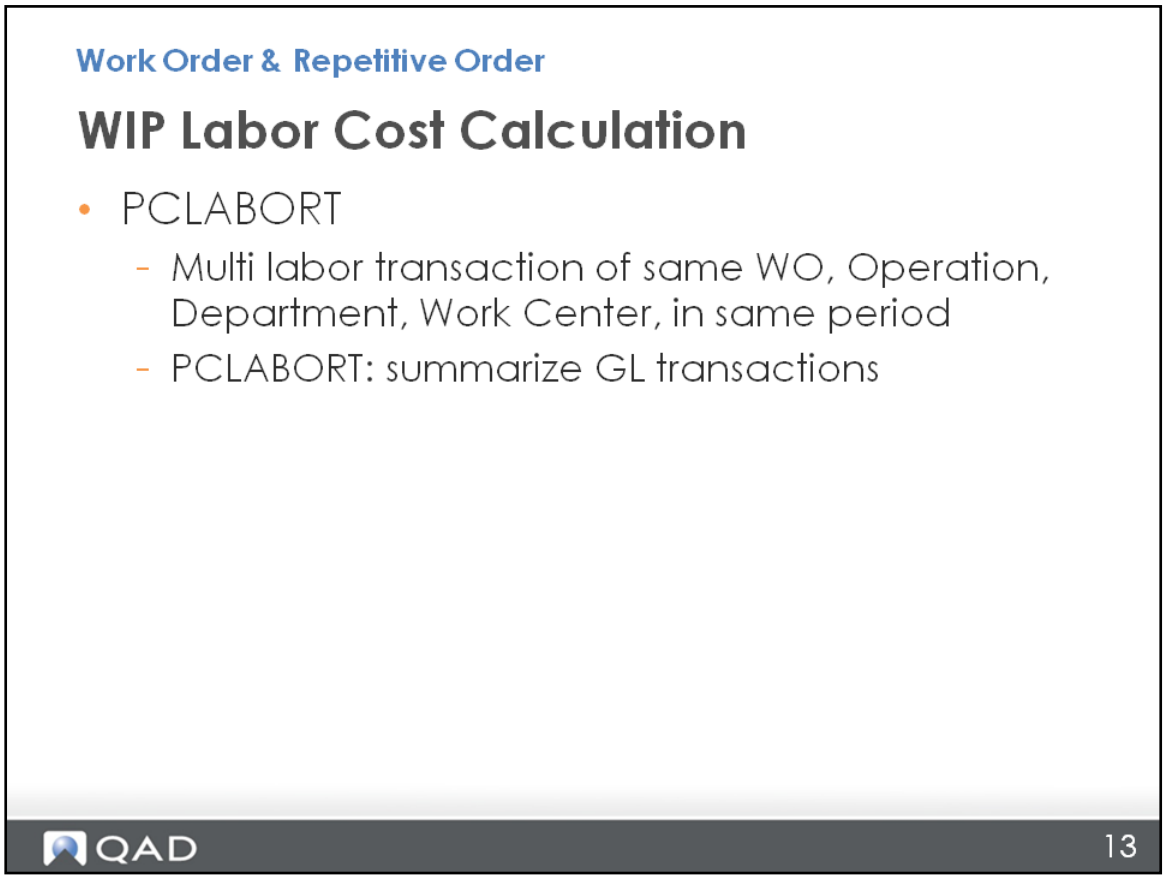
WIP Labor Cost Calculation



Use PC WO WIP History Report and Operation History Browse Collection to check the work order WIP cost information:

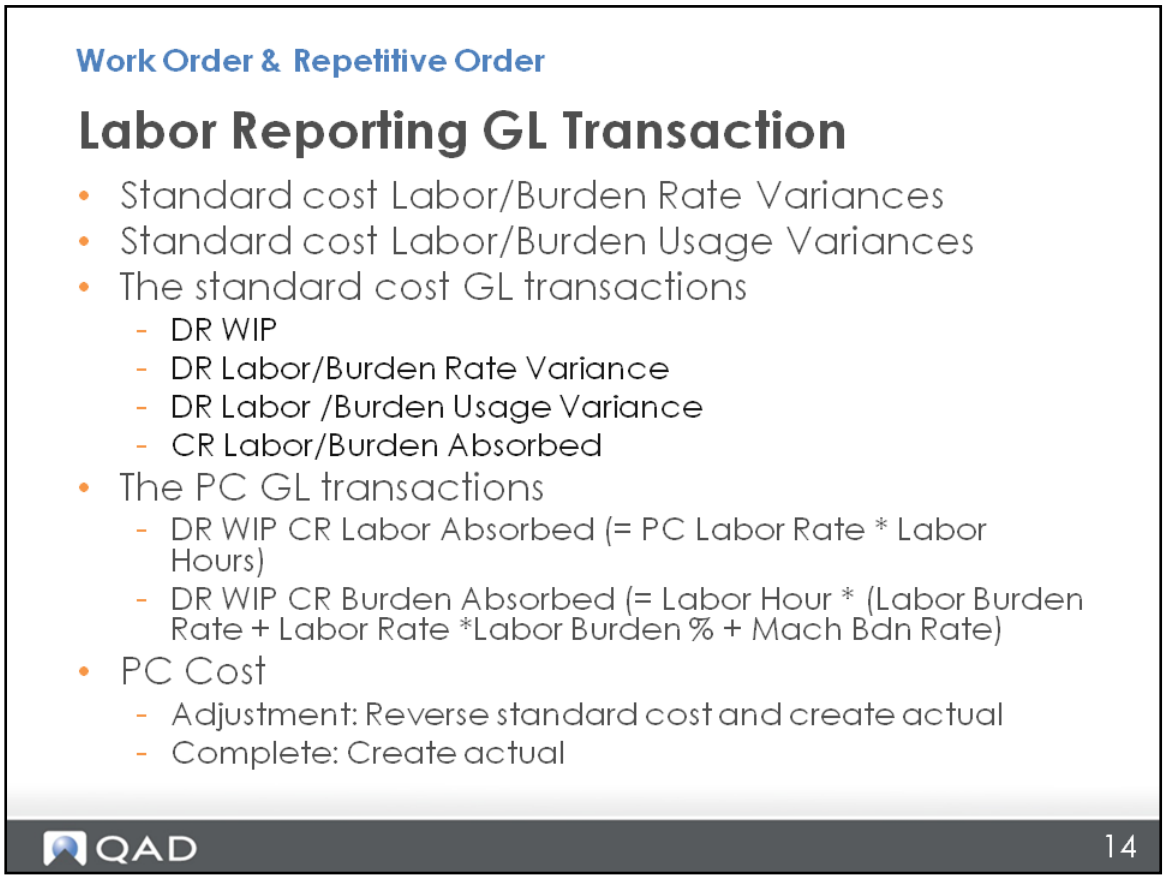
- Total labor/burden cost and process quantity till this period
- Process quantity this period

WIP Labor Cost Calculation



The system summarizes these WIP calculations by WO lot, WO operation, WO department, WO work center, and machine. The PCLABORT transaction type stores the summarized Periodic Costing calculated rates and the standard reversed costs. When only one operation history record exists for the WO lot, WO operation, WO department, or WO work center. Then, the system does not create a summarized record. The system adds the value as WIP for the work order.

Labor Reporting GL Transaction



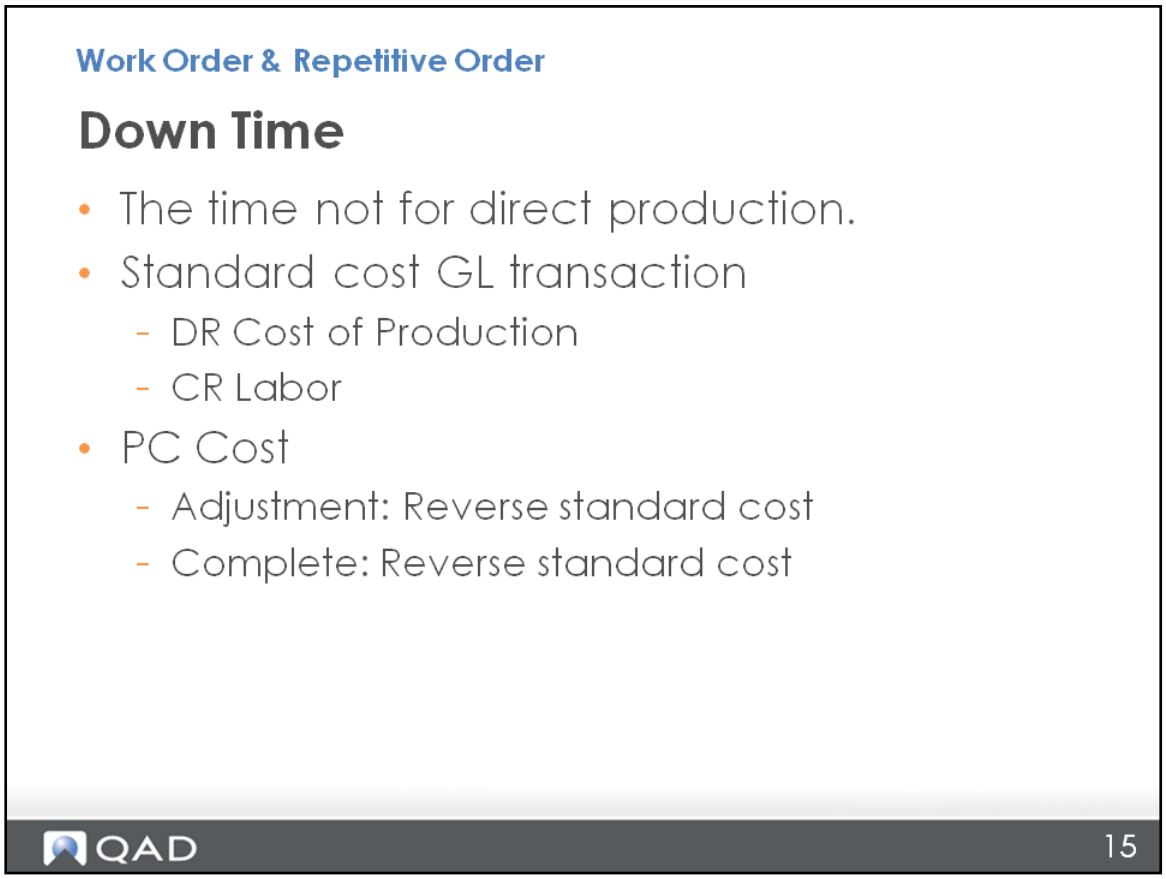
For work order, The standard cost Labor Rate Variances are posted if the employee pay rate does not match the standard pay rate at the work center where the work was reported. This is also applicable for repetitive when reporting labor using Backflush Transaction (18.22.13), Setup Labor Transaction (18.22.15), and Run Labor Transaction (18.22.14).

The standard cost Labor Usage Variances are posted when actual setup and/or run time differ from the time it should have taken to set up and/or make the number of units reported as complete. For work order, normally it is posted at the same time that labor is posted. Or it can be posted till Work Order Receipt (16.11) or Work Order Receipt Backflush (16.12) based on the setting. For repetitive, the usage variances are calculated and recorded upon Post Accumulated Usage Variances (18.22.9) or Cumulative Order Close (18.22.10).

The standard cost GL transactions:

- DR WIP
- DR Labor/Burden Rate Variance
- DR Labor /Burden Usage Variance
- CR Labor/Burden Absorbed

Down Time



Down time (or non-productive labor) is not related to a work order and has no effect on WIP or variances. It is posted as a miscellaneous Cost of Production, which attracts burden absorption. Transaction types DOWN and DOWN-TIME.

For work order, you can report the down time in Labor Feedback Work Order (16.20.1), Labor Feedback Employee (16.20.2), Labor Feedback

Work Center (16.20.3), and Operation Complete Transaction (16.20.5).

For repetitive, you can use Down Time Transaction (18.22.20) to register labor spent due to nonproductive activities associated with a manufacturing operation.

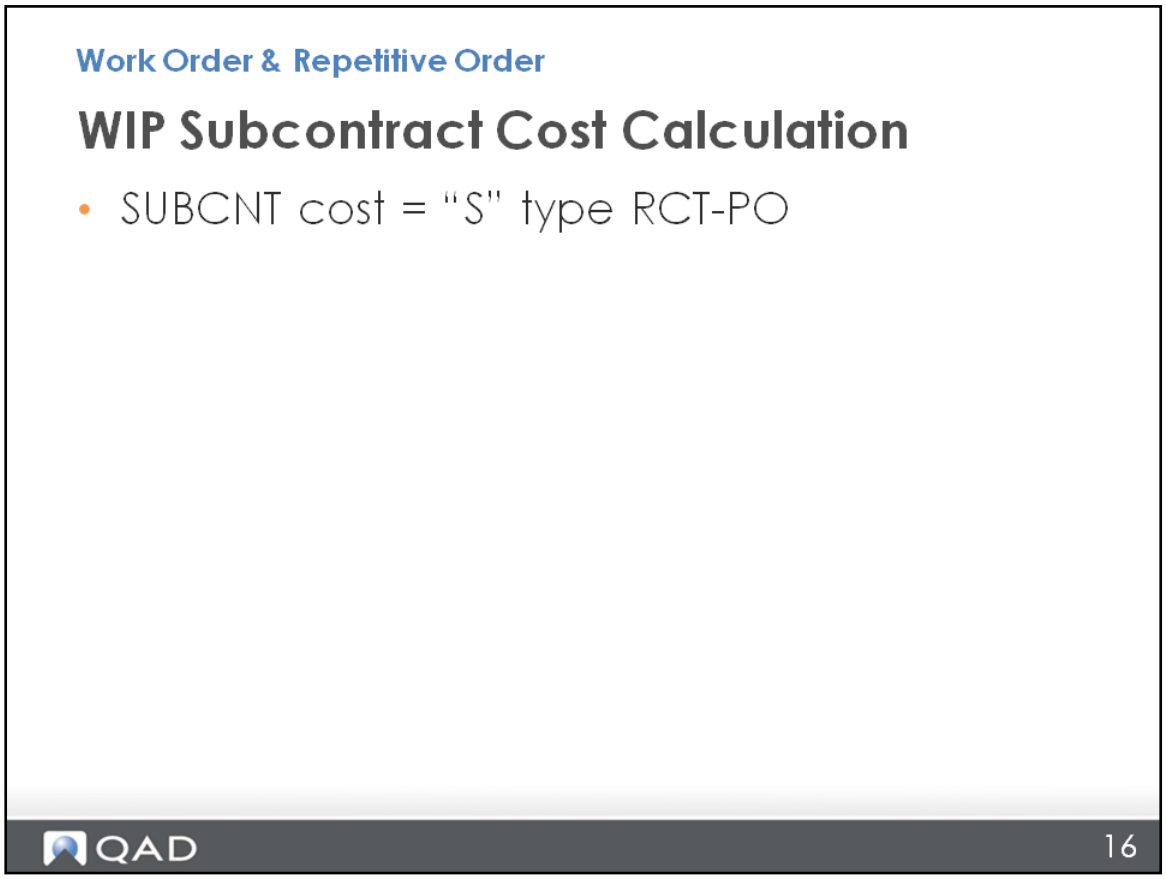
Standard cost GL transaction

DR Cost of Production

CR Labor

For the down time, Periodic costing reverses all down time transactions, but it ignores them during the remainder of the Periodic Costing calculation.

WIP Subcontract Cost Calculation

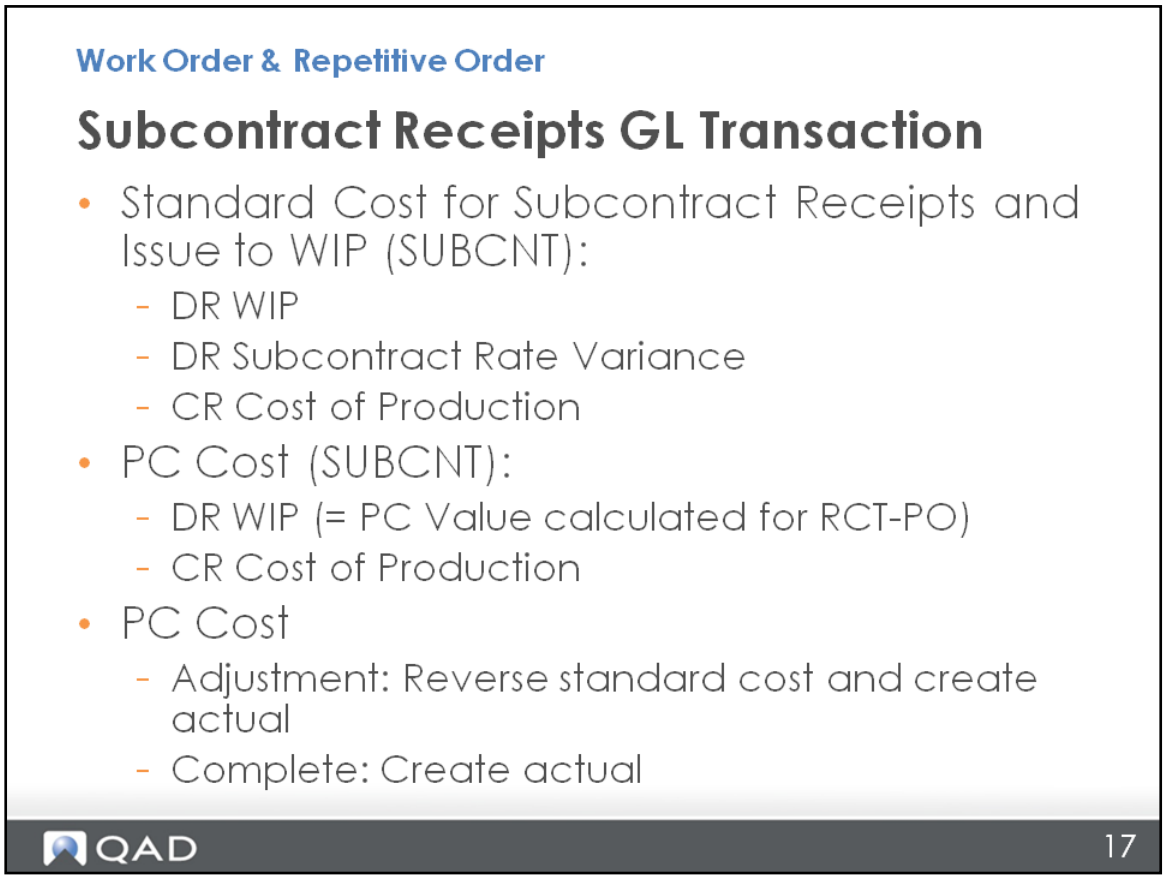


The materials are received on a purchase order and the actual cost accrued (credit PO Receipts). Because the PO is marked as Subcontract, the cost is posted to Cost of Production

(debit). If the purchase order receipt transaction specifies a valid work order and operation, then this transaction is processed to issue the materials to WIP.

The Periodic Costing value of the WO subcontract costs are tracked on the operation history transactions (SUBCNT). The system calculates the value for the SUBCNT operation history transaction by retrieving the actual subcontract costs from the purchase order receipt transactions (RCT-PO).

Subcontract Receipts GL Transaction



The actual cost is taken out of the Cost of Production account (credit) and put into WIP (debit) where it belongs.

Then the actual cost on the PO is compared to the standard (frozen) subcontract cost specified on the work order routing. If there is a difference, it is posted as a Subcontract Rate Variance.

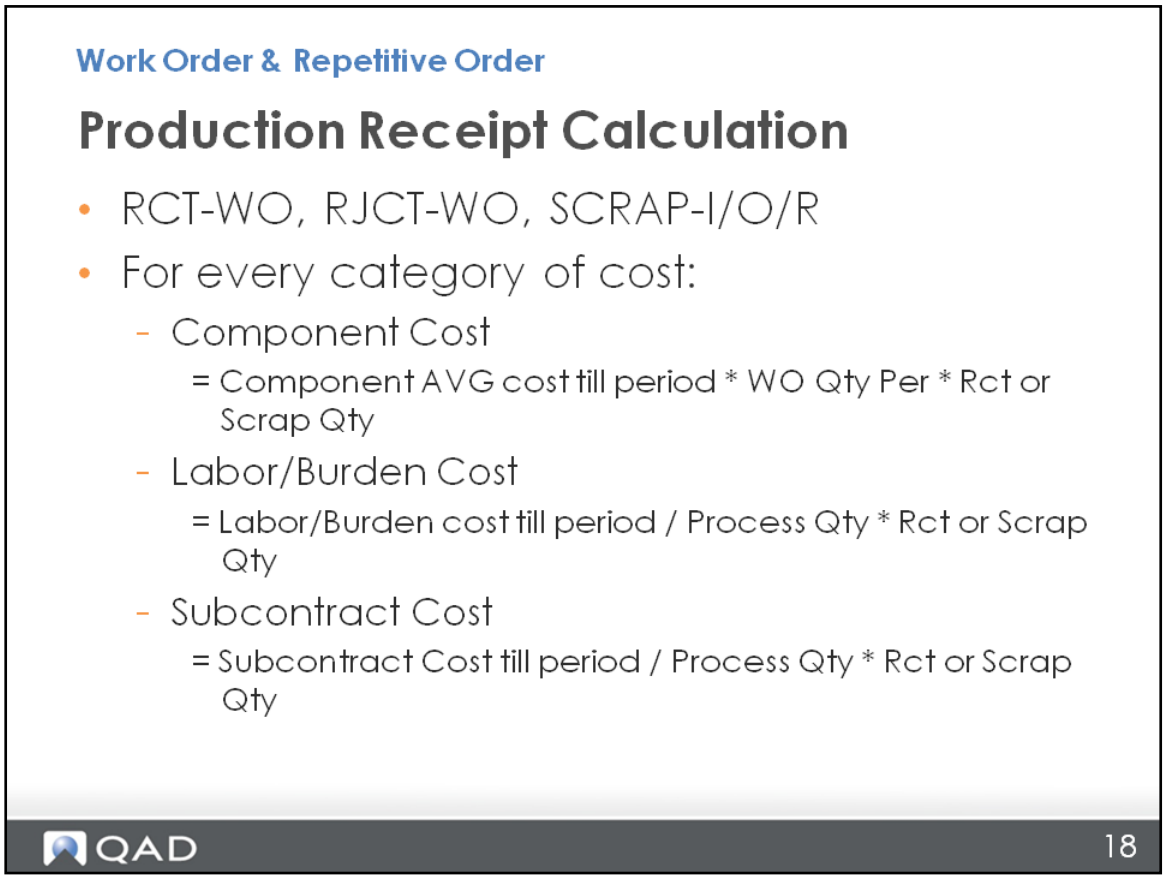
The amount is (Subcontract PO Unit Rate - Subcontract Frozen WO BOM Unit Cost) * Qty Received

Upon work order receipt, the total standard cost less overhead is subtracted from WIP and posted to inventory.

Upon Work Order Accounting Close:

- All Material and Subcontract Usage Variances are subtracted from WIP and posted to work order usage variance
- Any cost remaining in WIP is posted to work order Method Change Variance

Production Receipt Calculation



Once items have passed through all of the manufacturing operations, the finished units are received into stock. For work order, you use either Work Order Receipt (16.11) or Work Order Receipt Backflush (16.12) to do the receipts. For repetitive, you use Backflush Transaction (18.22.13) or Move Transaction (18.22.19) to move finished unit into stock from the last operation.

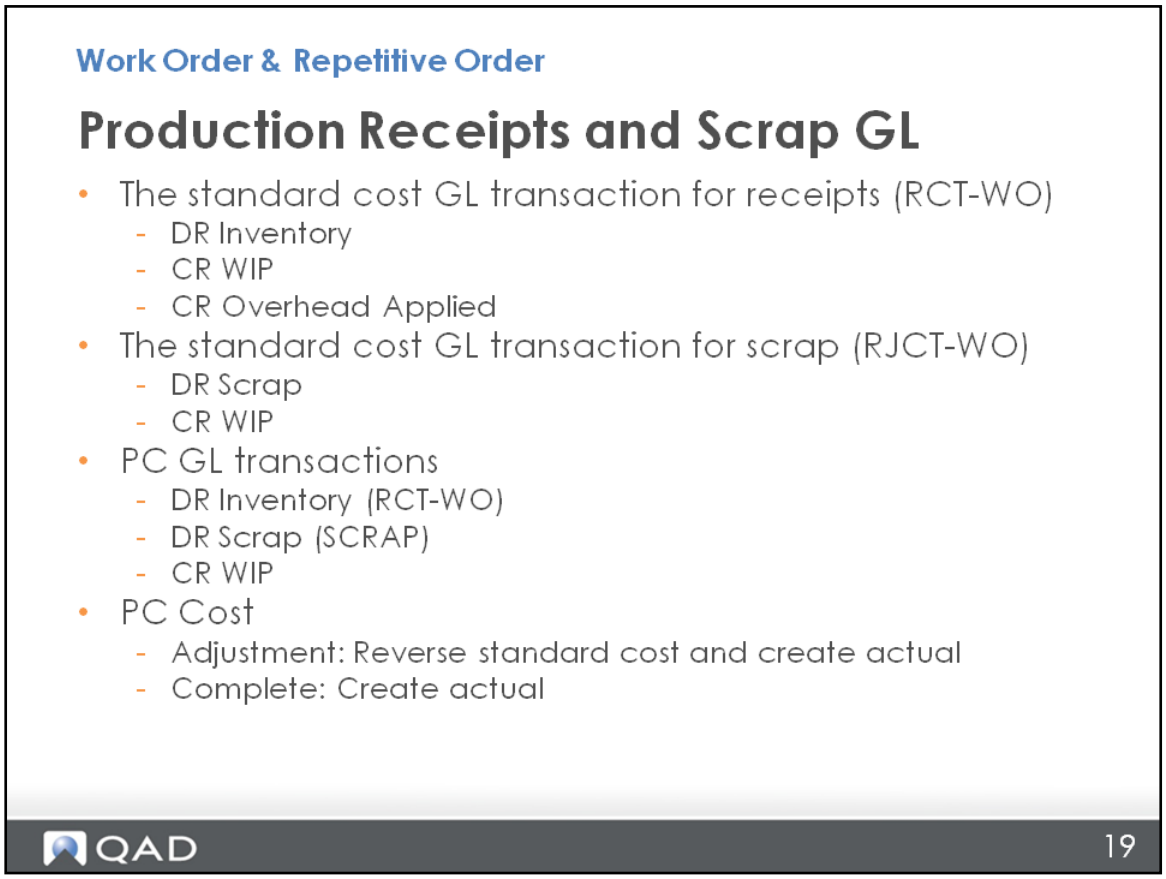
The RCT-WO and RCT-FAS transaction history transactions have the standard transactions reversed. The receipt quantity updates the inventory location for the current cost period.

The system calculates the value of a WO receipt by prorating the total value of each component and operation to give an approximate value of quantity received. Note that, during proration, the value of the cost calculated does not exceed the available WIP value.

Any scrap or rejected quantity cannot go into inventory; therefore, although the issued components and reported labor go into the WIP, the value of Rejected item is not applied to the finished good item but is recorded in the scrap account. For example, the total issued components cost is 100 and reported labor cost is 100. The total WIP is 200. If you processed 10 items but good item quantity is 8 and reject 2 items, the finished goods' PC unit cost is 20 (=(200 - 40)/8) and the rejected cost 40 will be written off to scrap account.

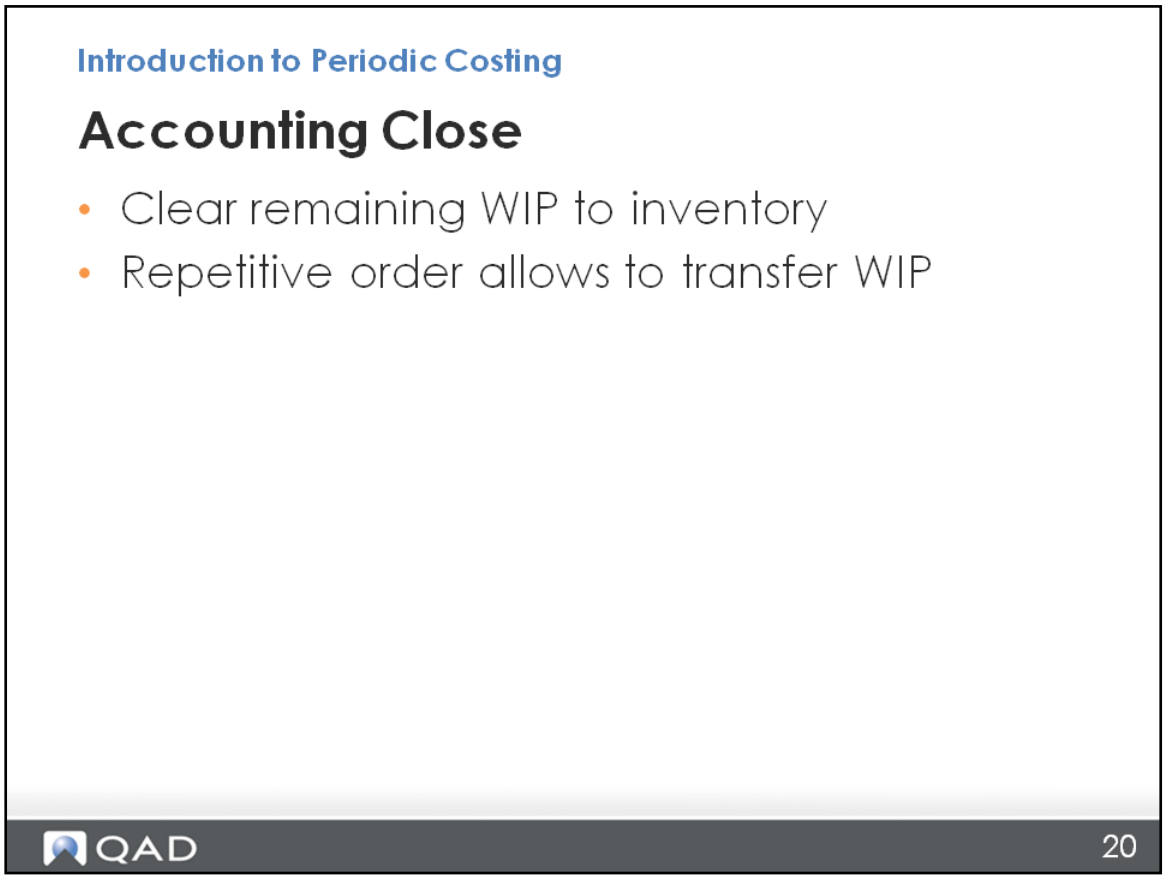
The system reverses the standard scrap values.

Production Receipts and Scrap GL



For work order, the quantity lost can be reported as Scrapped Qty in the Work Order Receipt function and written off to the scrap account. For repetitive, you can report scrap either in Backflush Transaction (18.22.13) or Scrap Transaction (18.22.18).

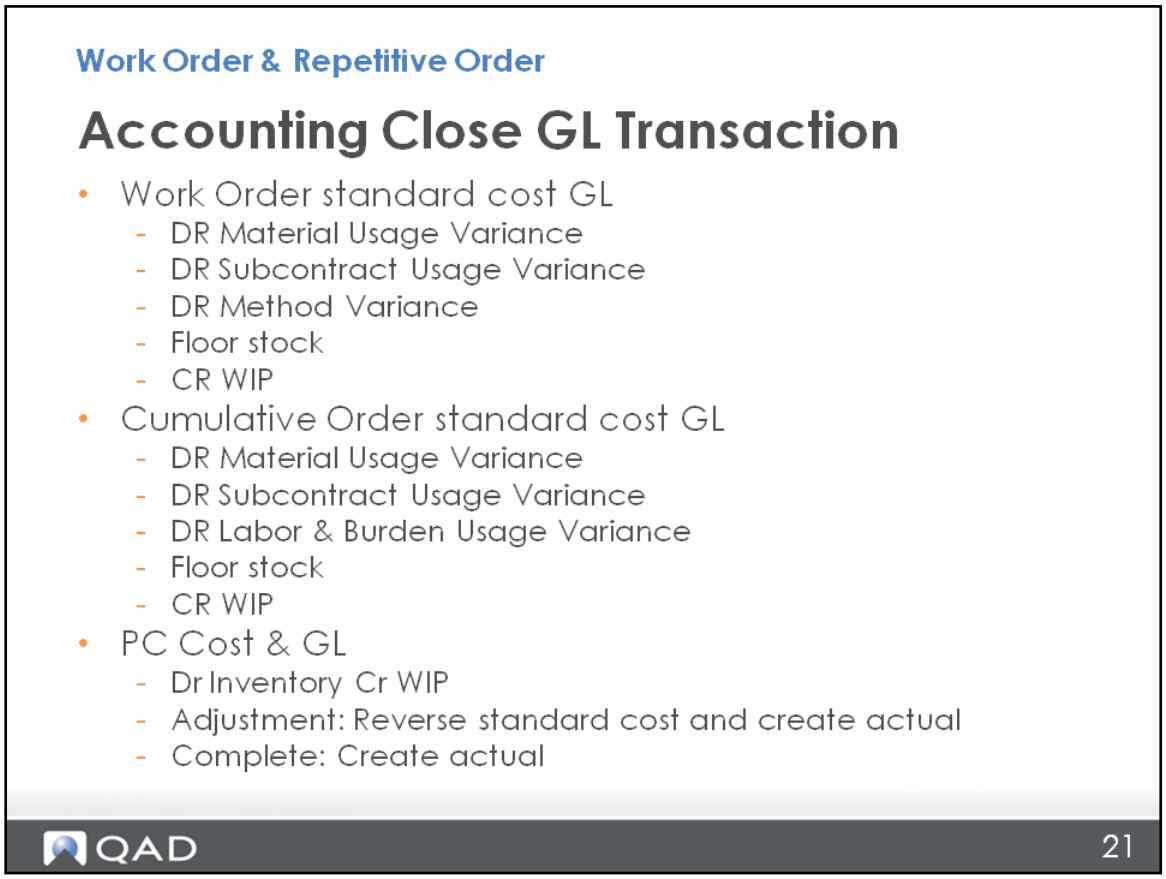
Accounting Close



Work Order Accounting Close (16.21) or Cumulative Order Close (18.22.10) is usually run at the end of each GL calendar period as part of the period-end closing process.

The system adds any remaining WIP balance (positive and negative) for the work order to the item receipt value. Note that the system checks to ensure that a negative WIP balance does not cause the item's cost to be negative. In this case, the system posts the amount that causes the cost to be negative to discrepancy.

Accounting Close GL Transaction



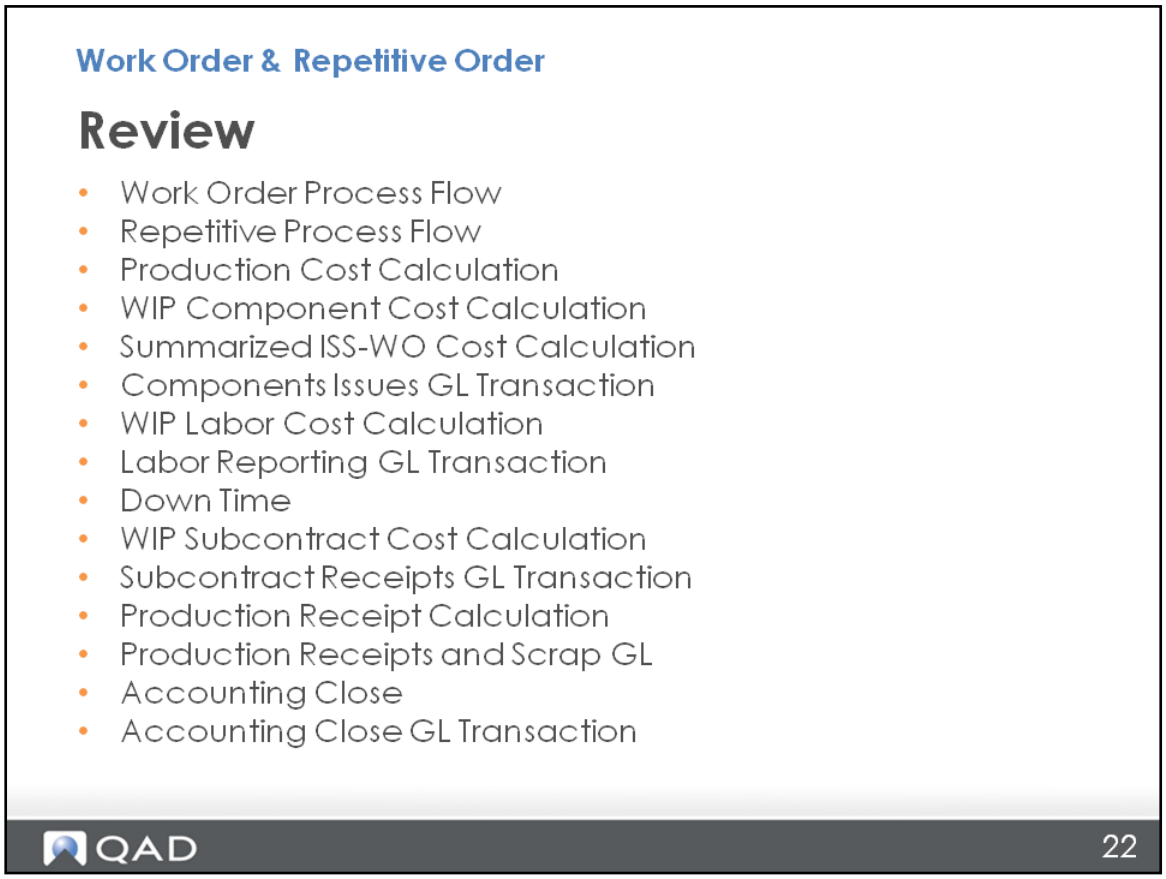
The work order accounting close serves several functions:

- Completes Open Operations
  Marks all operations complete. No more labor can be recorded against this work order. Any unreported operations are closed at standard. Adjusts quantities completed at open operations to match the total of completions plus rejects at Work Order Receipt.
- Posts Floor Stock
  Costs of components flagged as Issue Policy No are added to WIP before variances are calculated. Thus floor stock cost is not included in variance.
- Calculates Usage Variances
  Calculates material and subcontract usage variances. Total quantity issued is compared to total quantity required to make quantity reported complete (receipts plus rejects). Any difference is a usage variance.
- Clears Out WIP Balance
  Sets any remaining WIP balance to zero. Any amount left in WIP at this point is reported as a miscellaneous method variance that cannot be traced to any specific source (for example, material or labor, rate or usage). Method variances can result from the use of alternate bills and routings, different

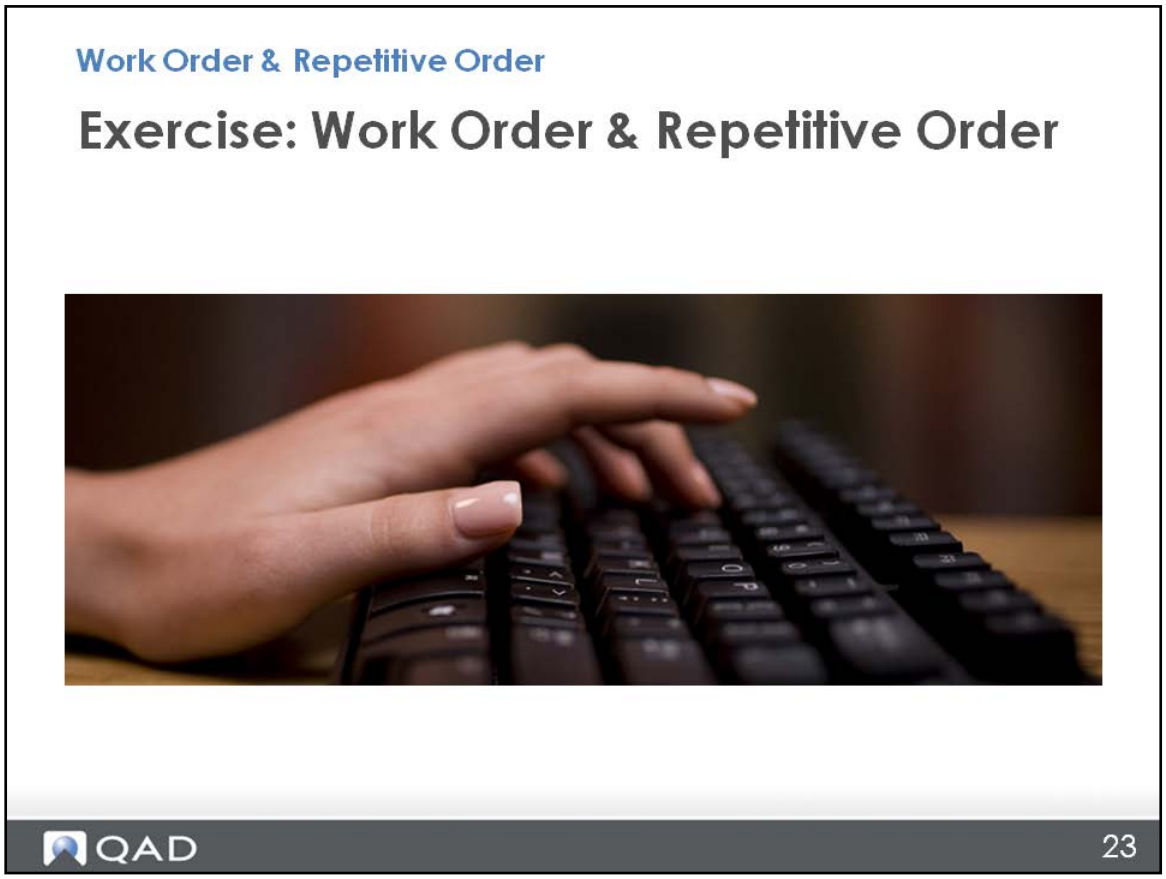
lot sizes, in-process loss, or changes in GL costs (without revaluing WIP). Because costs of component issues are tracked by operation, a method variance occurs if you issue components at an operation different than the one recorded in the bill.

Cumulative Order Close (18.22.10) creates the same GL transactions as the Work Order Accounting Close. Cumulative Order Close (18.22.10) also creates GL entries for usage and method variances accumulated.

Review


Work Order & Repetitive Order
Review
Work Order Process Flow
Repetitive Process Flow
Production Cost Calculation
WIP Component Cost Calculation
Summarized ISS-WO Cost Calculation
Components Issues GL Transaction
WIP Labor Cost Calculation
Labor Reporting GL Transaction
Down Time
WIP Subcontract Cost Calculation
Subcontract Receipts GL Transaction
Production Receipt Calculation
Production Receipts and Scrap GL
Accounting Close
Accounting Close GL Transaction
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Exercise: Work Order & Repetitive Order

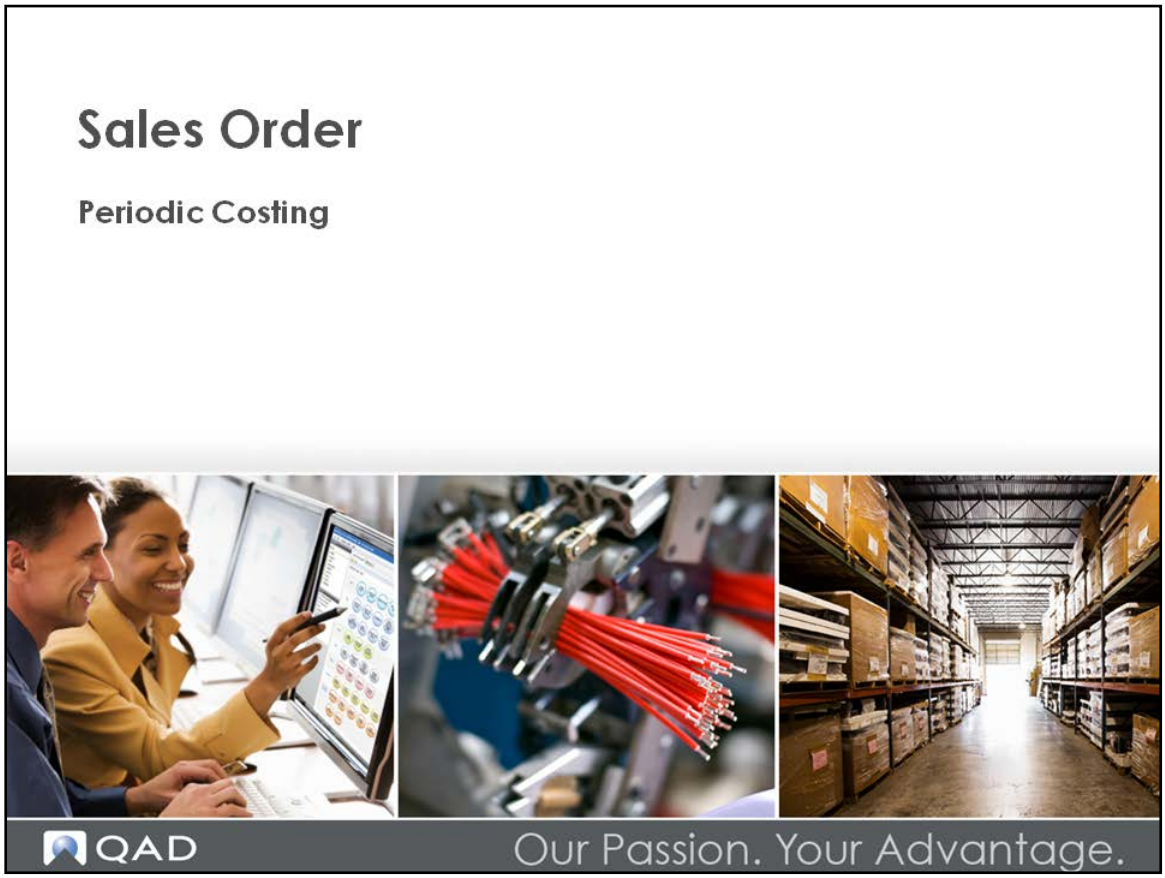


Finish the corresponding exercise at the end of this training guide.

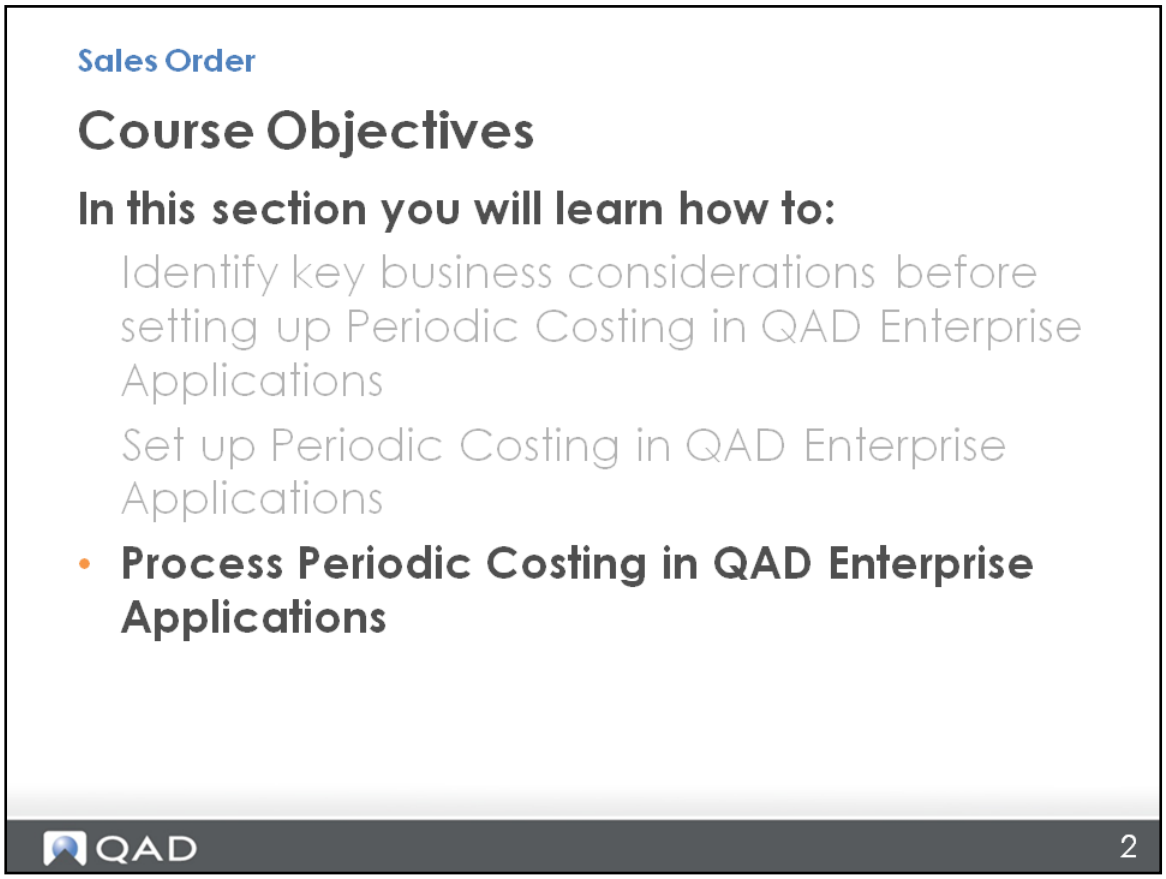
CHAPTER 9

Sales Order

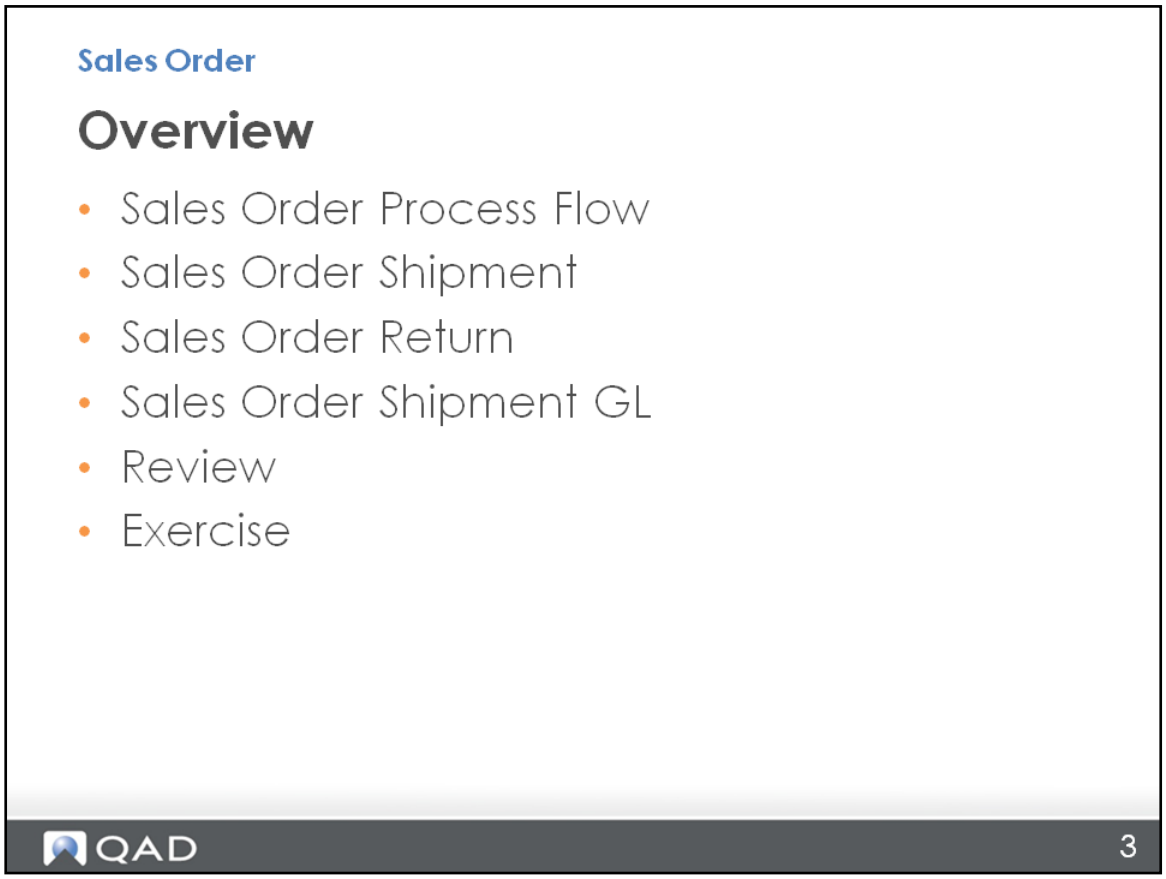
Sales Order


Sales Order
Periodic Costing
QAD
Our Passion. Your Advantage.

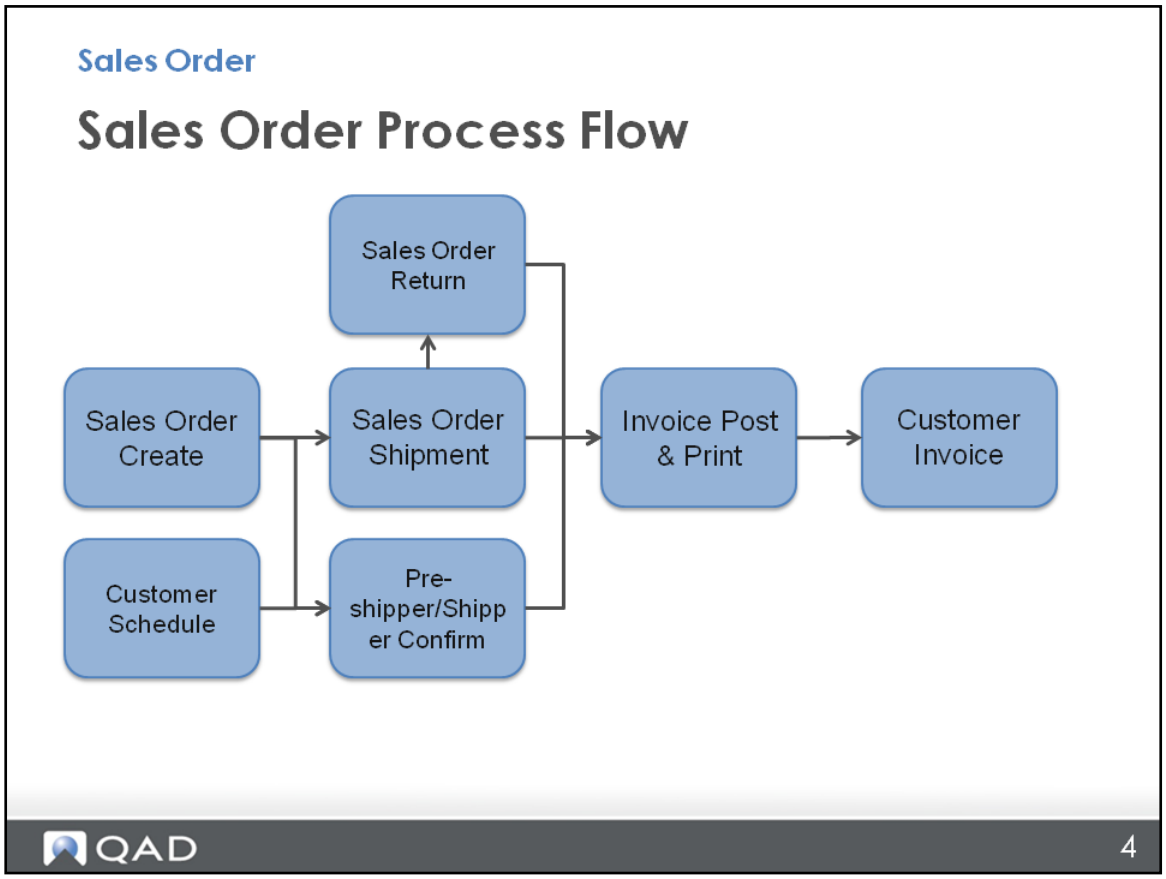
Course Objectives



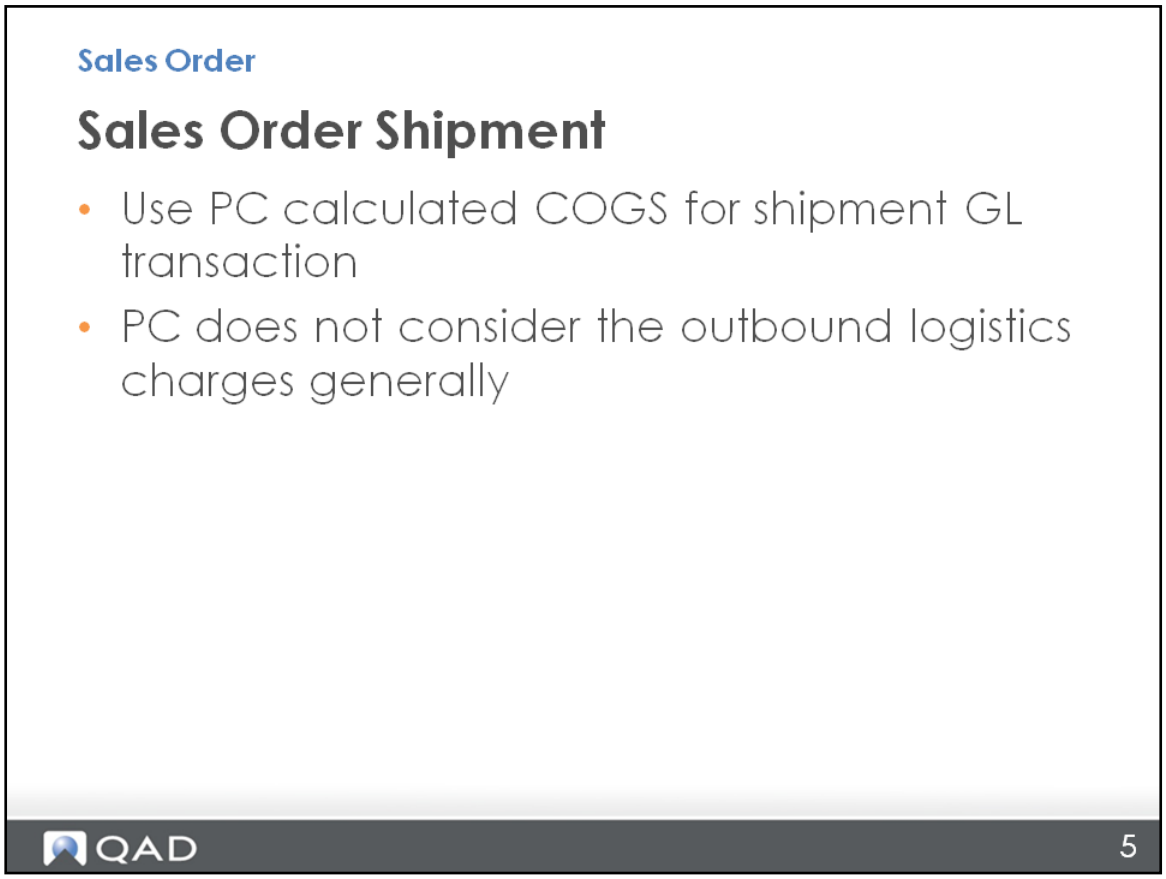
Overview


Sales Order
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Sales Order Process Flow
Sales Order Shipment
Sales Order Return
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Sales Order Process Flow

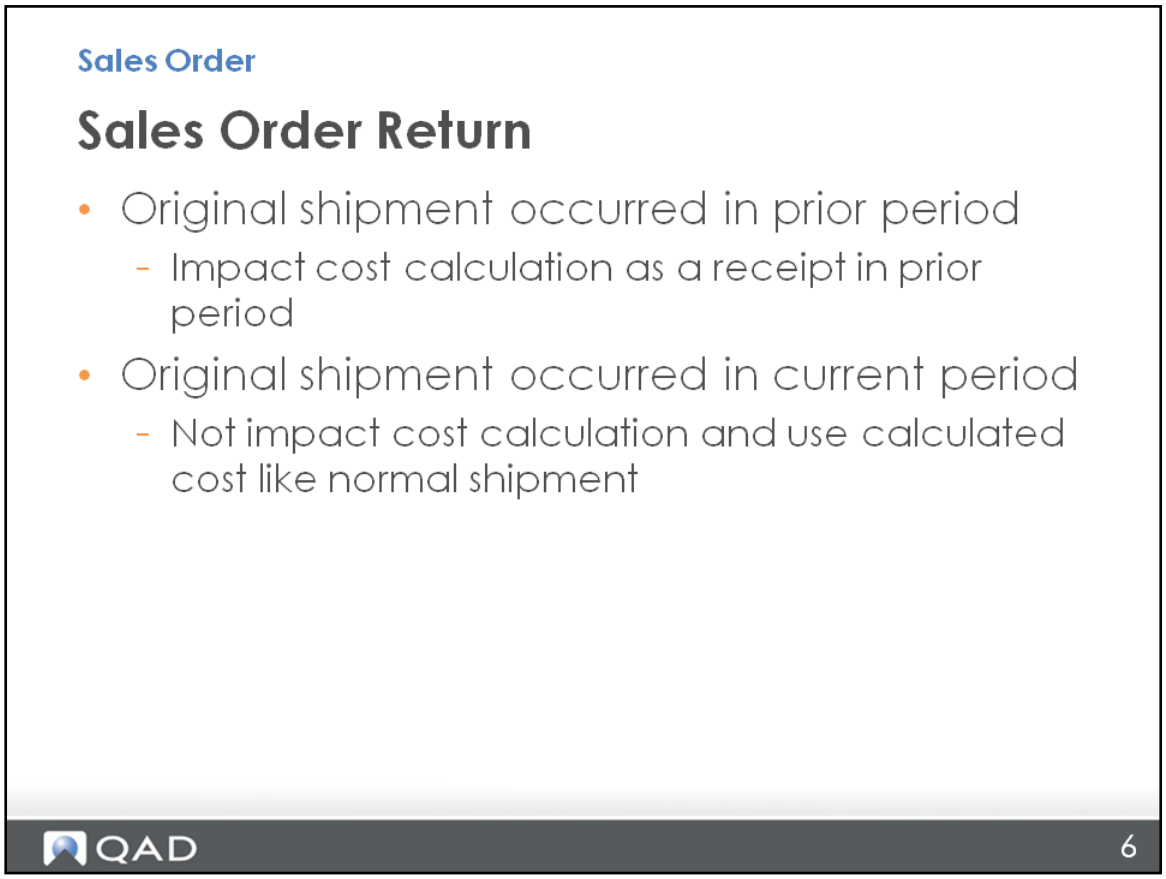


Sales Order Shipment



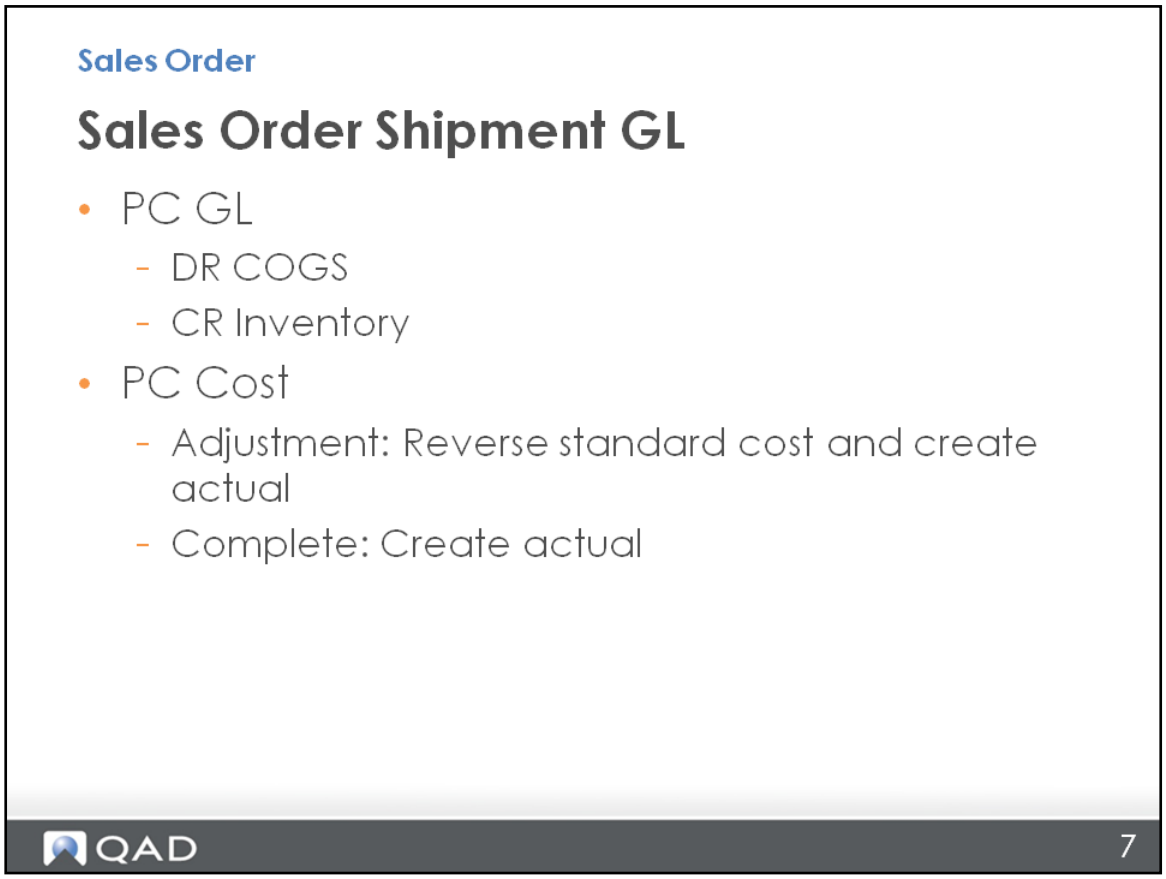
Sales order shipment transaction includes Sales Order Shipment (7.9.15) and Pre-shipper/Shipper Confirm (7.9.5).

Sales Order Return

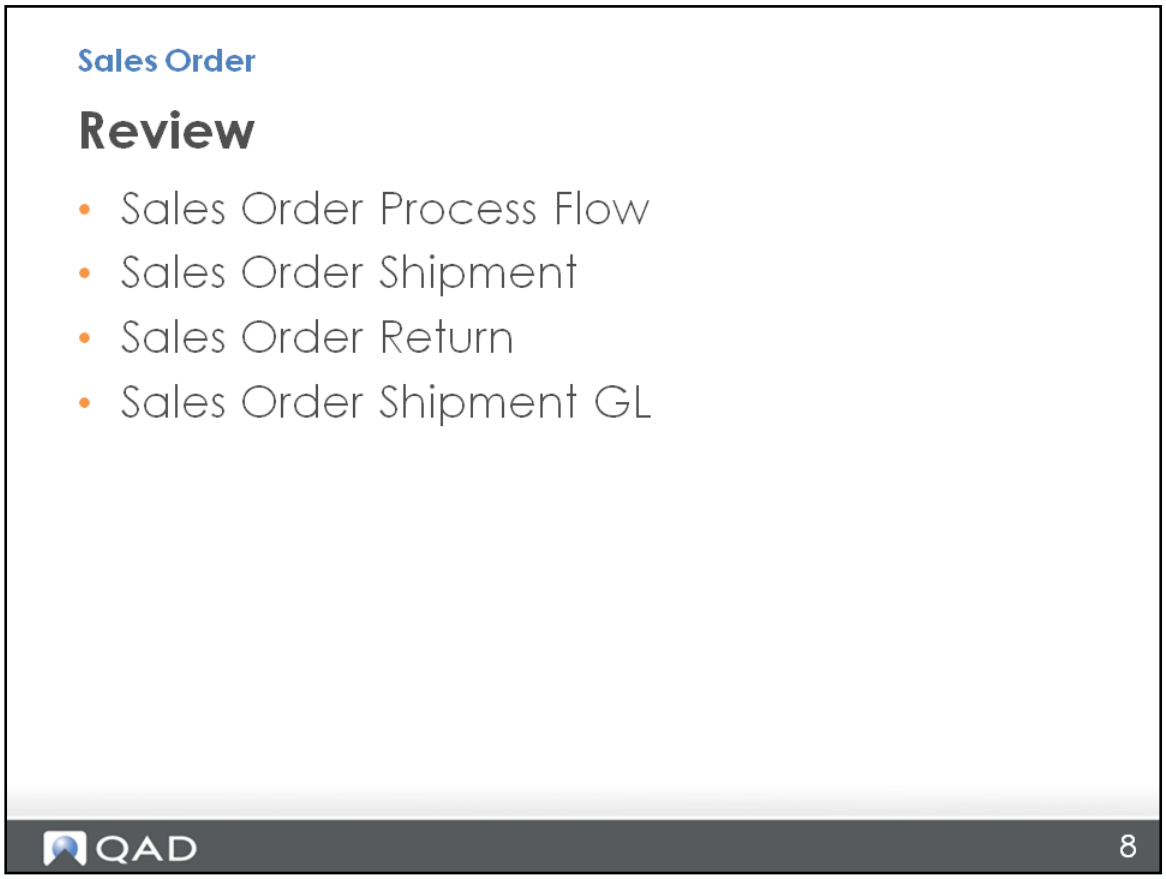


Sales order returns can be the receipts when the original SO shipment (ISS-SO) transaction occurred in the prior cost calculation period. The system then values the SO return at the prior period and it affects the unit cost calculation. When the corresponding ISS-SO transaction occurs in the current cost calculation period, the system considers it as normal shipment and uses the cost of the current period.

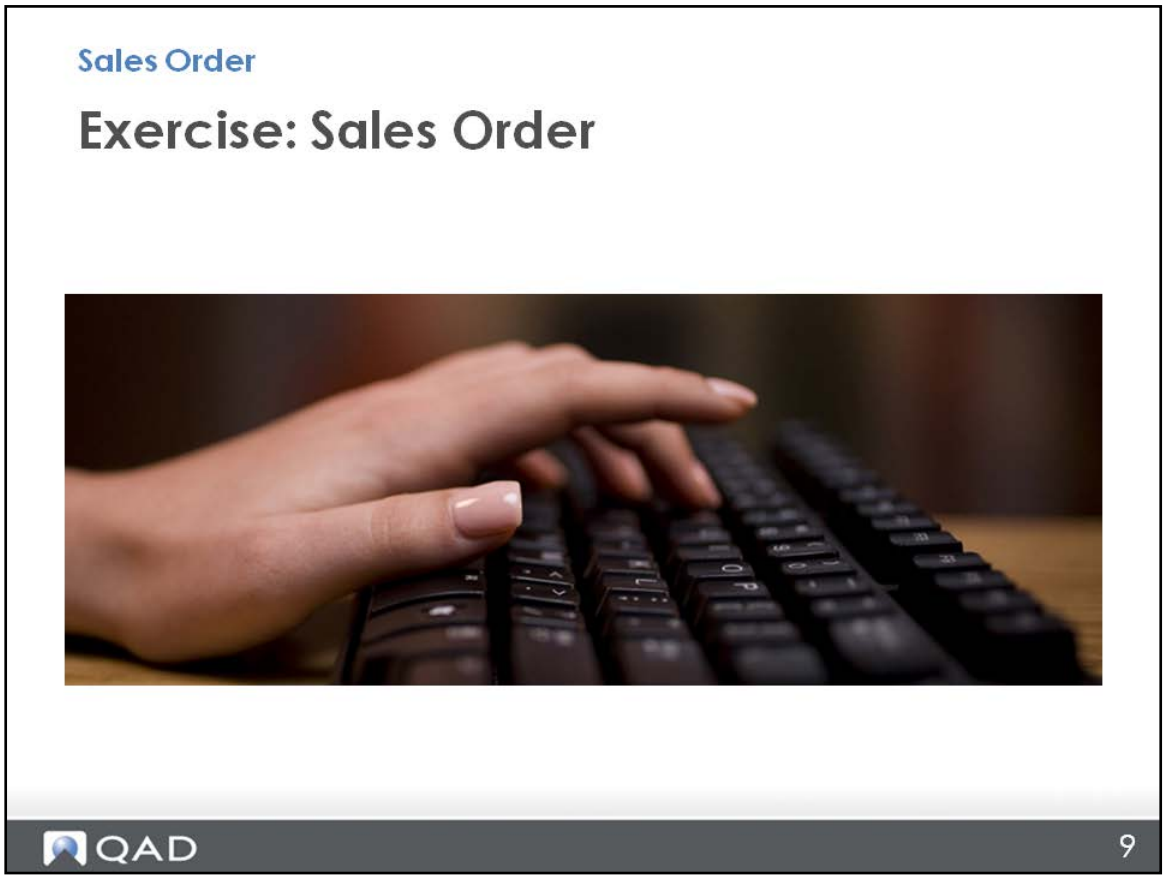
Sales Order Shipment GL



Review


Sales Order
Review
Sales Order Process Flow
Sales Order Shipment
Sales Order Return
Sales Order Shipment GL
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Exercise: Sales Order



Finish the corresponding exercise at the end of this training guide.

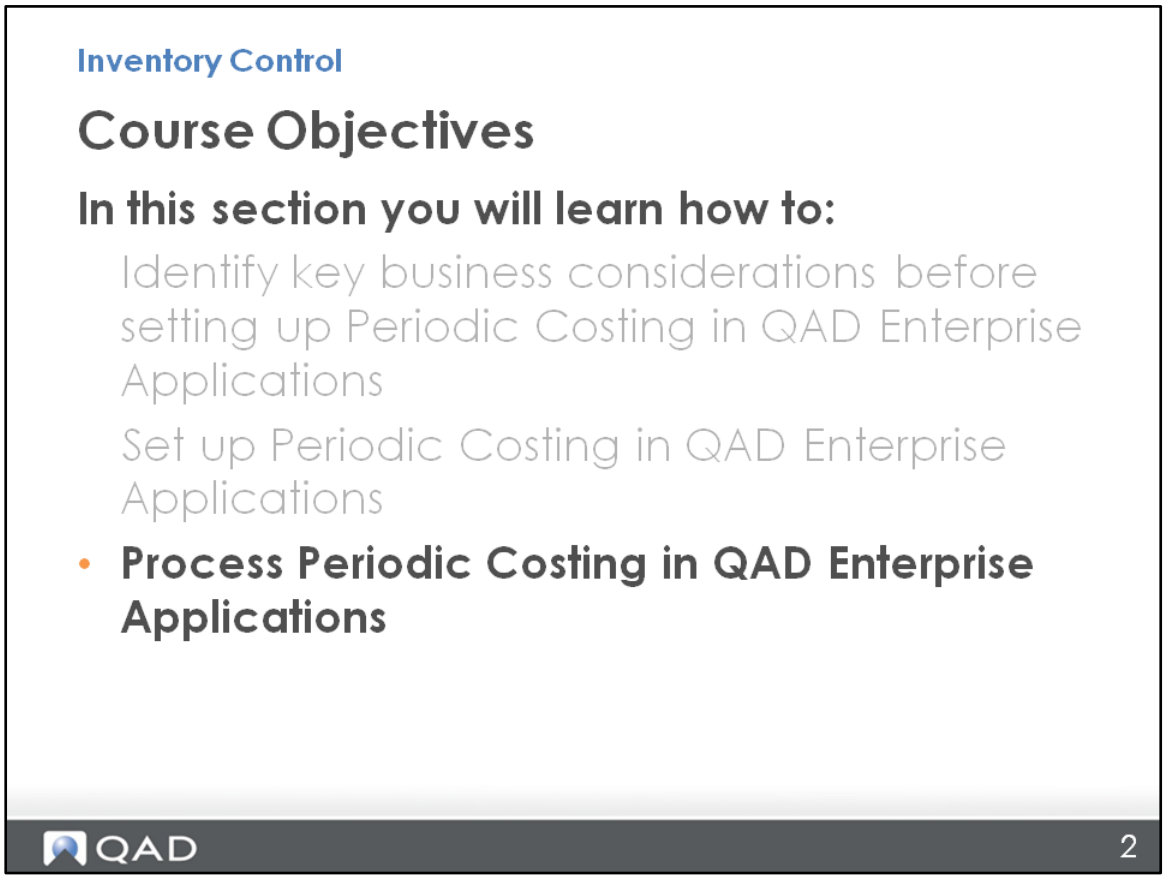
CHAPTER 10

Inventory Control

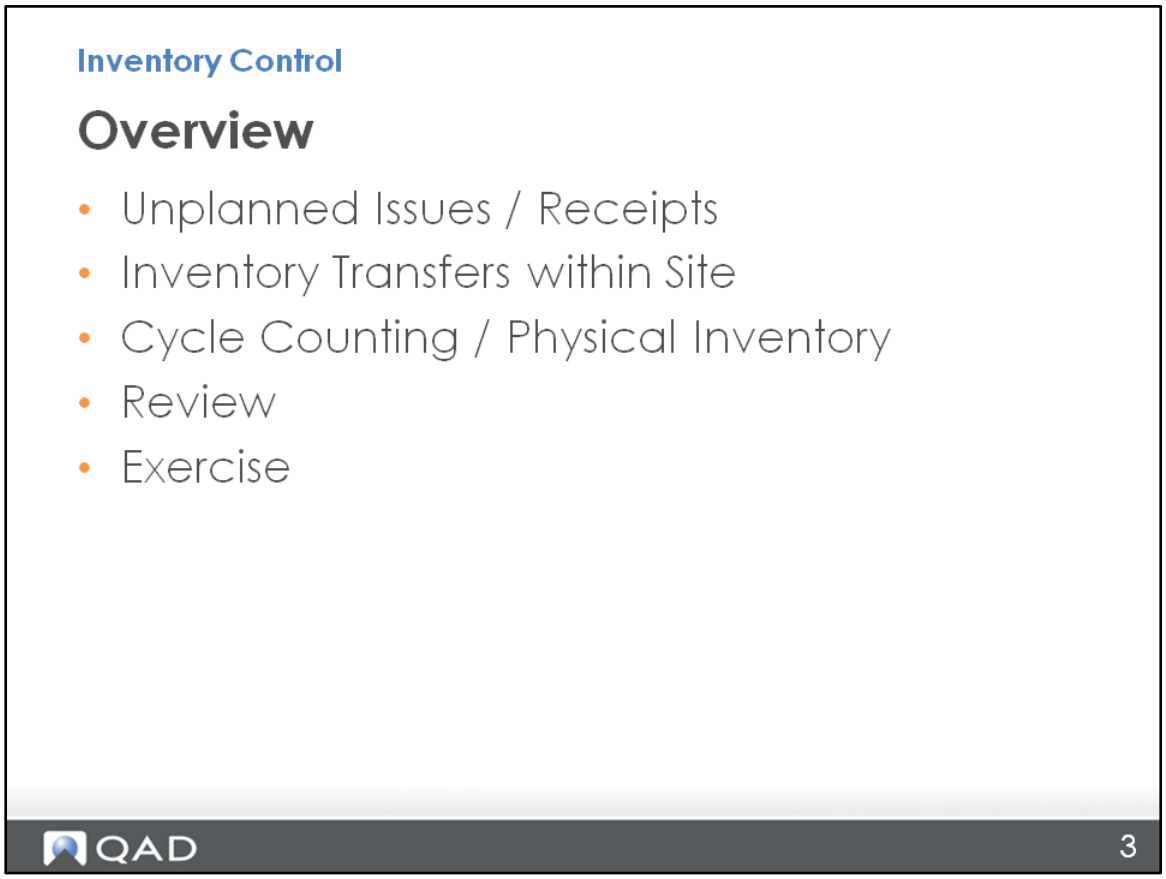
Inventory Control



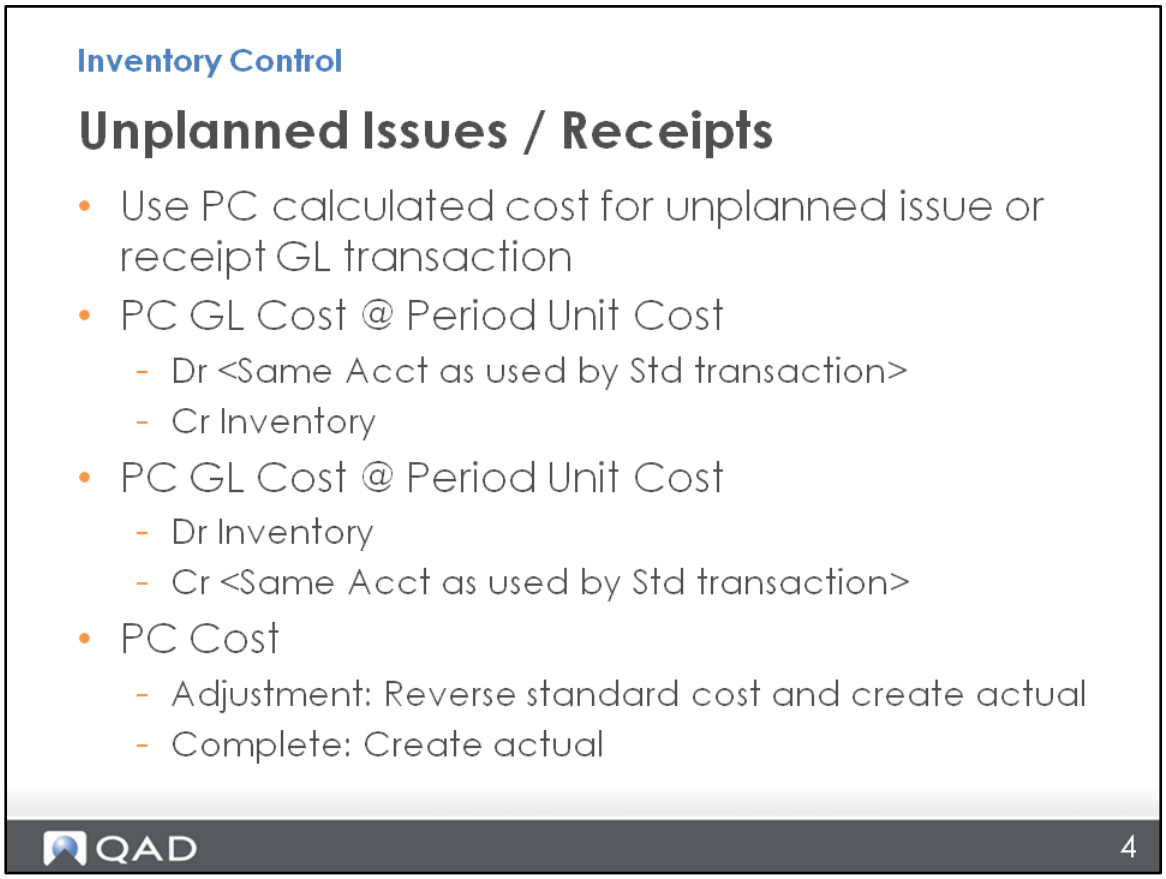
Course Objectives



Overview

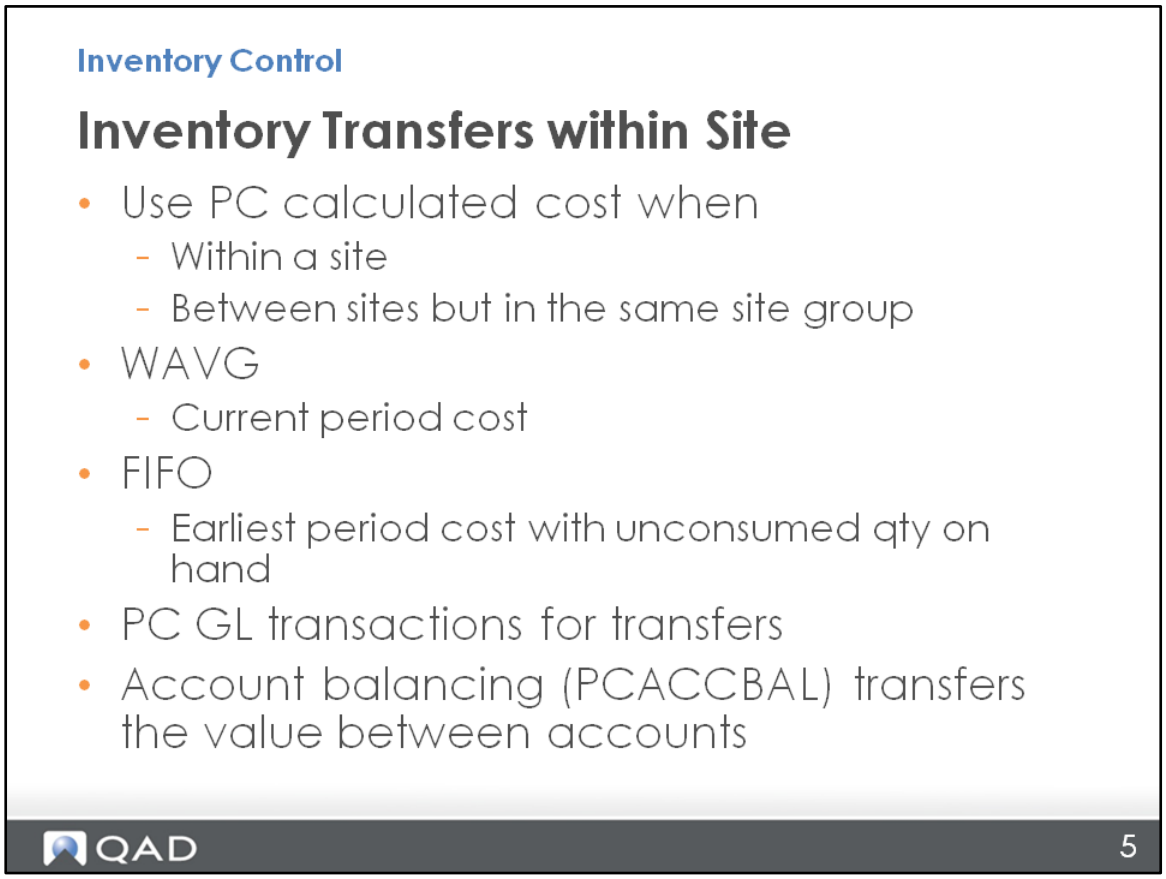

Inventory Control
Overview
Unplanned Issues / Receipts
Inventory Transfers within Site
Cycle Counting / Physical Inventory
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Unplanned Issues / Receipts



Unplanned issue and receipts transaction include Issue - Unplanned (3.7). Receipts - Unplanned (3.9) does not affect PC cost calculation. They use the PC calculated cost for the inventory GL transaction.

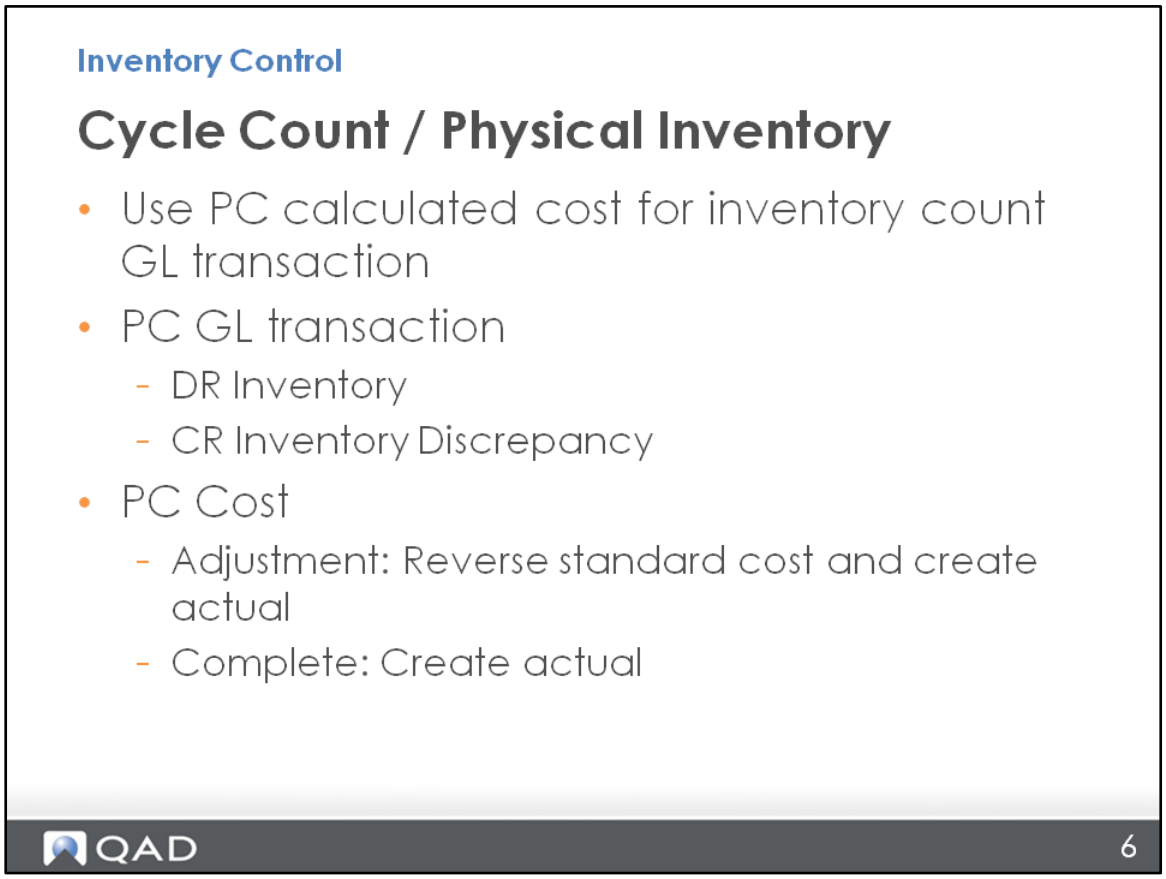
Inventory Transfers within Site



The system processes inventory transfers within a site and between sites in the same site group (intersite transfers). The cost used during calculation is the item unit cost (WAVG) of the current period or the cost of the period where the unconsumed quantity comes from (FIFO).

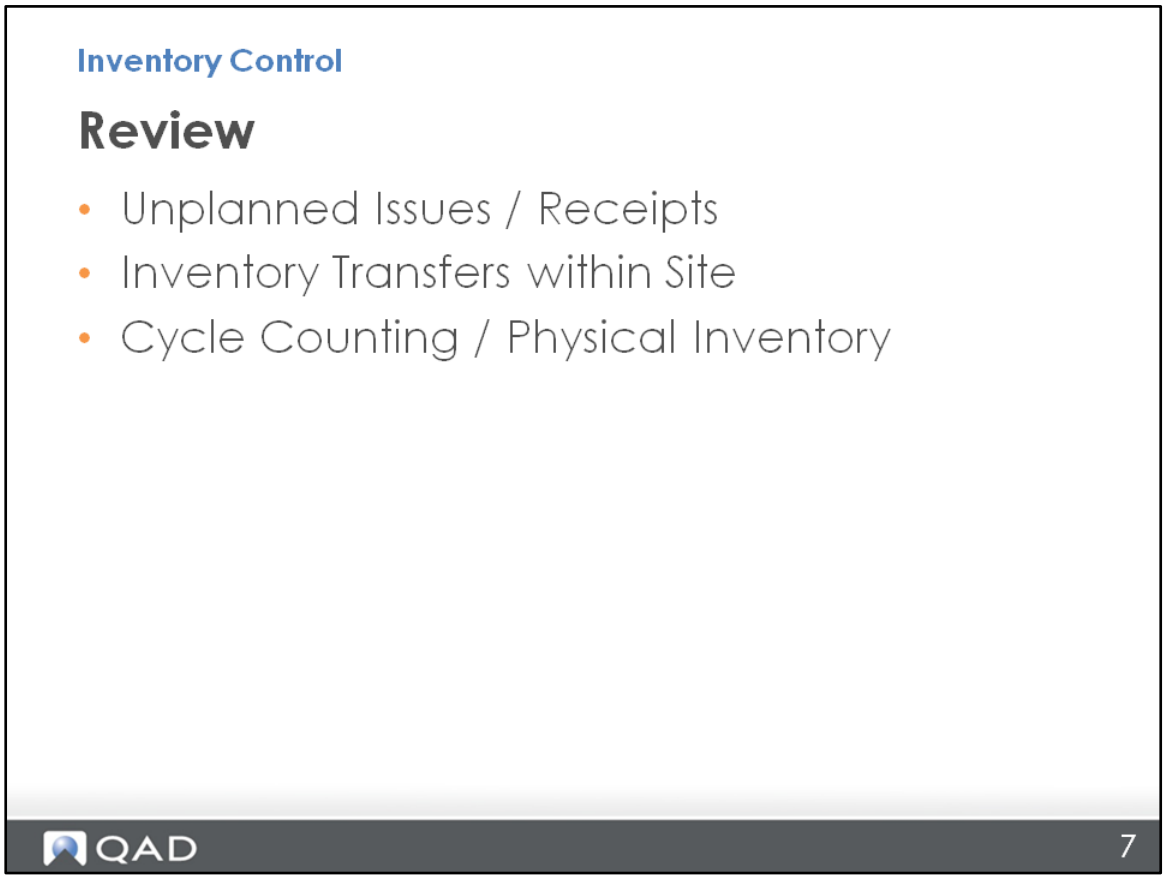
The system does not create any GL transactions for these inventory transfers transactions. The account balancing (PCACCBAL) transaction handles any value transfers between accounts.

Cycle Count / Physical Inventory

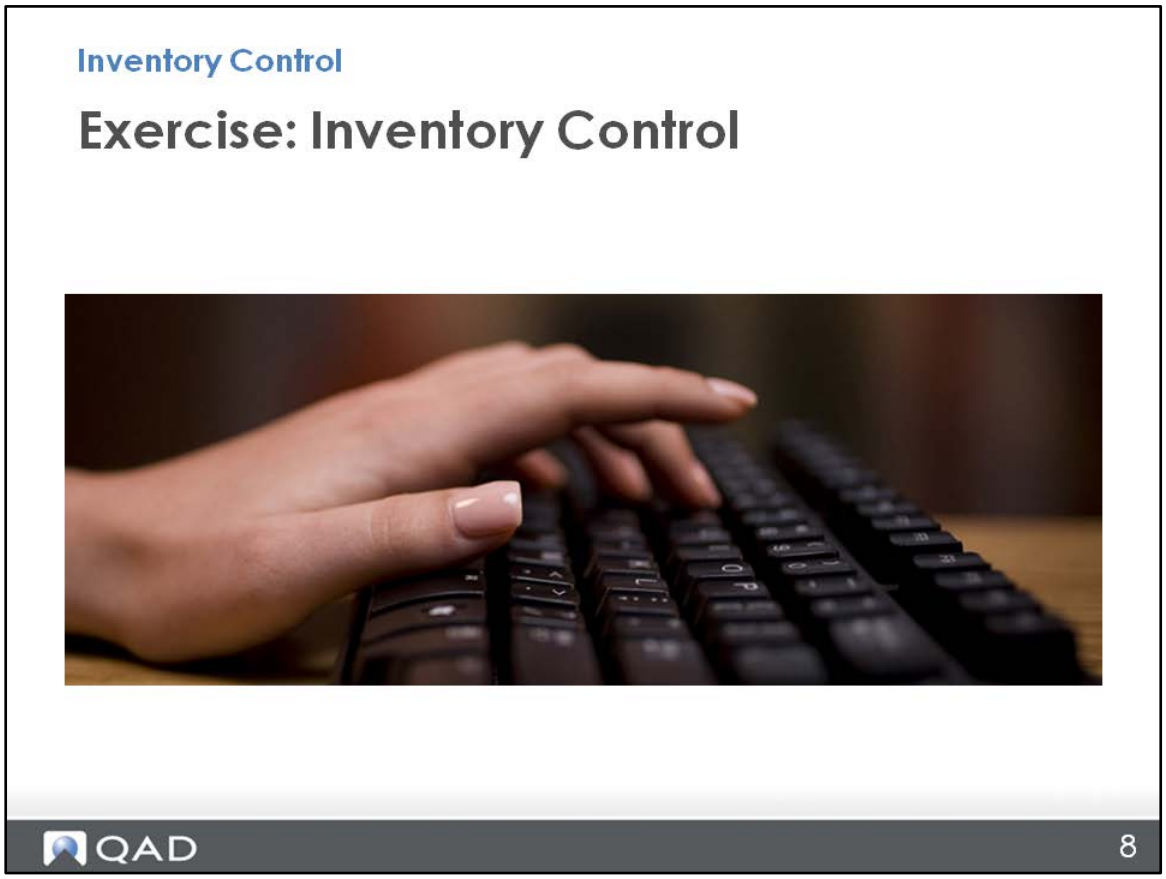


Cycle Count or Physical Inventory do not influence PC cost calculation. They use the PC-calculated cost for the inventory GL transaction.

Review


Inventory Control
Review
Unplanned Issues / Receipts
Inventory Transfers within Site
Cycle Counting / Physical Inventory
QAD
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Exercise: Inventory Control

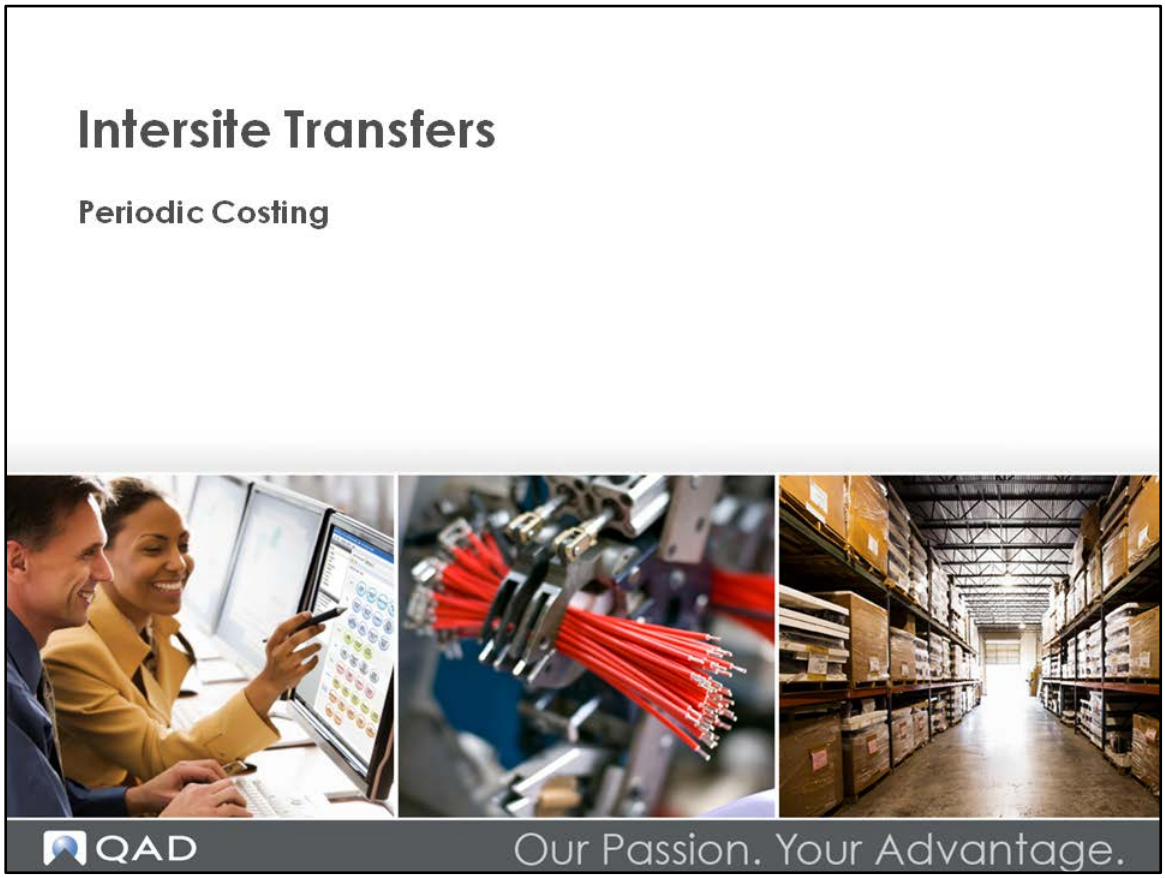


Finish the corresponding exercise at the end of this training guide.

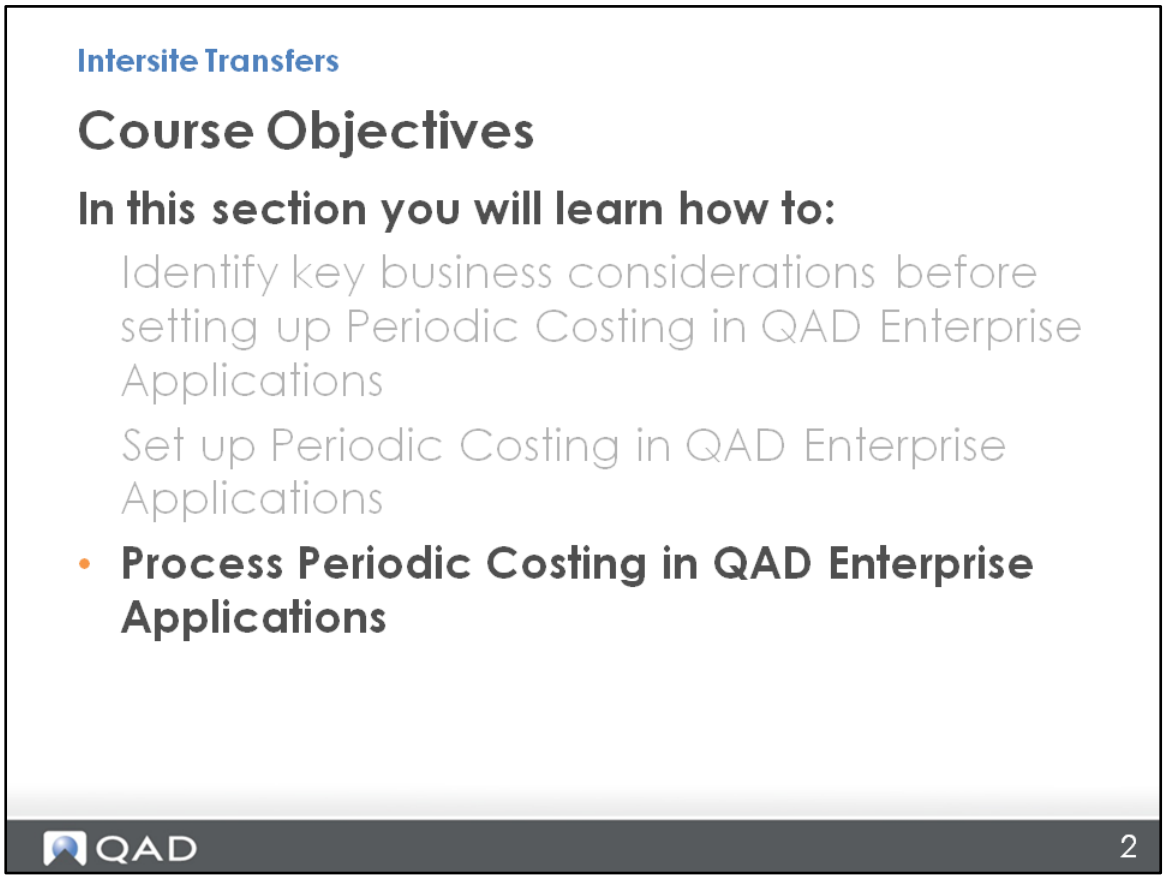
CHAPTER 11

Intersite Transfers

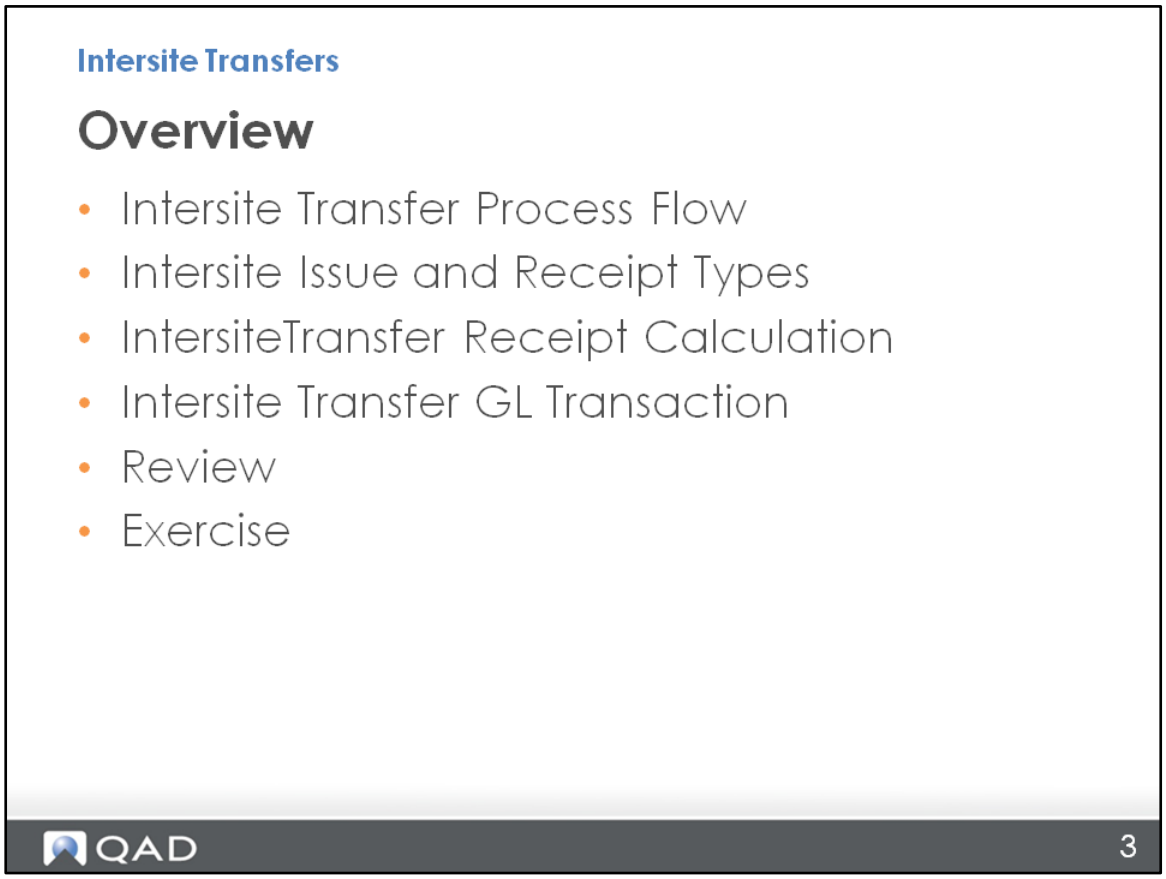
Intersite Transfers



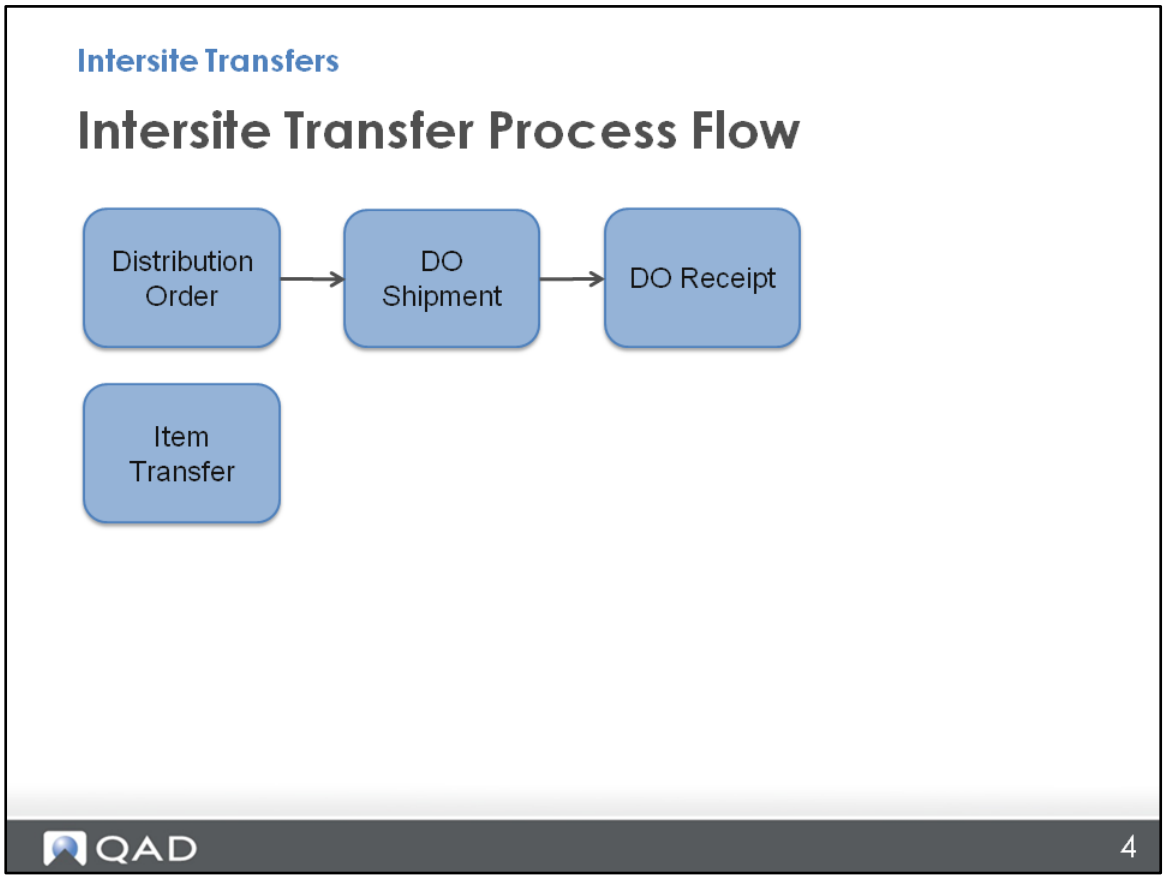
Course Objectives



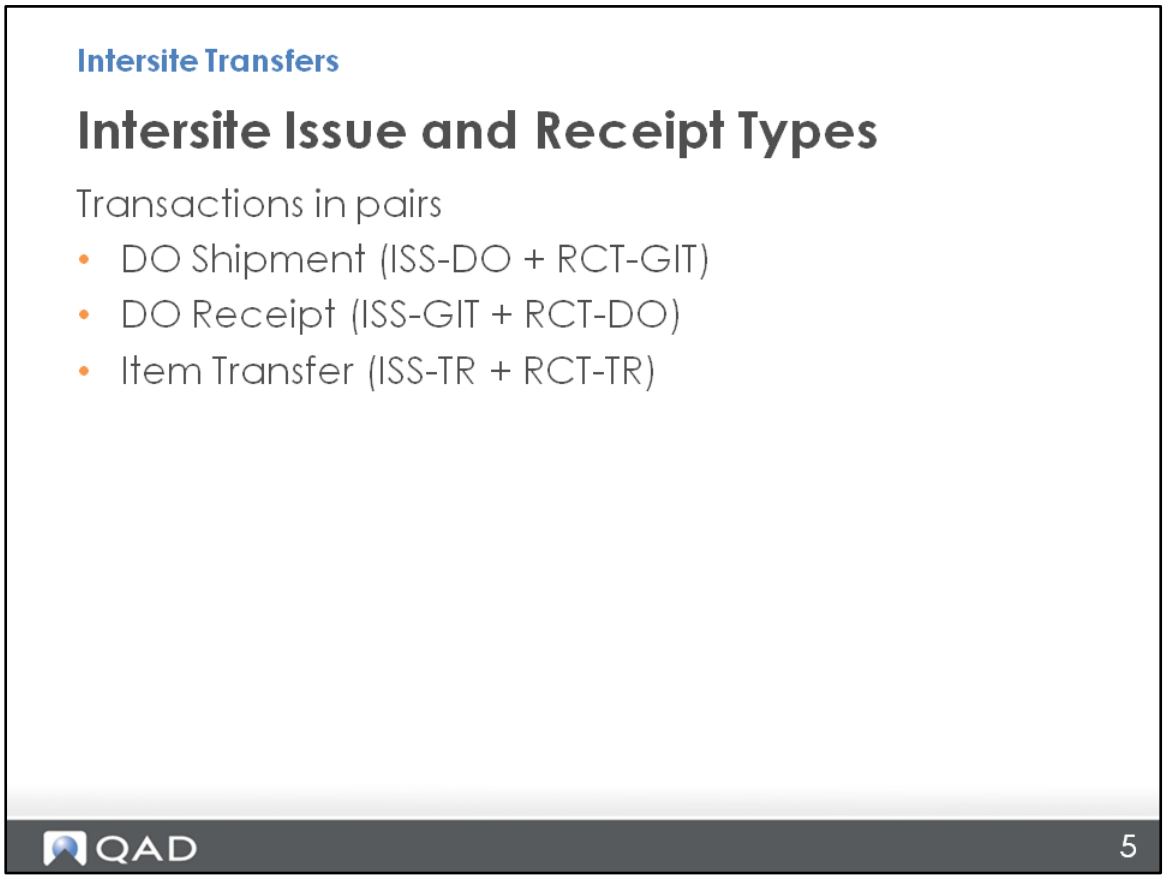
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Intersite Transfer Process Flow

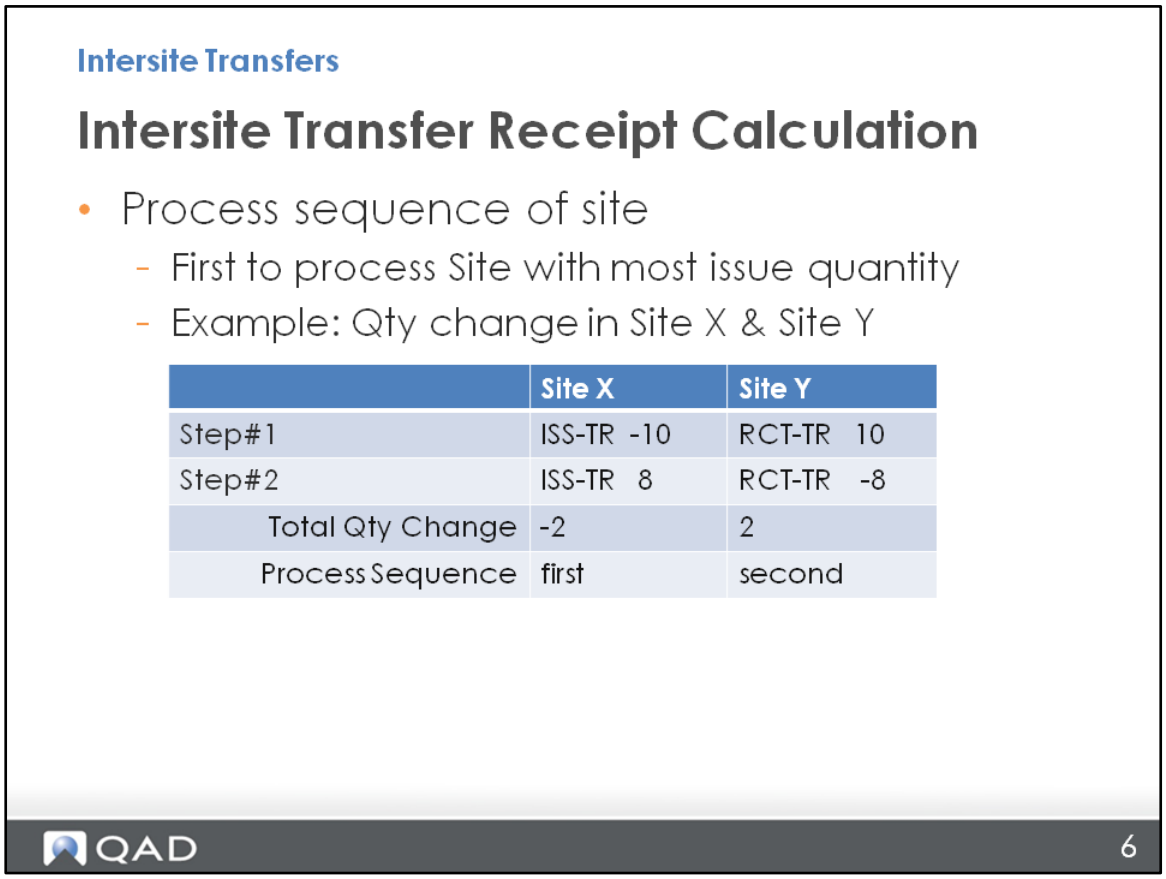


Intersite Issue and Receipt Types



Only one of the DO Shipment and the DO Receipt can be an Intersite Transfer, the other one is an Intrasite transfer. It depends on which transaction moves the inventory from one site to the other.

Intersite Transfer Receipt Calculation



The system calculates the total issued quantities for the intersite transfers transactions by the level of item and site. The periodic costing process the site transactions in descending order of the total issued quantity.

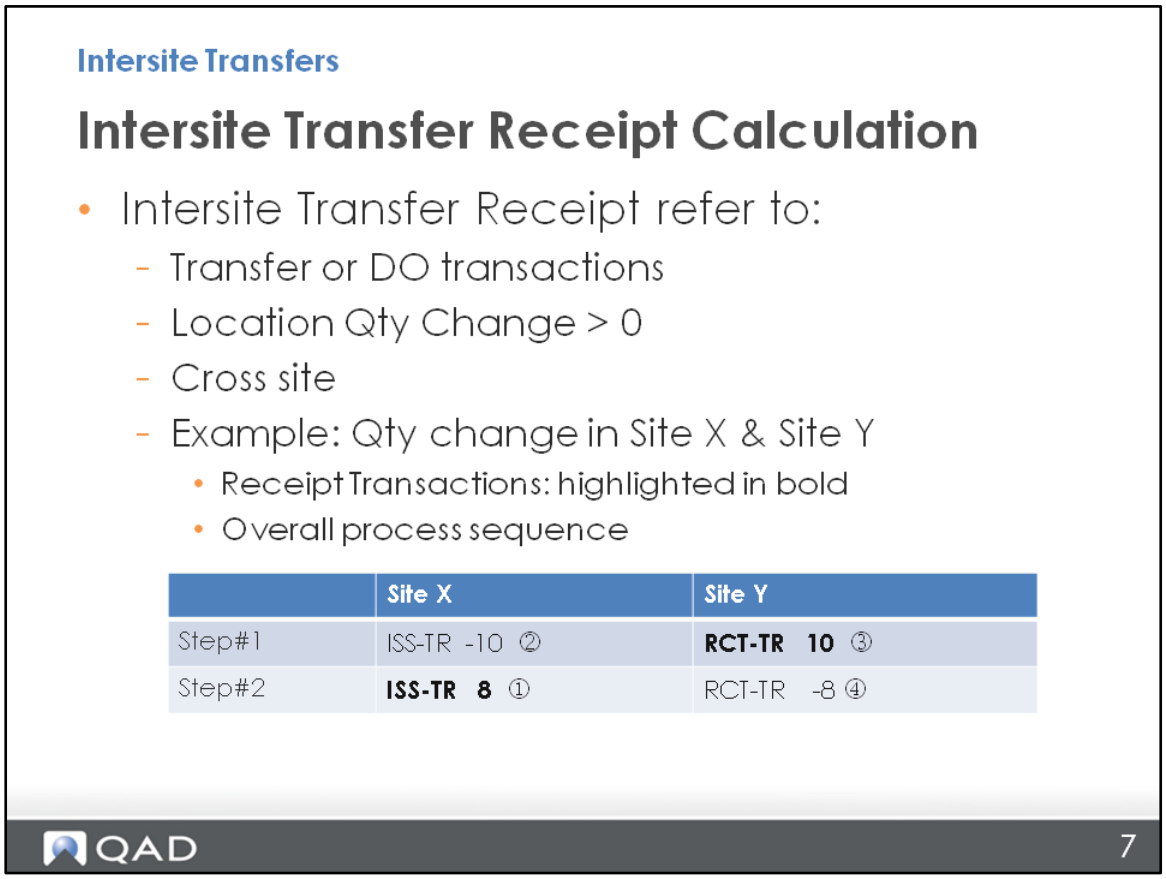
For example, there are two intersite transfer transactions between Site X and Site Y:

Transaction 1: issued 10 quantity from Site X to Site Y

Transaction 2: issued -8 quantity from Site X to Site Y

For Site X, the total issued quantity is 2 and for Site Y, the total issued quantity is -2. So the system will process the transactions in Site X first then process the transactions in Site Y.

Intersite Transfer Receipt Calculation

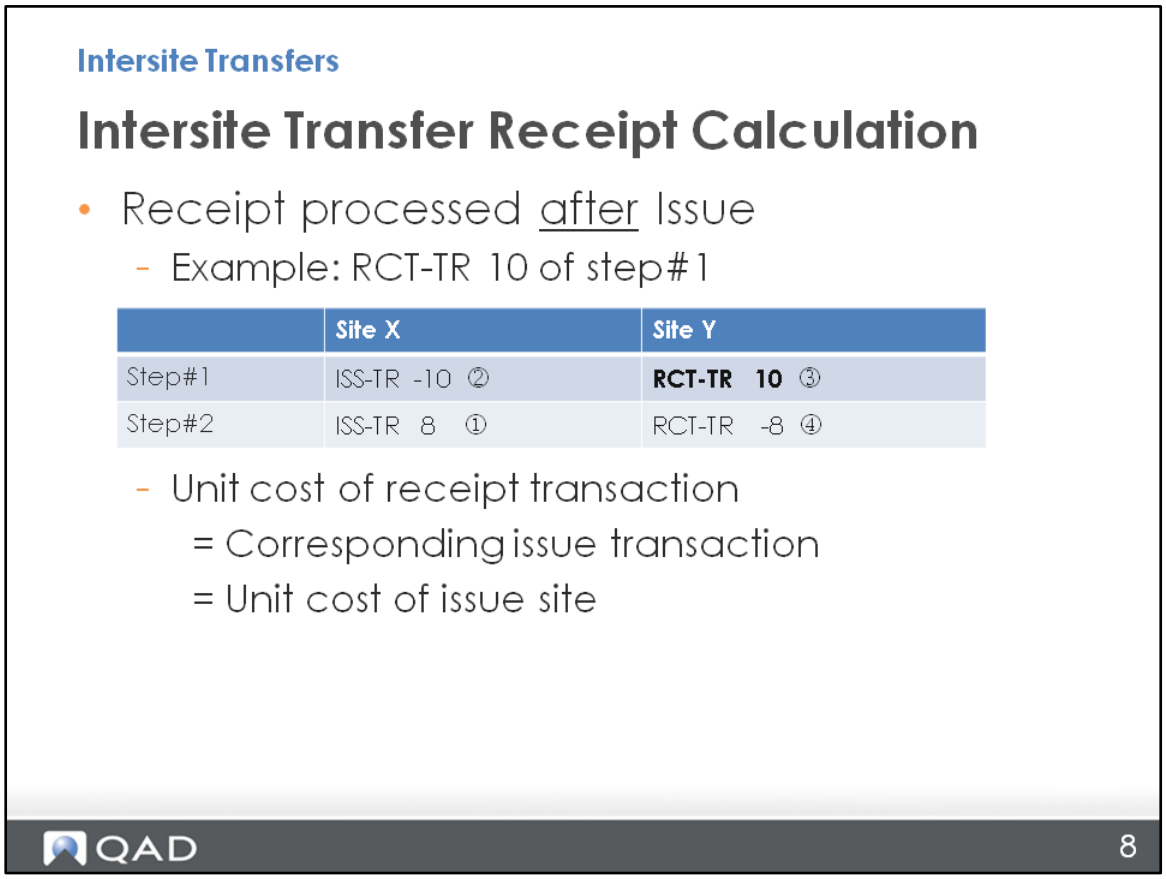


The receipt calculation for the intersite transfer considers the transfer of cross-site items and distribution order transactions where the location quantity change is greater than zero.

For the example in the slide, Site X has two transaction records (transaction type and quantity change): ISS-TR -10 and ISS-TR 8. Site Y has two transaction records (transaction type and quantity change): RCT-TR 10 and RCT-TR -8. The system processes the receipt transactions first, and then issues transactions. So the overall process sequence is:

- ISS-TR 8 (Process Site X first. Handles the negative issue as a receipt)
- ISS-TR -10 (Process Site X first)
- RCT-TR 10
- RCT-TR -8 (Handles the negative receipt as an issue)

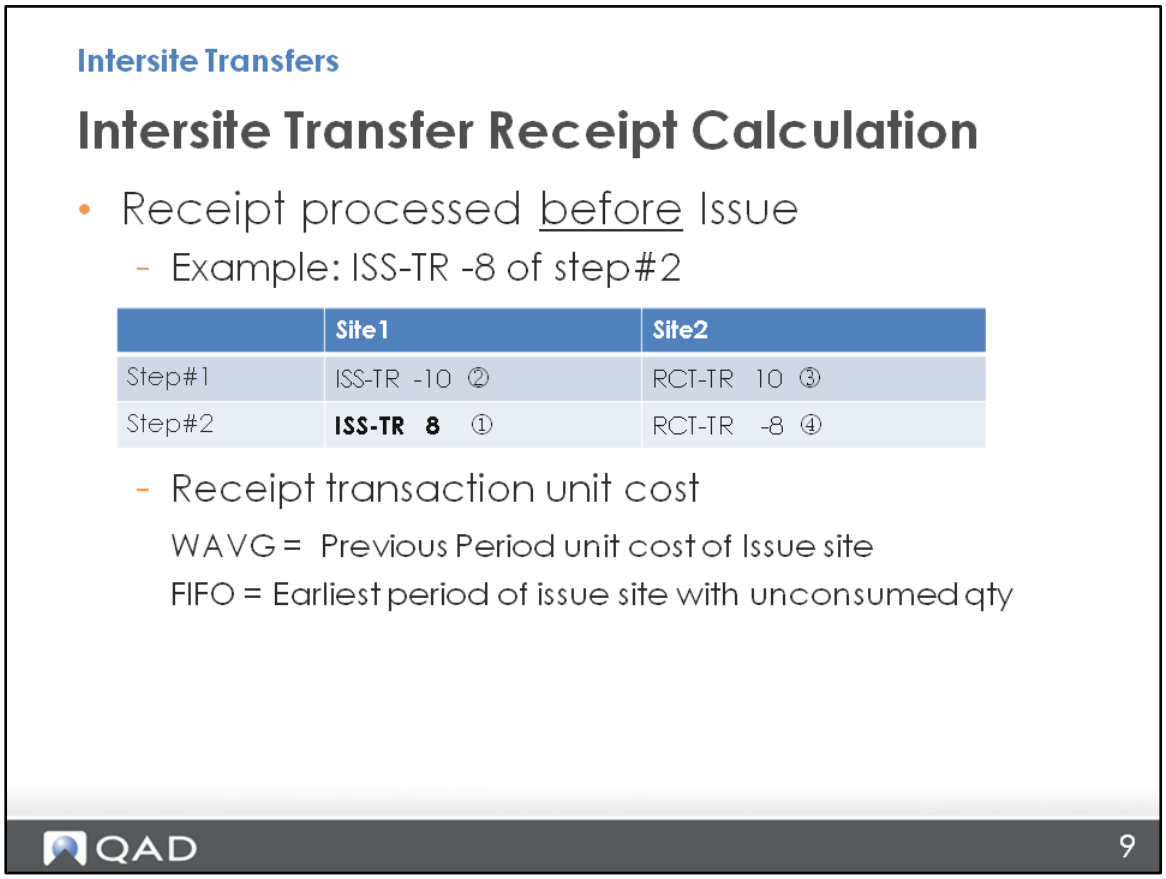
Intersite Transfer Receipt Calculation



If the receipt transaction is processed after the issue transaction, it will use the corresponding issue transaction's issue site unit cost.

For the example in the slide, the receipt transaction (RCT-TR 10) is processed after the issue transaction (ISS-TR -10) because Site X is processed before Site Y. The unit cost of corresponding issue in Site X is used for the receipt transaction (RCT-TR 10) in Site Y.

Intersite Transfer Receipt Calculation

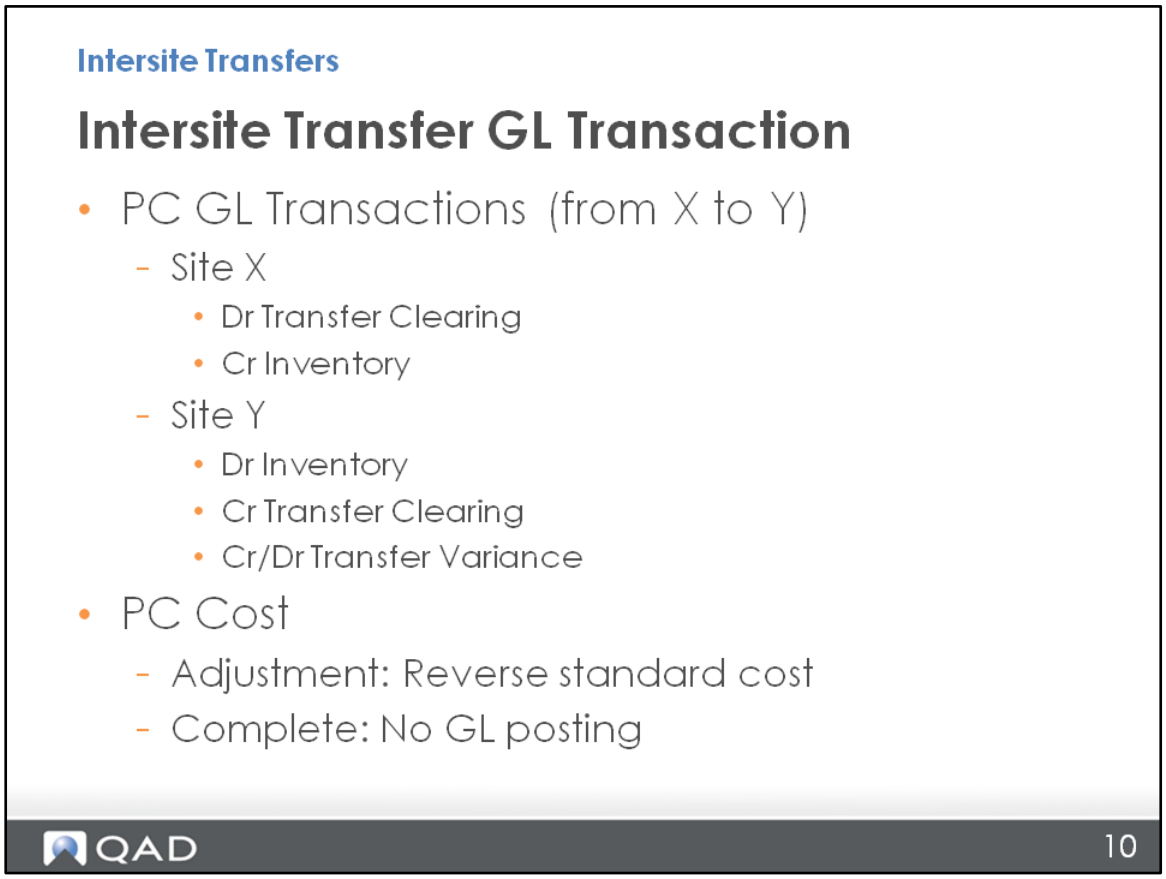


If the receipt transaction is processed before the issue transaction,

- For WAVG, the system uses the unit cost in the previous period of the corresponding issue site;
- For FIFO, the system uses the unit cost in the earliest period of the corresponding issue site.

For the example in the slide, the issue transaction (ISS-TR 8) is processed before the issue transaction (ISS-TR -10). Site X is processed before Site Y because the site of the Issue transaction (Site Y) has not been processed when Site X is processing ISS-TR 8. Until the process of the issue transaction (ISS-TR 8) is finished, there is no unit cost for the current period yet. So, the ISS-TR 8 transaction is valued at previous period cost of Site Y. When the unit cost in the current period of Site Y is finally calculated, the system posts the variance between the prior period cost and the current period cost to discrepancy at Site X.

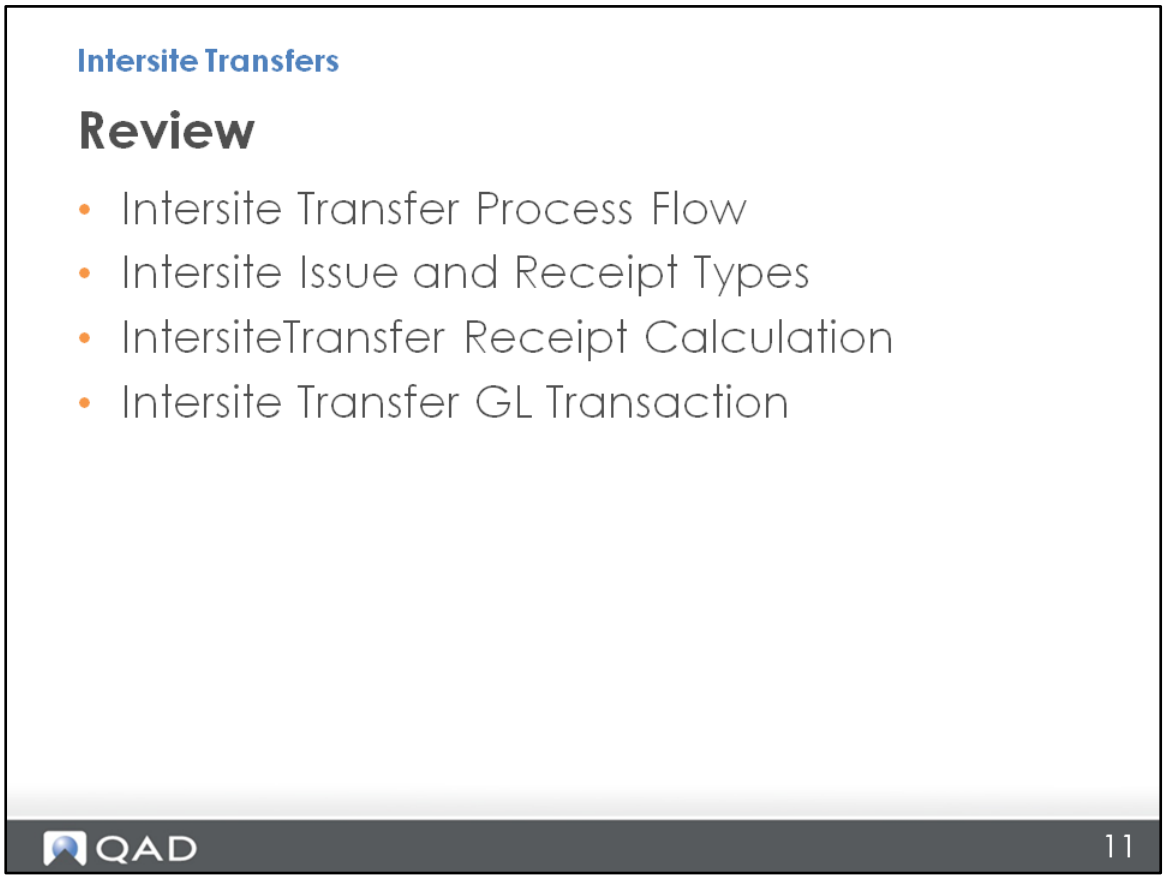
Intersite Transfer GL Transaction



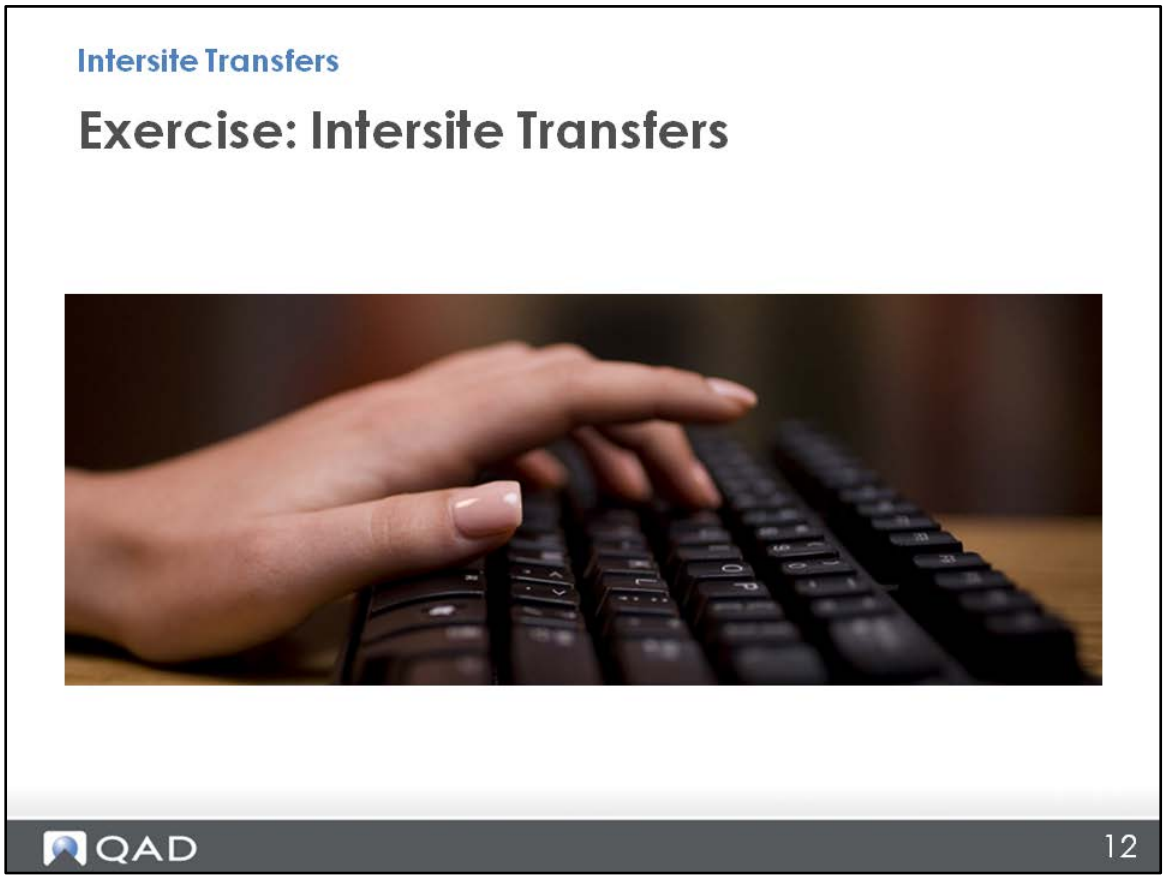
In adjustment mode, Periodic Costing only reverses the standard cost GL transaction and posts it to the management layer.

In complete mode, the system blocks the standard cost from generating GL transaction; Periodic Costing calculation does not create any GL transaction, either.

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Exercise: Intersite Transfers



Finish the corresponding exercise at the end of this training guide.

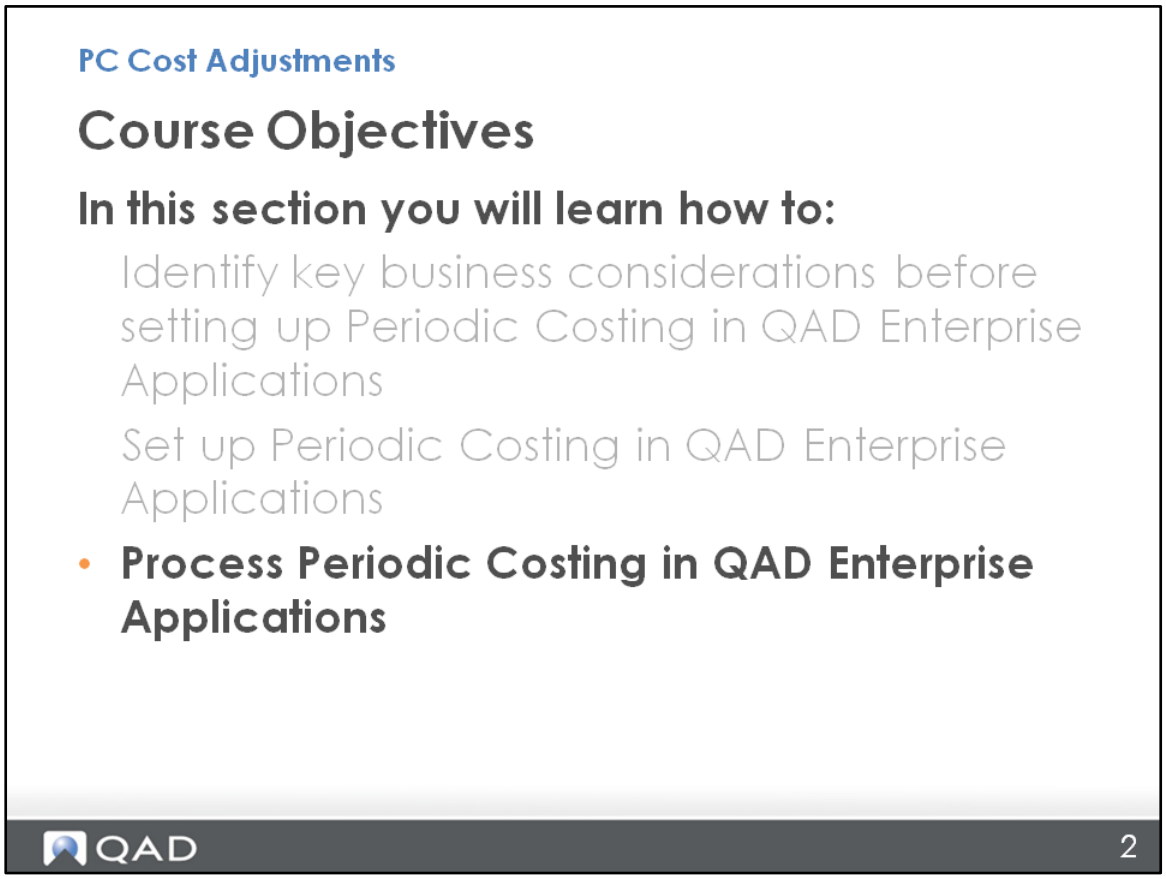
CHAPTER 12

PC Cost Adjustments

PC Cost Adjustments



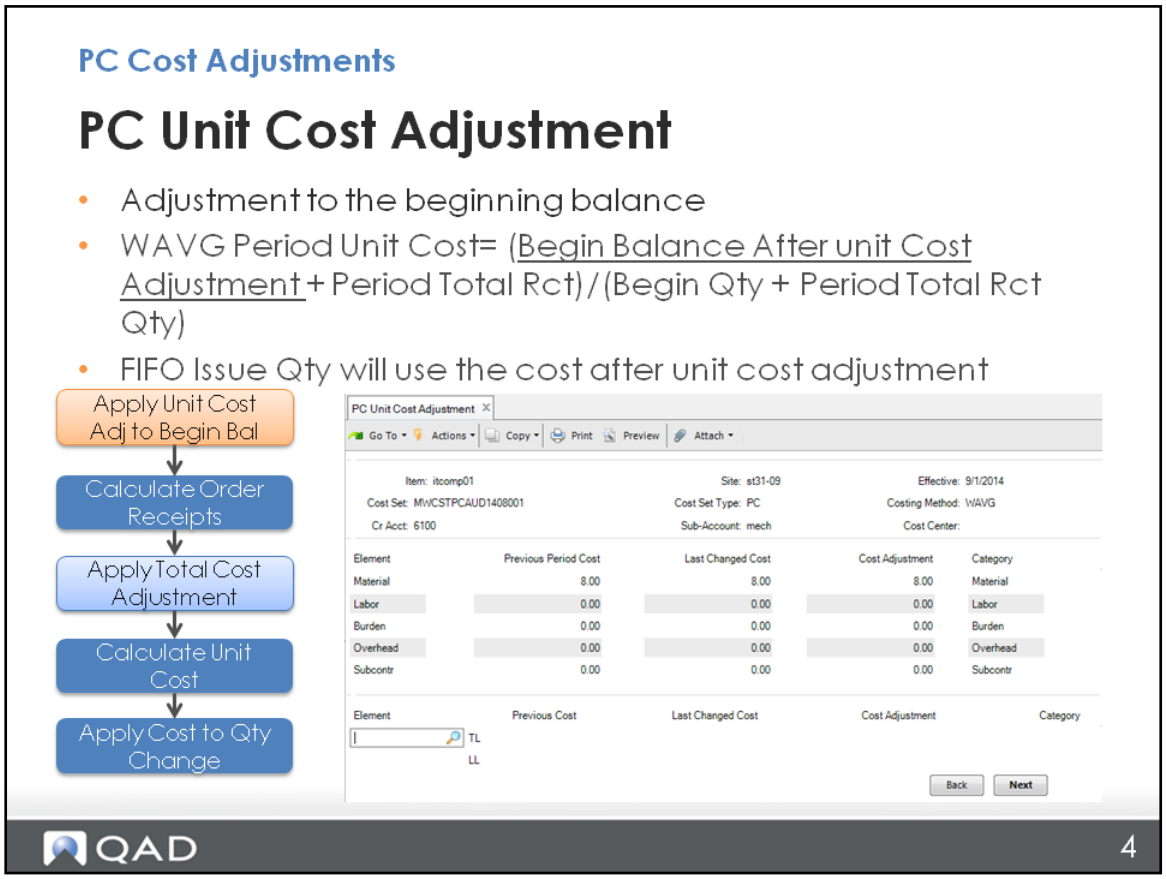
Course Objectives



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PC Cost Adjustments
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PC Unit Cost Adjustment
PC Total Cost Adjustment
WO Component Cost Adjustment
WO Operation Adjustment
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PC Unit Cost Adjustment



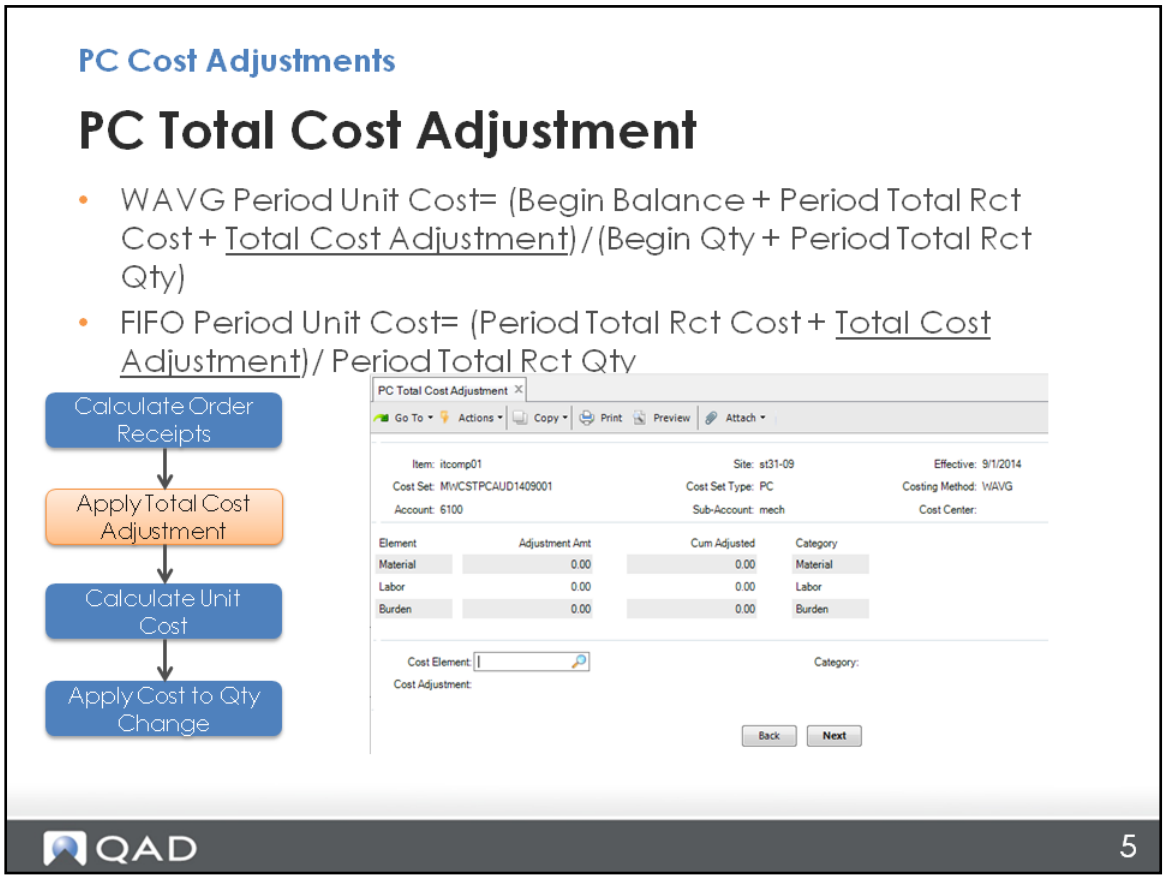
Use PC Unit Cost Adjustment (30.5.5.1) to adjust the cost of the previous period. You adjust unit cost by increasing or decreasing values per cost element. The system creates the PCCST-AD inventory transaction history record.

You perform a unit cost adjustment based on the ending balance of a previous period. That is, the value of the beginning balance for the new GL period for which you perform periodic costing calculation has changed and you apply the changed value to all issues. The system creates a GL transaction for the item against its inventory account that represents the change in total inventory value due to the unit cost adjustment.

When using WAVG, you adjust the beginning balance of the current period. When using FIFO, you can make a Unit Cost Adjustment to any of the prior periods that have unconsumed quantity.

You cannot adjust the unit cost that is negative.

PC Total Cost Adjustment



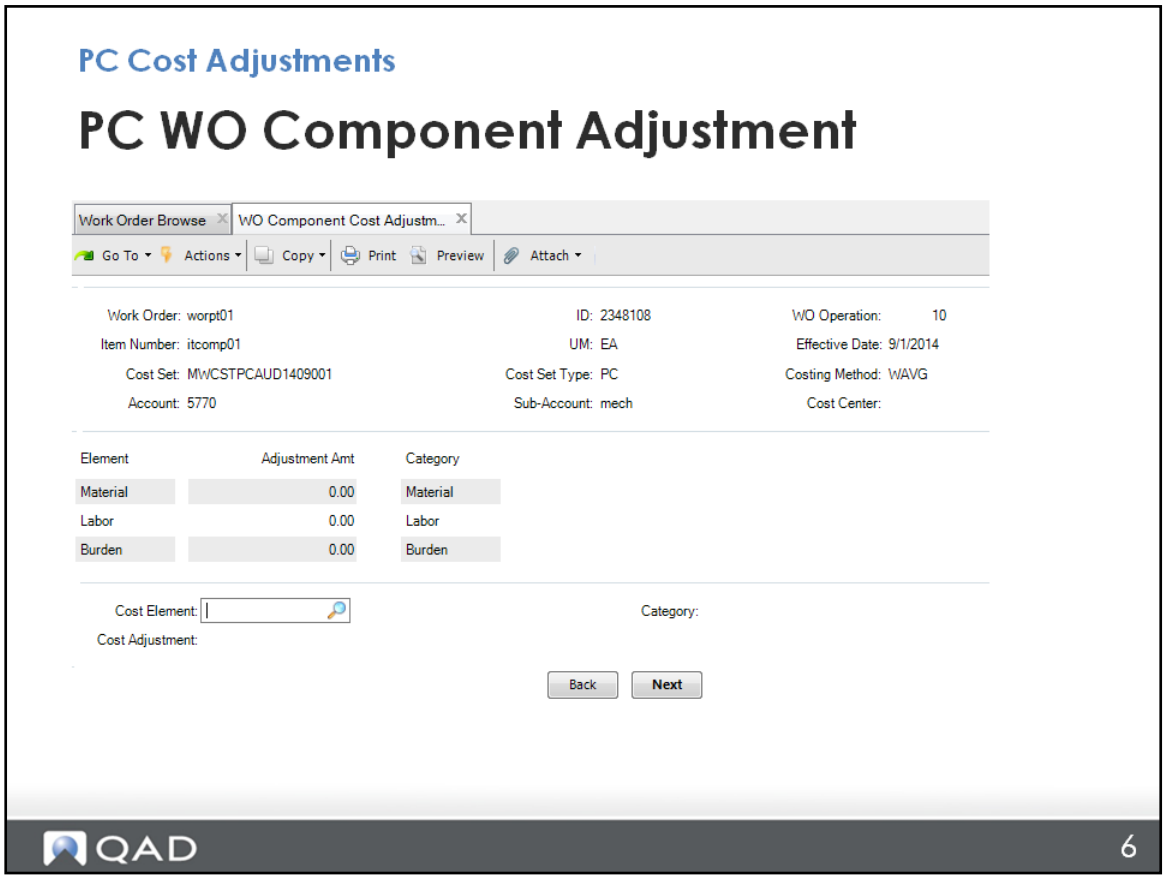
Use PC Total Cost Adjustment (30.5.5.2) to create a total cost adjustment to periodic cost. A total cost adjustment is typically performed to influence the inventory value for transactions that the PC calculation does not consider. Some cost is missing (for example, logistics costs or fixed overhead costs) or exceeds the expected cost (for example, recoverable taxes are in the inventory). For this reason, you decide to make some adjustments. The total cost adjustment can be positive or negative and can be done for any cost element.

When statutory currency is enabled for the domain, the system calculates the total cost adjustment transaction in statutory currency based on the effective date provided.

The system creates the PCTOT-AD inventory transaction history record and a periodic cost adjustment GL transaction for the total cost adjustment. You are required to specify an adjustment account for this total cost adjustment transaction. The total cost adjustment transaction impacts the item inventory account and the adjustment account specified.

The system verifies that there is inventory available to absorb a negative adjustment. When the full amount cannot be absorbed, the system creates the PCTOT-COR GL transaction to post the unabsorbed amount to the discrepancy account.

PC WO Component Adjustment

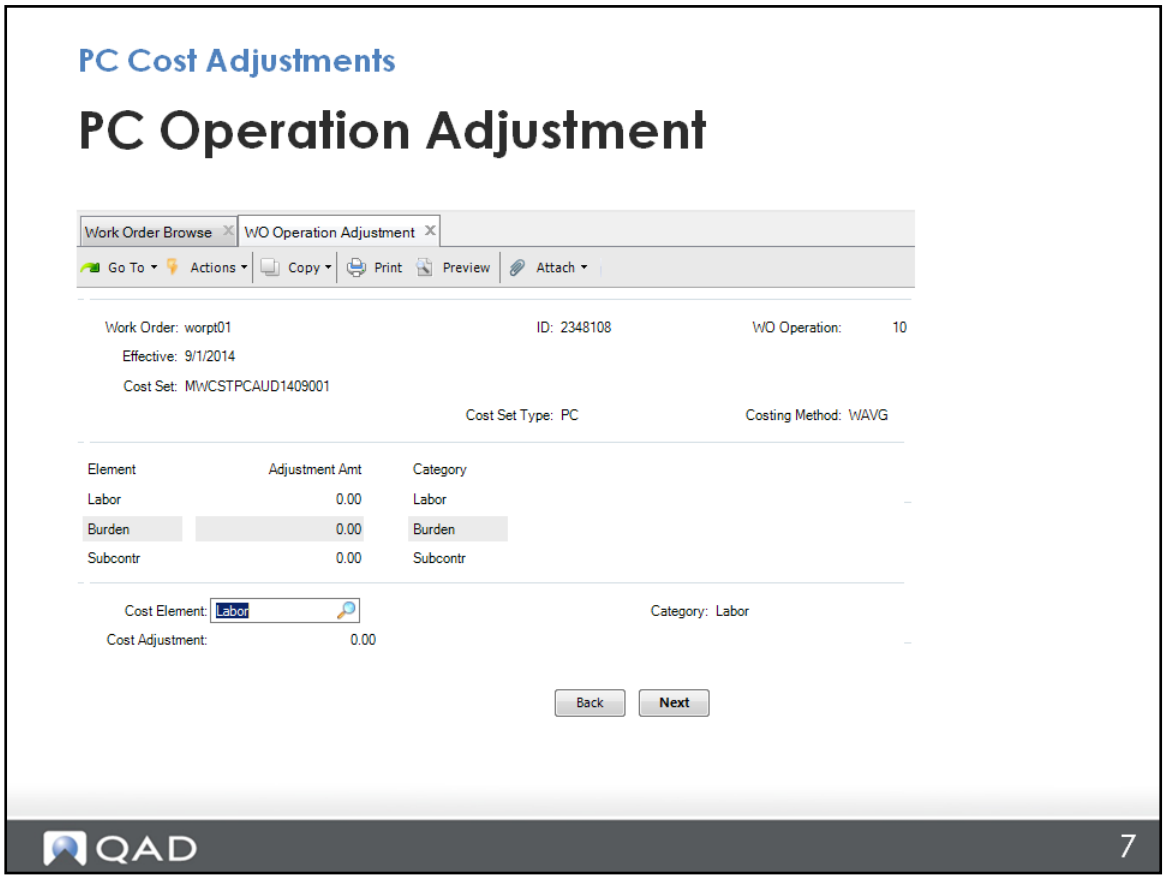


Use WO Component Cost Adjustment (30.5.5.13) to specify a WIP cost adjustment (PCWO-ADJ) that lets you modify the WIP value of a component on a work order or a cumulate order. You can modify any cost category.

The work order or cumulative order is required to be a valid system order and the components to be valid in the work or cumulative order, as well as operations. The work order/cumulative order must be open for the period/year the adjustment is being reported.

The system creates a periodic cost adjustment GL transaction for the WIP cost adjustment. When statutory currency is enabled for the domain, the system calculates the WIP cost adjustment transaction based on the effective date provided. The periodic cost adjustment transaction is separated from the CST-ADJ transactions created for standard cost. Ensure that you specify an adjustment account for this WIP cost adjustment transaction. The process cost adjustment transaction impacts the specified WIP account and the adjustment account.

PC Operation Adjustment



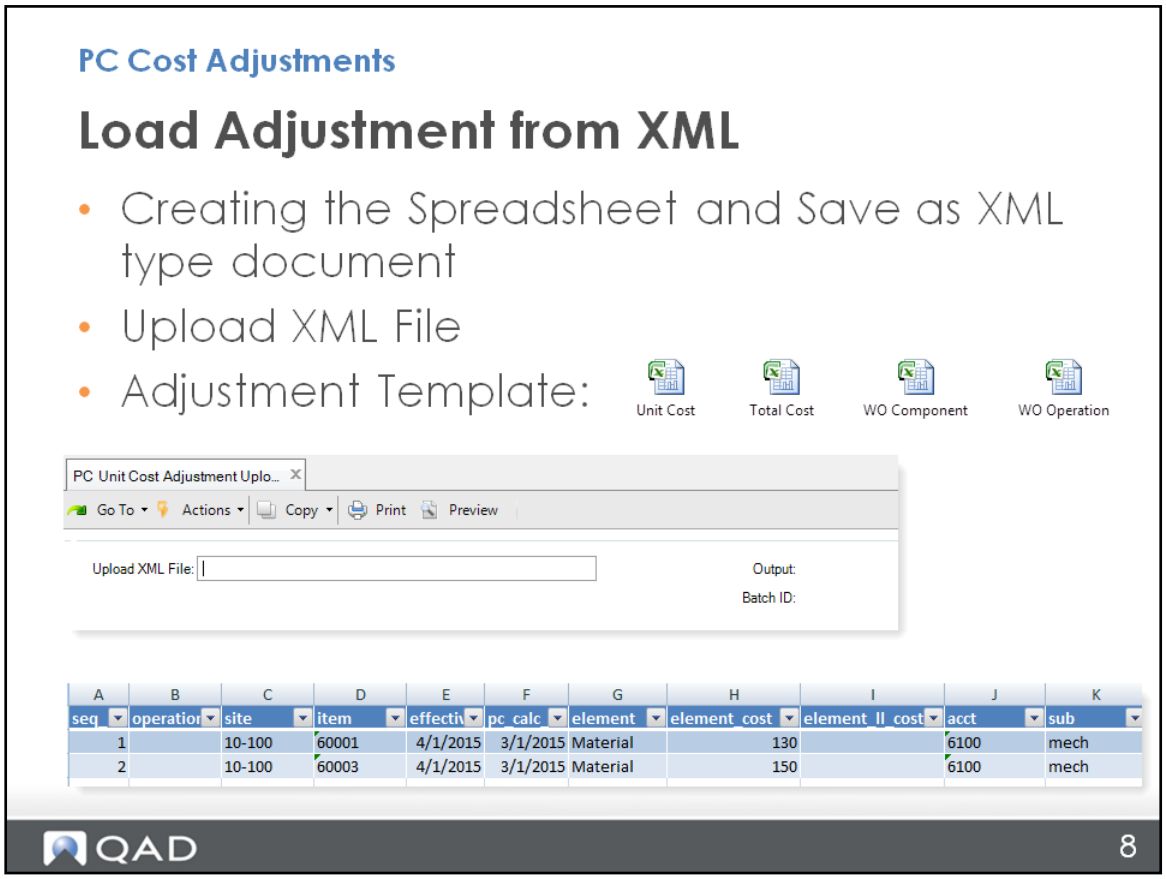
Use WO Operation Adjustment (30.5.5.14) to specify a WIP cost adjustment (PCWOP-AD), which also allows you to modify the labor, burden, and subcontract costs of an operation for a work order or a cumulative order.

The work order or cumulative order is required to be a valid system order and the components to be valid in the work or cumulative order, as well as operations. The work order/cumulative order must be open for the period/year the adjustment is being reported.

The system creates a periodic cost adjustment GL transaction for the WIP cost adjustment. When statutory currency is enabled for the domain, the system calculates the WIP cost adjustment transaction based on the effective date provided. The periodic cost adjustment transaction is separated from the CST-ADJ transactions created for standard cost. Ensure that you specify an adjustment account for this WIP cost adjustment transaction. The process cost adjustment transaction influences the specified WIP account and the adjustment account.

Note: The Work Order Cost Adjustment only displays the elements that apply to the work order operation, unlike the total cost adjustment and the unit cost adjustment, which display all the elements.

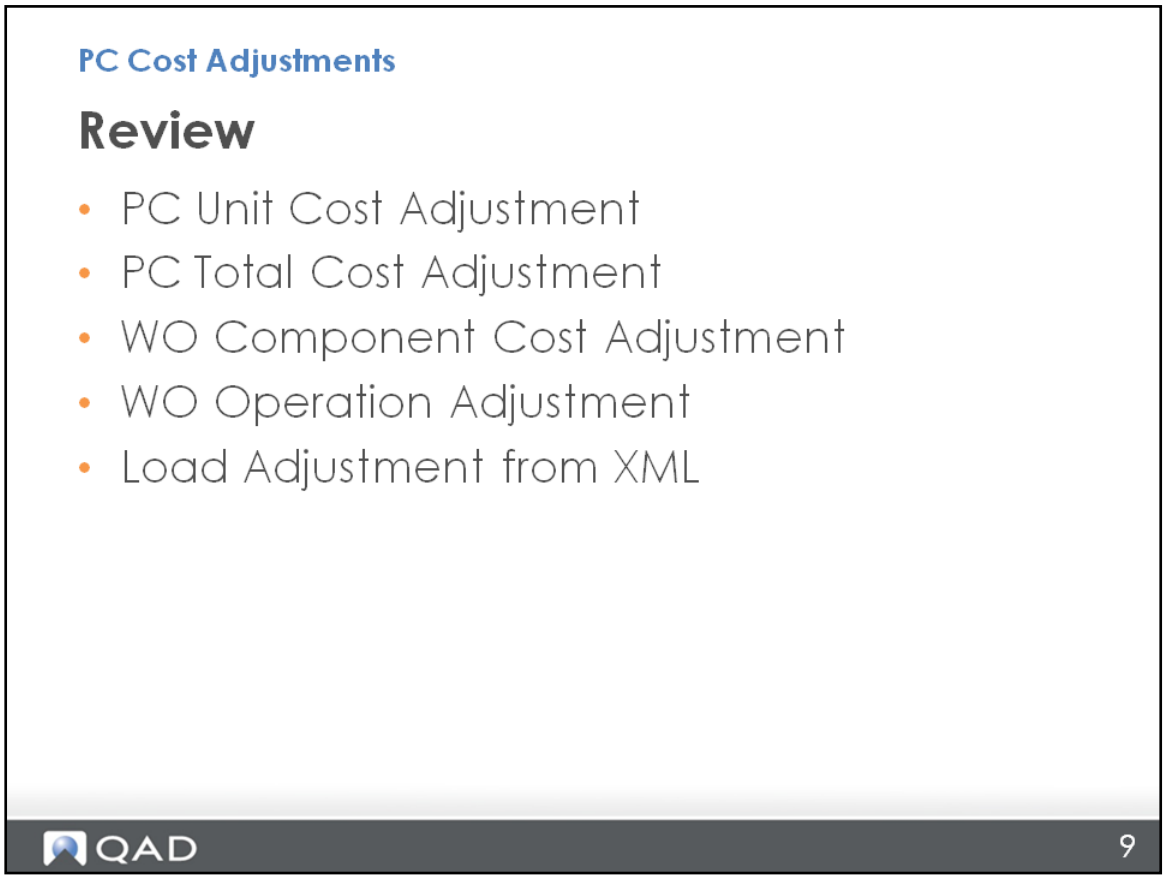
Load Adjustment from XML



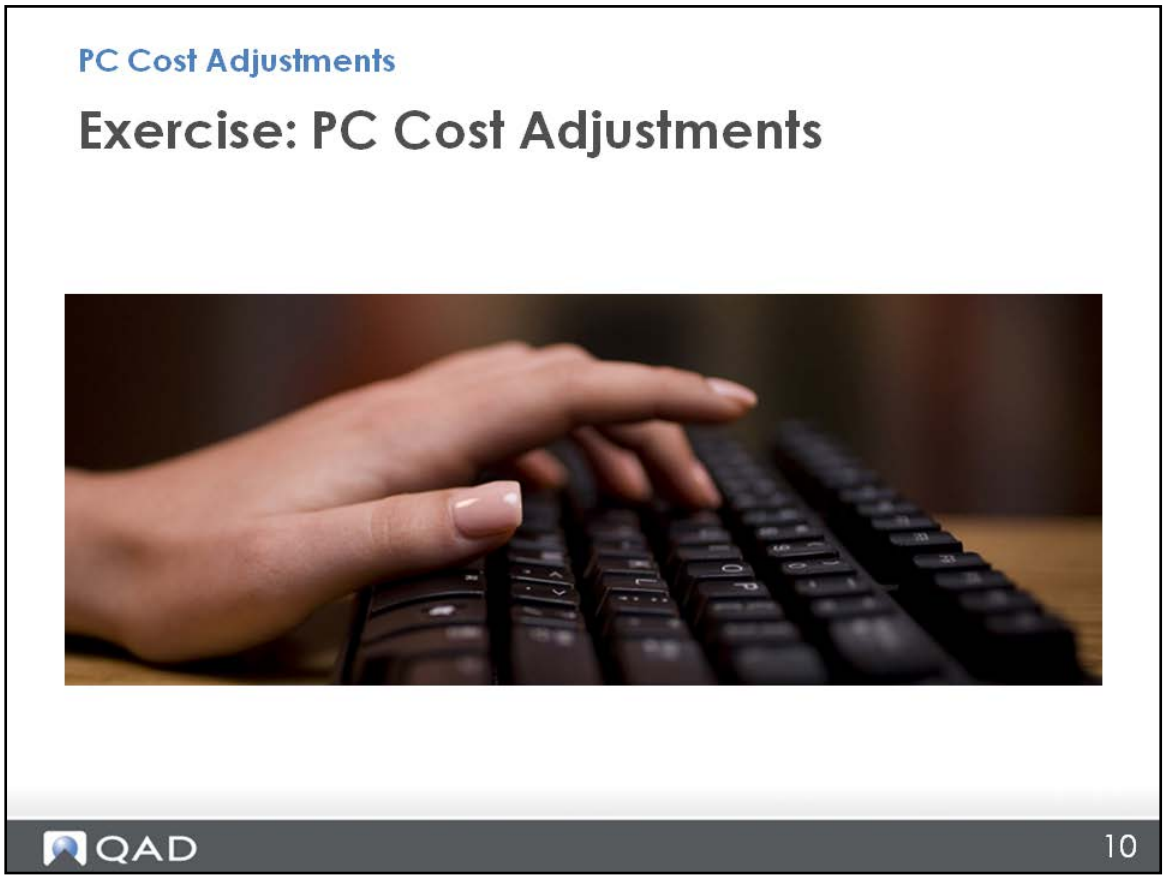
You can also use the following programs to upload adjustments:

- PC Unit Cost Adjustment Upload
- PC Total Cost Adjustment Upload
- WO Component Cost Adj Upload
- WO Operation Adj Upload

Review


PC Cost Adjustments
Review
PC Unit Cost Adjustment
PC Total Cost Adjustment
WO Component Cost Adjustment
WO Operation Adjustment
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Exercise: PC Cost Adjustments

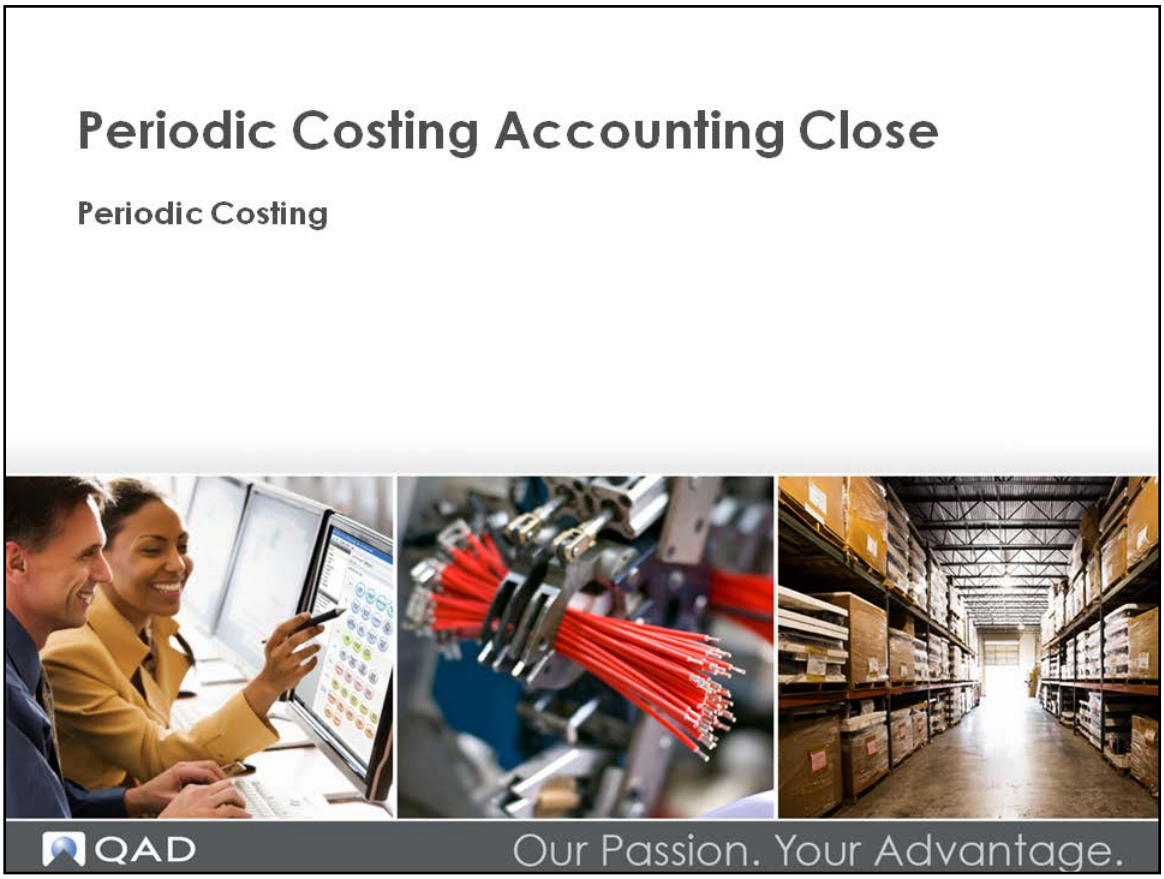


Finish the corresponding exercise at the end of this training guide.

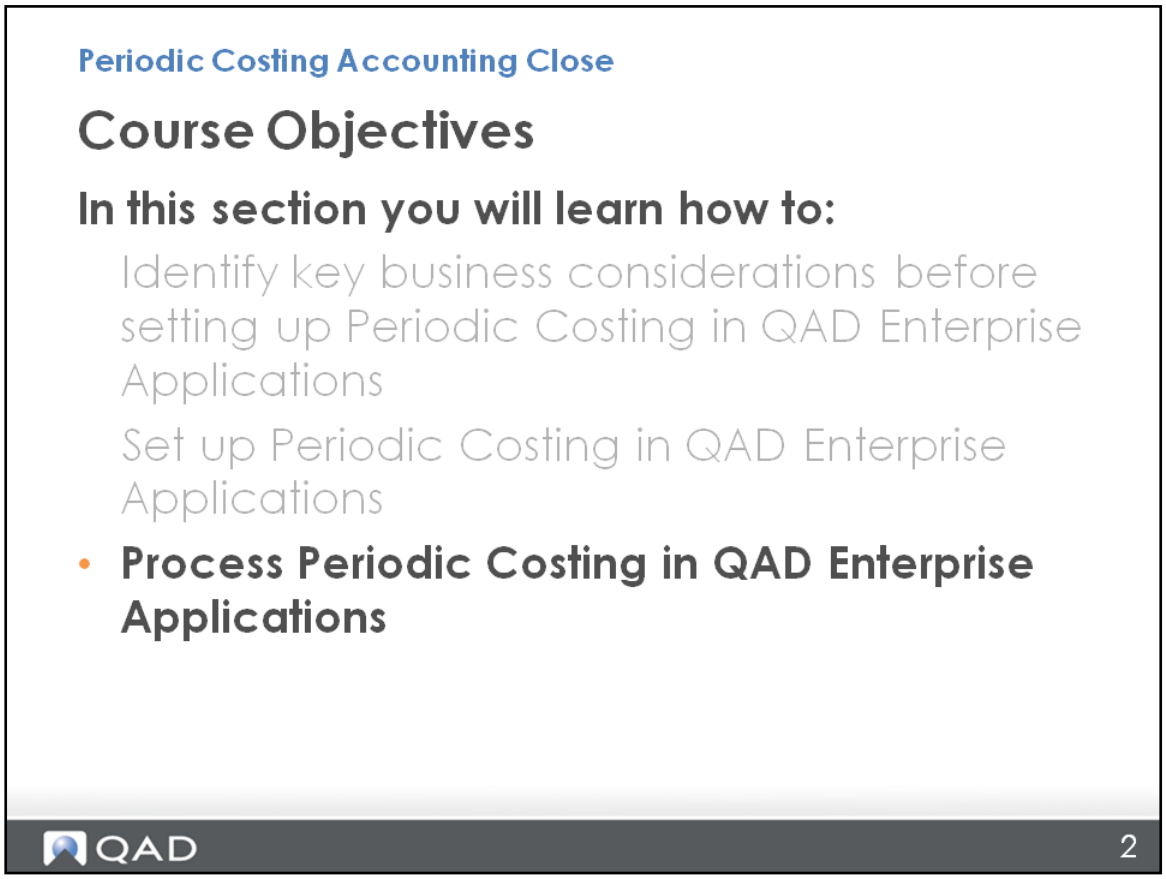
CHAPTER 13

Periodic Costing Accounting Close

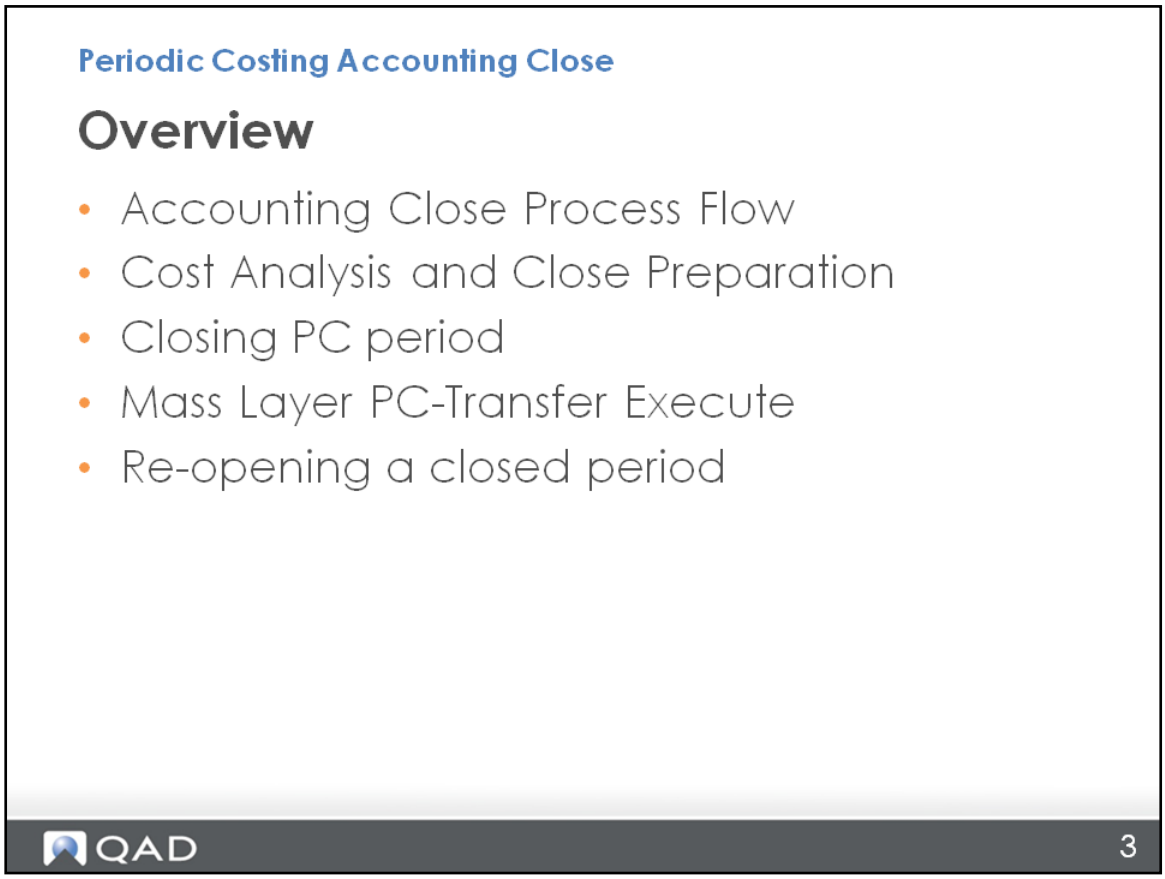
Periodic Costing Accounting Close



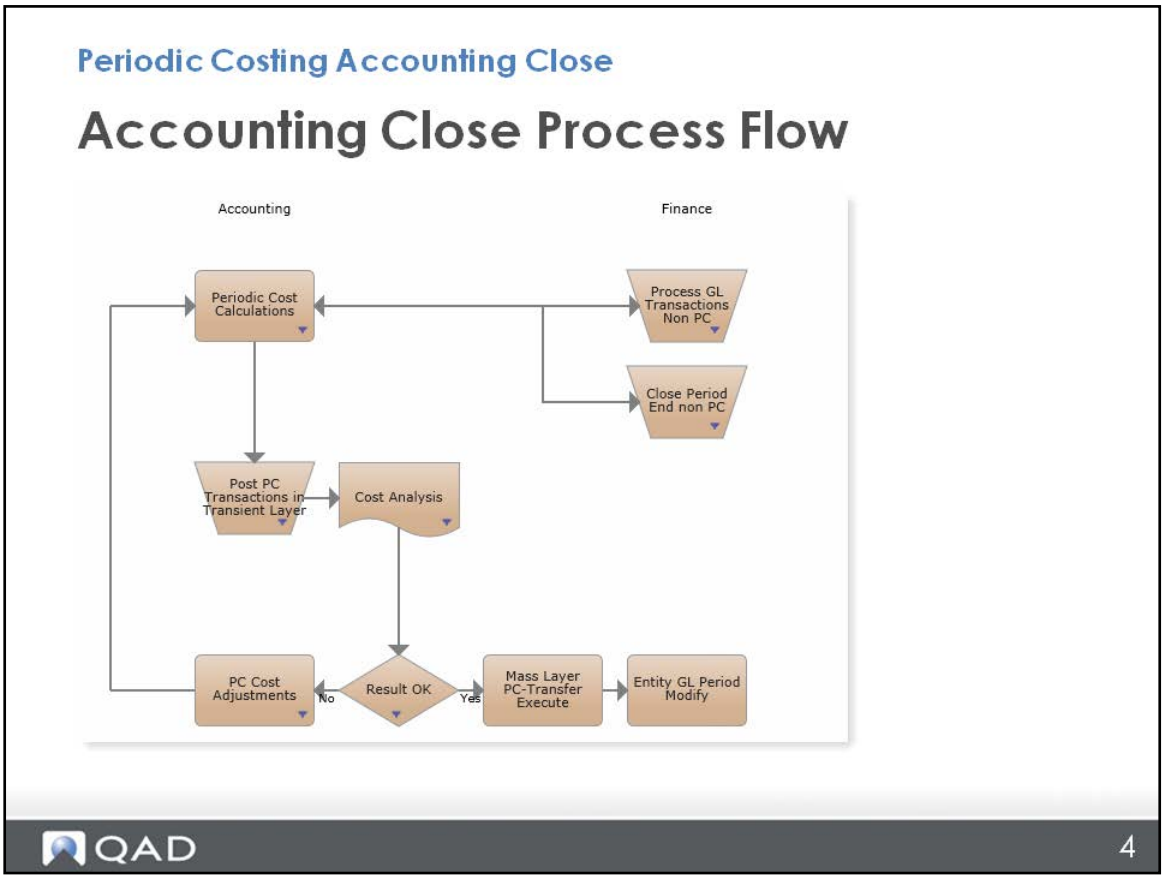
Course Objectives



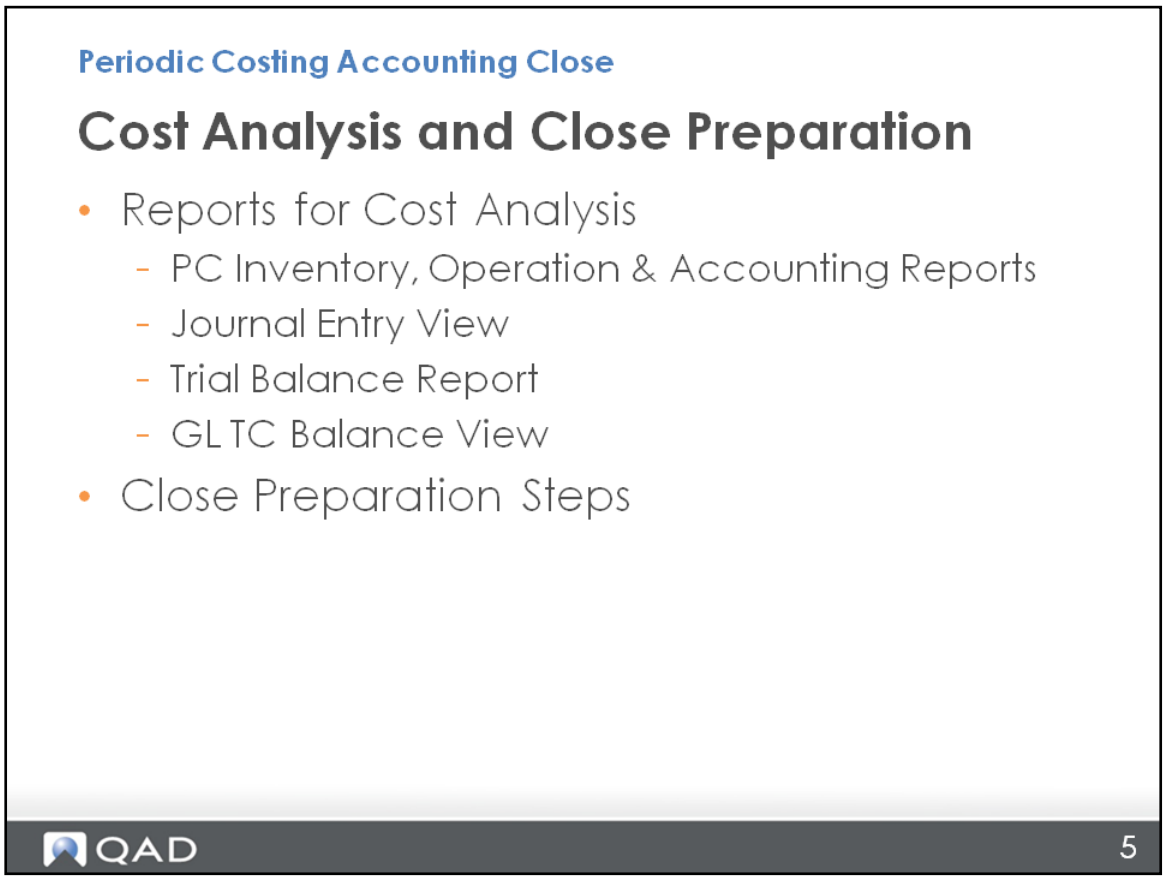
Overview


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Closing PC period
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Re-opening a closed period
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Accounting Close Process Flow



Cost Analysis and Close Preparation



After you complete Periodic Costing calculation, reconcile what item costs you are required to account for during a period and how those costs are accounted. Sometimes, the profit or loss shown by running Periodic Costing to derive at item unit costs based on inventory and shop floor transactions do not agree with the profit or loss shown by the GL accounts. In this situation, you are required to reconcile the profits or losses that are shown as different, and make figures consistent and accurate.

Running Periodic Costing Before Period End

You can run Periodic Cost Calculation (30.5.7.1) for the first open period of the Periodic Cost sub-ledger. The analysis and reconciliation of the Periodic Costing calculation results are similar in nature, compared to the activity after the period has ended.

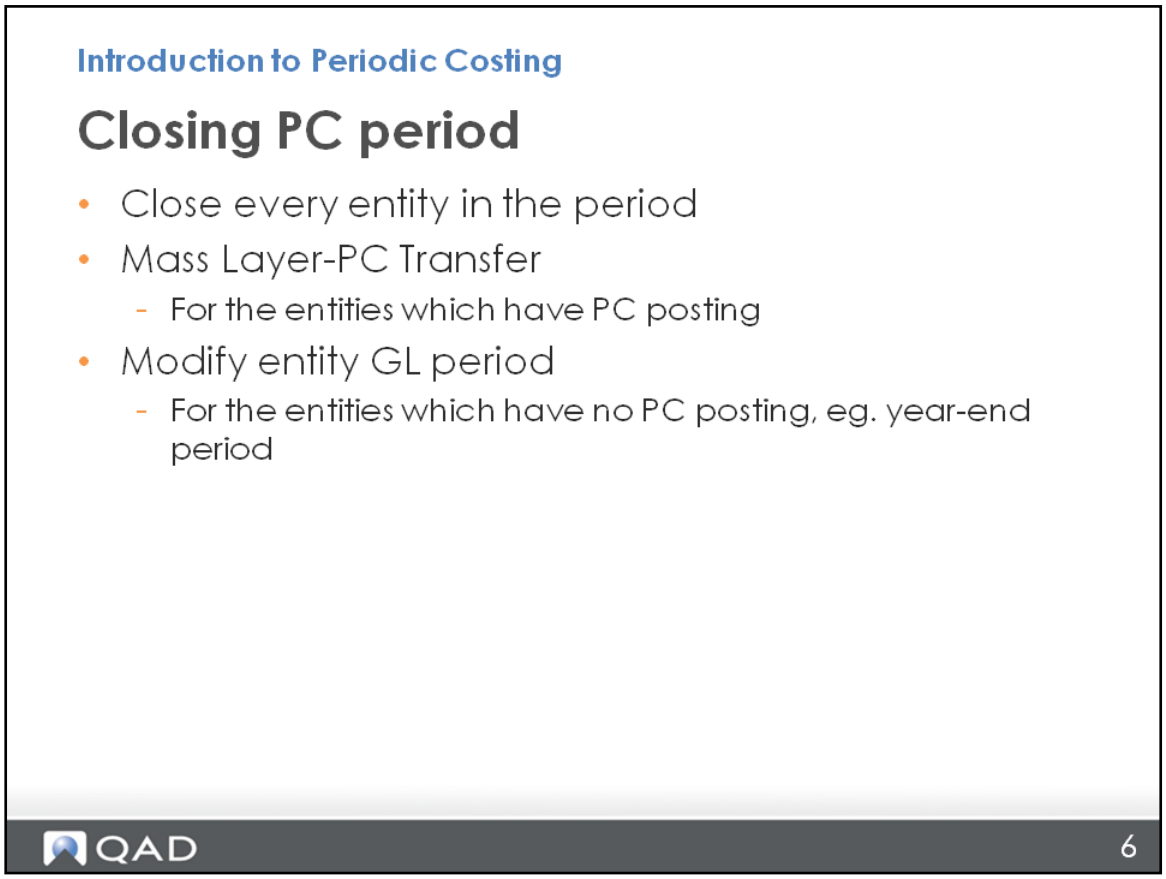
Preparing for Periodic Costing Period Close

As soon as the end of the period is reached and the closing procedures begin, closing Periodic Costing is similar to closing the operational sub-ledgers, but with a few additional steps. Consider the following steps before you conclude that Periodic Costing can be closed:

1. Release a cost month-end close schedule to all operational areas.
2. Verify outstanding legal documents.

3. Verify the period purchases to identify issues requiring adjustments.
4. Check whether all period non-system-created expenses are posted.
5. Analyze negative balances.
6. Accrue pending expenses.
7. Run work order and repetitive account close.
8. Check for all unposted GL transactions.
9. Close the entity GL period for operational modules (AP, SO, and IC).
10. Pull a labor absorbed report (total labor reported or backflushed).
11. Calculate total actual expenses by direct cost centers.
12. For overhead rates, pull the purchase or product receipts and calculate the actual overhead rate by item.
13. Load Periodic Costing adjustments.
14. Run PC calculation.
15. Analyze the results of the PC calculation using the browses, collections, and reports.
16. Perform any additional adjustments.
17. Make any necessary transaction corrections as identified during reconciliation.
18. Repeat step 14 until Periodic Costing results are satisfactory and the Periodic Costing sub-ledger can be closed.

Closing PC period



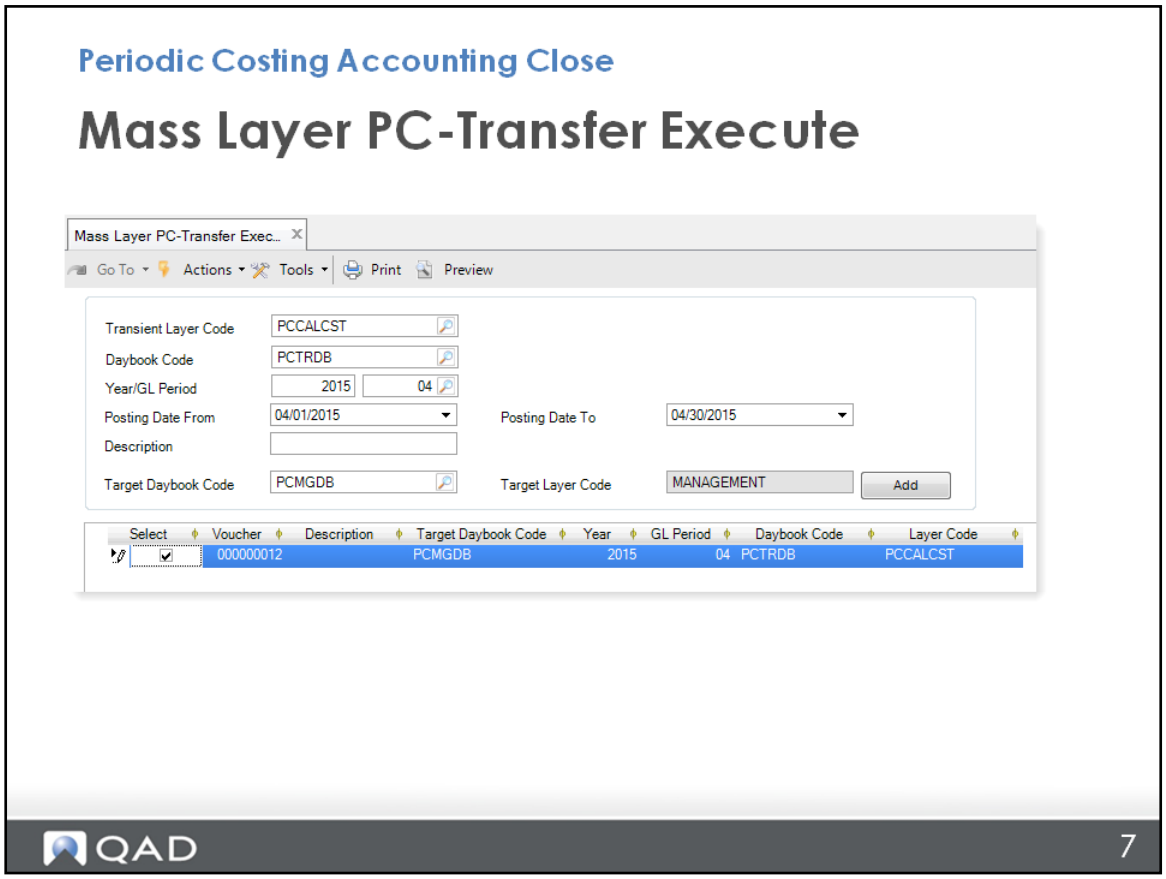
When the Periodic Costing has been analyzed and reconciled, and the results are approved, use Mass Layer PC-Transfer Execute (25.13.12) to do the following:

- Close the PC sub-ledger
- Move the Periodic Costing transactions from the transient layer to the management layer (or official layer when you use the complete method)

The Mass Layer PC-Transfer Execute function moves all Periodic Costing transactions from the Periodic Costing Calculation Daybook in the transient layer to the Final Daybook. It transfers the Periodic Costing transactions for all entities in the domain, and closes the Periodic Costing sub-ledger for each entity.

In the case where an entity does not have any GL transactions, the system does not close the PC sub-ledger for that entity by Mass Layer PC-Transfer Execute. This case can happen, for example, when you use separate entities for planning with no operational transactions. In this situation, make sure that you manually close the PC sub-ledger for these entities by using Entity GL Period Modify (25.4.2.1).

Mass Layer PC-Transfer Execute

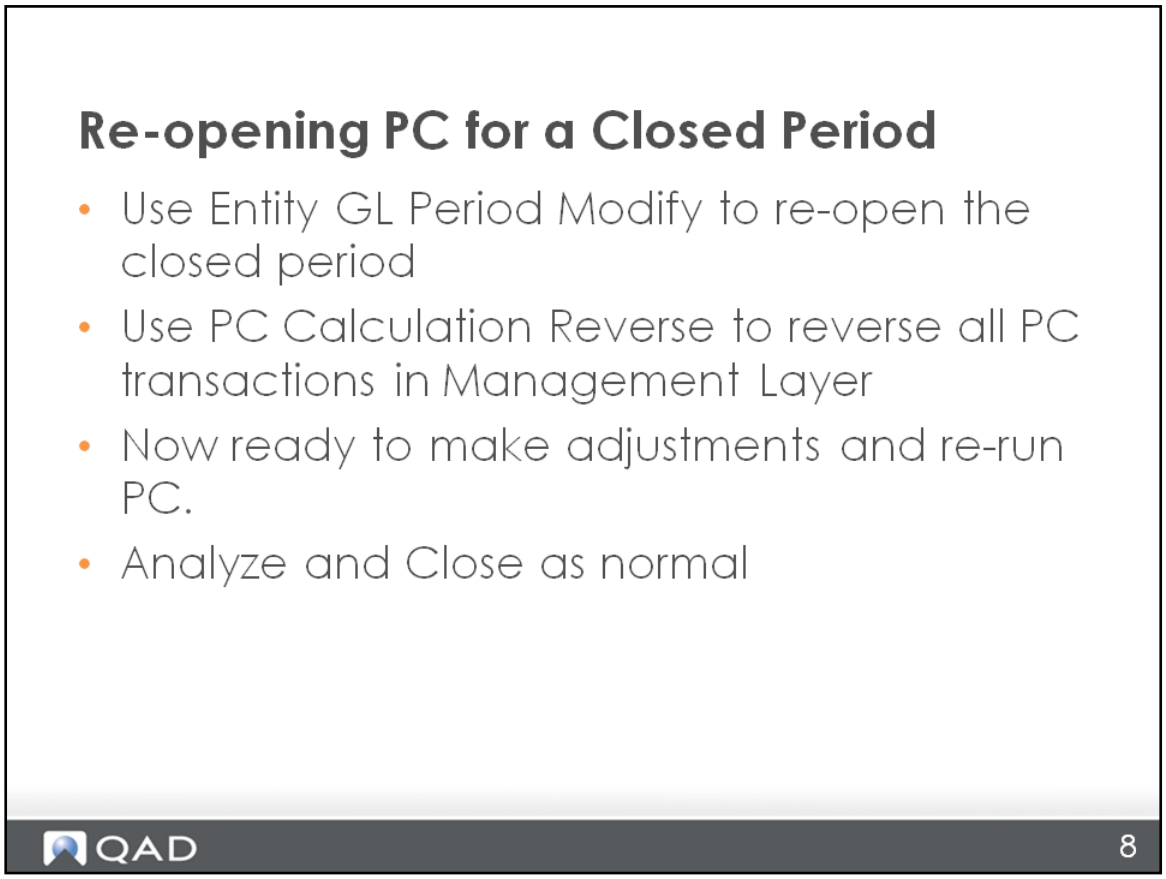


Use Mass Layer PC-Transfer Execute (25.13.12) to transfer batches of unfinalized periodic costing calculation from the transient layer to the management or official layers.

You can use this function to transfer postings only in daybooks of type Periodic Costing. The daybook to transfer from is also required to be linked to the transient layer. All selected postings are transferred to the same target daybook, which can be linked to the official layer, a management layer, or another transient layer. However, the target daybook is required to also have a daybook type of Periodic Costing.

Mass Layer PC-Transfer Execute runs at domain level so that you can also use it to transfer periodic costing cross-company postings. The system displays a warning if any of the selected transactions are cross-company postings that still have corresponding postings in a transient layer. This provision helps to keep cross-company postings synchronized in both entities. Mass Layer PC-transfer Execute only transfers one side of the cross-company posting. You are required to manually transfer the corresponding postings in the other entity to the management layer.

Re-opening PC for a Closed Period

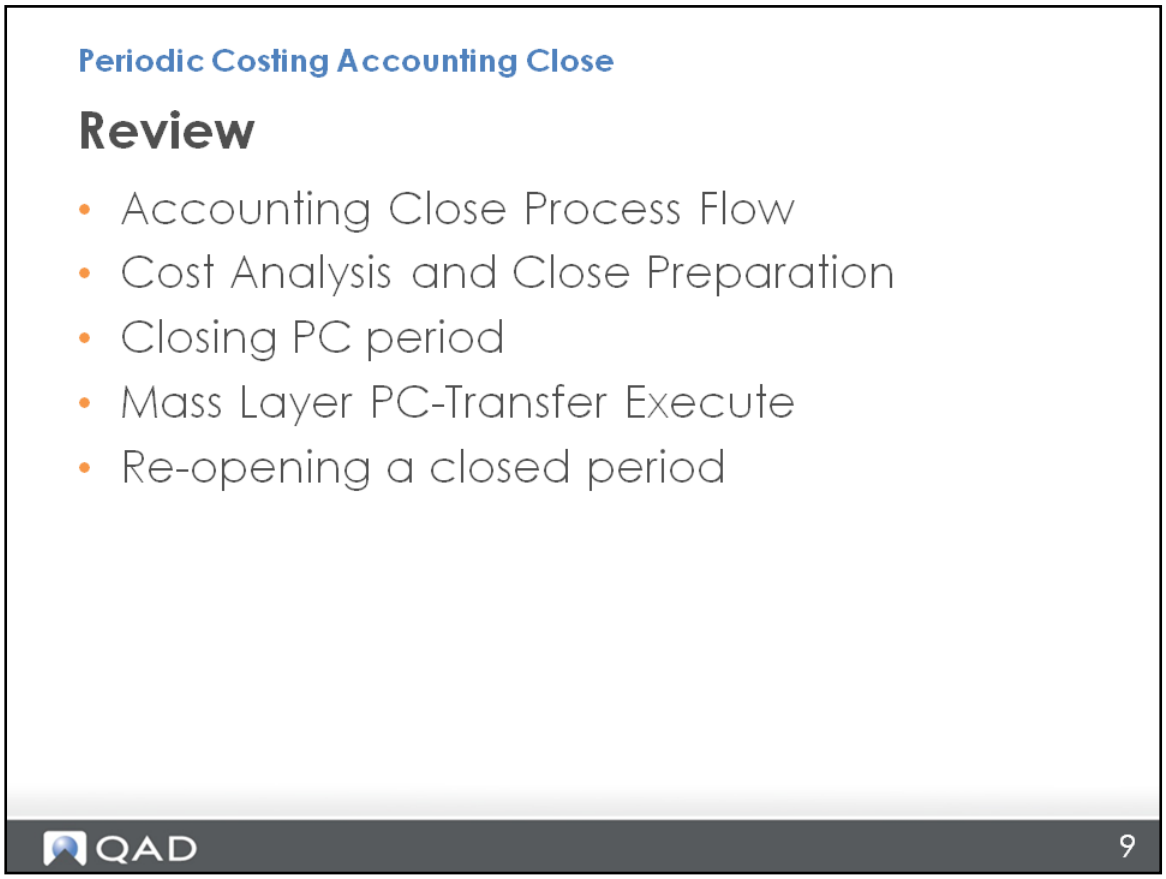


Use PC Calculation Reverse as a part of the process to reopen that closed PC period so that it can be recalculated.

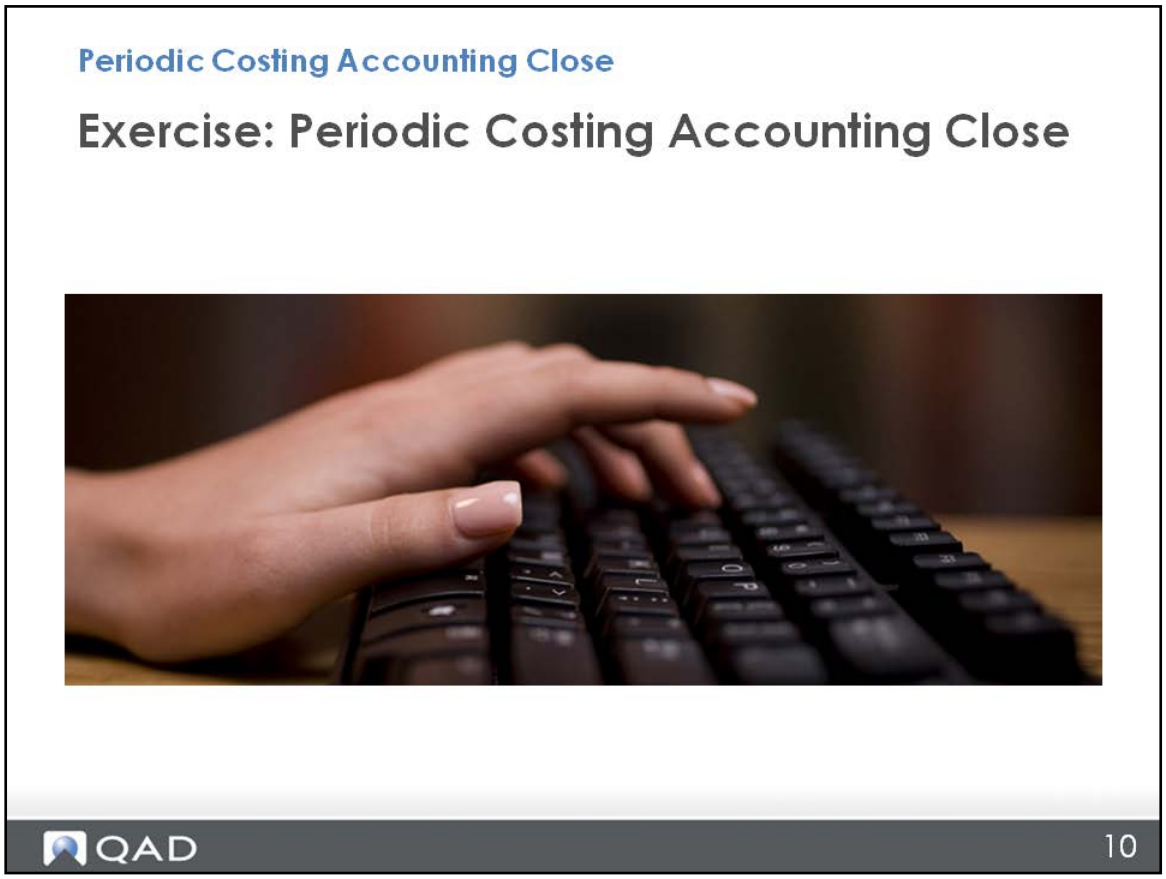
For example, the current open PC period is May 2015. You want to reverse and rerun PC Calculation for the closed PC period of April 2015. Follow these steps:

1. Go to Entity GL Period Modify and open the PC sub-ledger for the last closed period - April 2015.
2. Run PC Calculation Reverse to reverse all PC transactions in Management Layer.
3. Open other sub-ledgers of April 2015 and make adjustments and re-run PC calculations.
4. Analyze the PC results and close the April 2015 period as normal.

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• Closing PC period
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Exercise: Periodic Costing Accounting Close

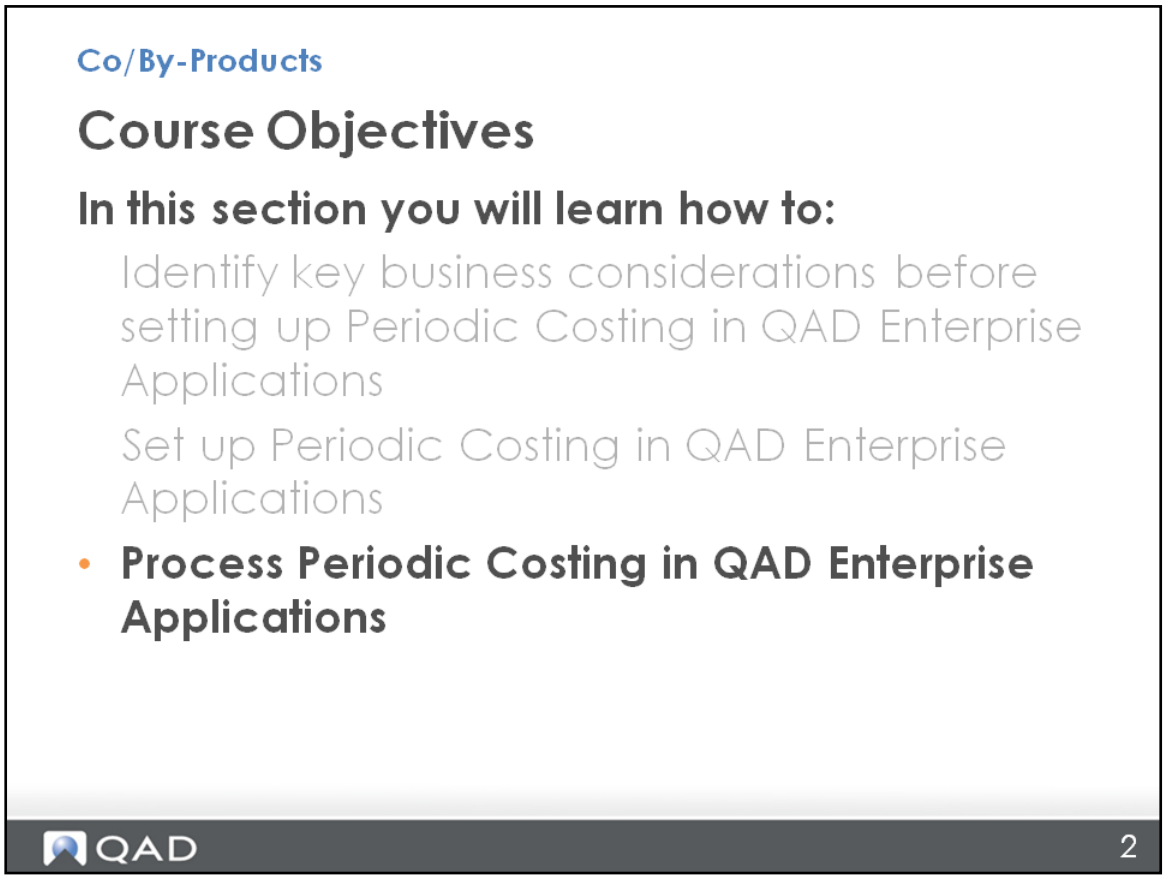


Finish the corresponding exercise at the end of this training guide.

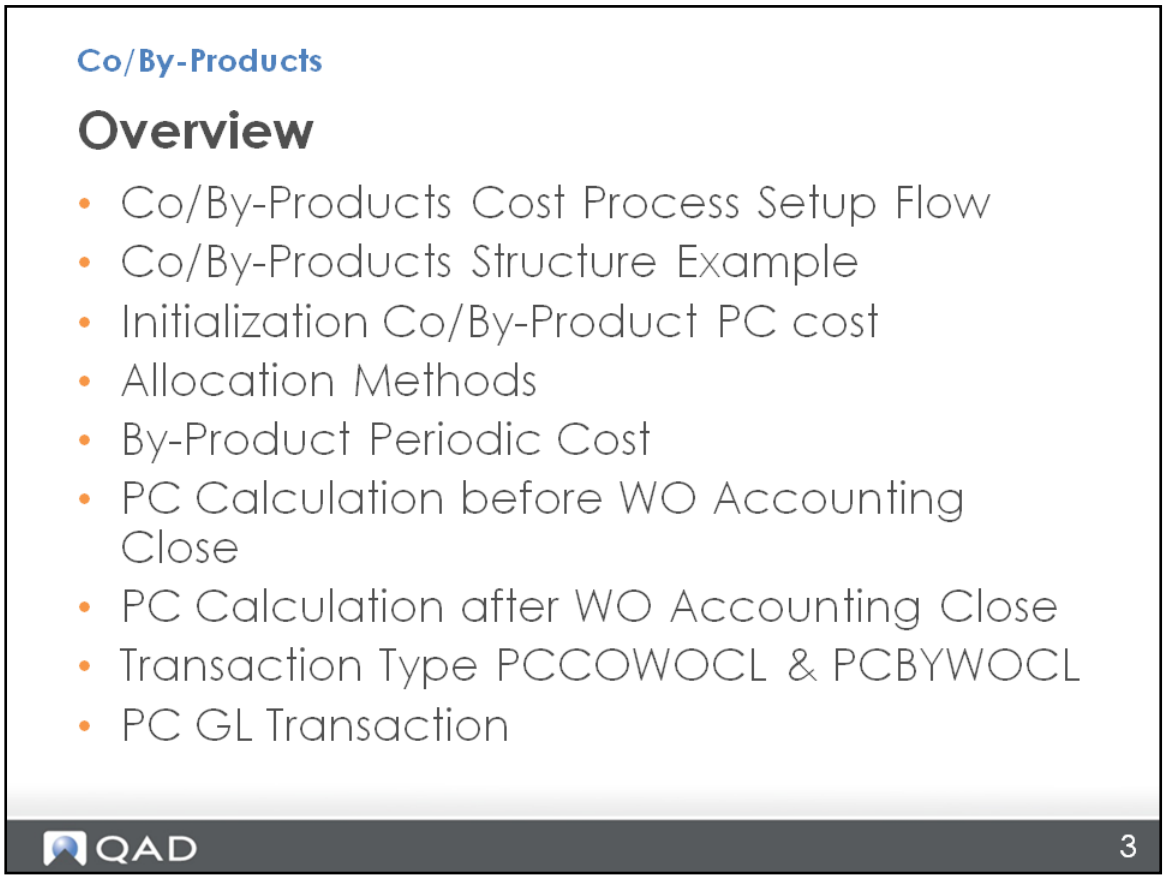
CHAPTER 14

Co/By-Products

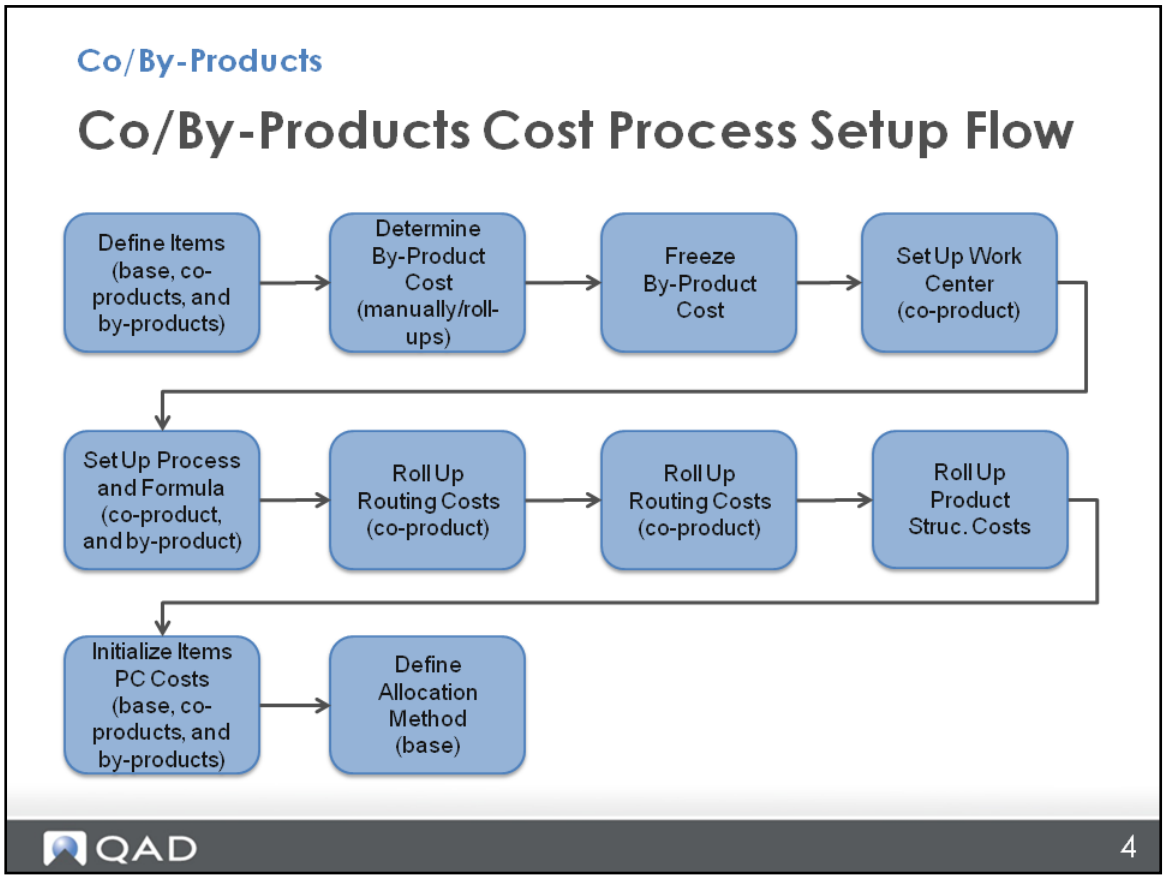
Course Objectives



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Co/By-Products
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• Co/By-Products Structure Example
• Initialization Co/By-Product PC cost
• Allocation Methods
• By-Product Periodic Cost
• PC Calculation before WO Accounting Close
• PC Calculation after WO Accounting Close
• Transaction Type PCCOWOCL & PCBYWOCL
• PC GL Transaction
QAD
3

Co/By-Products Cost Process Setup Flow



A base process requires a defined item record. Base processes are set up in Item Master Maintenance (1.4.1), as if they were items. Use base process “items” only for co-products/by-products. The BOM/Formula field must be blank.

Define the Co-product and By-product items in Item Master Maintenance (1.4.1). All of the component items used by the base process must be set up in Item Master Maintenance if they are not already items. For the Co-Products, enter the base process in the BOM/Formula field.

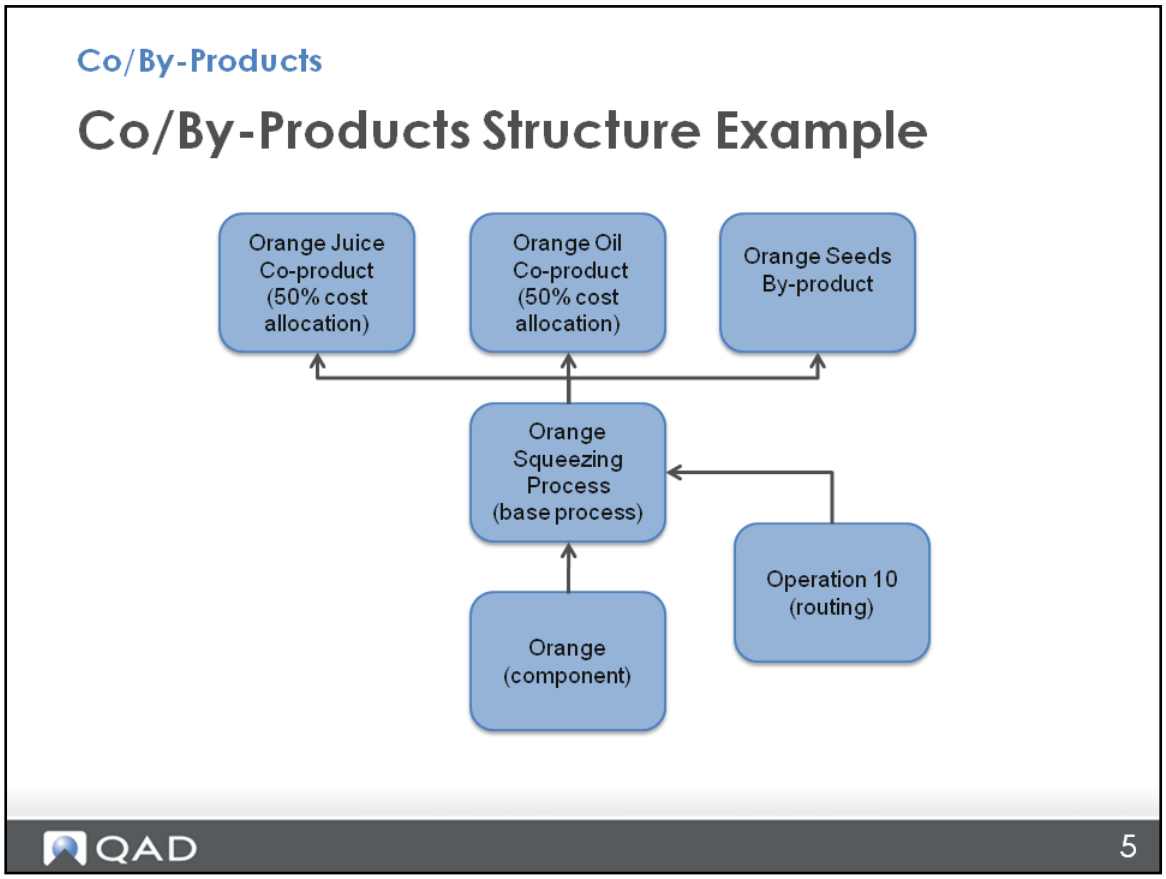
By-product costs are developed separately from the base process cost roll-up. You can enter by-product costs manually by Item Master Maintenance (1.4.1). Or, you can have the system calculate by-product costs from regular product structures. After by-product costs are established, freeze them to keep them from changing when co-product/by-product costs are rolled up.

Use Process/Formula Maintenance (15.18) to create the process route, the formula, or product structure and define the co/by-products for this base process.

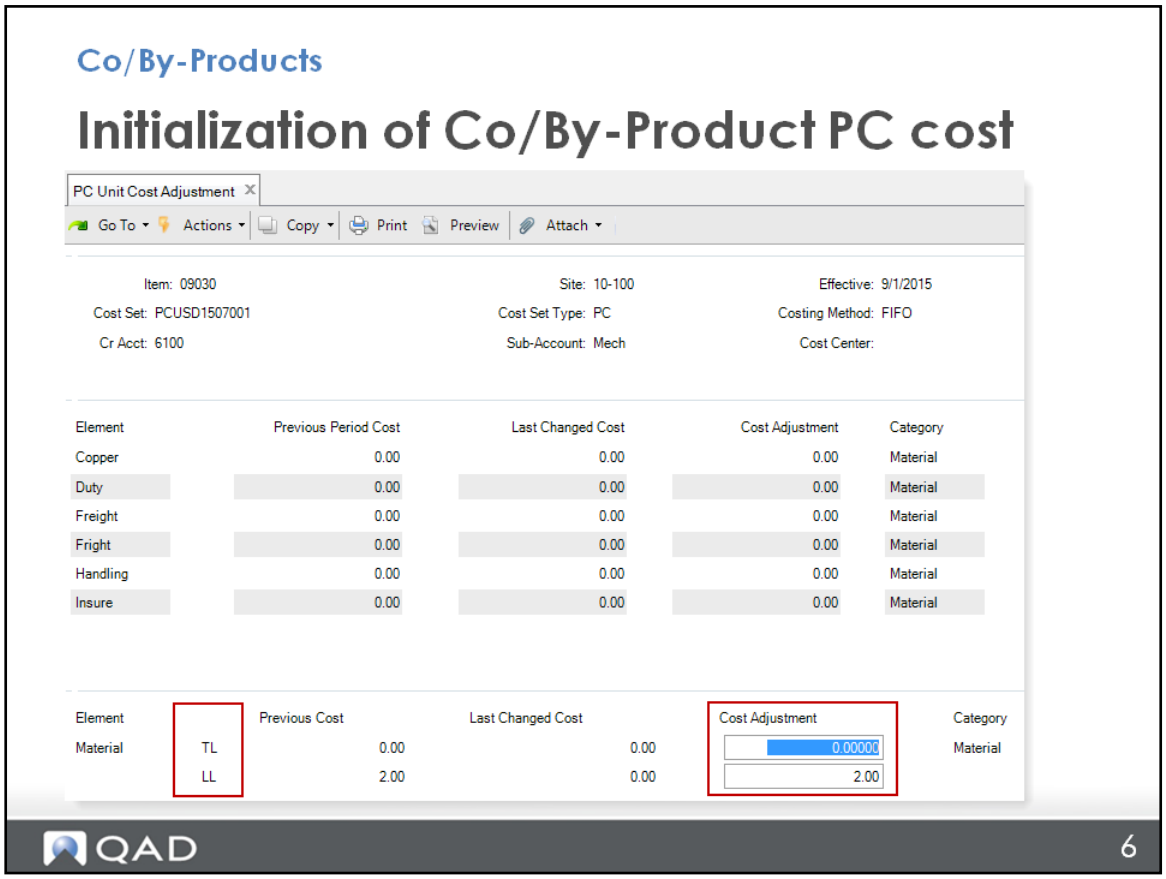
You can initialize co/by-products PC costs by Periodic Costing Initialize (30.5.1.23) before you starting to use PC module or by PC Unit Cost Adjustment (30.5.5.1) after the first period which you already calculated PC costs.

For co/by-products, use Average Cost Method Maintenance (15.12.5) to define the allocation methods for PC calculation.

Co/By-Products Structure Example



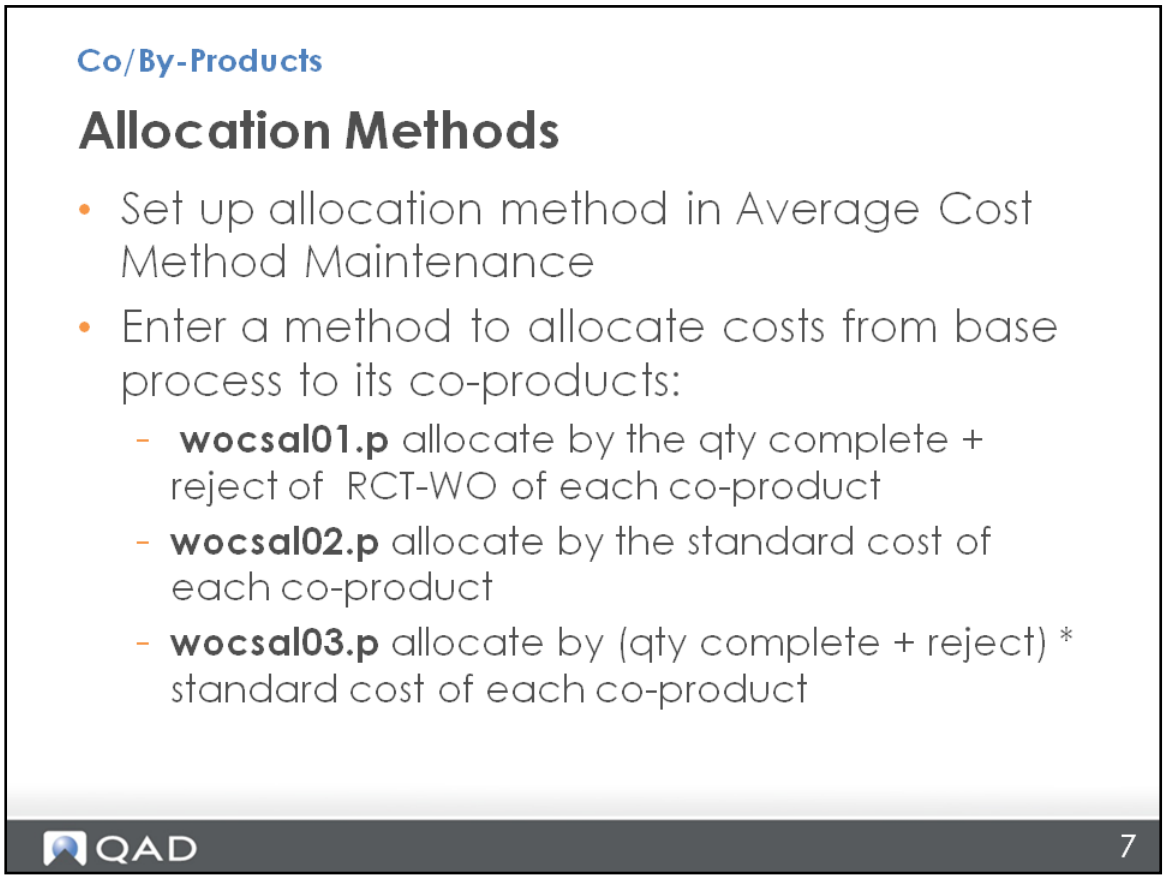
Initialization of Co/By-Product PC cost



You can use PC Unit Cost Adjustment (30.5.5.1) to create a prior period for new items that you added after Periodic Costing initialization.

Important For by-product PC cost initialization, make sure that the PC material category cost is in low level no matter it is raw material item or semi-finished goods.

Allocation Methods



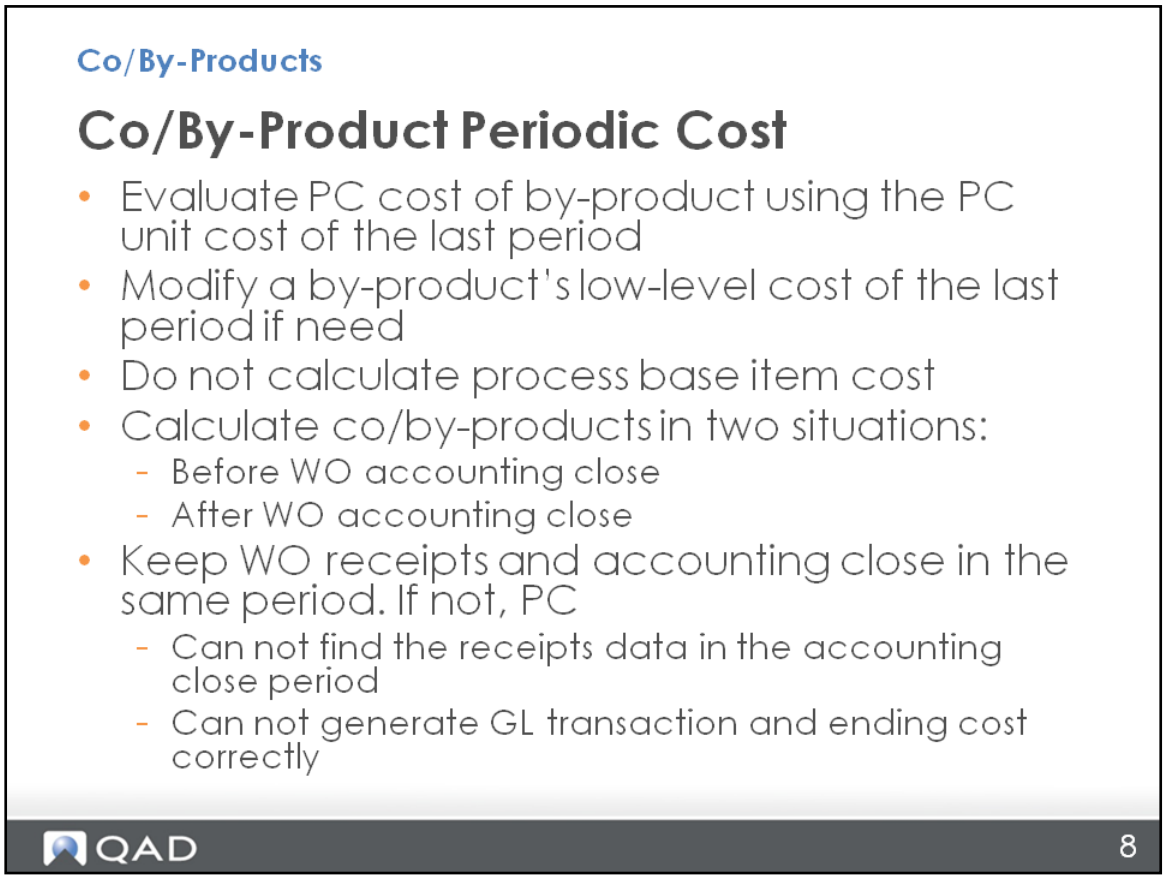
Periodic costing uses the allocation methods which maintained in Average Cost Method Maintenance (15.12.5) to allocate costs from a base process to its co-products.

You can define one of following three allocation methods for a combination of site, product line and process base:

- **wocsal01.p** - allocate by the quantity complete + reject of RCT-WO of each co-product
- **wocsal02.p** - allocate by the standard cost of each co-product
- **wocsal03.p** - allocate by the (quantity complete + reject) * standard cost of each co-product

It is required to create generalized codes for the valid allocation methods. Ensure that the three system-predefined cost allocation methods are added to Generalized Codes using the field name acm_method. Select one from wocsal01.p, wocsal02.p, and wocsal03.p for the value.

Co/By-Product Periodic Cost



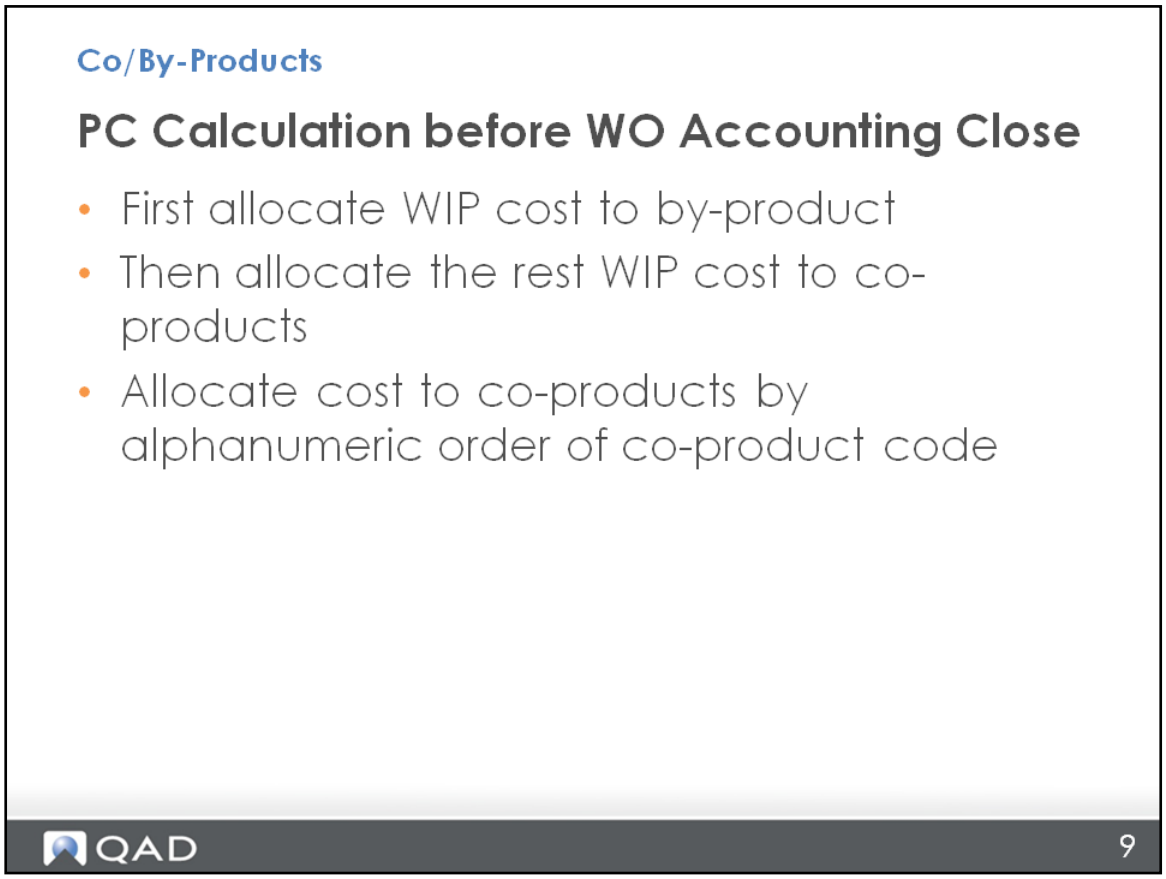
When the system calculates by-product WO receipts and base item WO closures, it evaluates PC unit cost of the last period.

You can use PC Unit Cost Adjustment to modify a by-product's low-level cost of the last period, so that the system can use the data to evaluate the current period cost.

The system does not calculate the process base item cost.

For co/by-product items, the system does not create a GL transaction for PC and does not calculate the ending cost correctly when the accounting period close is not in the same period as the WO receipt period. In this case, PC cannot find the receipts data in the accounting close period. So if the work order accounting close is a step in your process, ensure that you keep work order receipts and work order accounting close in the same period.

PC Calculation before WO Accounting Close



The periodic costing calculation checks if the work order has been done and the work order accounting close or not.

If the co-products and by-products of an open work order are partially received, the system first allocates the WIP cost to by-products as per its PC unit cost of last period multiply the total receipt quantity. And then, the system allocates the rest WIP cost to co-products.

The system allocates the cost to co-products by alphanumeric order of co-product code

Example 1: At the end of period, a work order is still open and the total WIP cost is 200. You received 50 by-product and its PC unit cost of last period is 2. You also received 10 co-product and its PC unit cost of last period is 14.

The by-product cost of this period is equal to its PC unit cost of last period. So the cost of current period is 2. The total cost is 2 * 50 =100.

The co-product total cost of this period

= (200 – 50 * 2)

= 100

The co-product cost total of this period

= (200 – 50 * 2) / 10

= 10

Example 2: in the period end, a work order still open and the total WIP cost is 200. You received 20 by-product and its PC unit cost of last period is 2. You also received 10 co-product-1 and 10 co-product-2. Each co-product PC unit cost of last period is 14.

The by-product cost of this period is equal to its PC unit cost of last period. So the cost of current period is 2. The total cost is 2 * 20 =40.

The two co-products total cost of this period

= (200 – 20 * 2)

= 160

The system considers the alphanumeric order of co-products and calculates the cost for co-product-1 first and then co-product-2.

Since the remaining cost 160 is greater than 140 (14 *10), the total cost of co-product-1 in this period

= 10 * 14

= 140

The co-product-1 cost total of this period is equal to its PC unit cost of last period 140 / 10 = 14.

Now the remaining cost is 20 (160 – 140) < 140. The total cost of co-product-2 in this period

= 160 – 140

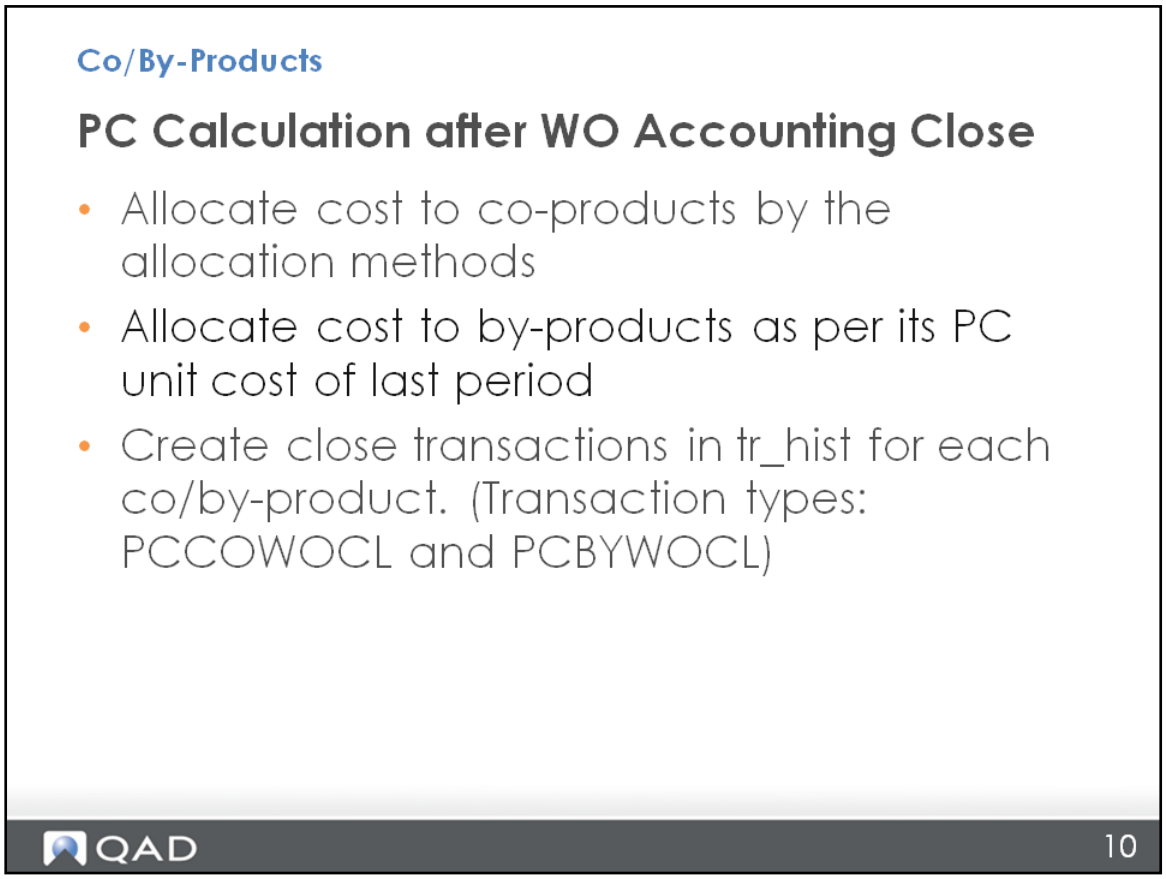
= 20

The unit cost of co-product-1 in this period

= 20 / 10

= 2

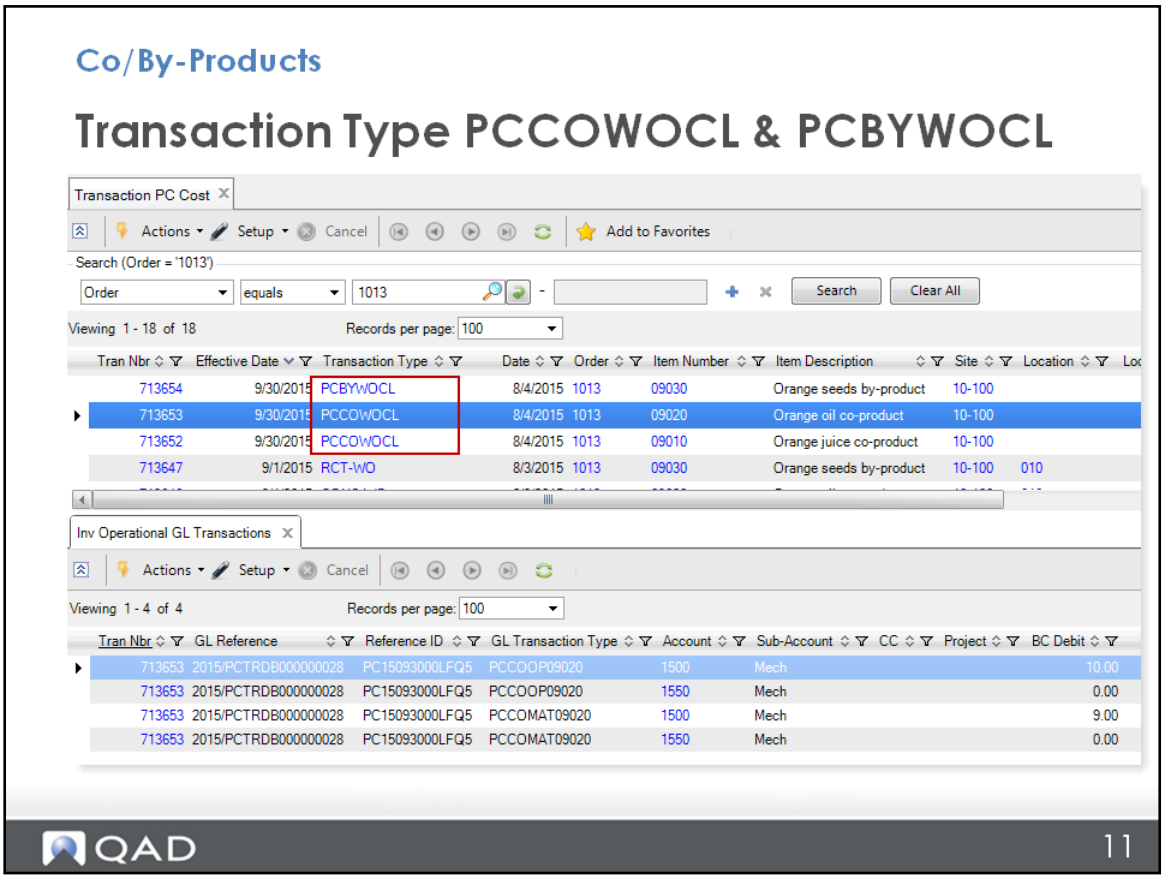
PC Calculation after WO Accounting Close



If a work order has been closed and the work order accounting close is done, then the system allocates the cost from a base process to its co-products by allocation method defined in Average Cost Method Maintenance (15.12.5).

The system allocates cost to by-products as per its PC unit cost of last period multiply the total receipts.

Transaction Type PCCOWOCL & PCBYWOCL



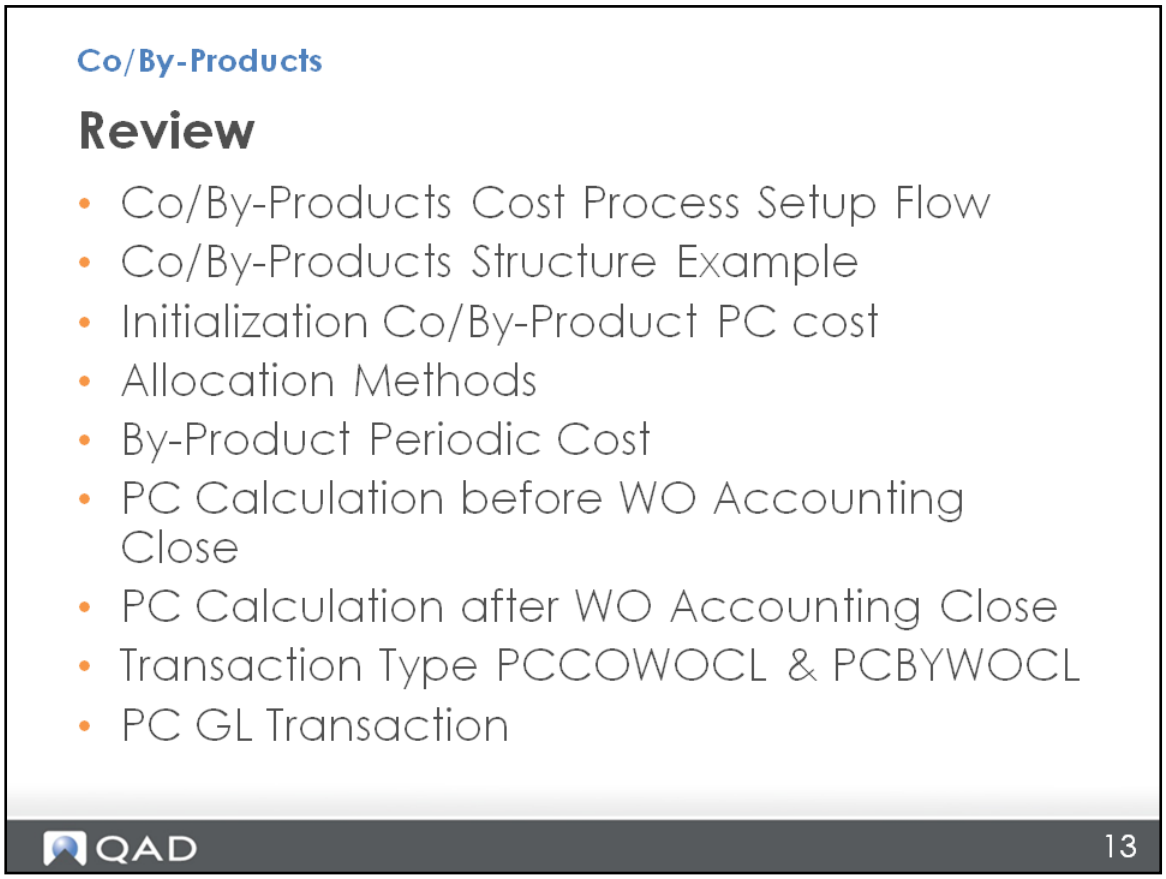
PC GL Transaction



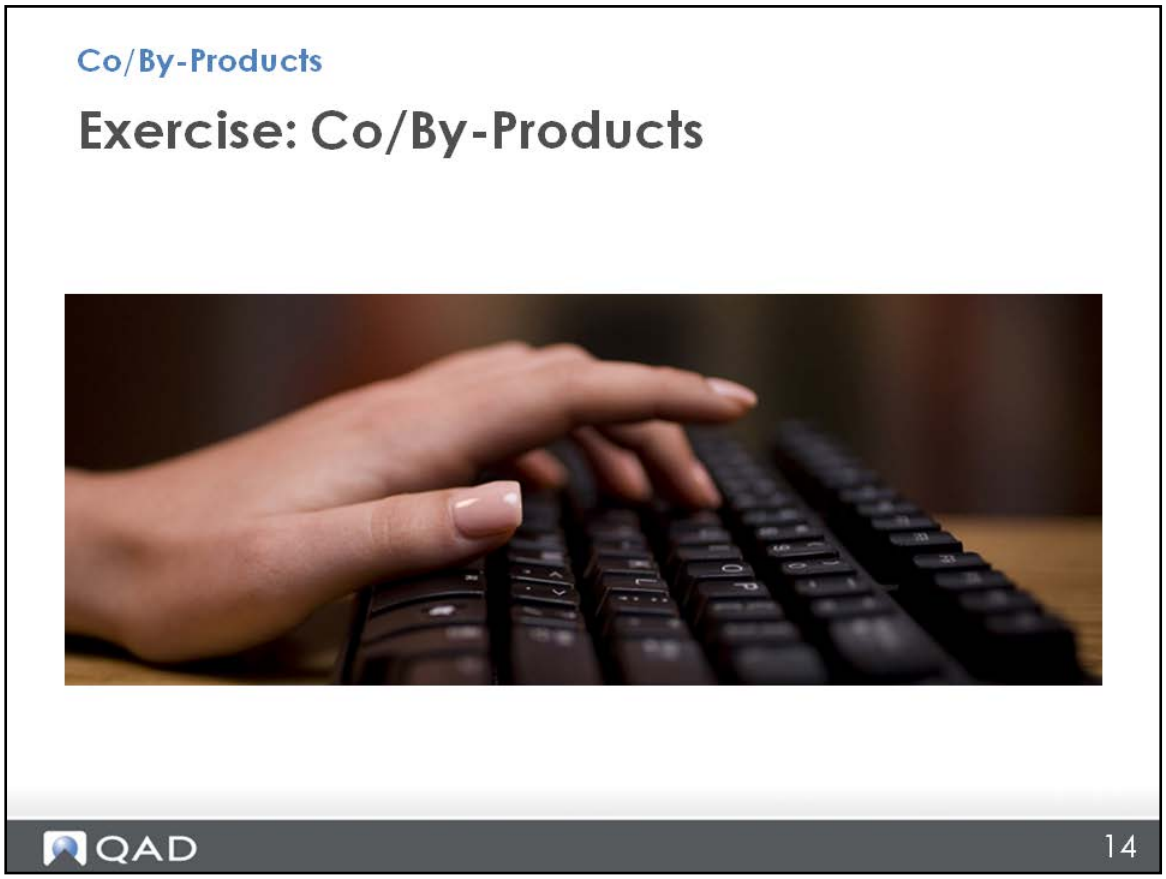
In adjustment mode, Periodic Costing reverses the standard cost GL transaction first and creates an actual cost GL transaction and posts it to the management layer.

In complete mode, the system blocks the standard cost GL transaction generation and Periodic Costing creates an actual cost GL transaction and posts it to the official layer.

Review


Co/By-Products
Review
• Co/By-Products Cost Process Setup Flow
• Co/By-Products Structure Example
• Initialization Co/By-Product PC cost
• Allocation Methods
• By-Product Periodic Cost
• PC Calculation before WO Accounting Close
• PC Calculation after WO Accounting Close
• Transaction Type PCCOWOCL & PCBYWOCL
• PC GL Transaction
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Exercise: Co/By-Products

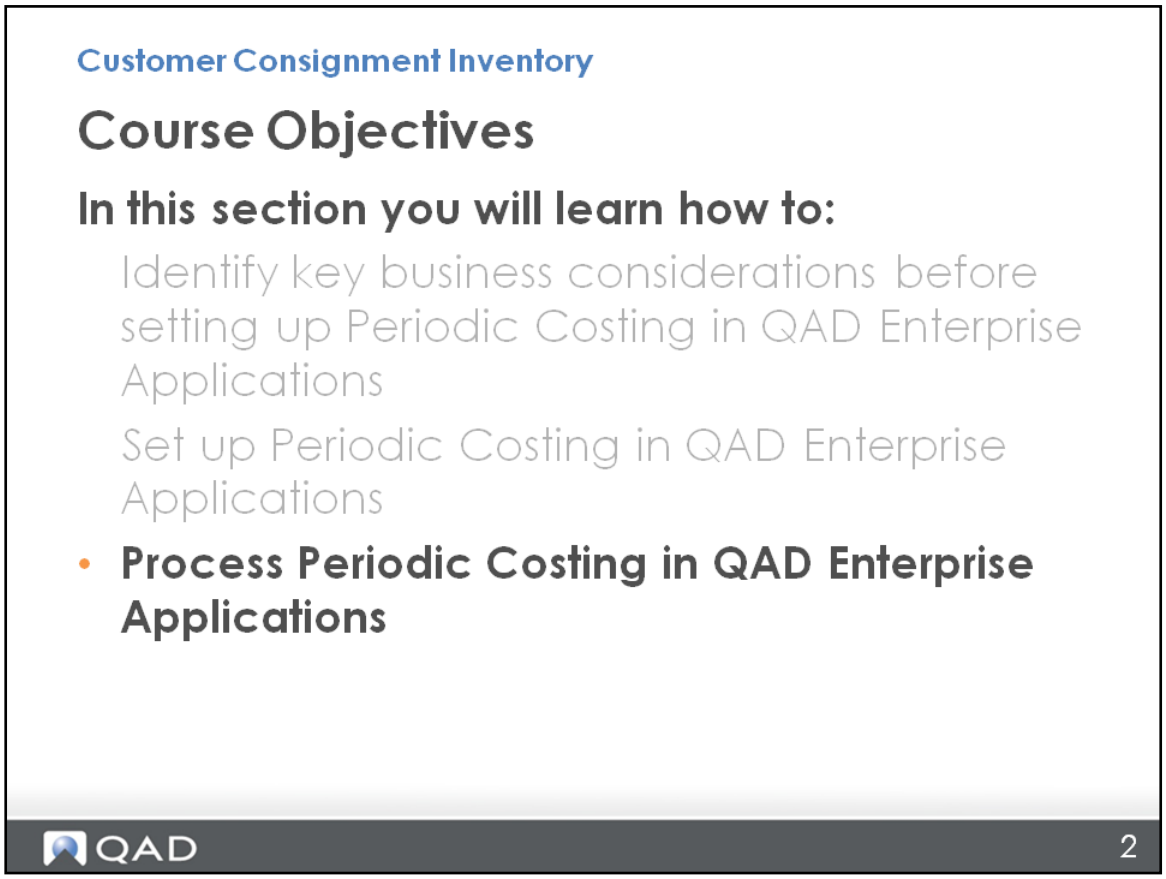


Finish the corresponding exercise at the end of this training guide.

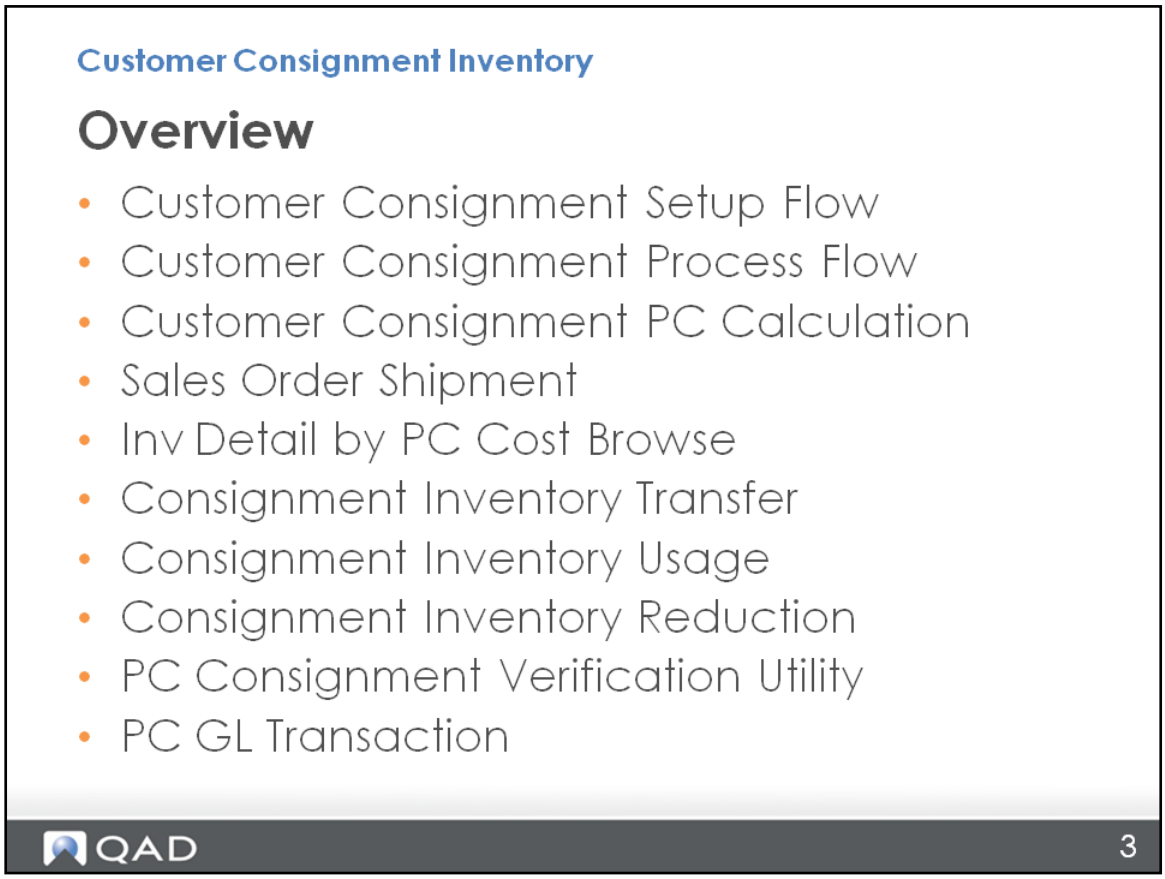
CHAPTER 15

Customer Consignment Inventory

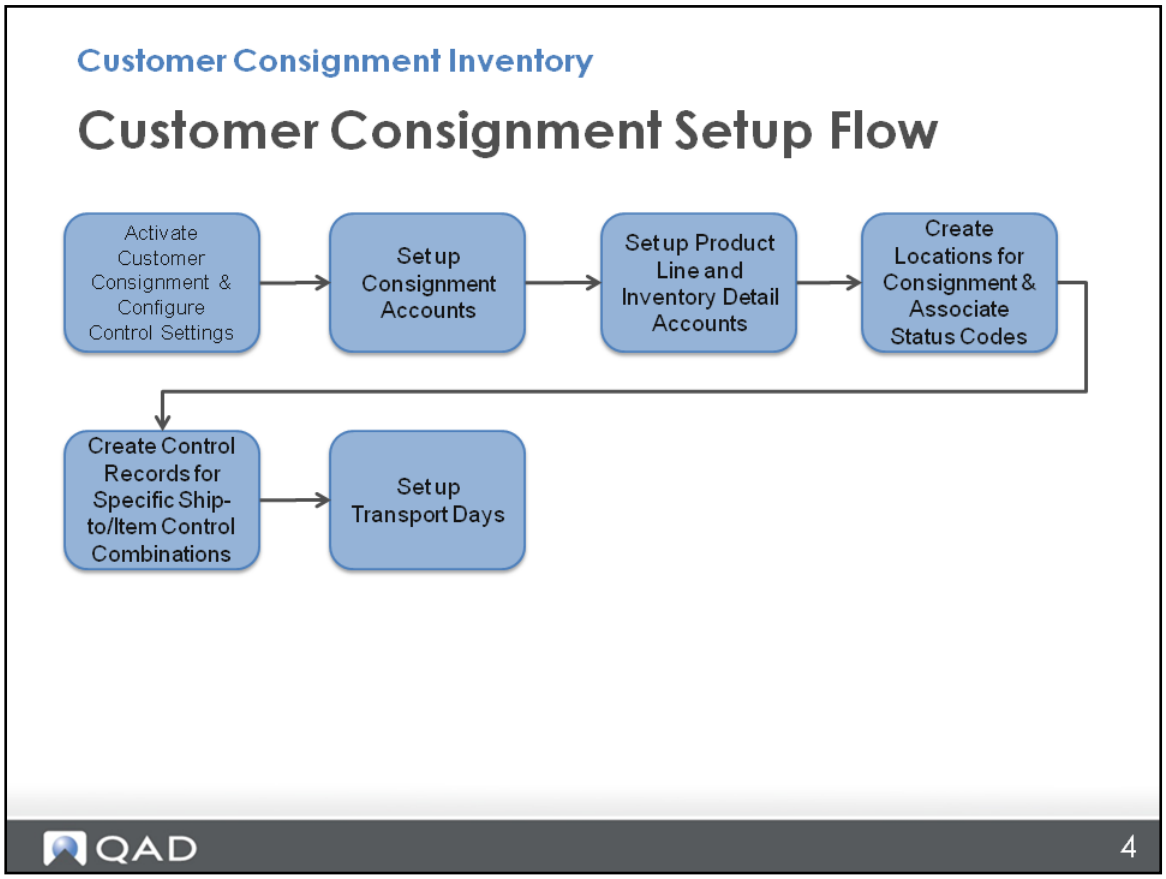
Course Objectives



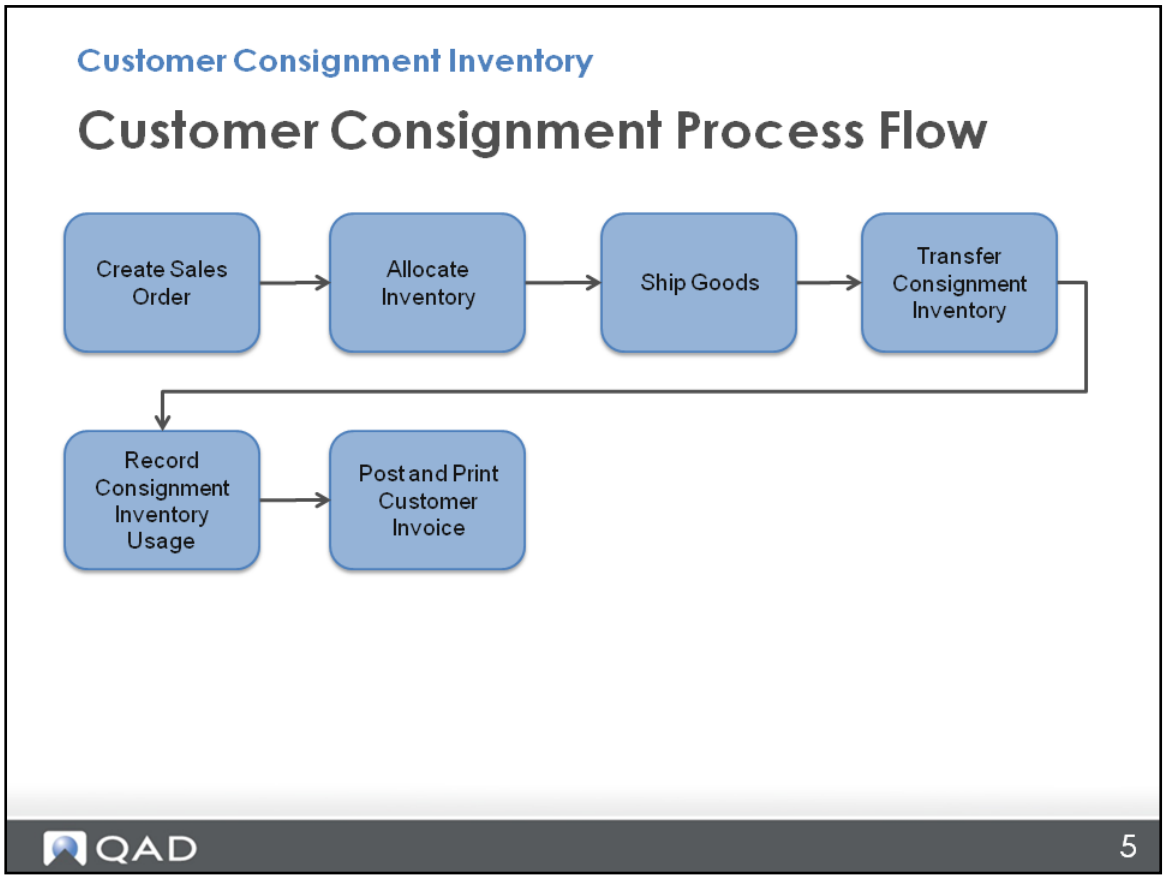
Overview


Customer Consignment Inventory
Overview
Customer Consignment Setup Flow
Customer Consignment Process Flow
Customer Consignment PC Calculation
Sales Order Shipment
Inv Detail by PC Cost Browse
Consignment Inventory Transfer
Consignment Inventory Usage
Consignment Inventory Reduction
PC Consignment Verification Utility
PC GL Transaction
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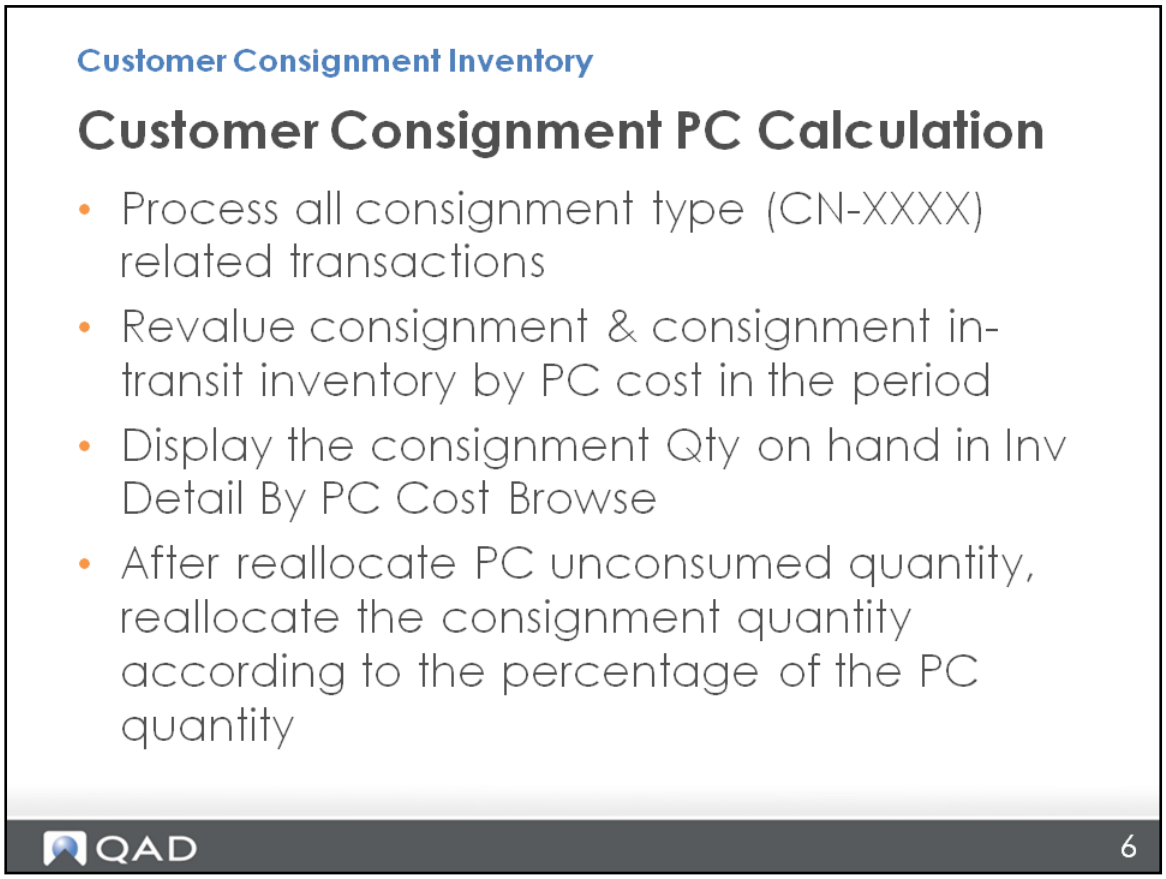
Customer Consignment Setup Flow



Customer Consignment Process Flow



Customer Consignment PC Calculation



The periodic costing calculation processes all the consignment type (CN-XXXX) related transactions. Include:

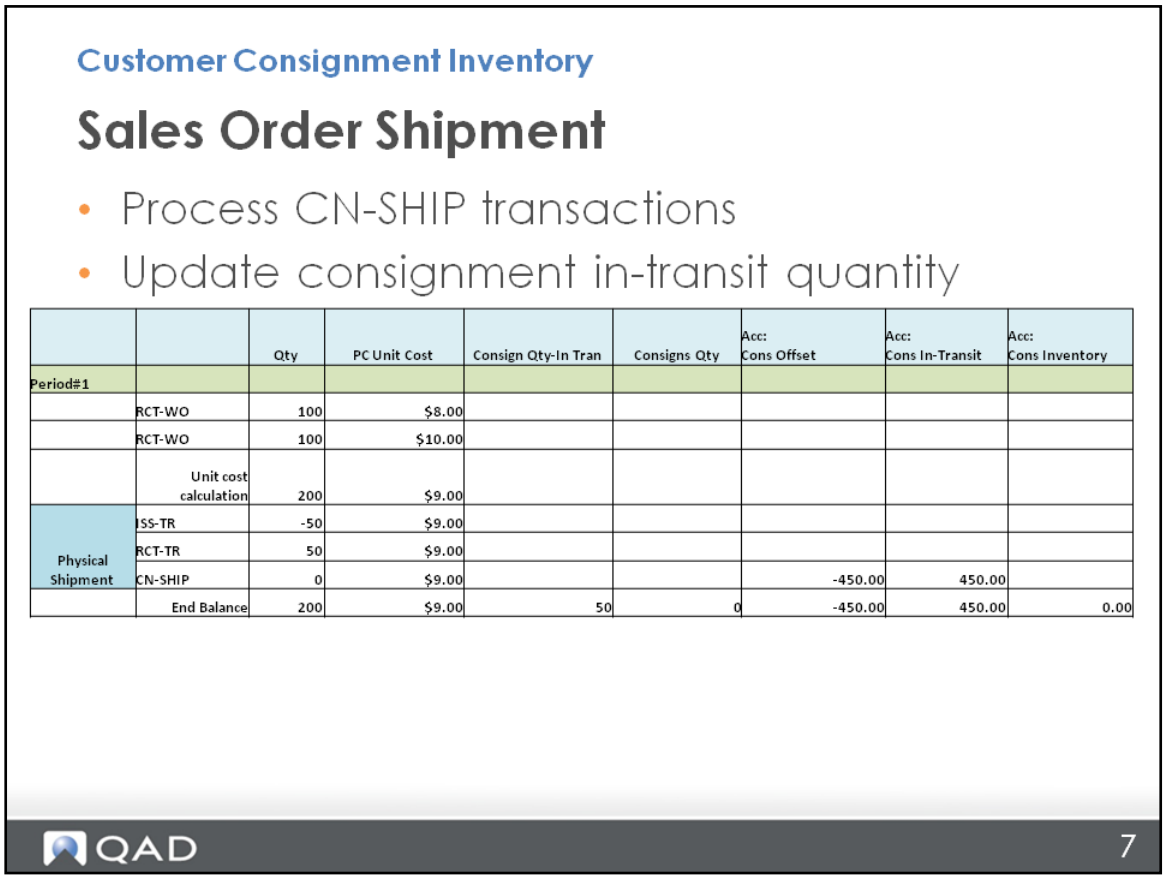
- Physical Shipment of Consigned Inventory (ISS-TR, RCT-TR, CN-SHIP)
- Consignment Inventory Usage (ISS-SO, CN-USE)
- Consignment Inventory Qty Adjustment (CN-ADJ)
- Reduce Consignment Inventory by Cycle Count or Tag Count (CYC-RCNT, CN-CN, ISS-SO, CN-USE)
- Reduce Consignment Inventory by ISS-UNP
- Consignment Inventory Transfer (ISS-TR, RCT-TR, CN-ISSTR, CN-RCTTR)
- Consignment Inventory Cost Adjustment (CST-ADJ, CN-ADJ)

The system revalues the consignment inventory items and consignment in-transit inventory items using periodic costing cost in the PC period.

In the Inv Detail By PC Cost Browse, it also displays the in-transit quantity and unconsumed quantity of the consignment.

After reallocate PC unconsumed quantity, reallocate the consignment quantity according to the percentage of the PC quantity.

Sales Order Shipment

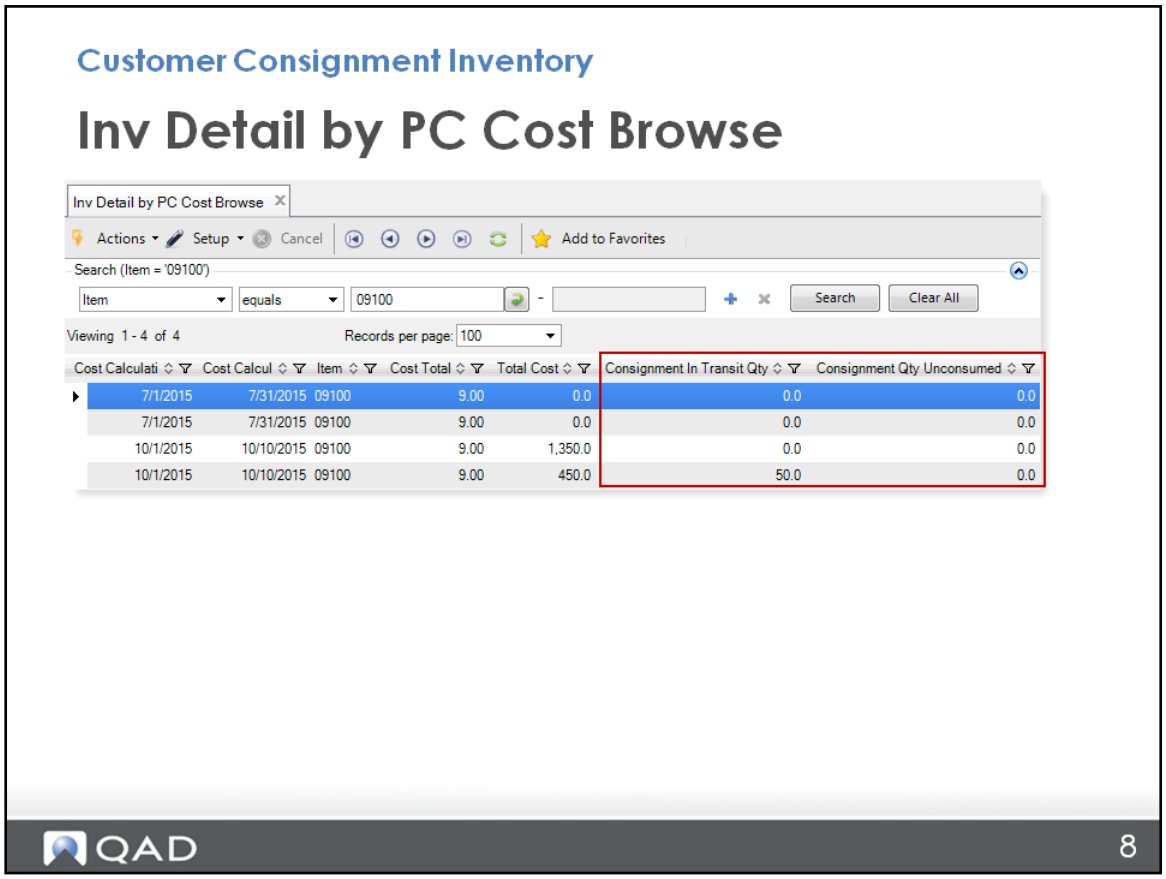


		Qty	PC Unit Cost	Consign Qty-In Tran	Consigns Qty	Acc: Cons Offset	Acc: Cons In-Transit	Acc: Cons Inventory
Period#1								
	RCT-WO	100	$8.00					
	RCT-WO	100	$10.00					
	Unit cost calculation	200	$9.00					
Physical Shipment	ISS-TR	-50	$9.00					
	RCT-TR	50	$9.00					
	CN-SHIP	0	$9.00			-450.00	450.00	
	End Balance	200	$9.00	50	0	-450.00	450.00	0.00

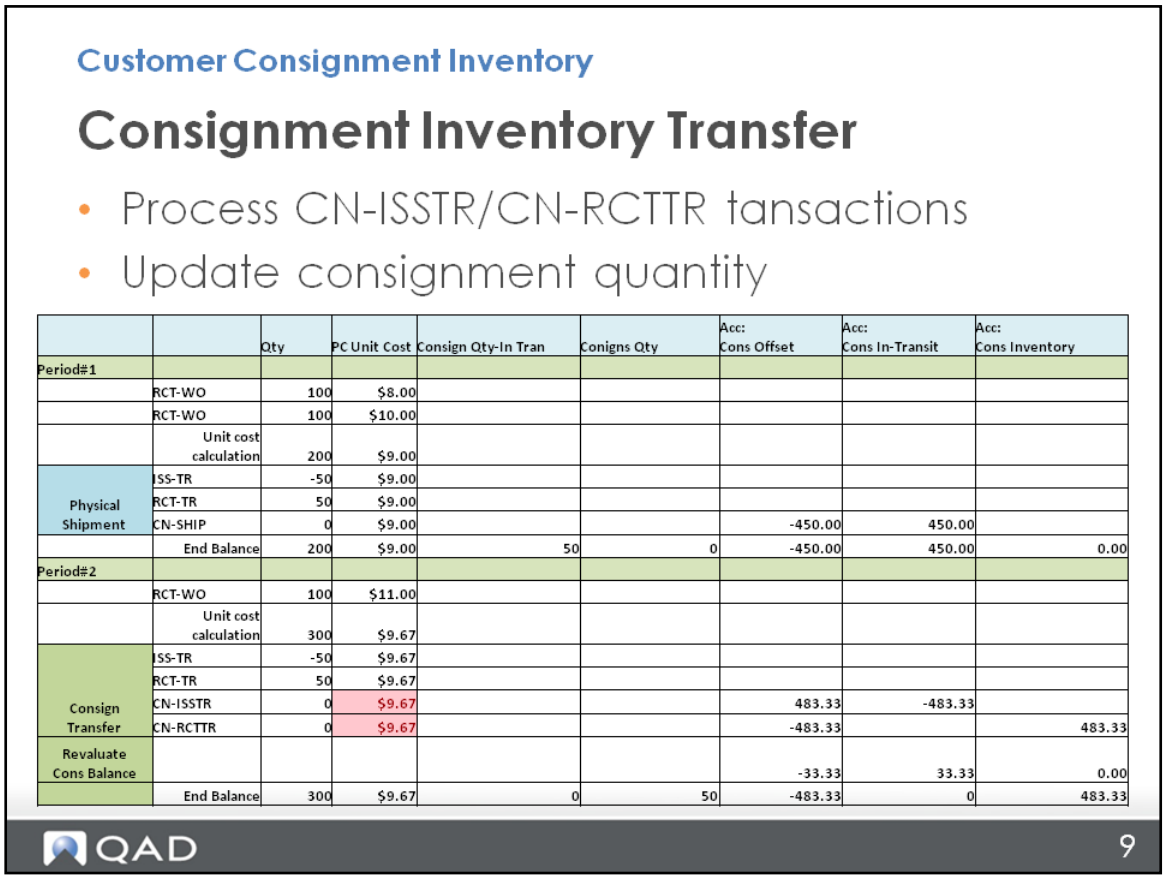
For consignment sales order, after shipment, the periodic costing calculation processes the consignment ship transaction (CN-SHIP) and updates the consignment in-transit quantity in the system.

Example: In the first period, the PC cost of a consignment item is 9.00. Ship 50 consignment items so the consignment in-transit account has total cost 450.00. In the Inv Detail By PC Cost Browse, you can see the 50 consignment in-transit quantity.

Inv Detail by PC Cost Browse



Consignment Inventory Transfer



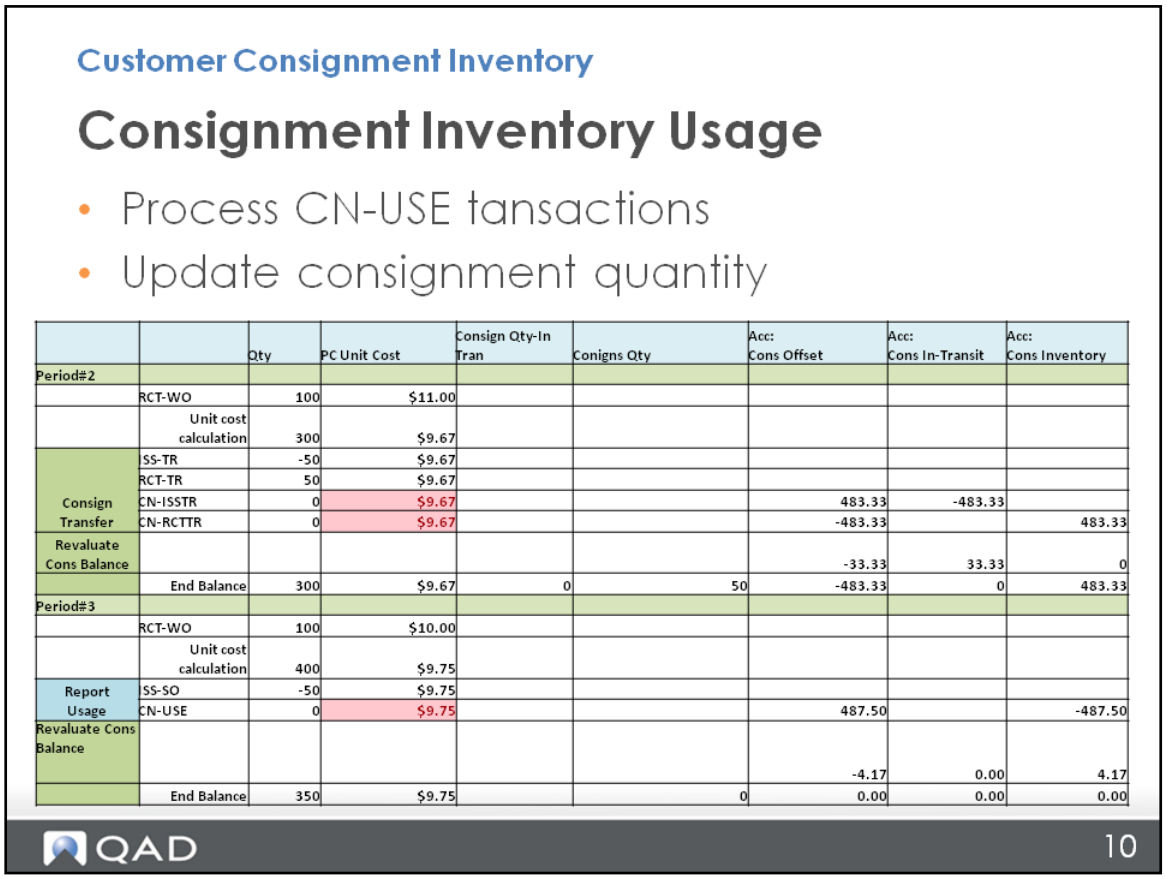
		Qty	PC Unit Cost	Consign Qty-In Tran	Conigns Qty	Acc: Cons Offset	Acc: Cons In-Transit	Acc: Cons Inventory
Period#1								
	RCT-WO	100	$8.00					
	RCT-WO	100	$10.00					
	Unit cost calculation	200	$9.00					
Physical Shipment	ISS-TR	-50	$9.00					
	RCT-TR	50	$9.00					
	CN-SHIP	0	$9.00			-450.00	450.00	
	End Balance	200	$9.00	50	0	-450.00	450.00	0.00
Period#2								
	RCT-WO	100	$11.00					
	Unit cost calculation	300	$9.67					
Consign Transfer	ISS-TR	-50	$9.67					
	RCT-TR	50	$9.67					
	CN-ISSTR	0	$9.67			483.33	-483.33	
	CN-RCTTR	0	$9.67			-483.33		483.33
Revaluate Cons Balance						-33.33	33.33	0.00
	End Balance	300	$9.67	0	50	-483.33	0	483.33

If you transfer the consignment items in next period but its PC cost has changed, the periodic costing calculation revalues the total cost in consignment account and in-transit account.

Let's continue with the example. In the second period, the PC cost of the consignment item is 9.67. After the transfer of 50 consignment items from in-transit location to consignment location, the periodic costing calculation revalues the total PC cost of the consignment account to 483.33.

In the Inv Detail By PC Cost Browse, now you can see the quantity of 50 in the Consignment Qty Unconsumed column.

Consignment Inventory Usage

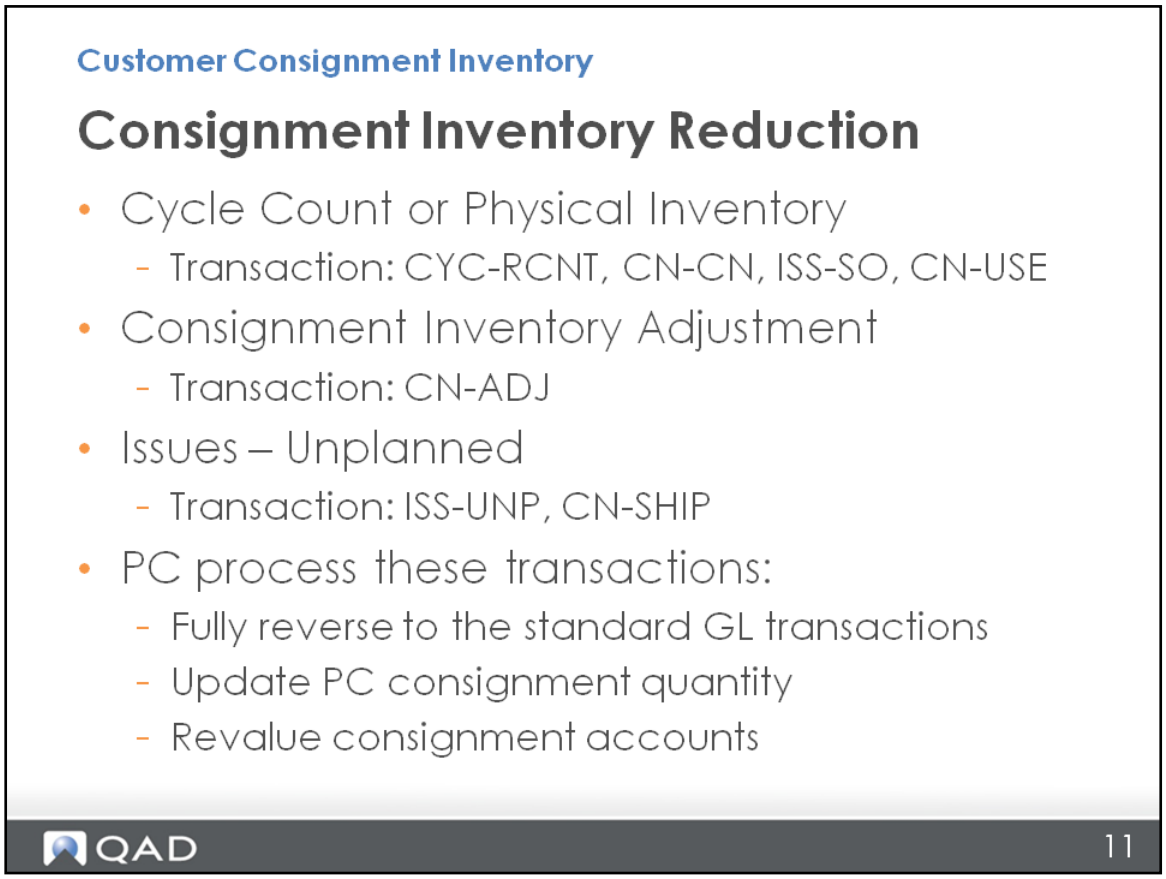


		Qty	PC Unit Cost	Consign Qty-In Tran	Conigns Qty	Acc: Cons Offset	Acc: Cons In-Transit	Acc: Cons Inventory
Period#2								
	RCT-WO	100	$11.00					
	Unit cost calculation	300	$9.67					
Consign Transfer	ISS-TR	-50	$9.67					
	RCT-TR	50	$9.67					
	CN-ISSTR	0	$9.67			483.33	-483.33	
	CN-RCTTR	0	$9.67			-483.33		483.33
Revaluate Cons Balance						-33.33	33.33	0
	End Balance	300	$9.67	0	50	-483.33	0	483.33
Period#3								
	RCT-WO	100	$10.00					
	Unit cost calculation	400	$9.75					
Report Usage	ISS-SO	-50	$9.75					
	CN-USE	0	$9.75			487.50		-487.50
Revaluate Cons Balance						-4.17	0.00	4.17
	End Balance	350	$9.75		0	0.00	0.00	0.00

If you report the customer usage after next period but the PC cost of the item has been changed again, the periodic costing calculation revalues the total cost in both of consignment account and in-transit account.

Let’s continue with the example. In the third period, the PC cost of the consignment item is 9.75. After usage of the 50 consignment items from consignment location, the periodic costing calculation revalues the total PC cost of the consignment account to 0.

Consignment Inventory Reduction

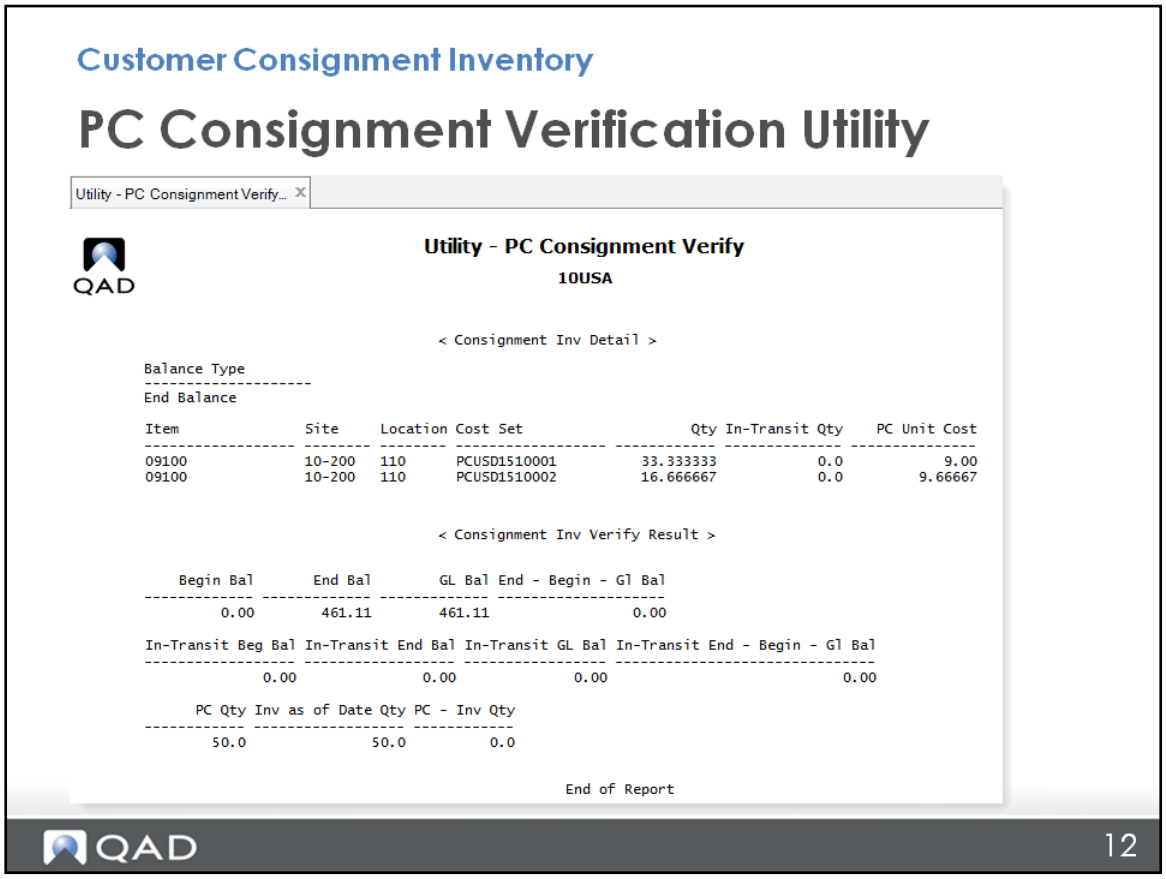


For Cycle Count or Physical Inventory, the transactions are CYC-RCNT, CN-CN, ISS-SO, and CN-USE. For Consignment Inventory Adjustment, the transaction type is CN-ADJ. For Issues – Unplanned, the transactions are ISS-UNP and CN-SHIP.

When periodic costing processes these transactions, it

- Fully reverses the transactions to the standard GL transactions
- Updates the consignment quantity according to the transaction quantity
- For every item/site/bucket, revalues the consignment inventory value movement and creates PC GL transactions to balance it

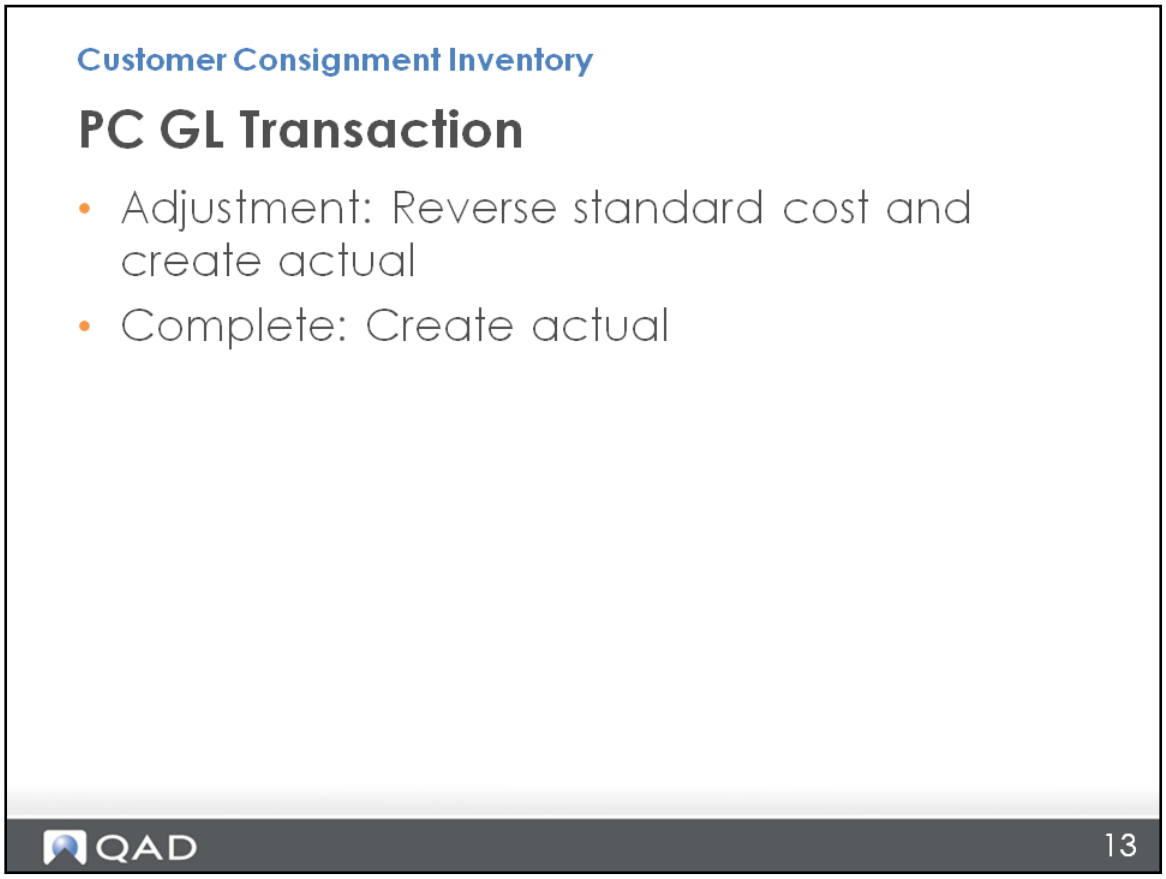
PC Consignment Verification Utility



Use Utility - PC Consignment Verify (30.5.7.25.5) to verify consignment inventory details including consigned quantity and in-transit quantity. It also displays the verification results:

- Ending Balance – Beginning Balance = GL Balance
- In-transit Ending Balance – In-transit Beginning Balance = In-transit GL Balance
- PC Quantity = Inventory as of Date Quantity

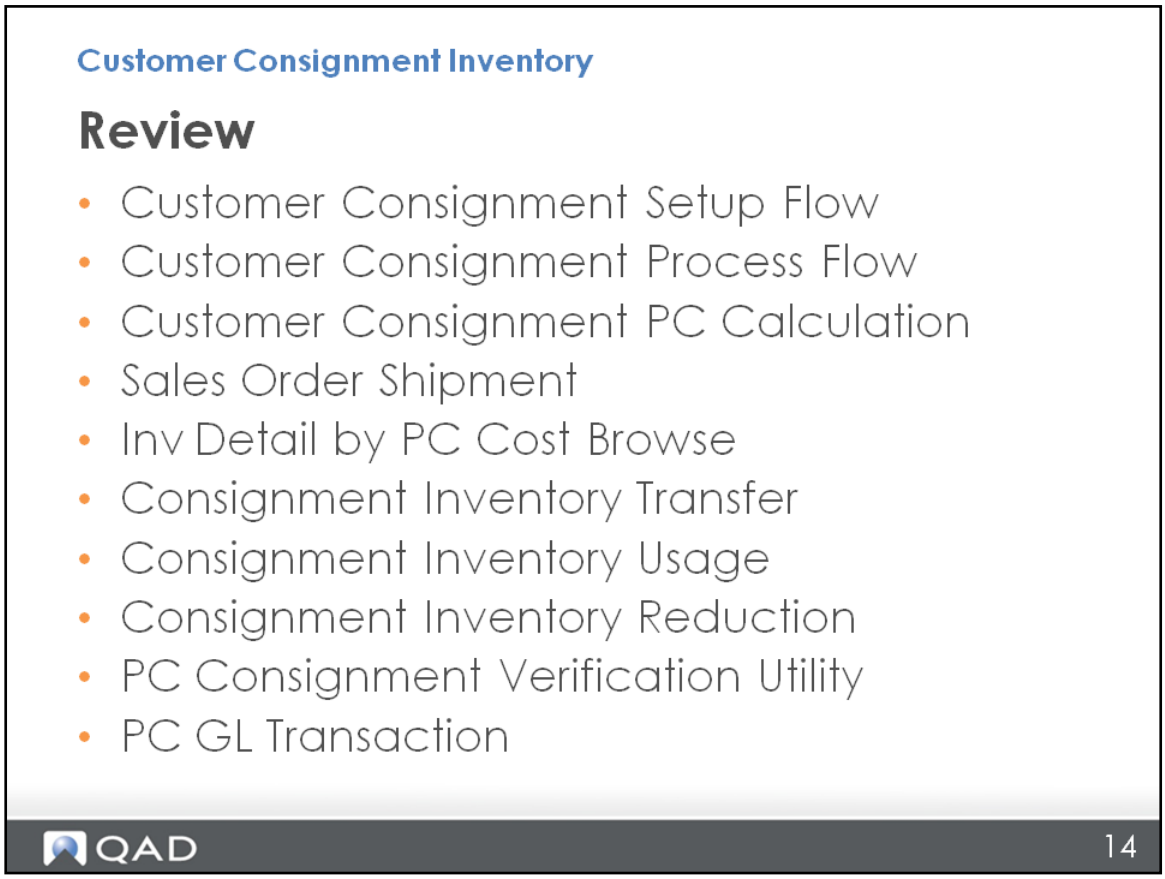
PC GL Transaction



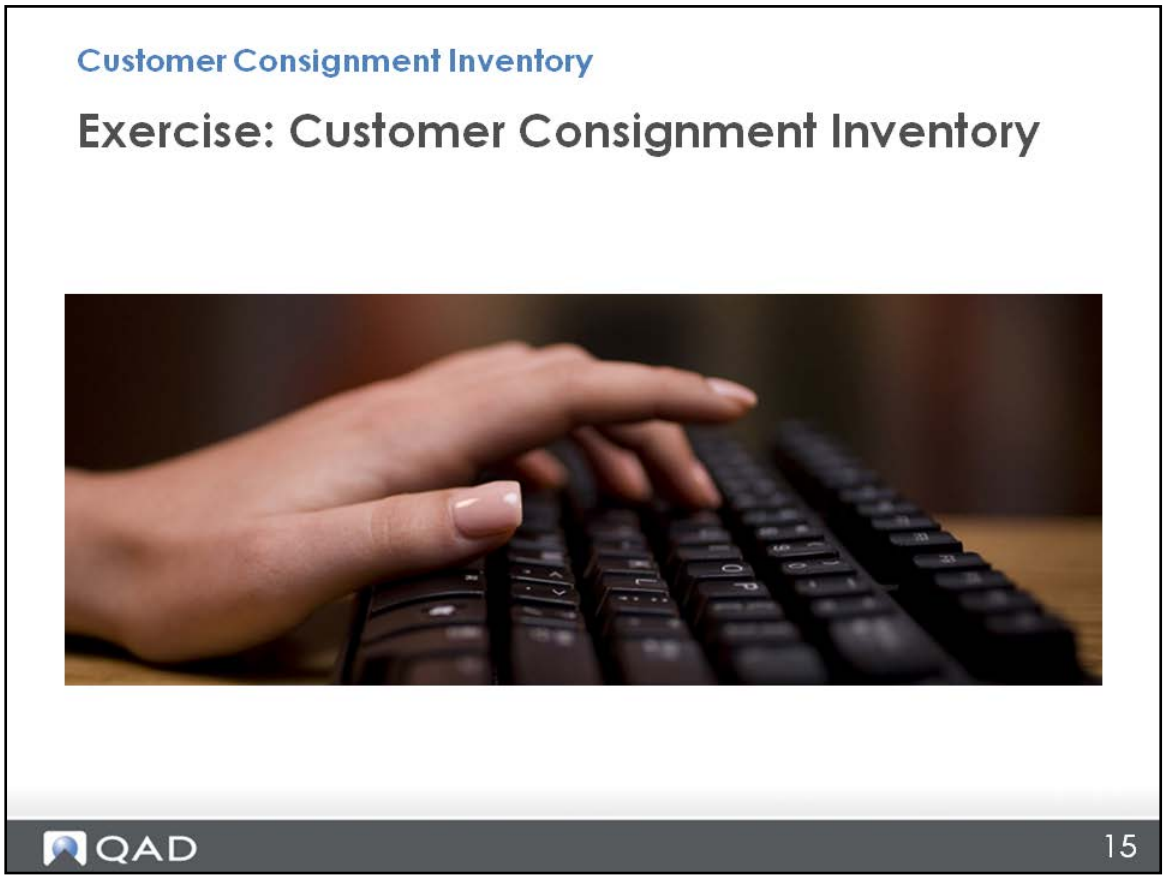
In adjustment mode, Periodic Costing reverses the standard cost GL transaction first, creates an actual cost GL transaction, and posts it to the management layer.

In complete mode, the system blocks the standard cost GL transaction generation. Periodic Costing creates an actual cost GL transaction and posts it to official layer.

Review


Customer Consignment Inventory
Review
Customer Consignment Setup Flow
Customer Consignment Process Flow
Customer Consignment PC Calculation
Sales Order Shipment
Inv Detail by PC Cost Browse
Consignment Inventory Transfer
Consignment Inventory Usage
Consignment Inventory Reduction
PC Consignment Verification Utility
PC GL Transaction
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Exercise: Customer Consignment Inventory

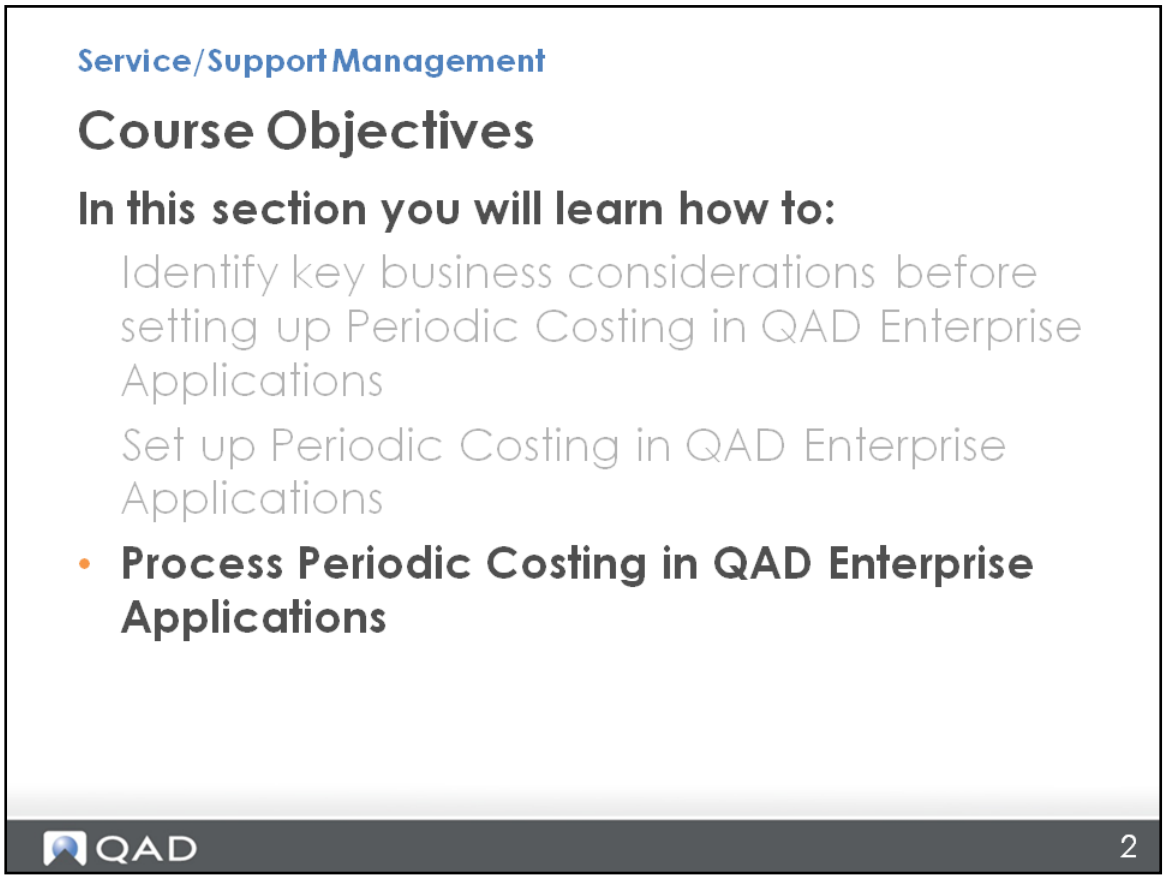


Finish the corresponding exercise at the end of this training guide.

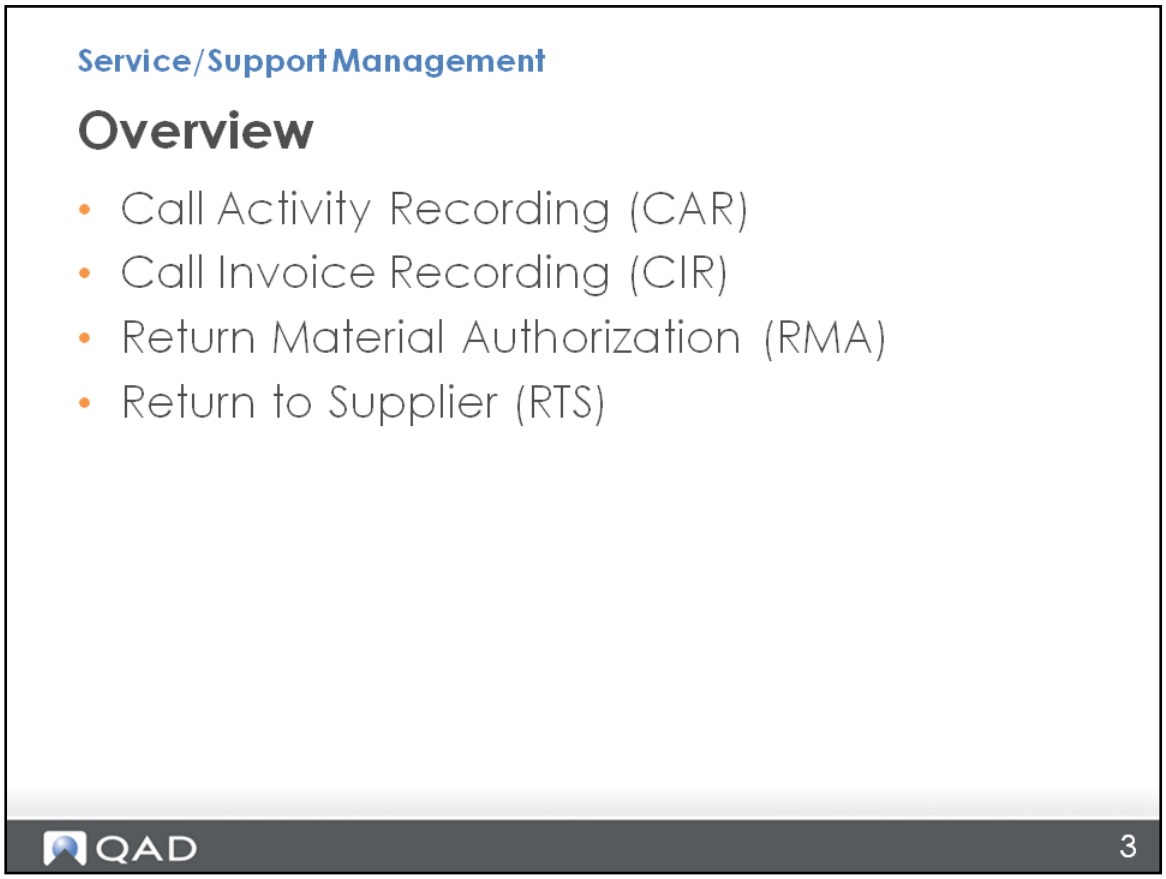
CHAPTER 16

Service/Support Management

Course Objectives



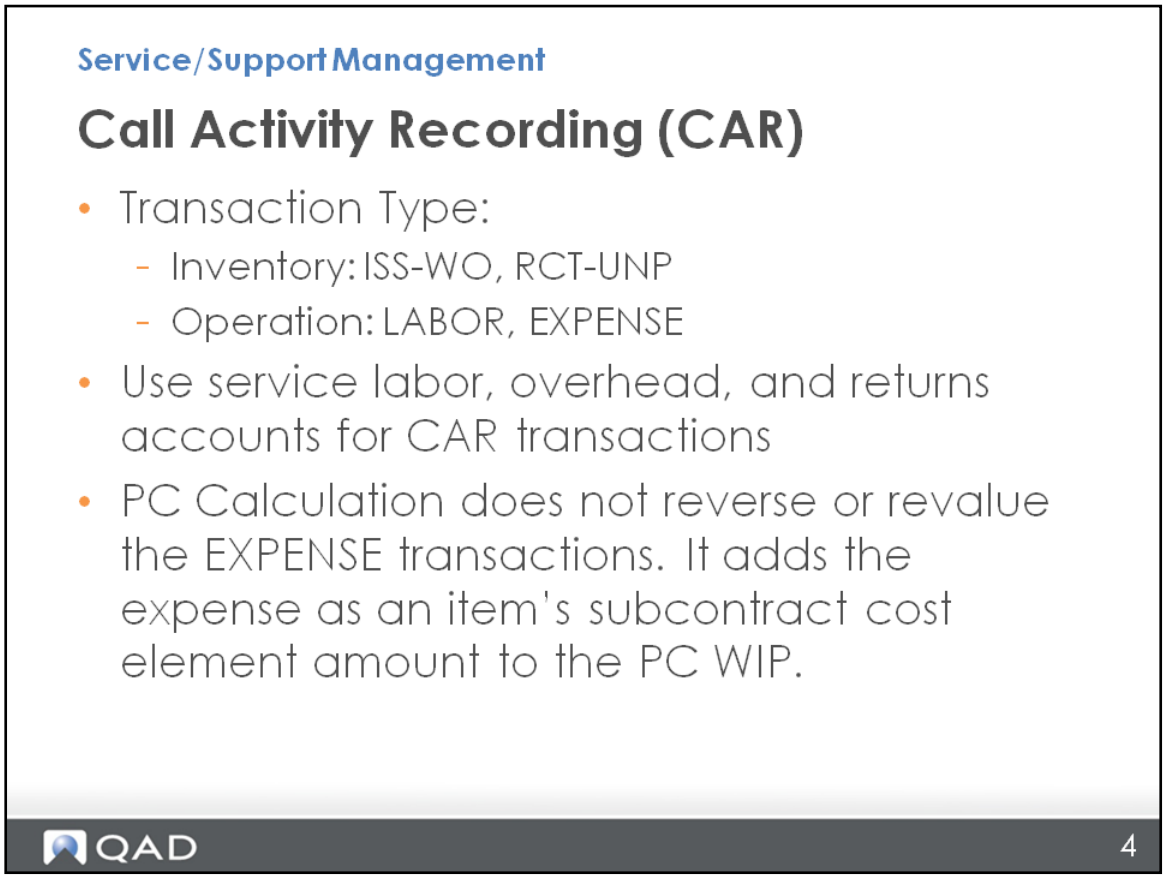
Overview



In current system, the Periodic Costing calculation supports the following SSM transactions:

- Call Activity Recording (CAR)
- Call Invoice Recording (CIR)
- Return Material Authorization (RMA)
- Return to Supplier (RTS)

Call Activity Recording (CAR)



For Call Activity Recording (CAR), the item issue transaction type is ISS-WO and the item return transaction type is RCT-UNP. The operation transaction types are LABOR and EXPENSE.

When Periodic Costing processes the operation transactions (Labor and Burden) that CAR created, the system uses the service account codes (Service Labor and Service Overhead) defined in product line maintenance for PC transactions credit accounts.

Note: For SSM operation transactions, the labor and burden accounts are not from the Department Maintenance.

For example: Labor & Burden

- Dr WIP
- Cr Service Labor (WC Labor Rate * Hours)
- Cr Service Burden (WC Burden Rate * Hours)

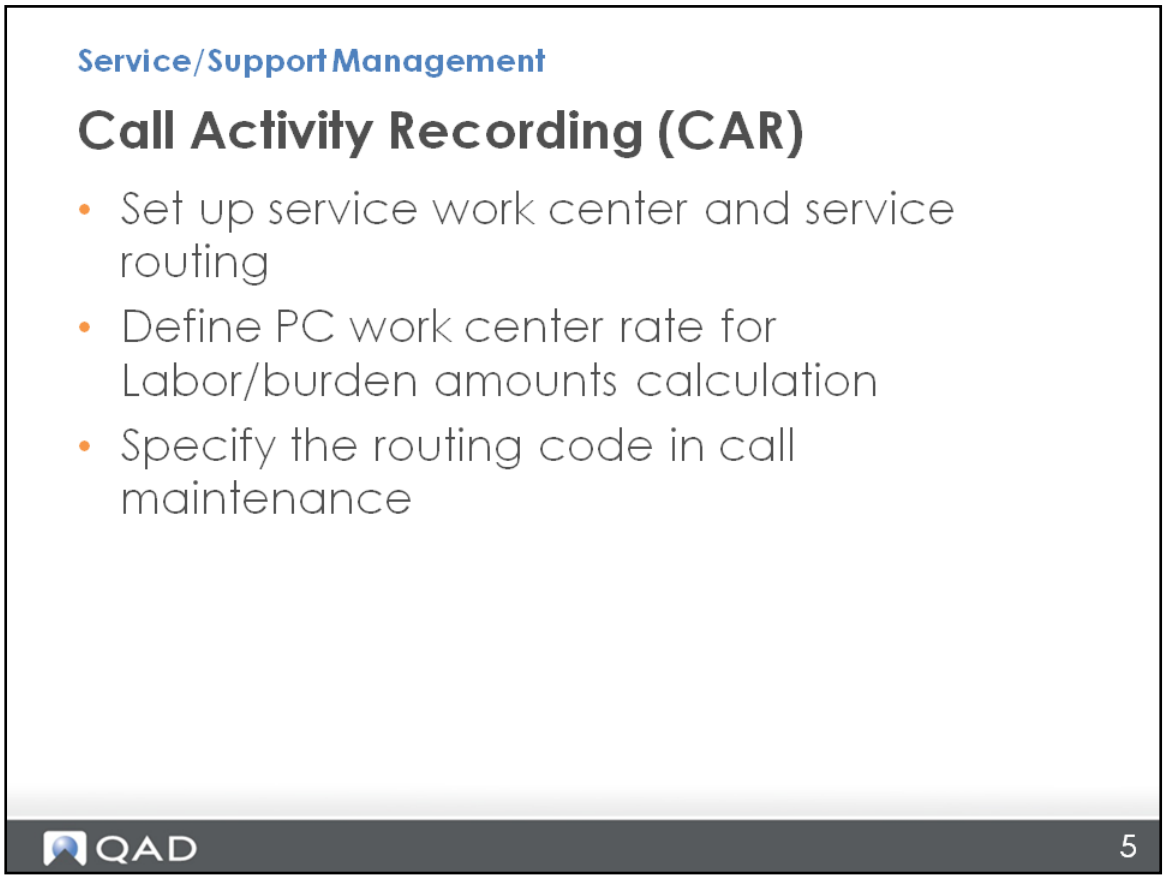
When Periodic Costing processes the return transaction (RCT-UNP) that CAR created, the system uses the service returns account code defined in product line maintenance for PC transactions credit account.

For example, parts returns:

- Dr Inventory
- Cr Service Returns (PC cost * Qty)

Periodic Costing calculation does not reverse or revalue the EXPENSE transactions. Instead, it adds the expense as an item’s subcontract cost element amount to the PC WIP.

Call Activity Recording (CAR)

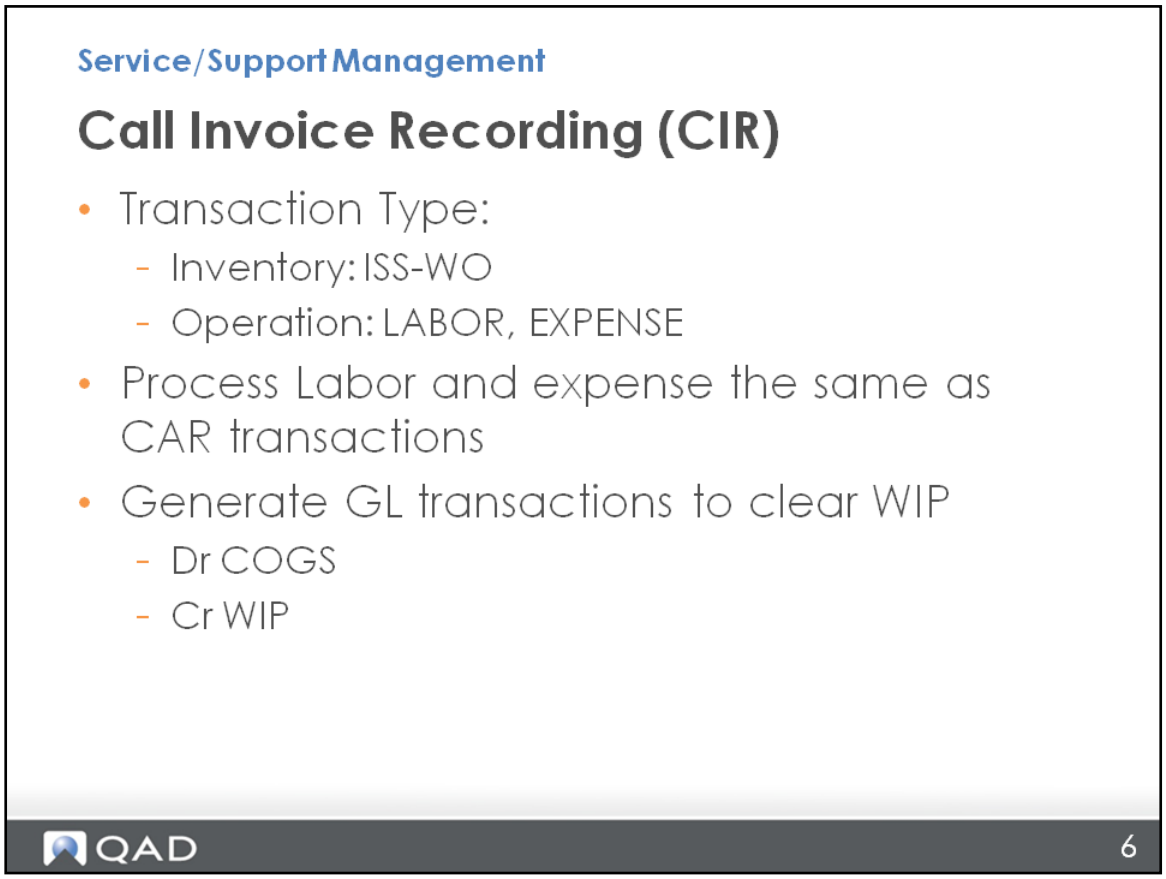


Periodic Costing uses the actual labor and burden rate defined in PC Work Center Rate Maintenance (30.5.3.1) for CAR operation cost calculation.

You must define the service work center in Service Work Center Maintenance (11.19.13) and service routing in Service Routing Maintenance (11.19.17) first. Then, maintain the labor and burden rate in PC Work Center Rate Maintenance.

When you create a customer call, specify the service routing code in call maintenance.

Call Invoice Recording (CIR)



For Call Invoice Recording (CIR), the item issue transaction type is ISS-WO. The operation transaction types are LABOR and EXPENSE.

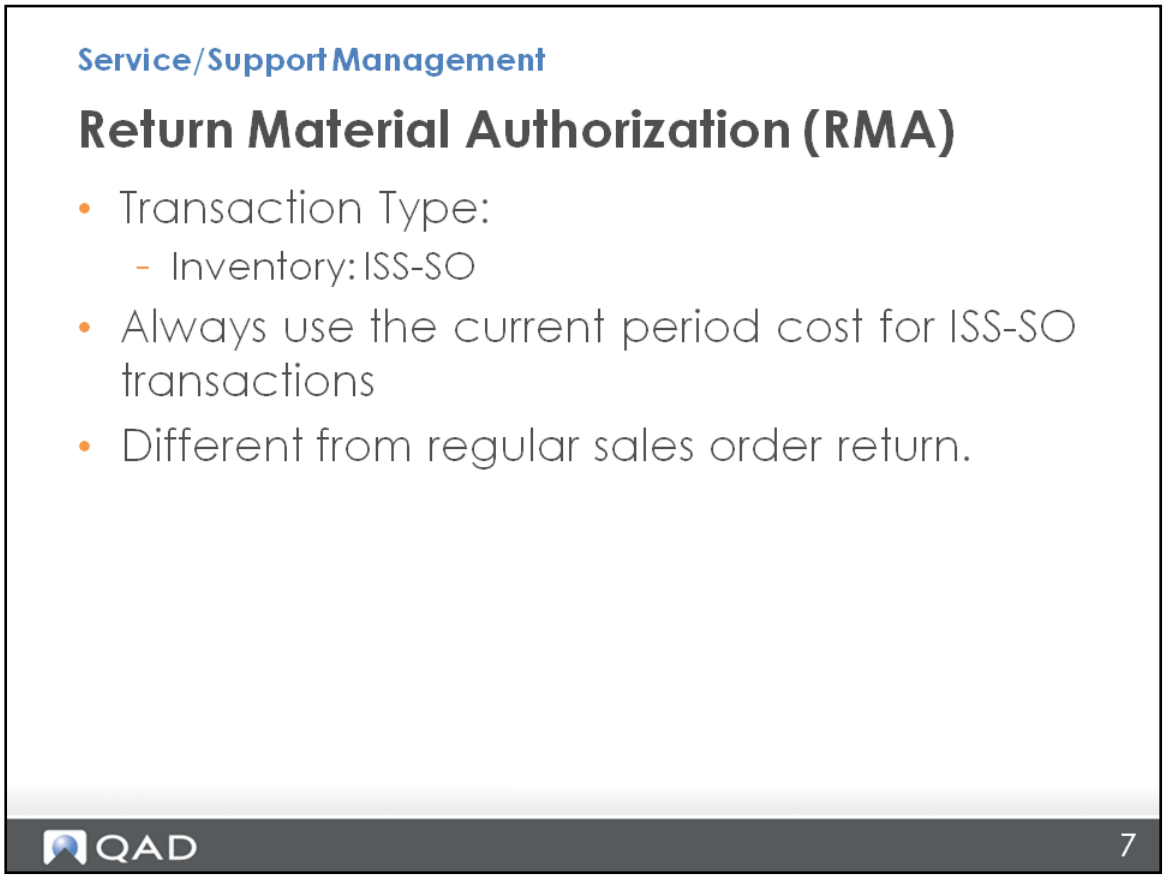
The Periodic Costing calculation process Labor and expense the same as CAR transactions.

After CIR & Invoice post and print, in case there is remaining WIP, the system generates the GL transactions to clear the WIP.

The GL transaction is:

- DR Cost of Goods Sold
- CR WIP

Return Material Authorization (RMA)

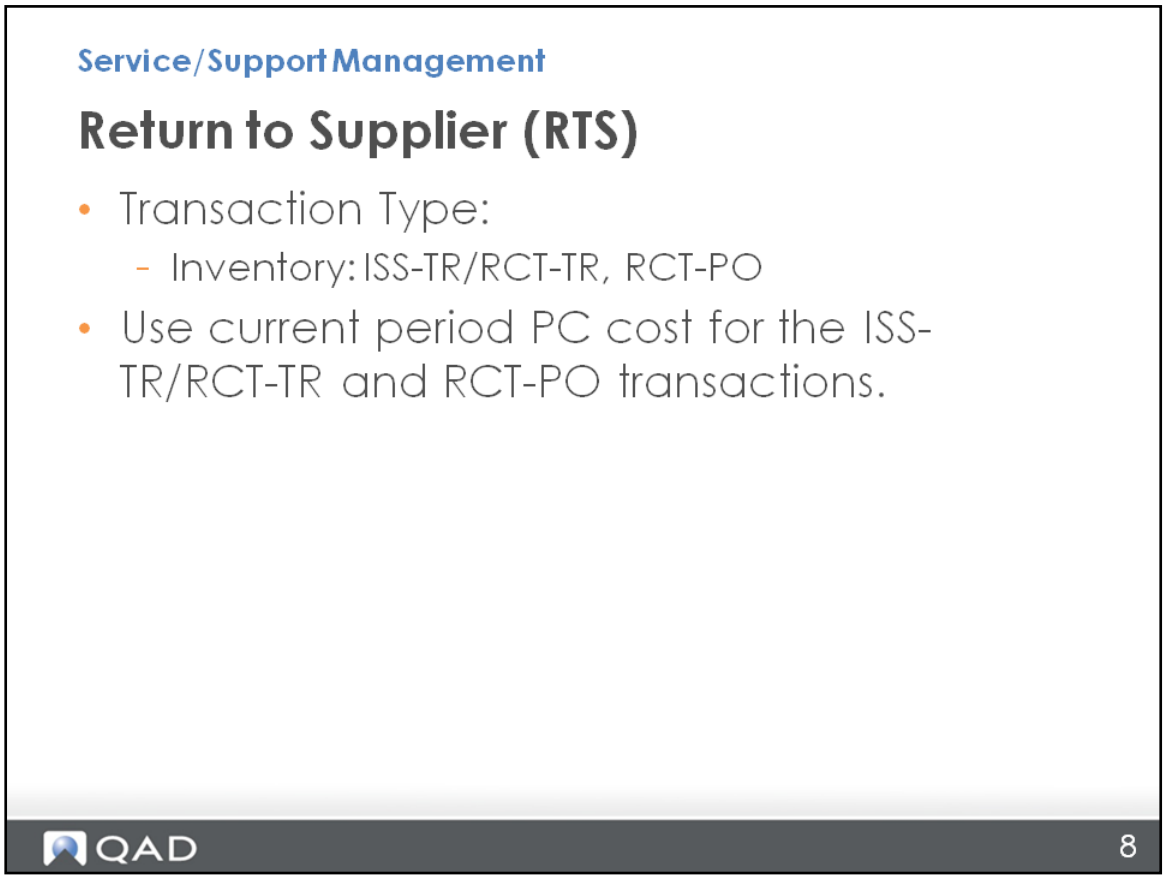


For Return Material Authorization (RMA), the transaction type of RMA Shipment and RMA Receipts is ISS-SO.

In the case of RMA, it always uses the current period cost; while, regular ISS-SO returns tries to look for the value from the period when the product was first shipped.

Note: Regular sales order returns can be the receipts when the original SO shipment (ISS-SO) transaction occurred in the prior cost calculation period. The system then values the SO return at the prior period and it impacts the unit cost calculation. When the corresponding ISS-SO transaction occurs in the current cost calculation period. The system considers it as normal shipment and uses the cost of the current period.

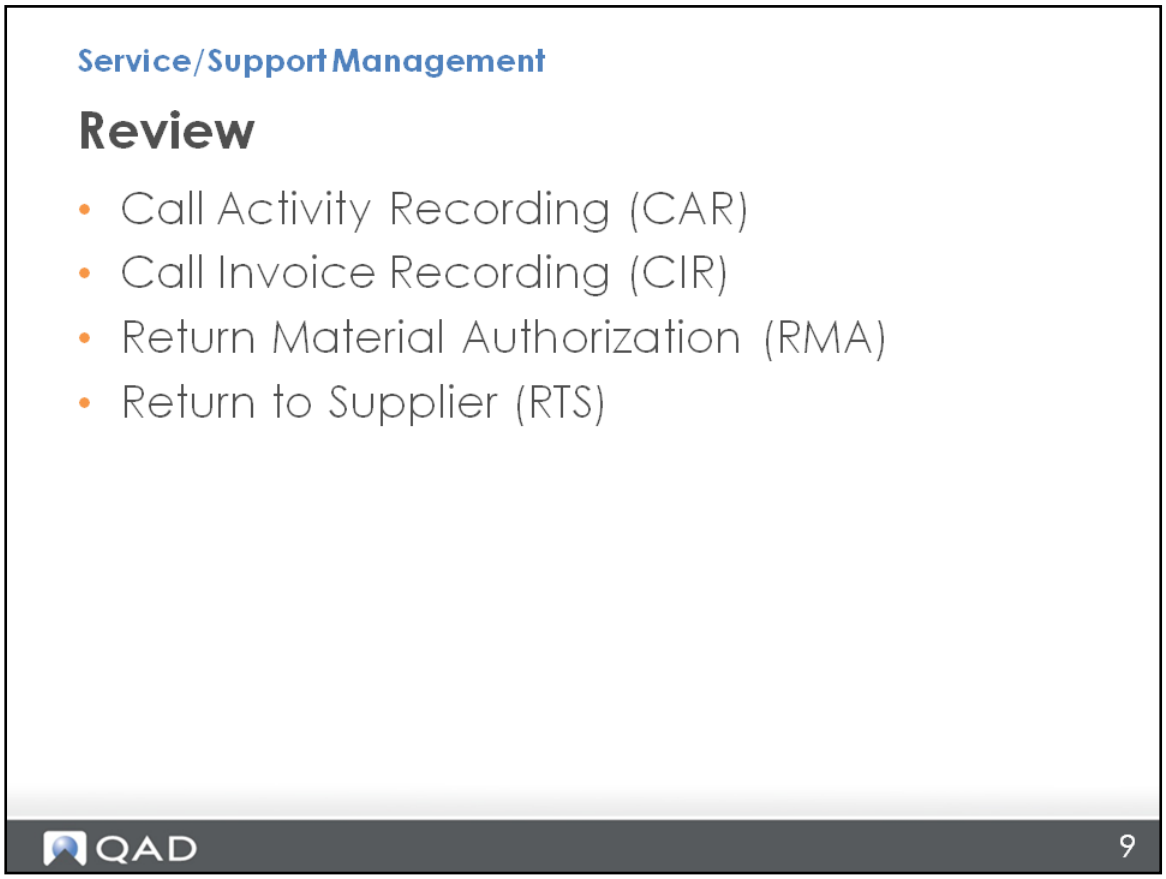
Return to Supplier (RTS)



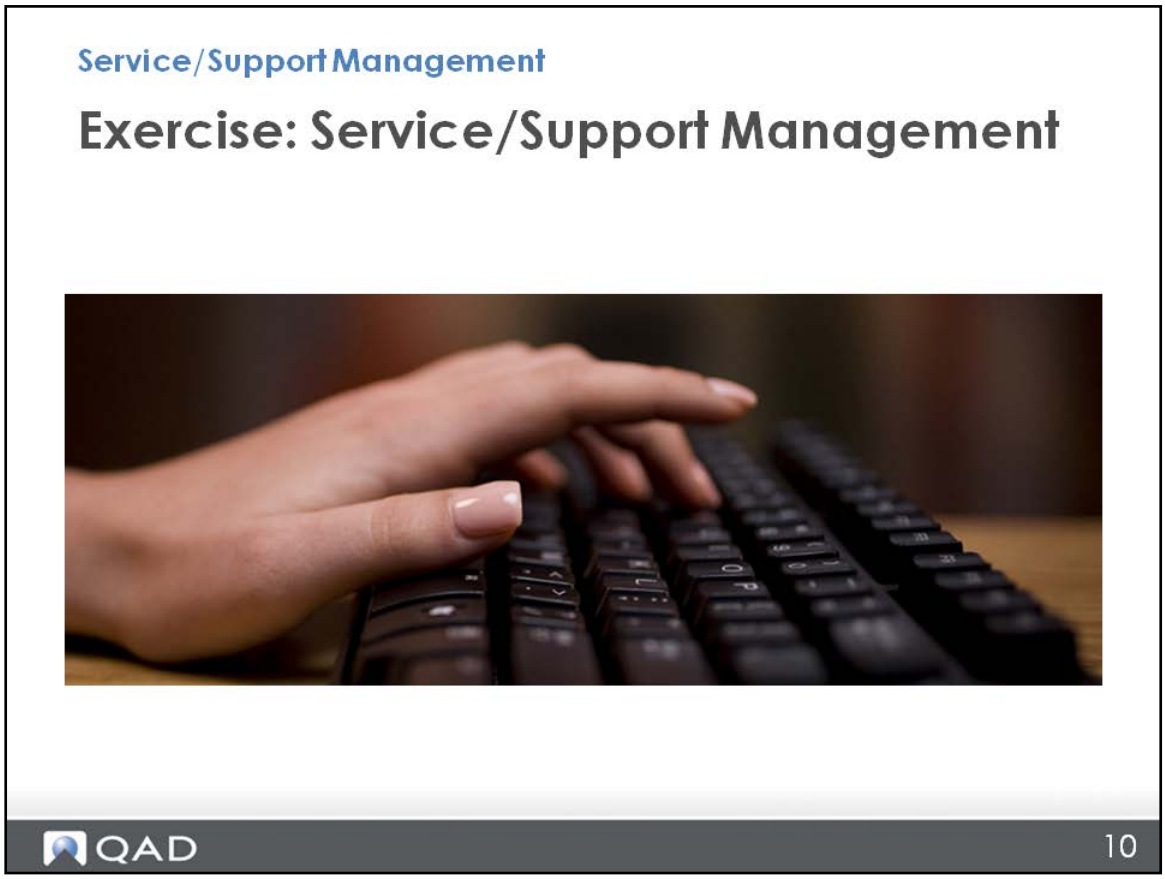
For Return to Supplier (RTS), the transaction types of RTS Shipment and RTS Receipts are ISS-TR/RCT-TR and RCT-PO.

The system uses the current period PC cost to process the ISS-TR/RCT-TR and RCT-PO transactions. The RCT-PO transactions do not affect periodic costing unit cost calculation.

Review


Service/Support Management
Review
• Call Activity Recording (CAR)
• Call Invoice Recording (CIR)
• Return Material Authorization (RMA)
• Return to Supplier (RTS)
QAD
9

Exercise: Service/Support Management



Finish the corresponding exercise at the end of this training guide.

Chapter 14

Exercises

Exercise: Periodic Costing Setup (Part 1)

In this exercise, you set up data for periodic costing and enable the periodic costing.
Log in to entity 10USACO.

Setting up Inventory Accounting Control to Decide the Periodic Costing Mode

1. Use Inventory Accounting Control (36.9.2) to maintain the Create GL Transactions field. Make sure that this field is Yes, which means the adjustment mode is on.

Creating Accounting Layers and Daybooks for Periodic Costing

2. Use GL Layer Create (25.8.14.1) to create two accounting layers: PCADJCST (PC Adjustment Cost) with the Management layer type and PCCALCST (PC Calculation Cost) with the Transient layer type.
3. Use Daybook Create (25.8.1) to create two daybooks:
   - PCMGDB (PC management daybook) in the layer PCADJCST; the Daybook Control is Financial
   - PCTRDB (PC Transient daybook) in the layer PCCALCST; the Daybook Control is Optional

Defining COA for Cost Revaluation

4. Use GL Account Create (25.3.13.1) to create an account: 5780 (PC cost revalue).
   The GL type is Standard Account and the category is Expense.

Setting up Periodic Costing Control

5. Use Entity GL Period View (25.4.2.2) to verify that all previous GL periods are closed, with statuses of Locked, Reported, or Frozen.
   - If not, use Entity GL Period Lock (25.4.2.3) to lock those open GL periods.

   Log in to entity 10CORPCONS and do the same verification; lock the open GL periods, if any.
   Log back in to entity 10USACO.
6. Use Periodic Costing Controls (30.5.24) to enable periodic costing and set up the control parameters.
   - Choose the FIFO cost method.
   - The calculation layer is PCADJCST.
   - Use daybook PCTRDB for the transient calculation result and daybook PCMGDB for final calculation result.
   - Use the account 5780 for the cost revaluation.

Exercise: Periodic Costing Setup (Part 2)

In this exercise, you define the Periodic Cost Set Template, PC Periods, and PC Cost Set. You also define PC Group and PC Work Center Rates.

Setting up Periodic Cost Set Template

1. Use Cost Set Maintenance (30.1) to set up a new cost set PC as the periodic costing cost set template.
   - The Cost Set Type is PC and the Costing Method is FIFO.
2. Use Cost Element Maintenance (30.17.1) to add a cost element Freight. Add this cost element to the category Material and the cost sets PC and Standard.

Setting up PC Periods

3. Use PC Periods Maintenance (30.5.1.1) to set up PC periods for the current GL period.
   - Split the GL period into three buckets: 1-10, 11-20, and 21-end.
   - Use PC Periods Browse (30.5.1.2) to verify your setup.

Defining PC Cost Sets

4. Use PC Periodic Cost Set Maintenance (30.5.1.4) to set up the PC cost set for current fiscal year.
   - Use PC Periodic Cost Set Browse (30.5.1.5) to verify your setup.

Defining PC Grouped Sites

5. Use PC Grouped Site Maintenance (30.5.1.13) to group the target site 10-200 to the source site 10-100.
   - Use PC Grouped Site Browse (30.5.1.14) to verify your setup.

Defining PC Work Center Rates

6. Use Work Center Maintenance (14.5) to add work center 8000 in department 0010. The labor rate is 10.00.
7. Use PC Work Center Rate Maint (30.5.3.1) to set the labor rate to 10.00 for the work center 1000 in the current PC cost set.
   - Use PC Work Center Rate Inquiry (30.5.1.14) to verify your setup.

Exercise: Periodic Costing Initialization

In this exercise, first you set up items and create a product structure. Then you do the initialization for periodic costing.

Setting up Items and Creating a Product Structure

1. Use Item Master Maintenance (1.4.1) to set up three new items: 30001, 40001 and 40002.
   - The item 30001 is a product in product line 10; the master site is 10-100 and the location is 010.
   - The item 40001 and 40002 are raw materials in product line 20; the master site is 10-100 and the location is 020. The standard cost for item 40001 is 10 (Material: 10). The standard cost for item 40002 is also 10 (Material: 8 and Freight: 2).
2. Use Product Structure Maintenance (13.5) to create the product structure for item 30001.
   - One parent 30001 needs one component 40001 in operation 10.
3. Use Routing Maintenance (14.13.1) for routing 30001.
   - The operation 10 is in work center 8000; run time is one hour. It is reported automatically.
4. Use Routing Cost Roll-Up (14.13.13) to roll up the standard labor cost for item 30001 in site 10-100.
   - Note: Close all windows before using this program.
5. Use Product Structure Cost Roll-Up (13.12.13) to roll up the low-level cost to parent item 30001 in the site 10-100.
   - Note: Close all windows before run this program.
   - Use Item Cost Inquire (1.4.10) to verify the product cost.
     - The total cost should be 20; Material: 10, Labor: 10.

Initializing Periodic Costing

6. Use Periodic Costing Initialize (30.5.1.23) to do the initialization.
   - Enter the last day of the last month as the effective date.
   - Use cost set Standard for the derived cost set.
   - Use Inv Detail by PC Cost Browse (30.5.13.2) to verify all items' PC cost for last PC period.

Exercise: Purchasing / AP (Part 1)

In this exercise, you create a purchase order, do the PO receipt, and run Periodic Cost Calculation.

1. Use Purchase Order Maintenance (5.7) to create a purchase order.
   - Supplier is 10s1002.
   - Taxable is No.

Line	1
Item	40001
Site	10-100
Quantity	100
Unit Cost	10.00
Line	2
Item	40001
Site	10-100
Quantity	100
Unit Cost	12.00

2. Use Purchase Order Receipts (5.13.1) to receive ten items for order line1 and another ten for order line 2.
   - Set the fifth day as the effective date.
3. Use Inventory Trans Detail Inquiry (30.5.13.13) to check the standard GL transactions for the two receipts.
   - Use Transaction PC Cost (30.5.13.18) to browse the transaction data. Right-click the transaction number and select Transactions Detail Inquire from the pop-up menu.
4. Calculate the expected transaction cost manually.
5. Run Periodic Cost Calculation (30.5.7.1).
6. Use Transaction PC Cost (30.5.13.18) to check the PC Amount for the transaction cost.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
7. Use Inv Detail by PC Cost Browse to check item-site period cost.
   - Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process.
   - Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: Purchasing / AP (Part 2)

In this exercise, you enable the Use Supplier Invoice Cost and run Periodic Cost Calculation again.

1. Select the Use Supplier Invoice Cost in Periodic Costing Control (30.5.24) and run Periodic Cost Calculation (30.5.7.1) again. You see the PC Calculation Exceptions in the report: No supplier invoice for PO receipt or Logistic Charge.
2. Use Supplier Invoice Create (28.1.1.1) to create a supplier invoice. Do the receivers matching for the two receivers with a difference invoice price (PO unit cost + 2). Run the Periodic Cost Calculation (30.5.7.1) again.
3. Use Transaction PC Cost (30.5.13.18) to check the PC Amount for the transaction cost. Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
4. Use Inv Detail by PC Cost Browse to check item-site period cost. Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process. Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: Purchasing / AP (Part 3)

In this exercise, you create a purchase order with foreign currency, do the PO receipt, do the receiver matching, and run Periodic Cost Calculation.

1. Use Purchase Order Maintenance (5.7) to create a purchase order.
   - Supplier is 30s1002. Taxable is No.

Line	1
Item	40001
Site	10-100
Quantity	100
Unit cost	Default value

2. Use Purchase Order Receipts (5.13.1) to receive ten items for order line1.
   - Set the 15th day as the effective date.
3. Use Inventory Trans Detail Inquiry (30.5.13.13) to check the standard GL transactions for the two receipts.
   - Use Transaction PC Cost (30.5.13.18) to browse the transaction data. Right-click the transaction number and select Transactions Detail Inquire from the pop-up menu.
4. Use Supplier Invoice Create (28.1.1.1) to create a supplier invoice and change the spot exchange rate. Do the receiver matching.
5. Calculate the transaction cost manually.
6. Run Periodic Cost Calculation (30.5.7.1).
7. Use Transaction PC Cost (30.5.13.18) to check the PC Amount for the transaction cost.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
8. Use Inv Detail by PC Cost Browse to check item-site period cost.
   - Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process. Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

(Optional) Exercise: Purchasing / AP (Part 4)

In this exercise, do the following:

- Enable the Logistic Accounting
- Create a purchase order
- Do the PO receipt
- Do the receiver matching
- Run Periodic Cost Calculation

1. Use Logistics Accounting Control (2.15.24) to enable the Logistic Accounting function. Use Logistics Charge Code Maint (2.15.1) to set up a new charge code Freight with the Apportion Method 01 and element Freight. Use Terms of Trade Maintenance (2.15.4) to set up trade terms Freight with charge code Freight and Customer responsibility.
2. Use Purchase Order Maintenance (5.7) to create a PO: the supplier is 10s1002 and taxable is No. Select the Freight for the Terms of Trade.

Line	1
Item	40002
Site	10-100
Quantity	100
Unit Cost	8.00

3. Use Purchase Order Receipts (5.13.1) to receive ten items for order line1. Choose the fifth day for effective date.
4. Use Inventory Trans Detail Inquiry (30.5.13.13) to check the standard GL transactions for the receipts.
   - Use Transaction PC Cost (30.5.13.18) to browse the transaction data. Right-click the transaction number and select the Transactions Detail Inquire from the pop-up menu.
5. Use Supplier Invoice Create (28.1.1.1) to create a supplier invoice. Do the receiver matching for the receiver.
6. Use Supplier Invoice Create (28.1.1.1) to create another supplier invoice. Do the Logistic Charge matching for the freight charges with a different amount--double charge amount.
7. Calculate the transaction cost manually. Run Periodic Cost Calculation (30.5.7.1).
8. Use Transaction PC Cost (30.5.13.18) to check the PC Amount for the transaction cost.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
9. Use Inv Detail by PC Cost Browse to check item-site period cost.
   - Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process.
   - Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: Work Order (Part 1)

In this exercise, you create two work orders, issue the components for the WO and run Periodic Cost Calculation.

1. Use Work Order Maintenance (16.1) to create two new WOs:

Work Order	1000
Item	30001
Site	10-100
Quantity	10
Work Order	1001
Item	30001
Site	10-100
Quantity	10

2. Use Multiple WO Release/Print (16.7) to release the two work orders.
3. Use Work Order Component Issue (16.10) to issue 20 components for work order 1000, and issue 5 components for work order 1001. Issue 5 components again for work order 1001.
4. Calculate the transaction cost manually. Run Periodic Cost Calculation (30.5.7.1).
5. Use Transaction PC Cost (30.5.13.18) to check the PCISSWOT transaction.
   - Right-click the transaction number and select Summarized Component Issue to see the detail issue transactions.
   - Right-click the transaction number and select Inv Operational GL Transactions to see transactions for ISS-WO and PCISSWOT.
6. Use PC WO WIP History Report (30.5.15.2) to check the WIP value for the work order.
7. Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: Work Order (Part 2)

In this exercise, you maintain the PC work center labor rate, report the run time for the WO, and run Periodic Cost Calculation.

1. Use PC Work Center Rate Maint (30.5.3.1) to maintain the labor rate for work center 8000 in the current PC period.
2. Use Labor Feedback by Work Order (16.20.1) to report ten run hours for work order 1000 and ten processed items. Report six run hours for work order 1001 and eight processed items. Report four run hours for work order 1001 and two processed items.
3. Calculate the transaction cost manually. Run Periodic Cost Calculation (30.5.7.1).
4. Use Transaction PC Cost (30.5.13.18) to check the PCLABOT transaction.
   - Right-click the transaction number and select Summarized Operation Transactions to check the detail operation transactions. To check PC GL transactions for LABOR, PCLABOT, Right-click the transaction number and select Inv Operational GL Transactions.
5. Use PC WO WIP History Report (30.5.15.2) to check the WIP value for the work order.
6. Use Utility–PC WIP Calc Verify (30.5.7.25.2) to validate the GL amount.

Exercise: Work Order (Part 3)

In this exercise, you receive the WO, report the scrap, and run Periodic Cost Calculation.

1. Use Work Order Receipt (16.11) to receive seven items and reject two items for both work orders 1000 and 1001.
2. Calculate the transaction cost manually. Run Periodic Cost Calculation (30.5.7.1).
3. Use Transaction PC Cost (30.5.13.18) to check PC Amount for the RCT-WO and RJCT-WO transactions.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
4. Use PC WO WIP History Report (30.5.15.2) to check the WIP value for the work order. Record the remaining WIP.
5. Use Utility–PC WIP Calc Verify (30.5.7.25.2) to validate the GL amount.
6. Use Inv Detail by PC Cost Browse to check the item-site period cost.
7. Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: Work Order (Part 4)

In this exercise, you close the WOs, do the accounting close, and run Periodic Cost Calculation.

1. Use Work Order Maintenance (16.1) to close work orders 1000 and 1001.
2. Run the Work Order Accounting Close (16.21) for these two work orders.
3. Calculate the transaction cost manually. Run Periodic Cost Calculation (30.5.7.1).
4. Use Transaction PC Cost (30.5.13.18) to check PC Amount for the WO-CLOSE transaction.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions. To check the item/transaction process sequence, filter by WO and sort by sequence.
5. Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process.
6. Use PC WO WIP History Report (30.5.15.2) to check the WIP value for the work order.
7. Use Utility–PC WIP Calc Verify (30.5.7.25.2) to validate the GL amount.
8. Use Inv Detail by PC Cost Browse to check item-site period cost.
9. Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: Sales Order

In this exercise, you create a sales order, ship the sales order, and run Periodic Cost Calculation.

1. Use Sales Order Maintenance (7.1.1) to create a sales order.
   Customer is 10c1001.

Line	1
Item	30001
Site	10-100
Quantity	10
Price	30

2. Use Sales Order Shipment (7.9.15) to ship ten items for order line1.
3. Use Inventory Trans Detail Inquiry (30.5.13.13) to check the standard GL transactions for the shipment.
   - Use Transaction PC Cost (30.5.13.18) to browse the transaction data.
   - Right-click the transaction number and select the Transactions Detail Inquire from the pop-up menu.
4. Calculate the transaction cost manually. Run Periodic Cost Calculation (30.5.7.1).
5. Use Transaction PC Cost (30.5.13.18) to check the PC Amount for the ISS-SO transaction.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
6. Use Inv Detail by PC Cost Browse to check item-site period cost.
   - Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process.
   - Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: Inventory Control (Part 1)

In this exercise, you do the unplanned issue and receipt, do the cycle count transaction and run Periodic Cost Calculation.

1. Use Issues - Unplanned (3.7) to issue two items of 40001 from site 10-100.
2. Use Receipts - Unplanned (3.9) to receive ten items of 40001 to site 10-100.
3. Use Cycle Count Results Entry (3.13.2) to enter the count result for item 40001 to increase inventory quantity.
4. Use Cycle Count Results Entry (3.13.2) to enter the count result for item 40001 to decrease inventory quantity.
5. Calculate the transaction cost manually. Run Periodic Cost Calculation (30.5.7.1).
6. Use Transaction PC Cost (30.5.13.18) to check PC Amount for the transactions.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
7. Use Inv Detail by PC Cost Browse to check item-site period cost.
8. Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process.
9. Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: Inventory Control (Part 2)

In this exercise, you do a transfer transaction within sites and run Periodic Cost Calculation.

1. Use Transfer - Single Item (3.4.1) to transfer two items of 40001 from site 10-100/location 020 to site 10-100/location 010.
2. Calculate the transaction cost manually. Run Periodic Cost Calculation (30.5.7.1).
3. Use Transaction PC Cost (30.5.13.18) to check PC Amount for the transactions.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
   - Right-click the transaction number and select Inv PC Cost by Site to check the item-site period cost.
4. Use Inv Detail by PC Cost Browse to check item-site period cost.

Exercise: Intersite Transfer

In this exercise, you do an intersite transfer from c 10-100 to site 10-300 and run Periodic Cost Calculation.

1. Use Item-Site Cost Maintenance (1.4.18) to maintain a standard cost of 15.00 for item 40001 in site 10-300.
2. Use Transfer - Single Item (3.4.1) to transfer two items of 40001 from site 10-100 to site 10-300.
3. Calculate the transaction cost manually. Run Periodic Cost Calculation (30.5.7.1).
4. Use Transaction PC Cost (30.5.13.18) to check PC Amount for the RCT-TR and ISS-TR transactions.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions. To check the item/transaction process sequence, filter by items and sort by sequence.
5. Use Inv Detail by PC Cost Browse to check item-site period cost.
6. Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: PC Cost Adjustment (Part 1)

In this exercise, you adjust the PC Unit Cost and run Periodic Cost Calculation.

1. Use PC Unit Cost Adjustment (30.5.5.1) to adjust cost for item 40001.
2. Run Periodic Cost Calculation (30.5.7.1).
3. Use Transaction PC Cost (30.5.13.18) to check PC Amount for the PCCST-AD transaction.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
4. Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process.
5. Use Inv Detail by PC Cost Browse to check item-site period cost.
6. Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: PC Cost Adjustment (Part 2)

In this exercise, you adjust the PC Total Cost and run Periodic Cost Calculation.

1. Use PC Total Cost Adjustment (30.5.5.1) to adjust cost for item 30001.
2. Run Periodic Cost Calculation (30.5.7.1).
3. Use Transaction PC Cost (30.5.13.18) to check PC Amount for the PCCST-AD transaction.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
4. Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process.
5. Use Inv Detail by PC Cost Browse to check item-site period cost.
6. Use Utility–PC Inv Verify (30.5.7.25.1) to validate the GL amount.

Exercise: PC Cost Adjustments (Part 3)

In this exercise, you adjust material cost and labor cost, and run Periodic Cost Calculation.

1. Use WO Component Cost Adjustment (30.5.5.13) to adjust material cost of component 40001 for work order 1000.
2. Use WO Operation Adjustment (30.5.5.14) to adjust labor cost of operation 10 for work order 1001.
3. Run Periodic Cost Calculation (30.5.7.1).
4. Use Transaction PC Cost (30.5.13.18) to check the PCCST-AD transaction.
   - Right-click the transaction number and select Inv Operational GL Transactions to check the PC GL transactions.
5. Use Inventory and SF Movement Report (30.5.19.1) to check the calculation process.
6. Use PC WO WIP History Report (30.5.15.2) to check the WIP value for the work order.
7. Use Utility–PC WIP Calc Verify (30.5.7.25.2) to validate the GL amount.

Exercise: Periodic Costing Accounting Close

In this exercise, you close sub-ledger for every entity in the period and transfer periodic costing postings.

1. Use Operational Transaction Post (25.13.7) to post all unposted operational GL transactions.
2. Use Entity GL Period Modify (25.4.2.1) to close all sub-ledgers except periodic costing for entities 10usaco and 10corpcons.
3. Use Mass Layer PC-Transfer Execute (25.13.12) to transfer PC GL transactions to the management layer.

Exercise: Co/By-Products (Part 1)

In this exercise, you will set up base process, co-product, by-product, components, and also their corresponding work center, process, formula, and average cost method.

1. Use Item Master Maintenance (1.4.1) to set up the items for base process, co-product, by-product, and component:

Item Number	09000
UM	L
Description	Orange squeezing process
Product Line	10
Location	010
P/M	M
Item Number	09010
UM	L
Description	Orange juice co-product
Product Line	10
Location	010
P/M	M
BOM/Formula	09000
Item Number	09020
UM	L
Description	Orange oil co-product
Product Line	10
Location	010
P/M	M
BOM/Formula	09000
Item Number	09030
UM	KG
Description	Orange seeds by-product
Product Line	10
Location	010
P/M	M
GL Material Cost	2
Item Number	09001
UM	KG
Description	Orange component
Product Line	20
Location	020
P/M	P
GL Material Cost	20

2. Use Unit of Measure Maintenance (1.13) to maintain the UM conversion for item 09030. 1 KG equals to 1L.

3. Use Work Center Maintenance (14.5) to set up the work center 09 (Orange juice processing) and set the Labor Rate to 10.

4. Use Process/Formula Maintenance (15.18) to set up the process and product structure:

BOM/Formula	09000
Batch Size	1
Description	Orange squeezing process
Operation	10
Work Center	09
Run Time/Batch Qty	1
Component Number	09001
Qty Per Batch	1
Co/By-Product	09010
Co/By Type	C
Quantity per Batch	1
Quantity Type	B
Cost Allocation	50%
Co/By-Product	09020
Co/By Type	C
Quantity	1
Quantity Type	B
Cost Allocation	50%
Co/By-Product	09030
Co/By Type	B
Quantity	1
Quantity Type	B
Cost Allocation	0%

5. Use Cost Roll-Up Freeze/Unfreeze (13.12.1) to freeze the cost for by-product 09030.

6. Use Routing Cost Roll-Up (14.13.13) to roll up the routing standard cost for co/by products. Use Product Structure Cost Roll-Up (13.12.13) to roll up the product structure standard cost for co/by products.

7. Use Generalized Codes Maintenance (36.2.13) to maintain a generalized code: field code is acm_method and the value is “wocsal01.p”. Use Average Cost Method Maintenance (15.12.5) to set up the method “wocsal01.p” for base process 09000.

8. Use PC Unit Cost Adjustment (30.5.5.1) to maintain the initial cost for all co/by-products and component. For the by-product 09030, adjust the material cost from this level to low level: in the last cost adjustment frame, select the material from Element field, enter 0 in this-level Cost Adjustment field and enter 2 in the low-level Cost Adjustment field. For all other items, use the default value.

Exercise: Co/By-Products (Part 2)

In this exercise, you will create a work order for the base process, issue the component, feedback the labor, and receive the finished goods. Also you will do the work order accounting close for the work order.

1. Use Receipts – Unplanned (3.9) to increase 100 items 09001 in inventory.
2. Use Work Order Maintenance (16.1) to maintain a joint order for base process and enter 1 for the quantity field. Release the work order by Work Order Release/Print (16.6).
3. Use Work Order Component Issue (16.10) to issue the component 09001.
4. Use Labor Feedback by Work Order (16.20.1) to report the quantity completed and run hours. Enter 1 in the Quantity Completed field and enter 2 in the Elapsed/Stop Run field.

   Note: The standard run time is 1 hour.
5. Use Work Order Receipt (16.11) to receive the one finished goods. Also select the close field.
6. Use Work Order Accounting Close (16.21) to clear WIP amount and close outstanding operations.
7. Use PC Work Center Rate Maint (30.5.3.1) to maintain the actual labor rate 10 for the work center 09.
8. Run Periodic Cost Calculation (30.5.7.1).
9. Use Inv Detail by PC Cost Browse to verify the calculated PC cost. The total cost of these two co-products should be 19.

Exercise: Customer Consignment Inventory (Part 1)

Important: The prerequisite for customer consignment inventory exercise is you have set up the domain using FIFO periodical costing and at least defined three PC periods. Refer to the Exercise: Periodic Costing Setup for more information.

In this exercise, you will:

- Set up a consignment inventory item and its component, work center, product structure, and routing.
- Roll up standard cost and initialize the PC cost.

1. Use Item Master Maintenance (1.4.1) to set up the consignment inventory item and the component:

Item Number	09100
UM	EA
Description	Airbag
Product Line	10
Site	10-200
Location	010
P/M	M
Item Number	09101
UM	EA
Description	Cushion
Product Line	10
Site	10-200
Location	020
P/M	P
GL Material Cost	5

2. Use Product Structure Maintenance (13.5) to maintain the product structure for item 09100 and its component 09101. One cushion item 09101 makes one airbag item 09100.
3. Use Work Center Maintenance (14.5) to set up a work center 091 (Airbag processing) and set the Labor Rate to 1.
4. Use Routing Maintenance (14.13.1) to maintain the routing operation 10 for item 09100 in the work center 091 and the run time is 4 hours.
5. Use Routing Cost Roll-Up (14.13.13) to roll up the routing standard cost for item 09100.
6. Use Product Structure Cost Roll-Up (13.12.13) to roll up the product standard cost for item 09100.
7. Use Item-Site Cost Inquiry (1.4.10) to verify the GL cost for item 09100. The GL cost should be 9.
8. Use PC Unit Cost Adjustment (30.5.5.1) to initialize the item PC cost for 09100 and 09101 in last period.

Exercise: Customer Consignment Inventory (Part 2)

In this exercise, you will:

- Set up consignment location and in-transit location.
- Activate consignment, set up consignment inventory accounts, and maintain ship-to/item consignment control.
- Create a sales order for item 09100 and process unplanned receipt for component item 09101.

1. Use Inventory Status Code Maintenance (1.1.1) to verify or maintain the inventory status code N-N-N. Make sure that the available, overissue, and nettable fields are set to No. Use Location Maintenance (1.1.18) to verify or maintain Location 110 (Customer Consignment) and 130 (In-transit) for site 10-200. Make sure that the inventory status code is N-N-N.
2. Use Customer Consignment Control (7.18.24) to activate the customer consignment function. Enter 110 for consignment location and 130 for In-transit location.
3. Use GL Account View (25.3.13.3) or GL Account Create (25.3.13.1) to verify or create the consignment inventory accounts 1650, 1655 and 2455. The GL type is Inventory Control Account and the category is ASSET.
4. Use Product Line Maintenance (1.2.1) to maintain product line 10. Enter 1650 for SO Consignment In-transit account, 1655 for SO Consigned Inventory account, and 2455 for SO Consigned Offset account.
5. Use Ship-To/Item Controls Maint (7.18.1) to set up the consignment control for the combination of ship-to and item number. Enter 10C1002 for the Ship-to and 09100 for the item number. Select the Consignment Order and make sure that the consignment location (110) and In-transit location (130) are defaulted from customer consignment control properly. Enter 90 for the Maximum Aging Days.
6. Use Sales Order Maintenance (7.1.1) to create a sales order for customer 10c1002. Make sure that the ship-to is also 10c1002 and the site is 10-200. In the order line, enter 09100 for the line item and enter 100 for the order quantity. Notice that the Consignment field is selected by default. In the Consignment Order Line Item Data frame, notice that the consignment location (110), In-transit location (130), and Maximum Aging Days (90) are defaulted from Ship-To/Item Controls Maint (7.18.1). Proceed to finish the sales order and record the sales order number here _____.
7. Use Receipts – Unplanned (3.9) to increase 500 units of item 09101 in inventory (default location).

Exercise: Customer Consignment Inventory (Part 3)

In this exercise, you will:

- Create a work order, issue the component, report the labor, and receive the finished goods in first and second PC period separately.
- Ship the sales order in the first PC period.

1. Use Work Order Maintenance (16.1) to maintain a work order for item 09100 and enter 500 in the quantity field. Release the work order using Work Order Release/Print (16.6).
2. Use Work Order Component Issue (16.10) to issue 200 units of component 09101 with effective date in first PC period.

   Important: Make sure that the effective date is within the first PC period for the steps 2, 3, 4, and 5.
3. Use Labor Feedback by Work Order (16.20.1) to report the 200 quantity completed and run 800 hours with effective date in first PC period. Clear the Operation Complete field.
4. Use Work Order Receipt (16.11) to receive the 200 finished goods with effective date in first PC period.
5. Use Sales Order Shipment (7.9.15) to ship 50 units of item 09100 with effective date in first PC period.
6. Use PC Work Center Rate Maint (30.5.3.1) to set the actual labor rate to 1 for the work center 091 for all PC periods in current month.
7. Run Periodic Cost Calculation (30.5.7.1).
8. Use Inv Detail by PC Cost Browse to verify the calculated PC cost.

Exercise: Customer Consignment Inventory (Part 4)

In this exercise, you will:

- Issue the component, report the labor, and receive the finished goods in second PC period
- Transfer the inventory from in-transit location to consignment location
- Run periodic cost calculation.

1. Use Work Order Component Issue (16.10) to issue 100 units of component 09101 with effective date in the second PC period.

   Important: Make sure that the effective date is within the second PC period for the steps 1, 2, 3, and 4.

2. Use Labor Feedback by Work Order (16.20.1) to report the 100 quantity completed and run 600 hours with effective date in the second PC period. Clear the Operation Complete field.

3. Use Work Order Receipt (16.11) to receive the 100 units of finished goods 09100 with effective date in the second PC period.

4. Now assume that the items have arrived at customer's site. Use Consignment Inventory Transfer (7.18.7) to transfer the consignment inventory from in-transit location to consignment location with effective date in the second PC period. Enter 10C1002 as ship-to address and the order number. Transfer the entire inventory in the transit location to consignment location.

5. Run Periodic Cost Calculation (30.5.7.1).

6. Use Inv Detail by PC Cost Browse to verify the calculated PC cost.

7. Use Utility - PC Consignment Verify (30.5.7.25.5) to verify that consignment inventory detailed information including consignment quantity and in-transit quantity and also the verification results.

Exercise: Customer Consignment Inventory (Part 5)

In this exercise, you will:

- Issue the component, report the labor, and receive the finished goods in the third PC period
- Record the usage for the sales order
- Run periodic cost calculation

1. Use Work Order Component Issue (16.10) to issue 100 units of component 09101 with effective date in the third PC period.

   Important: Make sure that the effective date is within the third PC period for the steps 1, 2, 3, and 4.

2. Use Labor Feedback by Work Order (16.20.1) to report the completed quantity of 100 and run 500 hours with effective date in the third PC period.

3. Use Work Order Receipt (16.11) to receive the 100 units of finished goods 09100 with effective date in the third PC period.

4. Now assume that the customer has consumed 50 units of the items. Use Inventory Usage Create (7.18.13) to update the usage of item 09100 in the consignment stock with effective date in the third PC period. Enter 10C1002 as the ship-to address and order number. In the Consignment Details frame, enter 50 for the consumed Qty and proceed to complete the usage update.

5. Run Periodic Cost Calculation (30.5.7.1).

6. Use Inv Detail by PC Cost Browse to verify the calculated PC cost.

7. Use Transaction PC Cost (30.5.13.18) to check the inventory operation GL transactions.

Exercise: Service Support Management (Part 1)

In this exercise, you will:

- Set up an inventory item and its component
- Set up the work center, product structure, and routing
- Roll up the standard cost and initialize the PC cost
- Create a work order, issue components, report labor, and receive the work order.

1. Use Item Master Maintenance (1.4.1) to set up the consignment inventory item and the component:

Item Number	09200
UM	EA
Description	Airbag
Product Line	10
Site	10-100
Location	010
P/M	M
Item Number	09201
UM	EA
Description	Cushion
Product Line	10
Site	10-100
Location	020
P/M	P
GL Material Cost	10

2. Use Product Structure Maintenance (13.5) to maintain the product structure for item 09200 and the component is 09201. One cushion item 09201 makes one airbag item 09200.
3. Use Work Center Maintenance (14.5) to set up a work center 092 (Airbag processing) and set the Labor Rate to 10.
4. Use Routing Maintenance (14.13.1) to maintain the routing operation 10 for item 09200 in the work center 092 and the run time is 1 hours.
5. Use Routing Cost Roll-Up (14.13.13) to roll up the routing standard cost for the item 09200. Use Product Structure Cost Roll-Up (13.12.13) to roll up the product standard cost for the item 09200.
6. Use PC Unit Cost Adjustment (30.5.5.1) to initialize the item PC cost for 09200 and 09201 in last period. Use Receipts – Unplanned (3.9) to increase 20 items 09201 in inventory.
7. Use Work Order Maintenance (16.1) to maintain a work order for the item 09200 and enter 10 for the quantity field.
8. Release the work order by Work Order Release/Print (16.6).
9. Use Work Order Component Issue (16.10) to issue 10 components 09201.
10. Use Labor Feedback by Work Order (16.20.1) to report the 10 quantity completed and run 20 hours. Use Work Order Receipt (16.11) to receive the 10 finished goods.

Exercise: Service Support Management (Part 2)

In this exercise, you will:

- Maintain the service work center, service routing, installed base item, and service item
- Create a call and record the call activity
- Run PC calculation and verify the PC cost

1. Use Service Work Center Maintenance (11.19.13) to set up a work center 09200 and set the Labor Rate to 20.
2. Use Service Routing Maintenance (11.19.17) to maintain the routing code s09200 operation 10 for item 09200 in the work center 09200 and the run time is 1 hour.
3. Use Installed Base Item Maintenance (11.3.1) to maintain the installed base item 09200 for end user 10C1001. Specify the serial 09200-001.
4. Use Service Item Maintenance (11.3.7) to maintain the service item for 09200 and specify s09200 in the Repair Routing field.
5. Use Call Maintenance (11.1.1.1) to create a call. Select serial number “09200-001”. The system selects end user 10C1001 and customer 10C1001 automatically. Accept all other default value. Record the call ID here_____.
6. Use Call Activity Recording (11.1.1.13) to record a call activity for the call you created in previous step. In the Labor/Expenses frame, select 2000 as Service Category and enter 1 in Quantity field. In the Item Usage frame, select 09201 in Item Number field, 1000 in Work Cd field, and Qty used 1. Select the Det field and specify 12 as the price. Proceed and complete the CAR.
7. Use PC Work Center Rate Maint (30.5.3.1) to set the actual labor rate to 15 for the work center 09200 for all PC periods in current month.
8. Run Periodic Cost Calculation (30.5.7.1).
9. Use Transaction PC Cost (30.5.13.18) to check the inventory operation GL transactions.

Exercise: Service Support Management (Part 3)

In this exercise, you will:

- Create an RMA and issue item 09200 to the customer
- Run PC calculation and verify the PC cost
- Create an RTS and receive items 09201 from the supplier
- Run PC calculation and verify the PC cost

1. Use RMA Maintenance (11.7.1.1) to maintain an RMA order for customer 10C1001. Issue one 09200 to the customer.
2. Run Periodic Cost Calculation (30.5.7.1).
3. Use Inv Detail by PC Cost Browse to verify the calculated PC cost.
4. Use Transaction PC Cost (30.5.13.18) to check the inventory operation GL transactions.
5. Use RTS Maintenance (11.7.3.1) to create an RTS order for supplier 10S1002. Skip the Items Returned to Supplier frame. In Items Received from Supplier frame, add an order line for items 09201. Enter 10 for the quantity and 12 for the price. In the detail frame, select the Inv Receipt and enter 10-100 for the To Site. Proceed to complete the order.
6. Use RTS Receipts (11.7.3.13) to receive the RTS order.
7. Run Periodic Cost Calculation (30.5.7.1).
8. Use Inv Detail by PC Cost Browse to verify the calculated PC cost.
9. Use Transaction PC Cost (30.5.13.18) to check the inventory operation GL transactions.