QAD Enterprise Applications
Enterprise Edition

User Guide
QAD Periodic Costing

Periodic Costing Overview
Periodic Costing Setup and Initialization
Periodic Costing Calculation Logic
Working with Periodic Costing Results
Periodic Costing Adjustments
Reverse Calculations and Delete/Archive
Using Checklists

70-3325-2016EE
QAD Enterprise Applications 2016
Enterprise Edition
March 2016

PeriodicCosting_UG_v2016EE.pdf/crl/crl

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Periodic Costing Change Summary

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

Date/Version	Description	Reference
March 2016/2016 EE	Added information about using WAVG with unit cost elements less than zero.	page 7
	Added information about the system transferring WIP from the last closed order to the next open order.	page 16
	Added information regarding the PCCSTCOR transaction resolving negative costs.	page 19
	Added information about avoiding number master record locking.	page 20 and page 98
	Added new browses and reports to program list.	page 22
	Added new customer consignment transaction information and added new Service and Support Module (SSM) transaction information to the Calculation chapter.	page 53
	Added information about the Periodic Costing calculating the hour rate for burden or labor as negative.	page 55
	Added information about the system including non-recoverable taxes associated with logistics expenses in the PC Unit Cost calculation.	page 56
	Added information about scrap or rejected quantities.	page 58
	Expanded co-/by-product processing and moved the data from the Overview to the Calculation chapter	page 59
	Added information about Periodic Costing with fiscal receiving enabled and disabled.	page 69
	Changed the name of the PC Discrete WO Bill Cost (30.5.15.7) report to PC WO Bill Cost.	page 73
	Added enhancements to PC Inv Cost and Account Reconcile (30.5.17.10).	page 82
	Added text to describe new PC Unit Cost Calculation report (30.5.17.17).	page 85
	Added information about CHUI version of SF Movement report (30.5.19.4).	page 86
March 2015, version EE 2015	New user guide for 2015 EE with multiple chapters. Separated as a single chapter from the *QAD Costing User Guide* in previous EE versions.	--

Chapter 1

Periodic Costing Overview

This section covers Periodic Costing and includes the following topics:

Overview 2
Introduces Periodic Costing and the business problems and issues it addresses.

Concepts 3
Introduces both concepts unique to Periodic Costing and other costing concepts.

Business Considerations 20
Points out aspects of Periodic Costing features that you should know before you begin using it.

Best Practices for Implementing Periodic Costing 20
Provides information about Periodic Costing that you should consider before you implement it.

Periodic Costing Programs 22
Contains a list of Periodic Costing programs by menu name and number.

Interoperability 24
Depicts issues and other information of importance when running Periodic Costing calculations based on data from other QAD products.

Limitations 24
Describes existing limitations for Periodic Costing, including limitations with other costing programs.

Overview

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 implied by the name, this is a calculation that is done per period.

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; 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.

Periodic Costing adds new methods of costing calculations that support local legal requirements for countries such as Brazil, Turkey, Italy, and many countries in Asia, Central Europe, and Latin America. It enables better support of International Financial Reporting Standards (IFRS) and business practices applied in certain industries to ensure more accurate inventory valuations for corporate reporting.

Note The QAD Document Library includes related training material. See *QAD Periodic Costing Training Guide.*

Background

Globalization presents challenges to global manufacturing companies. QAD Enterprise Edition helps companies to master these challenges by offering a solution that accommodates international variations in language, financial practices, business practices, and regulatory compliance.

Traditionally, ERP systems provided support to international customers using the localization approach, in which specific solutions were developed for individual country requirements. There is a move away from this approach, however, toward internationalization that is driven by legal considerations and by more cost reduction in total cost of ownership when supporting operations for different countries in a multinational company.

QAD Internationalization addresses these issues by maintaining a single generic product in which processes and systems are standardized, and functions are optimized across a global company. QAD has introduced additional functionality to address requirements that vary globally in the field of costing and inventory valuation.

Multi-country companies need to know the total cost of production at varying levels of output along with per-unit costs. Companies use costing methods for managing business as dictated by business conditions or, in some cases, as dictated by their country’s regulations. These companies must find costing methods and reporting functions that can meet local requirements and business practices when companies calculate inventory, transactions, or cost of goods sold. For example, in some countries, there are legal business and tax audit requirements for period costing, or the concept of standard cost variances may not be allowed.

IFRS guidelines—specifically, IFRS for inventory valuation (IAS-2)—recommend that companies use either specific identification or the periodic cost formulas first in first out (FIFO) or weighted average (WAVG).

Techniques to measure the cost of inventories, such as the standard cost method, can be used for convenience if the results approximate actual costs.

Complexities arise, though, as some countries require WAVG costing, while other countries require FIFO costing.

In some of these countries, the use of standard costing to value inventory is not acceptable, so companies must process inventory movements through the profit and loss account and not directly to the balance sheet.

Even when multinational companies use standard costing for management accounting, internal audit, or performance evaluation requirements, they still require a costing method that provides reporting for legal (end of period) accounting requirements, tax audit, or company requirements of actual costs.

In Periodic Costing, costs are recalculated for each period, and a new actual cost is defined according to what happened during that period—so no amounts need to be posted to variance accounts.

Periodic Costing uses cost-calculation formulas such as WAVG or FIFO that support local legal requirements for certain countries and IFRS guidelines.

Concepts

This section discusses concepts underlying periodic costing, including:

- Adjustment and Complete Modes
- Periodic Costing Template and Detailed Periodic Cost Sets
- Statutory and Base Currency Calculations
- Cost-Calculating Periods
- Grouped Sites
- Labor/Burden Actual Costs AbsorptionSupplier invoices
- Freight and Logistic Costs as Material Cost Elements
- Purchased Items versus Manufactured Items
- Period Costing versus Periodic Costing
- Costing for Newly Added Products
- Zero or Negative Unit Cost
- Determine Item’s Receipt Quantity and Element’s Receipt Cost
- Determine Item’s Receipt Quantity and Element’s Receipt Cost

Adjustment and Complete Modes

Periodic Costing includes two costing modes and two methods:

- For modes, you can set up Periodic Costing in either of two modes:

- Adjustment Mode
- Complete Mode

Adjustment Mode

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

For this purpose, the system makes use of the layers concept in GL. 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.

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.

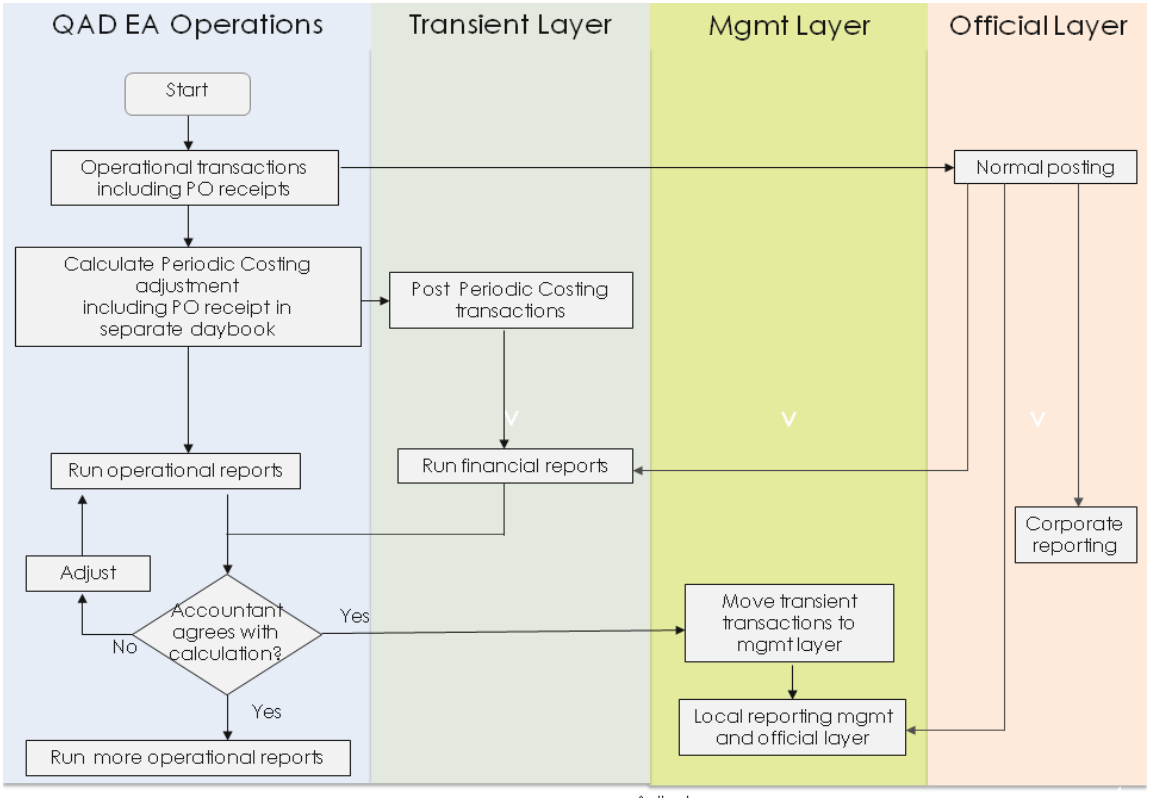
When you use adjustment mode, you have instantaneous costing data from standard costs. The system creates general ledger transactions when you create inventory transactions. It creates period cost transactions at the end of the period. You set Create GL Transactions to Yes in Inventory Accounting Control (36.9.2).

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.

Periodic Cost calculation uses an adjustment method that ensures accurate calculations. The adjustment logic begins by fully reversing the original transactions and then recalculating the PC GL transactions using the full amount to post the transactions to the accounts.

When you use adjustment mode, you can make analysis on inventory valuation based on both standard cost and the calculated periodic costs. Figure 1.1 present a flowchart for the adjustment mode calculations.

Fig. 1.1C
Periodic Costing, Adjustment Mode Flow



Complete Mode

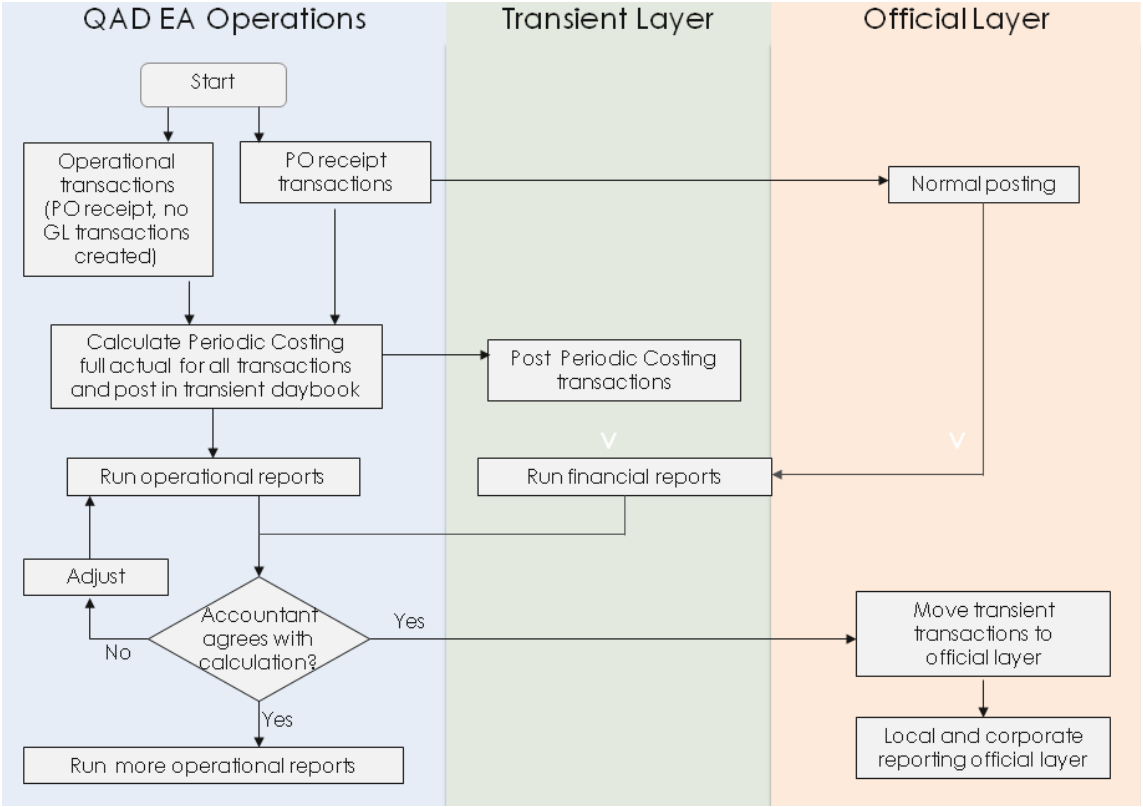
In complete mode, the system does not post any standard cost transactions. It only posts periodic inventory costs to the GL at the end of the period. As opposed to adjustment mode, the complete mode only produces one type of financial book based on periodic cost.

In this mode, you set Create GL Transactions to No in Inventory Accounting Control (36.9.2). In this mode, the system continues to post PO receipts transactions. This is required so that AP sub-ledger accounts always match correctly, without having to wait until the Periodic Costing close process posts to the GL.

Complete mode is less frequently in use, although in Brazil and in certain other locales, it may be a preferred best practice. Typically, complete mode is used by local companies operating in locations where standard costing is prohibited.

In complete mode, there will only be Periodic Cost based transactions 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 to the official layer. The following graphic depicts the flow for GL posting, using the complete mode.

Fig. 1.2
GL Posting Flow, Complete Mode



WAVG and FIFO Methods

Two methods for periodic costing are available:

- Weighted Average (WAVG)
- First, In, First Out (FIFO)

For WAVG, you can determine the item unit cost by analyzing initial inventory before period start as all received inventory during the calculation period, but for FIFO, item unit cost is based on how inventory is consumed. For more information, see “Weighted Average (WAVG)” on page 7.

For FIFO, there are key differences in theoretical calculations and the QAD approach. The QAD approach approximates the theoretical calculations but considers practical issues such as:

- The number of daily transactions, which can be very large
- The large number of users for which transaction sequencing can be cumbersome
- Asynchronous physical receipts or issues versus data captured
- Complexities when calculating production transactions

Also, when you use FIFO, for the overhead cost of RCT-PO, you set up overhead cost of the prior period using PC Unit Cost Adjustment. When the system processes RCT-PO, it reads the PC cost from the prior period cost set.

For FIFO, when there are multiple buckets set up for every period, you should set up overhead cost for the first bucket of prior period. For more information on FIFO, see “First, In, First Out (FIFO)” on page 10.

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 quantity received by cost calculation period by consuming the inventory from the oldest periods first and then chronologically period by period up to the most recent period.

The topics within this section explain each method and provide examples in tables. In the tables, goods for sale (or quantity to issue) considers the beginning inventory and the quantities received during that period, which are the inbound receipt transactions. The different formulas to define the periodic costs are illustrated using the example shown in Table 1.1.

Table 1.1
Formula Example

Beginning Balance	**Qty QOH**	**Unit Cost**	**Value**
	300	2	600
Receipts	**Qty Received**	**Unit Cost**	**Value**
May 1	200	2.2	440
May 8	300	2.3	690
May 14	200	2.5	500
Total Received	700		1630
Goods for Sale	1000		2230
Issues	**Qty Issued**	**Unit Cost**	**Value**
May 8	-150		
May 22	-200		
May 28	-400		
Total Issued	-750		
End Balance	**QTY OH**	**Unit Cost**	**Value**
	250		

Weighted Average (WAVG)

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 cost should, therefore, represent an average of the entire supply. The calculation considers the previous period cost and the average of the cost incurred this period. The system looks at the Inventory and WIP Balance Report (30.5.19.2) to determine the ending balance from location detail and uses the information when determining costs in the cost calculation period when you use the WAVG method.

Average cost produces results that typically fall somewhere between results for FIFO costs. The calculation is as follows:

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

Note You define the period using PC Periods Maintenance (30.5.1.1).

Received Quantity	*Unit Cost at Receipt*
200	*2.20*
300	*2.30*
200	*2.50*

*This period material cost = (200 * 2.20 +300 * 2.30 + 200 * 2.50) / (200 + 300 + 200) = 2.33*

The unit cost calculation is as follows:

*(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)*

Opening Inventory Balance	*Last Period Unit Cost*
300	*2.00*

*This period unit cost = (700 * 2.33 + 300 * 2.00) / (700 + 300) = 2.23*

For the following examples, WAVG is in use to define the periodic costs using the example shown in Table 1.1.

Table 1.2
WAVG Example

Beginning Balance	**Qty QOH**	**Unit Cost**	**Value**
	300	2	600
Receipts	**Qty Received**	**Unit Cost**	**Value**
May 1	200	2.2	440
May 8	300	2.3	690
May 14	200	2.5	500
Total Received	700		1630
Goods for Sale	1000		2230
Issues	**Qty Issued**	**Unit Cost**	**Value**
May 8	-150		
May 22	-200		
May 28	-400		
Total Issued	-750		
End Balance	**QTY OH**	**Unit Cost**	**Value**
	250		

Average cost produces results that typically fall somewhere between results for FIFO. The calculation is as follows:

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

Note You define the period using PC Periods Maintenance (30.5.1.1).

Received Quantity	*Unit Cost at Receipt*
200	*2.20*
300	*2.30*
200	*2.50*

*This period material cost = (200 * 2.20 +300 * 2.30 + 200 * 2.50) / (200 + 300 + 200) = 2.33*

The unit cost calculation is as follows:

*(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)*

Opening Inventory Balance	*Last Period Unit Cost*
300	*2.00*

*This period unit cost = (700 * 2.33 + 300 * 2.00) / (700 + 300) = 2.23*

Table 1.3
WAVG Example

Beginning Balance	**Qty QOH**	**Unit Cost**	**Value**
	300	2	600
Receipts	**Qty Received**	**Unit Cost**	**Value**
May 1	200	2.2	440
May 8	300	2.3	690
May 14	200	2.5	500
Total Received	700	2.32857	1630
Goods for Sale	1000	2.23	2230
Issues	**Qty Issued**	**Unit Cost**	**Value**
May 8	-150	2.23	-334.5
May 22	-200	2.23	-446
May 28	-400	2.23	-892
Total Issued	-750	2.23	-1672.5
End Balance	**QTY OH**	**Unit Cost**	**Value**
	250	2.23	557.5

When you use the WAVG method, and the unit cost element is less than zero (<0) or the total received value is less than zero, the following occurs:

- When any unit cost element is less than zero and receipt quantity is greater than zero (> 0), the system makes all unit cost elements equal to the prior period item cost, then creates the PCCSTCOR for the adjustment.
- When the total item value (opening balance inventory plus the receipt value) is less than zero, the system creates a PCCSTCOR record that makes the value equal to zero for the following:
  - DR inventory revaluation account
  - CR inventory account
- When the net received quantity including the opening inventory is less than zero and unit cost is positive, the system does not reset the cost.

First, In, First Out (FIFO)

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. The QAD approach approximates the theoretical calculations but considers practical issues such as:

- The number of daily transactions, which can be very large
- The large number of users for which transaction sequencing can be cumbersome
- Asynchronous physical receipts or issues versus data captured
- Complexities when calculating production transactions

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 quantity received by cost calculation period by consuming the inventory from the oldest periods first and then chronologically period by period up to the most recent period.

Also, when you use FIFO, for the overhead cost of RCT-PO, you set up overhead cost of the prior period using PC Unit Cost Adjustment. When the system processes RCT-PO, it reads the PC cost from prior period cos set.

For FIFO, when there are multiple buckets set up for every period, you should set up overhead cost for the first bucket of prior period.

The following table provides the theoretical way that FIFO is calculated.

Table 1.4
FIFO Theoretical Example

Beginning Balance	Qty QOH	Unit Cost	Value
	300	2	600
Receipts	**Qty Received**	**Unit Cost**	**Value**
May 1	200	2.2	440
May 14	300	2.3	690
May 31	200	2.5	500

Total Received	700	2.33	1630
Goods for Sale	1000		2230

Issues	Qty Issued	Unit Cost	Value	Value Calculations
May 8	-150		-300	(150 * 2) Initial inventory
May 22	-200		-410	(150*2 + 50*2.2) Remaining initial inventory and receipt of 50 on May 1.
May 28	-400		-906	(150*2.2 + 250*2.3)
Total Issued	-750		-710	

End Balance	QTY OH	Unit Cost	Value
	250	2.34	615
Beginning Balance	0	2	0
May 1	0	2.2	0
May 14	50	2.3	115
May 31	200	2.5	500

The ending inventory was received at two occasions' costs:

Quantity	*Receipt Unit Cost*
50	*2.3*
Remaining stock received May 14	
200	*2.5*
Remaining stock received May 31	

*Ending inventory value: 50 * 2.3 + 200 * 2.5 = 615*

Unit cost: 615 / 250 = 2.46

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 amount of taxes that a company should pay.

The following example shows the QAD FIFO solution.

Table 1.5
FIFO QAD Solution

Beginning Balance	Qty QOH	Unit Cost	Value
	300	2	600

Receipts	Qty Received	Unit Cost	Value

May 1	200	2.2	440
May 14	300	2.3	690
May 31	200	2.5	500
Total Received Bucket 1	700	2.32857	1630
Goods for Sale	1000		2230

Issues	Qty Issued	Unit Cost	Value	Value Calculations
May 8	-150		-300	(150 * 2)
May 22	-200		-416.3	(400*2.32857)
May 28	-400		-931.43	(400*2.32857)
Total Issued	-750		-710	

End Balance	QTY OH	Unit Cost	Value
	250	2.32857	582.14
Beginning Balance	0	2	0
Balance Bucket 1	250	2.32857	582.14

The QAD FIFO solution considers buckets with a weighted average that is calculated based on all receipts and specific related costs.

In the example, the system created only one bucket. The system first calculates the weighted average of the bucket; then, consumes inventory based on FIFO principles.

Note The smaller the buckets, the closer the QAD FIFO value approximates the theoretical FIFO value; however, it makes the system more difficult to maintain and periodic costing calculations longer. So, it is a business consideration to decide the number of buckets to define by GL calendar period. For example, having two buckets (one from May 1-15 and the other from May 16-31) causes two unit cost values (2.26 for the first bucket and 2.5 for the second bucket) to be calculated.

Calculation Comparisons

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. Examples of each method are provided in the following topics. The data in Table 1.6 applies to each example, to help you to distinguish the calculations:

Table 1.6
Example Data

Beginning Balance	Qty QOH	Unit Cost	Value
	200	12	2400

Receipts	Qty Received	Unit Cost	Value
May 1	400	13	5200

May 8	300	13.7	4110
May 14	350	14.2	4970
Total Received	1050	13.6	14280
Goods for Sale	1250	13.34	16680
Issues	**Qty Issued**	**Unit Cost**	**Value**
May 22	-870		
Total Issued	-870		
End Balance	**QTY OH**	**Unit Cost**	**Value**
	380		

WAVG Example

Table 1.7
WAVG Example

Beginning Balance	**Qty QOH**	**Unit Cost**	**Value**
	200	12	2400
Receipts	**Qty Received**	**Unit Cost**	**Value**
May 1	400	13	5200
May 8	300	13.7	4110
May 14	350	14.2	4970
Total Received	1050	13.6	14280
Goods for Sale	1250	13.34	16680
Issues	**Qty Issued**	**Unit Cost**	**Value**
May 22	-870	13.34	-11605.8
Total Issued	-870	13.34	-11605.8
End Balance	**QTY OH**	**Unit Cost**	**Value**
	380	13.34	50692

FIFO Theoretical

Table 1.8
FIFO Theoretical Example

Beginning Balance	**Qty QOH**	**Unit Cost**	**Value**
	200	12	2400
Receipts	**Qty Received**	**Unit Cost**	**Value**

May 1	400	13	5200
May 14	300	13.7	4110
May 31	350	14.2	4970
Total Received	1050	13.6	14280
Goods for Sale	1250	13.34	16680

Issues	**Qty Issued**	**Unit Cost**	**Value**
May 22	-870		-11299
Total Issued	-870		-11299

End Balance	**QTY OH**	**Unit Cost**	**Value**
	380	14.16	5381
Beginning Balance	0	12	0
May 1	0	13	0
May 14	30	13.7	411
May 31	350	14.2	4970

FIFO QAD Solution

Table 1.9
FIFO QAD Solution

Beginning Balance	**Qty QOH**	**Unit Cost**	**Value**
	200	12	2400

Receipts	**Qty Received**	**Unit Cost**	**Value**
May 1	400	13	5200
May 14	300	13.7	4110
May 31	350	14.2	4970
Total Received	1050	13.6	14280
Goods for Sale	1250	13.34	16680

Issues	**Qty Issued**	**Unit Cost**	**Value**
May 22	-870		-11512
Total Issued	-870		-11512

End Balance	**QTY OH**	**Unit Cost**	**Value**
	380	13.6	5168
Beginning Balance	0	12	0
Period Bucket	380	13.6	5168

Periodic Costing Template and Detailed Periodic Cost Sets

Within Periodic Costing, you can 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.

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

You use Cost Set Maintenance (30.1) to set up the template periodic cost set and define additional cost elements (30.17.1) for the template periodic cost set. 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 templates.

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.

The naming of the detailed cost sets is determined from the Periodic Costing template cost set, the currency, and the GL period.

Statutory and Base Currency Calculations

QAD Financials provides functions to support monetary amounts expressed in three currencies:

- Domain base currency
- Non-base transaction currency
- Statutory currency used for reporting

The three-currency system lets you display a transaction or create a report in any of the defined currencies. When creating GL accounts, you specify that the account accepts transactions in all currencies, in the base currency only, or in a specific currency.

For more information on statutory currency, see *QAD Financials User Guide*.

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 labor and burden rates or total amounts for 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), but for management purposes, data needs to be available in the company consolidation currency (statutory or base respectively).

Cost-Calculating Periods

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 during the period are summarized and averaged during FIFO cost calculations.

The system maintains a cost set for every cost-calculation period. Periods can be of any length, up to the total length of the GL period. By default, the start and end dates of the first period are the dates defined for the GL period. If you want the cost calculation period to be the same as the GL period, you do not have to define additional records. For more information, see “Periodic Costing Adjustments” on page 103.

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 calender period; however, when using FIFO as the Periodic Costing method, you can split the GL calender 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.

Grouped Sites

You can group sites in Periodic Costing so that the groups share the same unit cost. This is useful when you have factories, one or more warehouses, or one or more distribution centers as separate sites, but you want the same unit cost applied to them 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 in the group as if calculating for a single site.

Example You define site 10000 as primary and associate two other sites to it; for example, 20000 and 30000. When you process the cost calculation, the system considers all transactions that occurred at sites 10000, 20000, and 30000 as if all sites were in one site, and it determines a new unit cost that applies to all three sites. In the end, an item that has movements in any of the three sites uses this unit cost for its transactions.

In addition, you can perform the following on grouped sites:

- Transfer or perform DRP between grouped sites.
- Apply PC unit cost adjustment to grouped sites.
- Perform account balancing for grouped sites.
- View grouped sites in the Inventory and SF Movement report.

For more information, see “Loading Work Center Rates or Cost Adjustments from XML” on page 39.

Labor/Burden Actual Costs Absorption

Periodic Costing can use accrued cost in GL for labor and burden to calculate labor and burden rates for the period. The system applies the rates to labor transactions recorded at the respective work centers and machines to absorb it into WIP.

For accrual, GL allocations determine the productive cost centers and the accounts for labor and burden accrual. The final figures should be copied to Periodic Costing. There are two methods in use:

- Total: The total amount—entered manually in Periodic Costing from GL allocations—is prorated by the Periodic Costing calculation according to the cumulative run or setup time consumed in each work center or machine to calculate the labor and burden rates.
- Rate: The rates are calculated outside and entered manually into Periodic Costing.

Periodic Costing calculation then uses the calculated or entered labor and burden rates to revalue the labor transactions for the work orders to absorb into WIP. This functionality is useful for addressing such situations as the IAS-2 requirement that abnormal setup, run, and down times not be included in cost calculation by prorating such outliers for the period.

Supplier Invoices

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. When the receipt date is within the current period, the system also assigns AP rate variance to the PO receipt cost for each calculation.

In countries other than Brazil, supplier invoices may not be received before periodic cost calculations take place. In this case, the system calculates costs based on the PO prices at PO receipt for the inventory valuation.

Periodic Costing functionality does not prohibit you from calculating the periodic cost before supplier invoices have been received. You can verify this through reports.

Note 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. Invoices must be matched by the user.

When calculating PO receipt transactions (RCT-PO) for statutory currency:

- Only invoices matched within the same period are captured in the calculation of RCT-PO transactions.
- When an invoice matches a PO receipt for the current period, the system uses the statutory rate of the invoice. When there is no matched invoice in the current period, the system uses the statutory rate at PO receipt.

Freight and Logistic Costs as Material Cost Elements

Periodic Costing captures logistics expenses generated using the Logistics Accounting module. Logistics costs 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.

Depending on the freight terms, these costs can be paid by the seller and recharged to the buyer within the item price. They can also be paid by the buyer directly to the carrier, insurer, customs, and so on.

According to the IAS-2 rules for inventory valuation of the IFRS, cost of inventories is composed of all costs of purchase, conversion, and other costs incurred in bringing the inventories to their present location and condition. This includes:

- Cost of purchase, including the purchase price, any import duties or non-recoverable taxes, and cost directly attributable to the acquisition of inventory (like transport, handling) less any trade discounts, rebates, and so on.
- Cost of conversion, including the costs of direct labor used, a systematic allocation of variable production overheads, a systematic allocation of fixes production overheads based on normal production capacity, scraps that are common to the process, downtimes that are predicted in the routines, and so on.
- Other costs to bring inventories to their present location and condition. Excluded from these costs are abnormal or unplanned material waste, labor or production cost, storage costs, administrative costs not to do with present condition and location, selling costs, and so on.

These IAS-2 rules for inventory valuation are required in certain locales and are an option in others. QAD supports the absorption of indirect costs (such as overhead and burden) as expenses directly attributable to the acquisition of inventory.

Inbound logistics charges are the transportation costs associated with purchasing items from external suppliers. Expenses relating to inbound logistics charges are automatically calculated when Logistics Accounting is used. Other indirect costs can be entered manually using the total cost adjustment transaction.

Outbound logistics charges are generally not considered in Periodic Costing, in accordance with IAS-2 guidelines. However, if certain outbound logistics charges fall under the IAS-2 guideline of “costs incurred bringing inventories to their present location and condition,” they can be accounted for in Periodic Costing for inventory valuation at the receiving site.

Periodic Costing lets you receive invoices from carriers who charge freight expenses, prorate the expenses to received or issued items, then absorb the expenses in inventory in separate elements of the material cost category. Using Periodic Costing, you can capture them and adjust costs as well as track other costs, such as insurance and logistics costs.

Note You can use PC Item Cost Delete/Archive (30.5.22) to archive and delete PC category cost and element cost data as required, based on specified ranges of item, site, and period. See “Delete/Archive Periodic Costing Data” on page 119.

Purchased Items versus Manufactured Items

Periodic Costing calculations do not distinguish a purchased item from a manufactured item. Instead, the system handles transactions that exist for the item and treats them accordingly. The system calculates RCT-PO and RCT-WO transactions without validating whether the item in the transaction is a purchased item or a manufactured item—according to the item-site planning configurations. This approach is taken because the focus is on the actual operations that occurred for that item in the GL period and not on how the items are sourced by default. The item cost is calculated, beginning from the bottom of the BOM; then, typically purchased components and raw materials, level by level via sub-assemblies, to the top of the BOM—finished goods. The MRP item-level definition is assumed for this.

Period Costing versus Periodic Costing

It is important that you do not confuse Periodic Costing features with 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.

Before Periodic Costing features, period costing was not commonly used for financial valuation because it required manual entry of transactions and did not take advantage of automatic entries created by the system.

Costing for Newly Added Products

Programs within the Periodic Costing menu let you create a prior period for new items that you added after you initialize Periodic Costing. Regardless of whether you use the FIFO and WAVG methods, you can establish an initial cost set prior to the period for which you added the item using PC Unit Cost Adjustment.

Example The current Periodic Costing period is June, and you create item01. You use PC Unit Cost Adjustment to adjust the cost of item01 for May. The system creates a cost set of item01 for May with an unconsumed quantity equal to 0 (zero) and the unit cost set to user adjusted. Additionally, when there is no previous period cost, you can use PC Unit Cost Adjustment, then modify the unit cost for the last bucket in the latest period. Or, when the previous period only has one bucket with a quantity of 0 and a unit cost set to any, you can use PC Unit Cost Adjustment to modify the one bucket.

The system initializes the unit cost; then, applies the unit cost to the transaction cost when the following exist:

- You use WAVG and add new items.
- There is no order receipt.
- There is cycle count or other transactions that require costing.

When you add the new items to the system, the first period does not have order receipts so that the system cannot calculate a unit cost; however, when you have a first-period transaction that requires costing, such as a cycle count or issue transaction, the system now sets the unit cost to that of the prior period, then it costs the transactions with this unit cost. You establish the prior period unit cost in PC Unit Cost Adjustment.

Zero or Negative Unit Cost

The following topics discuss methods the system uses to handle zero or negative unit cost:

PCCSTCOR Transaction Resolves Negative Cost

When the unit cost calculation results in negative cost in this level (TL) or lower level (LL) and TL plus LL is positive, the Periodic Costing PCCSTCOR transaction resolves the negative cost between TL and LL and logs the exception. This applies to both single and grouped sites. When an element’s unit cost TL plus LL is negative, the system creates the PCCSTCOR transaction to reset the unit cost to the prior period cost. When there are no periods with cost, the system logs an entry in the exception log.

Determine Item's Receipt Quantity and Element's Receipt Cost

You can inquire the received quantity and value by element for each item site that determines the PC unit cost.

The system creates the inventory transaction—PCCSTCAL—for each item site when it calculates the PC unit cost of the period/bucket. The system displays the PCCSTCAL transaction data after all transactions receipt at cost and before all transactions receipt at average. In the Transaction PC Cost browse, you can drill down by right-clicking on the PCCSTCAL transaction number; then, selecting PC Cost Detail. A second-level browse displays the receipt cost of each element of the item site of the period/bucket.

Business Considerations

Periodic Costing is a two-step validation and correction process in which created GL transactions are stored in the transient layer in both standard and Periodic Costing daybooks, and transferred to the management or official layer when they are verified or corrected and the period is closed.

Carefully review the following aspects of Periodic Costing features before you begin using it. You should know that Periodic Costing:

- Bases costing on the following transactions: all transactions that add value for inventory and WIP, including procurement costs such as logistics charges, material costs, labor and burden costs
- Revaluates periodic inventory based on FIFO or WAVG cost methods
- Can be used in either complete period costing mode or standard costing plus adjustment mode
- Provides several cost adjustments, including:
  - Item's unit and total cost adjustment
  - Work order's component and operation cost adjustment
- Tracks costs by element and by base and by statutory currencies
- Provides periodic inventory and work-in-process (WIP) valuation
- Gives the opportunity to group several sites as one for costing purposes; that is, all grouped sites are considered as one and have the same item unit cost.
- Absorbs labor and burden costs into WIP.
- Performs calculations in the base and statutory currency; see "Statutory and Base Currency Calculations" on page 15.

Best Practices for Implementing Periodic Costing

- Decide when to start Periodic Costing.

  Periodic Costing is activated by a control file setting. Once enabled, you can start on any first day of a GL calendar period. You must decide whether to just start after year end closing or any GL period during the fiscal year, as long as the first GL period upon which to start Periodic Costing has not been posted. Once the first month is closed, you cannot deactivate Periodic Costing.
- Know how to use Periodic Costing with other costing programs.

Period Costing must not substitute for, overlap with, or conflict with current costing methods available in QAD EE, including standard, current, or simulation cost methods. Instead, Periodic Costing adds new methods of costing calculation that support legislations and business practices for different countries.

In general, customers have adopted standard costing before implementing Periodic Costing functionality. If you have adopted standard costing, you can continue to use standard costing plus Periodic Costing calculations; however, you should use the Periodic Costing adjustment mode; see “Adjustment Mode” on page 4.

- Re-evaluate inventory and shop floor transactions.

  Before implementing Periodic Costing, you must evaluate and recalculate all inventory and shop floor transactions (including COGS) according to the new accrued costing.

- QAD introduced statutory currency in QAD Enterprise Edition 2009.1. Periodic Costing runs inventory calculations on both functional and statutory currency as the local currency. This can be done when you set up the system to use statutory currency.

  The system calculates and stores the periodic unit costs in both the base currency and the statutory currency so that inventory valuation and cost analysis can be done in both currencies any time.

  When you use statutory currency for each Periodic Costing period, the system creates a cost set for both the base currency and the statutory currency.

  Some companies require secondary currencies for local reporting or management purposes. For management purposes, you can use the company consolidation currency (base or statutory).

- For best practices, ensure that your rates in statutory currency are correct.
- Ensure that you match invoices with POs before you use Periodic Costing.

  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. When you enable the supplier invoice functionality, the output displays all purchase orders that do not have matched invoices. In these countries, the period cannot be closed when the matching invoice is not available.

- For calendar use, Period Costing follows the GL calendar.
- Review Periodic Costing interoperability with other QAD EE products; see “Interoperability” on page 24.

  Periodic Costing does not work with certain features and functions of other QAD EE programs. Also, certain concepts, such as variances, are not recognized by Periodic Costing.

- Choose consolidated or detailed methods.

  When you use standard cost plus adjustment, you can choose consolidated or detailed. Consolidate can yield better performance for the calculation and can simplify adjusting per transactions. However, the method can cause issues for PO and LA receipts and shop floor transactions with multiple variances.

- Do not confuse Periodic Costing features with period costing.

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

Costing features, period costing was not commonly used for financial valuation because it required manual entry of transactions and did not take advantage of automatic entries created by the system.

- You should not use GL cost sets with average cost and Periodic Costing.
- If you use average costing, you may not want to continue with Periodic Costing calculations. QAD does not support average costing with Periodic Costing on top of average costing. Once you implement Periodic Costing, you do not need average costing as Periodic Costing provides the WAVG costing method.
- QAD recommends that you do not run the Periodic Costing calculation for less than 10 days, even though you can define a period as one day using the FIFO method. If you run the calculation every day, the calculations will be extended as they are calculated daily.

Periodic Costing Programs

The following table lists the programs that comprise the Periodic Costing functionality:

Table 1.10
Periodic Costing Menu Programs

Menu	Menu Label	Program Name
30.5	Periodic Costing Menu....	
30.5.1	PC Set-Up Menu...	
30.5.1.1	PC Periods Maintenance	pcbucmt.p
30.5.1.2	PC Period Browse	pcbr431.p
30.5.1.4	PC Periodic Cost Set Maintenance	pccsmt.p
30.5.1.5	PC Periodic Cost Set Browse	pcbr021.p
30.5.1.13	PC Grouped Site Maintenance	pclsrmt01.p
30.5.1.14	PC Grouped Site Browse	pcbr436.p
30.5.1.23	Periodic Costing Initialize	pcinitmt.p
30.5.3	PC Work Center Rate Menu...	
30.5.3.1	PC Work Center Rate Maint	scwcmt01.p
30.5.3.2	PC Work Center Rate Inquiry	sciq13.p
30.5.3.3	PC Work Center Rate Report	scrp13.p
30.5.3.5	PC Work Center Rate Copy	scwccp01.p
30.5.3.13	PC Work Center Rate Update	scwcup01.p
30.5.5.	**PC Costs Adjustments Menu...**	
30.5.5.1	PC Unit Cost Adjustment	pcptuadj.p
30.5.5.2	PC Total Cost Adjustment	pcpttadj.p
30.5.5.4	PC Unit Cost Adjustment Upload	pcucload.p
30.5.5.5	PC Total Cost Adjustment Upload	pctcload.p
30.5.5.13	WO Component Cost Adjustment	pcwocadj.p
30.5.5.14	WO Operation Adjustment	pcwopadj.p
30.5.7	PC Calculation Menu....	
30.5.7.1	Periodic Cost Calculation	pccscalc.p
30.5.7.2	PC Exception Log Browse	pcbr027.p
30.5.7.25	Periodic Costing Utilities Menu....	

Menu	Menu Label	Program Name
30.5.7.25.1	PC Inv Verification	pcverfy.p
30.5.7.25.2	PC WIP Calc Verification	pcwipverfy.p
30.5.7.25.3	PC Journal Validation	pcglvefy.p
30.5.7.25.4	PC PO Receipt Verification	pcpovefy.p
30.5.7.25.13	PC Inventory Account Balance Report	pcglbal.p
30.5.7.25.14	PC WIP Balance Report	pcwipbal.p
30.5.7.25.15	Labor Burden Reconcile Report	pclbdnrp.p
30.5.13	PC Inventory Reports Menu...	
30.5.13.1	Inventory Valuation Browse	icbr999.p
30.5.13.2	Inv Detail by PC Cost Browse	icbr997.p
30.5.13.11	Current Surplus Inventory Browse	icbr901.p
30.5.13.12	Project Surplus Inventory Browse	icbr902.p
30.5.13.13	Inventory Trans Detail Inquiry	ictriq03.p
30.5.13.14	Inventory Trans By Item Report	ictrrp06.p
30.5.13.15	Inventory Trans By Order Report	ictrrp05.p
30.5.13.17	Item Transaction Report	NET UI only
30.5.13.18	Transaction PC Cost	pcbr011.p
30.5.13.19	Inv Operational GL Transactions	pcbr015.p
30.5.15	PC Operations Reports Menu...	
30.5.15.1	PC Work Order WIP Cost Report	pcworp09.p
30.5.15.2	PC WO WIP History Report	pcworp03.p
30.5.15.5	Cost Set Period Browse	csbr011.p
30.5.15.6	PC WO WIP History Inquiry	pcwohist.p
30.5.15.7	PC WO Bill Cost	pcbr051.p
30.5.15.8	PC WO Routing Cost Browse	pcbr047.p
30.5.15.13	Operation Trans Detail Inquiry	pcscrprp.p
30.5.15.14	Op Operational GL Transactions	pcbr023.p
30.5.15.24	Operational Inv Transactions	pcbr014.p
30.5.15.25	WO Receipts	pcbr018.
30.5.15.26	WO Components	pcbr019.p
30.5.15.27	Operation Transaction	pcbr020.p
30.5.15.28	Subcontract Receipts	pcbr022.p
30.5.15.29	PC Cost Detail	pcbr032.p
30.5.15.30	PC Cost Detail	pcbr034.p
30.5.17	PC Accounting Reports Menu...	
30.5.17.1	PC & Standard Costs Report	pcstdcs.p
30.5.17.10	PC Inv Cost and Account Reconcile	.NET UI only
30.5.17.13	PC Cost and Account Reconcile	pcbr035.p
30.5.17.14	PC Work Center Cost Reconcile	pcbr043.p
30.5.17.16	PC Cost Fluctuation Stats Report	pccstcmp.p
30.5.17.17	PC Unit Cost Calculation Report	.NET UI only
30.5.19	PC Regional Reports Menu...	

Menu	Menu Label	Program Name
30.5.19.1	Inventory and SF Movement Report	NET UI version
30.5.19.2	Inventory and WIP Balance Report	NET UI only
30.5.19.4	Inventory and SF Movement Report	pcinvrp.p
30.5.22	PC Item Cost Delete/Archive	pcitcup.p
30.5.23	PC Calculation Reverse	pcrecalc.p
30.5.24	Periodic Costing Control File	pcctrl.p

Interoperability

The following table depicts issues and other information of importance when running calculations based on data from other QAD products.

Table 1.11
Interoperability

Product	Issue
Supplier Consignment Inventory	To recognize inventory, there is a corresponding supplier invoice match for inventory usage in the current period in which the usage occurs.
Logistics Accounting—Inbound	You can set up cost elements that are related to material or overhead to track various inbound logistics charges and to associate them with a logistics charge code for accrual at goods receipt and matching logistic supplier invoices. Periodic Costing can use these cost elements to include in the periodic calculation.
Co-/By-Products	The system calculates co-products at work order close by taking the actual cost of components used in the base process.
Configured Products	The system considers cost of goods sold (COGS) by item. That is, if the same item has many different configurations per sales order, there is only one unit cost for the item that is the average of all BOMs the system uses on sales orders for the current period.
QAD Warehousing	QAD Warehousing can generate a high volume of transactions when moving inventory from location to location within the warehouse. This high volume, however, does not affect the calculation of item cost, but it can affect the performance of batch processing of costing recalculations.
QAD Service/Support Management (SSM)	SSM transactions generated are normal inventory transactions. They are treated accordingly by Periodic Costing calculations. The system recognizes COGS, and SSM tax is captured.
JIT/S	A backflush that is posted using Receipts-Backward Exploded (3.12) can affect labor and burden absorption, as run time may not be not reported. To avoid this, the appropriate setup for JIT/S is to use the Advanced Repetitive (18.22) module for backflush instead of Receipts-Backward Exploded
TRM	TRM can calculate rates but all costs are in EE.

Limitations

Periodic Costing does not support the following:

- Memo accounts

  Periodic Costing supports inventory and WIP accounts, but memo transactions do not support inventory, and therefore, Periodic Costing cannot support memo transactions.

- Average costing

QAD does not support average costing with Periodic Costing on top of average costing. Once Periodic Costing is implemented, you do not need average costing; Periodic Costing provides the WAVG costing method.

- Supplier consignment

  Periodic Costing does not support supplier consignment.

- For supplier invoices, there is no variances concept in Period Costing.
- 13th accounting period

  Periodic Costing does not currently support a consolidated entity or thirteenth period. Even when you change inventory accounts, the thirteenth period is not supported.

- For labor and burden costs:
  - Periodic Costing does not let you provide rates or totals per department.
  - Labor or burden (one of the two) does not let you enter values with more than two decimals.
- Outbound logistics charges —the transportation costs associated with the shipment of items from a company location to customers or other company locations— are not relevant to Periodic Costing.

Chapter 2

Periodic Costing Setup and Initialization

This section covers Periodic Costing setup and includes the following topics:

Setup Overview 28
Introduces Periodic Costing setup.

Best Practices for Setup 28
Provides a list of best practices and procedures for setting up Periodic Costing.

Periodic Costing General Setup 29
Provides a setup flow and describes each setup step among several programs.

Initializing Periodic Costing 48
Explains specific setup for either the FIFO or the WAVG method.

Loading Work Center Rates or Cost Adjustments from XML 39
Describes the initialization process.

Best Practices for Initialization 48
Provides a list of best practices and procedures for initializing Periodic Costing.

Setup Overview

Periodic Costing can be activated at any time, independent of the QAD EE implementation.This chapter covers both Periodic Costing setup—including all programs and areas within QAD EE and Periodic Costing to set up—and Periodic Costing initialization.

Best Practices for Setup

The following topics describe best practices for setting up Periodic Costing for your business needs:

- Determine which Periodic Costing method to use.

  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 is according to IFRS guidelines.

  When deciding whether to use WAVG or FIFO, consider the differences in the two methods:

  - RCT-PO and RCT-WO are valued the same way for both costing methods.
  - Issuing transactions for FIFO means that the system considers unconsumed quantity and uses average cost from the oldest prior periods where there is still a balance available. Using FIFO, the balance can be split into several periods for unconsumed quantity.
  - Your country's legal requirements may dictate which costing method to use; for example, Brazil's laws require that WAVG provide costing, while Italy requires FIFO.
  - For IFRS, both WAVG and FIFO are compliant to use for inventory valuations so long as reporting is consistent. For country legal requirements, you cannot change costing methods over time.
  - If you use FIFO, you must consider the number of cost calculation periods to define for each GL calendar period. In practice 1, 2, or 3 buckets or weekly buckets (4 to 5) are used per GL period.
- Determine whether to operate in adjustment mode or in complete mode.

  In general, companies that have to report both standard cost reports and periodic cost reports should apply adjustment mode. When you only need to report Periodic Costing, then you can use the complete mode.
- Be consistent among costing and within the domain.

  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.
- Decide on a cost set to use for initialization.

  It is important to decide which cost set to use and to verify its accuracy. The reference cost set during initialization of Periodic Costing can be the standard cost set, the current cost set, or any simulation cost set. QAD recommends that you use a a simulation cost set as this does not get changed during the initialization process.

  The initialization process considers these unit costs as the cost to use for opening balances during Periodic Costing calculations; in other words, Periodic Costing uses the previous period costs to determine how to value the initial inventory balance. You can still make corrections afterward using the Periodic Costing adjustment functions.

- Decide on a Periodic Costing cost set template.

  Periodic Costing uses the template to create the periodic cost sets. Once you set up the template, you must ensure that all is correct because you cannot change templates once you use the template; however, you can add elements.

  Also, ensure that the cost set template has the same element structure as that of the cost set from which you plan to copy. When children cost sets are created, the system copies the cost in the cost elements.

- Close sub-ledgers.

  To use Periodic Costing, ensure that all sub-ledgers are closed for previous periods. You decide the GL period upon which Periodic Costing starts, then based on your decision, you close all sub-ledgers for all periods prior to the starting period. For example, to start Periodic Costing from December 2010, you must close all sub-ledgers for all periods prior to December 2010.

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

  Note Before the system can close the PC-created sub-ledger, you should ensure that other sub-ledgers have been previously closed. There are no unposted GL transactions from the operational modules; so, the system reports no transactions in the queue. Ensure that the trial balance in the Inventory Valuation as of Date Report (3.6.15) or in the Inventory Valuation as of By Location (3.6.16) matches.

- When labor rates are not set up in the PC Cost calculation cost set of the work centers, then labor values in for semi-finished goods and finished goods are 0s (zeros).

  Labor and burden rates should be set up by period (period cost set). The system does not value labor transactions, unless you defined labor and burden rates for the work center machines in the period to be calculated.

- Determine whether to group sites for determining periodic costs.

  Grouped sites allow several sites to share one common cost. For example, when the company operates several sites within one physical location (plant), it is possible to group these sites to have the same cost for the items in all the grouped sites.

- Determine whether to set up additional cost elements.

  You can use cost elements to capture logistics costs in separate elements so that they can be easily identified separately from material cost.

- Ensure that the following are set up in QAD EA before you use Periodic Costing:
  - Domains, domain periods, and domain GL accounts
  - Entities and entity periods
  - Create an entity period (this opens sub-ledgers GL, SO, IC, and WO; but PC remains disabled)
  - GL accounts, sub-accounts, and cost centers

Periodic Costing General Setup

To use Periodic Costing, set up the following items:

- Inventory Accounting Control

- Periodic Costing Sub-Ledger
- Periodic Costing Daybooks
- Periodic Costing Control
- Periodic Cost Calculation Periods
- Periodic Costing Cost Sets
- Work Center Rates
- Loading Work Center Rates or Cost Adjustments from XML
- Cost Set Elements

Note For information on work center rates, see “(this period burden cost * this period receipt quantity + last period burden cost * last period item quantity balance + this period burden cost adjustment) / (this period receipt quantity + last period item quantity balance)” on page 66.

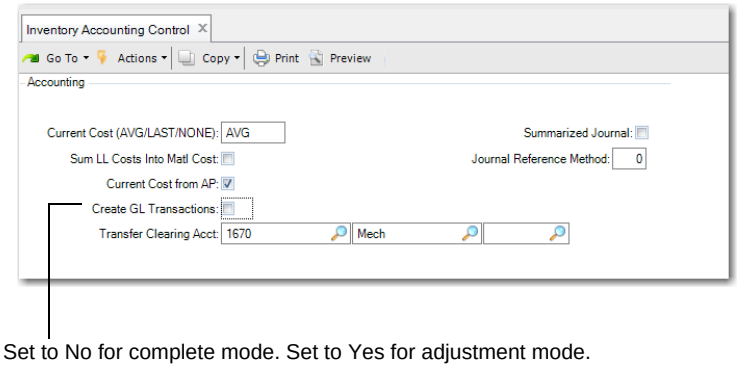
After these items are set up, you initialize Periodic Costing before using it for the first time. See “Loading Work Center Rates or Cost Adjustments from XML” on page 39.

Inventory Accounting Control

Use Inventory Accounting Control (36.9.2) to set the Periodic Costing mode.

Set the Create GL Transactions field based on whether you want to use Periodic Costing in complete mode or in adjustment mode. When using complete PC mode, set Create GL Transactions to No.

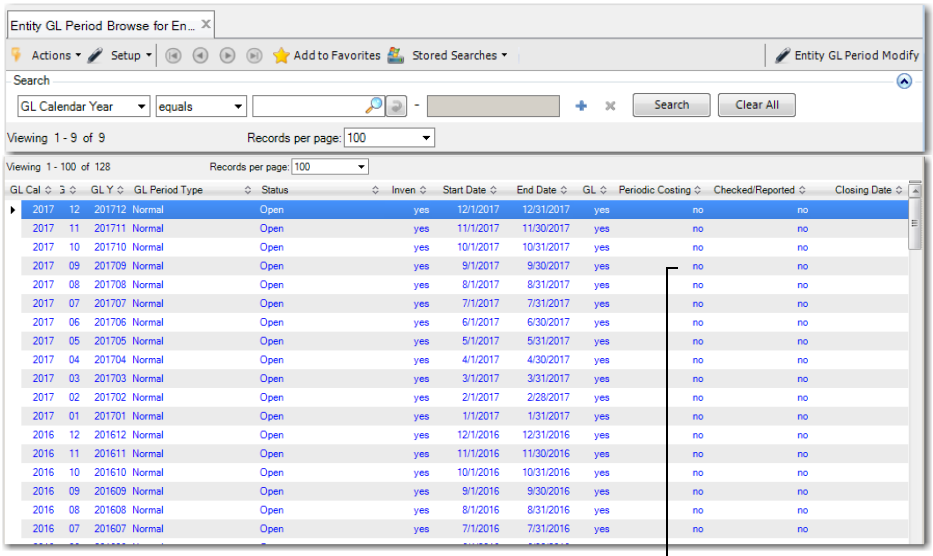
Fig. 2.1
Inventory Accounting Control



Periodic Costing Sub-Ledger

The system enables a new PC sub-ledger to control transactions related to Periodic Costing. Before the system can close the PC-created sub-ledger, you should ensure that other sub-ledgers are previously closed.

Fig. 2.2
Periodic Costing Sub-Ledger



Periodic Costing Daybooks

You should create the Periodic Costing daybook type in Daybook Create (25.8.1.1). You create two daybooks:

- PC calculation daybook

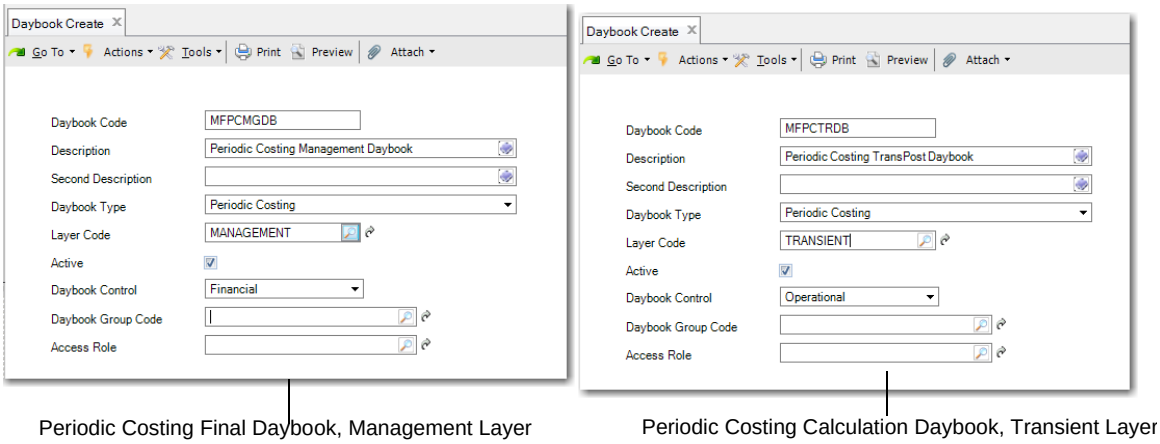
  This daybook is for Periodic Costing transactions the system creates during PC calculations. The layer code is Transient and Daybook Control is set to Operational.

- PC final daybook

  This daybook is for finalizing Periodic Costing transaction postings for the cost calculation period. This is either the official or the management layer, depending on which mode you use:

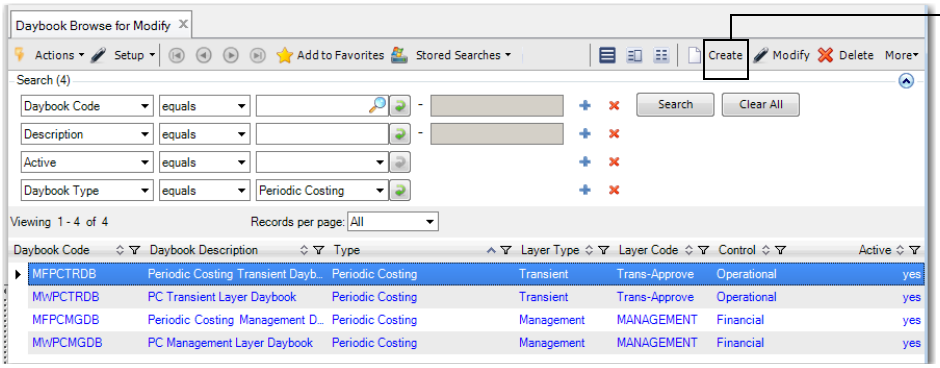
  - When you use adjustment mode, set the PC final daybook to management.
  - When you use complete mode, set it to official.

Fig. 2.3
Periodic Costing Daybooks



Periodic Costing Final Daybook, Management Layer

Periodic Costing Calculation Daybook, Transient Layer



You can also use Daybook Modify to create a Periodic Costing daybook.

The system captures the Periodic Costing GL transactions—after you run PC calculation— in the transient layer (the PC calculation daybook). When the cost accountant feels the calculated PC cost and the financial data are as expected, the cost accountant uses Mass Layer PC-Transfer Execute to post the GL transactions in the transient layer to the final daybook layer.

For journal entries of Periodic Costing in a transient layer:

- You cannot delete or change transient postings coming from Periodic Costing using the normal Journal Entry (JE) form.
- You cannot create transient postings in a daybook that point to Periodic Costing using the normal JE form.

The system ensures that no postings on a PC daybook are created in a period that is closed.

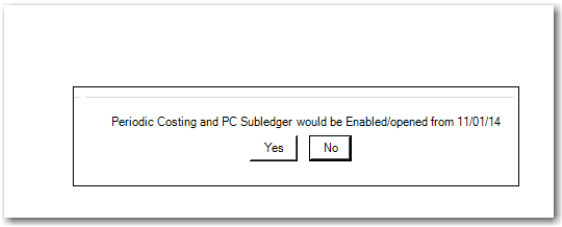
For more information on Daybook Create (25.8.1.1), see *QAD Financials User Guide*.

Periodic Costing Control

Use Periodic Costing Control (30.5.24) to enable Periodic Costing functionality and to define several values used in processing.

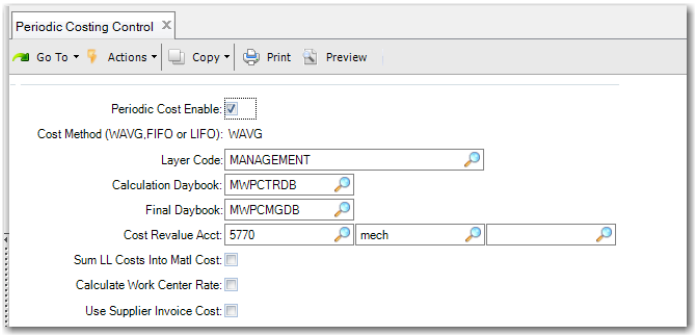
When you enable Periodic Costing for the first time, the system prompts you to enable Periodic Costing and the PC sub-ledger from the most recent date.

Fig. 2.4
Periodic Costing Control, Initial Enable



When you respond with No, the system leaves the PC Control program. When you respond with Yes, the system displays the fields for Periodic Costing Control.

Fig. 2.5
Periodic Costing Control (30.5.24)



Periodic Cost Enable. Select this option to enable Periodic Costing cost methods for this domain. Periodic Costing method lets you calculate cost averages during a user-specified period using formulas that are based on FIFO or weighted average, specified in the Cost Method field. The system uses the period you define in PC Periods Maintenance (30.5.1.1).

Cost Method (WAVG, FIFO). Specify how Periodic Costing calculations are done in this domain:

WAVG: Considers the previous period cost and the average of the cost incurred this period.

FIFO: Considers the cost of the receipts of the items in the cost calculation period. This method assumes that the oldest (first) item in stock is issued first.

Note Once periodic transactions exist in the official or management layer, this field is read-only; you cannot update it any longer.

Layer Code. Specify which accounting layer (management or official) is used for GL postings of periodic costs in this domain. It decides whether you are using adjustment mode or complete mode. The valid value depends on the setting of Create GL Transaction in Inventory Accounting Control (36.9.2).

Management: Use this option when Create GL Transaction is Yes and you want to use Periodic Costing in adjustment mode.

Official: Use this option when Create GL Transaction is No and you want to use Periodic Costing in complete mode.

Calculation Daybook. Specify a daybook that has the:

- Costing daybook type as Periodic Costing

- Daybook control as Operational
- Accounting layer type as transient

The system uses this daybook for posting calculated periodic costs values after the Periodic Cost calculation.

Final Daybook. •Specify a daybook that has:

- Daybook type as Periodic Costing
- Daybook control as Financial
- Accounting layer type as management or official, based on the Periodic Cost calculation mode

The system uses this daybook for posting the final calculated periodic costs values.

Cost Revalue Acct. Specify the account, sub-account, and cost center used to record offset amounts to ensure that inventory accounts are properly balanced when the unit cost for the item in a site is changed. The GL type should be Standard.

Sum LL Costs Into Matl Cost. Specify how lower-level costs are posted to Cost of Goods Sold when Periodic Costing is in use.

Note This setting applies only to the Periodic Costing calculation. The system uses the field when applying calculated periodic cost to ISS-SO transactions.

No: Add lower-level costs to this-level costs for each cost component and post the total to Cost of Goods Sold.

For example, the total material cost (this-level plus lower level) is posted to Cost of Goods - Material, the total labor cost is posted to Cost of Goods - Labor, and so on, for Cost of Goods - Burden, Overhead, and Subcontract.

Yes: Summarize all lower-level costs into Cost of Goods - Material. Only this-level costs are posted to Cost of Goods - Labor, Burden, Overhead, and Subcontract.

This field does not affect the way costs are calculated or stored in cost sets.

Usually, this field is set to No. Cost of Goods Sold amounts are maintained separately for each cost component. However, in some companies, the material cost for an end item is considered to include all costs associated with purchasing or manufacturing components, as well as any direct material costs. Then, this field is set to Yes.

Calculate Work Center Rate. Specify the method the system uses for calculating labor costs (including setup) and burden costs for the period. This field determines when you directly provide work center rates or provide a total value. During the periodic cost calculation, the system calculates the provided work center rates based on the number of labor hours (setup and run) in the operation history for the work center.

Note The work center rate here means PC work center rate. Make sure that you have set up the PC work center rate in PC Work Center Rate Maintenance (30.5.3.1). You can update rates for every work center/machine combination or you can load the information using XML (see Loading Work Center Rates or Cost Adjustments from XML.)

Yes: You provide the total value for the work center and the machine combination for labor (setup and run) and burden.

No: You provide rates for the work center and the machine combination for labor (setup and run) and burden.

Use Supplier Invoice Cost. Select when receipts must be costed using the price on supplier invoices. When Yes and a RCT-PO does not have a matched supplier invoice, the system inserts the cost of the receipt as 0 (zero.).

When Yes and when a pending voucher is not closed and hence, not fully matched with a supplier invoice, the system cannot process the receipt transaction. This displays as an error on the PC Exception Log Browse. For example, the following mismatched data can display in the browse:

```
No Supplier Invoice for material receipt: message refer to ID:4
@http://qdn.qad.com/display/MFG/PC+Exception+Log
No Supplier Invoice for logistic charge: message refer to ID:7
@http://qdn.qad.com/display/MFG/PC+Exception+Log
```

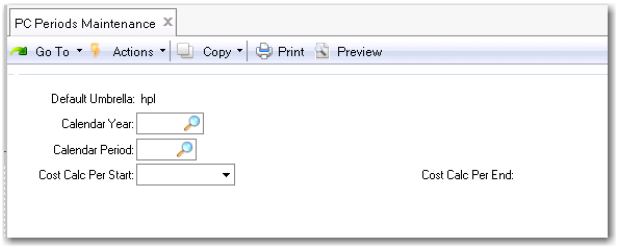
Periodic Cost Calculation Periods

Important This period setup description applies to the FIFO method.

Use PC Periods Maintenance (30.5.1.1) to define start and end dates for the cost periods for each 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. The periods per GL period only apply to FIFO calculations and have a minimum period length of one per day and a maximum length of one per GL 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.

Fig. 2.6
PC Periods Maintenance (30.5.1.1)



Calendar Year. Specify the GL calendar year for the cost period. Ensure that this value is a valid year. You use the Domain GL Period function to create, modify, and view the GL calendar year. For more information on the GL calendar, see *QAD Financials User Guide*.

Calendar Period. Specify the GL period for the cost period. Ensure that this value is a valid GL period defined in GL Calendar Create.

Cost Calc Per Start. Specify the first date in this Periodic Costing period.

When you set up a new record, the default for the first period is the first day of the GL period. Subsequent periods default to the day following the previous period end value.

Cost Calc Per End. Specify the last date in this Periodic Costing period.

When you set up a new record, the default for the first period is the last day of the GL period.

Ensure that the last period ends with the last day of the GL period. Otherwise, errors occur during cost calculations.

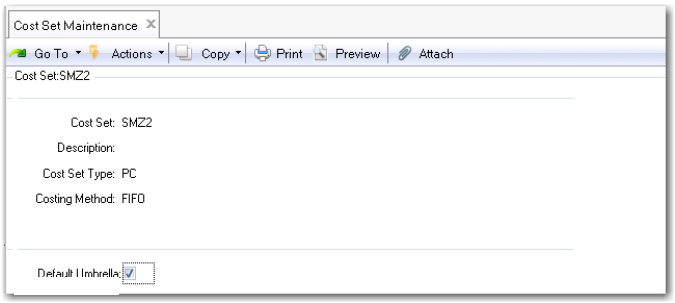
Periodic Costing Cost Sets

You begin the cost set setup using Cost Set Maintenance (30.1) to set the cost set to PC and set a template. Then, you use PC Periodic Cost Set Maintenance (30.5.1.4) to specify a detailed (child) cost set for the template cost set.

Cost Set Maintenance

Set the Cost Set Type to PC (Periodic Costing) indicating its purpose. When PC is the cost set type, the system displays an additional frame to indicate whether to use the PC cost set template.

Fig. 2.7
Cost Set Maintenance (30.1)



Cost Set. Enter the PC cost set name.

Cost Set Type. Choose PC (Periodic Costing).

Costing Method. The default is either FIFO or WAVG, based on the costing method you specify in Periodic Costing Control; see Periodic Costing Control.

Default Costset. Indicate Yes or No to define this cost set as the Periodic Costing cost set template when you use Periodic Costing to calculate inventory. The default is No. This field is editable only when you enable the Periodic Costing module. The field displays only when you set Costing Type to PC (Periodic Costing).

When the cost set is the first PC Cost Set Type and the cost set is the template, the system sets this field to Yes.

PC Periodic Cost Set Maintenance

You can use PC Periodic Cost Set Maintenance (30.5.1.4) to specify a detailed (child) cost set for a template cost set. You specify a template cost set in Cost Set Maintenance. In Periodic Cost Set Browse (30.5.1.5), you can see the detailed cost set displayed as the code of the template cost set followed by:

- Three characters of currency, and
- Two characters of the fiscal year, and
- Two characters for the GL period, and
- Three-digit numbers at the end

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.

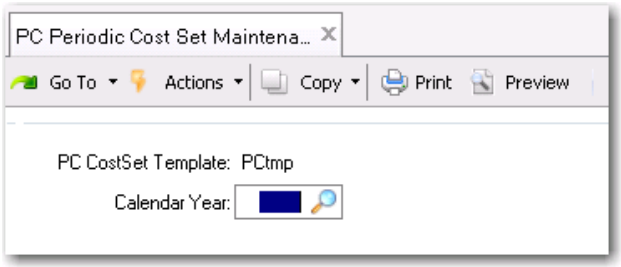
The last three-digit numbers vary from WAVG to FIFO. For WAVG, they are always 001. For FIFO, the last three-digit numbers depend on how many buckets are defined in PC Periods Maintenance (30.5.1.1). For example, if there are three buckets, the number can be 001~003.

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.

When you run PC Periodic Cost Set Maintenance, the default template cost set displays. Enter a year, then select Yes when the system prompts you to create the detailed cost set; see Figure 2.8. If you have enabled statutory currency, detailed cost sets are created for both the base and the statutory currencies.

Before running periodic cost calculations, verify that a detailed periodic cost set has been created for the respective periods. Also, you can check Periodic Costing cost sets by using Cost Set Browse (30.1.2).

Fig. 2.8
PC Periodic Cost Set Maintenance (30.5.1.4)



Work Center Rates

You use programs in the Periodic Costing Work Center Rate Menu (30.5.3) to set up the rates. You can set up and maintain the work center rates, copy them, upload the rates, and run a report and inquiry, using the following:

- PC Work Center Rate Inquiry (30.5.3.2)
- PC Work Center Rate Report (30.5.3.3)
- PC Work Center Rate Copy (30.5.3.5)
- PC Work Center Rate Update (30.5.3.13)

Note See Chapter 4, “Using Reports and Browse Collections to Reconcile,” for more information on Work Center Rate Inquiry.

Set Up and Maintain Rates

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.

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.

You can maintain the following rates or totals by specified work center, machine, and element:

- Labor burden percent
- Labor burden rate/total
- Labor rate/total
- Machine burden rate/total
- Setup rate/total

If you leave the machine field blank, all operations with a blank Machine field use the rate.

When you provide work center rates as totals, the formulas to calculate production costs rates are as follows:

Total run time = accumulated total run time for the department/work center/machine

Total setup time = accumulated total setup time for the department/work center/machine

Labor Rate = (total labor cost / total run time)

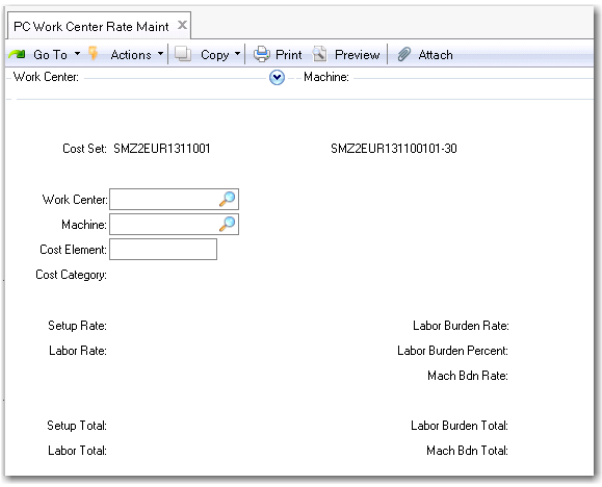
Setup Rate = (total setup cost / total setup time)

Burden Rate = (total labor burden cost / (total run time + total setup time))

Machine Burden Rate = (total machine burden cost / (total run time + total setup time))

Note The system can capture more data, resulting from cost allocation features; see Chapter 3, “Calculation Processing Details,” on page 55.

Fig. 2.9
PC Work Center Rate Maintenance (30.5.3.1)

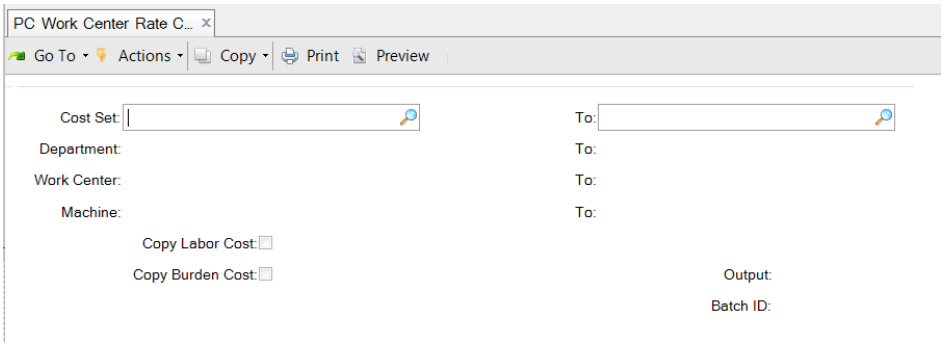


Cost Set. Enter the cost set for which you want to maintain work center rate costs.

Copy Rates

Use PC Work Center Rate Copy (30.5.3.5) to copy rates. You can enter a range of cost sets, departments, work centers or machines; then, specify Yes to copy labor or burden costs.

Fig. 2.10
PC Work Center Rate Copy (30.5.3.5)

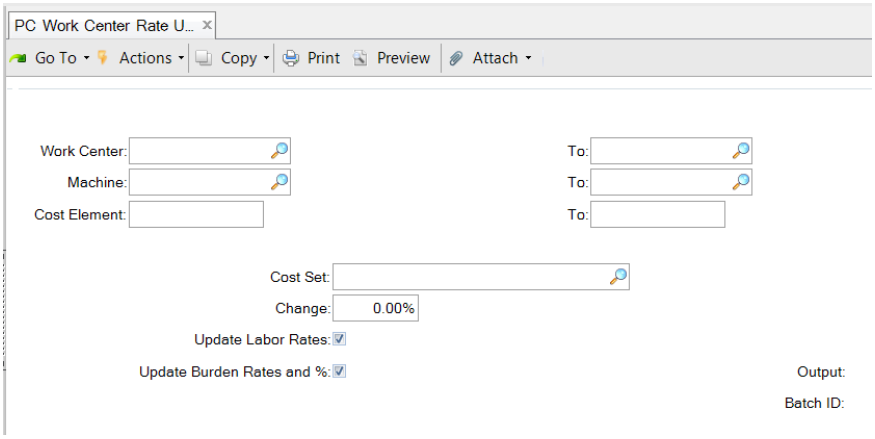


Update Rates

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.

Specify a range of work centers, machines, and cost elements (labor, burden, and so on), then specify the cost set. Enter a percentage by which you want the rates updated. For example, if you want to increase rates by 10%, enter 10. Specify whether the percentage is applied to labor rates or to burden rates.

Fig. 2.11
PC Work Center Rate Update (30.5.3.13)



Loading Work Center Rates or Cost Adjustments from XML

Currently, Periodic Costing uses the end results of accounting—which includes allocations for the production cost centers— to prorate for the labor and burden to absorb. Since PC uses the results of allocation, you manually collect the allocation numbers to send to Periodic Costing.

You can also upload WO component or operation adjustments to Periodic Costing using the method described in this section.

This information can be defined by department or by work center/machine using a specific rate or by defining the total amount to be applied to run times and/or setup times. For each cost calculation period, the work center rates on labor or burden can be calculated based on the amount of work assigned to a particular work center divided by the total hours of operation for that work center.

There should be an itemized account and sub-account for each type of cost—setup, labor, burden, and burden machine— and there may be more than one account or no account for each type of cost. The system checks the cost type against the language detail. Cost type can be:

- SET - Setup
- LBR - Labor
- LBD - Burden of Labor
- MBD - Burden Machine

Based on the product cost center setup, the system verifies all GL transactions of these cost centers, with the exception of the WO postings. You can generate a report to review before confirming that data be uploaded to Periodic Costing. The system uploads all the costs per cost type (LBR, BDN, and so on) and cost center data to Periodic Costing. The value related to add currencies (other than base currency) is converted based on the exchange rate of the period end date automatically.

To upload the data, you build a spreadsheet, then attach XML schema to the spreadsheet to upload the data to Periodic Costing. You find the rate or total for each cost center, then upload the actuals for labor and burden for each individual work center.

Once you upload the labor, burden, and other expenses data; Periodic Costing takes the totals from the accounts, locates the departments associated with centers and accounts, then via the transactions, determines the actual hours and costs. Totals, though, come from GL integration and the setup. From the totals, Periodic Costing then determines the details of the allocation.

Creating the Spreadsheet

You can use the example shown in Figure 2.12 to build a spreadsheet. Once you do, you collect the data for the spreadsheet, then attach an XML file with schema to the spreadsheet.

Fig. 2.12
Sample Spreadsheet

A23

	A	B	C	D	E	F	G	H	I	J
1	seq_no	site	item	effective_date	pc_calc_period_start_date	element	element_cost	acct	sub	cc
2	1	mwsite1	mwcompa	9/1/2012		Material	10	defprod		
3	2	mwsite1	mwcompa	9/1/2012		Labor	10	defprod		
4	3	mwsite1	mwcompa	9/1/2012		burden	10	defprod		
5	4	mwsite1	mwcompa	9/1/2012		overhead	10	defprod		
6	5	mwsite1	mwcompa	9/1/2012		subcontract	10	defprod		
7										

Using XML Schema

The following code depicts the schema in an XML file that you attach to the spreadsheet. Figure 2.12 shows the spreadsheet. The spreadsheet contains the actual data that you save in Microsoft Excel as a XML type document. This file is then the file that is uploaded.

Schema code to attach to the spreadsheet:

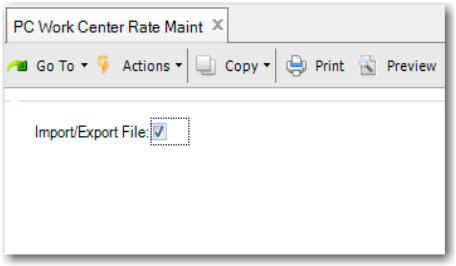
```
<?xml version="1.0" encoding="ISO-8859-1" ?>
        <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
        elementFormDefault="qualified">
       <xs:element name="dsPcUnitCost">
            <xs:complexType>
            <xs:sequence>
         <xs:element name="ttPcUnitCost" minOccurs="1" maxOccurs="unbounded">
      <xs:complexType>
    <xs:sequence>
          <xs:element name="seq_no" type="xs:integer" minOccurs="1"/>
                        <xs:element name="site" type="xs:string" minOccurs="1"/>
                        <xs:element name="item" type="xs:string" minOccurs="1"/>
                     <xs:element name="effective_date" type="xs:date" minOccurs="1"/>
                        <xs:element name="pc_calc_period_start_date" type="xs:date"/>
                           <xs:element name="element" type="xs:string" minOccurs="1"/>
                    <xs:element name="element_cost" type="xs:decimal" minOccurs="1"/>
                        <xs:element name="acct" type="xs:string" minOccurs="1"/>
                        <xs:element name="sub" type="xs:string" minOccurs="1"/>
                        <xs:element name="cc" type="xs:string" minOccurs="1"/>
                       </xs:sequence>
                 </xs:complexType>
                </xs:element>
                </xs:sequence>
                </xs:complexType>
      </xs:element>
      </xs:schema>
```

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 that the system builds. You can modify the XML file in Microsoft Excel and import it back into QAD Enterprise Edition to finish the maintenance at one time for mass amounts of data.

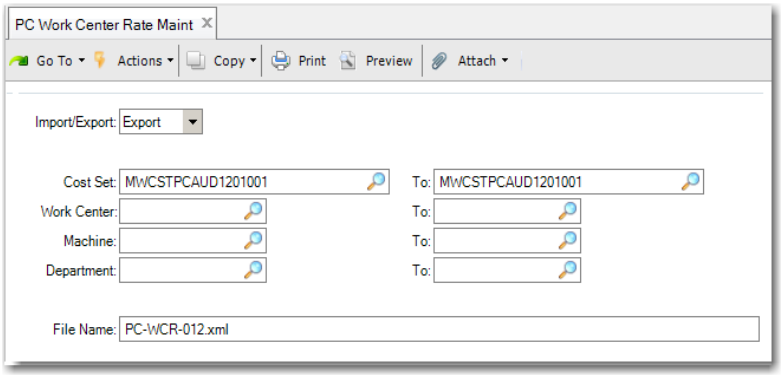
1 Select the Import/Export File option to enable the export and import function and Click Next.

Fig. 2.13
Import/Export File Option



2 Select Export in the Import/Export field and specify the range for the data that you want to export, using the Cost Set, Work Center, Machine, or Department field.

Fig. 2.14
Export Data



Note If you do not specify the data range, the export routine exports all records with an element of labor and burden for every combination of cost set, work center, and machine in the system. To avoid making the exported records a large document, ensure that you set the data range before exporting.

3 In the File Name field, specify a name for the exported XML file and click Next.

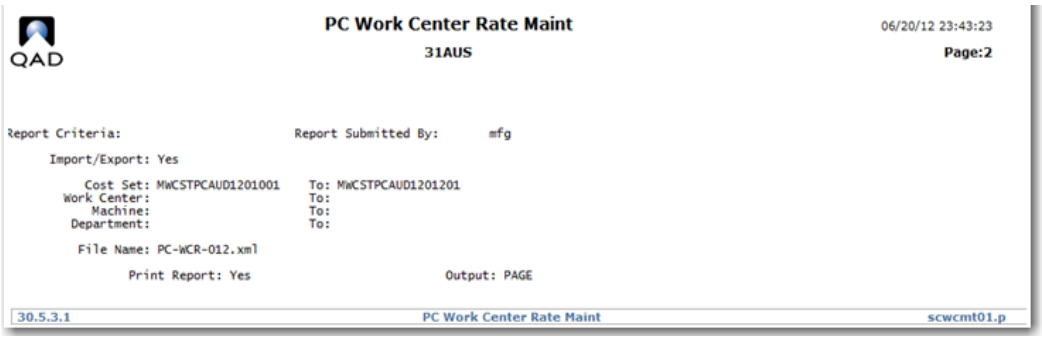
4 When prompted, select the Print report option to generate a report for the export process.

The report contains the status of the export, the directory of the output XML file, and the selection criteria of the exported data.

5 Click Next to start exporting.

The report displays when the export is done.

Fig. 2.15
An Example Report



Editing the Exported Data

In the exported XML file, you can edit and delete the existing records and add records. All the changes are not validated until you import the file into QAD Enterprise Edition.

To edit the exported data:

1. Open the XML file with Microsoft Excel or another XML editor. When prompted, select As an XML table and click OK.
2. Edit the records in the worksheet.

Important Do not edit row 1 in the XML file. The values in row 1 are used for data mapping when you import the file into QAD Enterprise Edition.

Fig. 2.16
Editing the Output XML File

	A	B	C	D	E	F	G	H	I
1	Operation	Cost-Set	Work-Center	Machine-ID	Cost-Element	Department	Setup-Rate	Labor-Rate	Labor-Burder
2		MWCSTPCA	1000		burden	'0400	0	0	
3		MWCSTPCA	1000		Labor	'0400	0	0	
4	*	MWCSTPCA	1001		Burden	'0400	0	0	
5	*	MWCSTPCA	1001		Labor	'0400	0	0	
6	*	MWCSTPCA	1010		Burden	'0400	0	0	
7	A	MWCSTPCA	1010		Labor	'0400	0	0	
8	*	MWCSTPCA	1020		Burden	'0410	0	0	
9	ADD	MWCSTPCA	1020		Labor	'0410	0	0	
10	*	MWCSTPCA	1030		Burden	'0500	0	0	
11	*	MWCSTPCA	1030		Labor	'0500	0	0	
12	*	MWCSTPCA	1040		Burden	'0160	0	0	
13		MWCSTPCA	1040		Labor	'0160	0	0	
14	*	MWCSTPCA	1050		Burden	'0160	0	0	
15	*	MWCSTPCA	1050		Labor	'0160	0	0	
16	D	MWCSTPCA	1050	1001	Burden	'0160	0	0	
17	D	MWCSTPCA	1050	1001	Labor	'0160	0	0	
18	*	MWCSTPCA	1060		Burden	'0550	0	0	
19	*	MWCSTPCA	1060		Labor	'0550	0	0	

Operation. The values in the Operation column indicate how the system handles the corresponding records during the file import. The valid values are:

- Blank: If you want the system to update this record during file import, leave this field empty.
- A or ADD: Input A or ADD if the record is new and you want to import it into QAD EE. If the same record exists in the QAD EE, the system updates this record during import.

- D, DELETE, R, or REMOVE: If you want to delete the records from the QAD EE database, mark the records with any of the four options.
- *: If you want to leave the records as is during import, mark them with an asterisk.

Cost-Set. This is a mandatory field. Ensure that the cost set exists in the QAD EE database.

Work-Center. This is a mandatory field. Ensure that the work center exists in the QAD EE database.

Machine-ID. This is an optional field. If specified, ensure that the machine ID exists in the QAD EE database.

Department. This field is for reference only. It displays the department in association with the work center or the machine ID.

Rates. How the system handles the rates during import depends on the setting of Calculate Work Center Rate in Periodic Costing Control (30.5.24).

- With the Calculate Work Center Rate option checked, the system updates
  - Setup-Rate when Cost-Element = Labor
  - Labor-Rate when Cost-Element = Labor
  - Labor-Burden-Rate when Cost-Element = Burden
  - Labor-Burden-Percent when Cost-Element = Burden
  - Machine-Burden-Rate when Cost-Element = Burden
- With the Calculate Work Center Rate option unchecked, the system updates
  - Setup-Total when Cost-Element = Labor
  - Labor-Total when Cost-Element = Labor
  - Labor-Burden-Total when Cost-Element = Burden
  - Machine-Burden-Total when Cost-Element = Burden

Total-Hours. This field is for reference only. It displays the total hours of setup and runs reported for the work center or the machine.

Total-Setup-Hours. This field is for reference only. It displays the total setup hours reported for the work center or the machine.

Total-Run-Hours. This field is for reference only. It displays the total run hours reported for the work center or the machine.

Cost Set Domain. This field is for reference only. It indicates the domain that the data was extracted from.

3 Save the file as an XML file when you finish editing.

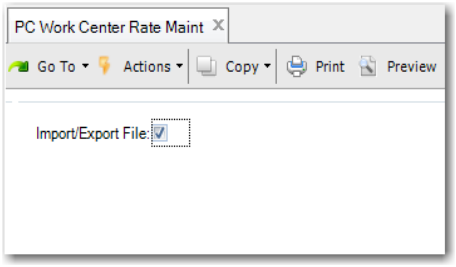
If you saved the file as an Excel Workbook during editing, ensure that you convert it to an XML file before you import it into QAD EE. To convert it to an XML file, click Export on the Developer tab.

Importing Work Center Rate Data to QAD EE

Use the following procedure to import work center rates.

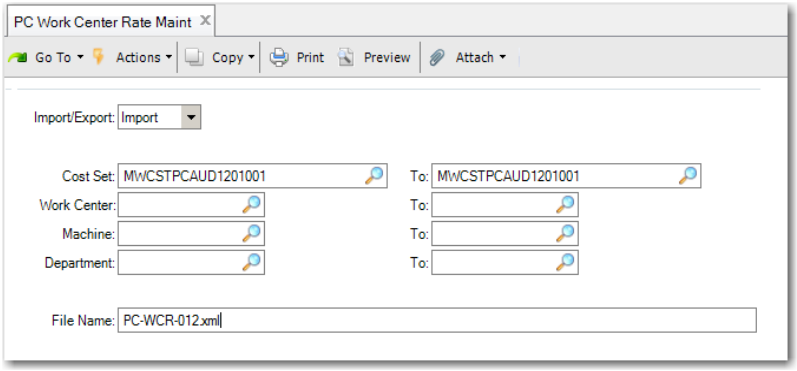
1 Check the Import/Export File option to enable the export and import function and Click Next.

Fig. 2.17
Import/Export File Option



2 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.

Fig. 2.18
Import Data



3 In the File Name field, specify the XML file to be imported and click Next.

4 When prompted, select the Print report option to generate a report for the import process.

The report contains the status of the import, the directory of the imported XML file, and the selection criteria of the imported data.

5 Click Next to start importing.

The report displays when the import is done.

Grouped Sites

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

You can use PC Grouped Site Maintenance (30.5.1.13) to delete sites from grouped sites so that the site cost can be calculated independently.

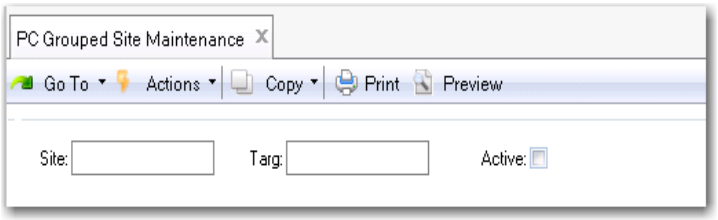
Important Once you delete a site from grouped sites, you must rerun the PC calculation. When you remove a site from a group, Grouped Site Maintenance warns you to rerun the calculation.

When a unit cost adjustment was made to the grouped sites, then you remove a site from the group, the unit cost adjustment is still effective for this site. You should manually adjust if necessary.

For grouped sites, note the following:

- All receipts in grouped sites are 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.
- 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.

Fig. 2.19
PC Grouped Site Maintenance (30.5.1.13)



Transfer or Perform DRP Between Grouped Sites

Periodic Costing calculation handles transfers between sites that are in the same group as local transfers. The Periodic Costing unit cost is no longer impacted by them. Previously, intersite transfers and DRP were processed in DRP receipt calculations before the unit cost calculation. Now, all local transfers are processed after unit cost calculations.

Apply PC Unit Cost Adjustment to Grouped Sites

You can use PC Unit Cost Adjustment (30.5.5.1) for a site in a group to adjust a period cost. The system creates the PCCST-AD transaction for every site in the group and applies the PC calculation to the new unit cost to all sites in the group. This functionality is also available when you use PC Unit Cost Adjustment Upload (30.5.5.4).

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 exists 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

Cost Set Elements

You can use Cost Element Maintenance (30.17.1) to set up separate cost elements for logistics charges in the GL cost sets assigned to sites that receive purchased items. The cost elements should be in the material or overhead cost category.

Note PC inventory reports are by cost categories rather than cost elements.

You create a cost element for each logistics charge that you want to accrue. For example, you could create separate cost elements for domestic freight and overseas freight, or create only one cost element for freight.

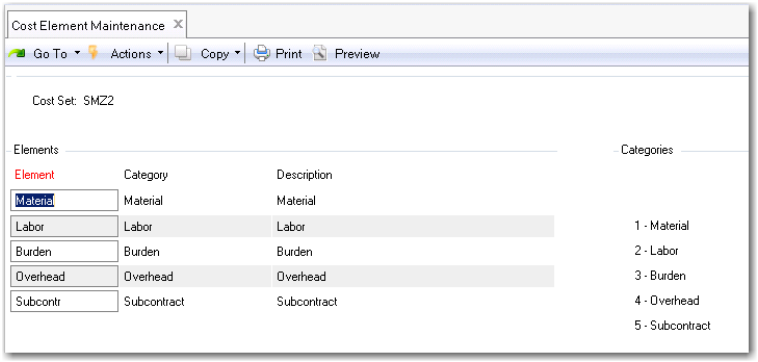
For more information on field descriptions and other information on Cost Element Maintenance, see *QAD Costing User Guide*.

You create a template Periodic Costing cost set so that these extra settings are defined in the template for all Periodic Costing cost sets. The system automatically creates these elements.

You can use PC Item Cost Delete/Archive (30.5.22) to archive and delete PC category cost and element cost data as required, based on specified ranges of item, site, and period; see page 99.

Important You should not have 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. Periodic Costing does display a warning indicating this; however, since only one element is allowed for these categories, you should set up the elements correctly, and if not, correct the multiple elements before you run the calculation.

Fig. 2.20
Cost Element Maintenance (30.17.1)



Initializing Periodic Costing

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 June, you can enter 05/31 as the initialize date, and as long as you have not closed June, you can reinitialize. Once a close is done on a Periodic Costing sub-ledger, you cannot reinitialize.

The system calculates and stores initial data for the first periodic cost calculation and links the cost set to the currency and the period. 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.

You must initialize Periodic Costing before you can 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.

  You enter the initialization date when you start the Periodic Costing Initialize (30.5.1.23) program. If you intend to initialize on the first day of the month, for example, you enter the last date of the previous month as the initialization date.

  Actions must be performed in preparation for initialization (see “Best Practices for Initialization” on page 48). For this reason, you must also select a time, based on completion of the actions, to initialize Periodic Costing.

Also, the system displays a message when you enable Periodic Costing in Periodic Costing Control that displays dates (from *xx* year *yy* month) upon which to use PC. Review the dates carefully to ensure that the dates match the dates you intend to use PC.

- 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; however, you can also enter a current cost set or a standard cost set. Make sure that you define the item price for each item in the cost set.
- Close all sub-ledgers for prior periods as of the effective date for the initialization. Use Entity GL Period Modify to close the sub-ledgers.
- 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.
- Ensure that you have completed setup as described in this chapter for the following before you initialize Periodic Costing.
  - Create a PC daybook—transition or management
  - Enable PC and the PC sub-ledger in Periodic Costing Control.
  - Set the calculation method in Periodic Costing Control to either WAVG or FIFO.
  - Create the periods if using FIFO in PC Periods Maintenance (30.5.1.1).
  - Create the child cost set in PC Periodic Cost Set Maintenance(30.5.1.4) and define the cost for every item on the cost set you enter.

  Note To initialize Periodic Costing using Periodic Cost Initialize, you enter a reference cost set—either a current cost set, a standard cost set, or a simulation cost set—that the item unit costs must be copied from for initial cost valuation. Before you do this, you should define the cost of every item on the cost set you enter.

Technical Considerations

When the system initializes, note the following important system processing points:

- The system creates a detail table when you use PC Periodic Cost Set Maintenance (30.5.1.4).
- The system does not use the Subcontract element in the initialize program.
- While getting the statutory currency, when the exchange rate type is not set, the system uses the accounting exchange rate. Note that Periodic Costing captures the exchange rate gain/loss from supplier invoices as inventory cost.
- When deleting transient layer information, the system only clears transient GL reference data and code and number data for the following inventory GL transactions types:
  - PCCST-AD
  - PCTOT-AD
  - PCWOP-AD
  - PCWO-ADJ

For other types, the system clears the transient GL detail records directly. This is because the system creates the GL transactions that start with `PC` based on existing GL transactions linked to inventory. For the GL transaction, there in only one record, so the system does not delete it.

- When not all entity GL periods are locked, the system can still initialize PC; however, when you run the PC calculation, the system displays an error message prompting you to create the cost calculation period before you run the PC calculation.
- When the cost set is empty, the system uses the default (standard) cost set.
- When the system cannot find a quantity on hand or an unconsumed quantity on hand, the default quantity value is 0 (zero), so the system creates a record to assign values to the quantity on hand and the unconsumed quantity on hand.
- For advanced repetitive, the system copies the WIP transferred from the old cumulative WO to the new cumulative WO to PC-related WO tables during the PC initialize process.

Initializing with Existing Data

To initialize Periodic Costing before first use, run the Period Costing Initialize (30.5.1.23) to begin calculating the period costs for a specific GL period.

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

When initializing Periodic Costing, specify:

- Effective Date

  Important You run the initialization as of the day *before* the Periodic Costing start date. So, this is the last date of the GL period not using Periodic Costing.

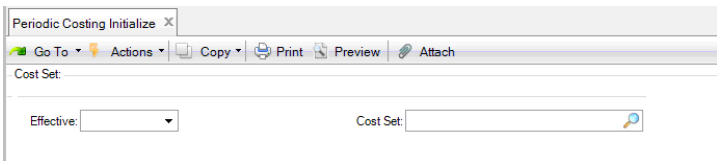
- Cost Set

  Reference cost set of item unit costs to be copied for the initial cost valuation. The default is the Standard cost set.

  When entering a cost set, you may enter a current cost set, a standard cost set, or a simulation cost set. Make sure that you define the item price for each item in the cost set. You can create a simulation cost set by copying the standard cost set.

You enter Standard for the cost set. For Item A in standard cost, the material portion is 1 and the overhead is 0.5. In Periodic Costing Initialize, you enter a date of 05/31/2010. The system creates a new cost set for the period May 2010. If you enter the Periodic Costing template PCTEMPL for the cost set, the cost set for May 2010 would be PCTEMPLUSD1005001, and the cost for Item A for cost set PCTEMPLUSD1005001 is 1 for material and 0.5 for overhead.

Fig. 2.21
Periodic Cost Initialize (30.5.1.23)



Initialization Process and Results

The system tries to create quantities in inventory location detail as of the effective date. To do this, the system needs the closing inventory balance as of that date to determine quantity values, and ultimately, get the cost. To do this, the system uses the location detail records (ld_det) and tries to find all greater than or less than 0 (zero) values as of that date.

It then goes to the ending inventory balance of a reserved locations detail (LOCD-DET) records, then to FIFO history of unconsumed quantity on hand per period records (LOCPD_DET).

The system goes to the inventory master (in_mstr) records, then transaction history records (tr_hist) looking for temporary locations after the effective date in an attempt to get the beginning balance as of the start date.

These steps are to determine the beginning quantity as of the effective date. Once the system determines a quantity, it attempts to verify if the quantity is correct as of that date, so it checks for other transactions after that date.

At this point, the system goes into WIP site, determines open work orders after the effective date to capture WIP values. It then captures quantities and values in:

- Periodwise (Cost calculation) components details (wopd_det)
- Periodwise (Cost calculation) WO master WIP information (wopm_det)
- Periodwise (Cost calculation) WO Routing (WIP) information (wopr_det)

So, the initialization process creates cost records for the ending balance and creates the records above.

The system calculates production costs rates for previous periods, based on work center rates or a total value that you provide.

Initializing When Starting Fresh

When you have no inventory data to rely on for the PC initialization process, you can create data by:

- Receiving inventory, for example, through QAD unplanned receipt functions to create transactions.
- Using inventory data from the prior period.

For example, if you initialize with an effective date of December 31, you can keep the GL periods open in QAD entity programs. You create the periods, then do an unplanned receipt for inventory.

For production, you can create work orders, simulate the processing of the orders. then post operation transactions so that there is data up to the effective date. You then close GL in QAD entity programs, and run Periodic Costing Initialization with a Dec 31 effective date.

You can load inventory from period before the initialization with regular programs or load inventory into the first PC period, valued at whatever cost you come up with for the period.

Verifying Correct Initialization

Once Periodic Costing initialization finishes, you can use Inventory Detail by PC Cost Browse (30.5.13.2) to verify the following:

- Quantity on hand
- Cost for the item at corresponding cost set

After you run PC Initialize, the system updates the following tables:

- Ending inventory balance of a cost calculation period (locd_det)
- Cost simulation total detail (sct_det)
- Cost simulation item detail (spt_det)
- Cost simulation master (sc_mstr on Periodic Costing template)

Use Inventory Detail by PC Cost Browse to verify the following:

1. Verify the quantity on hand (locd_uncons_qty_oh) and cost (sct_cst_tot) for the item (locd_part) at corresponding cost set (cs_set).
2. Check whether the system created a child cost set for last period.
3. Check whether the system created a cost set element (sc_mstr) for last period.

Chapter 3

Periodic Costing Calculation Logic

This section covers the logic applied in the Periodic Costing calculation and includes the following topics:

Calculation Flow 54
Presents a series of flow charts to aid in understanding Periodic Costing processing.

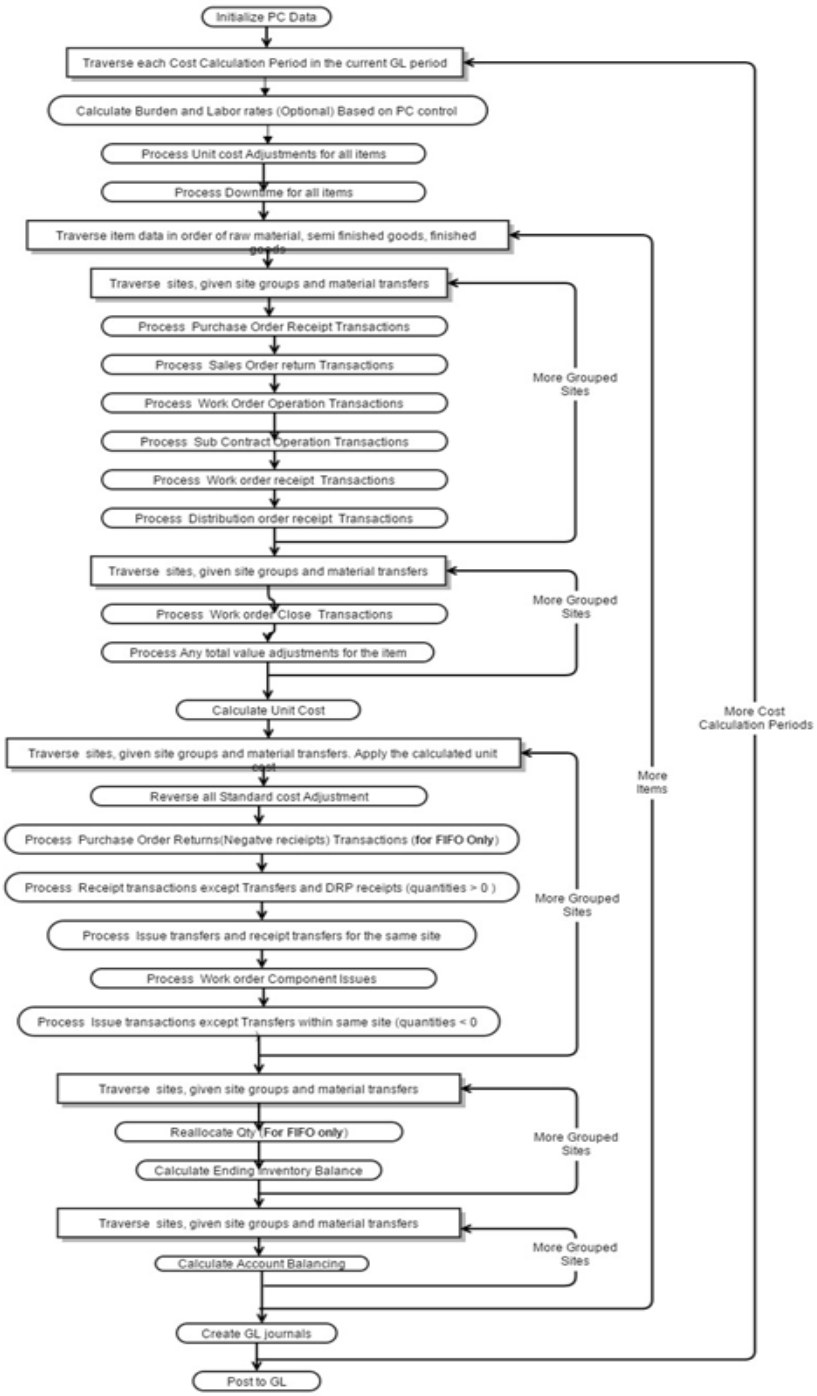
Calculation Processing Details 55
Describes details of the calculation processing for various categories, elements, orders and so on.

Calculation Cost Categories 64
Provides a description of the five cost elements that match the cost categories and explains how Periodic Costing interacts with them.

Calculation Flow

Period costing does not have the concept of variances because there are no fixed costs for evaluation. Instead, it is recalculated every period and a new item cost is defined according to what happened that period.

Fig. 3.1
Periodic Costing Flow



Calculation Processing Details

Periodic Costing has a specific way of handling and processing transactions, costs, and areas of costing. It is important that you understand information regarding these details to be able to correctly evaluate the Periodic Costing calculation results.

The following topics describe the various steps in Figure 3.1.

Transactions Processed

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 or not. The system considers only transactions that affect inventory or WIP accounts. Memo type transactions are never considered.

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.

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 by dividing the total value by the number of hours recorded against the work center/machine. The system only considers productive hours for this calculation, and down time is ignored. For this purpose, the system calculates run and setup labor separately; likewise, it calculates separate rates for labor burden and machine burden from the totals entered in PC Work Center Rate Maintenance (30.5.3.1). When the system calculates and the hour rate for burden or labor is negative, it sets the hour rate to zero (0) and logs the exception.

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, but it ignores them during the remainder of the Periodic Costing calculation.

Processing Order for Items and Sites

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 goods items. It looks at all component issues to determine the correct order so that the cost of components are 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. The system processes sites with the most intersite issues before the sites with more intersite receipts. When using grouped sites, the system considers each group of sites as one for the purpose of this logic.

PO Receipts and Logistics Accounting Transactions

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.

The system includes non-recoverable taxes associated with logistics expenses in the PC Unit Cost calculation so that the item absorbs the tax costs. Logistics expenses (LE) and logistics charges (LC) behave the same for inventory transaction and GL creation and tax handling, except that the system does not create a pending voucher for logistics expenses.

When you enable fiscal receiving in Purchasing Control (5.24), Periodic Costing uses cost values from Legal Documents. When fiscal receiving is not enabled, PC still uses PC used cost values from accounts payable (AP).

SSM Return-to-Supplier Processing

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

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 at the of the prior 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.

RMA Processing

For items returned in SSM CAR—RMA with ISS-SO with a quantity greater than 0 (zero)—Periodic Costing uses the service return account as the credit account and normal inventory debit.

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.

These operation history types do not track labor and burden:

- SUBCNT
- SCRAP-I
- SCRAP-O
- SCRAP-R
- TRANSFER
- CLOSE
- DOWN
- DOWNTIME

On occasion, you may need to adjust the cost calculated for a WO, operation, and cost element. You do this using WO Operation Adjustment (30.5.5.14), and the system stores the adjustment value as the PCWOP-AD operation history type.

Note You can upload WO Operation Adjustment data via an XML file; see “Loading Work Center Rates or Cost Adjustments from XML” on page 39.

The valid cost elements for this function are labor, burden, and subcontracting. The system picks up these additional costs during this calculation, stores them on the work order routing period balance, and does not include them in the summarized PCLABORT transaction.

When the system performs a repetitive transfer, it transfers WIP from the last closed order to the next open order and creates GL transactions to capture the cost movement. Periodic Costing identifies the correct pair of close and transfer transactions.

SSM CIR Expense

PC Calculation processes Service and Support Maintenance (SSM) operation history (op_hist) EXPENSE transactions without reversing or revaluing the transactions. The system adds the transaction value to the Periodic Costing WIP value of the work order subcontract element and updates the calculation sequence number so that the transaction is included in the WIP value at the value at which you first entered it.

Periodic costing use the actual labor and burden rate that you define in PC Work Center Rate Maintenance (30.5.3.1) for CAR operation cost calculations. When PC processes the operation transaction (labor, burden) created by CAR or the RCT-UNP created by partial returns during CAR, PC uses the service account for the credit side.

When Periodic Costing processes the labor and burden operation transactions that CAR creates, the system uses the service labor and service overhead account codes that you specify in Product Line Maintenance (1.2.1) for Periodic Costing transaction credit accounts.

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. Scrap transactions have prorated cost even when the total quantity of work order receipts and scrap that is absorbed by the current period is zero. Consider the following example with the current and expected results at the bottom of the table for period 1 (P1) and period 2 (P2) items:

Table 3.1
Example Scrap Prorated

Example 1:	Example 2
P1:	**P1:**
• RCT-WO 10	• RCT-WO 10
• ISS-SO -10	• ISS-SO -5
P2:	**P2:**
• RCT-WO -10	• RCT-WO -10
• RCT-WO +9	• RCT-WO +2
• RJCT-WO +1	• RJCT-WO +3
Results: RJCT-WO has prorated unit cost so that prorated cost is posted to the scrap account.	

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 tr_qty_loc that is less than 0 (zero). The value for these transactions is 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.

The system transfers WIP from the last closed order to the next open order and creates GL transactions to capture the cost movement. Periodic Costing identifies the correct pair of close and transfer transactions.

PC Calculation Before WO Accounting Close

When you choose to run PC Calculation before WO accounting close, the system allocates:

1. WIP cost to by-product

   The periodic costing calculation checks for WO closure and for WO accounting close. When the WO is open and co-products and by-products are only partially received, then the system first allocates the WIP cost to by-products as per its PC unit cost of last period multiply the total receipt quantity.

2. Remaining WIP cost to co-products

   When remaining WIP costs still exists, the system then allocates the rest WIP cost to co-products.

3. Cost to co-products by alphanumeric order of co-product code

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

PC Calculation After WO Accounting Close

When you choose to run PC Calculation after WO accounting close, the system allocates:

1. Allocates cost to co-products by the allocation method.

   For a closed WO already processed through WO accounting close, 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).

- Allocates cost to by-products as per its PC unit cost of last period.

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

- Creates close transactions in tr_hist for each co/by-product (PCCOWOCL PCBYWOCL)

  You can see the transactions in the Transaction PC Cost browse collection,

When using the WAVG method and processing co-product orders, when there is no quantity of co-product, the system uses the work order close transaction (WO-CLOSE) to post remaining WIP to discrepancy; then, logs the exception in the exception log. For the FIFO method when processing co-product orders, when there is no receipt of co-product in the cost calculation period, the system uses the WO-CLOSE transaction to post remaining WIP to discrepancy; then, logs the exception.

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

Co-/By-Product Transactions

You can calculate co/by-products either before or after WO accounting close. You must keep WO receipts and accounting close in the same period. When they are not in the same period, Periodic Costing cannot locate receipt data in the accounting close period and does not generate GL transactions and ending cost correctly.

Note The system does not calculate the process base item cost.

You can calculate co/by-products either before or after WO accounting close. You must keep WO receipts and accounting close in the same period. When they are not in the same period, Periodic Costing cannot locate receipt data in the accounting close period and does not generate GL transactions and ending cost correctly. The following topics provide more information on calculating either before or after WO accounting close.

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 at this point 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 this level costs and lower level costs, and none 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. See Chapter 4, “Transaction PC Cost Browse Collection,” for more information accessing the drill down.

Issue Transactions

The transactions processed below this point in the calculation are mostly issue transactions and the system processes at the current period unit cost (WAVG) or according to FIFO logic (FIFO).

General Inventory Transactions (Process Receipt Transactions)

This group of transactions covers inventory transactions such as cycle count, physical inventory, unplanned issues and receipts, sales order issues, scrap transactions, and so on. The system processes these transactions in this step, regardless of whether the quantity is negative (issue) or positive (receipt), with the exception of SO returns.

These transactions are valued according to the logic for the cost method that you use; that is, either WAVG or FIFO.

Process Issue Transfers and Receipt Transfers within Same Site

The system processes inventory transfers that are within a site and between sites in the same site group (intrasite transfers) with the current period item unit cost. The system does not create GL transactions or these transactions. The account balancing (PCACCBAL) transaction handles any value transfers between accounts.

Customer Consignment Transactions

PC Calculation processes Customer Consignment Inventory module transactions. PC Calculation reverses the standard customer consignment transactions—that is, CN-XXX transactions where the consignment account is 0 (zero):

- 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)

PC Processing for Customer Consignment

When processing the customer consignment inventory transactions, PC Calculation revalues the consignment inventory account to hold the value of the ending consignment inventory balance.

Process Work Order Component Issues

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

On occasion, you may need to adjust the cost calculated for a WO, operation, and component. You do this using WO Component Cost Adjustment (30.5.5.13) and the system stores the adjustment value as the PCWO-ADJ transaction history type. You can upload the WO component cost adjustment via an XML file; see “Loading Work Center Rates or Cost Adjustments from XML” on page 39.

The valid cost elements for this function are labor, burden, overhead, and subcontracting. The system processes these additional costs during this calculation and stores them on the work order WIP period balance. They are not included in the summarized PCISSWOT transaction.

SSM CIR Processing of Issue Work Order Transactions

Periodic Costing processes the CAR-created ISS-WO and operation transactions as normal WO during PC calculations. When the system processes the ISS-WO created by CIR, the system clears the WIP for each component.

Calculate Ending Inventory Balance (and FIFO Rebalancing)

Once the system processes all inventory transactions for the item and site, the system saves the inventory balances by item, site, and location. This is the balance it uses, for example, in Inv Detail by PC Cost Browse (30.5.13.2) and Inventory and WIP Balance Report (30.5.19.2).

In this step, the system also recalculates the unconsumed quantity by cost calculation period and location when FIFO is in use as the costing method. This guarantees that all inventory is valued according to the same FIFO aging, regardless of the location at which it is stored.

Calculate 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 the rebalancing, and it should always have a zero balance.

QAD SSM Transactions

PC Calculation processes QAD Service and Support Maintenance (SSM) transactions using the account that standard cost SSM transactions uses.

GL Transactions

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 you define 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*.

When you enable mirror accounting for the domain, the Periodic Costing calculation also creates GL unposted transactions for the mirror accounts.

Fig. 3.2
GL Transaction Information

Transaction Type	Reverse Standard TRGL_DET	New Periodic cost TRGL	Update GLT_DET	Cost for the transaction	Remarks
PCCST-AD	No	No	Yes	User	During PC Unit cost adjustment
RCT-PO	Yes	Yes	Yes	Supplier invoice or PO receipt	
ISS-PRV (WAVG)	Yes	Yes	Yes	Supplier invoice or PO receipt	
RCT-SOR	Yes	Yes	Yes	Prior Period Cost	
WO Operations (Labor and Burden)	Yes	Yes	Yes	PC Work Center rates	
WO Operations (Sub Contract)	Yes	Yes	Yes	Supplier invoice or PO receipt	
RCT-WO	Yes	Yes	Yes	Prorate From WIP built	
RCT-TR (DRP)	Yes	Yes	Yes	Cost of ISS-TR coming from other site	
WO-CLOSE	Yes	Yes	Yes	Remainder of the WIP balance	
PCTOT-AD	No	No	Yes	User	
CST-ADJ	Yes	No	Yes		
ISS-PRV (FIFO)	Yes	Yes	Yes	Cost from which cost calculation period the item is picked	Can be from multiple periods
Physical Inventory (RCT-UNP, CYC-CNT, etc Qty > 0)	Yes	Yes	Yes	Cost from which cost calculation period the item is picked	
Transfers within same site (ISS-TR and RCT-TR)	No	No	No	N/A	
ISS-WO	Yes	No	Yes	Cost from which cost calculation period the item is picked	
ISSWOTOT	No	Yes	Yes	Summarized Cost on WO-LOT, Operation level	
Physical Inventory (ISS-UNP, CYC-CNT, ISS-TR (different sites transfer)etc, Qty < 0)	Yes	Yes	Yes	Cost from which cost calculation period the item is picked	

Post Periodic Costing Transactions to GL

As the very last step of the calculation, the system posts the created GL transactions to the General Ledger. The system runs this function after it processes all items and sites. It does this by automatically running Operational Transaction Post (OTP) (25.13.7). The system generates the same report as when OTP is run from the menu. For more information on OTP, see *QAD Financials User Guide*.

It is possible to rerun this step by running Operational Transaction Post should this step fail

Calculation Cost Categories

Every cost set, including the Periodic Costing cost set, starts out with five cost elements that match the cost categories. The following topics describe the following categories, and explain how Periodic Costing interacts with them.

- Material
- Subcontract
- Burden
- Labor
- Overhead

Material

Any material receipt transaction—that is, a purchase order receipt, PO shipper receipt, work order/cumulative order receipt—might cause the material cost to change. Also, for distribution order receipts, any transfer by site, whether DRP or not, causes a material cost change, but should have the same cost as the issue value on the issue site.

Unplanned receipts, cycle counts, physical counts, and receipt transfers between locations are all transactions that do not cause cost change; the current unit cost is applied to the goods received and material costs related to Logistics Accounting.

Material cost calculations formula - Average:

*Sum of (Receipt Quantity * Receipt Cost) / total receipt quantity*

After manufacturing, finished products and components are received into stock.

Subcontract

Instead of only materials, suppliers sometimes also provide services for completing manufacturing operations. Companies subcontract operations when there is insufficient manufacturing capacity or when operations require specialized equipment.

Subcontract items are received into WIP, not into inventory. The receipt updates the quantity completed at the designated work order operation.

The work order receipt takes the subcontract from WIP and causes the material cost to change. Subcontract cost calculations are similar to the calculations for materials; they use the same two methods: WAVG and FIFO.

Burden

In Periodic Costing, you can calculate burden costs using either the work center burden rates or the total burden cost of the period. The system only calculates burden rates when you set Work Center Rate Calculation to Yes in Periodic Costing Control (30.5.24).

Total consumed hours = Total actual setup hours + Total actual run hours

Total burden cost = Total labor burden + Total machine burden

Burden rate = Total burden cost / Total consumed hours

*Unit burden cost = Burden rate * the item consumed hours / this period total quantity of the item*

Labor

The following example depicts the setup labor cost calculation. Setup time includes changing or refitting a work center or a piece of equipment to produce a new item, while setup costs include scrap, calibration, downtime, and lost sales associated with preparing a resource for the next item.

Total consumed setup hours = total actual setup hours

Setup rate = total setup cost / total consumed setup hours

*Unit setup labor cost = setup rate * the item consumed setup hours / this period total quantity of the item*

The following depicts run labor cost calculations:

Total consumed run hours = total actual run hours

Run rate = total run cost / total consumed run hours

*The unit run labor cost = run rate * the item consumed run hours / this period total quantity of the item*

Overhead

The system adds the cost of the prior period from this element to the PO receipts occurring in the current period. The PO receipts should not be subcontract PO receipts. The system uses the value added to the PO receipt to calculate the unit cost of the item.

Material and Labor Cost Calculation

The cost of raw material or components issued to work orders or repetitive orders is the lower-level cost of the product and is calculated as WAVG and FIFO.

The weighted average calculation considers this period and the previous period. These calculations are for material, labor, and burden costs.

Several elements can be attached to material costs to capture such things as freight, insurance, and other logistics costs. This is not available in existing direct average costing functionality. In standard QAD EE costing, several elements can be attached to any of the cost categories; in period costing, only material costs can have multiple elements.

The material cost calculation is as follows:

*(this period material cost * this period receipt quantity + last period material cost * last period item quantity balance + this period material cost adjustment) / (this period receipt quantity + last period item quantity balance)*

The unit labor cost calculation is as follows:

Unit labor cost = the unit setup labor cost + the unit run labor cost

Labor cost calculation applies to semi-finished components:

*(this period labor cost * this period receipt quantity + last period labor cost * last period item quantity balance + this period labor cost adjustment) / (this period receipt quantity + last period item quantity balance)*

Burden cost calculation applies to semi-finished components:

*(this period burden cost * this period receipt quantity + last period burden cost * last period item quantity balance + this period burden cost adjustment) / (this period receipt quantity + last period item quantity balance)*

Chapter 4

Working with Periodic Costing Results

This chapter provides step-by-step instructions for month-end closing. The system provides many cost-related reports to facilitate cost analysis during closing and reconciliation. The topics in this chapter include the following:

Overview 68
Overview of closing for both month end and period end.

Best Practices 68
Lists best practices and recommendations for closing.

Running Periodic Costing Before Period End 69
Describes how Periodic Costing generates calculation exceptions that you can view.

Preparing for Periodic Costing Period Close 69
Includes a series of steps to consider before you can conclude that Periodic Costing can be closed.

Using Reports and Browse Collections to Reconcile 72
Describes several reports to help with reconciliation.

Using Utilities to Verify and Balance Data 92
Describes Periodic Costing utilities designed to help you in the reconciliation process.

Calculation Exceptions 97
Describes Periodic Costing calculation exceptions that display at calculation end.

Troubleshooting Other Cost Issues 98
Describes issues, possible causes, and fixes that may arise during Periodic Costing.

Cost Month End Close 101
Provides steps and explanations of steps for month-end closing.

Overview

Once you complete Periodic Costing calculation, you should reconcile what item costs you have to account for during a period and how those costs are accounted. In other words, the profit or loss shown by running Periodic Costing to derive at item unit costs based on inventory and shop floor transactions may not agree with the profit or loss shown by the GL accounts. When this occurs, you reconcile the profits or losses that are shown as different. In short, you should ensure that figures are in agreement and are accurate.

Activities, such as analyzing doubtful receivables, adjusting individual value, and resolving deferred revenue, are part of the reconciliation scenario. For example, legal documents can be booked against the accrual account because amounts are already adjusted in inventory. You may need to reconcile and ensure that the adjustment is correct, compensating the difference between the accrual and the legal document. The closing operation includes the transfer of the necessary information to the relevant ledgers, as well as the reconciliation of the transferred information.

Periodic Costing should be executed not only as an end of period activity but also during the period to validate the transactions closer to *real time*. Doing the intermediate Periodic Costing calculation runs and analysis alleviates the work to be done at the end of the period because you correct transactions early.

This section contains a description of the reports, browses, and collections that you use to analyze and reconcile the results of the PC calculation.

Note Tables in Appendix A contain closing checklists that provide reconciliation steps for each area; for example, for accounts receivable, accounts payable, and general ledger closing.

Finally, this section covers the steps to close the PC sub-ledger once the PC results have been verified and reconciled.

Best Practices

Consider the following best practices:

- Before closing, QAD recommends that you run Periodic Costing frequently.

  Period closing must be a continuous process—you should not leave issues to period end. You should run Periodic Costing often, for example, every week, within a period as a method to check your purchase orders and work orders before the month- or period-end closing.

  Even though running Periodic Costing includes reversing costs, correcting issues, and so on; it is an effective method to correct issues on a smaller scale. You can use Periodic Costing as a separate checking tool too to check, for example, when a unit cost has changed. Periodic Costing reports reveal the change. And, since you can run Periodic Costing on a transient layer, it can be removed without permanent committal to the system.
- You should establish a detailed period-end schedule that includes:
  - A structured timetable of due dates and frequency
  - Closing responsibilities: who does which closing task by when. Closing steps by area and activity per area are included in tables in Appendix A.
- You should consider year-end closing as just another period end (peak workload period 1, budget preparation, and so on.)

- Ensure that your Periodic Costing work center rates are updated for the period for the calculation.
- Plan a time span to run the calculation.

  An acceptable performance for the Periodic Costing calculating process should be approximately three hours for a database with one million inventory transactions/shop floor transactions on average per Periodic Costing period (usually, one month). Businesses with an extremely large number of transactions can expect longer processing times. Processing times do, of course, also depend on hardware configuration and database tuning.

Running Periodic Costing Before Period End

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.

The analysis and reconciliation of the Periodic Costing calculation results are similar in nature compared to the activity after the period has ended. The intermediate reconciliation allows for validation of transactions, in particular in the following areas:

- Purchase order receipts and logistic charges

  You can validate these transactions against accounts payable and legal documents to verify that receipts, charges, taxes, and so on, have been recorded correctly.
- Work order and repetitive transactions

  You can validate that labor and component are recorded correctly and included in the closing of the work order.
- Inventory balances

  Review the balances for any negative balances to identify situations where transactions have not been recorded in a timely fashion.

Preparing for Periodic Costing Period Close

Once the end of the period is reached the closing procedures begin, closing Periodic Costing is similar to closing the operational sub-ledgers, but with a few additional steps. The following topics include a series of steps to consider before you can conclude that Periodic Costing can be closed.

Use the following steps to conduct costing month-end closing with Periodic Costing:

1. Release a cost month-end close schedule to all operational areas.

   You release the schedule to all operational areas so that personnel know when they have to have their activities finished. Typically, it takes one to two days to complete the tasks before conducting cost-closing tasks.

2. Verify outstanding legal documents (issues and receipts)

   You can use Legal Document Browse (7.10.3) to check for issues and receipts of legal documents; that is, verify whether the legal documents are still open, what the statuses are, and so on. These documents must be closed for the month end.

3 Verify the period purchases to identify issues requiring adjustments.

You can use Transactions Accounting Report (3.21.40) to locate issues such as receipts that affect inventory and so on.

4 Check if all period non-system-created expenses are posted.

Check whether payroll, rent, power, and other non-system created expenses are ready for calculating the actual labor and burden rates.

5 Analyze negative balances.

Analyzing is important when the total balance of the items in inventory is negative. You should correct this when you have legal documents with a negative balance. You can use the following reports to help analyze and locate the reasons for the negative balance:

- Inventory Valuation as of Date (1.5.23)
- Inventory Valuation as of by Location (3.6.16)
- Item Transaction Report (30.5.13.17)
- Inventory Valuation Browse (30.5.13.1)

6 Accrue pending expenses.

For example, you accrue expenses for complementary import duties due to legal documents that did not arrive on time, or you accrue for invoice legal documents related to consignment requirements.

You can handle the accrued expenses though Periodic Costing manual adjustments. You may need to back out of manual Periodic Costing adjustments. When you do, you can use the legal document and credit the account; however, when the legal document arrives in the next period, you offset the accrual.

Note You must consider all expenses for the amount, even when the legal documents do not arrive on time.

Legal documents are booked against the accrual account because the amounts are already adjusted in inventory. You may need to reconcile and ensure that the adjustment is correct, compensating the difference between the accrual and the legal document.

7 Run work order and repetitive account close.

8 Check for all unposted GL transactions.

Use the official layer as the transactions are related to the operational modules.

Important You cannot have unposted transactions from the operational sub-ledgers as they are assumed to be posted to the Periodic Costing reports to balance with GL.

9 Close the entity GL period for operational modules (AP, SO, and IC).

The idea here is to guarantee that no one else does any activity for the entity GL period.

10 Pull a labor absorbed report (total labor reported or backflushed).

Pull from the shop floor control module or the advanced repetitive module.

Run an Efficiency by Work Center Report (16.20.13.19).

Note You can use other reports too to find the labor reported.

11 Calculate total actual expenses by direct cost centers.

For labor and burden and other expenses, Periodic Costing needs to know the actual expenses by direct site, work center, or cost center. This must be done manually in QAD EE.

Note You must enter or load the rate or the total for labor and burden every period for each work center. To do this:

a. You first prepare labor/burden actual totals/rates by site, cost center (department) or work center. You calculate labor burden actual totals by rate. You perform the calculation and you provide the rate for the total amount of expenses. You do this in a spreadsheet.

b. In the spreadsheet, you divide the value by the number of hours to calculate the rate by work center.

c. You attach XML schema to the spreadsheet to load the data for Periodic Costing. See Chapter 2, “Loading Work Center Rates or Cost Adjustments from XML,” for more information on the XML file and to load the data into Periodic Costing.

12. For overhead rates, pull the purchase or product receipts and calculate the actual overhead rate by item.

    This data too must be loaded into PC.

    Overhead is used to absorb costs that are not absorbed by the transactions recorded in the system. This can be fixed burden costs that must be allocated to the products through other means than regular inventory or WIP transactions. You calculate the specific values outside of QAD EE and enter them or load them manually.

    As an end to this step, you perform a unit cost adjustment in Periodic Costing, taking into consideration the receipt transactions.

    You upload the data to Periodic Costing using a spreadsheet and CIM load procedure.

13. Load the following:
    - Periodic Costing adjustments:
      - Unit cost adjustments
      - Total cost adjustments
      - WIP adjustments (labor and component)/

    These adjustments compensate for extra expenses not covered by the transactions already in the system.

14. Run PC calculation.

15. Analyze the results of the PC calculation using the browses, collections, and reports described in “Using Reports and Browse Collections to Reconcile”.

16. Perform any additional adjustments; see Chapter 5, “Periodic Costing Adjustments,” for more information.

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.

19. Close the PC sub-ledger and transfer the Periodic Costing journal to the management layer.

Using Reports and Browse Collections to Reconcile

You can use several reports to help with reconciliation, including reports from the following Periodic Costing areas:

- PC Inventory Reporting
- PC Operations Reports
- PC Accounting Reports
- PC Browse Collections

PC Inventory Reporting

The PC Inventory Reports Menu (30.5.13) includes numerous reports and browses. Each report is discussed separately in the topics within this section. Browses include the following:

- Inventory Valuation Browse (30.5.13.1)

  This browse lets you select periodic cost period/year. If you use .NET UI, you can specify additional search criteria; for example, item number.

  The report displays the current and standard cost set, quantity on hand, and quantity cost by item and site.

- 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 Detail Inquiry (30.5.13.13)

  Use this browse to display data, optionally, in the statutory currency, by entering the transaction number. You can specify that data display by several different criteria.

- 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.

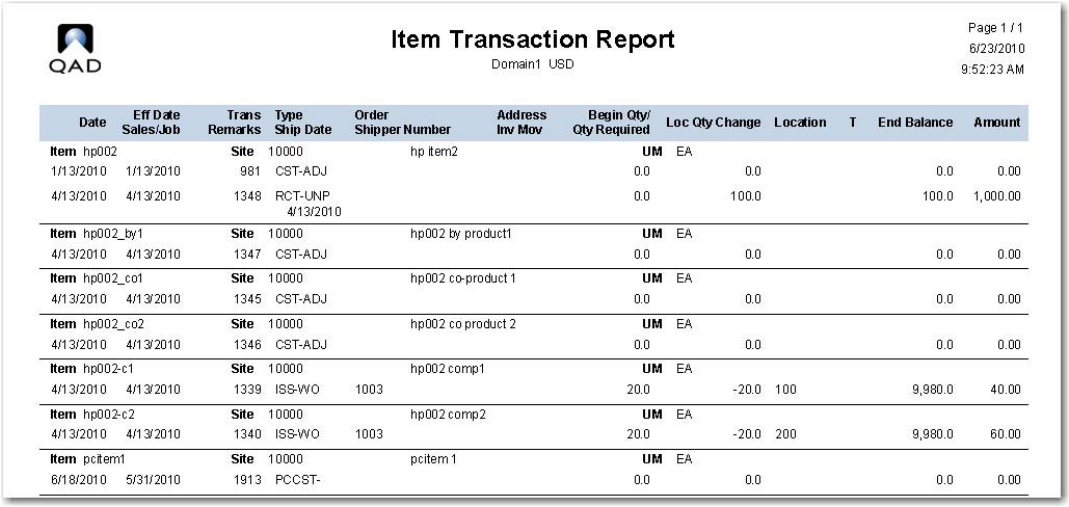
- Inventory Trans By Order Report (30.5.13.15)

  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.

Fig. 4.1
Item Transaction Report (30.5.13.17)



QAD

Item Transaction Report

Domain1 USD

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Date	Eff Date	Sales/Job	Trans	Remarks	Type	Ship Date	Order	Shipper	Number	Address	Inv Mov	Begin Qty/ Qty Required	Loc Qty Change	Location	T	End Balance	Amount
Item hp002			**Site**	10000					hp item2			**UM**	EA				
1/13/2010	1/13/2010		981		CST-ADJ							0.0	0.0			0.0	0.00
4/13/2010	4/13/2010		1348		RCT-UNP	4/13/2010						0.0	100.0			100.0	1,000.00
Item hp002_by1			**Site**	10000					hp002 by product1			**UM**	EA				
4/13/2010	4/13/2010		1347		CST-ADJ							0.0	0.0			0.0	0.00
Item hp002_co1			**Site**	10000					hp002 co-product 1			**UM**	EA				
4/13/2010	4/13/2010		1345		CST-ADJ							0.0	0.0			0.0	0.00
Item hp002_co2			**Site**	10000					hp002 co product 2			**UM**	EA				
4/13/2010	4/13/2010		1346		CST-ADJ							0.0	0.0			0.0	0.00
Item hp002-c1			**Site**	10000					hp002 comp1			**UM**	EA				
4/13/2010	4/13/2010		1339		ISS-WO		1003					20.0	-20.0	100		9,980.0	40.00
Item hp002-c2			**Site**	10000					hp002 comp2			**UM**	EA				
4/13/2010	4/13/2010		1340		ISS-WO		1003					20.0	-20.0	200		9,980.0	60.00
Item pcitem1			**Site**	10000					pcitem 1			**UM**	EA				
6/18/2010	5/31/2010		1913		PCCST-							0.0	0.0			0.0	0.00

PC Operations Reports

You can use the reports in the PC Operations Reports menu (30.5.15) to help you review operations data.

- PC Work Order WIP Cost Report (30.5.15.1)
- PC WO WIP History Report (30.5.15.2)
- PC WO WIP History Inquiry (30.5.15.6)
- PC WO Bill Cost (30.5.15.7)
- PC WO Routing Cost Browse (30.5.15.8)
- PC WO Cost History Report (30.5.15.12)
- Operational Trans Detail Inquiry (30.5.15.13)
- Op Operational GL Transactions (30.5.15.14)
- Operational Inv Transactions (30.5.15.24)
- WO Receipts (30.5.15.25)
- WO Components (30.5.15.26)
- Operation Transaction (30.5.15.27)
- Subcontract Receipts (30.5.15.28)
- PC Cost Detail (30.5.15.29)

The following topics describe important reports and inquiries most frequently used in reconciling PC operations.

PC Work Order WIP Cost Report

Use PC Work Order WIP Cost Report (30.5.15.1) to specify a range of data to display for each cost set. You can specify the account, sub-account, cost center, project, work order, ID, item number, site, sales/job, or supplier.

PC WO WIP History Report

Use PC WO WIP History Report (30.5.15.2) to display work order WIP history for each cost set. You can specify a range of work orders, sites, item numbers, batches, due dates, IDs, sales/jobs, or suppliers. Optionally, you can specify whether to display items, routing details, and co-/by-product orders. You can also select a cumulative order with no effective date or set page breaks on work orders that display.

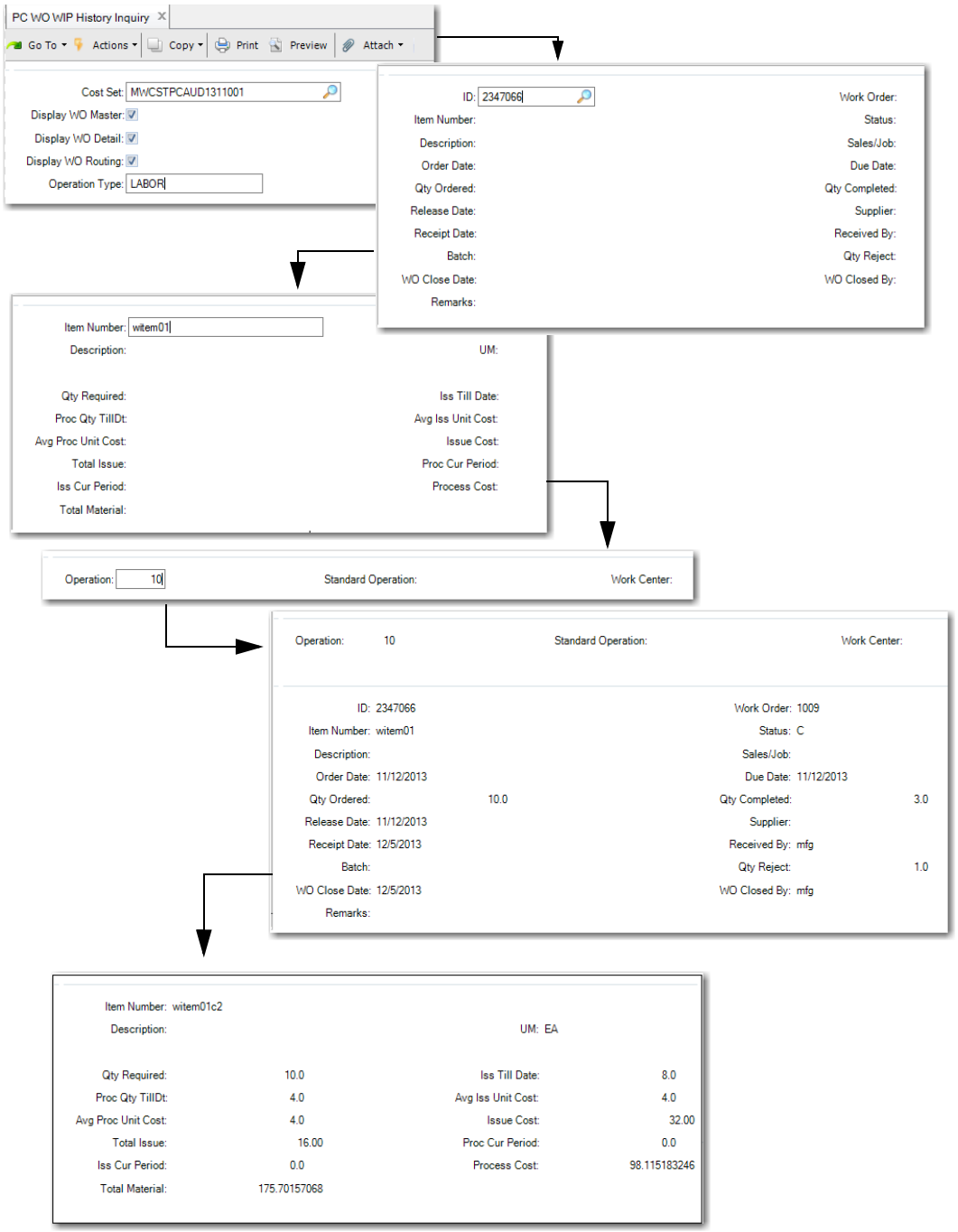
PC WO Routing Cost Browse

PC WO Routing Cost Browse (30.5.15.8) displays Periodic Costing work order routing cost for multiple periods. For any cost set, when the WO has any operation or finished goods transactions that affect WIP, the browse displays all WO routing of this WO of this cost set.

PC WO WIP History Inquiry

Use PC WO WIP History Inquiry (30.5.15.6) to view WO WIP history data for components and routing operations. You can specify the cost set and operation type, which are mandatory fields; then specify whether the WO master, WO detail, or WO routing data displays in the report. When you press Go, you are prompted to enter additional information such as operation and component item data. Enter specifics about each area, then press Go to run the inquiry.

Fig. 4.2
PC WO WIP History Inquiry (30.5.15.6)



PC WO Cost History Report

Use PC WO Cost History Report (30.5.15.12) to review work order cost data. You enter the work order; the system defaults the ID, item number, release and due dates, quantity ordered and completed, status, sales/job, and supplier. You can optionally choose to print BOM or routing detail or print co-/by-product orders. You can also choose to insert page breaks upon cost sets to aid when printing. The system defaults the currency to print, but you can change it.

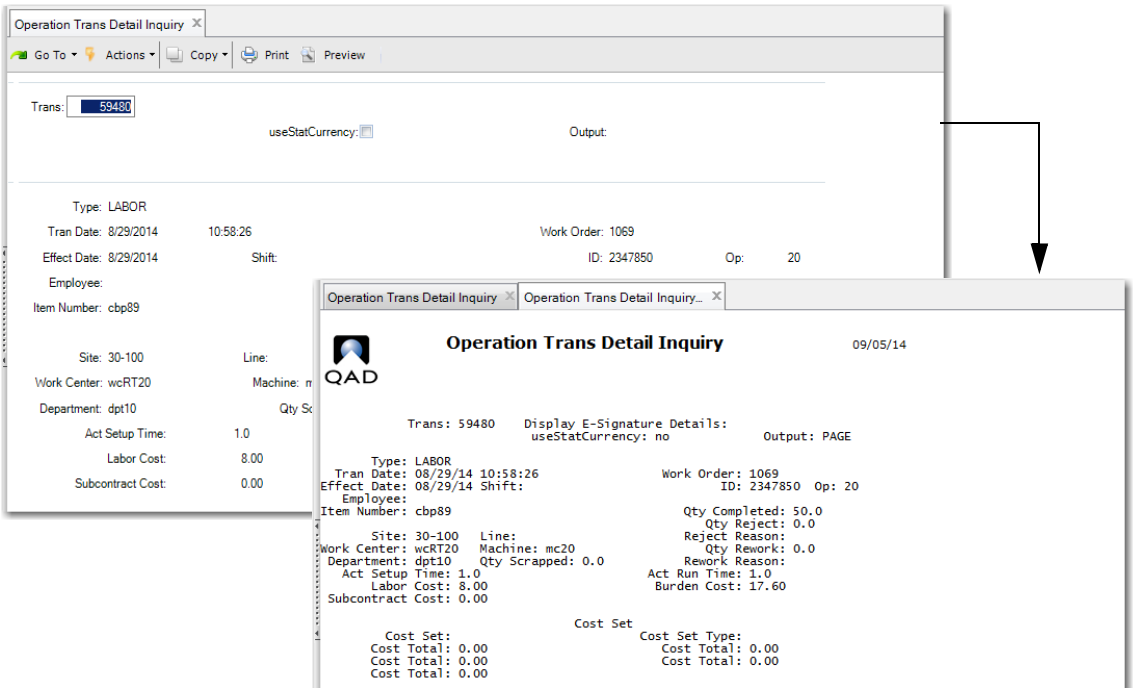
The report displays the work order data in the header, including receipt, order, release, WO close, and due dates; quantity ordered, completed, and rejected; status, supplier, job, and other data. For each cost set, it displays the UM, quantity required, issue till date, and issue for the current period, then the average issue unit cost, total material issue cost, process to date/process current period, the average process unit cost, and the total issue process cost.

It displays the operation ID, standard operation, work center; the process quantity and the total hours till date and for this period; and the operation cost per unit and total operation cost.

Operation Trans Detail Inquiry

Use Operation Trans Detail Inquiry (30.5.15.13) report to view operational transaction details. You first enter the transaction number, then use the initial frame to view transaction details in the QAD EA standard maintenance frame setup. When you press Next, the system displays the report data.

Fig. 4.3
Operation Trans Detail Inquiry (30.5.15.13)



Op Operational GL Transactions (30.5.15.14)

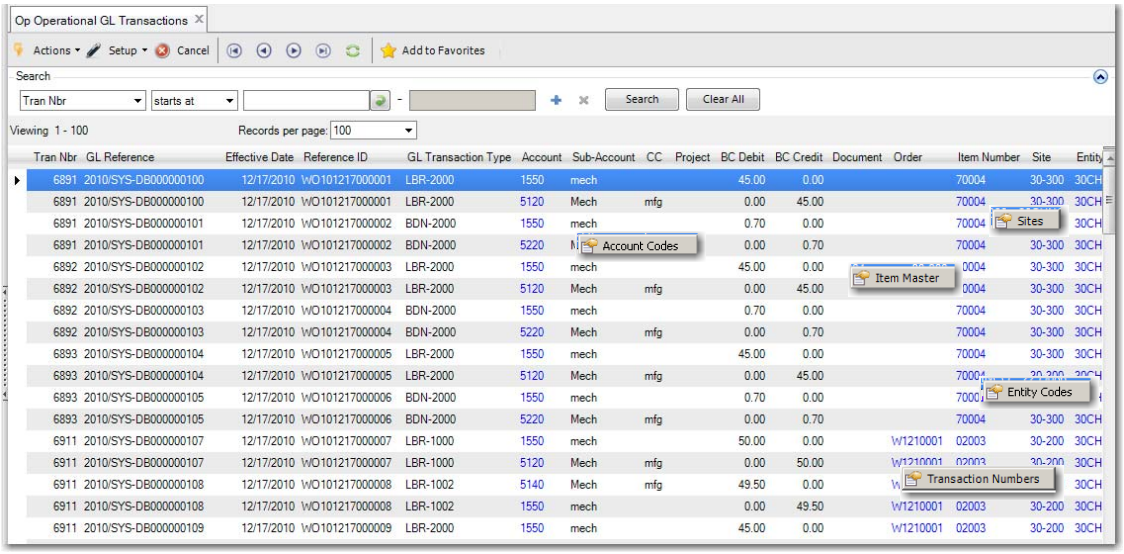
Use Op Operational GL Transactions (30.5.15.14) to view GL transaction data, including the transaction number, GL reference, effective date, reference ID, GL transaction type, account, sub-account, cost center, project, BC debit and credit, documents, orders, item number, site, entity, ID, and operation.

Several columns display a button when you right-click on the column. When you click the button, a supporting browse displays. Columns with additional data include:

Column	Button/Supporting Tab
Account	Account Codes
Order	Transaction Number

Column	Button/Supporting Tab
Item	Item Master
Site	Sites
Entity	Entity Codes

Fig. 4.4
Op Operational GL Transactions (30.5.15.14)

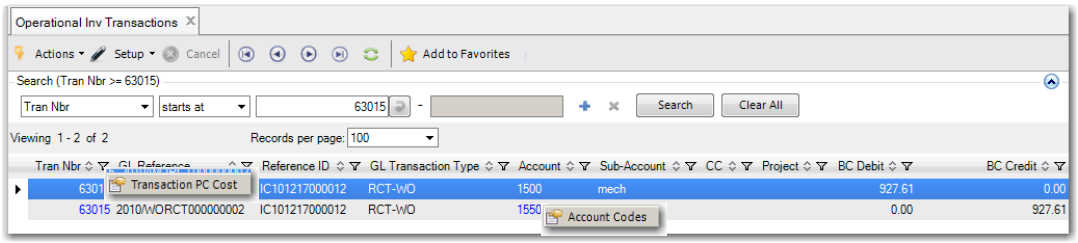


Operational Inv Transactions (30.5.15.24)

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 and credit, and more. Columns with additional data include:

Column	Button/Supporting Tab
Tran Nbr	Transaction PC Cost
Account	Account Code

Fig. 4.5
Operational Inv Transactions (30.5.15.24)



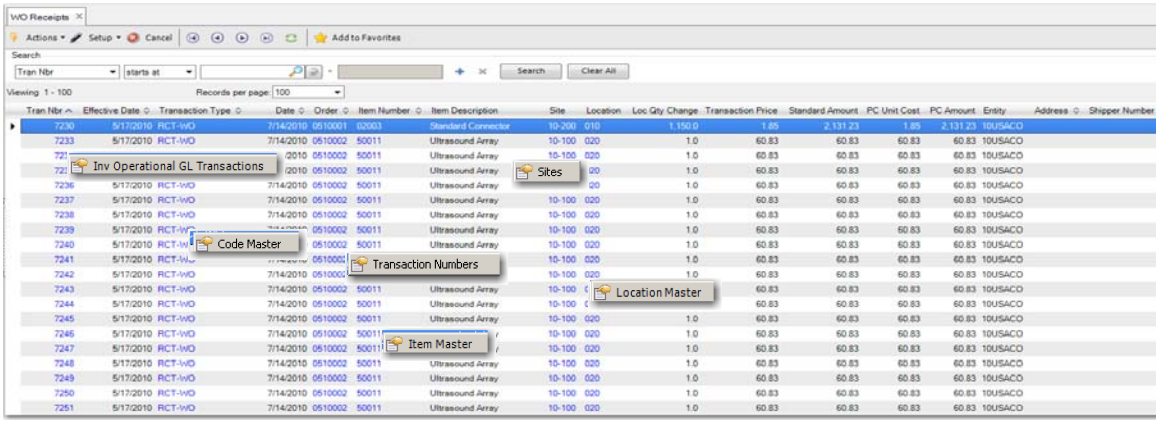
WO Receipts and WO Components

Use the WO Receipts (30.5.15.25) to report WO receipt data, including 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.

Use WO Components (30.5.15.26) to report similar data to the WO Receipts report. Columns with additional data include:

Column	Button/Supporting Tab
Tran Nbr	Inv Operational GL Transactions
Transaction Type	Code Master
Order	Transaction Numbers
Item Number	Item Master
Site	Sites
Location	Location Master

Fig. 4.6
WO Receipts (30.5.15.25)



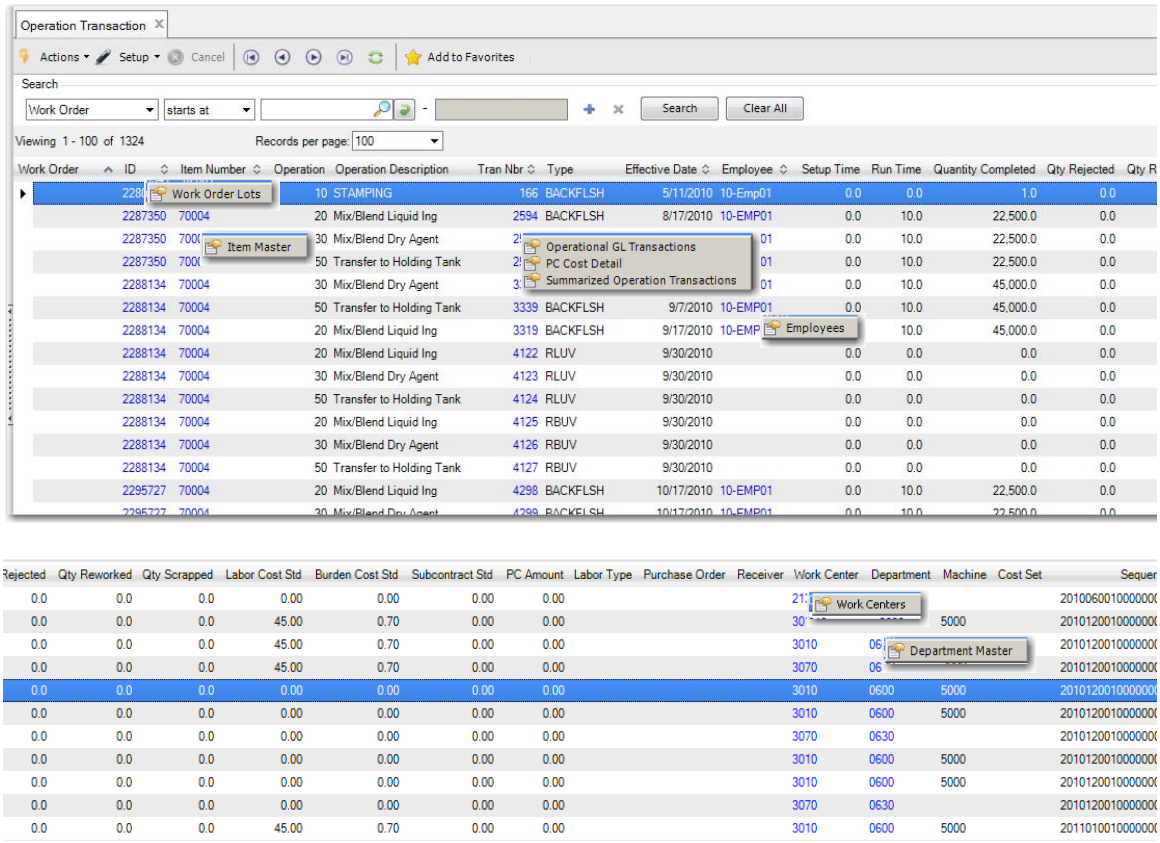
Operation Transaction

Use Operation Transaction (30.5.15.27) to view transaction data, including 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. Columns with additional data include:

Column	Button/Supporting Tab
ID	Work Order Lots
Item Number	Item Master
Order	Transaction Numbers
Item Number	Item Master
Tran Nbr	Operational GL Transactions
	PC Cost Detail
	Summarized Operation Transactions

Column	Button/Supporting Tab
Employee	Employees
Work Ctr	Work Centers
Department	Department Master

Fig. 4.7
Operation Transaction (30.5.15.27)

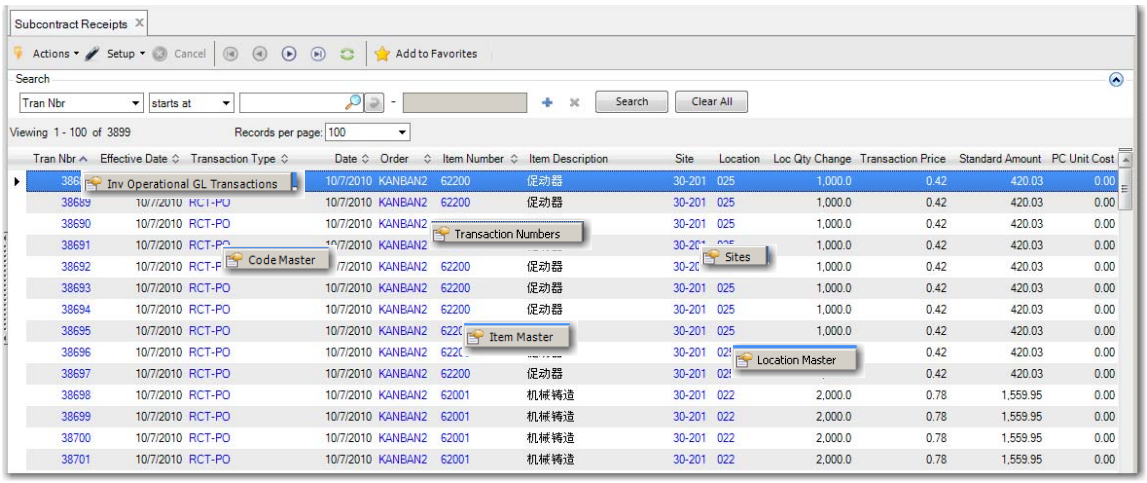


Subcontract Receipts

Use Subcontract Receipts (30.5.15.28) to view subcontract receipt data, including 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. Columns with additional data include:

Column	Button/Supporting Tab
Tran Nbr	Inv Operational GL Transactions
Transaction Type	Code Master
Order	Transaction Numbers
Item Number	Item Master
Site	Sites
Location	Location Master

Fig. 4.8
Subcontract Receipts (30.5.15.28)



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. The report supports six transaction types:

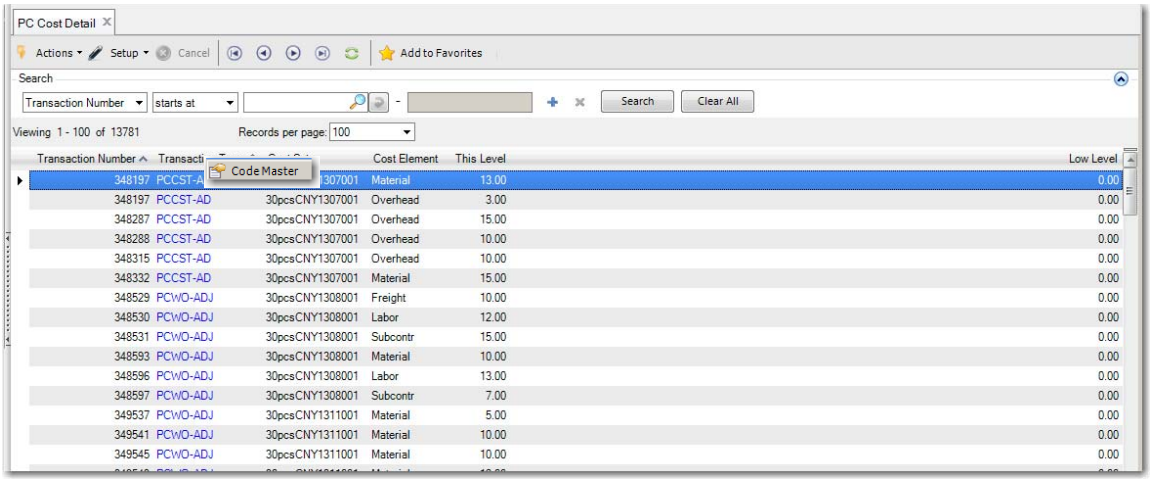
- Unit cost adjustment (PCCST-AD)
- Total cost adjustment (PCTOT-AD)
- WO component cost adjustment (PCWO-ADJ)
- WO labor and burden cost adjustment (PCWOP-AD)
- Unit cost calculation correction (PCCSTCOR)
- Unit cost calculation details (PCCSTCAL)

For PCCST-AD, the two level-related columns indicate the current-level and lower-level cost after you make adjustments through PC Unit Cost Adjustment. For PCTOT-AD, PCWO-ADJ, and PCWOP-AD; the two level-related columns indicate the cost delta between the before and after adjustment after you run PC Total Cost Adjustment. For PCCSTCAL, the two level-related columns indicate the current-level and lower-level cost of the item-site. For PCCSTCOR, the two columns indicate the cost before a unit cost reset.

Columns with additional data include:

Column	Button/Supporting Tab
Transaction Type	Code Master

Fig. 4.9
PC Cost Detail (30.5.15.29)



PC Accounting Reports

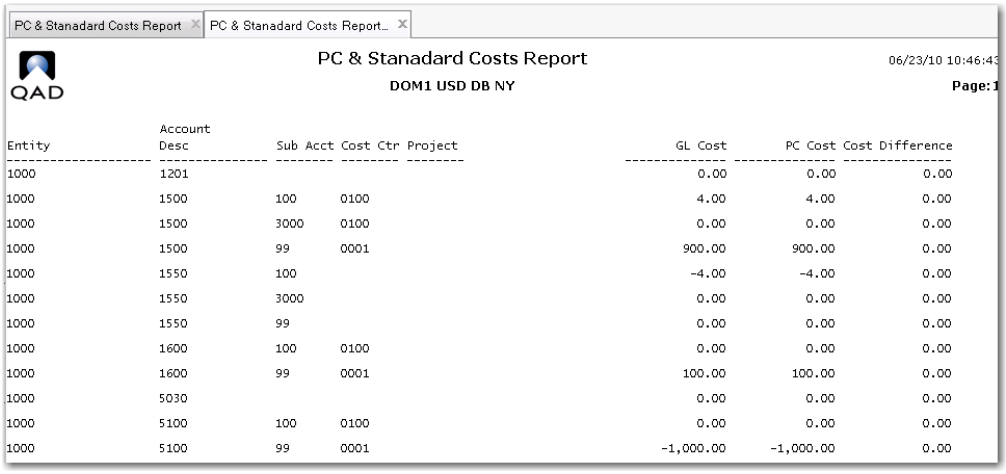
The following topics discuss the reports in the PC Accounting Reports Menu (30.5.17).

PC & Standard Costs Report

Use the PC & Standard Costs Report (30.5.17.1) to display Periodic Costing and standard costs by date range and entity. The report displays the entity, account description, sub-account, cost center, and project. You can optionally display statutory currency and SAF codes.

Note In Periodic Costing, Summarized Journal in Inventory Accounting Control (36.9.2) can work together with SAF.

Fig. 4.10
PC & Standard Costs Report (30.5.17.1)



Entity	Account Desc	Sub Acct	Cost Ctr	Project	GL Cost	PC Cost	Cost Difference
1000	1201				0.00	0.00	0.00
1000	1500	100	0100		4.00	4.00	0.00
1000	1500	3000	0100		0.00	0.00	0.00
1000	1500	99	0001		900.00	900.00	0.00
1000	1550	100			-4.00	-4.00	0.00
1000	1550	3000			0.00	0.00	0.00
1000	1550	99			0.00	0.00	0.00
1000	1600	100	0100		0.00	0.00	0.00
1000	1600	99	0001		100.00	100.00	0.00
1000	5030				0.00	0.00	0.00
1000	5100	100	0100		0.00	0.00	0.00
1000	5100	99	0001		-1,000.00	-1,000.00	0.00

PC Inv Cost And Account Reconcile

Use PC Inv Cost and Account Reconcile (30.5.17.10) to review operational inventory movements and GL account movements.

The report displays when the inventory cost and GL account match and displays when item level cost and GL match for an account and period. You can see the difference between GL and operational inventory transaction totals using the following filters as report criteria:

Period: Single choice (cannot be blank)

Account: Multiple choice, or leave blank for all values

Sub-Account: Multiple choice, or leave blank for all values

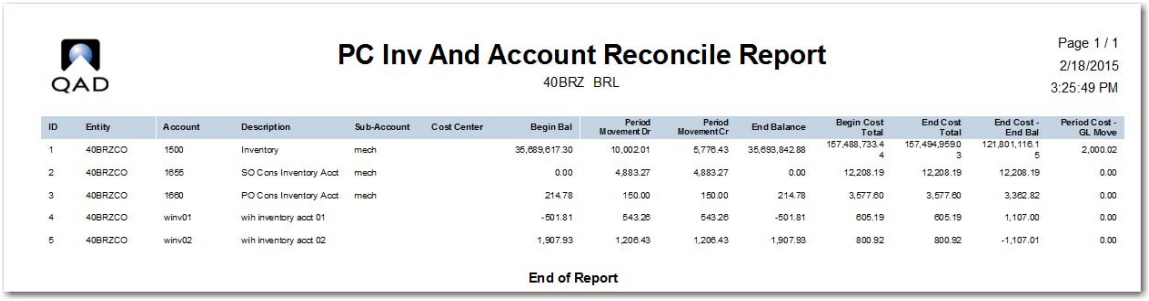
Cost Center: Multiple choice, or leave blank for all values

Display Item: Yes/No

Drill down threshold: Show Item details if the difference is greater than this amount.

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 and ending total cost, the ending cost ending balance, and more.

Fig. 4.11
PC Inv Cost and Account Reconcile (30.5.17.10)



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PC Inv And Account Reconcile Report

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ID	Entity	Account	Description	Sub-Account	Cost Center	Begin Bal	Period Movement Dr	Period Movement Cr	End Balance	Begin Cost Total	End Cost Total	End Cost - End Bal	Period Cost - GL Move
1	40BRZCO	1500	Inventory	mech		35,689,617.30	10,002.01	5,776.43	35,693,842.88	157,488,733.44	157,494,959.03	121,801,116.15	2,000.02
2	40BRZCO	1655	SO Cons Inventory Acct	mech		0.00	4,883.27	4,883.27	0.00	12,208.19	12,208.19	12,208.19	0.00
3	40BRZCO	1660	PO Cons Inventory Acct	mech		214.78	150.00	150.00	214.78	3,577.60	3,577.60	3,362.82	0.00
4	40BRZCO	winv01	wih inventory acct 01			-501.81	543.26	543.26	-501.81	605.19	605.19	1,107.00	0.00
5	40BRZCO	winv02	wih inventory acct 02			1,907.93	1,206.43	1,206.43	1,907.93	800.92	800.92	-1,107.01	0.00

End of Report

PC Cost and Account Reconcile

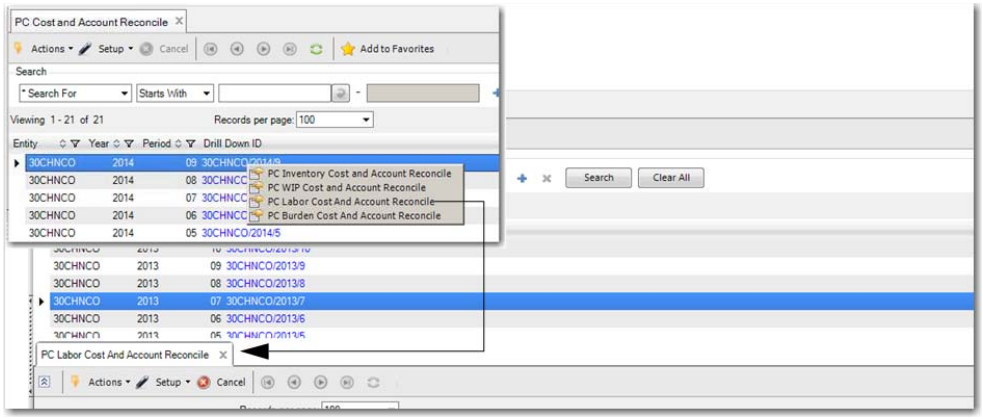
Once you complete Periodic Costing calculation, you can use PC Cost and Account Reconcile Browse Collection (30.5.17.13) to help you reconcile the item movements, WIP movements, and account movements. The initial screen displays the entity, year, period, and a list of drill down links for the entity.

The drill down column links, listed by date, lead you to more reconciliation data. When you right-click on a dated listing in the column, the system displays a menu for the following:

- PC WIP Cost and Account Reconcile
- PC Labor Cost and Account Reconcile
- PC Burden Cost and Account Reconcile

When you click on a menu item, the system displays a supporting tab of additional information. You can then drill down into details to analyze data.

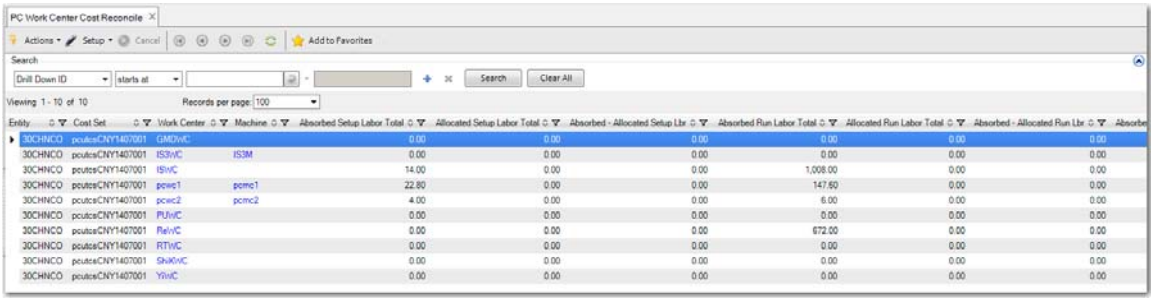
Fig. 4.12
PC Cost and Account Reconcile, Drill Down



PC Work Center Cost Reconcile

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.

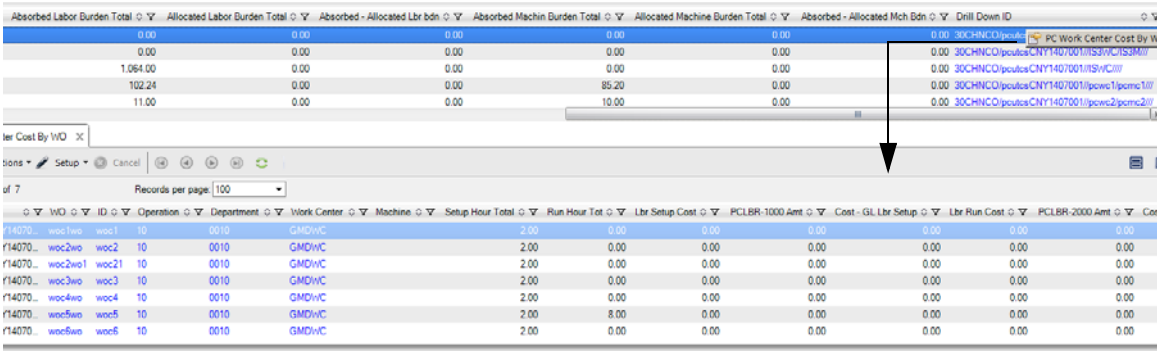
Fig. 4.13
PC Work Center Cost Reconcile (30.5.17.14)



You can drill down to view work centers by right-clicking a work center, and you can drill down to view work center machines by right-clicking a machine. When you right-click on a record in the DrillDownID column, the system displays the PC Work Center Cost by WO button. When you click the button, you can drill into the details that make up the summary shown in the PC Work Center Cost Reconcile browse. When the PC Work Center Cost by WO supporting browse displays, you can then further drill down to display other browses as follows:

Column with Button	Supporting Browse
WO	Work Order Master
ID	Work Order Lots
Operation	Routing Operations
Department	Department Master
Work Center	Work Centers

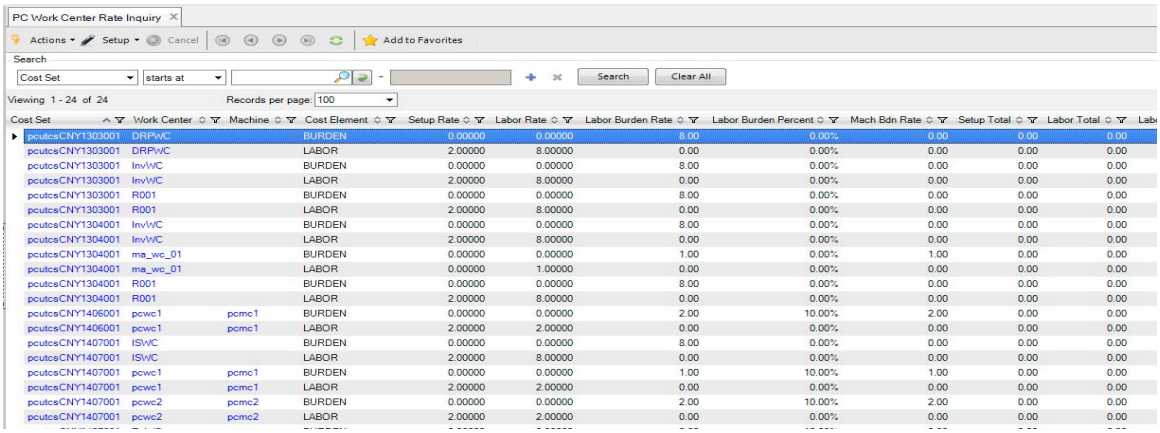
Fig. 4.14
PC Work Center Cost Reconcile, Drill Down



PC Work Center Rate Inquiry

When reconciling work center rates, you can use Work Center Rate Inquiry (30.5.3.2) to display work center rate and totals data. Use the data to validate that the work center totals and rates were loaded correctly before you run PC calculation. After you run PC calculation, you can validate the calculated work center rates. Like other browse collections, you can right-click to display additional buttons, then click the button to view supporting browse data.

Fig. 4.15
PC Work Center Rate Inquiry (30.5.3.2)



PC Cost Fluctuation Report

Use PC Cost Fluctuation Report (30.5.17.16) to determine when any item's unit cost varies a lot compared with previous periods after you run PC calculation.

The report displays item unit cost variance for the current period. You can filter on item, product line, site, variance % greater than or less than on any element, or total unit cost. Columns include Item, Description, Product Line, Site, Current Period (Bucket), Cost Set, Element/Total, Current Unit Cost, Prev Unit Cost, and Variance%, (current unit cost-previous unit cost)/previous unit cost in %).

For WAVG, the report lets you compare:

- The unit cost of the prior period
- By element or total

For FIFO, the report lets you compare:

- The WAVG unit cost of all previous periods:

  *sum (unit cost * unconsumed qty)/sum (unconsumed qty)*

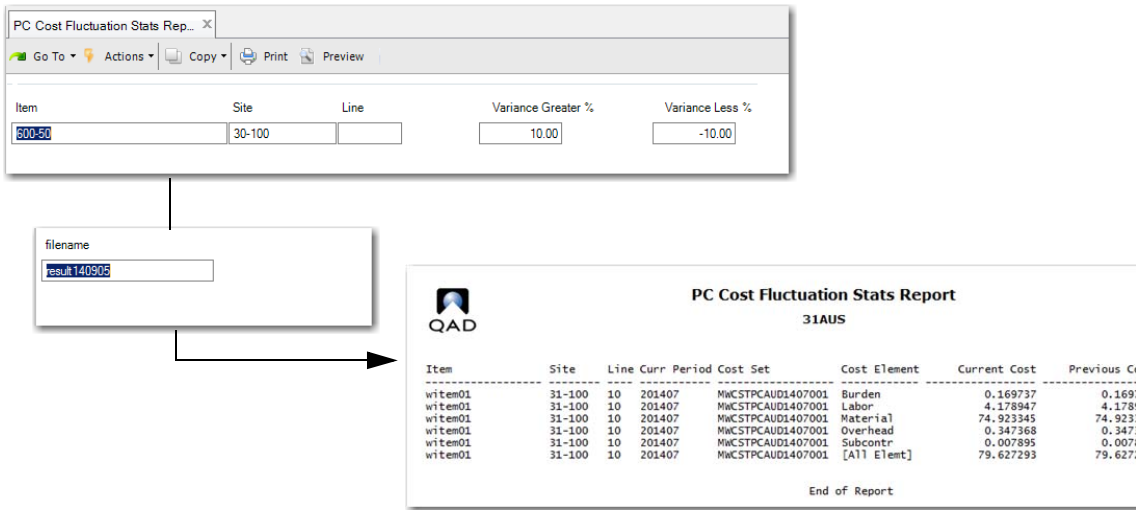
- When the sum (unconsumed qty) of all previous period is 0, you can compare with the average unit cost of all previous periods. The report displays 99 when the WAVG or AVG previous period cost is 0.
- By element or total

To run the report:

1. Enter the item, site, and product line number.
2. Enter the variance greater and variance less than percentages.
3. Click Next.

   The system displays the default file name for a file that holds output to archive after you run the report.
4. Accept the default file name or specify another file name.

Fig. 4.16
PC Costs Fluctuation Stats Report (30.5.17.16)



PC Unit Cost Calculation Report

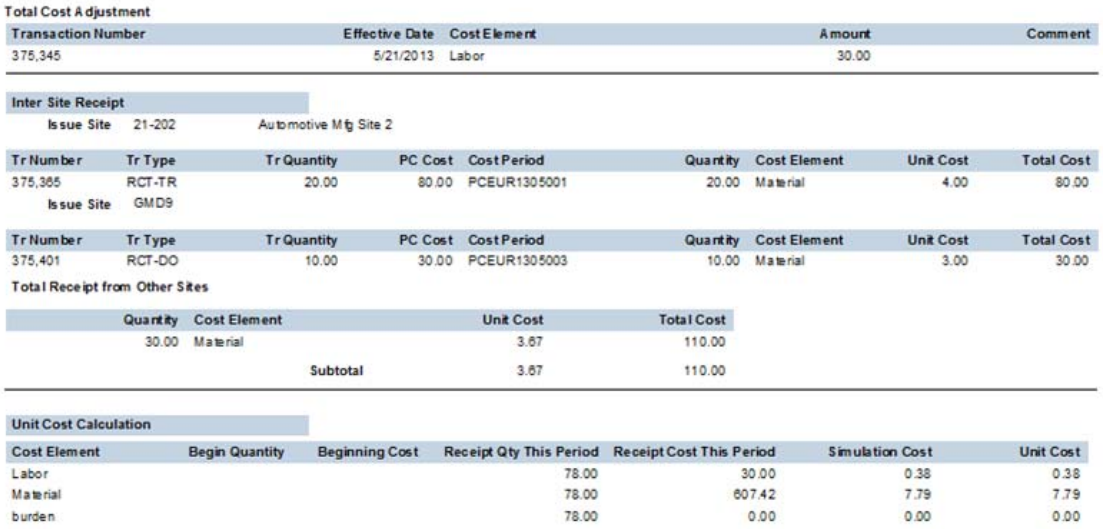
PC Unit Cost Calculation report (30.5.17.17) shows how Periodic Costing calculated the unit cost for the item and all the data that went into the calculation. It is an extensive report that consists of sections that mimic how the PC Calculation processes. The report has sections for the following:

- Prior period cost
- Unit cost adjustments
- PO receipts
- WO receipts and close, including all costs added to WIP
- Intersite transfer receipts
- Total cost adjustments

- Unit cost calculation summary

PC Unit Cost Calculation report presents data in each section as it accumulates the total quantity and values received; see Figure 4.17.

Fig. 4.17
PC Unit Cost Calculation Report



Total Cost Adjustment

Transaction Number	Effective Date	Cost Element	Amount	Comment
375,345	5/21/2013	Labor	30.00	

Inter Site Receipt

Issue Site 21-202 Automotive Mfg Site 2

Tr Number	Tr Type	Tr Quantity	PC Cost	Cost Period	Quantity	Cost Element	Unit Cost	Total Cost
375,365	RCT-TR	20.00	80.00	PCEUR1305001	20.00	Material	4.00	80.00
Issue Site	GMD9							

Tr Number	Tr Type	Tr Quantity	PC Cost	Cost Period	Quantity	Cost Element	Unit Cost	Total Cost
375,401	RCT-DO	10.00	30.00	PCEUR1305003	10.00	Material	3.00	30.00

Total Receipt from Other Sites

Quantity	Cost Element	Unit Cost	Total Cost
30.00	Material	3.67	110.00
	Subtotal	3.67	110.00

Unit Cost Calculation

Cost Element	Begin Quantity	Beginning Cost	Receipt Qty This Period	Receipt Cost This Period	Simulation Cost	Unit Cost
Labor			78.00	30.00	0.38	0.38
Material			78.00	607.42	7.79	7.79
burden			78.00	0.00	0.00	0.00

PC Regional Reports

Reports provided through the PC Regional Reports Menu (30.5.19) can satisfy legal reporting requirements specified for some countries:

- Inventory and SF Movement Report
- Inventory and WIP Balance Report

Inventory and SF Movement Report

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.

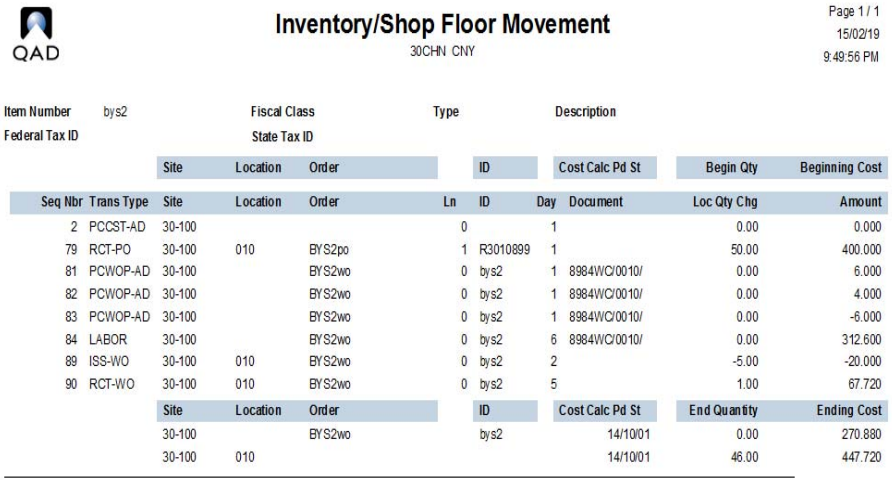
Note You can also use Inventory and SF Movement Report (30.5.19.4) in the character environment. This is useful when the reports are too large for the Windows client to handle.

You can view how WO close allocates remaining WIP cost to co-/by-products in the Inventory and SF Movement Report. After you close a WO for co-/by-products, the system:

- Creates the co-/by-product WO close transaction
- Sets the WO close Periodic Costing amount to 0 for the base item
- Displays the WO close data in Inventory and SF Movement report
- Sets the Periodic Costing amount equal to the GL inventory account amount

Also, for FIFO environments, the Inventory and SF Movement Report displays the total unconsumed quantity of the period for the site. The report displays the beginning and ending balance ordered by ascending period.

Fig. 4.18
Inventory and Shop Floor Movement Report (30.5.19.1)



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Inventory/Shop Floor Movement
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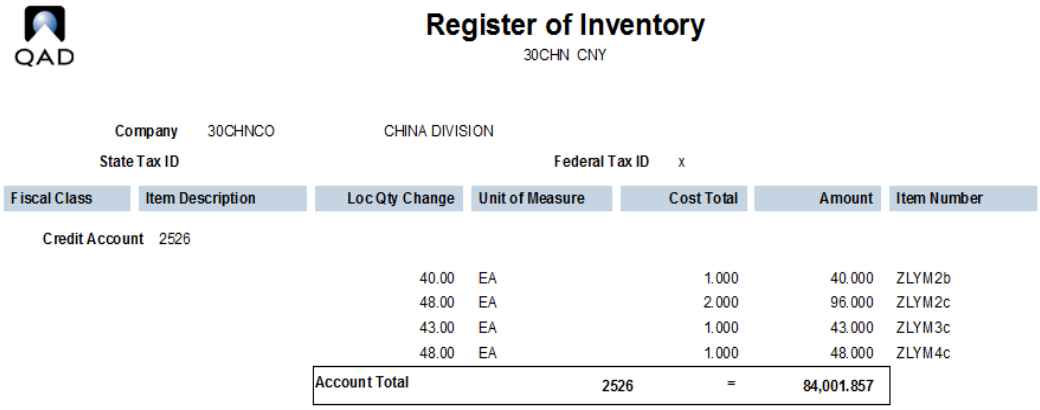
Item Number bys2 Fiscal Class Type Description
Federal Tax ID State Tax ID

	Site	Location	Order		ID	Cost Calc Pd St	Begin Qty	Beginning Cost
Seq Nbr Trans Type	Site	Location	Order	Ln	ID	Day Document	Loc Qty Chg	Amount
2 PCCST-AD	30-100			0		1	0.00	0.000
79 RCT-PO	30-100	010	BYS2po	1	R3010899	1	50.00	400.000
81 PCWOP-AD	30-100		BYS2wo	0	bys2	1 8984WC/0010/	0.00	6.000
82 PCWOP-AD	30-100		BYS2wo	0	bys2	1 8984WC/0010/	0.00	4.000
83 PCWOP-AD	30-100		BYS2wo	0	bys2	1 8984WC/0010/	0.00	-6.000
84 LABOR	30-100		BYS2wo	0	bys2	6 8984WC/0010/	0.00	312.600
89 ISS-WO	30-100	010	BYS2wo	0	bys2	2	-5.00	-20.000
90 RCT-WO	30-100	010	BYS2wo	0	bys2	5	1.00	67.720
	Site	Location	Order		ID	Cost Calc Pd St	End Quantity	Ending Cost
	30-100		BYS2wo		bys2	14/10/01	0.00	270.880
	30-100	010				14/10/01	46.00	447.720

Inventory and WIP Balance Report

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.

Fig. 4.19
Inventory and WIP Balance Report (30.5.19.2)



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Register of Inventory
30CHN CNY

Company 30CHNCO CHINA DIVISION
State Tax ID Federal Tax ID x

Fiscal Class	Item Description	Loc Qty Change	Unit of Measure	Cost Total	Amount	Item Number
Credit Account 2526						
		40.00	EA	1.000	40.000	ZLYM2b
		48.00	EA	2.000	96.000	ZLYM2c
		43.00	EA	1.000	43.000	ZLYM3c
		48.00	EA	1.000	48.000	ZLYM4c
	Account Total		2526	=	84,001.857	

PC Browse Collections

You can use the following Periodic Costing .NET UI browse collections as one-stop programs to view data. You can select a record in the top-level browse and drill down into the browse collection's supporting browses that display additional information about the record you selected. Periodic Costing browse collections include the following:

- Transaction PC Cost Browse Collection
- Inv Operational GL Transactions Browse Collection
- Operation History Browse Collection

The following topics provide more information.

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.

To access supporting browses, you 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; see Figure 4.20.

The top-level browse lets you right-click the following to display a supporting browse:

Table 4.1
Transactions PC Cost Supporting Browses

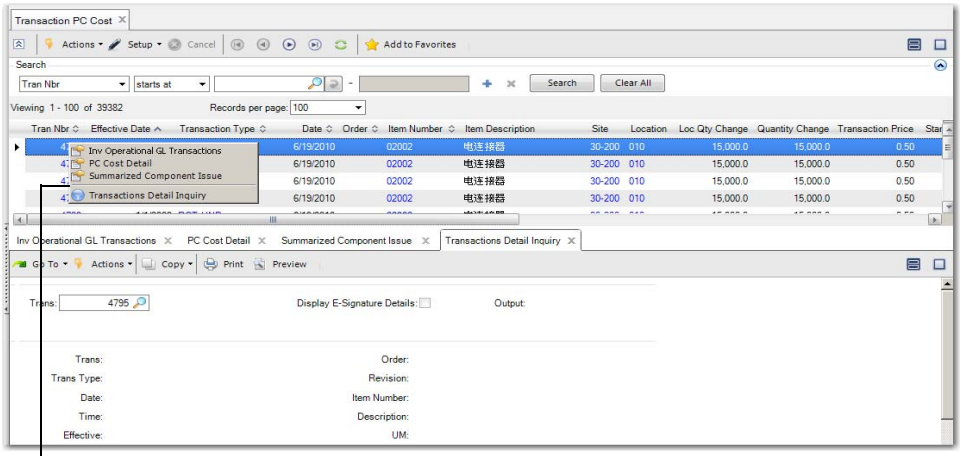
Field to Click	Button/Browse that Displays
Tran Nbr	• Inv Operational GL Transactions • PC Cost Detail • Summarized Component Issue • Transaction Detail Inquiry
Transaction Type	Code Master
Order	Transaction Numbers
Item Number	Item Master
Site	Sites
Location	Location Master

When you right-click a transaction number, the system displays a menu that lets you choose the supporting browse you want to see. Some supporting browses for the transaction number let you drill down into other browses or more data.

You can use the browse collection to view WO issue history transactions with the related ISS-WO to help you reconcile GL. The system creates a new PCISSWOT history transaction to post accounting while it stores PC amounts to individual WO issues. In the browse, you can drill down to the supporting Summarized Component Issue browse and view reconciled summarized WO issues or labor transactions. The system displays the ISS-WO with the same WO, ID, Operation, item, site, and location. WO issues are summarized to process by group.

You can view PC cost detail for the unit cost in the PC Cost Detail supporting browse.

Fig. 4.20
Transaction PC Cost



Right-click a transaction number at the top browse to display a menu of supporting browses.

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.

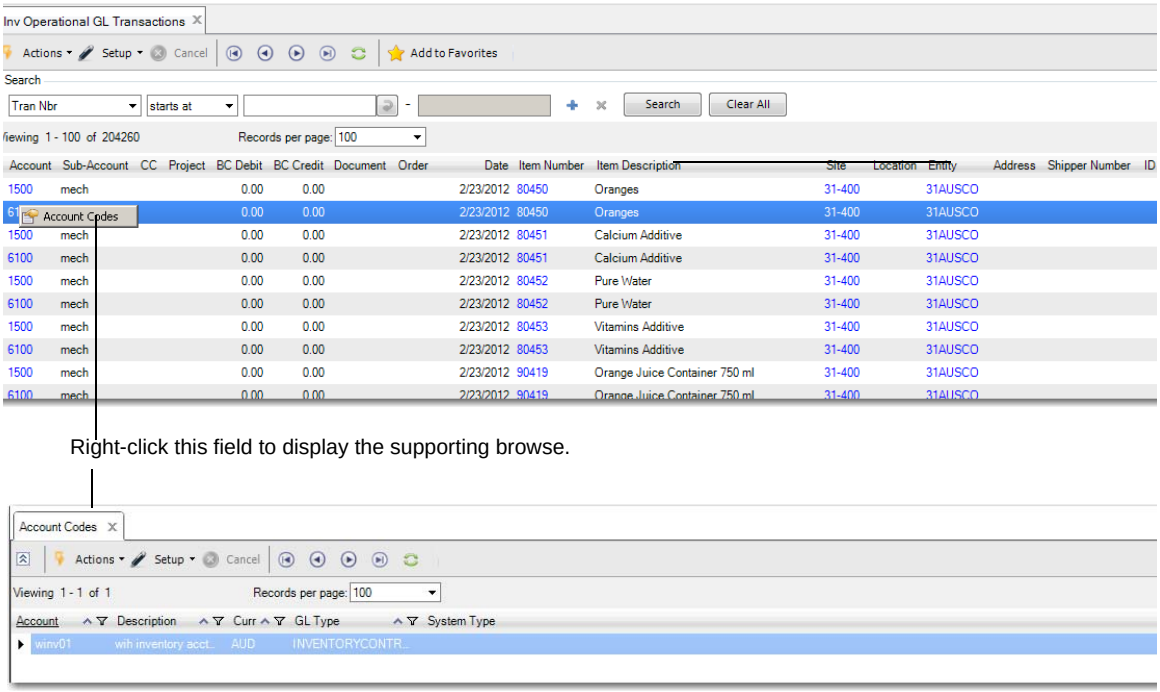
To access supporting browses, you right-click the blue data in the top-level browse. When you do, a button displays. Click the button and the supporting browse of the same name displays below the top-level browse. For example, right-click the transaction number in the top-level browse and the system displays the supporting Transaction PC Cost browse, or right-click the account code and the system displays another supporting browse that shows the account codes; see Figure 4.21.

Table 4.2
Inv Operational GL Transactions Supporting Browses

Field to Click	Button/Browse that Displays
Tran Nbr	Transaction PC Cost
Account	Account Codes
Item Number	Item Master
Sites	Sites
Entity	Entity Codes

By selecting a single record in the top-level browse, then drilling down, you can easily see which accounts are debited and credited for every inventory operational GL transaction.

Fig. 4.21
Inv Operational GL Transactions



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.

Supporting browses include the Operation Transaction, PC Work Center Rates, WO Components (which also shows the cost adjustments transactions), WO Receipts (and shows the WO reject and accounting close), OP Operational GL Transactions, and Subcontract Receipts (and shows the inventory transactions for the receipts); see Figure 4.22.

You can view data in Qty Completed, Qty Reject, Qty Scrap, and Qty Rework columns in the Operation History Browse Collection's top-level browse.

To access even more supporting browses, 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.

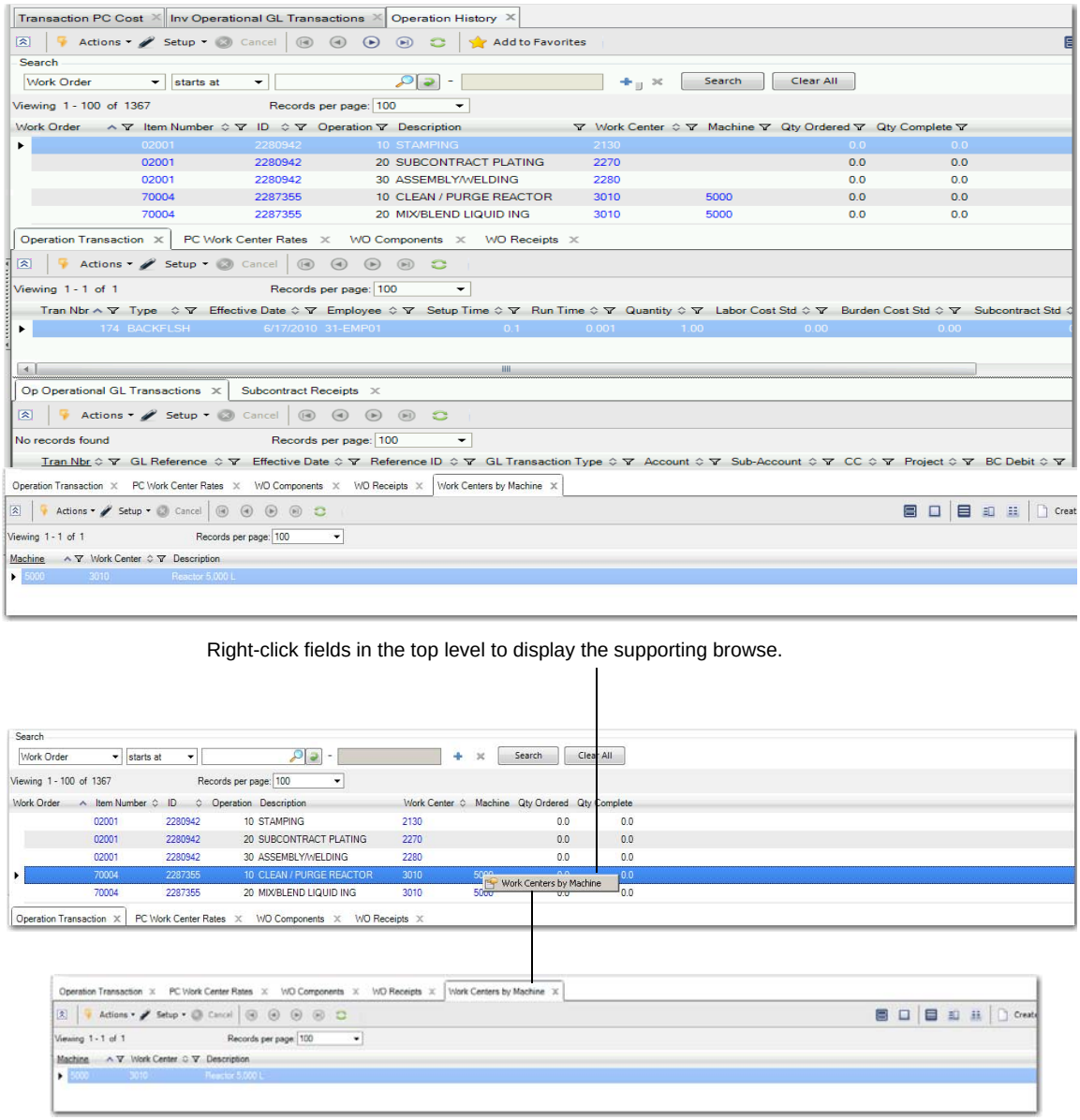
Table 4.3
Operation History Supporting Browses

Field to Click	Button/Browse that Displays
Item Number	Item Master
ID	Work Order Routings and Work Order Routings Maintenance
Work Center	Work Centers

Field to Click	Button/Browse that Displays
Machine	Work Centers by Machine
Trans Nbr	Operational GL Transactions
	PC Cost Detail
	Summarized Operation Transactions

You can use a Department field in the Operation Transactions supporting browse of the Operation History Browse Collection to view or search by department for each operation transaction and search operation transactions by department.

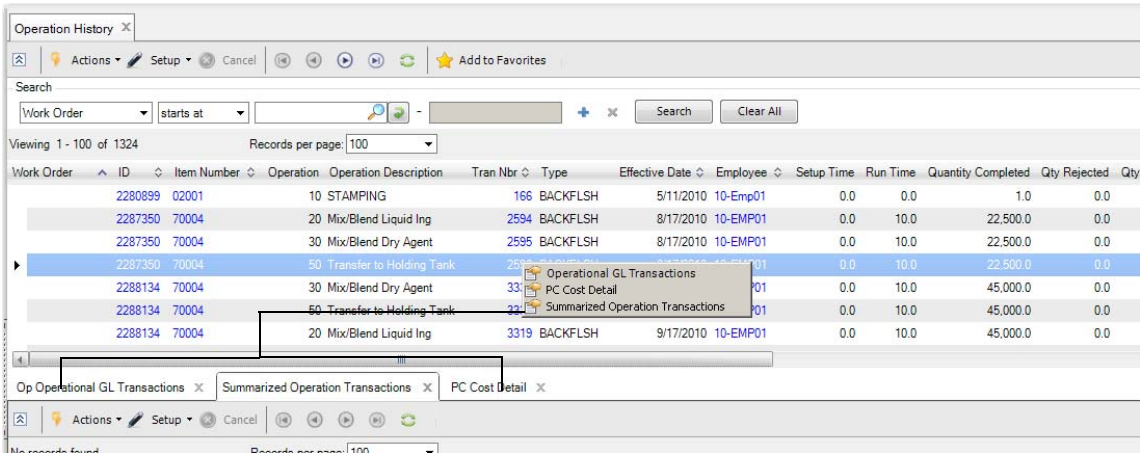
Fig. 4.22
Operation History



Right-click fields in the top level to display the supporting browse.

In the Summarized Operation Transactions supporting browse, the system displays the PCLABORT operation transactions of the same WO, ID, operation, department, work center, and machine.

Fig. 4.23
Operation History Transaction Data



Using Utilities to Verify and Balance Data

Programs in the Periodic Costing Utilities submenu (30.5.7.25) provide numerous verification and balance reports. Use the reports for reconciliation purposes:

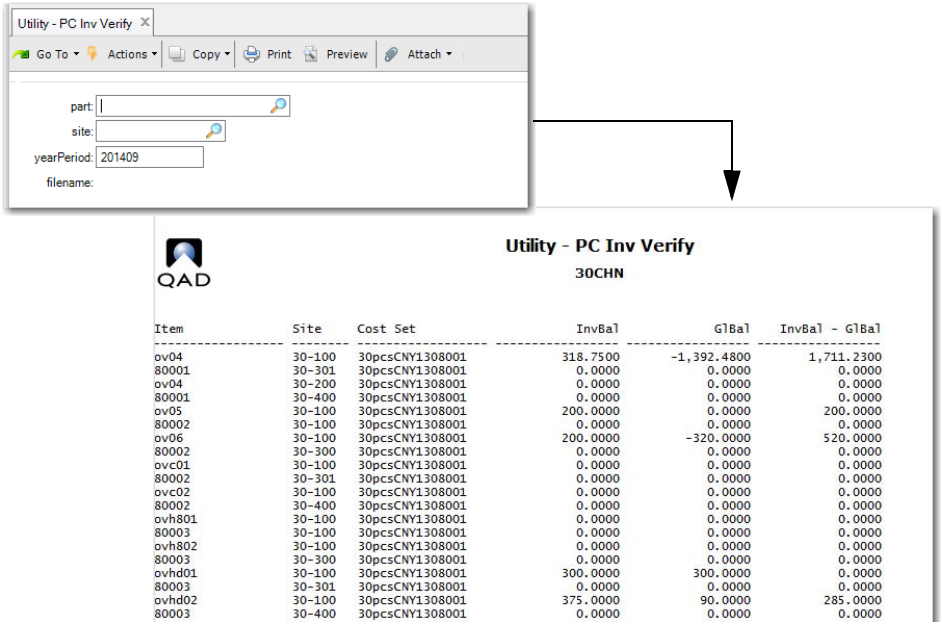
30.5.7.25	**Periodic Costing Utilities Menu...**	
30.5.7.25.1	PC Inv Verification	pcverfy.p
30.5.7.25.2	PC WIP Calc Verification	pcwipverfy.p
30.5.7.25.3	PC Journal Validation	pcglvefy.p
30.5.7.25.13	PC Inventory Account Balance Report	pcglbal.p
30.5.7.25.14	PC WIP Balance Report	pcwipbal.p
30.5.7.25.15	Labor Burden Reconcile Report	pclbdnrp.p

PC Inv Verification

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.

Fig. 4.24
PC Inv Verification (30.5.7.25.1)

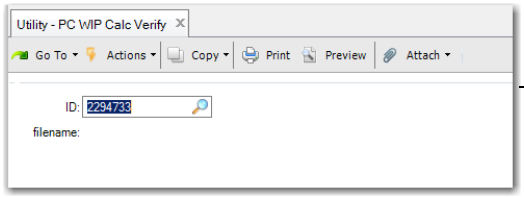


PC WIP Calc Verification

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.

Fig. 4.25
PC WIP Calc Verification (30.5.7.25.2)



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Utility - PC WIP Calc Verify

30CHN

WOrk Order ID Accounting Closed with WIP Cleared

bys2

Cost Set	Remain WOPM	Begin WOPM	Dr WIP	Cr WIP	Remain WOPM - (Begin + Dr - Cr)	Is Equal
30pcsCNY1410001	270.88	0.0	2,262.60	1,991.72	0.00000000000	YES

Cost Set	Remain WOPM	Remain WOPD	Remain WOPR	Remain WOPM - (WOPD + WOPR)	Is Equal
30pcsCNY1410001	270.88	17.6	253.28	0.00000000000	YES

Cost Set	Iss Qty WOPD	Iss Qty ISS-WO	Qty WOPD - ISS-WO	Is Equal
30pcsCNY1410001	5.0	5.0	0.00000000000	YES

Cost Set	Op Hour WOPR	Op Hour op_hist	Hour WOPR - op_hist	Is Equal
30pcsCNY1410001	19.0	19.0	0.00000000000	YES

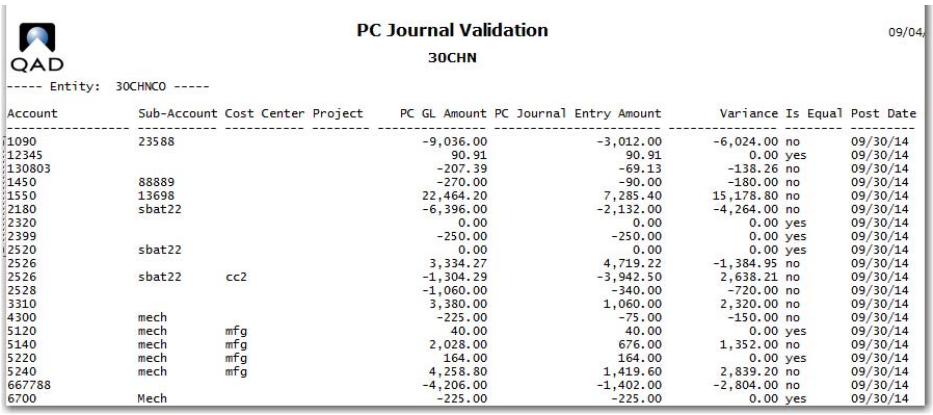
Cost Set	Rct Qty WOPM	Rct Qty RCT-WO	Rct Qty RCT-WO	Is Equal
30pcsCNY1410001	1.0	1.0	0.00000000000	YES

Cost Set	Rjt Qty WOPM	Rjt Qty RJCT-WO	Rjt Qty WOPM - RJCT-WO	Is Equal
30pcsCNY1410001	0.0	0.0	0.00000000000	YES

PC Journal Validation

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.

Fig. 4.26
PC Journal Validation (30.5.7.25.3)



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PC Journal Validation 09/04/

30CHN

----- Entity: 30CHNCO -----

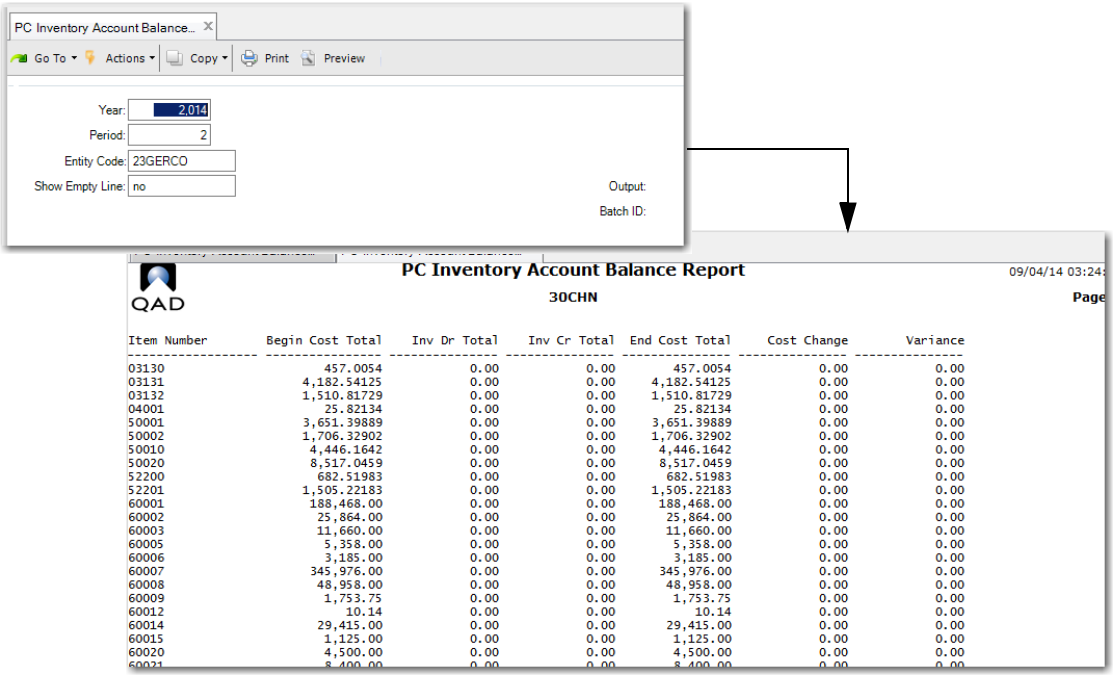
Account	Sub-Account	Cost Center	Project	PC GL Amount	PC Journal Entry Amount	Variance	Is Equal	Post Date
1090	23588			-9,036.00	-3,012.00	-6,024.00	no	09/30/14
12345				90.91	90.91	0.00	yes	09/30/14
130803				-207.39	-69.13	-138.26	no	09/30/14
1450	88889			-270.00	-90.00	-180.00	no	09/30/14
1550	13698			22,464.20	7,285.40	15,178.80	no	09/30/14
2180	sbat22			-6,396.00	-2,132.00	-4,264.00	no	09/30/14
2320				0.00	0.00	0.00	yes	09/30/14
2399				-250.00	-250.00	0.00	yes	09/30/14
2520	sbat22			0.00	0.00	0.00	yes	09/30/14
2526				3,334.27	4,719.22	-1,384.95	no	09/30/14
2526	sbat22	cc2		-1,304.29	-3,942.50	2,638.21	no	09/30/14
2528				-1,060.00	-340.00	-720.00	no	09/30/14
3310				3,380.00	1,060.00	2,320.00	no	09/30/14
4300	mech			-225.00	-75.00	-150.00	no	09/30/14
5120	mech	mfg		40.00	40.00	0.00	yes	09/30/14
5140	mech	mfg		2,028.00	676.00	1,352.00	no	09/30/14
5220	mech	mfg		164.00	164.00	0.00	yes	09/30/14
5240	mech	mfg		4,258.80	1,419.60	2,839.20	no	09/30/14
667788				-4,206.00	-1,402.00	-2,804.00	no	09/30/14
6700	Mech			-225.00	-225.00	0.00	yes	09/30/14

PC Inventory Account Balance Report

Use PC Inventory Account Balance Report (30.5.7.25.13) to see inventory movement by items. You can view account balance data. You specify the year, period, entity code, and whether the report displays empty lines.

The report displays the item number, beginning cost total, inventory debit and credit totals, ending cost total, cost change, and the variance.

Fig. 4.27
PC Inventory Account Balance Report (30.5.7.25.13)



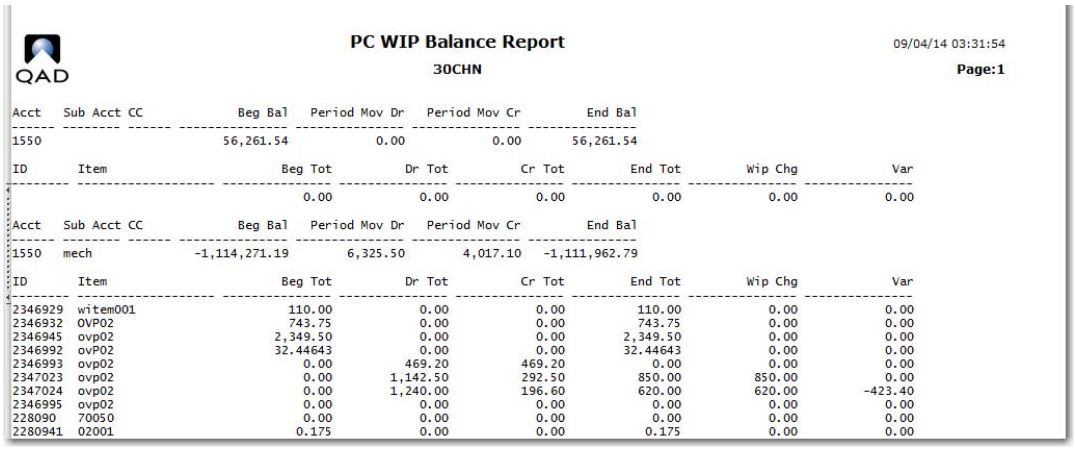
Item Number	Begin Cost Total	Inv Dr Total	Inv Cr Total	End Cost Total	Cost Change	Variance
03130	457.0054	0.00	0.00	457.0054	0.00	0.00
03131	4,182.54125	0.00	0.00	4,182.54125	0.00	0.00
03132	1,510.81729	0.00	0.00	1,510.81729	0.00	0.00
04001	25.82134	0.00	0.00	25.82134	0.00	0.00
50001	3,651.39889	0.00	0.00	3,651.39889	0.00	0.00
50002	1,706.32902	0.00	0.00	1,706.32902	0.00	0.00
50010	4,446.1642	0.00	0.00	4,446.1642	0.00	0.00
50020	8,517.0459	0.00	0.00	8,517.0459	0.00	0.00
52200	682.51983	0.00	0.00	682.51983	0.00	0.00
52201	1,505.22183	0.00	0.00	1,505.22183	0.00	0.00
60001	188,468.00	0.00	0.00	188,468.00	0.00	0.00
60002	25,864.00	0.00	0.00	25,864.00	0.00	0.00
60003	11,660.00	0.00	0.00	11,660.00	0.00	0.00
60005	5,358.00	0.00	0.00	5,358.00	0.00	0.00
60006	3,185.00	0.00	0.00	3,185.00	0.00	0.00
60007	345,976.00	0.00	0.00	345,976.00	0.00	0.00
60008	48,958.00	0.00	0.00	48,958.00	0.00	0.00
60009	1,753.75	0.00	0.00	1,753.75	0.00	0.00
60012	10.14	0.00	0.00	10.14	0.00	0.00
60014	29,415.00	0.00	0.00	29,415.00	0.00	0.00
60015	1,125.00	0.00	0.00	1,125.00	0.00	0.00
60020	4,500.00	0.00	0.00	4,500.00	0.00	0.00
60021	8,400.00	0.00	0.00	8,400.00	0.00	0.00

PC WIP Balance Report

Use PC WIP Balance Report (30.5.7.25.14) to view WIP balance data. You can specify the debit account, year, period, entity code, and whether the report includes zero amount work orders.

The report displays the account and sub-account, cost center, beginning balance, period mov(ement) debit and credit, and ending balance at the top portion. You can see the ID; item; beginning, debit/credit, and ending totals; the WIP charge; and the variance in the report.

Fig. 4.28
PC WIP Balance Report (30.5.7.25.14)



PC WIP Balance Report

09/04/14 03:31:54

30CHN

Page:1

Acct	Sub Acct	CC	Beg Bal	Period Mov Dr	Period Mov Cr	End Bal
1550			56,261.54	0.00	0.00	56,261.54

ID	Item	Beg Tot	Dr Tot	Cr Tot	End Tot	Wip Chg	Var
		0.00	0.00	0.00	0.00	0.00	0.00

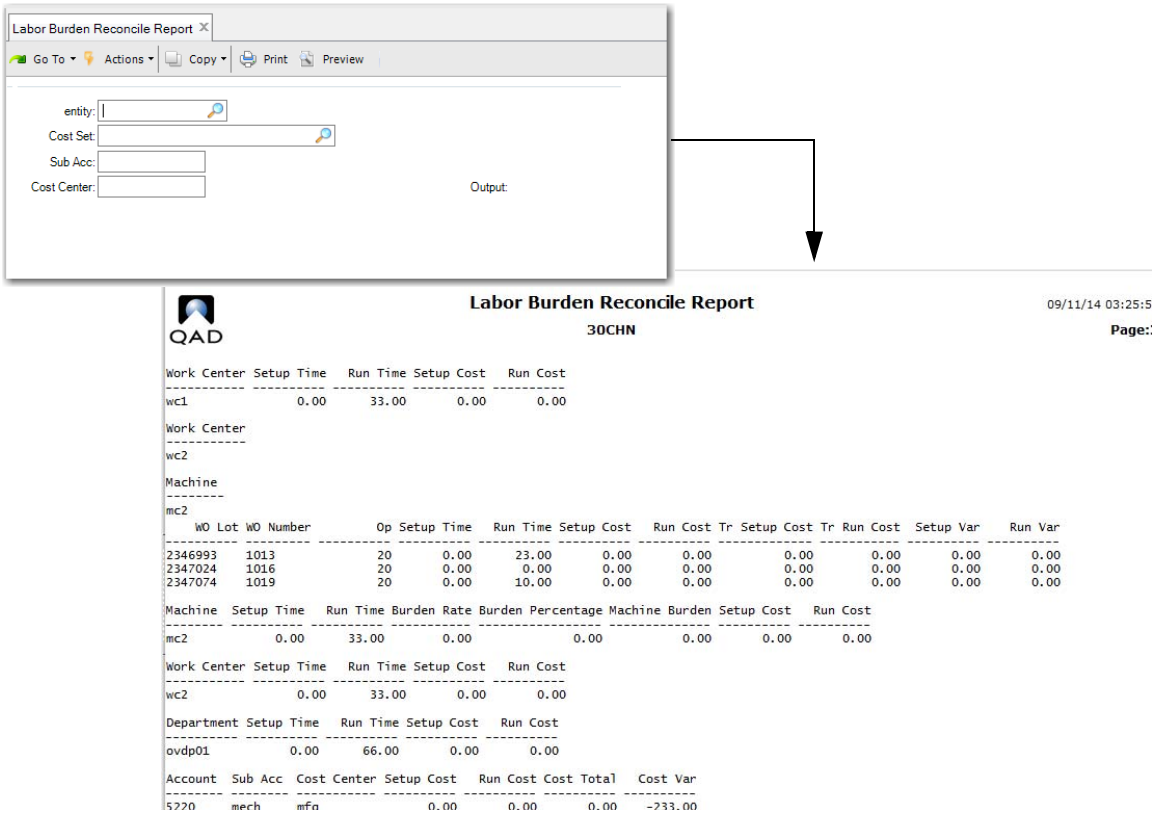
Acct	Sub Acct	CC	Beg Bal	Period Mov Dr	Period Mov Cr	End Bal
1550	mech		-1,114,271.19	6,325.50	4,017.10	-1,111,962.79

ID	Item	Beg Tot	Dr Tot	Cr Tot	End Tot	Wip Chg	Var
2346929	witem001	110.00	0.00	0.00	110.00	0.00	0.00
2346932	OVP02	743.75	0.00	0.00	743.75	0.00	0.00
2346945	ovp02	2,349.50	0.00	0.00	2,349.50	0.00	0.00
2346992	ovP02	32.44643	0.00	0.00	32.44643	0.00	0.00
2346993	ovp02	0.00	469.20	469.20	0.00	0.00	0.00
2347023	ovp02	0.00	1,142.50	292.50	850.00	850.00	0.00
2347024	ovp02	0.00	1,240.00	196.60	620.00	620.00	-423.40
2346995	ovp02	0.00	0.00	0.00	0.00	0.00	0.00
228090	70050	0.00	0.00	0.00	0.00	0.00	0.00
2280941	02001	0.175	0.00	0.00	0.175	0.00	0.00

Labor Burden Reconcile Report

Use Labor Burden Reconcile Report (30.5.7.25.15) this report to view labor burden data so that you can reconcile discrepancies. You must set the entity and cost set, unless only a single entity exists; but you can optionally specify the sub-account and cost center.

Fig. 4.29
Labor Burden Reconcile Report (30.5.7.25.15)



Labor Burden Reconcile Report

09/11/14 03:25:5

30CHN

Page:1

Work Center	Setup Time	Run Time	Setup Cost	Run Cost
wc1	0.00	33.00	0.00	0.00

Work Center
wc2

Machine
mc2

WO Lot	WO Number	Op	Setup Time	Run Time	Setup Cost	Run Cost	Tr Setup Cost	Tr Run Cost	Setup Var	Run Var
2346993	1013	20	0.00	23.00	0.00	0.00	0.00	0.00	0.00	0.00
2347024	1016	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2347074	1019	20	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00

Machine	Setup Time	Run Time	Burden Rate	Burden Percentage	Machine Burden	Setup Cost	Run Cost
mc2	0.00	33.00	0.00	0.00	0.00	0.00	0.00

Work Center	Setup Time	Run Time	Setup Cost	Run Cost
wc2	0.00	33.00	0.00	0.00

Department	Setup Time	Run Time	Setup Cost	Run Cost
ovdp01	0.00	66.00	0.00	0.00

Account	Sub Acc	Cost Center	Setup Cost	Run Cost	Cost Total	Cost Var
5220	mech	mfg	0.00	0.00	0.00	-233.00

Calculation Exceptions

The Periodic Costing calculation program generates exceptions at the end of the calculation display that shows transactions that were not processed 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 quickly view the transactions that can cause Periodic Costing results to not match accounting in the Financials and operational modules, resulting in unbalanced accounts.

The transactions are typically due to unexpected defects that were never processed during the calculation and, thus, caused the program to finish with unbalanced GL and operations. 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 does not exists, etc.

The PC Exception Error Log Browse reports:

- A negative in beginning or ending balance.
- Adjustment in a discrepancy account
- Not enough WIP for by-product work order receipt
- All transaction data within the Periodic Costing period that affects an item value or an average cost that should be processed during the calculation. If either transaction is skipped, the program logs the transaction.
- Cost adjustment transactions applied to a cost set that has 0 (zero) in quantity.
- Exceptions where the offset account is not zero.
- Transactions that reference an invalid or deleted work order, including a deleted master work order; see Chapter 3, “Process Work Order Operation Transactions,” for more information.
- Subcontract processes that are missing subcontract transactions.
- Items where overhead is not reversed or adjusted.
- Transfers where non zero is assumed; that is, the transfer account should be zero assuming all the ISS-TR/RCT-TR match.
- Transfers between sites that have different costs, and therefore, create a discrepancy
- Unclosed pending vouchers that are not fully matched with supplier invoices, and therefore, leaving the receipt transaction unprocessed.

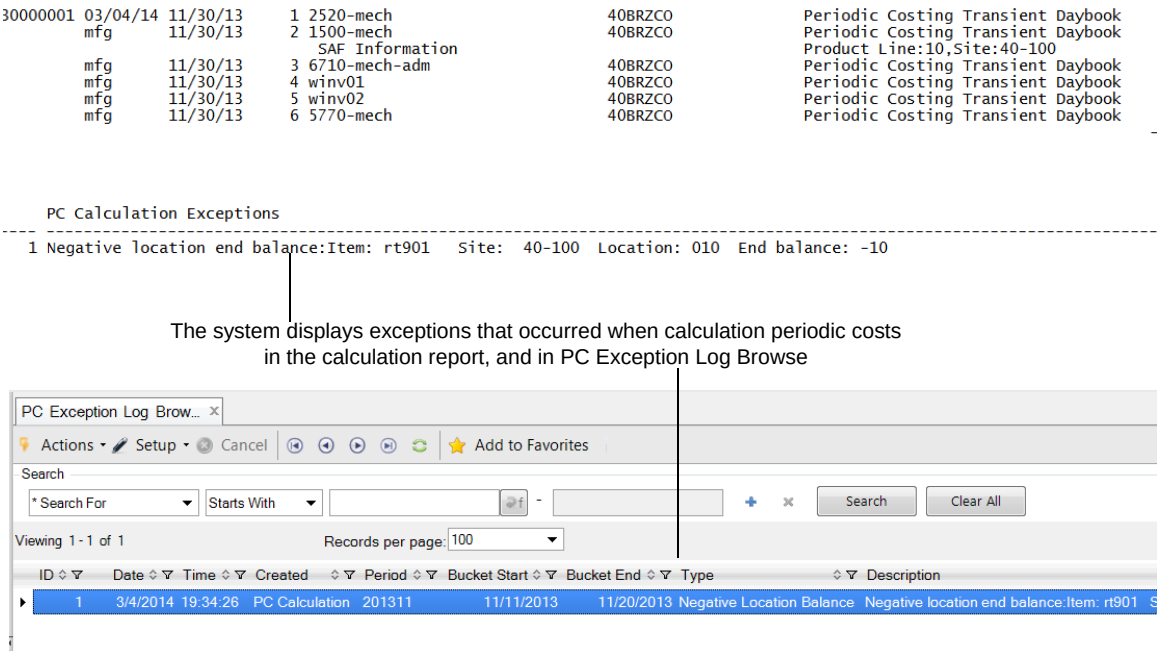
  Note You set Use Supplier Invoice to Yes in Periodic Costing Control to use the cost specified in the supplier invoice; see “Periodic Costing Control” on page 32.

Also, when you use the FIFO method to calculate costs, the system checks the total receipt quantity of the bucket and also checks the exception log if it is negative. When you use the WAVG method to calculate costs, the system checks the beginning balance plus the receipt quantity of the period and logs exceptions when it is negative.

The Periodic Costing exception logs report when the work order has been deleted, even though inventory or operational transactions exist and there is issue activity. You should re-create the work order.

When you run the calculation, when the system encounters a transaction that references an invalid or deleted work order, the system uses a zero (0) cost for the transaction and displays an error in the PC Exception Log browse (30.5.7.2), indicating the transaction and problem description so you can make the appropriate correction or adjustment. For more information on the PC Exception Log Browse, see “Calculation Exceptions”. When the work order master has been deleted, this information displays, too, and the cost is zero.

Fig. 4.30
Periodic Costing Calculation Exception Display



Troubleshooting Other Cost Issues

Occasionally, you may have issues that reports cannot help you resolve. This section covers various issues, the possible causes, and the solutions.

Record Locking in nr_mstr

The system locks and displays an error message that indicates that nr_mstr is in use. The message prompts you to cancel or stop the processing.

Possible Causes

The Periodic Costing calculation uses number-generated sequence numbers for creating the GL reference number. When a daybook is shared with other functions, there is a risk of nr_mstr record locking to occur when the PC calculation is run.

Solution

Ensure the daybook codes used for creating the GL reference number are only used by Periodic Costing.

Finished Goods Do Not Have Costs

In Periodic Costing, the finished goods do not have a cost.

Possible Causes

The finished goods do not have the correct product structure. Product structures are modular, so you enter separate structures for finished goods and lower-level assemblies or intermediate products. So, a component in a higher-level structure might be a parent in a lower-level structure. Looking in the other direction, a parent in a lower-level structure can be a component in a higher-level structure.

Solution

You can run QAD EE product structure reports to quickly check the product structure of finished goods. You can use all the product structure reporting tools for component and parent items, regardless of the source of the items.

WIP Balance after WO Closing

You closed all with the Work Order Maintenance (16.1) program, but you have a WIP balance.

Possible Causes

The finished goods do not have the correct product structure. See the possible cause and solution for “Finished Goods Do Not Have Costs”.

Inventory Report Has Too Many Values

The Inventory and WIP Balance report (30.5.19.2) has more values than the total balance in the finished goods account.

Possible Causes

You do not have enough inventory, so the system sent values to the Discrepancy account.

Solution

Review the Inv Operation GL Browse for trgl_type transactions that begin with PCDSCR.

Negative Excess after Negative Total Cost Adjustment

Item values are in negative excess and end up as a discrepancy.

Possible Causes

To prevent values from becoming a negative excess and becoming a discrepancy, you must do a negative total cost adjustment correctly.

Solution

Before doing a negative total cost adjustment, run Periodic Costing calculation first. Review the results of the item and determine how much value the item will have at the end of the month, then make your negative adjustment less than that value. If you do not do this, any remaining value, which is in negative excess, goes to discrepancy

Multiple Vouchers During Mass Layer Transfer

You have two vouchers from Periodic Costing during a mass layer transfer.

Probable Cause

When you ran PC calculation, another user was running an Operational Transaction Post (25.13.7). This caused the system to create a partial Glt_det record and store the record.

Solution

It is better to avoid this situation and consider running the PC calculation without the OTP running at the same time.

No Difference in Total Balance and Inventory WIP Report

You cannot determine when there is a difference between the total balance and the values shown in the Inventory WIP Report.

Probable Cause

You need to follow a set process, summing the debit and credit, and running the total balance. Refer to “Best Practices” on page 68 and “Preparing for Periodic Costing Period Close” on page 69.

Solution

Use this process to see a difference:

1. Run the Inv OP GL browse for the account, ensuring that the effective date range is the month you run Periodic Costing.
2. Sum the debit and credit amounts respectively, and obtain the difference.
3. Run the total balance for the account for the month
4. Set daybook fields to summarize by daybook.

The balance value in the PC daybook of the transient layer should be the difference of the other report.

Differences between Inventory value in PC and GL

You find differences between Inventory/WIP reports and GL.

Probable Cause

Check that the History daemon is running. When you find differences between Inventory/WIP reports and GL, the reason may be that the History daemon was not running and the transactions have not posted to GL yet.

Solution

Start the daemon and re-run the reports after all transactions have posted in GL

Cost Month End Close

When the Periodic Costing has been analyzed and reconciled and the results are approved, then you can close the PC sub-ledger and move the Periodic Costing transactions from the transient layer to the management layer (or official layer when you use the complete method). Both these functions are performed at once using Mass Layer PC-Transfer Execute (25.13.12). This function moves all Periodic Costing transactions from the Periodic Costing Calculation Daybook in the transient layer to the Final Daybook. You define the layers and daybooks to use in Periodic Costing Control; see Chapter 2, “Periodic Costing Control,” for more information.

The Mass Layer PC-Transfer Execute program transfers the Periodic Costing transactions for all entities in the domain and closes the Periodic Costing sub-ledger for each entity. For more information on Mass Layer PC-Transfer Execute, see *QAD Financials User Guide*.

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. For example, this can happen when you use separate entities for planning with no operational transactions. You must close the PC sub-ledger manually for these entities by using Entity GL Period Modify (25.4.2.1).

Please refer to “PC Calculation Reverse” on page 116 when there is a reason to re-open a previously closed PC period.

Using Checklists

To help you to close, you can use checklists to ensure that all tasks are completed and that all areas are closed. Refer to Appendix A.

Chapter 5

Periodic Costing Adjustments

This section covers Periodic Costing adjustments and includes the following topics:

Overview 104
Presents an overview and general information for running the Periodic Costing calculation.

Best Practices for Adjustment 104
Presents best practices for running Periodic Costing calculations.

Adjustment Programs 104
Describes the adjustment programs, providing screens and field descriptions.

Overview

Typically, you run Periodic Costing calculations to ensure that and to validate that costs are acceptable. You can make adjustments when results are not as expected. The following topics summarize available system functions events when creating GL transactions for making cost adjustments to standard Periodic Costings.

Best Practices for Adjustment

If you enter an adjustment and save it, then discover that you made an error, you can only edit adjustments in PC WO Adjustment, so ensure that figures are accurate before making an adjustment. There are utilities and reports that help you find adjustment errors; see “Delete/Archive Periodic Costing Data” on page 119.

- You cannot make a unit cost adjustment that is less than zero.
- When you delete an order, Periodic Costing leaves the cost at 0 (zero) for the items on the order during the calculation and continues running the calculation.
- Do not add figures for overhead during total cost adjustment; overhead is figured at unit cost adjustment.

  When you include overhead at total cost adjustment, the overhead does not impact the receiving costs since receipts are considered first; however, it does impact the issue. For overhead, you want to apply receiving, either PO or work order receiving, but, for total cost adjustment, the receiving is applied afterwards. Since the total cost comes afterward, you are recalculating unit cost with overhead for which you do not have beginning balance, so there is a receiving gap that does not support the overhead.

  Also, when overhead is figured in the middle of the period, the system does not apply it to the receipts in the beginning of the period.

Adjustment Programs

You can use the programs in the Periodic Costing Adjustment menu (30.5.5) when adjusting costs:

- PC Unit Cost Adjustment (30.5.5.1)

  This program lets you make adjustments to the unit cost of a prior period, and revalues inventory accordingly.
- PC Total Cost Adjustment (30.5.5.2)

  This program lets you add to or subtract from inventory value in the currently open period.
- WO Component Cost Adjustment (30.5.5.13)

  This program lets you add or subtract work in process (WIP) value for a component on a work order.
- WO Operation Cost Adjustment (30.5.5.14)

  This program lets you add or subtract work in process value for an operation, the adjustment can be made to labor, burden, or subcontract values.

You can also use the following programs to upload adjustments:

- PC Unit Cost Adjustment Upload (30.5.5.4)

- PC Total Cost Adjustment Upload (30.5.5.5)

For information on uploading, see “Uploading Unit or Total Cost Adjustments” on page 111.

PC Unit Cost Adjustment

Use PC Unit Cost Adjustment (30.5.5.1) to create a cost adjustment to previous period periodic unit cost. You can make adjustments in 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 a previous period ending balance. That is, the value of the beginning balance for the new GL period for which you perform periodic coting 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.

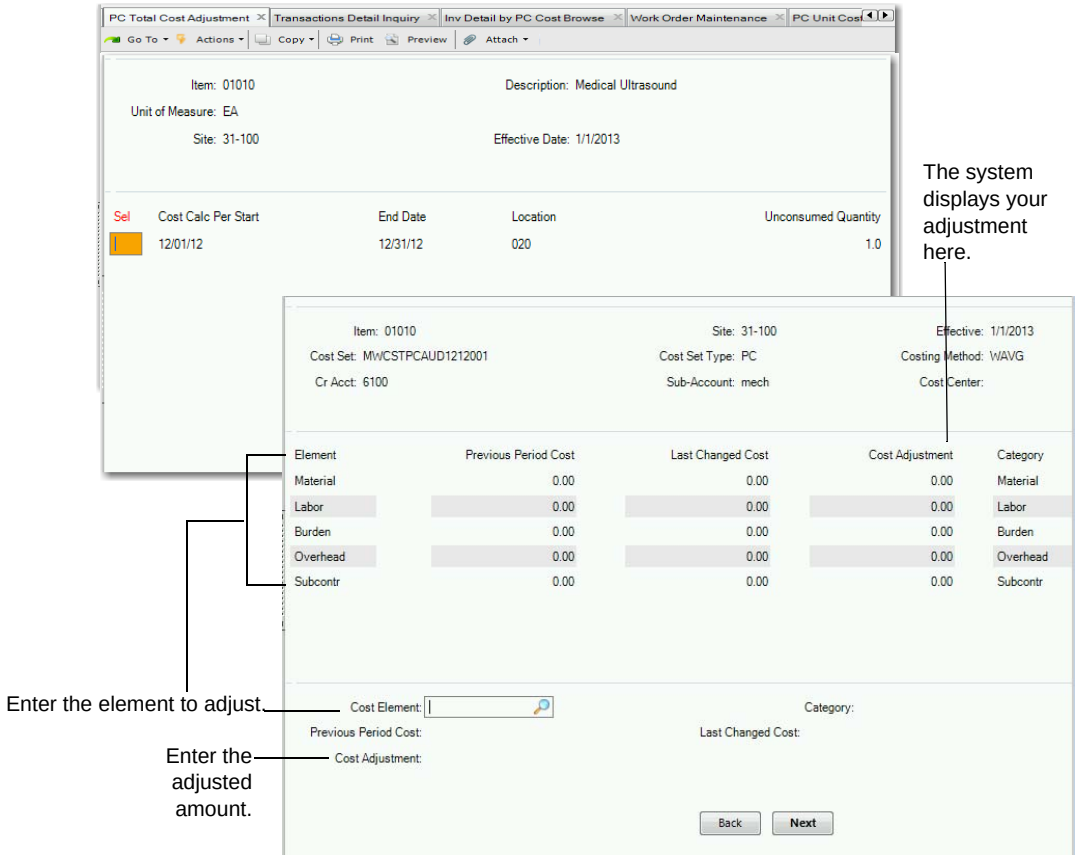
Navigation

Enter the item number, site, and effective date for the unit cost adjustment. The system displays the Cost Set Selection frame. Select the cost set, then enter the credit account, sub-account, and cost center. The system uses the item’s default inventory account as the debit account, which cannot be modified by this program. When you first enter data, the system displays elements from the cost set.

Enter the element whose cost you want to adjust in the Cost Element field; for example, enter Material. Then, enter the amount you want the adjusted cost element to be. You cannot enter a negative amount for an element. When you press Go, the system prompts you to confirm that all information is correct. You can use Transaction Detail Inquiry (3.21.1) and Transaction PC Cost Browse to view changes.

The following depicts the program frames. Note that, in a FIFO environment, the Selection Frame lets you select to make adjustments for different periods; you select the date for which you want to make adjustments. The WAVG method shows the unconsumed quantity by location.

Fig. 5.1
PC Unit Cost Adjustment (30.5.5.1)



Item Number. Enter the item number for which you want to adjust cost elements.

Site. Enter the site for the item.

Effective Date. Enter the effective date for the cost adjustment.

Account. Enter the account for the adjustment.

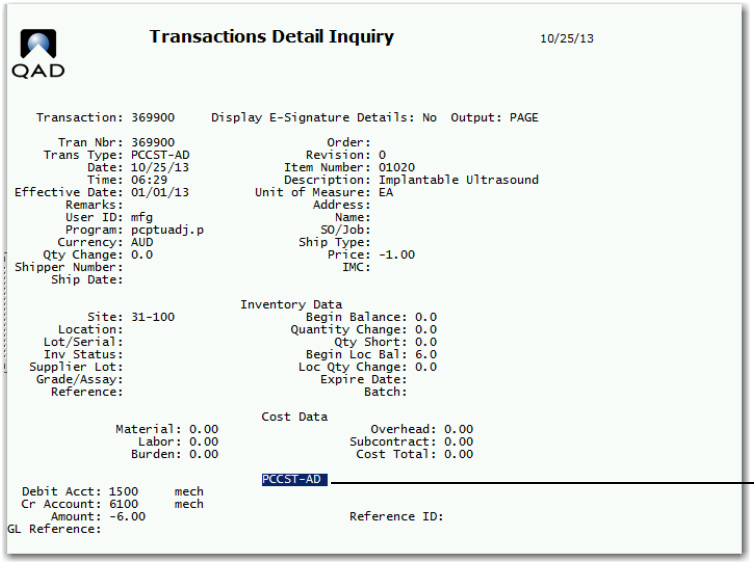
Sub-Account. Enter the sub-account for the adjustment.

Cost Center. Enter the cost center for the adjustment.

Adjustment AMT. Accept or enter a new amount in dollars and cents for the element.

You can keep track of your adjustments using Transaction Detail Inquiry. The browse shows you the Periodic Costing adjustments, as shown in Figure 5.2.

Fig. 5.2
Transaction Detail Inquiry



The system displays your adjustment here.

Method to Create a Prior Period for Newly Added Items

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.

Previously, when Periodic Costing calculated the unit cost—referred to as the prior period cost—for new items that you added after Periodic Costing initialization, there was no prior period to which to refer. Now, for FIFO and WAVG methods, you can establish an initial cost set prior to the period for which you added the item using PC Unit Cost Adjustment.

Example The current Periodic Costing period is June, and you create item01. You use PC Unit Cost Adjustment to adjust the cost of item01 for May. The system creates a cost set of item01 for May with an unconsumed quantity equal to 0 (zero) and the unit cost set to user adjusted. Additionally, when there is no previous period cost, you can use PC Unit Cost Adjustment, then modify the unit cost for the last bucket in the latest period. Or, when the previous period only has one bucket with a quantity of 0 and a unit cost set to any, you can use PC Unit Cost Adjustment to modify the one bucket.

The system initializes the unit cost; then, applies the unit cost to the transaction cost when the following exist:

- You use WAVG and add new items.
- There is no order receipt.
- There is cycle count or other transactions that require costing.

When you add the new items to the system, the first period does not have order receipts so that the system cannot calculate a unit cost. However, when you have a first-period transaction that requires costing, such as a cycle count or issue transaction, the system now sets the unit cost to that of the prior period, then it costs the transactions with this unit cost. You establish the prior period unit cost in PC Unit Cost Adjustment.

View Updated Unit Cost and Historical Unit Cost

You can view the following after you perform a PC unit cost adjustment to find the updated cost:

- Inv Detail by PC Cost Browse always displays the up-to-date unit cost.
- Inventory and SF Movement Report (mod3) displays the historical cost as of the period of the cost set you select.
- Inventory and WIP Balance Report (mod7) displays the historical cost as of the period of the cost set you select.
- Transaction PC Cost Browse Collection to see the details of the Unit Cost Adjustment transaction by cost element.

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 affect the inventory value for transactions that are not considered by the Periodic Costing calculation. Some cost is missing (for example, logistics costs) or exceeds the expected cost (for example, recoverable taxes are in the inventory) and, 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.

You can specify the period/year for the total cost adjustment.

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 should 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 value available to absorb a negative adjustment. When the full amount cannot be absorbed, the system creates the PCTOT-COR GL transaction to post the amount that cannot be absorbed to the discrepancy account.

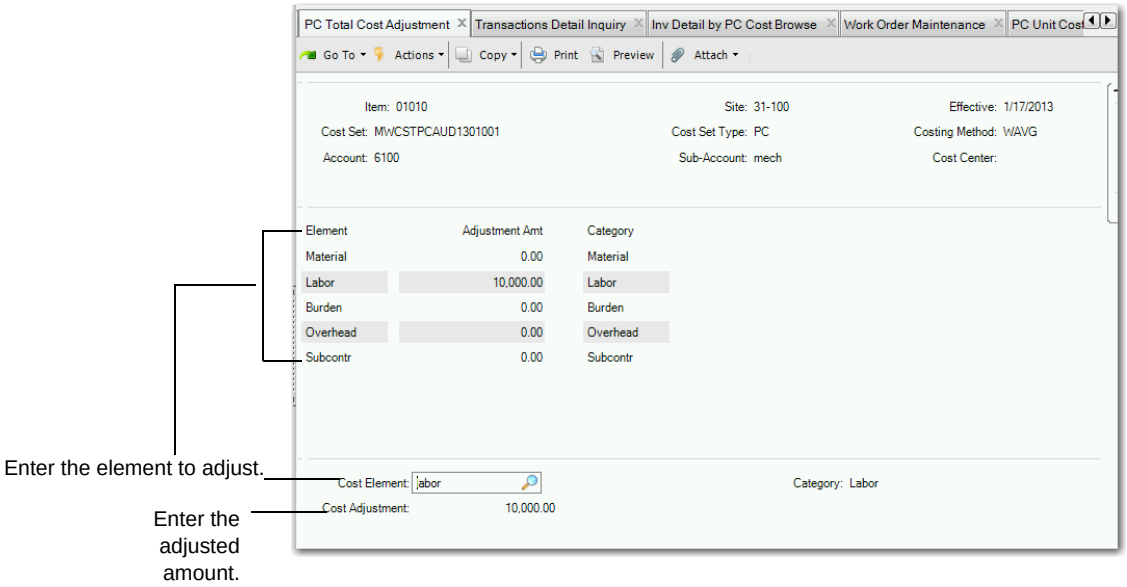
Navigation

Enter the item number, site, and effective date for the unit. The system displays the Cost Set Selection frame. Select the cost set, then enter the account, sub-account, and cost center. The system displays elements from the cost set.

Individually adjust costs in the Adjustment Amt field for any cost element. You can enter a negative amount for an element; however, the total should be positive. The system sums the total cost adjustment for the period, and compares the adjustment against receipts on the element level.

The system creates a periodic cost adjustment GL transaction for the total cost adjustment. An adjustment account for this total cost adjustment transaction should be specified. The total cost adjustment transaction impacts the specified inventory account and the adjustment account specified.

Fig. 5.3
PC Total Cost Adjustment (30.5.5.2)



Item Number. Enter the item number for which you want to adjust cost elements.

Site. Enter the site for the item.

Effective Date. Enter the effective date for the cost adjustment.

Account. Enter the account for the adjustment.

Sub-Account. Enter the sub-account for the adjustment.

Cost Center. Enter the cost center for the adjustment.

Adjustment AMT. Accept or enter a new amount in dollars and cents for the element.

View Updated Unit Cost and Historical Unit Cost

You can view the following after you perform a PC total cost adjustment to find the adjustment transactions:

- Inventory and SF Movement Report (mod3) displays the adjustment transactions.
- Transaction PC Cost Browse Collection to see the details of the Total Cost Adjustment transaction by cost element.

WO Component Cost Adjustment

Use WO Component Cost Adjustment (30.5.5.13) to specify a WIP cost adjustment that lets you modify a component's costs for its related categories for a work order or a cumulate order.

The work order or cumulative order must be a valid, system order, and the components must 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 separate from the CST-ADJ transactions created for standard cost. An adjustment account for this WIP cost adjustment transaction should be specified. The process cost adjustment transaction impacts the specified WIP account and the adjustment account.

Note You can load WO Component Cost Adjustment data through an XML file; see “Loading Work Center Rates or Cost Adjustments from XML” on page 39.

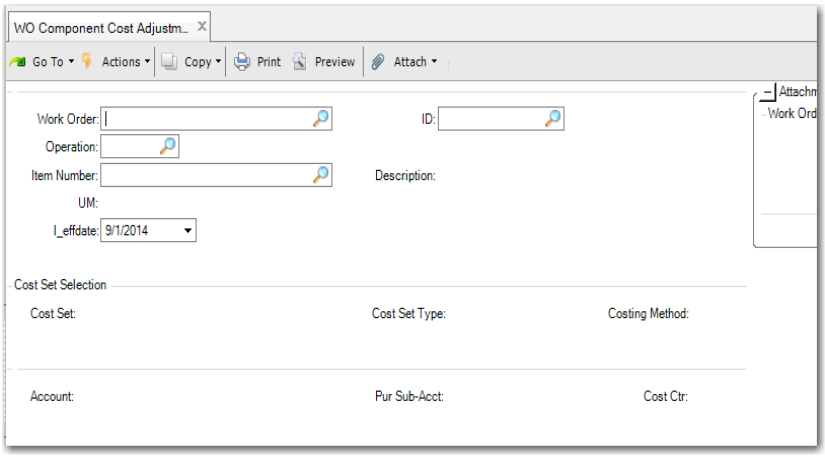
Navigation

Specify the period/year for this adjustment. Enter the work order number, ID, and operation; then, specify the item number and effective date. The system displays the Cost Set Selection frame. Select the cost set, then enter the account, sub-account, and cost center. The system displays elements from the cost set.

Individually adjust costs in the Adjustment Amt field for material, labor, burden, and so on. You can enter a negative amount for an element; however, the total must be positive.

For each element, specify Yes to change the element to a primary element. You cannot change a primary element to a non-primary element. The system sums the total cost adjustment for the period, and compares the adjustment against receipts on the element level.

Fig. 5.4
WO Component Cost Adjustment (30.5.5.13))



Work Order. Enter the work order for the cost adjustment.

ID. Enter the work or cumulative order ID for the cost adjustment.

WO Operation. Enter the work order operation for the cost adjustment.

Item Number. Enter the item number for which you want to adjust cost elements. The item must be a valid component in the BOM of this work order/cumulative order.

Site. Enter the site for the item.

Effective Date. Enter the effective date for the cost adjustment.

Account. Enter the account for the adjustment.

Sub-Account. Enter the sub-account for the adjustment.

Cost Center. Enter the cost center for the adjustment.

Adjustment AMT. Accept or enter a new amount in dollars and cents for the element.

Uploading Unit or Total Cost Adjustments

When you make adjustments, use one of the following programs to upload the adjustment to Periodic Costing:

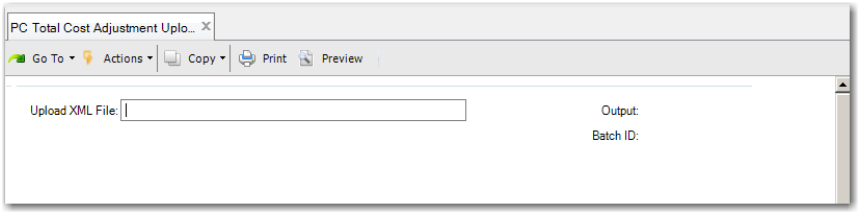
- PC Total Cost Adjustment Upload (30.5.5.5)
- PC Unit Cost Adjustment Upload (30.5.5.4)
- WO Component Cost Adjustment (30.5.5.13)
- WO Operation Adjustment (30.5.5.14)

You enter the XML file with schema to upload the adjustments; then press Go. The system displays detailed error messages when you use the XML file to upload the adjustments. For failures when loading from XML files, the system displays an error message and does not perform the transaction.

You find the rate or total for each cost center, then upload the actuals for labor and burden for each individual work center.

The following depicts the adjustment upload program for PC total cost adjustment, but the screen is similar for the upload program for PC unit cost adjustment.

Fig. 5.5
PC Total Cost Adjustment Upload (30.5.5.4)



WO Operation Adjustment

Use WO Operation Adjustment (30.5.5.14) to specify a WIP cost adjustment that lets you modify an operation's labor, burden, and subcontract costs for a work order or a cumulative order.

The work order or cumulative order must be a valid, system order, and the components must 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 separate from the CST-ADJ transactions created for standard cost. An adjustment account for this WIP cost adjustment transaction must be specified. The process cost adjustment transaction impacts the specified WIP account and the adjustment account.

Note that 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 elements.

Note You can load WO Operation Cost Adjustment data through an XML file; see “Loading Work Center Rates or Cost Adjustments from XML” on page 39.

Navigation

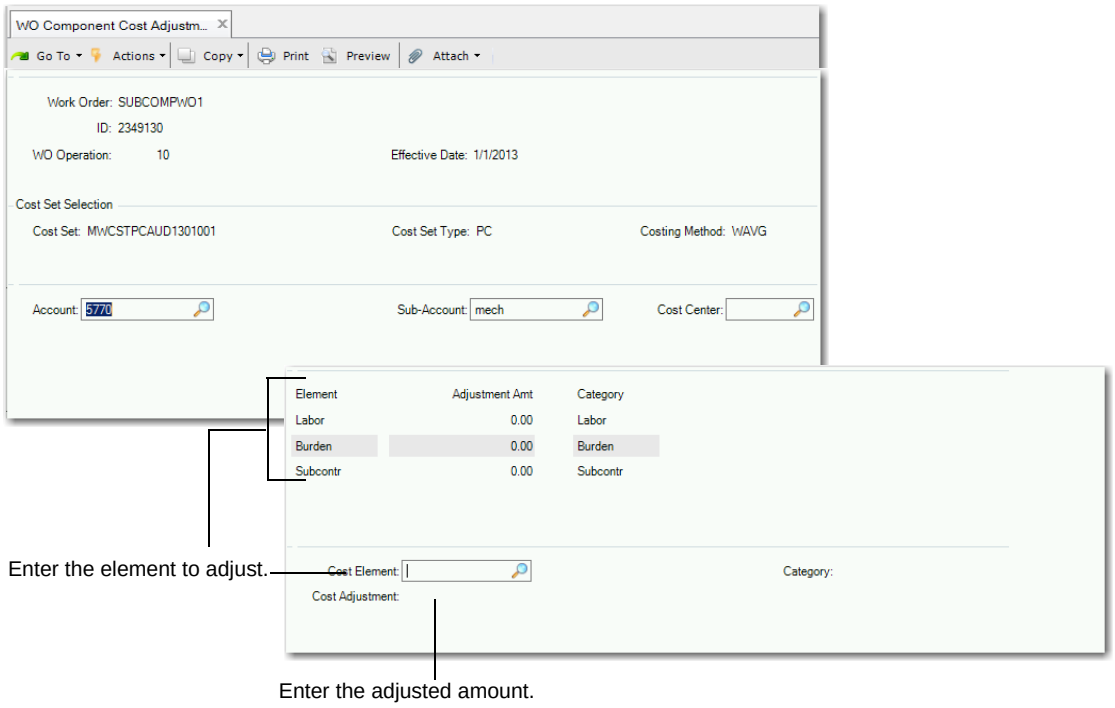
Specify the period/year for this adjustment. Enter the work order number, ID, and operation; then, specify the item number and effective date. The system displays the Cost Set Selection frame. Select the cost set, then enter the account, sub-account, and cost center. The system displays elements from the cost set.

Individually adjust costs in the Adjustment Amt field for material, labor, burden, and so on. You can enter a negative amount for an element; however, the total must be positive.

For each element, specify Yes to change the element to a primary element. You cannot change a primary element to a non-primary element. The system sums the total cost adjustment for the period and compares the adjustment against receipts on the element level.

Note Fields are the same as for WO Component Cost Adjustment, except that you should specify the work order operation for the cost adjustment and there is no material or overhead category available for adjustments.

Fig. 5.6
WO Operation Adjustment (30.5.5.14)



Work Order. Enter the work order operation for the cost adjustment.

ID. Enter the work order ID for the cost adjustment.

WO Operation. Enter the work order operation for the cost adjustment.

Effective Date. Enter the effective date for the cost adjustment.

Account. Enter the account for the adjustment.

Sub-Account. Enter the sub-account for the adjustment.

Cost Center. Enter the cost center for the adjustment.

Adjustment AMT. Accept or enter a new amount in dollars and cents for the element

Chapter 6

Reverse Calculations and Delete/Archive

This section covers reversing calculations and archiving for Periodic Costing, and includes the following topics:

Overview 116
Presents an overview and general information for reversing PC calculations and deleting data.

PC Calculation Reverse 116
Tells you how to reverse the Periodic Costing calculation.

Delete/Archive Periodic Costing Data 119
Tells you how to delete and archive Periodic Costing data.

Overview

This chapter presents information that tells you how to reverse Periodic Costing calculations and, as a last step in the process, how to delete and archive Periodic Costing data.

PC Calculation Reverse

If you discover that a closed PC period needs to reopened and recalculated because the data for that PC period was not accurate when calculated, then you need to use PC Calculation Reverse as a part of the process to reopen that closed PC period so that it can be recalculated.

Note PC Calculation Reverse runs at domain level so that you can also use it to reverse Periodic Costing cross-company postings. Cross-company postings can occur when reversing distribution order receipt transactions and inventory transfers.

Example The current open PC period is May 2013. You want to reverse and rerun PC Calculation for the closed PC period of February 2013. Follow these steps:

1. Go to Entity GL Period Modify and open the PC sub-ledger for the last closed period, which, in this example, is April 2013.
2. When the month of the PC reverse is not the last closed month, go one month at a time. In the example, the last closed month is April 2013 and you must rerun PC calculation for February 2013; to do this:
   a. Open the PC sub-ledger of April 2013 and run PC Calculation Reverse.
   b. Open sub-ledger of March 2013 and run PC Calculation Reverse.
   c. Open sub-ledger of February 2013 and run PC Calculation Reverse.

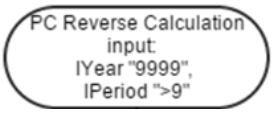
PC Calculation Reverse creates a reversed GL transaction on both the management layer and the operational layer. The reverse of GL transactions is only on PC GL transactions. The PC reverse happens on the original PC values. The PC GL reversal posting uses the same COA values as the original inventory transaction.

PC Reverse Calculation Flow

The following flow diagrams illustrate the logic flow of PC Calculation Reverse:

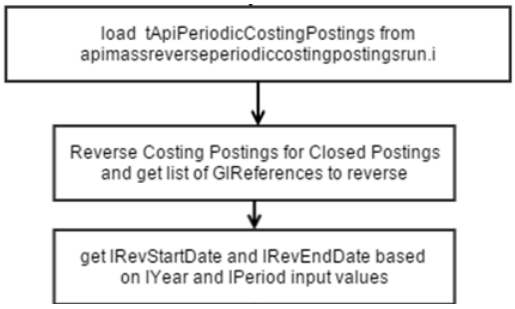
The system first obtains the input year and period from the user:

Fig. 6.1
PC Calculation Reverse Flow, Step 1



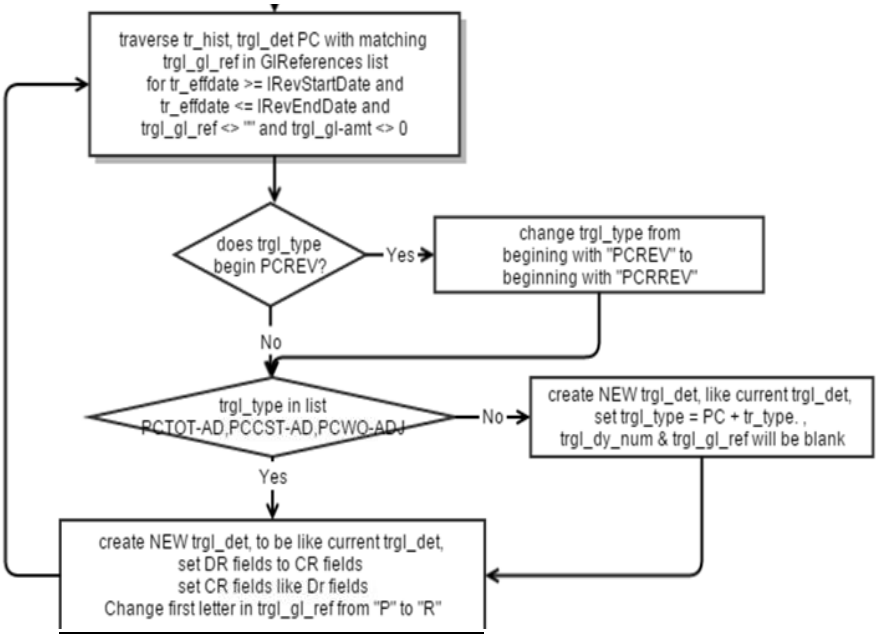
Next, the system uses the Financials API to reverse the Periodic Costing postings and to capture GL references that were used:

Fig. 6.2
PC Reverse Flow, Step 2



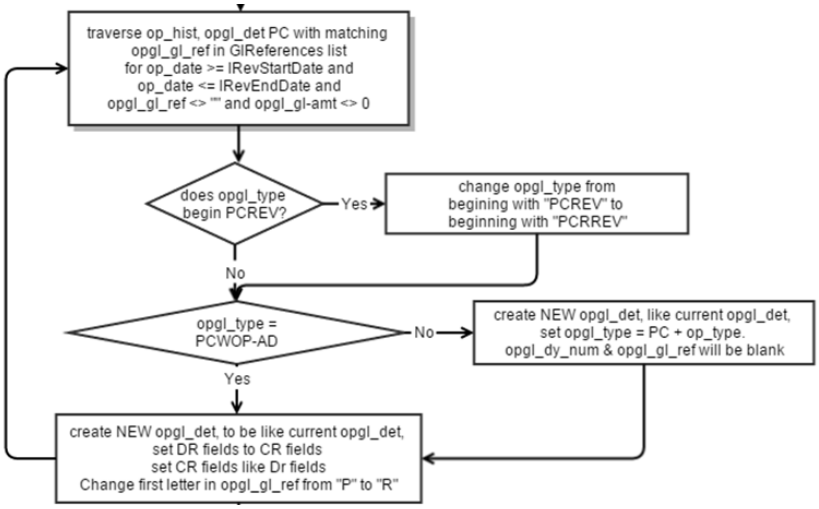
Next, the system reverses the tr_hist/trgl_det related data, filtering by period for the effective range and GL references captured from the Financials API:

Fig. 6.3
PC Reverse Flow, Step 3



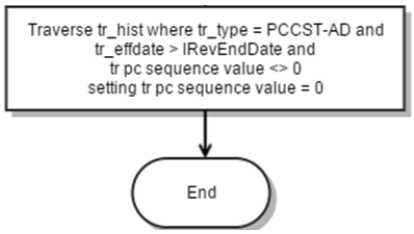
Next, the system reverses the Op_hist/Opgl_det related data, filtering by period effective range and GL References captured from the Financials API:

Fig. 6.4
PC Reverse Flow, Step 4



For the final step, the system resets the PC cost adjustment data:

Fig. 6.5
PC Reverse Flow, Step 5



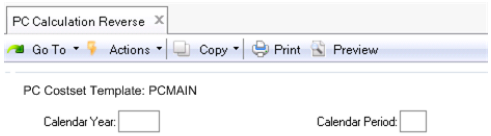
The following figure depicts a reopened month end close and reversed Periodic Costing calculations.

Fig. 6.6
Reopen Month-End Close and PC Calculation Reversal

Running PC Calculation Reverse

To reverse calculations, enter the calendar year and calendar period for the cost set. The system defaults the current Periodic Costing cost set. Enter the calendar year and period for which you want to reverse calculations.

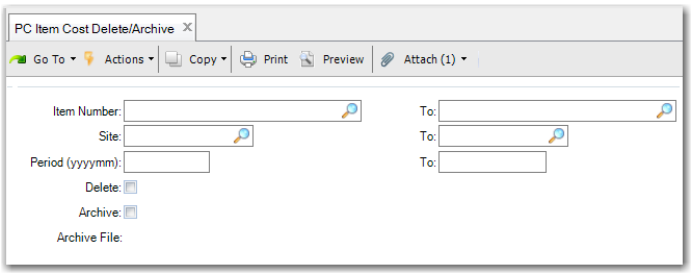
Fig. 6.7
PC Calculation Reverse (30.5.23)



Delete/Archive Periodic Costing Data

Use PC Item Cost Delete/Archive (30.5.22) to archive and delete PC category cost and element cost data as required, based on specified ranges of items, sites, and periods.

Fig. 6.8
PC Item Cost Delete/Archive (30.5.22)



Item Number/To. Enter a range of item numbers for the PC category cost and element data to delete or archive.

Site/To. Enter a range of sites for the PC category cost and element data to delete or archive.

Period (yyyymm). Enter a period for the category cost and element data to delete or archive.

Delete. Specify Yes to delete data.

Archive. Specify Yes to archive the data. The system supplies the archive file name when you press Enter.

Appendix A

Using Checklists

This appendix includes checklists to help you to ensure that all tasks are completed and that all areas are covered when you close. For more information on closing, see “Cost Month End Close” on page 101.

Overview 122
Overview of closing checklists and their purpose.

Period End Checklist for Discrete Orders 122
Contains checklists for closing to use with discrete work orders.

Period End Checklist Using Advanced Repetitive 125
Contains checklist for closing to use with advanced repetitive work orders.

Overview

You can use the following checklists to help you with your closing activities:

- Period End Checklist for Discrete Orders
- Period End Checklist Using Advanced Repetitive

You can print the checklists, then have personnel complete information on the required frequency to perform the tasks in the checklist. The checklists can also help you when you reconcile differences as you can use them to analyze and review the costing process and the data to process.

Period End Checklist for Discrete Orders

This section contains checklists to use with discrete work orders.

- WIP Discrete Work Orders
- Inventory and Accruals
- Accounts Receivable
- Accounts Payable
- Cash Book
- Value-Added Tax

Table A.1
WIP Discrete Work Orders

Your Close Activity	Menu	Frequency (Weekly, Monthly, or Quarter)
Check all transaction activity up to date:		
• Standard cost amendments updated	30.15.3	
• W/O component issue	16.10	
• SFC labor feedback by WO	17.1	
• QO receipts and backflush	16.11 or 16.12	
• WIP material cost re-evaluation	16.22	
• Close work orders	16.1 or 16.11	
Run WO Accounting Close	16.21	
Print WO WIP Cost Report	16.3.5	
Print WO Cost Reports	16.3.4	
Review using GL Unposted Transactions Register Inquiry	25.13.13 or 25.13.14	
Post WO transactions	25.13.7	
Analyze unposted transactions	25.13.14	
• Correct • Repost	15.13.7	

Table A.2
Inventory and Accruals

Your Close Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Check all transaction activity up to date:		
• Transfers	30.4.1 or 30.4.2	
• W/O component issues	3.7	
• SFC labor feedback by WO	17.1	
• WO receipts and backflush	16.11 or 16.12	
• Issues - Unplanned	3.9	
• PO receipts	5.13.1	
• SO shipments and SO shipment issues	7.9.15 and 7.9.5	
Print Inventory Valuation Report	3.6.15	
Identify remaining sales invoices from pending Invoice register.	7.13.2	
Print and post remaining sales invoices.	7.13.3 and 7.13.4	
Post zero value report to evidence all shipments invoiced.	7.13.2	
Print PO Unvouchered Receipts Report for Inventory vouchers.	5.13.10	
Print PO Unvouchered Receipts Report for Memo vouchers.	5.13.10	
Review unposted transactions.	25.13.13 or 25.13.14	
Analyze unposted IC and SO transactions	25.13.7	
• Correct	3.21.16	
• Re-post	25.13.7	
Close sub-module in GL (WO/IC, SO)	25.3.4	
Use GL Account Balance or Transaction by Account Inquiry or Account Balance and Detail reports.	25.13.17, 25.13.18, 25.15.1, and 25.15.2	
• Reconcile with inventory valuation	3.6.15	
WIP Valuation	16.3.5	
• GRNIs - PO Receipts	5.13.5	
• GRNIs - PO Receipts Memos	5.13.5	

Table A.3
Accounts Receivable

Your Close Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Check all transaction activity up to date		
Run AR to GL transactions report (all posted?)	27.21	
Run AR Age Report as of effective date	27.18	
Run DR/CR Memo Register	27.3	
Run AR Payment Register	27.6.6	
Reconcile opening age balance plus DR/CR Memo Register Report total less AR Payment Register total with closing AR age balance total		

Your Close Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Check all transaction activity up to date		
Run AR to GL transactions report (all posted?)	27.21	
Review GL Unposted Transactions Register/Inquiry	25.13.13 or 25.13.14	
Post AR transactions	25.13.7	
Analyze unposted AR transactions	25.13.13 or 25.13.14	
• Correct • Re-post	25.13.7	
Reconcile AR closing balance with GL balance	25.15.1 or 27.18	
Close sub-module in GL	25.3.4	

Table A.4
Accounts Payable

Your Close Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Check all transaction activity up to date)		
Run AR to GL transactions report (all posted?)	27.21	
Run AR Age Report as of effective date	27.18	
Run DR/CR Memo Register	27.18	
Run AR Payment Register	27.6.6	
Reconcile opening age balance plus DR/CR Memo Register Report total less AR Payment Register total with closing AR age balance total		
Review GL Unposted Transactions Register/Inquiry	25.13.13 or 24.13.14	
Review GL Unposted Transactions Register/Inquiry	25.13.7	
Analyze unposted AR transactions	25.13.13 or 24.13.14	
• Correct • Re-post	25.13.7	
Reconcile AR closing balance with GL balance	25.15.1 or 27.18	
Close sub-module in GL	25.3.4	

Table A.5
Cash Book

Your Closing Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Check all transaction activity up to date	31.14	

Table A.6
Value-Added Tax

Your Closing Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Reconcile AR and AP VAT History Reports to GL balances	2.13.15.14 and 2.13.17 with 25.15.8	

Period End Checklist Using Advanced Repetitive

This section contains the following checklists for closing to use with advanced repetitive work orders.

- WIP Advanced Repetitive Orders
- Inventory and Accruals
- Accounts Receivable
- Accounts Payable
- Value-Added Tax
- General Ledger

Table A.7
WIP Advanced Repetitive Orders

Your Closing Activity	Menu	Frequency (weekly, monthly, or quarterly)
Complete all transaction activity:		
• Standard cost revisions (rollup) for new period	14.13.14, 13.12.13, 1.4.18, 1.4.20, 1.4.21	
• Backflush transaction	18.22.13	
• PO Subcontract activities*	18.22.5 +	
• Repetitive Scrap*	18.22.18	
• Repetitive Reject*	18.22.16	
• Repetitive Rework*	18.22.15	
• Repetitive Setup Labor*	18.22.15	
• Repetitive Move	18.22.19	
• WIP Adjustments	18.22.21	
• Downtime	18.22.20	
• Non Productive Labor	18.22.22	
*Can be completed as part of backflush transaction		
Cum Order Close	18.22.10	
Note: Cumulative orders must have an effective end date on or before the effective end value you enter.		
Print WIP Valuation Report (use cum order std)	18.22.4.13	
Print other cost reports as required, for example, WIP Status Report	18.22.4.11	
Review unposted GL transactions	25.13.13 or 25.13.14	
Post repetitive order transactions to GL	25.13.7	
Analyze unposted repetitive transactions: • Correct • Re-post	25.13.13 or 25.13.14 25.13.7	

Table A.8
Inventory and Accruals

Your Close Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Check all transaction activity up to date:		
• Verify all transfers up are to date	3.4.1 or 3.4.2	
• Verify all issues (unplanned/returns) are up to date	3.9 and 3.7	
• See all PO receipts/returns completed	5.13.1 and 5.13.5	
• See all SO shipments completed	7.9.15	
• See all SO shipments completed	7.9.5	
Print Inventory Valuation Report.	3.6.15	
Identify remaining sales invoices from Pending Invoice Register	7.13.2	
Print and post remaining sales invoices or accrue using Pending Invoice Register (7.13.2).	7.13.3 and 7.13.4	
Print PO Receipts Report GRNI (unvouchered)	5.13.5	
Print PO Receipts for Memo vouchers (unvouchered)	5.13.5	
Review unposted GL transactions	25.13.13 or 25.13.14	
Post IC and SO transactions to GL	25.13.7	
Analyze unposted IC and SO transactions	25.13.13 or 25.13.14	
• Correct	3.21.16	
• Re-post	25.13.7	
Close sub-module in GL (WO/IC, SO)	25.3.4	
Using GL Account Balance or Transaction by Account Inquiry or Account Balance and Detail Reports, reconcile with:	25.13.17, 25.13.18 25.15.1 and 25.15.2	
• Inventory Valuation	3.6.15	
• WIP Valuation	18.22.4.13	
• GRNIs - PO Receipts	5.13.5	
• GRNIs - PO Receipts Memos	5.13.5	

Table A.9
Accounts Receivable

Your Close Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Complete all transaction activity		
Run AR to GL Transactions Report (all posted?)	27.21	
Run AR Age Report as of Effective Date	27.18	
Run DR/CR Memo Register	27.3	
Run AR Payment Register	27.6.6	
Reconcile opening Age balance plus DR/CR Memo Register Report total less AR Payment Register total with closing AR Age balance total		
Review GL Unposted Transactions Register/Inquiry	25.13.13 or 25.13.14	
Post AR transactions to GL	25.13.7	

Your Close Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Complete all transaction activity		
Analyze unposted AR transactions • Correct • Re-post	25.13.14 25.13.7	
Reconcile AR Closing balance with GL balance	25.15.1 or 27.18	
Close sub-module in GL	25.3.4	

Table A.10
Accounts Payable

Your Close Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Check all transaction activity		
Run AP to GL transactions report (all posted?)	28.21	
Run AP Age Report as of effective date	28.18	
Run voucher register for: confirmed/unconfirmed/all	28.3.1	
Run AP Payment Register (GL detail to Yes)	28.9.12	
Reconcile opening Age balance plus Confirmed Voucher Register Report total less AP Payment Register total with closing AP Age balance total		
Review GL Unposted Transactions Register/Inquiry	25.13.13 or 25.13.14	
Post AP Transactions to GL	25.13.7	
Analyze unposted AP transactions • Correct • Re-post	25.13.14 25.13.7	
Reconcile AP Closing balance with GL balance	25.15.1 and 28.17	
25.15.1/28.17	25.3.4	

Table A.11
Value-Added Tax

Your Closing Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Reconcile AR and AP Vat Reports to GL	2.15.2.13 or 2.15.2.14 and 2.15.2.16 or 2.15.2.17 with 25.15.1	

Table A.12
General Ledger

Your Closing Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Other modules: Fixed Assets	Reconcile/post	
Other modules: Payroll and Deductions	Reconcile/post	
Other modules?	Reconcile/post	
Accrue for unconfirmed vouchers	28.3	

Your Closing Activity	Menu	Frequency (Weekly, Monthly or Quarter)
Calculate manual accruals and prepayments		
Input Standard Transaction Maint. journals	25.13.1	
Input Reversing Transaction Maint journals	25.13.3	
Foreign Exchange Revaluation	25.13.9	
Review/correct unposted transactions	25.13.13 or 25.13.14	
Post JL, RV, FX and other GL transactions	25.13.7	
Print and review as required: • Trial balance • Balance sheet • Income statement • Custom reports • Cost center or project reports • GL Report Writer reports	 25.15.4 25.15.8 25.15.13 25.17.13 25.15.18 to 25.15.23 25.21.17	
Review, correct, post and reprint until satisfactory	25.3.4	
Close GL module for period		

Product Information Resources

QAD offers a number of online resources to help you get more information about using QAD products.

QAD Forums (community.qad.com)
Ask questions and share information with other members of the user community, including QAD experts.

QAD Knowledgebase (knowledgebase.qad.com)*
Search for answers, tips, or solutions related to any QAD product or topic.

QAD Document Library (documentlibrary.qad.com)
Get browser-based access to user guides, release notes, training guides, and so on; use powerful search features to find the document you want, then read online, or download and print PDF.

QAD Learning Center (learning.qad.com)*
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*Log-in required

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