QAD Enterprise Applications
Enterprise Edition

Training Guide

QAD Advanced Financials

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QAD Advanced Financials Change Summary

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

Date/Version	Description	Reference
April 2016/v2016 EE	Rebranded for QAD 2016 EE, added links to Preface and book, miscellaneous minor changes	--
March 2015/v2015 EE	Added slide on Bulk Data Load functionality.	page 62
	Updated Financial Report Writer chapter to reflect development introduced in QAD 2015 EE	page 187
	Updated the Domain COA Mask Settings and COA Element without Mask Setting slides	page 309, page 310
	Updated Process Incoming Bank Files chapter to reflect development introduced in QAD 2015 EE	page 445
March 2014/v2014 EE	Updated slides to include enhanced Journal Entry Cross Company Excel Integration	page 59
	Updated slides to show updated screens for Financial Report Writer	page 187
September 2013/v2013.1 EE	Rebranded for QAD 2013.1 EE	--
June 2013/v2013 EE	Miscellaneous minor edits	--
	Removed the Alternate COA and Structured Reports chapters	--
	Updated slides to show updated Budget Create screen	page 133
	Updated the order of slides in the Report Customization chapter	page 171
	Updated slides to show updated screens for Financial Report Writer	page 187
	Added new section on Report Tree Drill Down to the Financial Report Writer chapter	page 243
September 2012/v2012.1 EE	Rebranded for QAD 2012.1 EE	--
March 2012/v2012 EE	Added new chapter on Financial Report Writer	page 187
March 2012/v2012 EE	Various updates to accommodate feedback from training classes	--
September 2011/v2011.1 EE	Rebranded for QAD 2011.1 EE	--

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About This Course

Course Description

This class is designed to teach the advanced features and functions of the Financials module of QAD Enterprise Applications, Enterprise Edition. The topics covered by this class include budgeting, allocations, Financial Report Writer, structured reports, consolidation, Excel integration, screen customization, and ERS.

For more information on Accounts Receivable, Accounts Payable, and General Ledger, see see *QAD Financials Fundamentals Training Guide*.

The chapters in this training guide provide an overview of Financials features, and include the business considerations for implementing the features, where applicable. Most of the chapters include exercises that let you put your newly acquired knowledge into practice.

At the end of the class, an evaluation will give you the opportunity to test your knowledge of Advanced Financials.

Course Objectives

By the end of this class, students will:

- Have a comprehensive knowledge of the advanced QAD Financials concepts
- Understand the tools available for data load during implementation
- Understand the best practice for the setup and use of QAD Financials

Audience

This class is intended for accountants, controllers, financial managers and accounting clerks, as well as QAD R&D, Services, and Support personnel.

Prerequisites

An understanding of financial principles is required to obtain maximum benefit from this class.

Students must have completed the QAD Financials Fundamentals class.

Course Credit and Scheduling

This course provides 24 credit units. It is designed to be taught in four days.

Virtual Environment Information

The hands-on exercises in this book should be used with the latest Enterprise Edition learning environment in either of two environments:

- If you are familiar with standard US accounting practices, choose the 10USA > 10USACO workspace, which has USD currency.
- For European accounting practices, choose the 22UK > 22UKCO workspace, which has GBP currency.

When prompted to log in, specify *demo* for user ID and *qad* for password.

Additional Resources

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

http://www.qad.com/

QAD Learning Center

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

QAD Document Library

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

For more information, see *QAD Financials User Guide*.

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

QAD Support

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

Chapter 1

GL Coding Structures

Objectives

Objectives

- Understand the capabilities of the GL coding structure for financial analysis
- Learn how to use the GL capabilities for your company
  - Simplified setup of complex financial analysis

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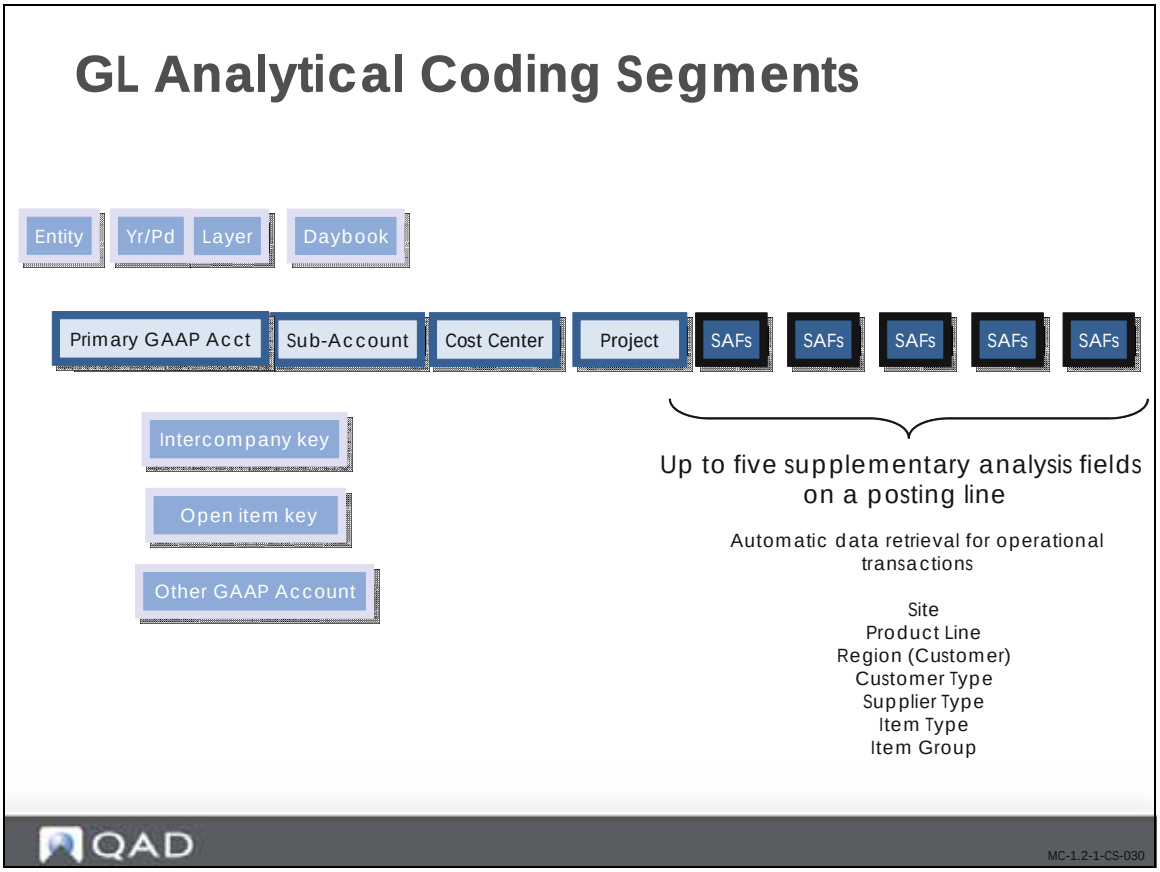
GL Analytical Coding Segments



To support different types of reporting and analysis, some GL accounts can be used in combination with sub-accounts, cost centers, and projects. These elements provide greater granularity in financial reporting. You can list balances for sub-accounts and cost centers separately, or summarize them under account codes.

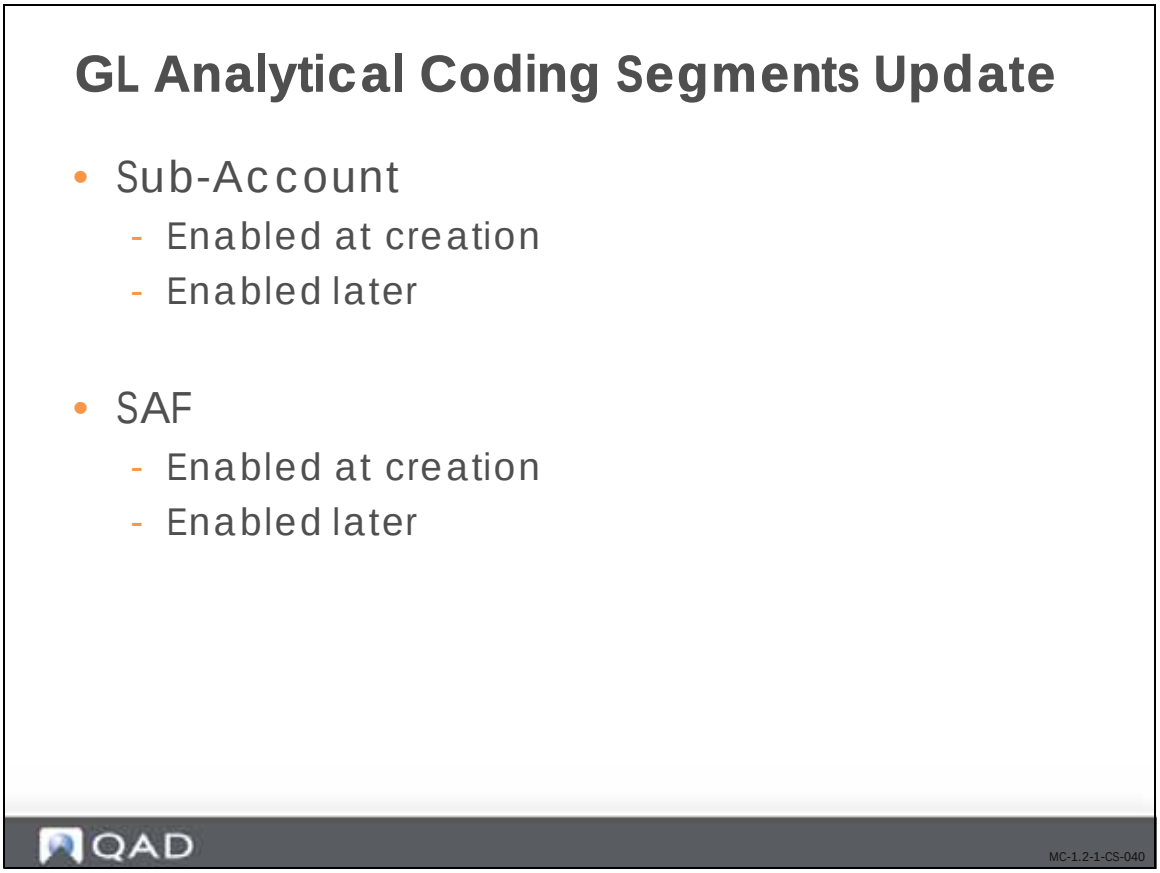
Supplementary Analysis Fields (SAFs) provide reporting data on specific areas within GL accounts, cost centers, or projects. They are typically used to track the volume of sales or purchases of a product in a region in a given period.

Transactions are recorded in daybooks, which can enable temporary postings through links to accounting layers. The Chart of Account (COA) mask lets you combine accounts, sub-accounts, cost centers, and projects in a predefined posting framework.

The following table lists the valid combinations of GL accounts and analysis elements:

	Account Type	Sub-Acct.	Cost Center	Project	SAF
Standard Accounts	Bank Account	Yes	No	No	No
	Cash Account	Yes	Yes	Yes	Yes
	Closing Account	Yes	No	No	No
	Cross-Company Account	No	No	No	No
	Customer Control Account	Yes	Yes	Yes	No
	Customer Payment Account	Yes	Yes	Yes	Yes
	Fixed Assets Account	Yes	Yes	Yes	Yes
	Inventory Control Account	Yes	Yes	Yes	Yes
	Open Items Account	Yes	Yes	Yes	Yes
	Standard Account	Yes	Yes	Yes	Yes
	Supplier Control Account	Yes	Yes	Yes	No
	Supplier Payment Account	Yes	Yes	Yes	Yes
	Tax Account	Yes	No	No	No
	WIP Control	Yes	Yes	Yes	Yes
System Accounts					
	Auto Balance		No	No	No
	PO Receipts	Yes	Yes	Yes	Yes
	Realized Exchange Gain	Yes	No	No	No
	Realized Exchange Loss	Yes	No	No	No
	Result of Current Year	Yes	No	No	No
	Result of Previous Year	Yes	No	No	No
	Rounding Differences	Yes	No	No	No
	Unmatched Invoices	Yes	No	No	No
	Unrealized Exchange Gain	Yes	No	No	No
	Unrealized Exchange Loss	Yes	No	No	No

GL Analytical Coding Segments Update



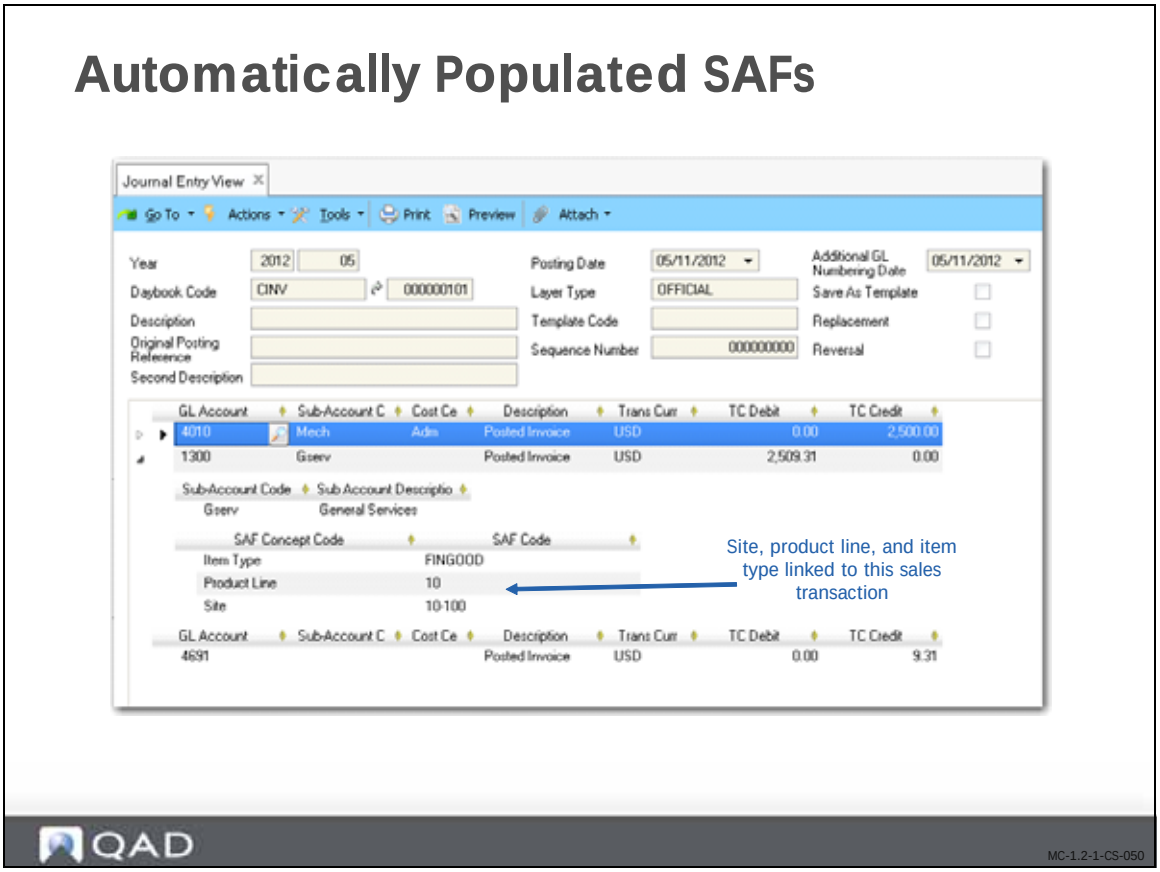
When creating GL accounts, you set the analytical parameters for the account on the Analysis tab in GL Account Create. When you define analysis for an account, you can specify the individual sources or targets for transaction amounts, such as cost centers or SAFs.

Important After you have saved account setup data and used the account in postings, you can change the account setup to add extra analysis (project or cost center), but you cannot remove analysis. You can change the analysis limitation setting at any time.

You can also enable cost center and project analysis to analyze account entries. For accounts used in Financials transactions, you can change the analysis limitation setting to use the new values without restriction. However, you can encounter issues if you have changed the analysis limitation settings for GL accounts used in unposted operational transactions.

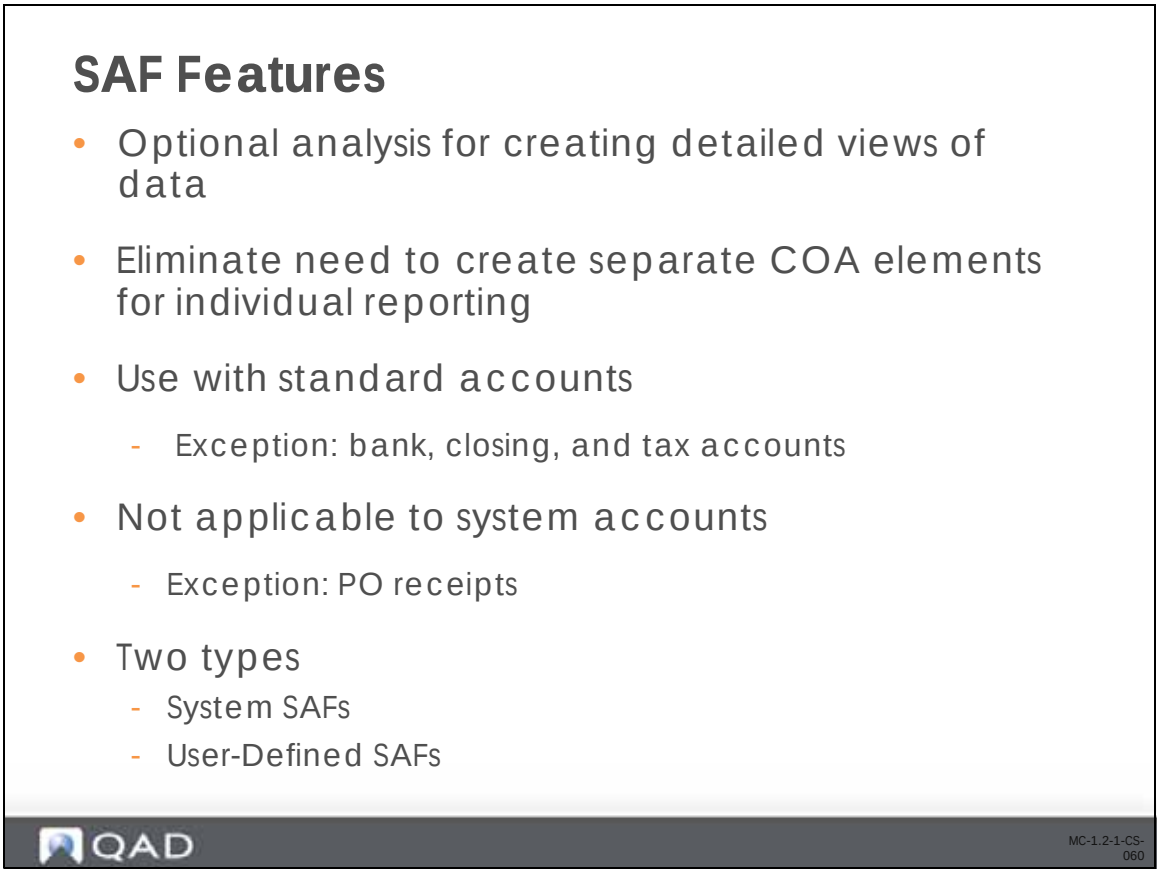
It is recommended that you post all operational GL transactions prior to changing the GL account analysis limitation.

Automatically Populated SAFs



Supplementary Analysis Fields are populated automatically, and can be viewed in detail by drilling down the transaction in Journal Entry View (25.13.1.3).

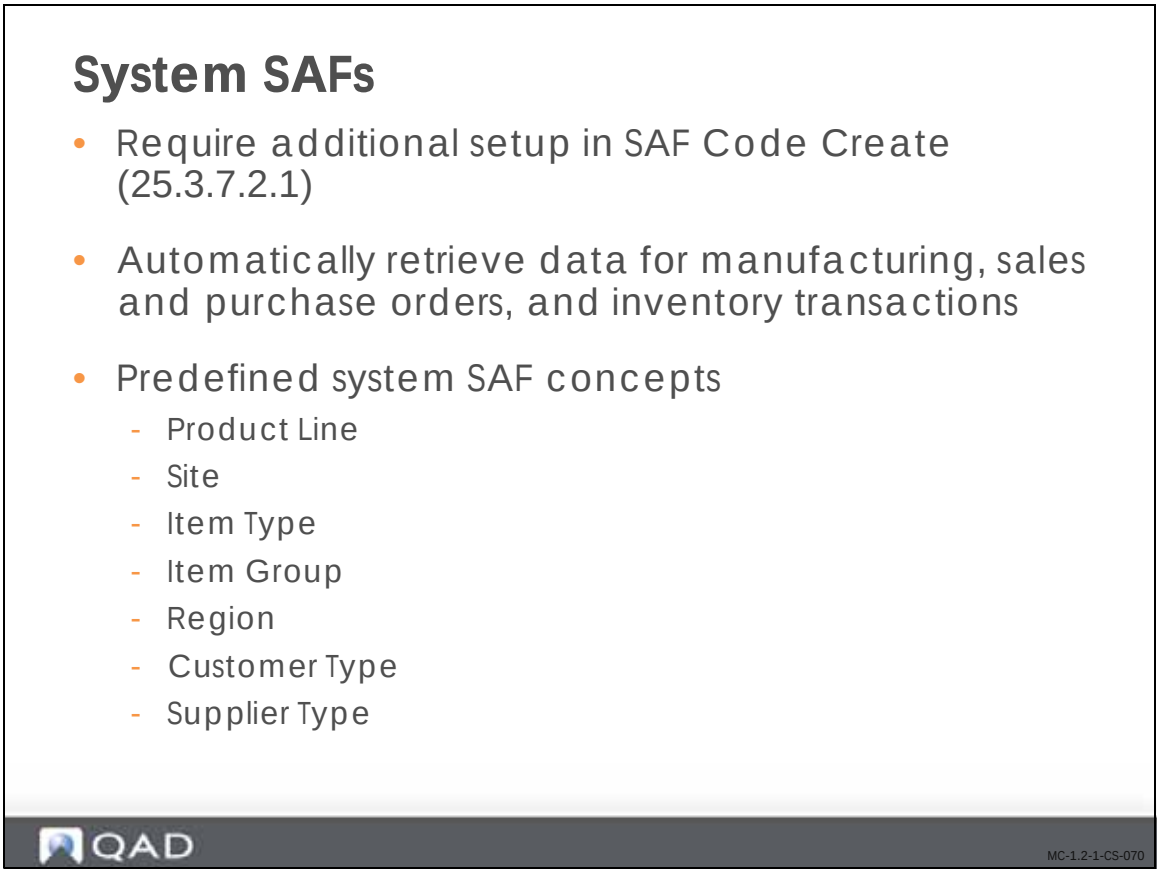
SAF Features



SAF analysis is optional. It lets you create detailed views of data. Using SAFs, you can analyze a single account in many different ways by filtering based on the SAF codes included in the postings to the account. A carefully planned set of SAF structures avoids the need to set up separate COA elements for individual reporting.

SAF analysis can be applied to all GL accounts, except bank, closing, and tax accounts. SAF analysis is not supported for System accounts except for Purchase Order Receipts. You can apply SAF analysis to both revenue and expenses, and, normally, a separate SAF structure is set up for each of these types of transaction. In addition to system SAF concepts, user-defined SAF analysis can augment operational reporting or can be used with financial transactions only. See “User-Defined SAFs” on page 14.

System SAFs



Seven SAF concepts are predefined and provided with the system. They are designed to interact with operational transactions and capture key analysis details useful for reporting the GL effects of operations, such as sales by region, sales to OEM customers, or work orders by item type.

The following system concepts are provided:

Product Line. This concept captures values created in Product Line Maintenance (1.2.1) and associated with items involved in operational transactions.

Site. This concept captures values created in Site Maintenance (1.1.13) and associated with items involved in operational transactions.

Item Type. This concept captures generalized code values created in Generalized Codes Maintenance (36.2.13) and associated with items in Item Master Maintenance (1.4.1) when those items are used in operational transactions.

Item Group. This concept captures generalized code values created in Generalized Codes Maintenance (36.2.13) and associated with items in Item Master Maintenance (1.4.1) when those items are used in operational transactions.

Region. This concept captures generalized code values created in Generalized Codes Maintenance (36.2.13) and associated with customers in Customer Data Maintenance (2.1.1) when those customers are referenced on operational transactions.

Customer Type. This concept captures codes created in Customer Type Create (27.20.4.1) and associated with customers in Customer Create (27.20.1.1) when those customers are referenced on operational transactions.

Supplier Type. This concept captures codes created in Supplier Type Create (28.20.4.1) and associated with suppliers in Supplier Create (28.20.1.1) when those suppliers are referenced on operational transactions.

While the system concepts are specifically designed for capturing details of operational transactions, you can use a combination of system and user-defined concepts in the same structure.

System concepts cannot be deleted, but can be disabled by clearing the Active field. Data is captured for a concept only when it is active. Since system concepts have a predefined meaning, you cannot modify other fields of the concept or create new system concepts.

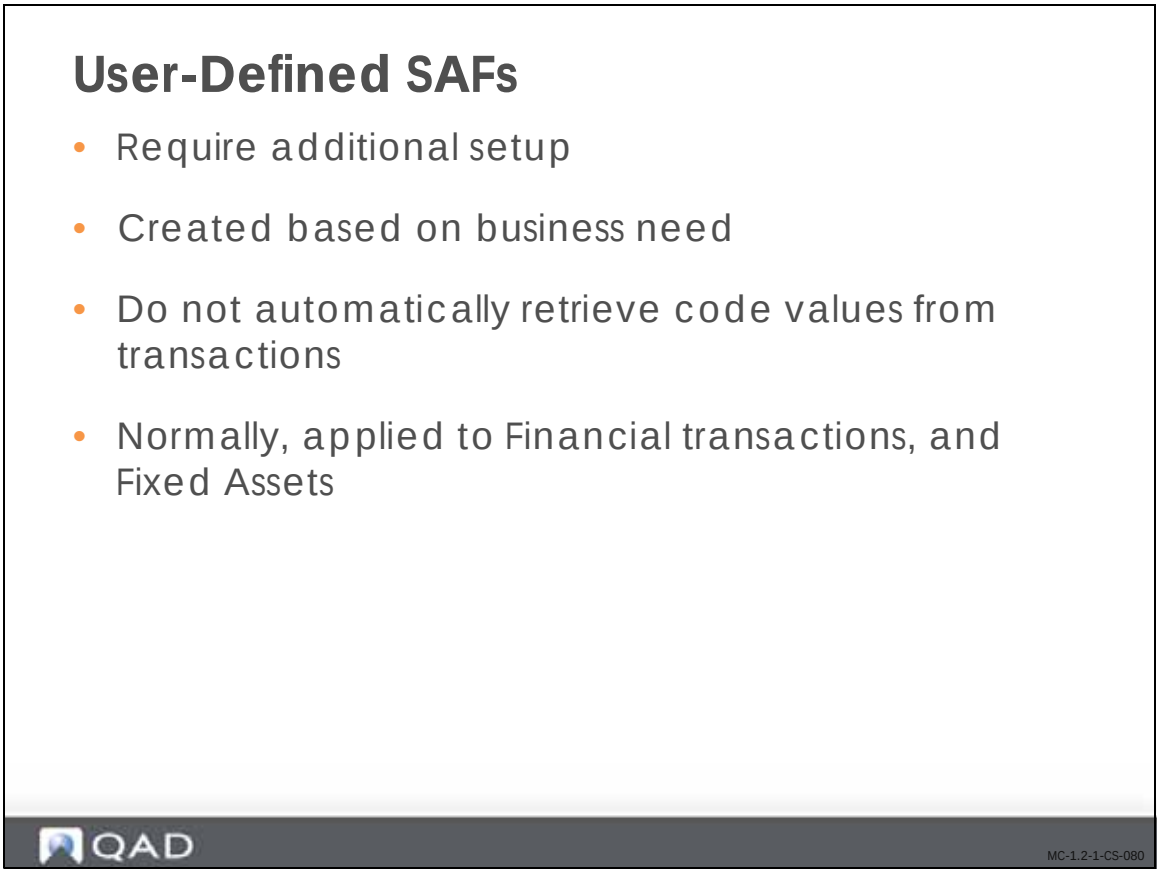
Not all concepts apply to every transaction. For example, when you post a sales order, the Supplier Type field does not apply, since a customer—not a supplier—is associated with the sales order shipment. For more information on system concepts and the types of operational transactions they apply to, see *QAD Financials User Guide*.

You can include a maximum of five system SAF concepts in each SAF structure, and you can use the same SAF system concept in different SAF structures.

Retrieving SAF Codes for System Concepts

If new system SAF codes are used in operational transactions, you must manually update the system SAF codes in SAF Code Create (25.3.7.2.1) before you can use the codes in a Financials posting.

User-Defined SAFs

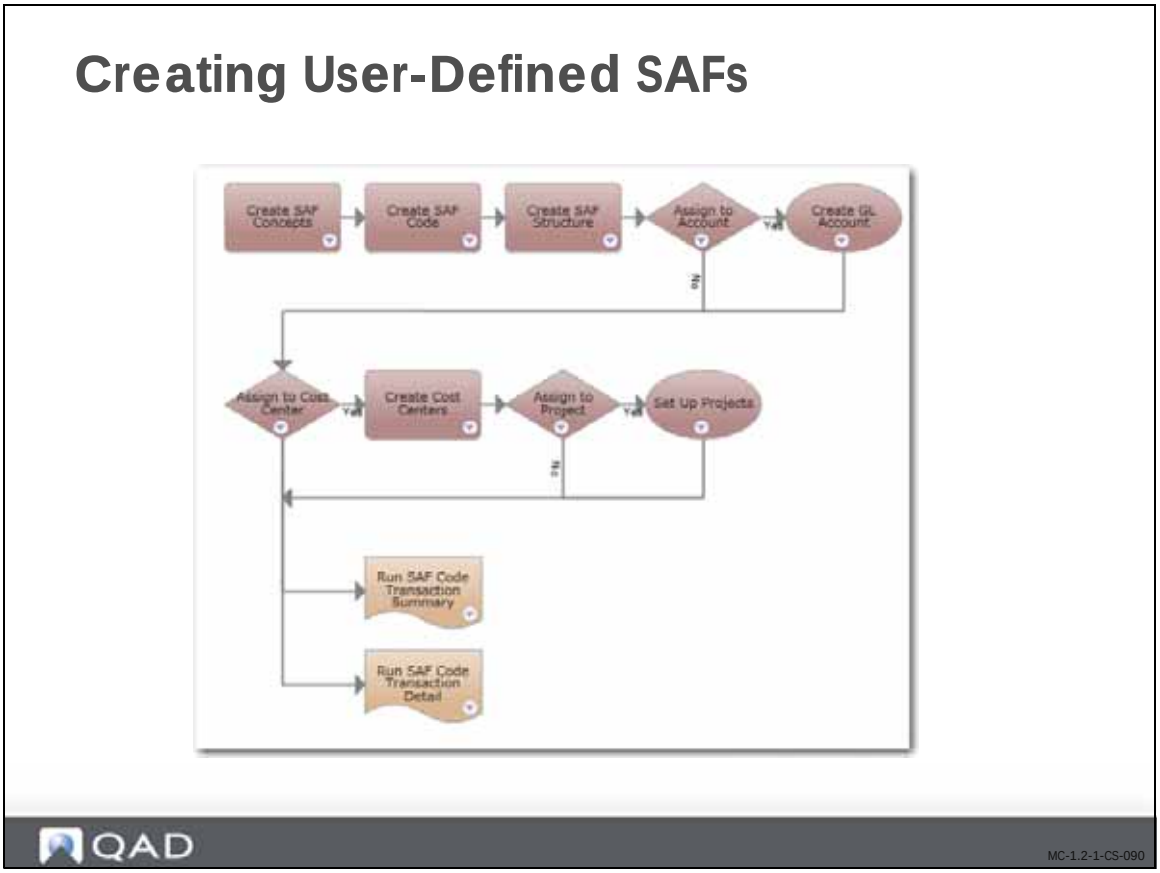


Create user-defined SAF concepts (25.3.7.1) based on your business requirements, and unlike system SAF concepts, they do not automatically retrieve code vales from transactions. Instead, you manually create both the concept and the SAF codes it uses and then select the code or define defaults.

User-defined SAF concepts are normally applied to financial transactions only, although you can also use them with fixed assets. Like system concepts, you can include a maximum of five user-defined SAF concepts in each SAF structure, and you can use the same user-defined SAF concept in different SAF structures.

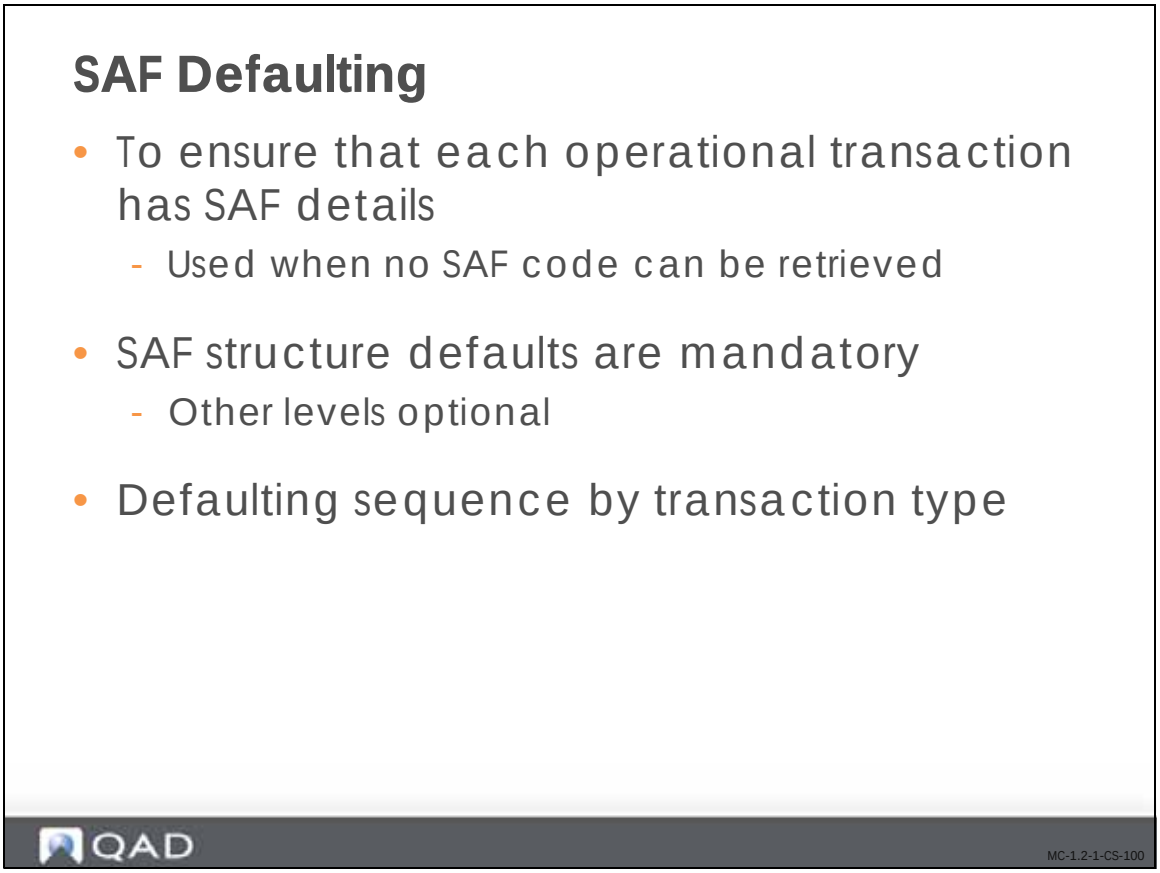
You can create user-defined SAF analysis to track specific costs arising from any type of financial transaction.

Creating User-Defined SAFs



The process map displays the steps involved in creating user-defined SAFs. For details on the SAF creation steps, refer to *QAD Financials User Guide*.

SAF Defaulting



The system validates the SAF structure to ensure that each SAF concept, both system and user-defined, has a default SAF code.

System SAF concepts retrieve codes from operational transaction records. Operational transactions are posted automatically, and you cannot manually correct SAF data before posting. Therefore, to ensure that posting is successful, you must define default values. The defaults are used when a code for an active SAF concept cannot be retrieved for a transaction. This substitute SAF code ensures that the transaction is processed.

Default SAF codes can be defined on multiple levels. The defaulting mechanism selects the most likely default SAF code for the concept, based on an order of precedence determined by the type of transaction in which the SAF is being used. Only the default at the structure level is required; others are optional.

Default codes for SAF concepts are defined for multiple components:

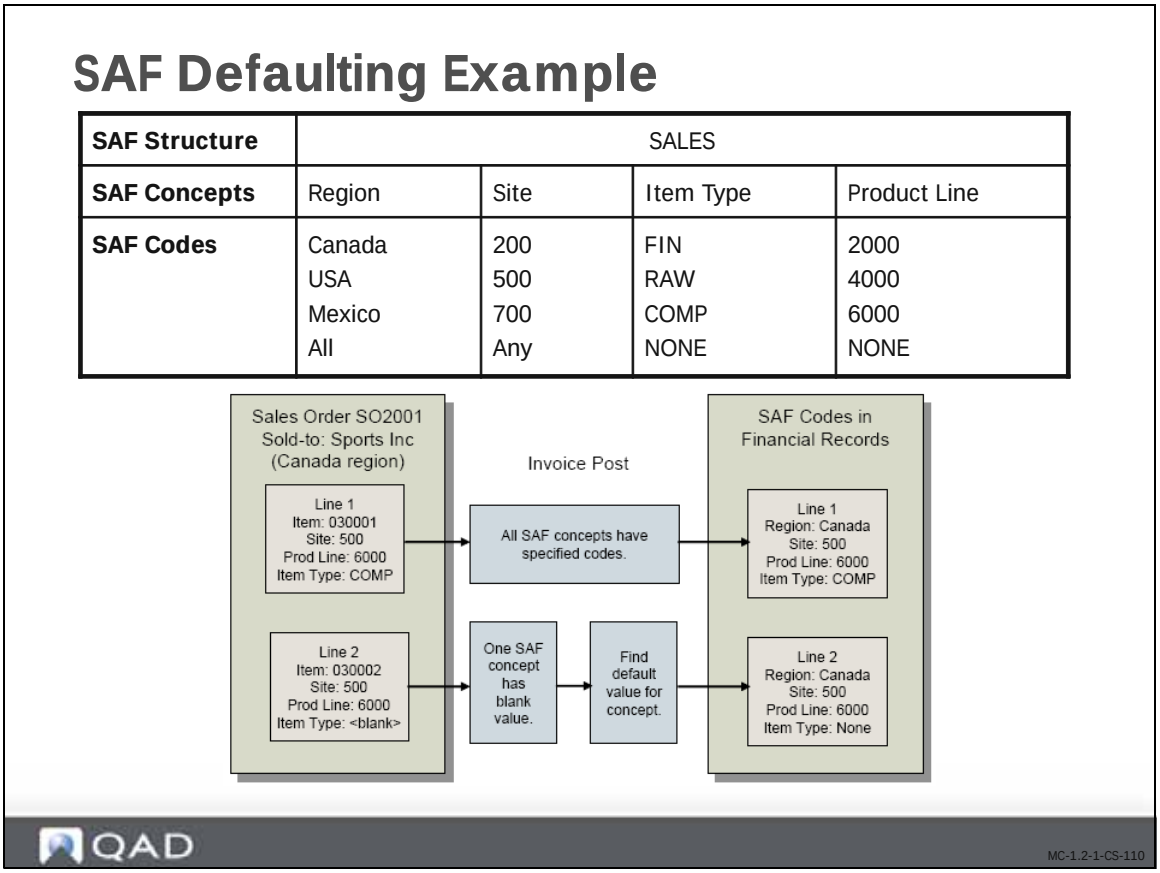
- Customers, on the Defaults tab
- Suppliers, on the Defaults tab
- Business relations, on the Defaults tab
- Projects, on the Defaults tab
- Cost centers, on the main screen
- GL accounts, on the Defaults tab

The table lists the SAF defaulting sequence when a value is not found in the transaction or when SAF data is specified manually in programs, such as Journal Entry Create.

The system always finds the correct structure to use based on the type of analysis and the value of the Retrieve SAF Structure from GL field. The system then finds default values for codes by searching the components in the table in the listed order. If no values are defined for a component, the system then checks the next component. Since default values must be defined for the SAF structure, a value is always found.

Transaction Type	**Defaulting Sequence**
Non-Invoice Operational and Journal Entries	Cost center or project GL account SAF structure
Customer Invoices and Credit Notes	Customer Business relation Cost center or project GL account SAF structure
Supplier Invoices and Credit Notes	Supplier Business relation Cost center or project GL account SAF structure

SAF Defaulting Example



SAF Structure	SALES			
SAF Concepts	Region	Site	Item Type	Product Line
SAF Codes	Canada USA Mexico All	200 500 700 Any	FIN RAW COMP NONE	2000 4000 6000 NONE

Customer Sports Inc. in Canada periodically buys quantities of item 030001 from site 500 with item type COMP. This item belongs to product line 6000. The sales order transactions for these line items are posted to the sales account GL10001. Occasionally, the customer also buys item 030002 from that same product line; it has a blank item type.

SAF system concepts for site, region, item type, and product line are active. You must assign every SAF concept a default SAF code when you set up the SAF structure; when the system uses the default value, it means that the code was blank in the originating transaction. You might want to assign default codes like the following to indicate that the code was not relevant in the transaction:

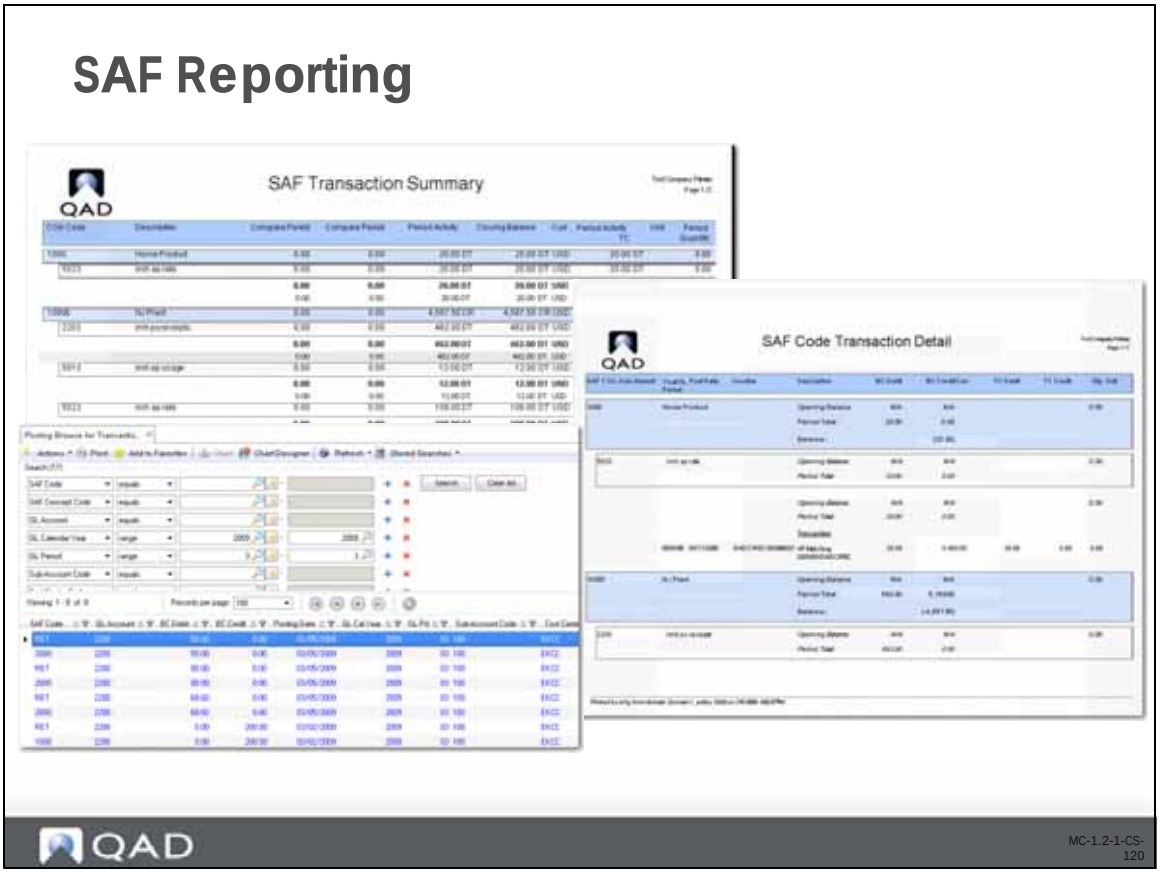
- Default code Any for the Site concept
- Default code All for the Region concept
- Default code None for the Item Type concept
- Default code None for the Product Line concept

You combine these four concepts in an SAF structure called Sales and assign the SAF structure to account GL10001.

You now create sales order SO2001 for customer Sports Inc. with two lines: one for item 030001 and one for 030002. When you post an invoice that updates account GL1001, the codes for all the active concepts are stored with the transaction history so they are available for analysis. In this example, the SAF codes would have the following values.

For line item 030001:

SAF Reporting



1 Site is 500 from the sales order line.

2 Region is Canada from the sales order customer.

3 Item Type is COMP from the sales order line item.

4 Product line is 6000 from the sales order line.

For line item 030002:

1 Site is 500 from the sales order line.

2 Region is Canada from the sales order customer.

3 Item Type is None from the default value.

4 Product line is 6000 from the sales order line.

The retrieval process for system concepts is automatic, and requires no user input. However, you must supply the default values for active concepts that do not have a value.

SAF Reports and Views

Two specific SAF reports and one view are available:

- SAF Transaction Summary (25.15.3.5) lists all transactions in which SAFs are used in combination with GL accounts and sub-accounts.
- SAF Transaction Detail (25.15.3.6) provides a detailed breakdown of GL postings, based on SAF codes.
- Transactions by SAF View (25.15.4.24) provides a detailed breakdown of GL postings based on SAF codes.

Also, in most GL, Cost Center and Project reports you can use SAF as filter criteria, just as any other GL coding element, which provides additional analysis capabilities.

Hands-On Exercise

Exercise: Supplementary Analysis Fields

Create a new SAF structure and add it to GL accounts. Use entity 10USACO or 22UKCO.

1 In SAF Concept Create (25.3.7.1.1), create a new concept:

Field	Data
SAF Concept Code	Logcharge
SAF Concept Description	Logistics Charge

Other fields default.

2 In SAF Code Create (25.3.7.2.1), create the following codes:

Field	SAF Code 1	SAF Code 2	SAF Code 3
SAF Code	Freight	Handling	Other
SAF Description	Freight	Handling	Other
SAF Concept	Logcharge	Logcharge	Logcharge

Note Budget groups are not mandatory.

3 In SAF Code View (25.3.7.2.3), select the SAF concept code Logcharge to review the linked SAF codes you created.

4 In SAF Structure Create (25.3.7.4.1), create the SAF structure Transport.

Field	Data
Structure Code	Transport
Description	Transport

a Right-click in the grid and choose Insert a New Row.

Line	SAF Concept	Default Values
1	Site	No
2	Product Line	Def
3	Logcharge	Freight

b Click Save.

5 Check all GL accounts for which cost centers are enabled. If no SAF structure is linked, then link Transport:

a Open GL Account Modify (25.3.13.2).

b In the Search pane, click Stored Searches - Manage Filter Fields.

c Select the Cost Center Account line and click OK.

d In the Search pane, select Cost Center Account, set the operator to Not Equal, and select No. Click Search.

The browse displays the list of GL accounts that are cost center enabled.

e Select them one by one with a double-click.

f In the Analysis tab, if the SAF Structure Code field is empty, specify the Transport SAF structure.

6 In Cost Center Modify (25.3.20.2), add SAF defaults to cost center Log:

- Cost Center: Log
- Retrieve SAF structure from GL account: Select this field

7 Create SAF defaults for this cost center.

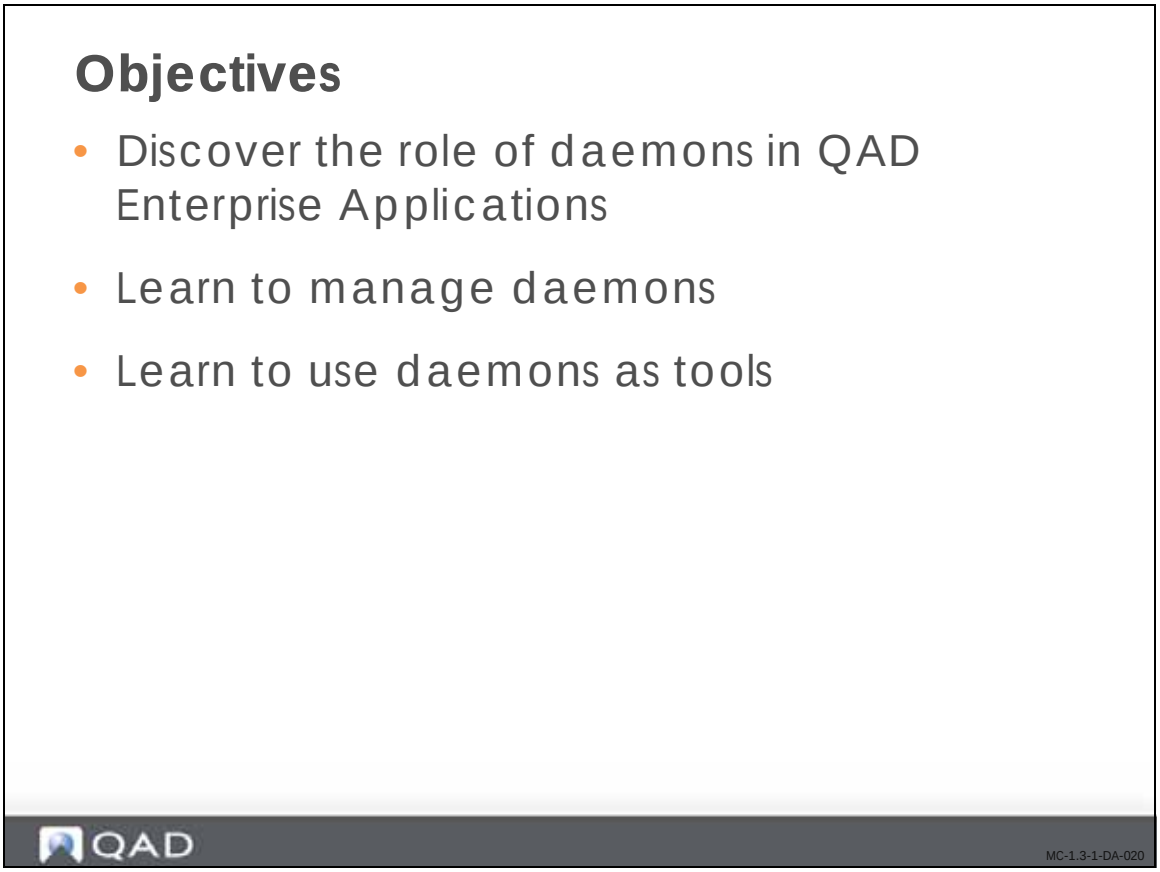
a In the SAF Defaults grid, right-click and select Insert a New Row for each of the three lines:

Field	Data
SAF Row 1	
SAF Concept Code	Logcharge
SAF Code	Freight
SAF Row 2	
SAF Concept Code	Site
SAF Code	10-100 for US, 22-100 for EMEA
SAF Row 3	
SAF Concept Code	Product Line
SAF Code	SAM

Chapter 2

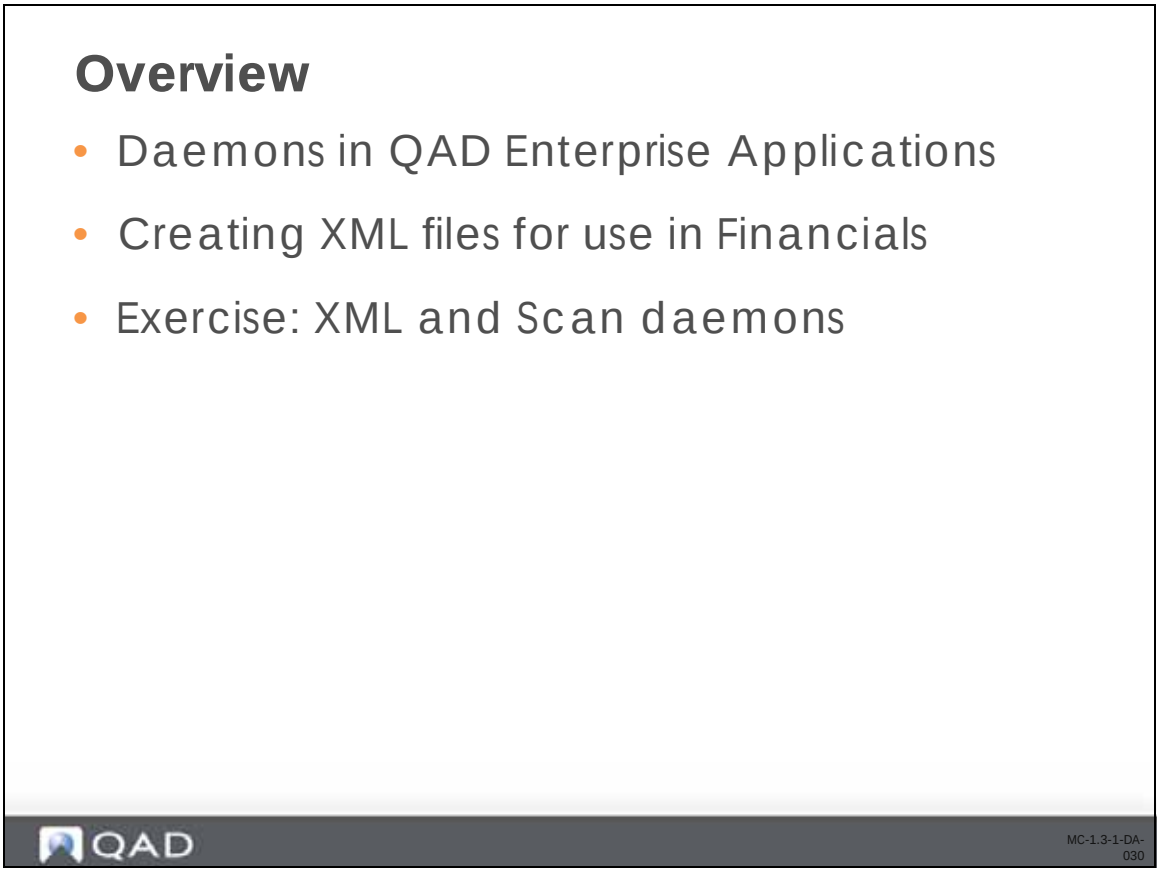
Daemons

Objectives



In this chapter, you will learn about the QAD EE daemons and how to manage them. However, this chapter is not designed to provide in-depth training about daemons. Instead, this chapter is designed to provide an overview of the daemons, and to raise awareness of these tools.

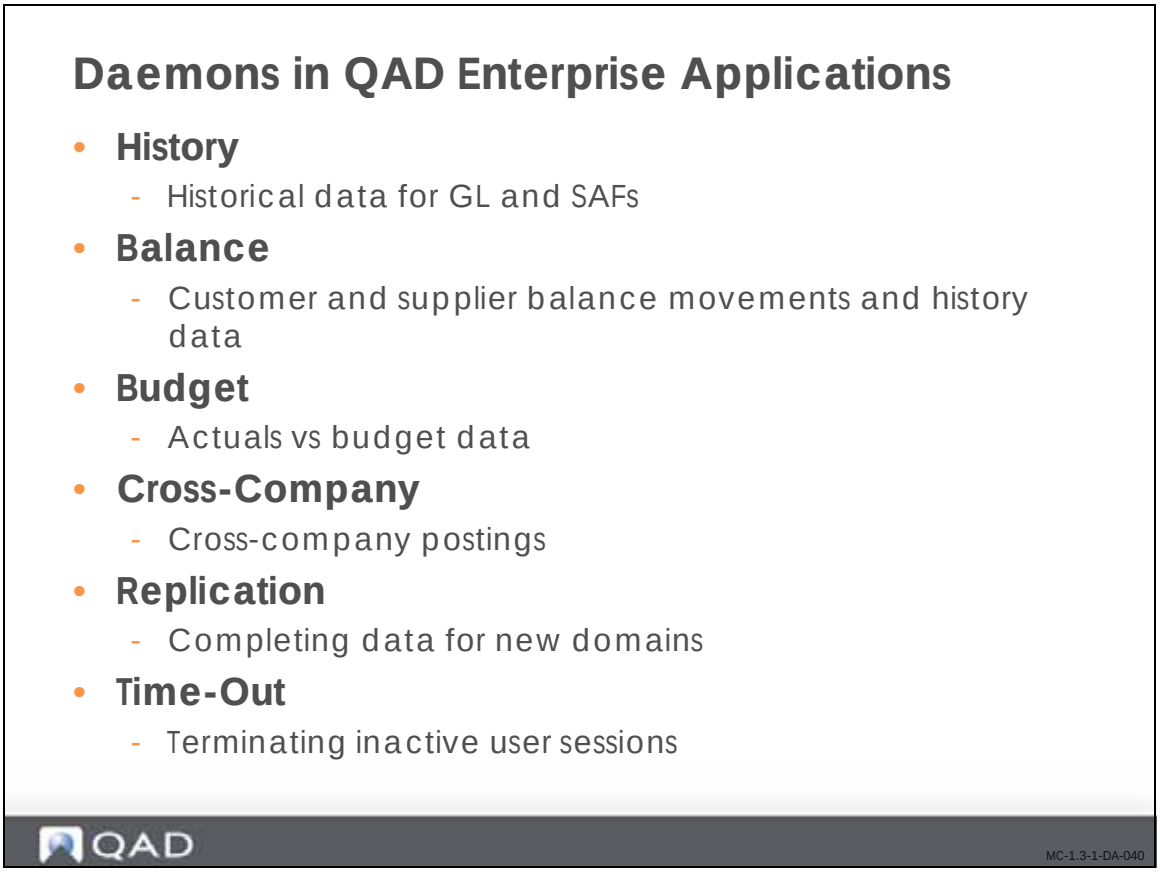
Overview



In this chapter, you will learn about the function of daemons in QAD Enterprise Applications, and how to manage them. You will also learn how to use daemons as tools in the Financials modules.

For more information about daemons, see *QAD System Administration User Guide*.

Daemons in QAD Enterprise Applications



Daemons are server-based processes that let you run background tasks; the user has no direct input.

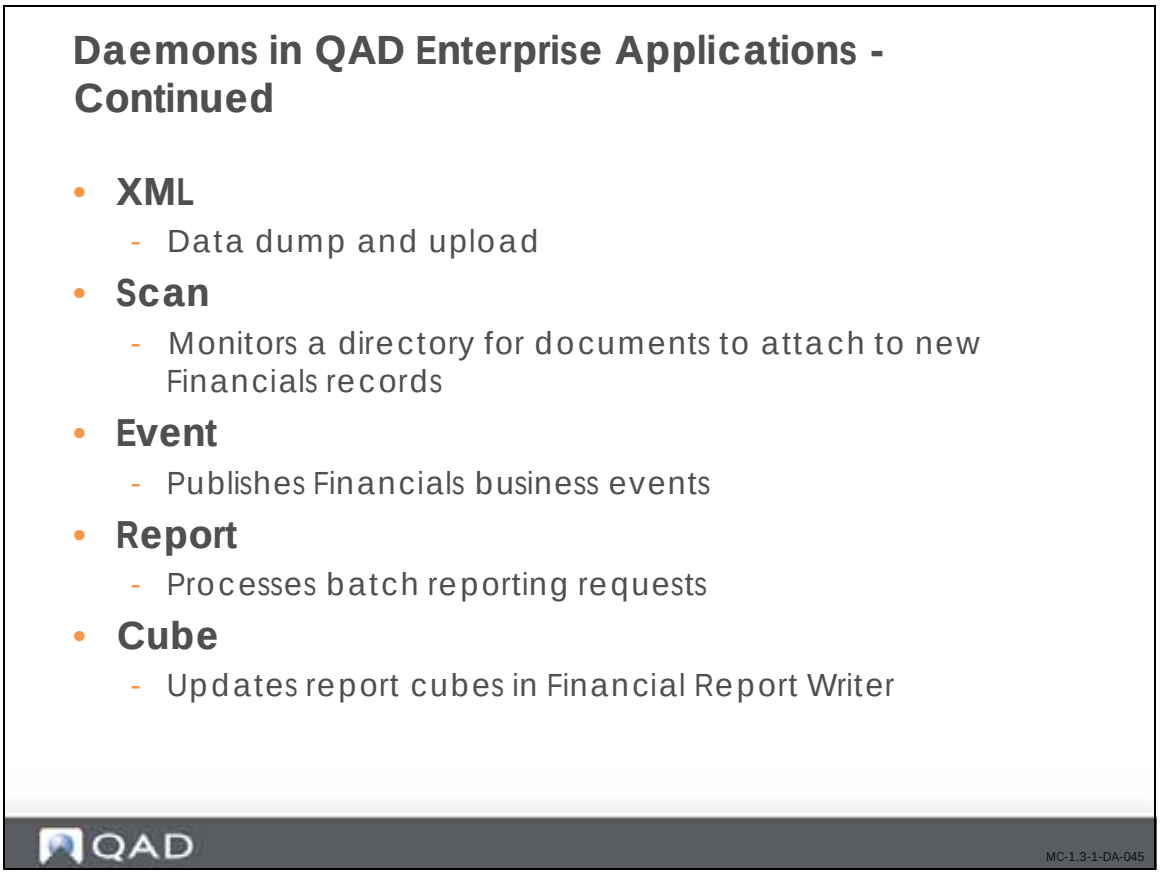
Important Some daemon processes must be running to ensure the integrity of your application. You must ensure that these processes are configured to start when the database is started.

In general, tasks submitted to the daemon for processing are stored in a queue in a dedicated database table. The daemon regularly checks the queue for tasks, and then processes them. The behavior of each daemon and its request queue are controlled and monitored using specific maintenance programs.

The system has the following daemons:

- Balance daemon
- Budget daemon
- Cross-Company daemon
- Event Daemon
- History daemon
- Replication daemon
- Report daemon
- Scan daemon

- Time Out daemon
- XML daemon
- Cube daemon



Balance Daemon

The Balance daemon operates in a similar manner to the History daemon. It builds the supplier and customer balance and movement data and history files. The Balance daemon updates the supplier and customer history tables each time a movement is created on an invoice.

Note If queue records are waiting to be processed by the Balance daemon, the supplier and customer balances might be inaccurate.

Budget Daemon

The Budget daemon allocates postings to the appropriate budget topics. All postings are processed, including those in the transient and secondary layers. The daemon analyzes all budget definition tables, and updates the actuals for the relevant budget topics. The Budget daemon must always be running when using Allocations because of its essential role in this functionality.

Cross-Company Daemon

The Cross-Company daemon processes automatic cross-company postings that cannot be performed manually in the UI. The Cross-Company daemon handles transactions related to invoices and banking entries, in addition to intercompany transactions in purchase and sales orders. The Cross-Company daemon processes transactions in the primary layer only, and completes the linking fields in both the source and target posting line.

Event Daemon

The Event daemon publishes Financials business events, such as record creation events, as XML messages. Event publishing lets you export data updates to other Financials instances, without the need to extract the data from the database.

History Daemon

The History daemon populates the database with condensed GL transaction data, and updates GL and SAF balances for each period. Detailed transaction data is accumulated in tables to increase performance in, for example, drill downs and reporting. All GL postings, including those in the transient and secondary layers, are processed.

The History daemon generates historical data grouped by a number of criteria, such as the GL period, the account, sub-account, project, cost center, period mark, daybook, and the entity used in the transactions.

Replication Daemon

The Replication daemon makes domain shared set data available to the operational functions, and replicates the data to the appropriate operational domain.

During implementation of the system and setup of the domains, you can continue to modify the data associated with a domain for as long as you require, and then confirm the setup when you are satisfied that it meets your business requirements. Until the setup of a domain is confirmed, the domain data is not available to your operational functions.

The availability of domain data to the operational functions is controlled by the Setup Complete field in the Domain function. When you select the Setup Complete field, the Replication daemon creates request queue records for each shared set. After the data has been reproduced, you cannot change the shared sets and base currency of the domain. In addition, you cannot link any of the entities linked to the domain to a different domain; the relationship is now permanent.

The data made available to the operational functions includes daybooks, GL accounts, sub-accounts, and cost centers, suppliers, customers, and exchange rates.

Report Daemon

Financial reports can be printed to screen or to a printer directly, or can be batch printed from a report queue. You can schedule batch reports, output them to files, or e-mail them to addresses or roles. The Report daemon processes these batch reporting requests.

Scan Daemon

The Scan daemon lets you configure the system to monitor a directory for documents to be attached to new records in the QAD application database. Currently, the Scan daemon is only used for documents related to supplier invoice creation. You configure the daemon by specifying the tasks it should perform when it finds a document.

Note In order to use the Scan daemon, you must enable workflow because the scanned documents are associated with draft objects and sent to user inboxes for completion. See *Introduction to QAD Enterprise Applications User Guide* for details on how to configure workflows.

Supplier invoice is the most common type of document to scan, but you can also use this feature to scan documents related to any components that support the save-as-draft feature. For example, you could scan new customer profiles and send them to the inbox of those responsible for creating customer records.

The Configure activity for the Scan daemon includes an additional grid where you specify the scan directory associated with each entity. See *QAD System Administration User Guide* for more information.

Time Out Daemon

You can configure a user time-out setting defined in Security Control (36.3.24). This feature lets system administrators automatically terminate inactive user sessions, thereby reducing system load and improving performance for active users. Time out is defined as a number of minutes a logged in user can be inactive.

XML Daemon

The XML daemon processes external data in XML format.

Cube Daemon

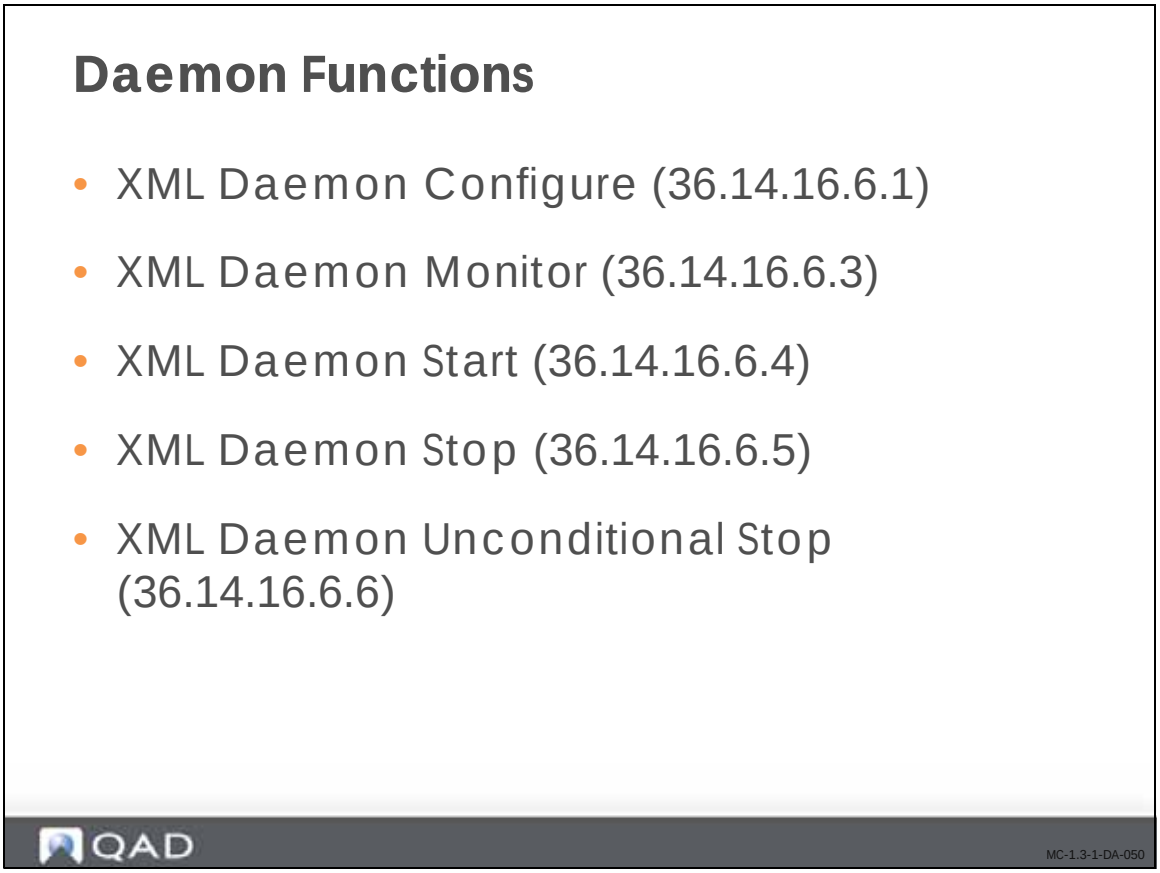
The Cube daemon builds data for report cubes used in Financial Report Writer, and is fed by the History daemon. Therefore, if the History daemon stops, the Cube daemon does not receive any queue requests.

You must stop the Cube daemon before you can rebuild report cubes in Financial Report Writer. You do not need to stop the History daemon; the Cube daemon catches up with missed updates when it restarts.

If the system finds errors during the update process (for example, missing exchange rates or missing COA cross references), these are logged in the Cube Build Log and you can view the errors using Cube Build Log Browse.

When the system finds an error in cube data, the cube is assigned the status Needs Rebuild and the daemon stops further updates for that cube. You must determine the root cause of the error and rebuild the cube using Cube Generation so that the cube status becomes Operational again.

Daemon Functions



Use the following activities to maintain and control daemons:

- Configure
- Clear Queue
- Monitor
- Start
- Stop
- Unconditional Stop

These activities are the same for all of the daemons, except the XML daemon and the Report daemon. See *QAD System Administration User Guide* for detailed information.

Both the Configure and Monitor activities check the status of the daemon, and update the daemon status before displaying. For example, if the daemon status is set to Running, but no daemon process is detected on the QAD Financials appServer, the status is reset to Inactive before the Configure or Monitor screens display.

Note You configure, clear queues, and monitor the Report daemon in the same way as other daemons. However, the Report daemon is stopped and started from within the .NET Report Service.

Configure

The Configure activity lets you configure maintenance information for a daemon, such as the login ID and password, in addition to the log file and start directory. For security reasons, you should use a dedicated daemon user name. The user name must have access to all domains and entities have role permissions to all component activities in the database.

Note The activities controlled by the daemon must be included in the list of activities for the role assigned to the daemon user name.

The Configure activity also lets you define the time interval before the daemon checks its queue for new requests, indicate whether to record processed items for audit purposes, and set the number of records that the daemon should process in each run.

Start

The Start activity starts the daemon. The system displays a message that indicates that the daemon has started successfully.

Stop

The Stop activity stops the daemon after it completes its current task. Depending on the type of daemon and the amount of time it takes to complete an operation, some time can pass before the daemon detects the stop request and shuts down. The system displays a message that indicates that the daemon has stopped successfully.

Unconditional Stop

If you cannot stop the daemon using the Stop activity, the Unconditional Stop activity stops the daemon. This task should only be performed by the system administrator.

Note The Start, Stop and Unconditional Stop activities are not available for the Report daemon, which is managed by the .NET Report Service.

Monitor

The Monitor screen lets you view the start and stop dates for the daemons and the requests that are processed, waiting, in progress, or incorrectly processed. The screen is composed of a header area and two grids.

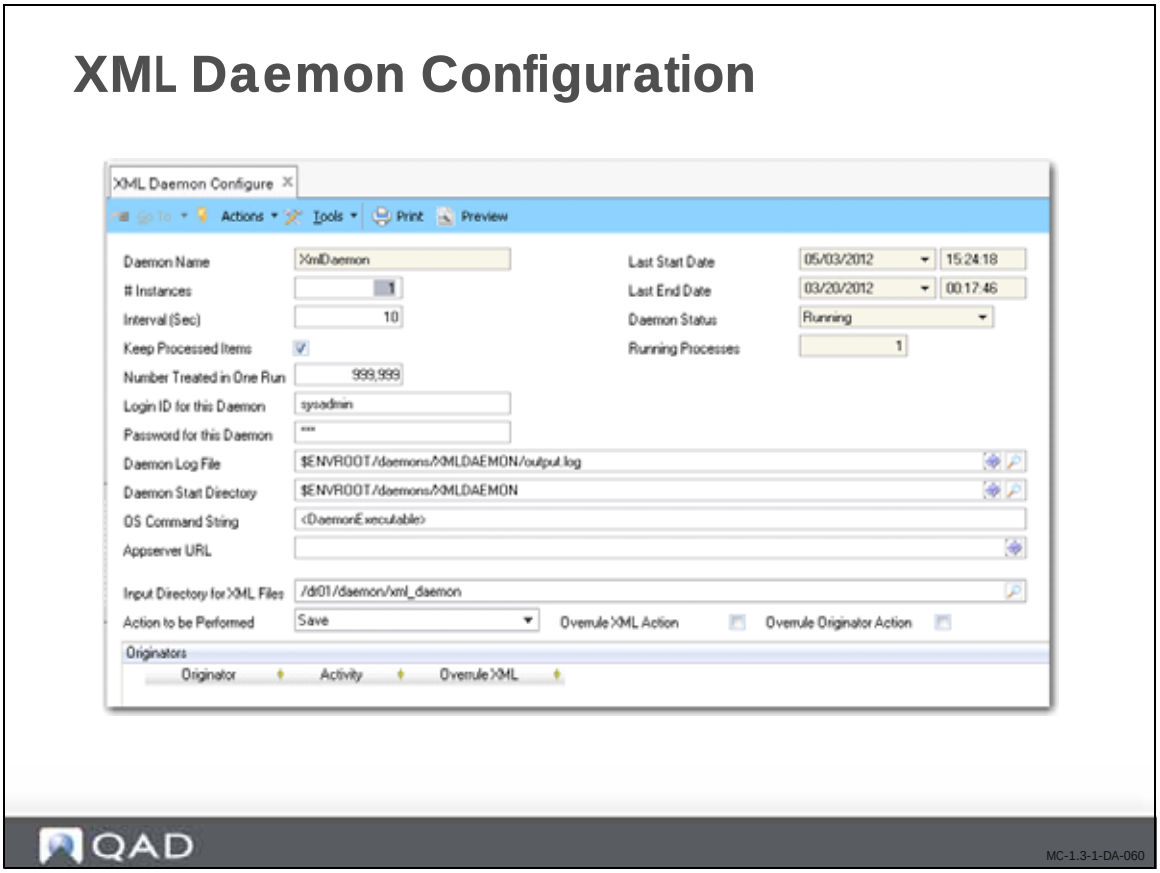
1. The header area contains fields that display the daemon name, the start and end times, and the daemon status. The header also contains four fields that let you choose the type of requests to include in the view.
2. The center grid of the Monitor displays:
   - The start and end time of the request currently processing.
   - A description of the request.
   - The status of the request. The valid values are PROCESSED-OK, PROCESSED-ERR, WAITING, and IN-PROCESS.

- Additionally, if you set a specific start date and time for the request, the center grid also displays this data. It is only possible to set a specific request date and time for the XML daemon.

3 The lower grid displays the error information for each request line, if any.

The view does not store correctly processed records after the next refresh unless the Keep Processed Items field is selected in the Maintain screen.

XML Daemon Configuration



Configuring Daemons

The Scan Daemon Configure activity contains an additional grid for specifying the business component to be associated with a scanned document, the directory the daemon should monitor for documents, and the entity the scanned documents should be associated with.

The XML daemon processes external data in the form of XML files, for example, invoices are received in electronic form from a supplier. You store the files in a specific directory on the server, and the daemon reads and processes them.

The XML daemon differs from the other daemons in that it creates its own requests.

The XML daemon can process XML files only. You must convert other text formats to XML, according to the QAD-defined XSDs, before importing them.

You can use the Dump XML option to generate well-formed schema as the starting point for entering your own data. Use the Dump XML option to create the XML schema for a component, and you access it by selecting Properties in the component menu. The Properties dialog includes a Dump XML button that lets you generate schemas to a designated directory. You must already have data in the system for the object for which you want the dump an XML sample file.

You can also create an XML file for one or multiple objects by right-clicking in the View or Modify browser, and selecting Dump XML.

XML Daemon Configuration

The XML Daemon Configure screen lets you configure the XML daemon, and differs from the Maintain screen of the other daemons.

The settings in XML Daemon Configure instruct the daemon to convert an XML file into a daemon request and how to process it. Only the settings that are unique to the XML daemon are described here; the others are the same as the general settings discussed above.

Field Descriptions

Input Directory for XML Files. Specify the directory that the daemon scans for XML files.

Action to be Performed. Optionally, choose the action that the XML daemon must perform on the data in the XML file. If not specified, the action is read from the XML file.

Overrule XML Action. Select this field to overrule the action specified in the XML file with the action defined in the Action to be Performed field.

Overrule Originator Action. Select the field to overrule the action based on the originator and according to the rules defined in the grid.

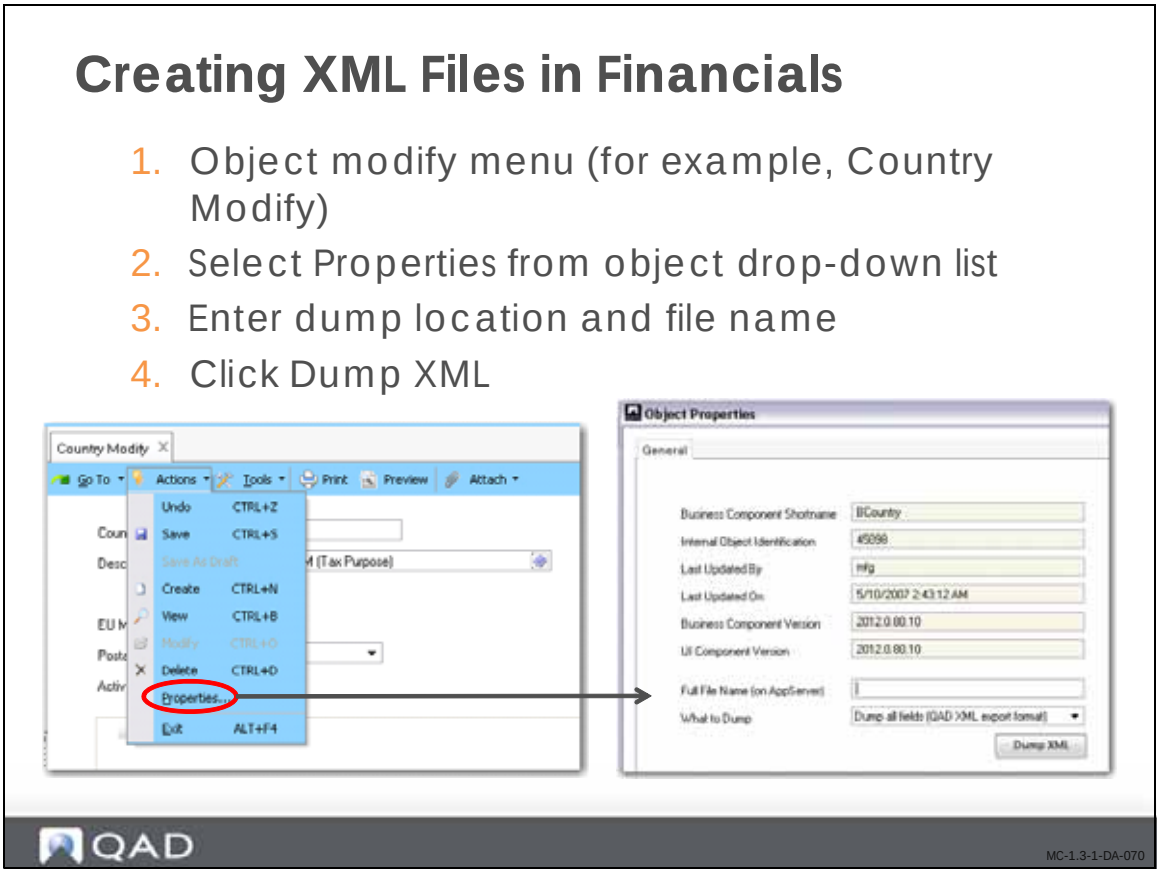
The Originator field is part of the header section of the XML file and indicates the origin of the file; for example, a source application or external party.

Originator. Specify the originator for which to perform the overrule action.

Activity. Choose the activity to perform. The options are:

- Save
- Save/Create Draft
- Create Draft
- Validate

Creating XML Files in Financials



In the following example, you want to update all countries in your system with additional data. Instead of doing this manually, you can update in batch using an XML file and the XML daemon.

1 In Country Modify (36.1.3.1.2), select Properties from the Country drop-down menu.

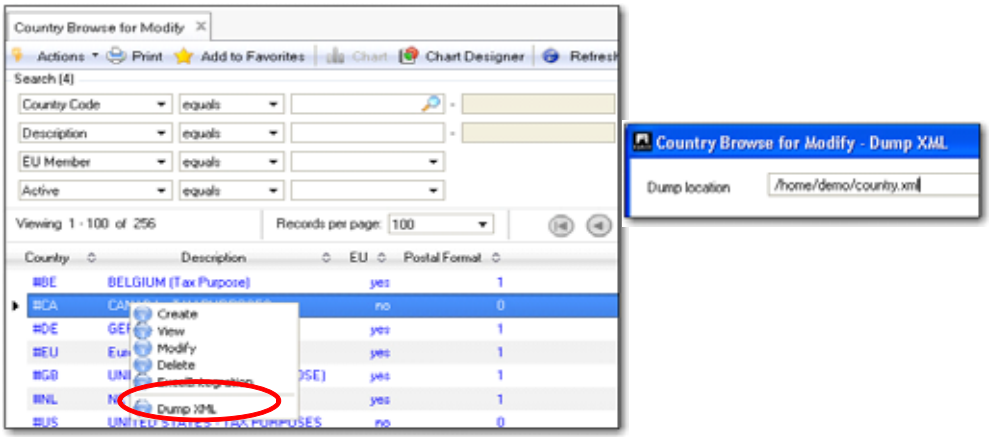
2 Enter a file name and a dump location, and click Dump XML.

To select specific records only, open the Country Browse for Modify window, select the required records and right-click to select Dump XML.

You must then enter a file name and dump location.

Creating XML Files in Financials

- In object Modify menu browse: right-click -> Dump XML
- Multiple selection



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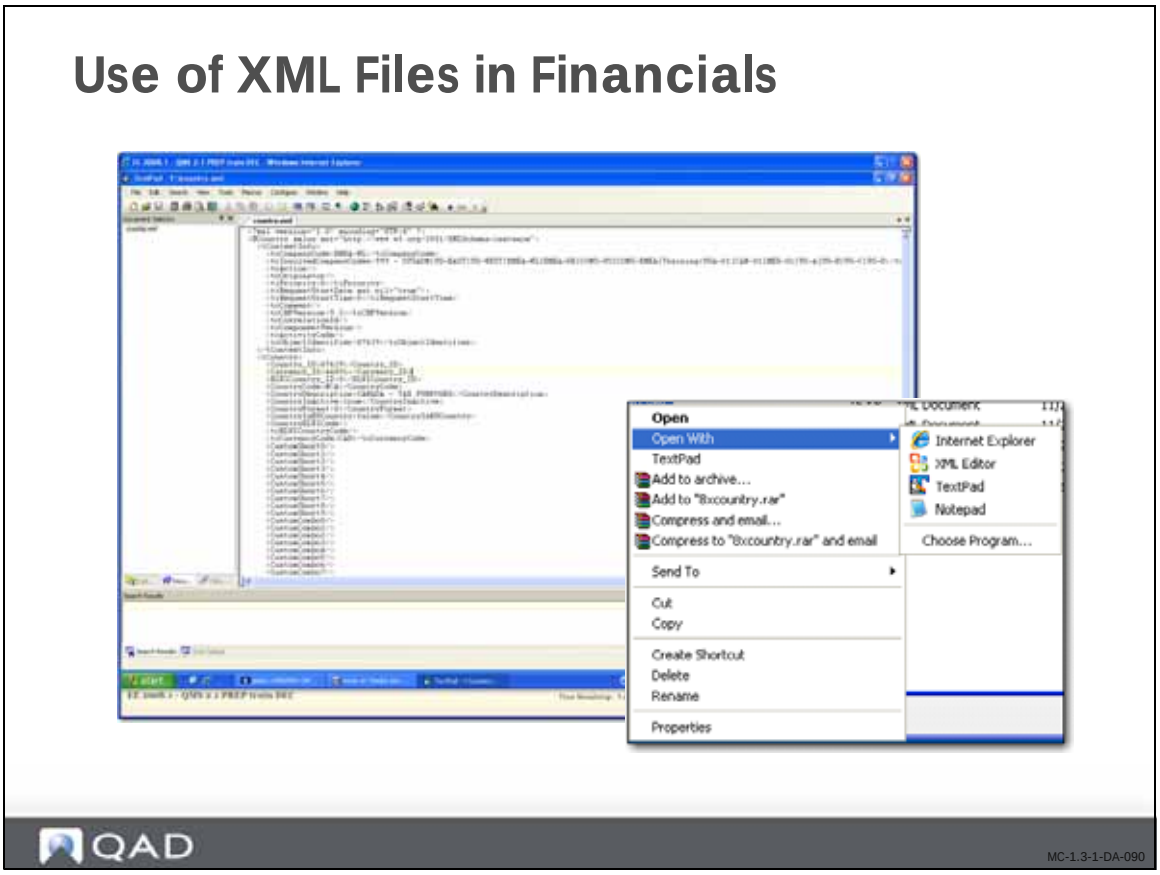

Once you have created the XML dump file, open it with the program of your choice to update the data and re-import the file into the system.

Hands-On Exercises

Exercise 1: Dump and Load XML Files

1. Use the Exchange Rate activities to define the following Accounting exchange rates:

   10USACO

   1 USD = 0.625 GBP as of 4/1/2013

   22UKCO

   1 GBP = 1.23 EUR as of 7/1/2013

2. Open XML Daemon Monitor (36.14.16.6.3), and verify that the daemon is running.

   Otherwise, use XML Daemon Unconditional Stop (36.14.16.6.6) to stop it, and XML Daemon Start (36.14.16.6.4) to start it.

3. Open Exchange Rate Modify (26.4.2).

   a. Select exchange rate USD-GBP (10USACO entity) or GBP-EUR (22UKCO entity).

   b. Right-click and select Dump XML.

   c. In the pop-up window, enter file name `USDGBPFX1.xml` (10USACO) or `GBPEURFX1.xml` (22UKCO).

   d. In the What to Dump field, select Only Dump Fields for Import.

   e. Click OK.

4. Using Windows Explorer, open the directory: `Z:\qadapps\qea\fin\` and locate the file that you exported.

5. Right-click the file name and select Textpad.

6. Modify the file in the Textpad application:

   In entity 10USACO:

   a. Find the ExchangeRateValidDateFrom field and change the date to 2013.04.01

   a. Find the ExchangeRateValidDateTill field and change the date to 2013.04.30.

   b. Find the ExchangeRate field and change the value to 0.625

   In entity 22UKCO:

   a. Find the ExchangeRateValidDateFrom field and change the date to 2013.07.01

   b. Find the ExchangeRateValidDateTill field and change the date to 2013.07.31.

   c. Find the ExchangeRate field and change the value to 1.23

7. Save and close.

8. Open Windows Explorer and move the file to the `xml_daemon` directory (use the XML and Scan daemon shortcut on your desktop). The file will be picked up and processed by the XML daemon.

9 Go back to the QAD Application, and Exchange Rate Modify (26.4.2).

10 Verify that the new rates are in the system.

11 Go to XML Daemon Monitor (36.14.16.6.3).

Note in the grid at the bottom of XML Daemon Monitor that the file has been imported. The Daemon Request Status should state PROCESSED-OK.

Exercise 2: Scan Daemon

Tip Use Workflow Delete (36.24.7) to remove objects from your application inbox.

1 Copy the scanned supplier invoice `10USA-Supplier-Invoice.doc` from `QMI Documentation\Financials Activities\Daemons` to the `scan_daemon` folder on the desktop. Place the invoice in the folder for the relevant entity.

Note In EMEA, use invoice `22UK-Supplier-Invoice.doc`.

2 Return to the QAD application.

3 Open your Inbox, located in the lower left of the UI (below Favorites and Quick Search).

4 Check for new mail.

5 Double-click the new message.

6 Click the link in the message to start the Supplier Invoice Create process.

7 In the Supplier Invoice Create (28.1.1.1) window that was opened by the system, check the scanned document (use the Attach menu to display it).

8 Use the data on this document to enter the information on the supplier invoice (such as supplier name, reference, amount, and currency). Use daybook SINV.

9 Save the details.

10 In Supplier Invoice View (28.1.1.3), check the attached scanned document.

Chapter 3

Excel Integration

Objectives

Objectives

- Learn how to use Excel integration for
  - Loading and updating static data
  - Loading transaction data

QAD

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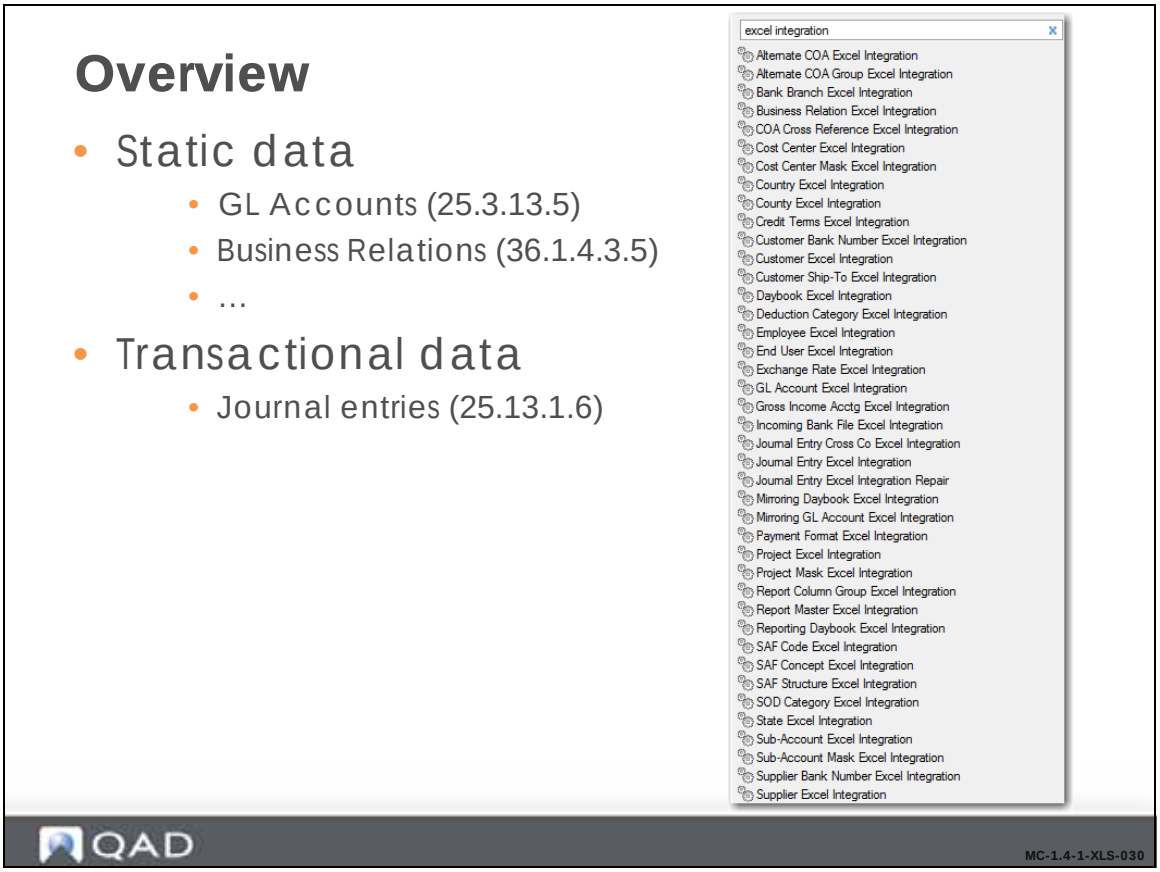
Overview

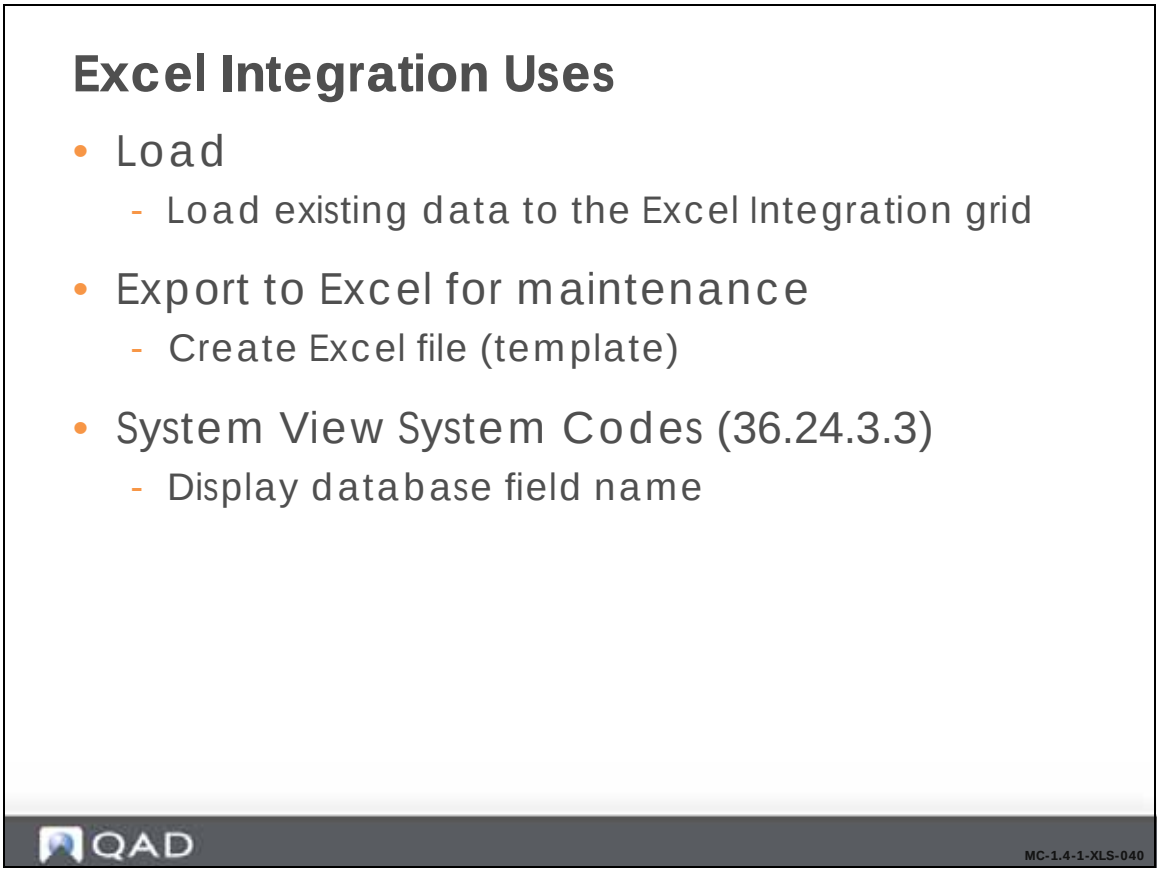


In this section, you will learn how to use powerful Excel integration capabilities in QAD Enterprise Applications.

Excel integration can be used to upload and update master data such as chart of account data, business relations, and SAF structures. You can also upload transactional data such as journal entries.

Type “Excel integration” in the menu search bar to review the menu list.

Excel Integration Uses



Use the Excel integration feature to export data to Excel spreadsheets for analysis or reporting. You can also create new data within Excel and import it to the system database, where it is validated before being saved. Export to Excel for reporting is available in all browses and grids. Advanced Excel integration is supported in only a subset of components.

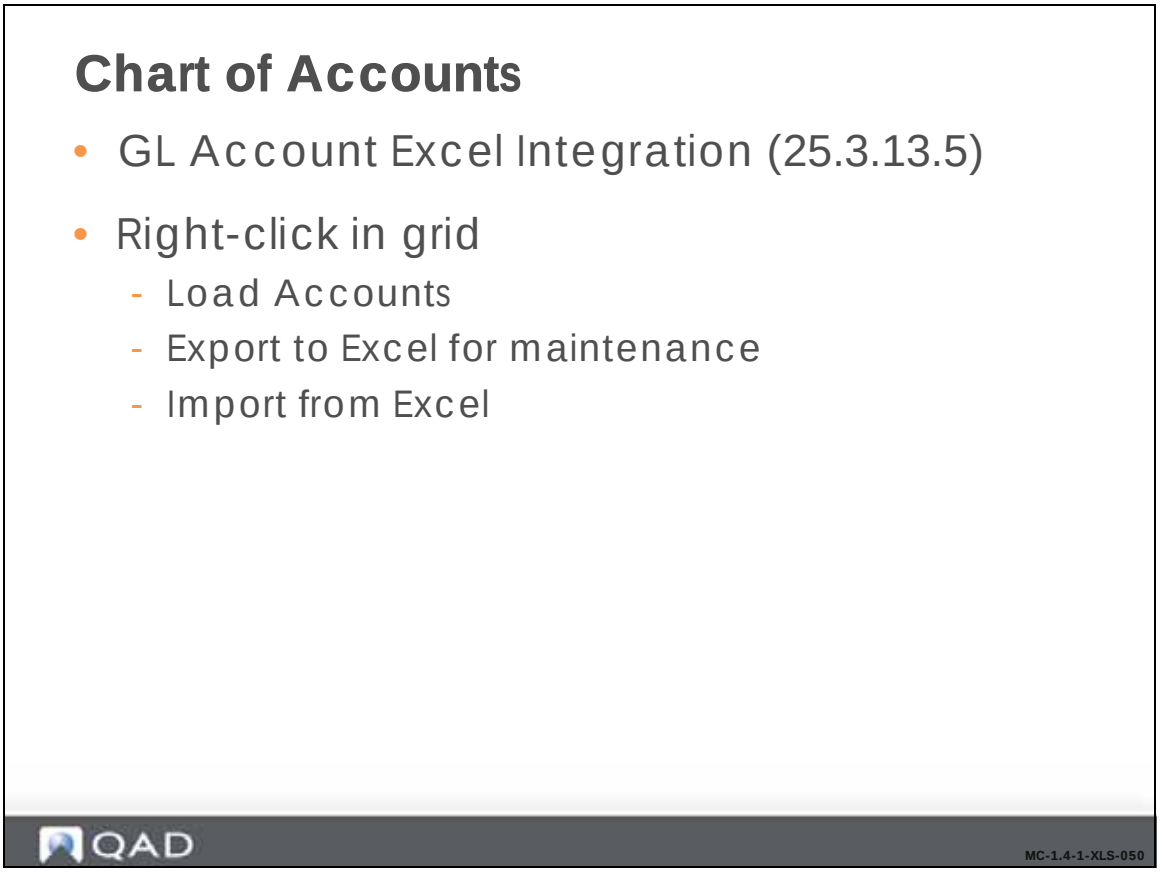
When you export to Excel, all settings configured for the specific type of record are placed in the spreadsheet, including custom business fields. Each setting and field is converted to a column heading, and the columns contain the value assigned to the field for that business component.

With advanced Excel integration, you can:

- Export all records to Excel for remote maintenance. You can then modify the data and re-import the saved results to the system database.
- Create a blank template that consists of column headings for all fields in a business component, and export this template for remote maintenance. You can then create the data in the spreadsheet or load data from another application into the template for import to the system database.

Advanced integration with Excel is available as a right-click option on the results grid of business components that support it. To view the complete list, see *Introduction to QAD Enterprise Applications User Guide*.

Chart of Accounts



Load Data for Export to Excel for Maintenance

In the following sections, we will review the areas where Excel integration can be used, and learn how to load data for export to Excel for maintenance.

The Load option lets you retrieve all records for a supported business component (such as GL accounts and business relations) from the database, and export them to Excel for maintenance.

This activity includes multiple steps:

- You choose the Excel Integration activity and load data into the grid using the Load option.
- You then export the data to a spreadsheet, open the data in Excel, and modify it.
- After saving your changes, you return to the QAD application and import the modified data.

Business Relations

Create an Empty Grid and Load Data

To export data for maintenance:

1. Choose the Excel Integration activity for one of the supported record types such as customer.

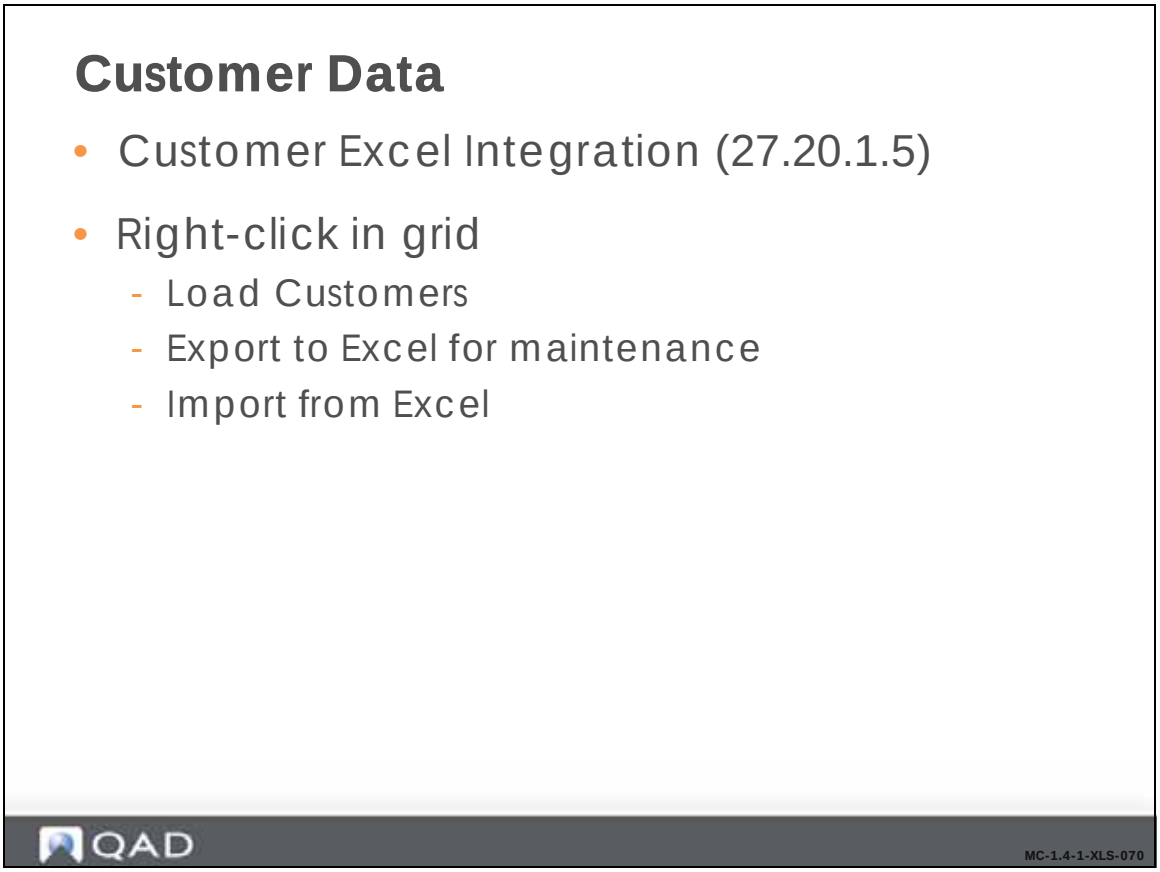
   The system displays a blank grid containing the data fields for this business component as column headings.

2. Right-click the blank grid and choose Load Customers.

   The system retrieves all customer records for the shared set of the current domain and loads them into the grid. The order of columns in the grid is determined by the sequence of the fields in the original data model. This is the order in which the fields will appear in the spreadsheet.

Note You can also load a selection of business relations by right-clicking and choosing Load Business Relations by Filter. The load by filter function is available in several Excel Integration programs. To view the complete list, see *Introduction to QAD Enterprise Applications User Guide*.

Customer Data



Export Data to Excel

When you right-click in Customer Excel Integration and load the customer data for the shared set of the current domain, you can also modify the loaded data directly on screen before exporting it to Excel. Your modifications are validated when you click Save.

Important You should **not** customize the display by hiding columns before export. When you hide a column, the corresponding field is not exported to the spreadsheet. If the field is mandatory, the system attempts to validate it before saving the data to the database, and the absence of the column will generate validation errors.

To export the data to Excel:

1. Right-click in the grid and choose Export to Excel for Maintenance.
2. At the prompt, enter the name of the spreadsheet in which to save the data.
3. Open the spreadsheet in Excel and make your changes.

   Note You do not need to exit the QAD application before working in Excel. For minor maintenance, it generally more convenient to run the applications simultaneously, and to switch back to your QAD application to import the saved data.

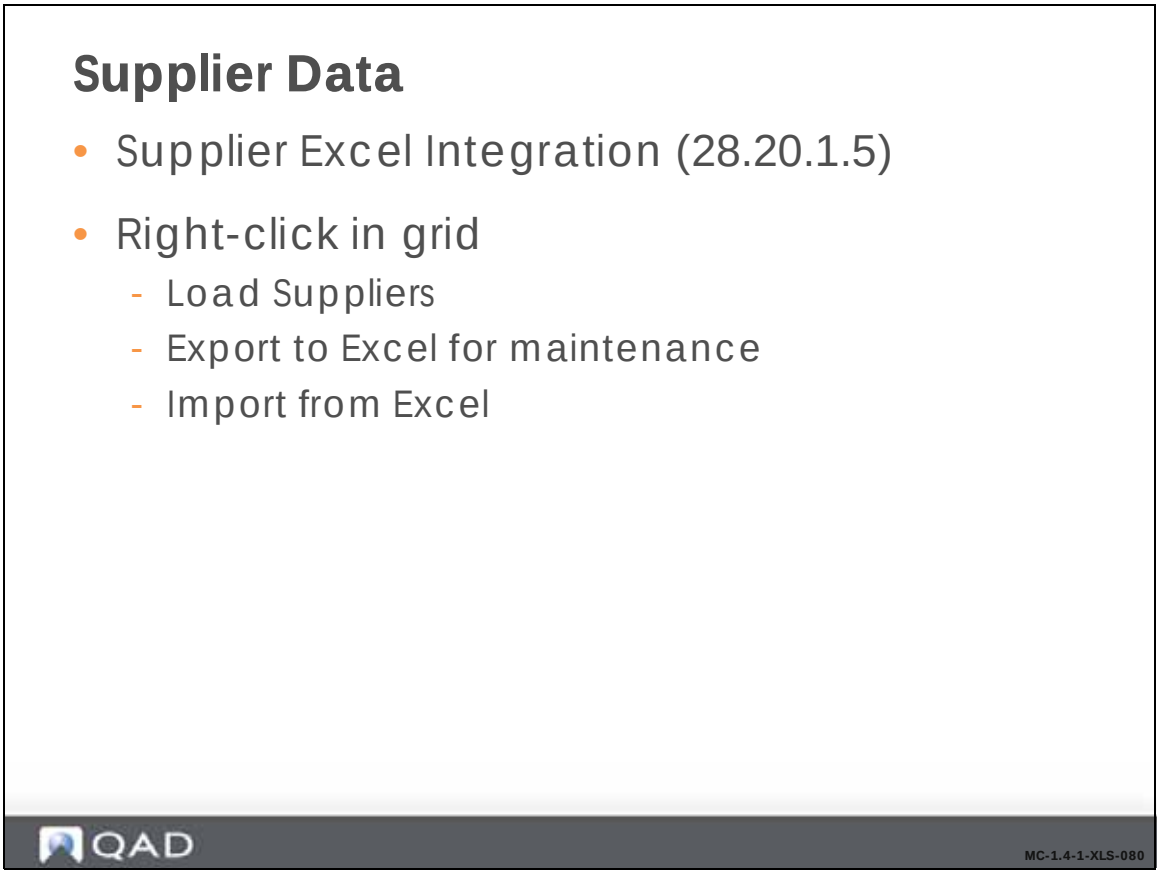
The exported Excel spreadsheet has the following features:

- The first row of every spreadsheet contains logical identifiers for the business component fields. You can edit these identifiers for maintenance purposes within Excel. When you import your saved data into the system, your edits are discarded.
- The second row contains technical identifiers for the business component fields. These identifiers correspond directly to the database tables, and must not be edited. Any change you make to a logical identifier generates an error during validation.
- The other rows contain your business component data.
- The spreadsheet contains business component ID columns, which identify the business component instances in the databases. You cannot edit these IDs, and you should leave these columns blank for any new rows you create. Each spreadsheet can contain a number of ID columns. For example, when you export business relation data to a spreadsheet, there are ID columns for business relation, address, default SAF, contact, and tax number.
- All rows are imported into the system, which lets you hide unnecessary rows while working with large spreadsheets. You should avoid hiding columns, however, as hidden columns are not imported. You can create extra columns for maintenance purposes, which are also not imported.
- Avoid using the Sort option in Excel.

  Most business components contain sub-level information. For example, the business relation can contain separate address rows for head office, delivery, invoice, reminder and remittance, and can also contain contact details.

  When you export to Excel, the main business component data and its sublevel data is grouped together in a hierarchy, with each main business component row followed by sublevel rows. If you sort the data in Excel, the sublevel rows are rearranged throughout the spreadsheet, and the hierarchical relationship is lost. This creates a conflict and prevents you from importing the saved data.
- Ensure that your column widths are set to Autofit before saving. If the column width is too narrow and the data is not readable, the data will not import correctly.
- The spreadsheet you create must have the Shared attribute, which lets other network users modify the data.
- Be aware of mandatory fields while you are modifying data. For example, you must specify a bank number, currency, and banking profile when you create a GL bank account. If you do not enter valid information for these fields, an error occurs after import when you try to save the data.

Supplier Data



Import Modified Data from Excel

When you have completed the modifications:

1. Save the changes to your Excel spreadsheet.
2. Switch back to your QAD application.
3. Right-click in the business component data grid and choose Import from Excel.
4. When prompted, select your spreadsheet and click OK.
5. Click Save to validate the data and save to the database.
6. If the system returns validation errors, you can resolve them on screen at this stage, and save again to validate.

Create a Template for Use in Excel Integration

This option creates a blank spreadsheet for maintenance that contains the relevant fields as column headings. This is similar to the previous activity, but you do not load existing system data. You use the template to add your own data and import it, which creates new records in the system.

1. Choose the Excel Integration activity for a supported business component, such as customer.

   The system displays the blank grid consisting of the data fields as column headings.

2. Right-click the blank grid and choose Export to Excel for Maintenance.

3. Open the spreadsheet in Excel and make your modifications. Save the spreadsheet and import the data into the application, as described in “Import Modified Data from Excel” on page 49.

   Leave the first column with the <component name>_ID field blank. The system supplies the IDs when you import the data

4. Save your spreadsheet and import the data into the application, as described in “Import Modified Data from Excel” on page 49.

Bank Numbers

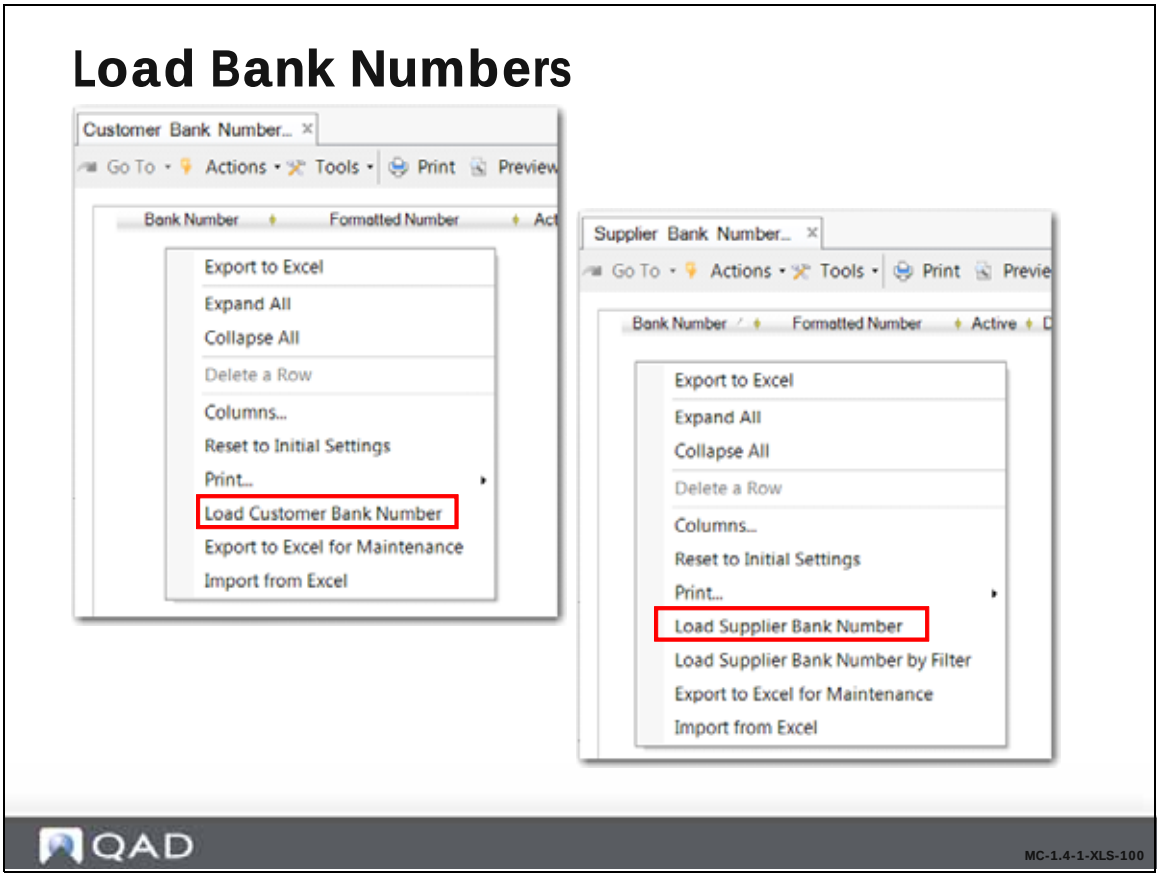
Bank Numbers

- Up to QAD 2009.1 EE
  - Upload new bank numbers only
  - Unsuitable for mass updates (no Load Data option)
- From QAD 2010 EE
  - New Load Data option
  - Can be used for mass updates

QAD MC-1.4-1-XLS-090

You can use Customer Bank Number Excel Integration (27.20.1.8) and Supplier Bank Number Excel Integration (28.20.1.7) to load bank numbers and modify existing bank number records. You can also export the data to Excel for update or review.

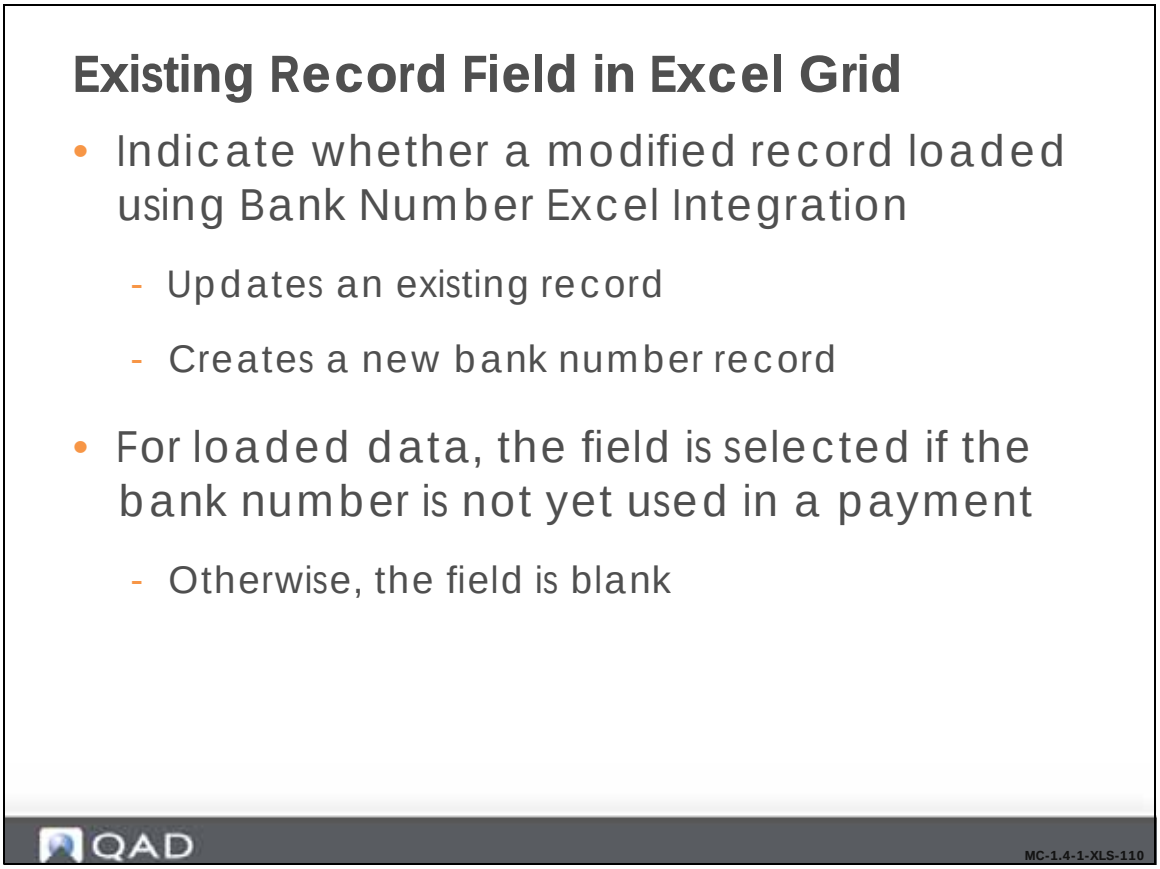
Load Bank Numbers



You can use the Load Bank Numbers option in the right-click menu in the grid to load all existing customer or supplier bank numbers. You can then make mass updates to all the bank numbers; for example, changing the own bank number of a cross-section of customers. The Existing Record field in the grid lets you determine whether the bank number record you modified updates an existing record or creates a new bank number record.

Note Supplier Bank Number Excel Integration also enables you to load supplier bank numbers by filter.

Existing Record Field in Excel Grid



The Existing Record field lets you control how the system treats existing bank number records modified using Bank Number Excel Integration. When using Bank Number Excel Integration, the combination of customer code, bank number, own bank number, and payment format uniquely identifies a record.

If you modify an existing bank number record in the grid and leave the Existing Record field selected, the system tries to locate a unique bank number record to update that has the same key identifier values as the record you modified in the grid. If the system locates a single matching record, it saves your change as a modification to the existing record. If the system cannot find a matching record to update, an error message displays.

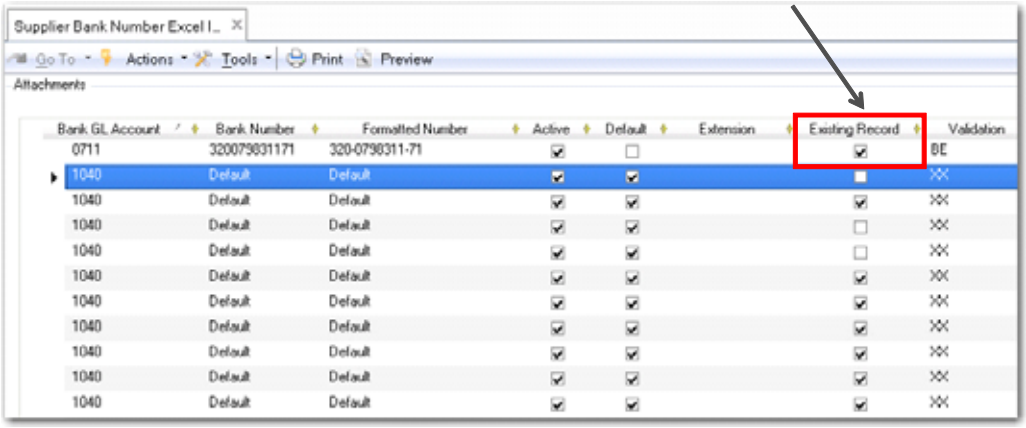
If you modify an existing bank number record in the grid and deselect the Existing Record field, the system saves your change as a new bank number record.

When you load existing bank number records from the database, the Existing Record field is automatically selected for bank numbers that have never been used in a payment and is deselected for bank numbers that have been used in payments. If a bank number is used in a payment, you can no longer update the bank number record.

Before using combinations of own bank numbers and payment formats in Excel integration, you must define them first in Bank Payment Format Link.

Existing Record Field in Excel Grid

- For newly imported data, the field is blank, and the system creates a new bank number



Bank GL Account	Bank Number	Formatted Number	Active	Default	Extension	Existing Record	Validation
0711	320079831171	320-0798311-71	☑	☐		☑	BE
1040	Default	Default	☑	☑		☐	
1040	Default	Default	☑	☑		☑	
1040	Default	Default	☑	☑		☐	
1040	Default	Default	☑	☑		☐	
1040	Default	Default	☑	☑		☑	
1040	Default	Default	☑	☑		☑	
1040	Default	Default	☑	☑		☑	
1040	Default	Default	☑	☑		☑	
1040	Default	Default	☑	☑		☑	
1040	Default	Default	☑	☑		☑	

MC-1.4-1-XLS-120

Incoming Bank Files

Incoming Bank Files

- Export a template from Incoming Bank File Excel Integration (31.1.12)
- Complete the template with bank file data
- Import to Incoming Bank File Excel Integration
- Save the file and process it in Process Incoming Bank Files (31.1.6)

QAD

MC-1.4-1-XLS-121

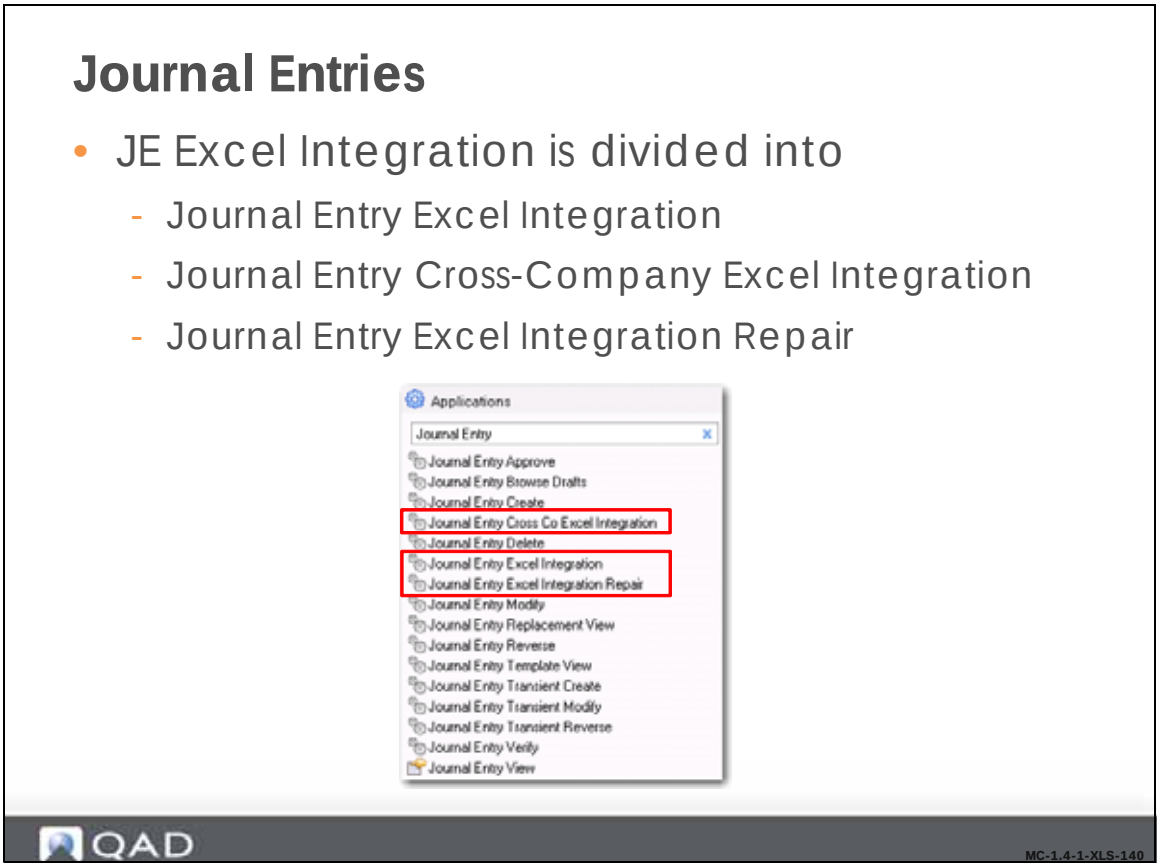
Opening Balance Create

Opening Balance Create

- Customer (27.1.10)/Supplier (28.1.15)
- Transfer account
- Calculate BC/SC
- Invoice type
  - Adjustment, Credit note, Credit note correction, Invoice, Invoice Correction
- Customers: Ship-to/Ship-From
- Suppliers: Invoice Status Code
  - Allocation status: any or allocated

QAD MC-1.4-1-XLS-130

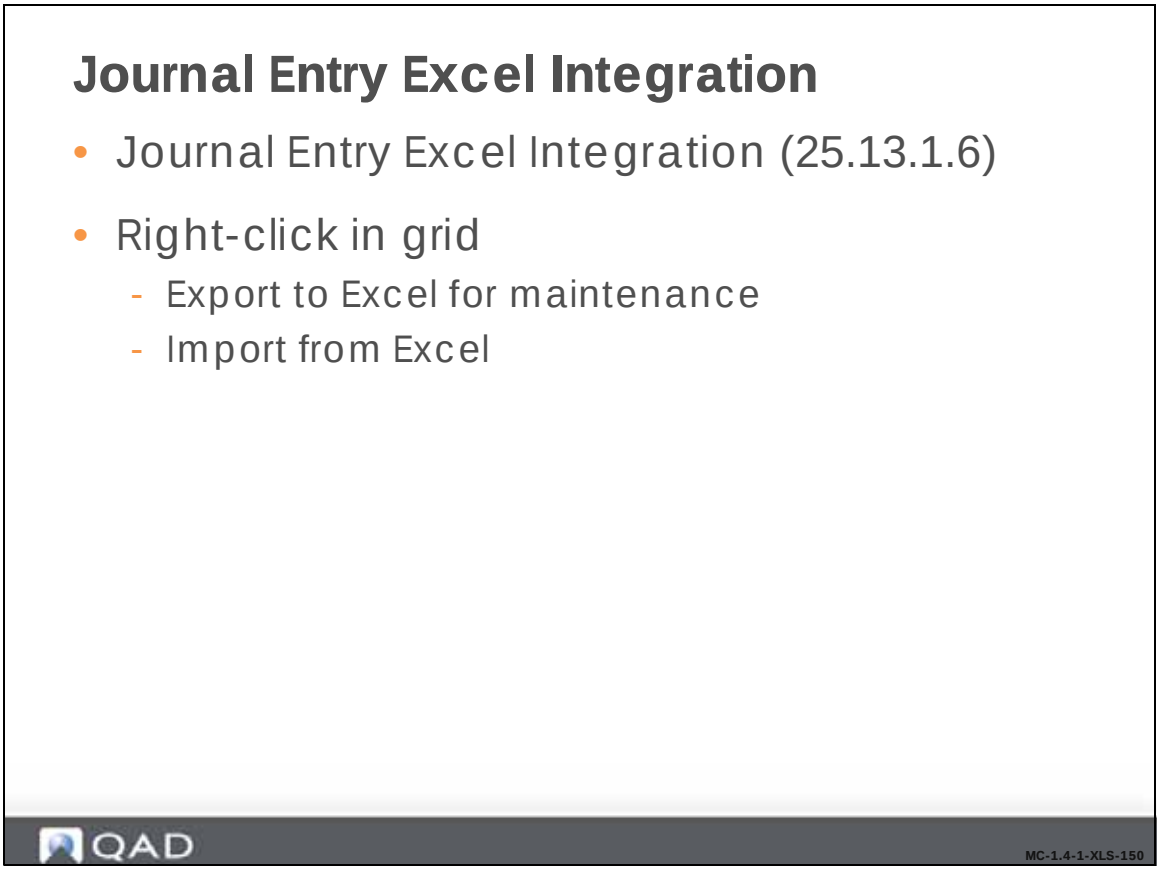
Journal Entries



Journal Entry Excel Integration encompasses three functions:

- Journal Entry Excel Integration.
- Journal Entry Cross Company Excel Integration.
- Journal Entry Excel Integration Repair, designed for use by authorized personnel to repair existing inconsistencies in the system.

Journal Entry Excel Integration



Using the Journal Entry Excel Integration (25.13.1.6) feature, you can export data into Excel spreadsheets for analysis or reporting. You can also create new data within Excel and import it to the system database, where it is validated before being saved.

You cannot use Journal Entry Excel Integration to load postings for accounts that do not accept manual postings; for example, control accounts, customer and supplier payment accounts, inventory accounts, WIP accounts, and purchase order receipt system type accounts.

Note Journal Entry Cross Co Excel Integration (25.13.1.10) also enables you to create journal entry postings within the same entity.

JE Cross-Company Excel Integration

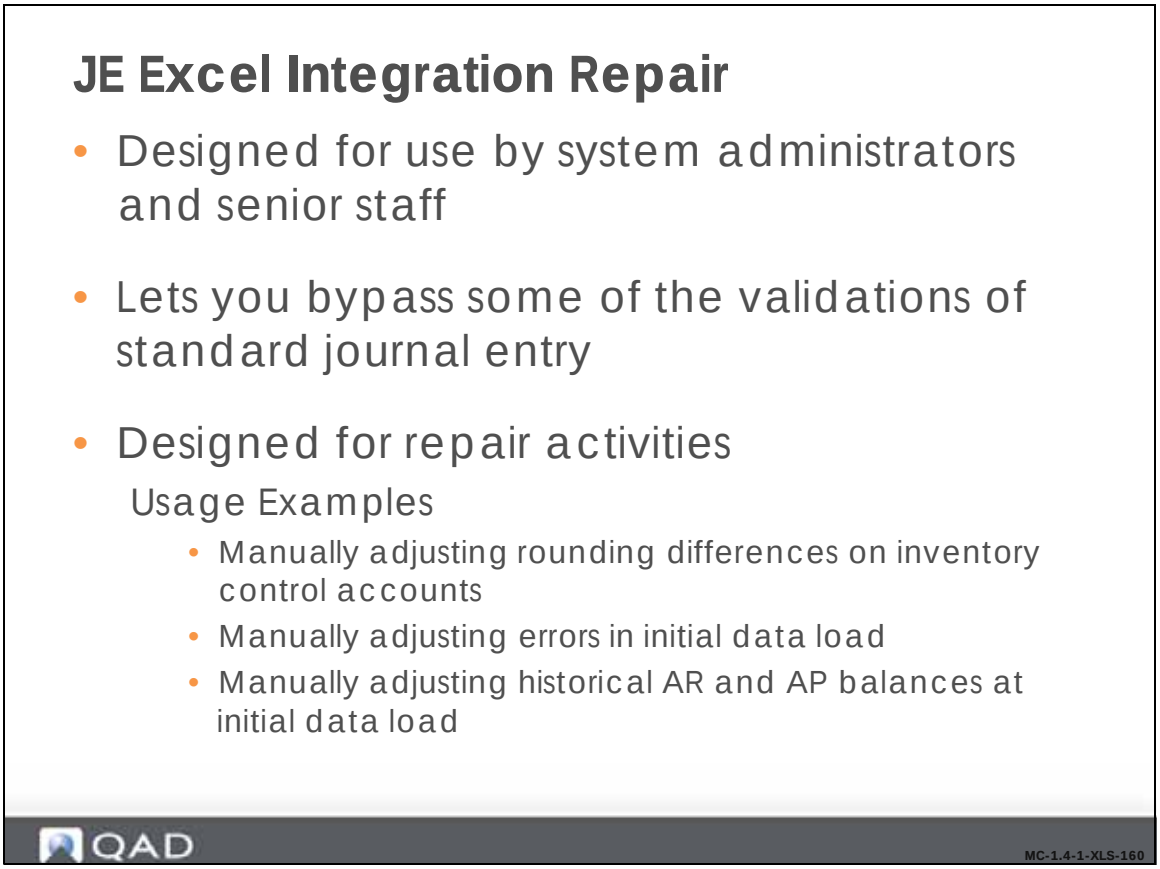
Use Journal Entry Cross Co Excel Integration (25.13.1.10) to load multi-entity and cross-company journal entries defined in an Excel spreadsheet and post them to multiple entities. You can also use this function to create journal entry postings within the same entity.

To use the function, you must have access to all entities for which you want to create postings, and you must also be assigned role permissions that grant you access to Journal Entry Create in those entities.

You can export grid data into Excel spreadsheets for analysis or reporting. You can also create new data within Excel and import it to the system database, where it is validated before being saved. You can also export any transactions that fail to post to Excel for correction. Correct any errors to the spreadsheet and open Journal Entry Cross Co Excel Integration again to load the corrected transactions.

It is recommended that you use Journal Entry Cross Co Excel Integration for all journal entry postings from Excel. It offers transaction posting line by line, detailed error messages, and the ability to automatically create correction reversal and auto reversal journal entries.

JE Excel Integration Repair



In exceptional circumstances, your system administrator can use Journal Entry Excel Integration Repair (25.13.1.18) to repair inconsistencies between control accounts and their related sub-ledgers. In Journal Entry Excel Integration Repair, the GL account validation is unrestricted, and it is possible to post to control accounts without posting to the corresponding sub-ledger. It is important to restrict user access to this tool because it can create inconsistencies between GL control accounts and the sub-ledgers.

JE Excel Integration Repair

NOT for use in

- Day-to-day accounting activities
- Correcting discrepancies between GL and AR/AP
  - This requires intervention by QAD Support!

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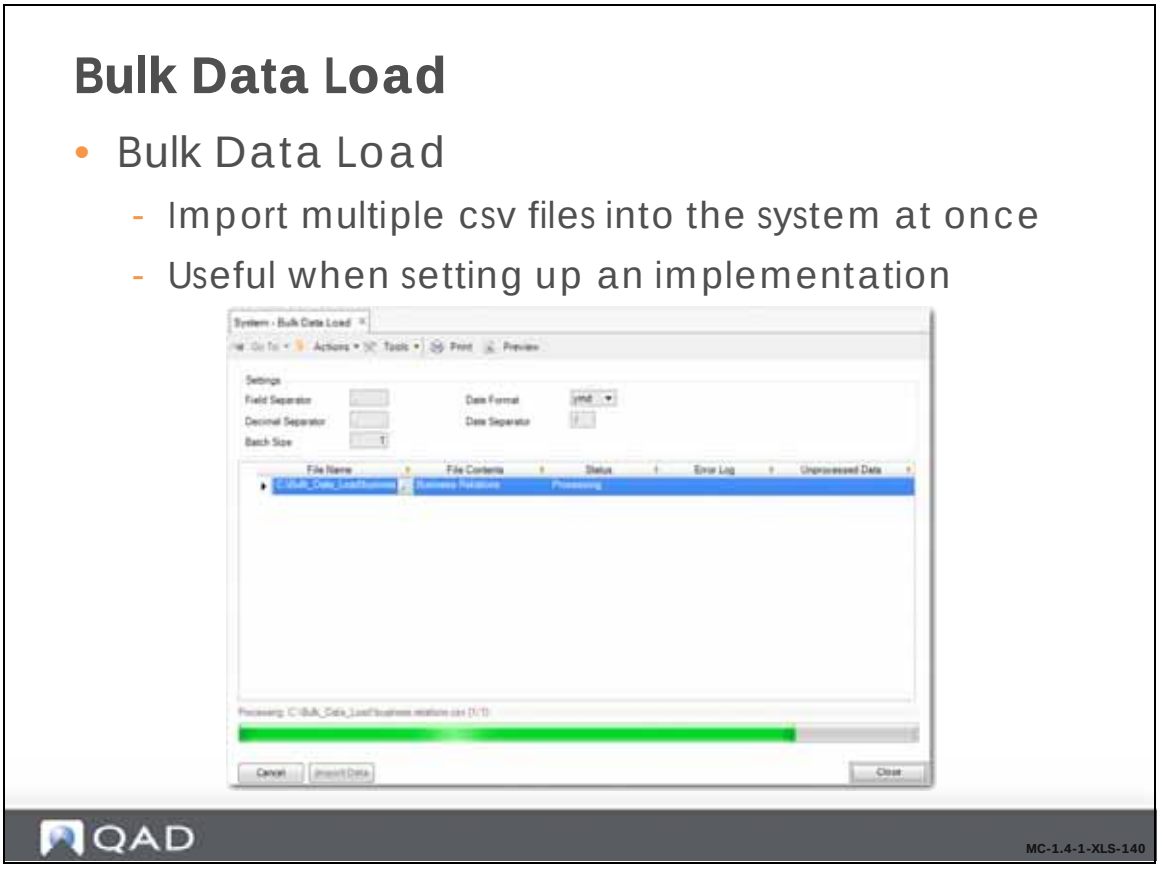
Journal Entry Excel Integration Repair should only be used by authorized personnel to solve existing inconsistencies in the system.

Bulk Data Load



The full list of files and the recommended order of import using Bulk Data Load is: SAF codes, business relations, daybooks, GL accounts, sub-account masks, sub-accounts, cost center masks, cost centers, project masks, projects, COA cross references, exchange rates, customers, customer ship-tos, customer bank numbers, end users, customer opening balances, suppliers, supplier bank numbers, employees, supplier opening balances, and journal entries.

It processes file content in batches, so that an error in one batch does not cause the entire import process to fail.

When the import begins, one or more log files are created with information on the progress of the import. A log file with the name `QAD-Bulk-Data-Load-Logging.txt` is stored in each folder that contains a file to be imported.

If there is an error with the import, then the details of the error are stored in a file called `<FILE-NAME>-errors.txt` where <FILE-NAME> is the name of the file that you added to the grid for import.

If the import does not complete, then the lines that are not processed are stored in a file called `<FILE-NAME>-failed.csv` where <FILE-NAME> is the name of the file that was not fully imported.

Hands-On Exercises

Log in to 10USACO or 22UKCO

Exercise 1: GL Account Excel Integration

1. In GL Account Excel Integration (25.3.13.5), right-click in the grid and select Load Accounts.
2. Right right-click in the grid again and select Export to Excel for Maintenance.
3. Enter a file name and a location for your file.
4. Go to the dump location and open the Excel file.

   The worksheet displays field labels on the first row, and field names on the second row. Do not modify these two rows.
5. Make some modifications to the rows below. Add some accounts, modify others.

   Add the following account:

Field	Value
Account	2059
Description	Supplier Open Bal Trans
Type	Standard
Category	Liability
Proj Analysis Cost Center Account Sub-Account Intercompany Account Quantity Base Currency SAF Auto Fixed IC Val Date	False
Active	True
Budget Enabled	True
Debit/Credit	True
Balance Account	True
TC Revaluation in BC TC Revaluation in SC Analysis Limit Analysis	None
Manual Posting	
Consolidation Method	Current
Category	Asset
Balance/P&L	Balance
Debit/Credit	Debit
Auto/Manual	Manual
Sub-Account	Blank

6 Save when you are done. Return to the QAD application.

7 In the GL Account Excel Integration grid, right-click and select Import from Excel.

8 Select your location and file name.

9 Click Open.

10 In GL Account Excel Integration, verify that the data is as you entered in Excel.

If a description is too long, an error message displays:

"Value is too long."

You can correct this in the grid.

11 Save your changes in GL Account Excel Integration.

Exercise 2: Business Relation Excel Integration

This process is similar to that for GL accounts. You will export the business relation data to Excel, and use the file as a template for data load.

1 Open Business Relation Excel Integration (36.1.4.3.5).

2 Right-click the grid and select Export to Excel for Maintenance.

This option exports a blank spreadsheet in the format required for loading business relations.

3 Open the Excel file you exported.

The first row on the Excel file shows field labels, the second row database field names. Do not modify these rows. Do not change the order of the columns.

4 In the exported Excel file, add a row for the new business relation:

10USACO

Field	**Value**
Business Relation Code	10-C1006
Business Relation Name	Global Aluminum US
Search Name	Global Aluminium
Act	True
Address Type	Headoffice
Address Line 1	11 Reston Street
Zip Code	07310
City	Jersey City
State	NJ
Country	US
Tax Zone	USA
Lang	US
Contact	
Name	Muller
Initials	J

Field	Value
Gender	Male
Function	Sales Manager
Telephone	+1-201-75800123
Lang	US
Primary	True

22UKCO

Field	Value
Business Relation Code	22-C1003
Business Relation Name	Global Aluminium UK
Search Name	Global Aluminium UK
Act	True
Address Type	Headoffice
Address Line 1	11 Amberley Way
Zip Code	BS1 7EQ
City	Bristol
Country	GB
Tax Zone	GB
Lang	US
Primary	True
Contact	
Name	Bedford
Initial	M
Gender	Male
Function	Sales Manager
Telephone	+44-117-7580013
Lang	US

5 Return to the QAD application.

6 In the Business Relation Excel Integration grid, right-click and select Import from Excel.

Exercise 3: Supplier Excel Integration

1 Open Supplier Excel Integration (28.20.1.5).

2 Right-click in the grid and select Export to Excel for Maintenance.

3 Enter a file name and a location for your file.

4 Go to the dump location and open the Excel file.

5 Create supplier 10S1007 in entity 10USACO:

Field	Value
Supplier	10S1007
Business Relation	10-C1006
Default Currency	USD
Credit Terms	2M
Invoice Status Code	999
Control GL Profile (Invoice)	APcontrol3rdparty
Control GL Profile (Credit Note)	APcontrol3rdparty
Control GL Profile (Pre-payment)	APcontrol3rdparty
Sub-Account Profile	Mech
Purchase Account GL Profile	Purchase
Supplier Type	OTH
Taxable Supplier	True
Tax Zone	USA
Tax Class	H
Tax Nature	None
Tax Level	None

Create supplier 22S1003 in entity 22UKCO.

Field	Value
Supplier Code	22S1003
Business Relation	22-C1003
Default Currency	GBP
Credit Terms	2M
Invoice Status Code	999
Control GL Profile (Invoice)	APcontrol3rdparty
Control GL Profile (Credit Note)	APcontrol3rdparty
Control GL Profile (Pre-payment)	APcontrol3rdparty
Sub-Account Profile	Mech
Purchase Account Profile	Purchase
Supplier Type	OTH
Taxable	Yes
Tax Zone	GB
Tax Class	H
Tax Nature	None
Tax Level	None

Exercise 4: Supplier Bank Number Excel Integration

1 Open Supplier Bank Number Excel Integration (28.20.1.7).

2 Right-click in the grid and select Export to Excel for Maintenance.

3 Save the Excel spreadsheet.

4 Open the exported, blank spreadsheet and create the following supplier bank account:

In entity 10USACO:

Field	Value
Bank Number	US800800
Formatted Number	US800800
Active	True
SWIFT Code	Blank
Default	True
Validation	XX
Own Bank Account	55667342
Bank GL Account	1100
Payment Format	CHECK-AP
Type	CREDITOR
Parent Object Code	10S1007
Currency	USD
Entity Code	10USACO

In entity 22UKCO:

Field	Value
Bank Number	UK800800
Formatted Number	UK800800
Active	True
SWIFT Code	Blank
Default Bank	True
Validation	XX
Own Bank Account	UK5564999
Bank GL Account	1120
Payment Format	UK-Check
Parent Type	CREDITOR
Parent Object Code	22S1003
Currency	GBP
Entity Code	22UKCO

Exercise 5: Supplier Open Items

1 Open Supplier Opening Balance Create (28.1.15).

2 In entity 10USACO, enter the following data:

Field	Record 1	Record 2	Record 3
Posting Year/GL Period	System date	System date	System date
Posting Date	Last day of current GL period	Last day of current GL period	Last day of current GL period
GL Transfer Account	1670	1670	1670
Action	Save	Save	Save
	Grid Fields		
Supplier Code	10S1007	10S1007	10S1007
Invoice Type	Invoice	Credit Note	Adjustment
Sub-Acct	Mech	Mech	Mech
Daybook Code	SINV	SCNHO	SUPADJ
Invoice Voucher	99900001	8880002	7770003
Invoice Date	Last day of current GL period	Last day of current GL period	Last day of current GL period
Invoice Tax Point Date	Last day of current GL period	Last day of current GL period	Last day of current GL period
Invoice Reference	INV1007-1	CN1007-1	BE1007-1
Invoice Description	Inv Po1001	Corr on inv	Prepayment
Posting Text	InvPo1001	Corr on inv	Prepaym
TC Invoice Amount	2,000	500	250
Curr	USD	USD	USD
Bank Number	US800800	US800800	US800800
Invoice Due Date	1 month from invoice date	1 month from invoice date	1 month from invoice date
Credit Term	1M	1M	1M
Invoice Status Code	OK2PAY	OK2PAY	OK2PAY
Daybook Set Code	10PURCH	10PURCH	10PURCH

In entity 22UKCO, enter the following data:

Field	Record 1	Record 2	Record 3
Posting Year/GL Period	System date	System date	System date
Posting Date	Last day of current GL period	Last day of current GL period	Last day of current GL period
GL Transfer Account	1670	1670	1670
Action	Save	Save	Save
	Grid Fields		
Supplier Code	22S1003	22S1003	22S1003
Invoice Type	Invoice	Creditnote	Adjustment
Sub-Acct	Mech	Mech	Mech
Daybook Code	SINV	SCNHO	SUBADJ
Invoice Voucher	99900001	8880002	7770003

Field	Record 1	Record 2	Record 3
Invoice Date	Last day of current GL period	Last day of current GL period	Last day of current GL period
Invoice Tax Point Date	Last day of current GL period	Last day of current GL period	Last day of current GL period
Invoice Reference	INV1003-1	CN1003-1	BE1003-1
Invoice Description	Inv Po1001	Corr on inv	Prepaym
Posting Text	InvPo1001	Corr on inv	Prepaym
TC Invoice Amount	2,000	500	250
Curr	GBP	GBP	GBP
Bank Number	UK800800	UK800800	UK800800
Invoice Due Date	1 month from invoice date	1 month from invoice date	1 month from invoice date
Credit Term	1M	1M	1M
Invoice Status Code	OK2PAY	OK2PAY	OK2PAY
Daybook Set Code	22PURCH	22PURCH	22PURCH

Exercise 6: Journal Entries

1. Open the `QMI Documentation/Financial Activities` folder on the desktop.
2. Download the file `accrualJE USD.xlsx` if you are in 10USACO or download the file `accrualJE GBP.xlsx` if you are in 22UKCO.

   The file is saved to `My Documents/Downloads`.
3. Open Journal Entry Excel Integration (25.13.1.6).
4. Import the file `accrualJE USD.xlsx` if you are in 10USACO or import the file `accrualJE GBP.xlsx` if you are in 22UKCO. Post the transactions in the period of the current system date (change the posting date, GL calendar year, and GL period to match the system date, if required):

Field	Value
Daybook	TRAJE
Sub-Account	Gserv....
Cost Center	Adm

5. In both entities 10USACO and 22UKCO, the following are the transaction posting lines:

Account	Debit	Credit
7000 (Travel)	10,000	
7010 (ICT)	900	
7200 (Repair & Maint)	1,100	
2470 (Accrual)		12,000

6. Save the transactions.
7. When complete, repeat the previous step, but save the transaction as a template.

Field	Value
Daybook	Template
Template Code	M-EXP-ACCR-1

You should now understand how easy to use QAD Financials Excel integration is, and how useful it is for loading data during implementation and modifying data in batches.

Exercise 7: Journal Entry Cross-Company Excel Integration

1. Open the QMI Documentation/Financial Activities folder on the desktop.
2. From the Excel Integration folder in the Financials Activities folder, download the file `Cross-Company-JE.xlsx`.

   When running this exercise in 22UKCO, change the source entity in the data loaded from 10USACO to 22UKCO.The file is saved to My Documents/Downloads.
3. Open Journal Entry Cross Co Excel Integration (25.13.1.10).
4. Right-click in the grid and select Import from Excel.

   Note You may need to change the GL calendar year and posting date to 2014.
5. Save the uploaded file in Journal Entry Cross Co Excel Integration.

   The status is updated to Processed in Journal Entry Cross Co Excel Integration.
6. Go to Journal Entry View to view the resultant postings. The following are the transaction posting lines:

Account	Entity	Debit	Credit
7040	10USACO	450,000	
1975	11CANCO		320,000
1975	12MEXCO		130,000

Chapter 4

ERS

Objective

Objective

- Understand the ERS functionality in QAD Enterprise Applications
- Learn how to set up and use ERS

QAD

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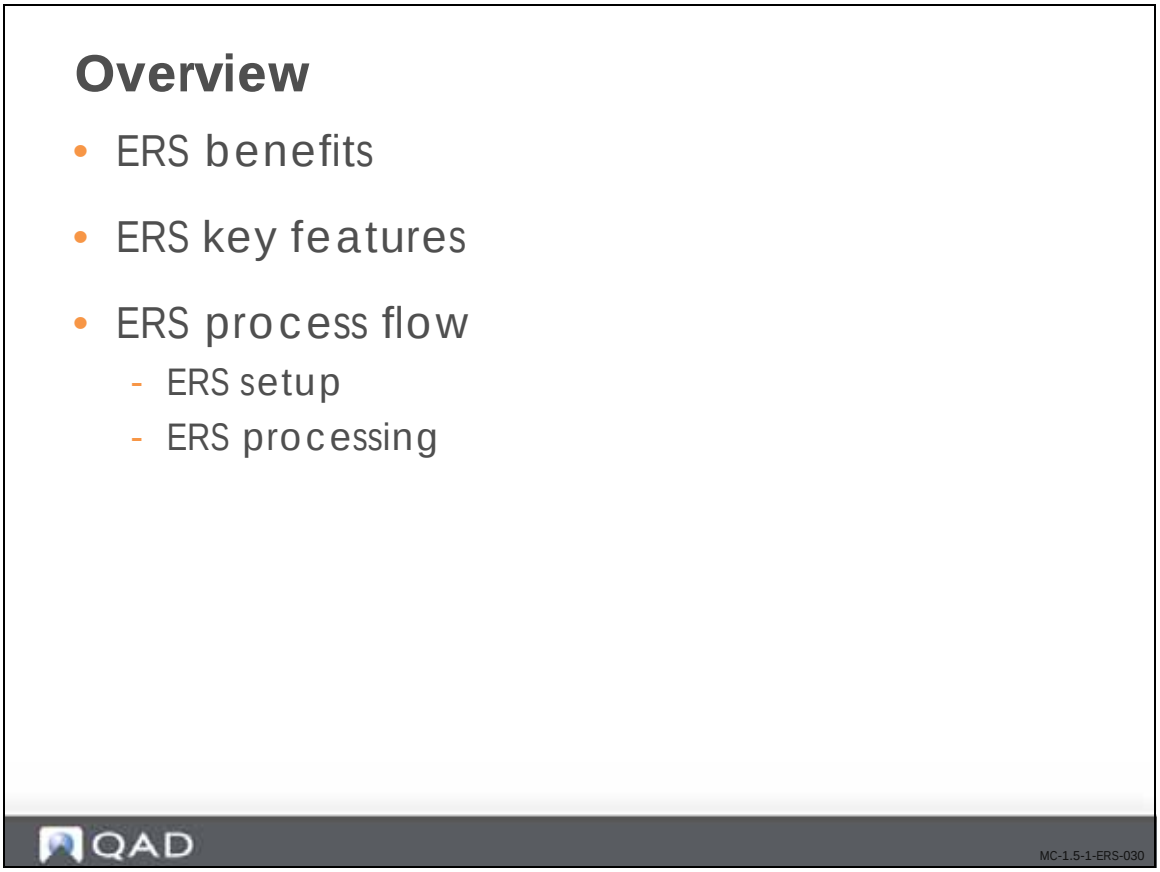
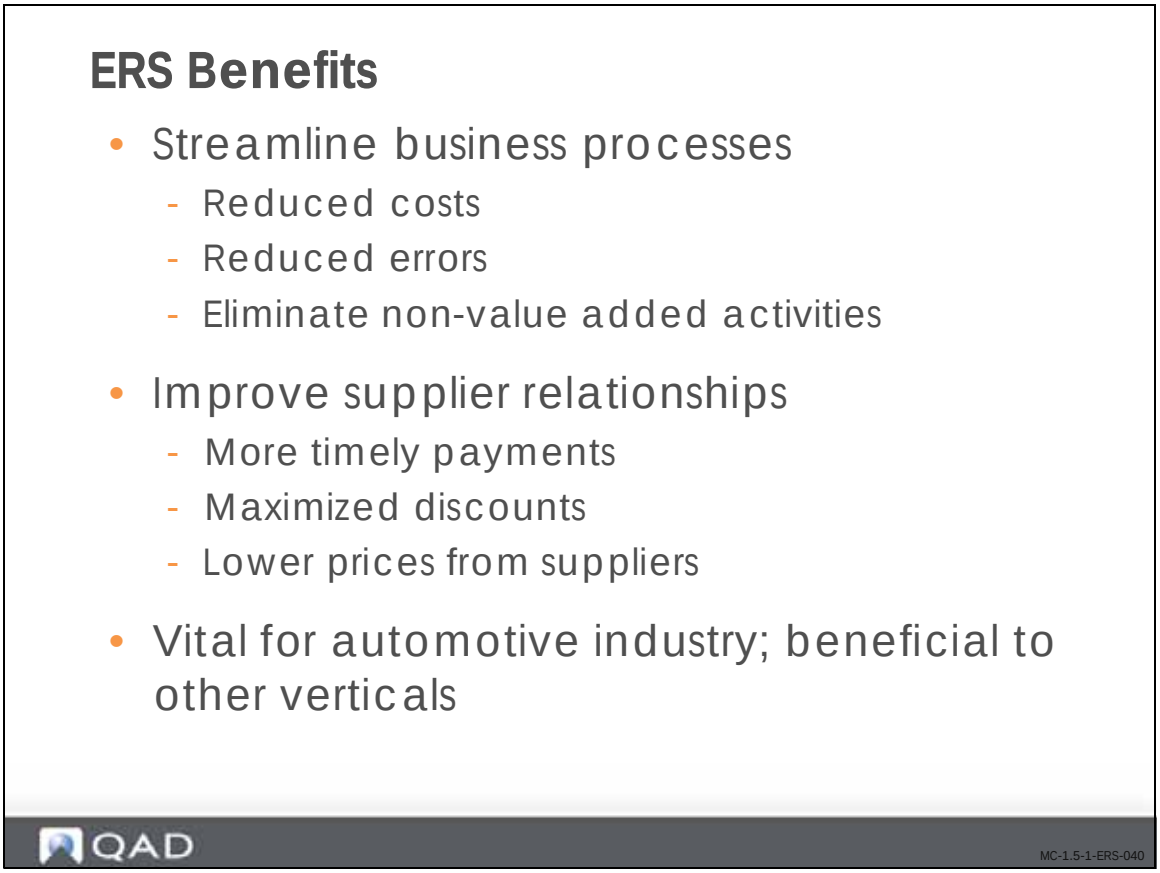
Overview



In this section, you will learn about the Evaluated Receipts Settlement (ERS) functionality, its benefits, and key features. Then, we will learn how to set up and process ERS.

ERS Benefits



The ERS function lets you generate supplier invoices and corresponding receiver matching records based on completed purchase order receipts.

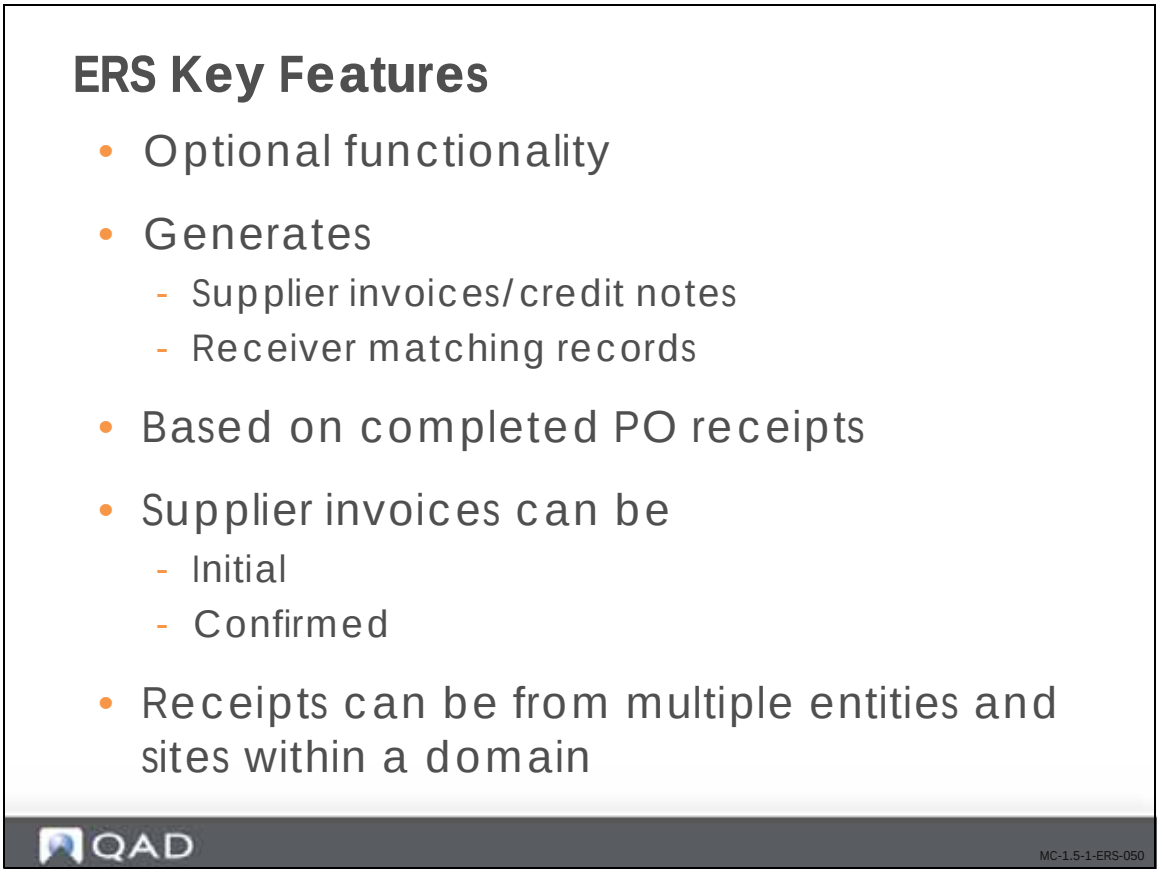
ERS offers several benefits to customers and suppliers, such as reduced clerical workload, lower costs, and reduced error rate. Several factors make an ERS system work efficiently:

- Trading partners must agree on price.
- Customers must issue purchase authorization.
- Suppliers must provide accurate shipping information.
- Customers must enter accurate receipts.

ERS improves your company's relationship to suppliers by ensuring more timely payments, accurate and maximized discounts, and lower prices.

While the ERS function can be beneficial to many verticals, it is a must for the automotive industry.

ERS Key Features



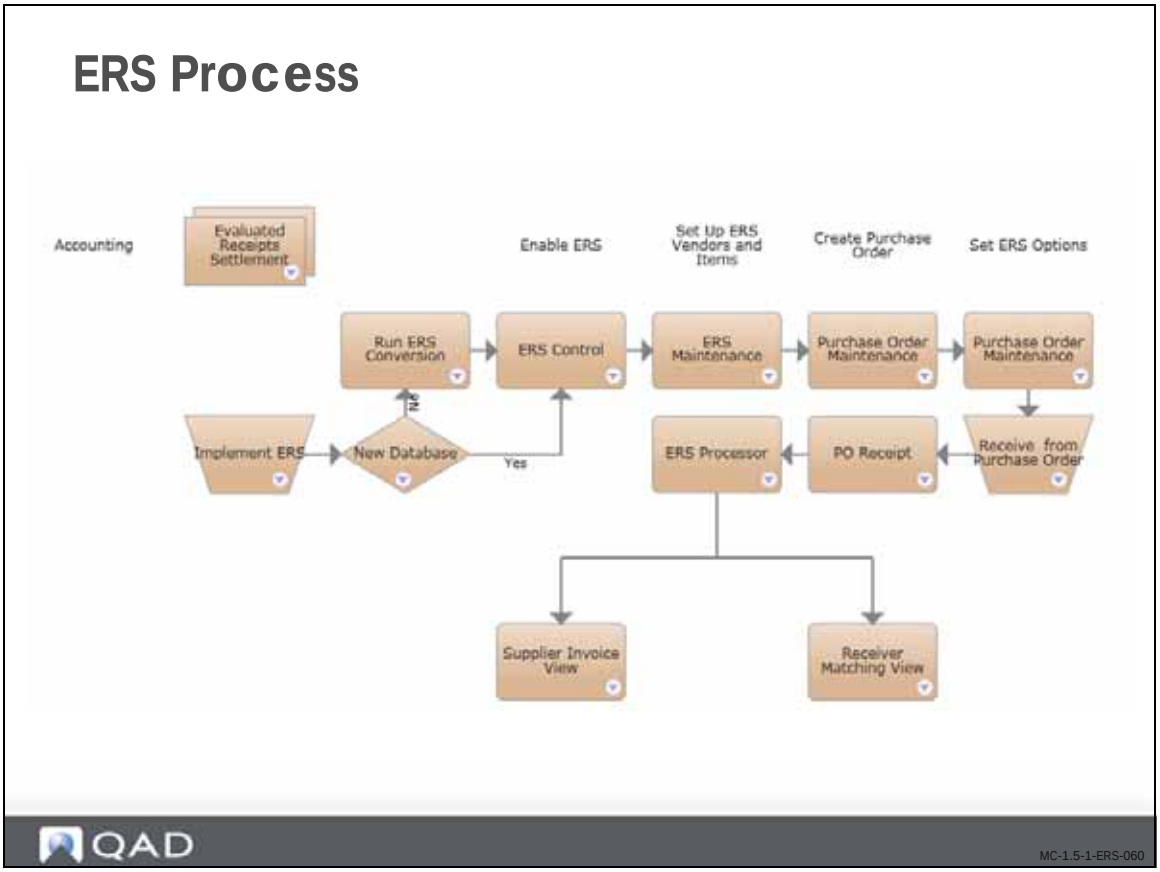
The (optional) ERS function lets you generate supplier invoices or credit notes and corresponding receiver matching records based on completed purchase order receipts. The system automatically records liabilities to the supplier based on quantities received at the unit price negotiated with the supplier in a purchase agreement.

You can use the ERS Processor program to generate supplier invoices and receiver matching for purchase orders, scheduled orders, blanket orders, pending invoices generated due to supplier consignment inventory consumption, or for receivers that become available for invoicing at time of use or when ownership changes (for example, inventory transfer, WO component issues, or shipments).

You can choose to create supplier invoices with status initial, requiring confirmation, or automatically confirmed.

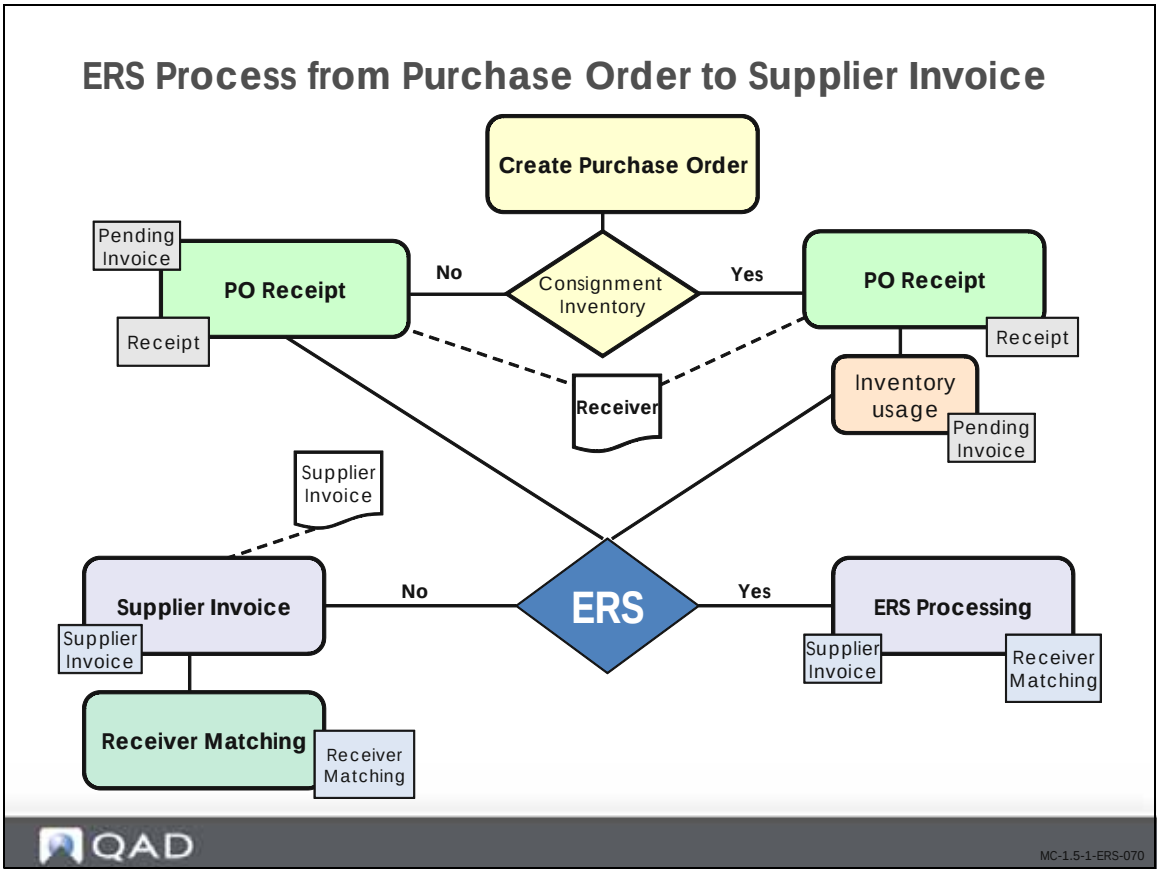
ERS can process receipts across multiple entities and sites within a domain, where the entity that recorded the purchase order and incurred the AP liability is different than the receiving entity. In this case, ERS automatically creates cross-company postings.

ERS Process



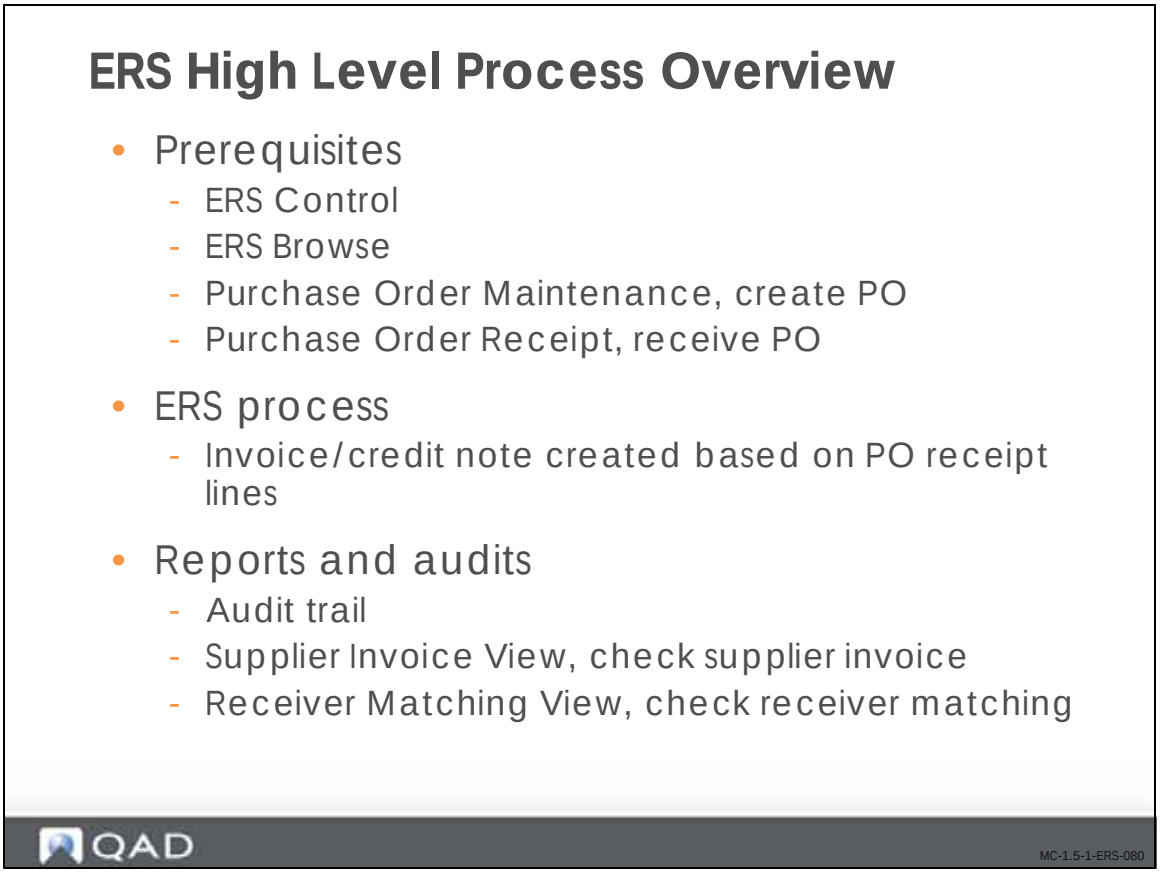
The slide shows the ERS process map from setup to supplier invoice and receiver matching.

ERS Process from Purchase Order to Supplier Invoice



For comparison purposes, the slide shows the purchase order to supplier invoice and receiver matching flow with and without ERS.

ERS High Level Process Overview



Set up ERS by setting control programs and adding required records. If you already have open purchase orders, you must also convert them to enable ERS processing (see below).

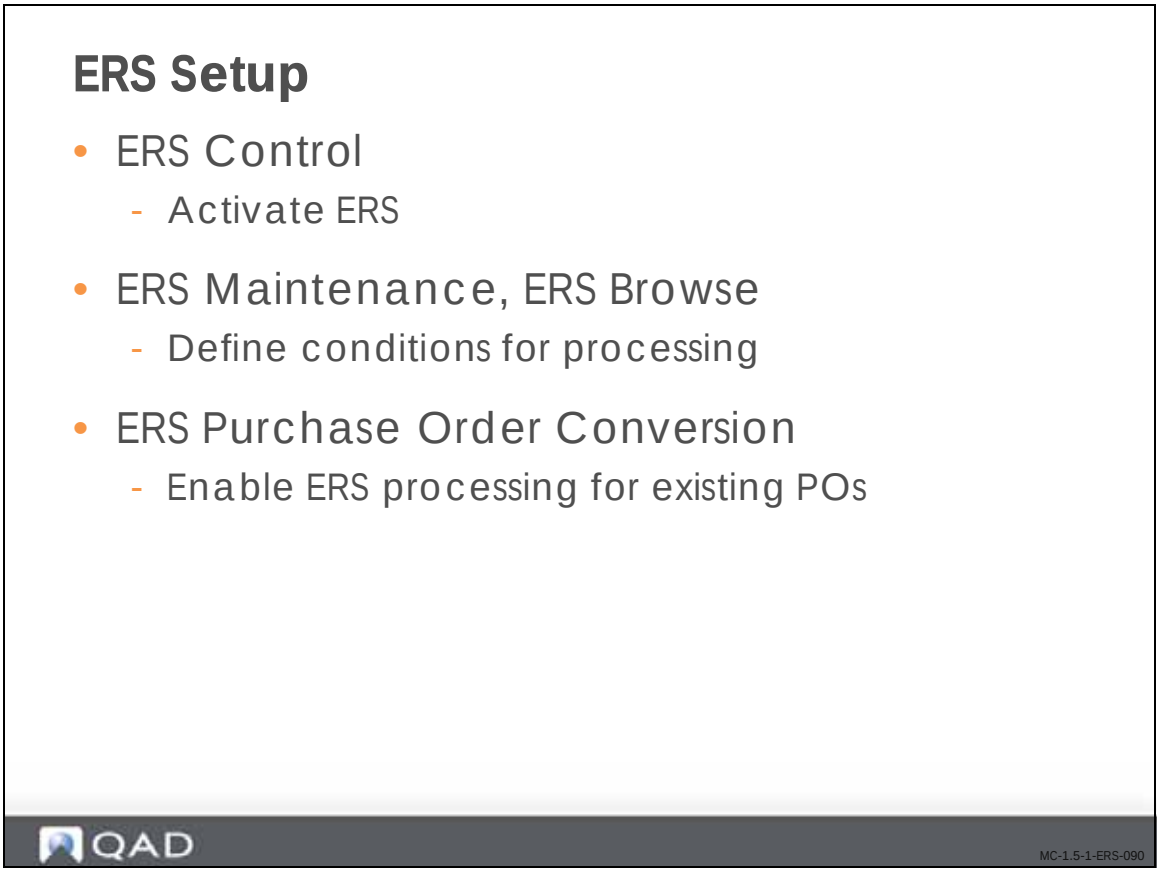
You must also set default ERS process options for purchase orders.

The ERS Processor creates an invoice or a credit note based on the purchase order receipt lines.

The system provides several ways to verify and report the ERS processing:

- Use an audit trail.
- Use Supplier Invoice View (28.1.1.3) to check the supplier invoice.
- Use Receiver Matching View (28.2.3) to verify the receiver matching.

ERS Setup



Use the fields in ERS Control (28.10.24) to activate and deactivate ERS processing, and to set options that affect ERS processing.

Use ERS Maintenance to set the default ERS processing options for a PO line, which determine:

- Whether to process the line using ERS
- When applicable, whether ERS should generate confirmed or initial invoices for the line

ERS Browse lets you review the ERS options set as default.

ERS Conversion

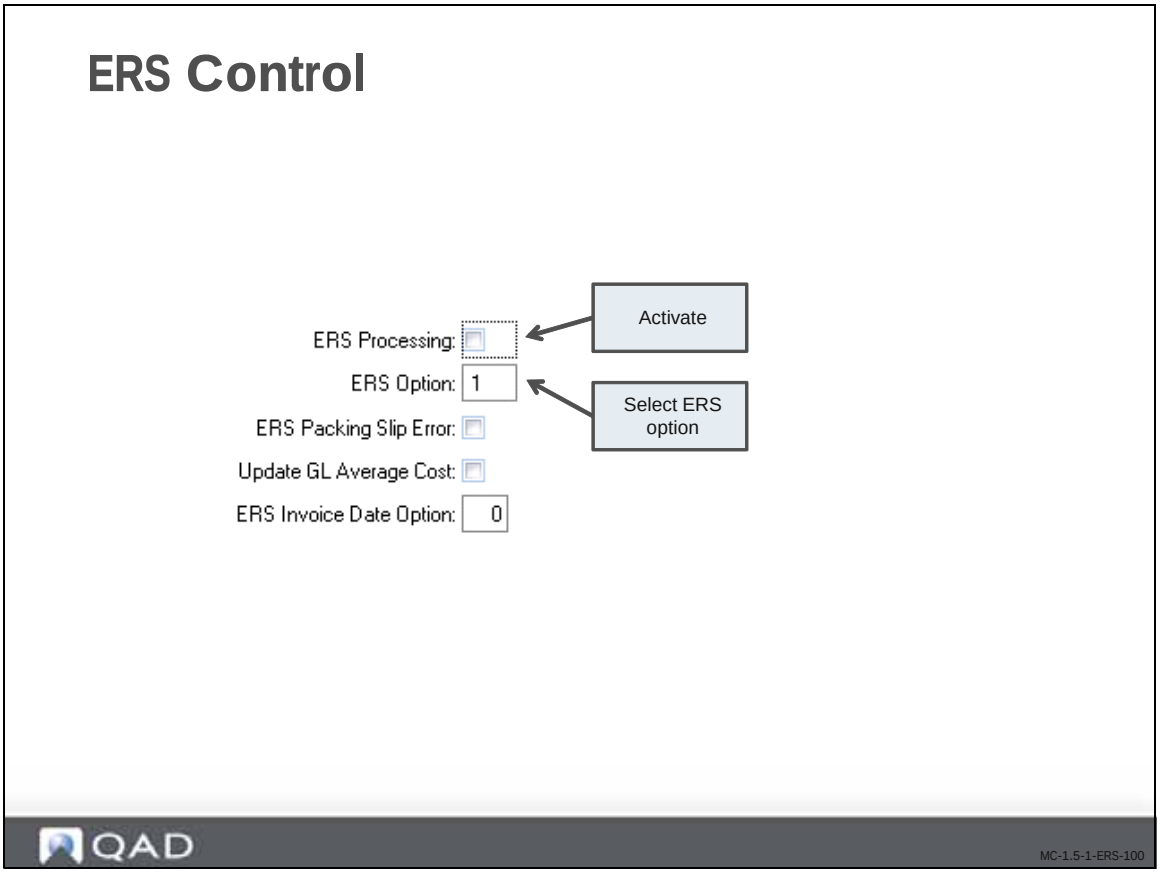
If you decide to implement ERS in a new database, this step is not required. If you have existing open purchase orders and you want ERS processing to apply to them, you must run a utility program to set the processing option.

Choose ERS Purchase Order Conversion (36.25.62) from the Miscellaneous Utilities menu. The system prompts you to enable or disable ERS.

- Enter E to set ERS option 0—ERS enabled for all purchase orders.
- Enter D to set ERS option 1—ERS disabled for all purchase orders.

For the full setup details, refer to the *QAD Financials User Guide*.

ERS Control



In ERS Control (28.10.24), the following fields need to be set:

ERS Processing. Select the field to activate ERS. When activated, a pop-up window with ERS processing options opens when you create a purchase order.

ERS Option. Specify the default value for the ERS Option field that displays in the pop-up window mentioned above. Valid values for the header ERS Option are:

- Blank: The system determines the default ERS option for the line using settings in ERS Maintenance.
- 0: The system determines the ERS option when you run the ERS Processor, and uses the most current value from ERS Maintenance.
- 1: ERS processing is disabled.

The defaulting for the ERS Option works as follows:

Control	PO Header	PO Line	ERS Processor
Blank	Defaults to blank	Defaults to value from ERS Maintenance (1, 2, or 3)	Uses PO Line value if that is not zero.
0	Defaults to 0	Defaults to 0	Uses value in ERS Maintenance
1	Defaults to 1	Defaults to 1	ERS is not used

The ERS maintenance options are:

- 1: no ERS

- 2: Initial Supplier Invoice
- 3: Confirmed Supplier Invoice

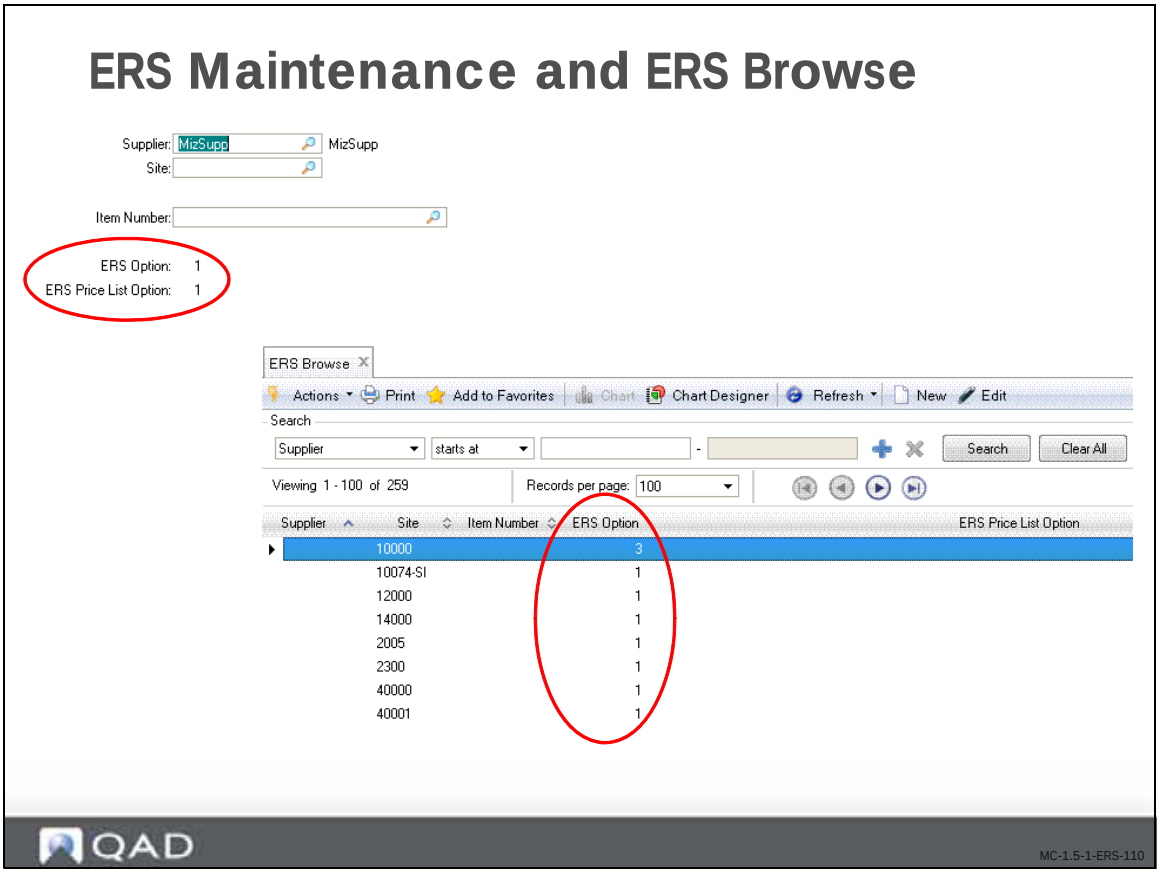
The PO header uses the value from the control file as the default. On the PO header, you can modify this value. The values allowed on the PO header are blank, 0, 1, 2, or 3.

- If the value on PO header is not blank, that value is passed as the default to the PO lines. If the value on the PO header is blank, the default value for the PO lines is retrieved from ERS Maintenance.
- You can also modify the ERS Option value on the PO line. The possible values on the PO header are 0, 1, 2 or 3.
- In the ERS Processor, if the value of the ERS Option for the PO line is 2 or 3, that value is used.
- In the ERS Processor, if the value of the ERS Option for the PO line is 0, the value is retrieved from ERS Maintenance.
- In the ERS Processor, if the value of the ERS Option for the PO line is 1, the PO receipt line is not processed.

ERS Invoice Date Option. Specify how ERS calculates the supplier invoice date:

- 0 (zero): Use the receipt date of the receiver as the supplier invoice date.
- 1: Use the shipment date of the receiver as the supplier invoice date.

ERS Maintenance and ERS Browse



The ERS Processor searches ERS Maintenance (28.1.1) for default settings for the supplier, site, and item combination associated with a PO line to determine how it should process the line. You can define default settings in ERS Maintenance for a particular supplier, site, item number, or any combination of these, such as:

- Supplier, site, and item
- Supplier and site
- Supplier and item
- Supplier
- Site

When determining the ERS option for a PO line, the system looks for a corresponding ERS Maintenance record or combination of ERS Maintenance records, in the following order:

- Supplier/site/item record
- Supplier/site record
- Supplier/item record and a separate site record
- Supplier record and a separate site record

If no records or record combinations are found, the system sets the ERS option to 1, disallowing ERS processing for that line.

ERS Option. Specify whether the ERS Processor should create supplier invoices and receiver matching for purchase order lines with the supplier, site, and item combination, and if created, whether to create initial or confirmed invoices. The options are:

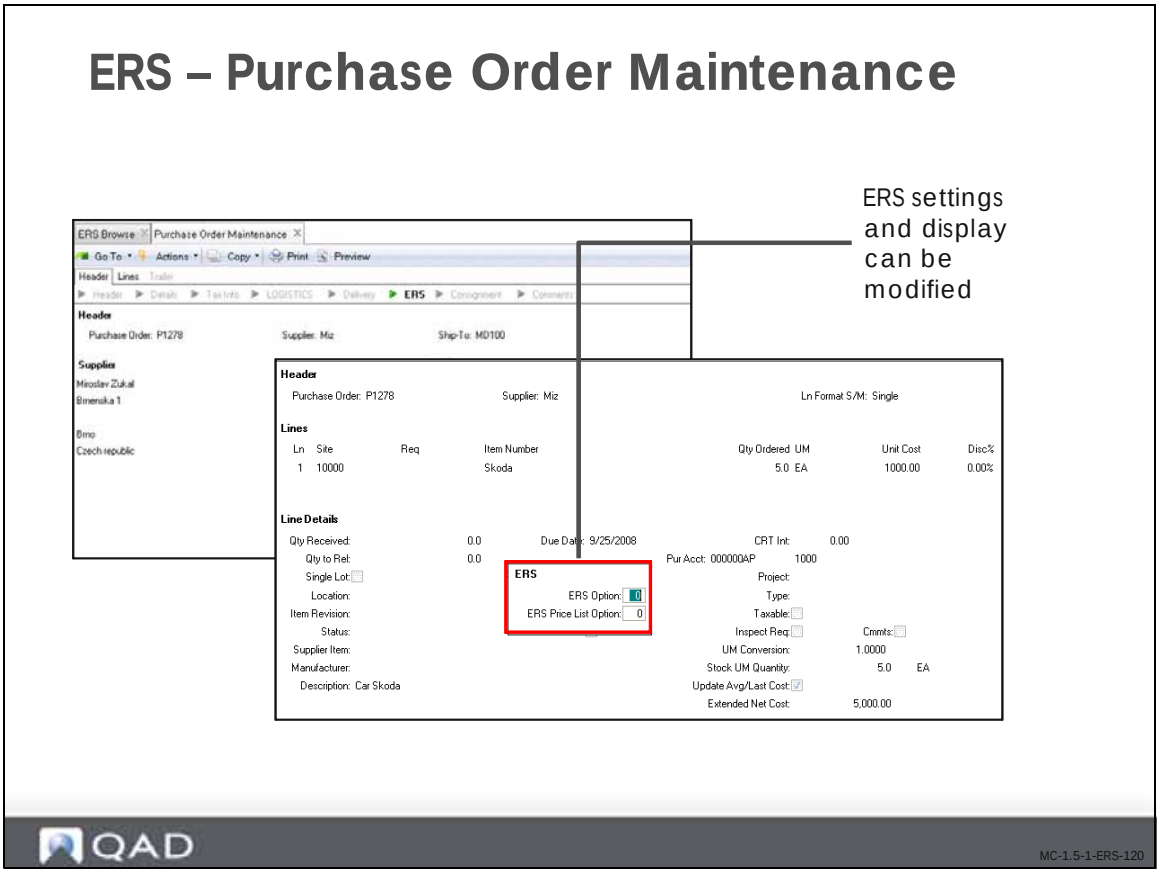
- 1: Disallow ERS processing for the combination specified.
- 2: Create an initial invoice and receiver matching record for pending invoices with the specified combination of supplier, site, and item. This option adds a degree of security because the invoice created must be approved using a separate process.
- 3: Create a confirmed supplier invoice and receiver matching record for receipts with the specified combination of supplier, site, and item.

ERS Price List Option. Specify the effective date the ERS Processor should use when retrieving the relevant price list. The options are:

- 1: Use the receipt date.
- 2: Use the ship date.
- 3: Use the order date.

The ERS Processor uses the ERS Price List Option field if a price list is specified for the order, and if the Fixed Price field on the order line is set to No.

ERS – Purchase Order Maintenance



When ERS is set up and activated, it affects how you create a purchase order, issue a blanket or scheduled order, and how you receive purchased items.

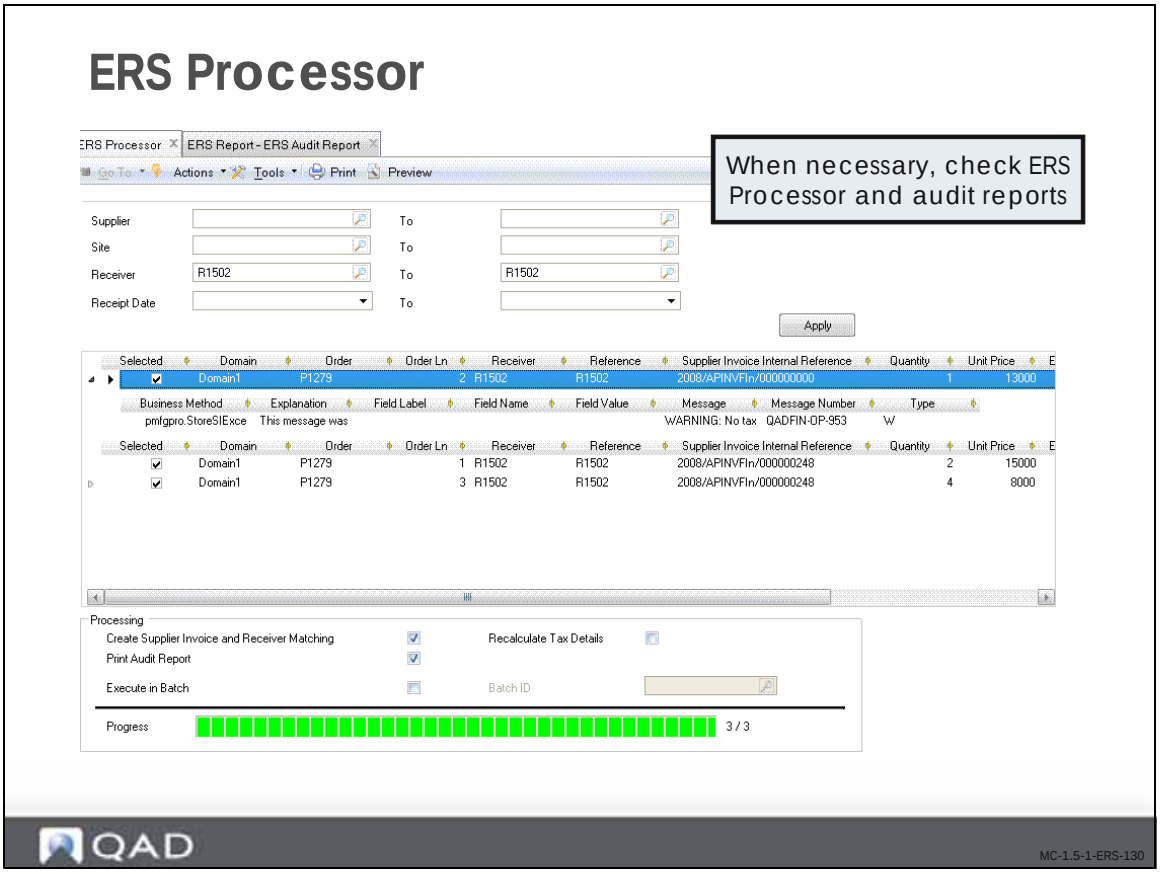
Three fields in Purchase Order Maintenance (5.7) affect ERS processing:

Fixed Price. This field is part of the standard header in Purchase Order Maintenance (5.7), but it functions differently when you are using ERS. The header sets the default for line items. The value for this field defaults from Supplier Data Maintenance (2.3.1).

- If the item price is fixed, the ERS Processor takes the price from the purchase order.
- If the item price is not fixed, the ERS Processor refers to the relevant price list.
- If there is no price list, the ERS Processor looks for a supplier-item quoted price defined in Supplier Item Maintenance.
- If there is no supplier quoted price, the ERS Processor looks for the GL material cost in the item master.

The ERS Option field and the ERS Price List Option fields in the pop-up window default from the ERS Option field of ERS Control. The header value determines how the default ERS Option is set on each line item on the order, but can be updated.

ERS Processor



Run the ERS Processor (28.10.13) to generate supplier invoices and their corresponding receiver matching for PO receipts. You can only run one instance of the ERS Processor at a time.

The ERS Processor (28.10.13) lets you specify ranges of suppliers, sites, and receivers to retrieve receipts for which you want to create supplier invoices and receiver matching. The processor then retrieves a group of receipts that meet your selection criteria. You can then specify which receipts to process by selecting the check box for that record.

The ERS Processor opens the selected group of receipts, creates the relevant supplier invoice records and receiver matching, and makes the appropriate journal entries, just as if the invoices were entered manually.

ERS Audit Report

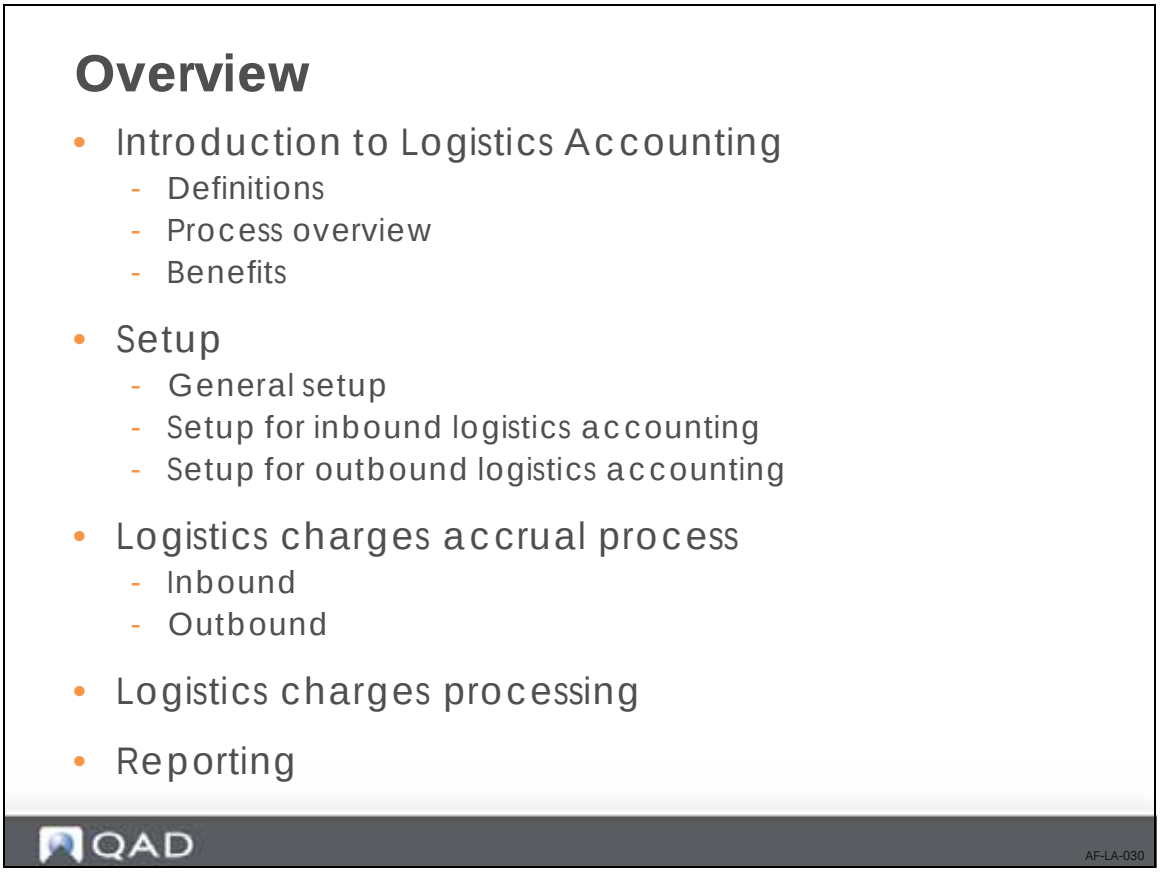
The ERS audit report, which is produced when you select the Print Audit Report option in the ERS Processor, provides an overview of processed receipts and lists validation errors, if the ERS Processor ran with errors. The ERS audit report generates errors in the following situations:

- No price is available for an item.
- Purchase orders have already been invoiced.
- Credit terms are invalid.
- No packing slip number is entered on the receipt screen, and the ERS Packing Slip Error field of ERS Control (28.10.24) is set to Yes.

Chapter 5

Logistics Accounting

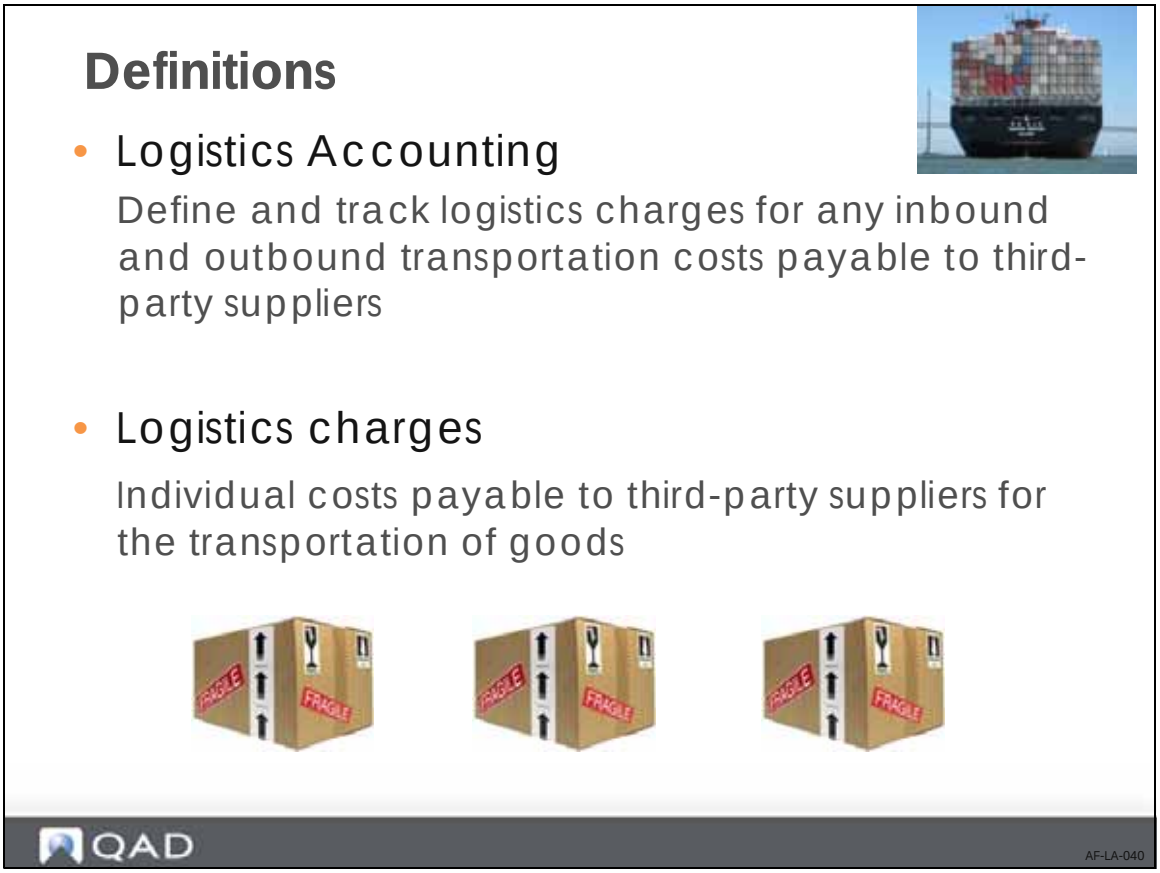
Overview



This chapter begins with an introduction to Logistics Accounting, including definitions and an overview of the process. The introductory section also discusses the business benefits of Logistics Accounting.

The setup section outlines the steps involved in setting up inbound and outbound Logistics Accounting, before reviewing how logistics charges are accrued and processed in the system, and which reporting capabilities are available.

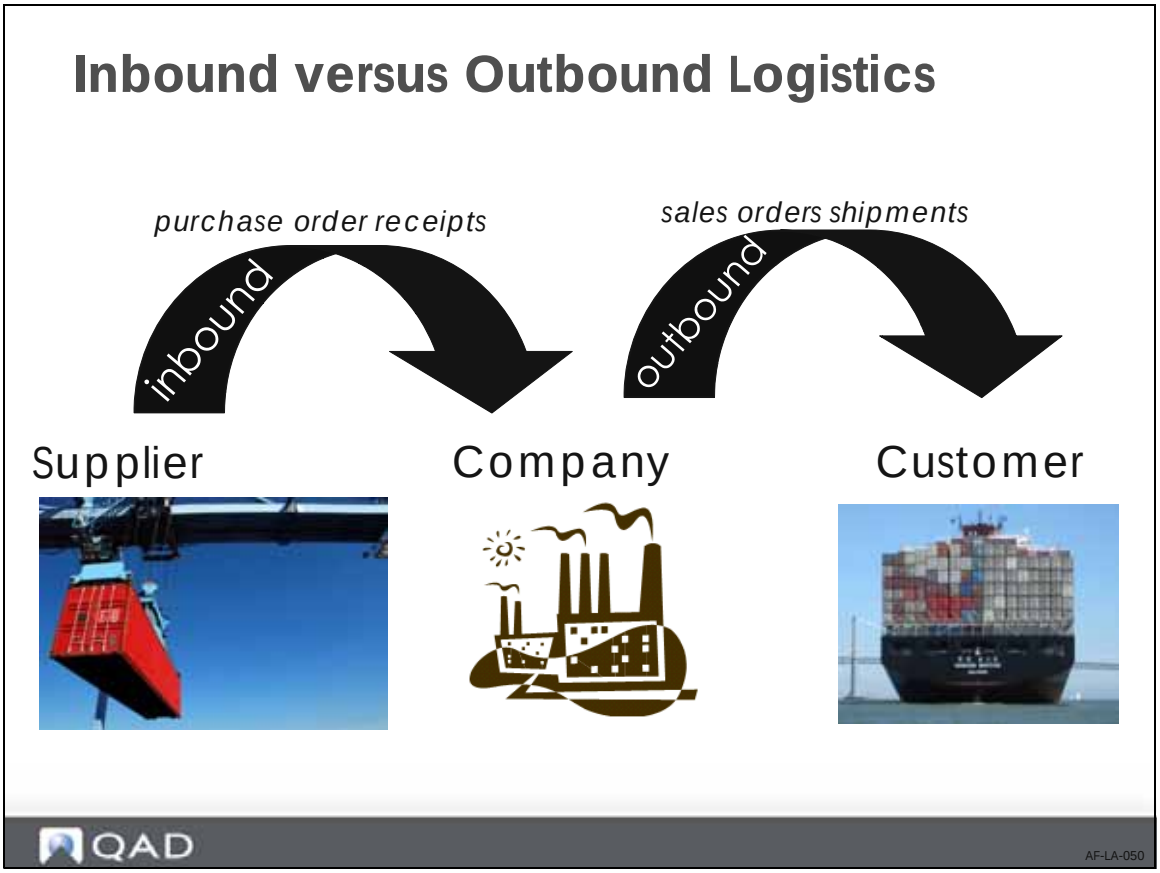
Definitions



Logistics costs are those 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 supplier and recharged to the customer within the item price or as a trailer charge. The costs can also be paid by the customer directly to the carrier, insurer, or customs.

The individual costs payable to third-party suppliers for the transportation of goods are referred to as logistics charges. Logistics Accounting lets you define logistics charges for any inbound and outbound transportation costs payable to third-party suppliers.

Inbound versus Outbound Logistics

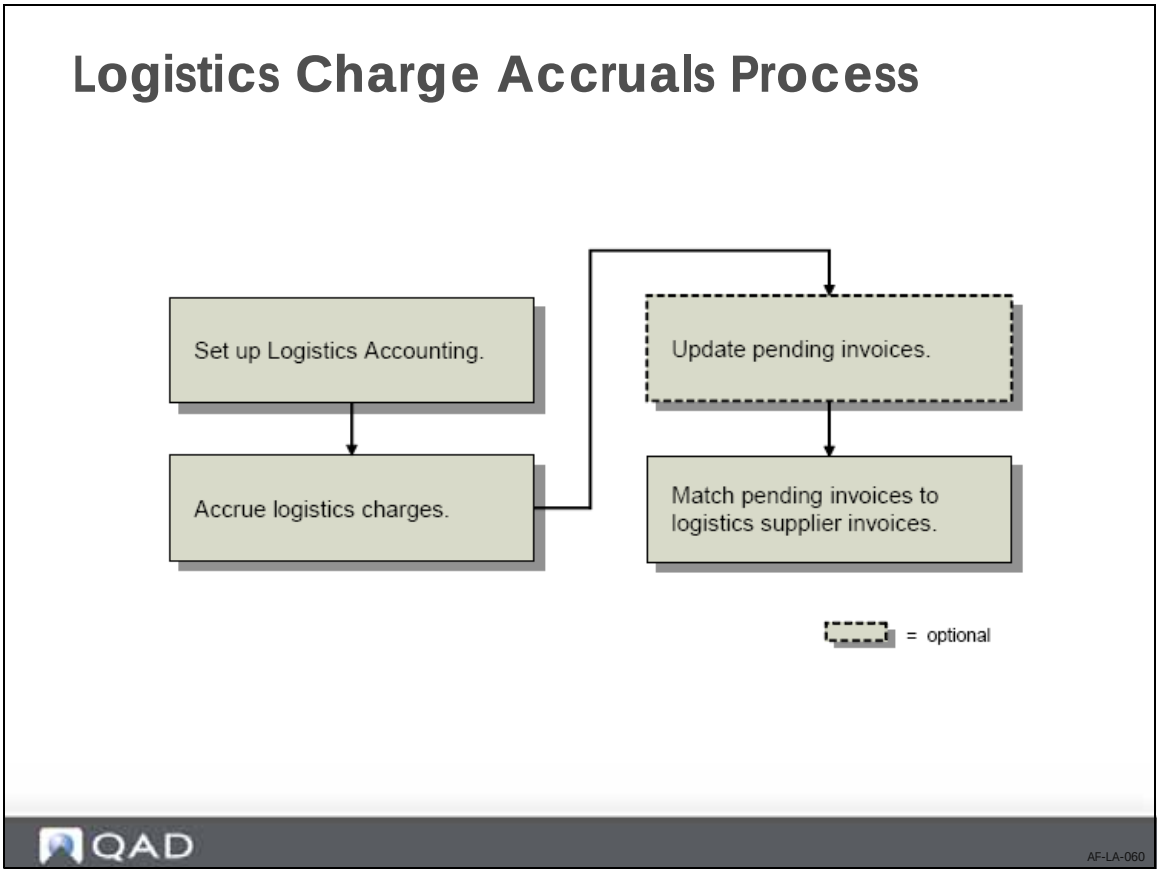


Inbound logistics charges are the transportation costs associated with purchasing items from external suppliers. The system then automatically creates a pending invoice for the charges during purchase receipts. During purchase receipts, the system determines which logistics charges to accrue, based on the terms of trade assigned to the order supplier.

The system then creates pending invoice records and receivers for each purchase order line.

Outbound logistics charges relate to the transportation costs incurred when you ship items to customers or to other company locations. Outbound logistics charges include the cost of freight only. Normally, outbound logistics charges result from the sales order and distribution order processes, and accrue when the items are shipped. In order to accrue outbound logistics charges, you must first define freight charge data and freight terms, and then associate the freight terms with the customer.

Logistics Charge Accruals Process

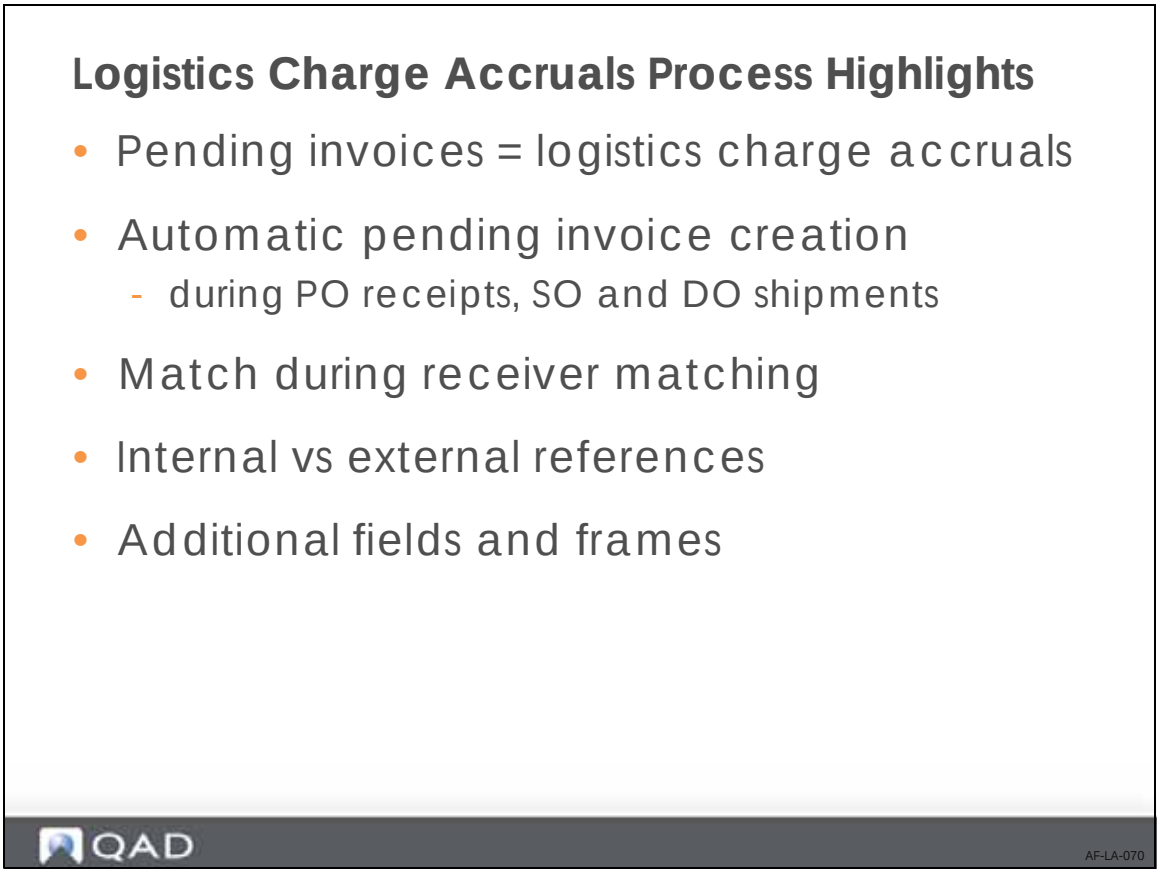


GL accruals for inbound logistics charges are triggered by purchase order receipts. GL accruals for outbound logistics charges are triggered by shipments.

For each receipt or shipment, a pending invoice is created for each logistics charge accrual. Inbound logistics charges are built into the GL cost for items.

The above process flow summarizes the steps involved in accruing logistics charges

Logistics Charge Accruals Process Highlights



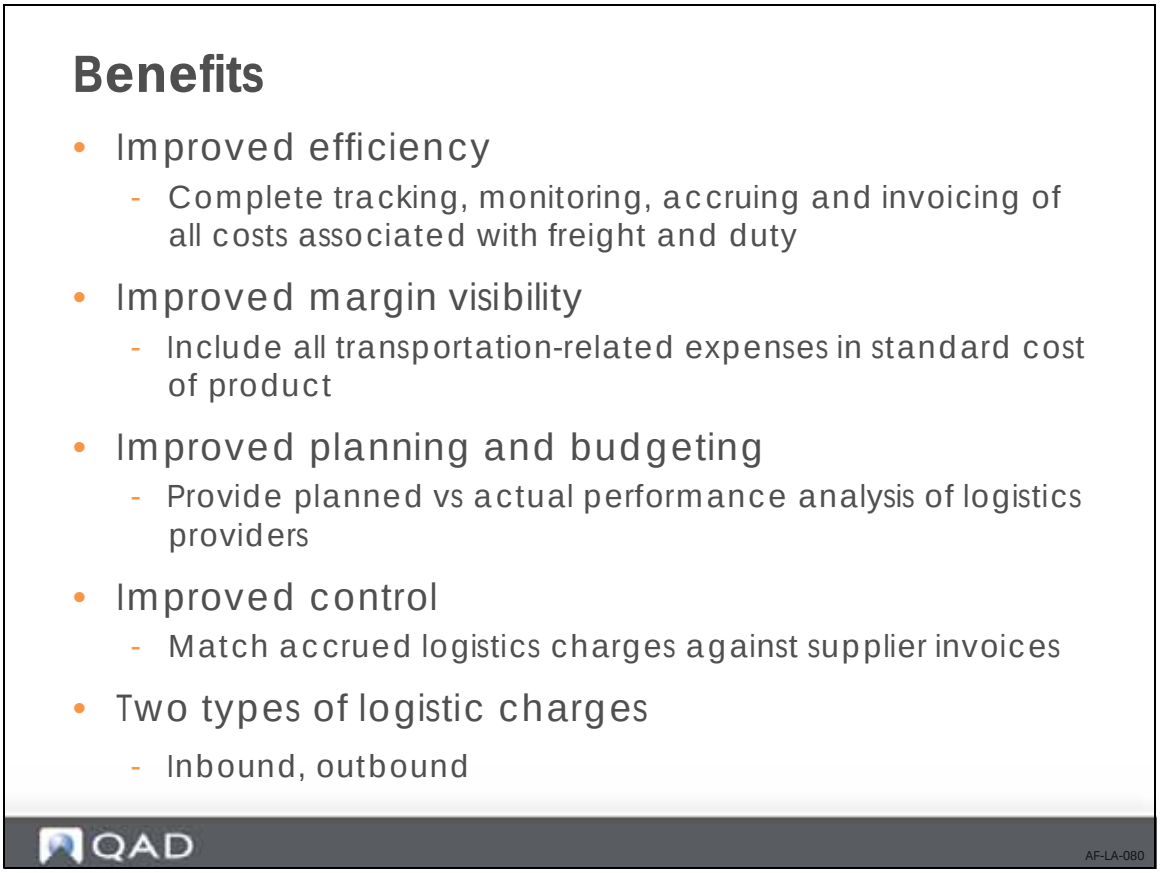
Pending invoices for logistics charges are created automatically during purchase order receipts, and sales or distribution order shipments. Logistics charge accruals are also referred to as pending invoices. During receiver matching, you can match the amounts from pending invoices to actual invoice amounts. The more information provided on the pending invoice, such as the supplier of the logistics charge, the easier it is to match it to an invoice.

When purchased items are shipped from an item supplier, you might not know the name of the logistics supplier until the goods arrive. Logistics charges can accrue without specifying a logistics supplier. After an invoice arrives, you can define the logistics supplier on the pending invoice using Logistics Charge Pending Invoice Maintenance (2.15.7). During receiver matching, it is easier to match invoice amounts to pending invoices when logistics suppliers are assigned.

Each pending invoice includes an internal reference and, optionally, an external reference. An internal reference is a code that identifies a shipment or receipt created by the system, such as a receiver number or shipper ID. An external reference is an identifier supplied by a third-party logistics supplier, such as a bill of lading number, carrier tracking number, or packing slip number. During receiver matching, use internal and external references to help match invoices from logistics suppliers to pending invoices.

When Logistics Accounting is enabled, additional fields and frames display in several screens. These fields are described in *QAD Master Data User Guide*, which contains detailed information on Logistics Accounting.

Benefits



As manufacturing companies increasingly look for cheaper materials and components from remote sources, logistics costs have become a more significant aspect of cost management. The availability of accurate product and customer profitability information, including the total cost of purchasing or selling items, enables companies to maker better pricing and financial analysis decisions.

Logistics Accounting lets you define logistics charges for any inbound and outbound transportation costs payable to third-party suppliers.

Inbound logistics charges are the transportation costs associated with purchasing items from external suppliers. Outbound logistics charges are the transportation costs associated with the shipment of items from a company location to customers or other company locations.

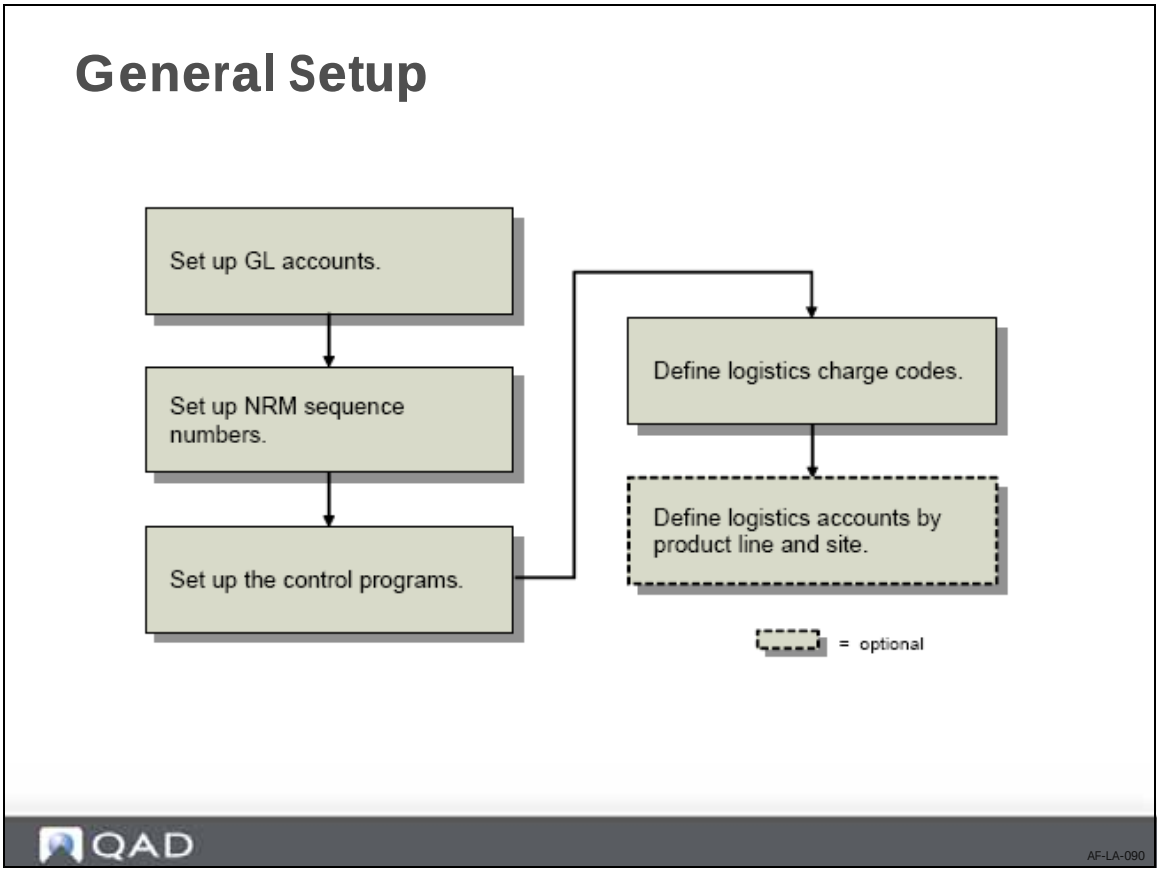
For some companies, a significant proportion of purchases are imports. Logistics costs have a large financial impact since they can represent a high percentage of the total delivered cost and must be included in price comparisons with local sources. In Logistics Accounting, inbound logistics charges are considered part of the overall cost specific to each item and included in the item cost.

For other companies, the shipment of goods by third-party carriers is a frequently occurring expense. Tracking the amounts owed to carriers as a separate liability in the general ledger (GL) provides better control over invoices from suppliers. Identifying variances in expected freight

charges and actual invoice amounts reduces the risk of duplicate or over payment of logistics charges. Tracking these charges improves visibility of total outbound freight costs, helping to reduce these costs by reviewing order quantities or seeking alternative carriers.

When items are purchased or shipped, you can accrue logistics charges as part of the process. GL accruals for inbound logistics charges are triggered by purchase receipts. GL accruals for outbound logistics charges are triggered by shipments. For each receipt or shipment, a pending invoice is created for each logistics charge accrual. Inbound logistics charges are built into the GL cost for items.

General Setup



To implement Logistics Accounting, you first need to define general data, such specific GL accounts, Number Range Management (NRM) sequence numbers, control programs settings, logistics charge codes, and, optionally, logistics accounts by product line and site. Next, you set up inbound and outbound specific data, like freight charges and cost elements.

This section details the general setup steps for Logistics Accounting.

Note This course does not provide detailed information on how taxes for logistics charges are set up and calculated. For more details, see *QAD Master Data User Guide*.

Setting Up GL Accounts

Setting Up GL Accounts

	Account	Type	Use
Inbound	Accrual	Liability	PO Receipt, Invoice
	Expense	Expense	PO Return
	Variance	Expense	Invoice
Outbound	Sales Order Accrual	Liability	Shipment, Invoice
	Sales Order Expense	Expense	Shipment
	Sales Order Variance	Expense	Invoice
	Distribution Order Accrual	Liability	Shipment, Invoice
	Distribution Order Expense	Expense	Shipment
	Distribution Order Variance	Expense	Invoice

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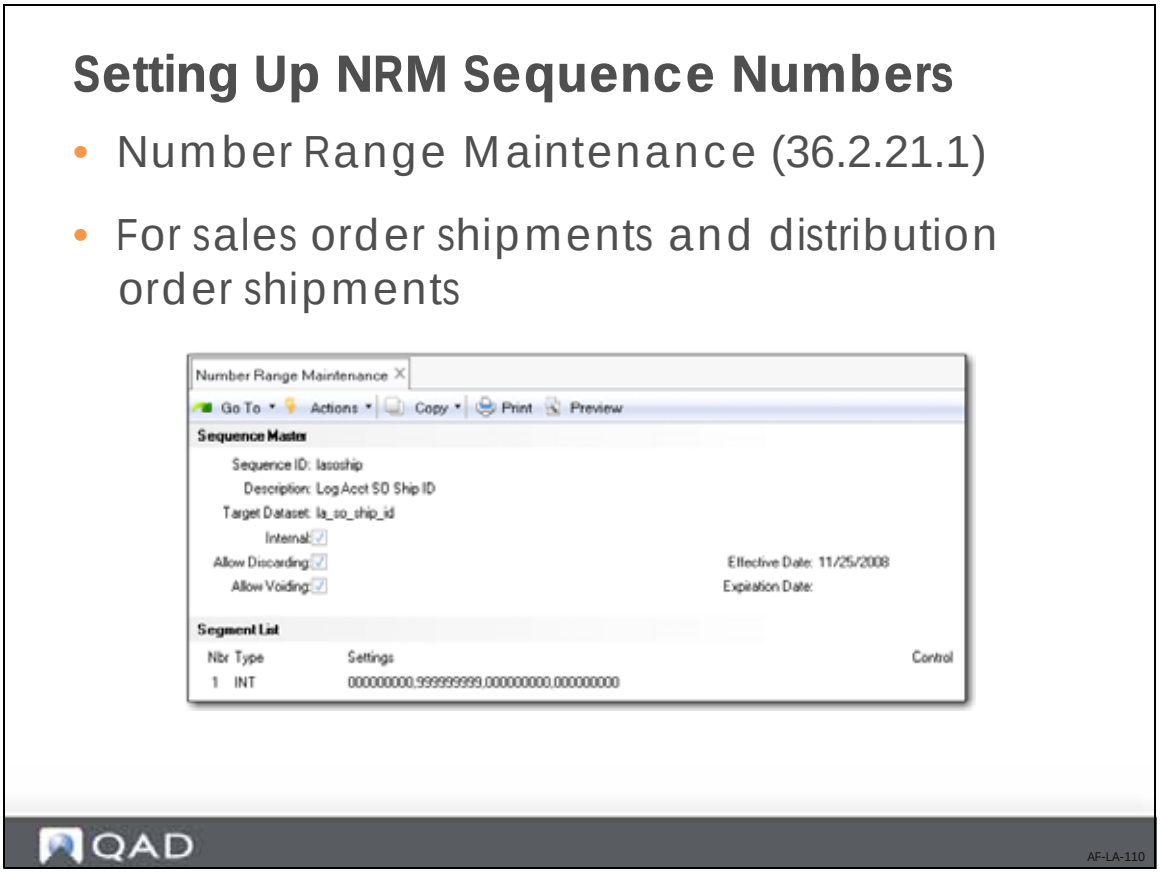
You must define the default GL accounts, sub-accounts, and cost centers that are accessed when logistics charges are accrued and invoiced. You can use separate sets of accounts to track inbound and outbound logistics charges.

For outbound logistics charges, you can use separate sets of accounts to track the costs associated with shipments to customers and shipments to other company locations. See *QAD Financials User Guide* for information on setting up accounts.

The slide lists the accounts used by Logistics Accounting. The Type column indicates how the account is used. The Use column indicates the transactions that use the account.

Setting Up NRM Sequence Numbers



All pending invoices must have an internal reference number. Before you can accrue outbound logistics charges, you must set up separate Number Range Management (NRM) sequence codes used as identifiers for discrete sales order and distribution order shipments. See *QAD System Administration User Guide* for details on Number Range Management.

The system uses the sequence codes to determine what format to use when assigning sequential internal reference numbers to discrete shipments.

This step is not required for other types of shipments. For sales order shippers, the shipper number is used as the internal reference. Shipper sequence codes are defined in Container/Shipper Control (7.9.24). When distribution orders use shipper documents, the shipper number is also used. Inbound logistics charge accruals use receiver or PO shipper numbers as internal references.

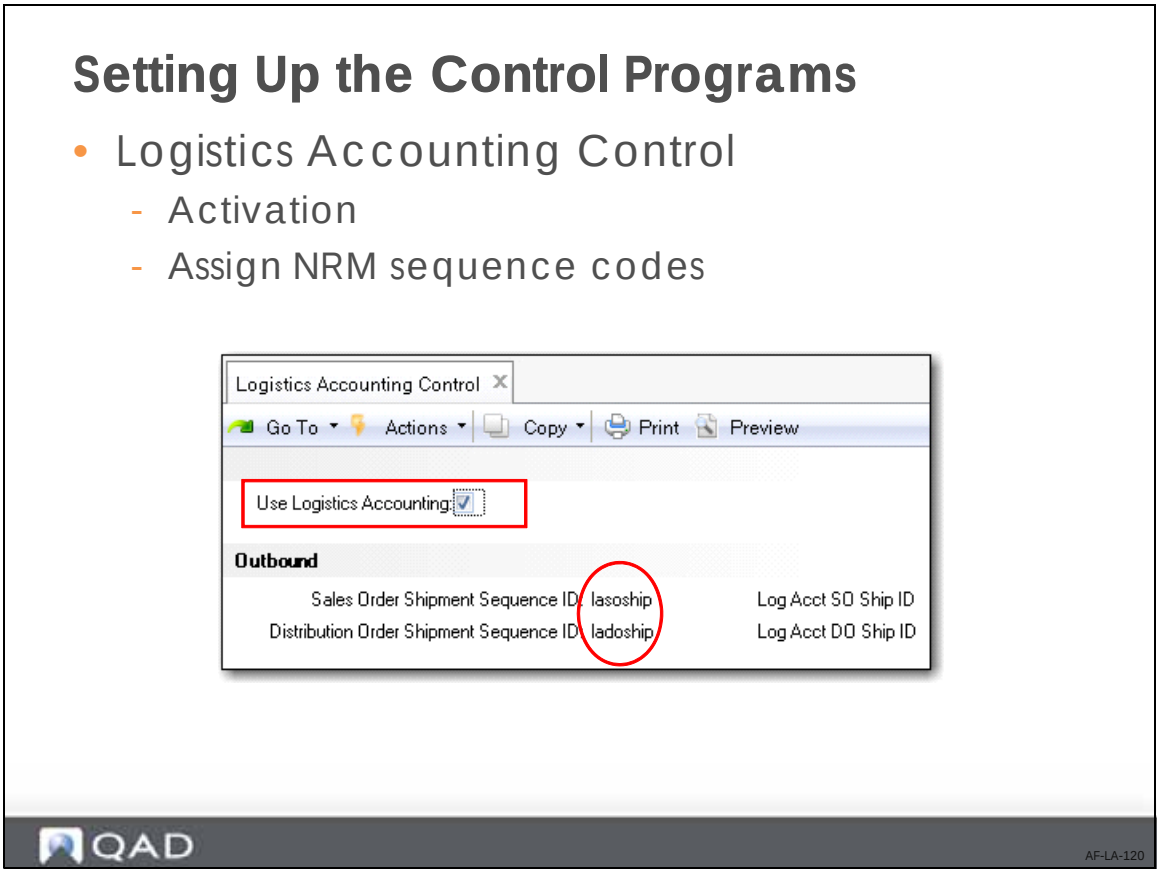
Use Number Range Maintenance (36.2.21.1) to create sequence parameters for sales order shipments and distribution order shipments. See *QAD System Administration User Guide* for more information on number ranges.

Target Dataset. Enter the dataset identifier associated with this sequence:

- Enter la_so_ship_id for sales order shipments.
- Enter la_do_ship_id for distribution order shipments.

Internal. Enter Yes to have NRM generate sequence numbers automatically. Enter No to let users supply numbers that are validated against the NRM sequence.

Setting Up the Control Programs



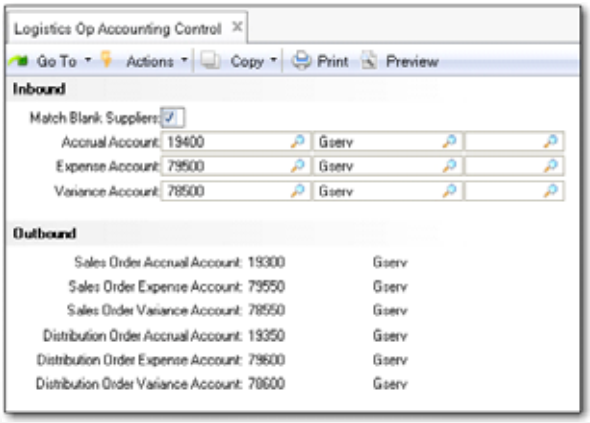
Use Logistics Accounting Control (2.15.24) to assign NRM sequence codes to sales order and distribution order shipments.

Sales Order Shipment Sequence ID. Enter the NRM sequence code used for sales order shipments. The sequence code must have the target dataset la_so_ship_id.

Distribution Order Shipment Sequence ID. Enter the NRM sequence code used for distribution order shipments. The sequence code must have the target dataset la_do_ship_id.

Setting Up the Control Programs

- Logistics Operational Accounting Control
  - Pending invoices and third-party logistics supplier
    - Receiver matching
  - GL accrual, expense and variance
    - Default



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Use Logistics Operational Accounting Control (36.9.1) to:

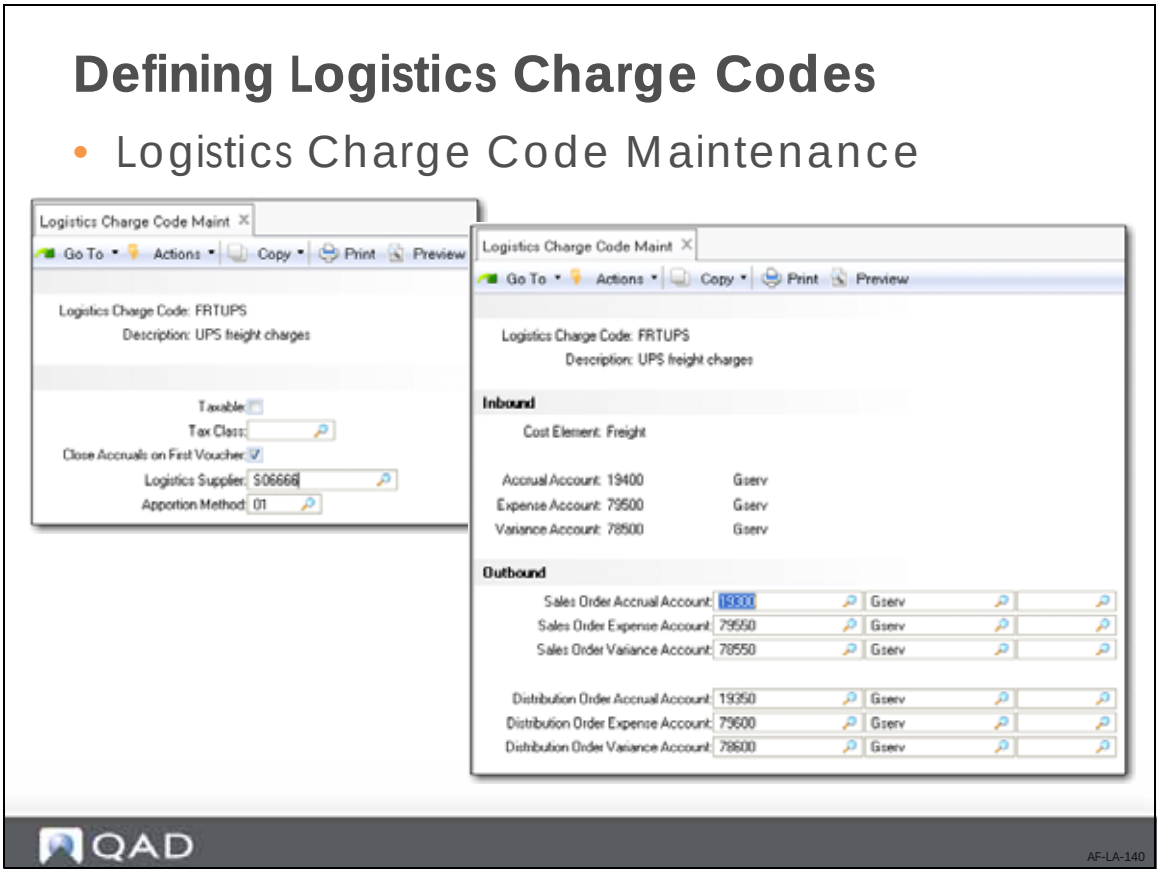
- Specify whether pending invoices must contain a third-party logistics supplier before they can be selected for receiver matching.
- Specify default GL accrual, expense, and variance accounts for tracking inbound and outbound logistics charges. You can define a separate set of default outbound accounts for sales order and distribution order shipments.

If you only want to track inbound logistics charges, you can leave the Outbound fields blank. If you only want to track outbound logistics charges, you must first define inbound accounts when Verify GL Accounts is Yes in Domain/Account Control.

Match Blank Suppliers. When No, only pending invoices with a defined logistics supplier display when logistics charges are selected for matching in the Logistics Charge tab of Receiver Matching Create (28.2.1). The default is No.

When set to Yes, you can indicate during receiver matching whether to display pending invoices with blank suppliers by selecting the Include Blank Suppliers field in the Logistics Charge tab of Receiver Matching Create (28.2.1).

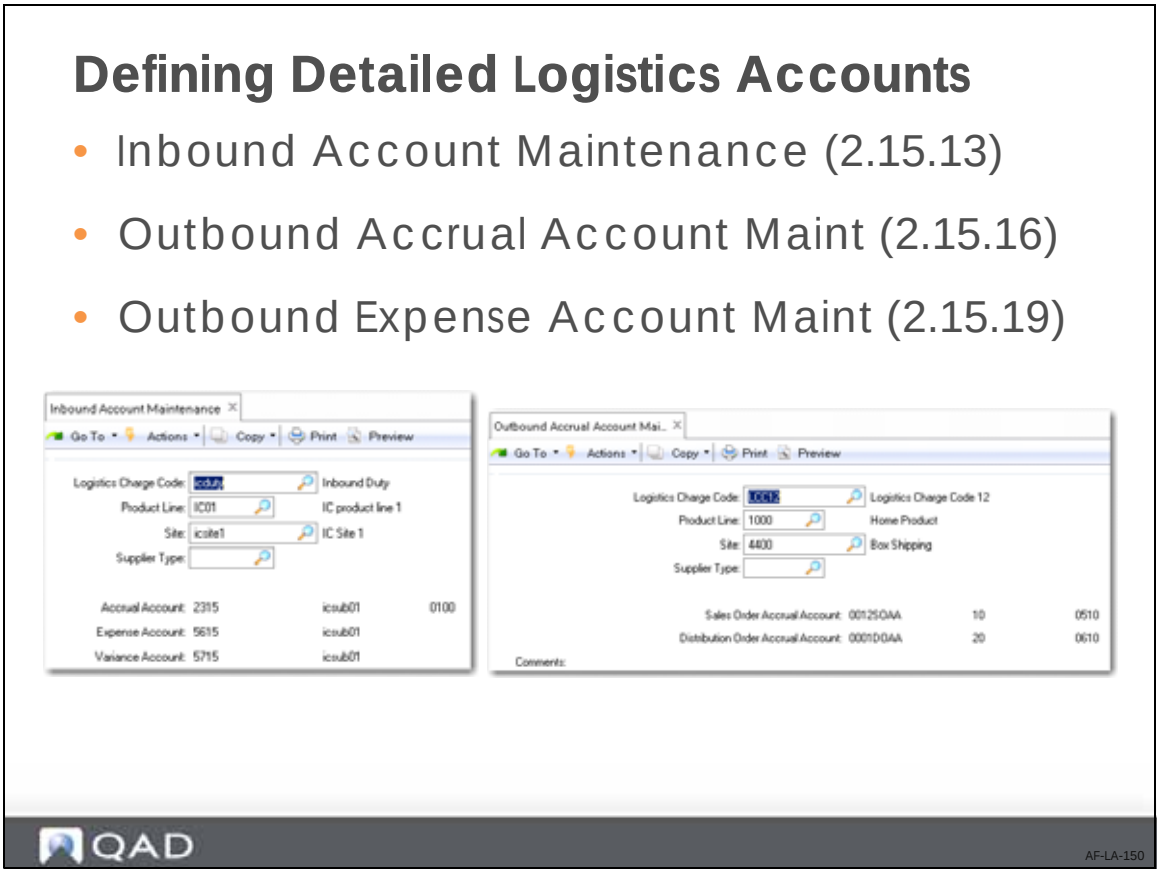
Defining Logistics Charge Codes



Use Logistics Charge Code Maintenance (2.15.1) to define codes for each logistics charge incurred and payable to a third-party supplier when purchasing or shipping items. You can also define the accrual, expense, and variance accounts used to track each logistics charge. These accounts default from Logistics Operational Accounting Control, but you can change them.

A logistics charge code can be used for inbound charges, outbound charges, or both. There is nothing to indicate whether a logistics charge code is used for outbound or inbound purposes. When an inbound and outbound charge is managed differently, define two separate codes.

Defining Detailed Logistics Accounts



Although inbound and outbound logistics accounts are defined for each logistics charge in Logistics Charge Code Maintenance (2.15.1), you can define logistics accounts at a more detailed level.

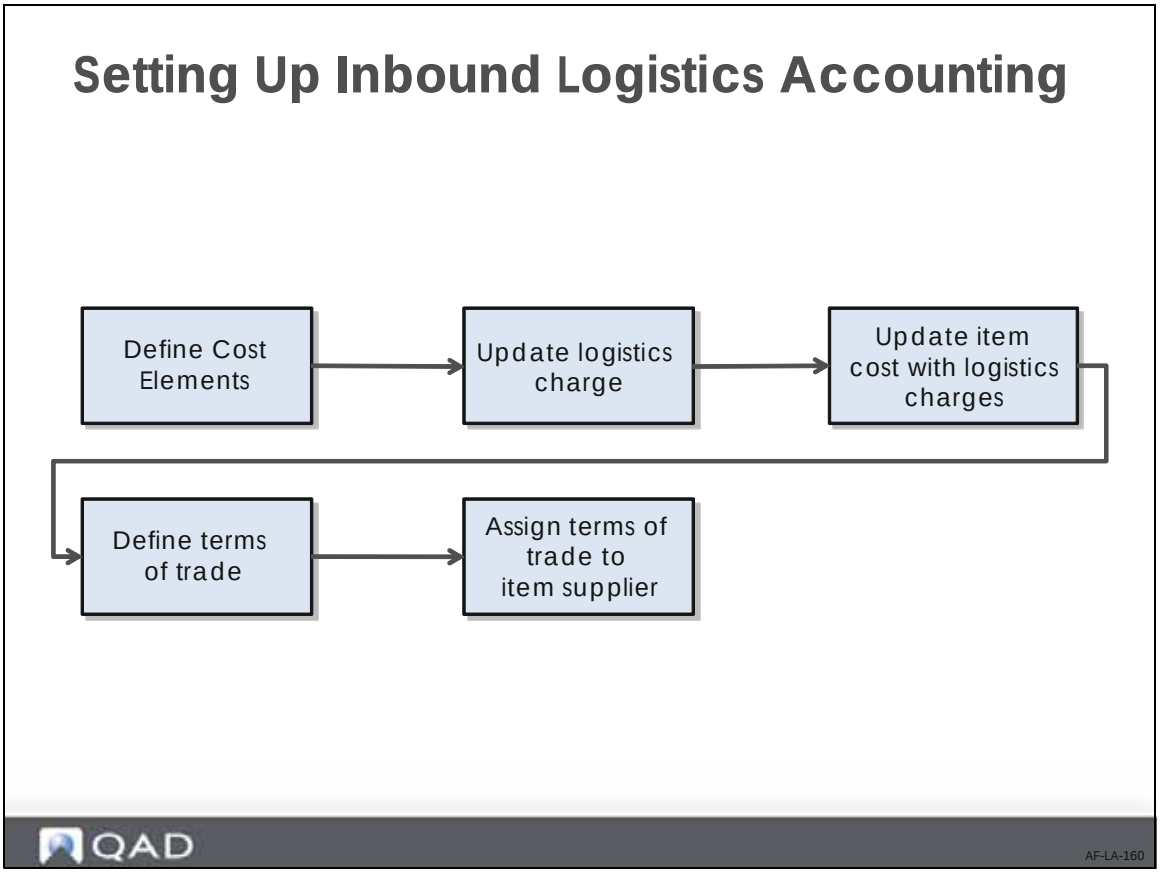
You can separately track logistics charges by product line at multiple sites within the same entity. For example, you can track logistics charges for different product lines at different sites using separate accounts.

Use the following programs to specify GL accrual, expense, and variance accounts used for inbound and outbound logistics charges by product line, site, and supplier or customer type:

- Inbound Account Maintenance (2.15.13)
- Outbound Accrual Account Maint (2.15.16)
- Outbound Expense Account Maint (2.15.19)

All accounts default from the specified logistics charge code, but you can change them.

Setting Up Inbound Logistics Accounting

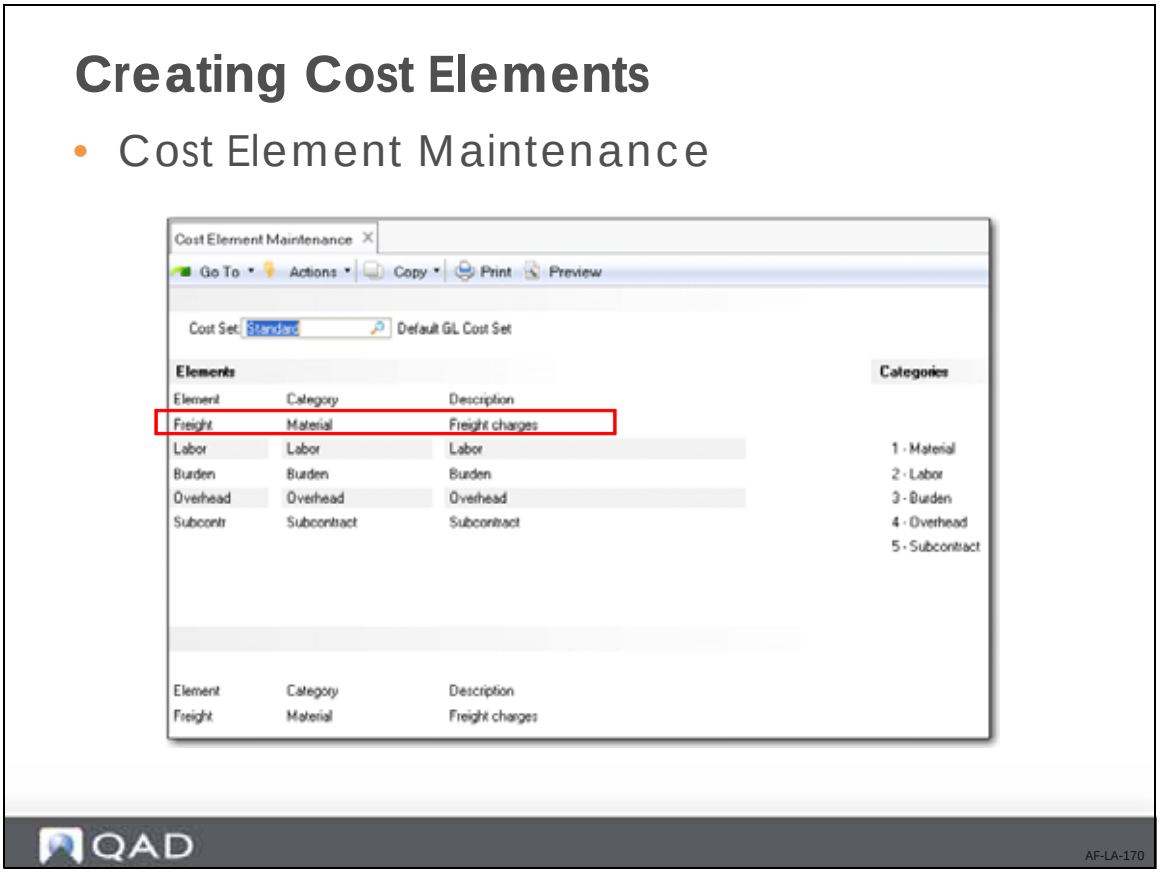


After the general data, set up additional data specific to inbound logistics:

- Define cost elements for each logistics charge in Cost Element Maintenance (30.17.1).
- Link logistics charges to the appropriate cost element in Logistics Charge Code Maintenance (2.15.1). One cost element can only link to one logistics charge.
- Update item cost with logistics charges in Item Master Maintenance (1.4.1), Item Cost Maintenance (1.4.9), Item-Site Cost Maintenance (1.4.18), or Item-Element Cost Maintenance (30.17.5).
- Define Terms of Trade in Terms of Trade Maintenance (2.15.4).
- Link Terms of Trade to the item supplier in Supplier Data Maintenance (2.3.1).

We will now review these steps in more detail.

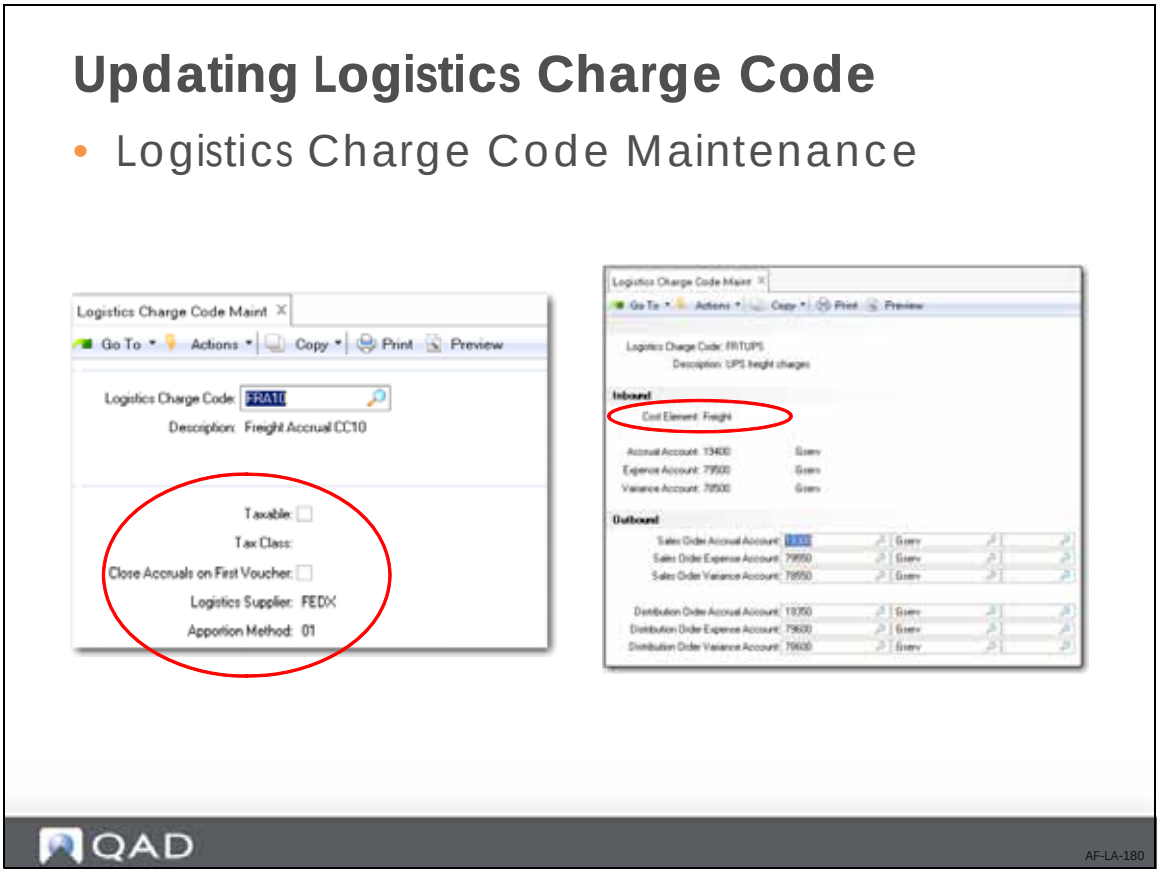
Creating Cost Elements



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 must be in the Material or Overhead cost category. See *QAD Costing User Guide* for more information on cost elements and product costing.

Create a cost element for each logistics charge 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.

Updating Logistics Charge Code



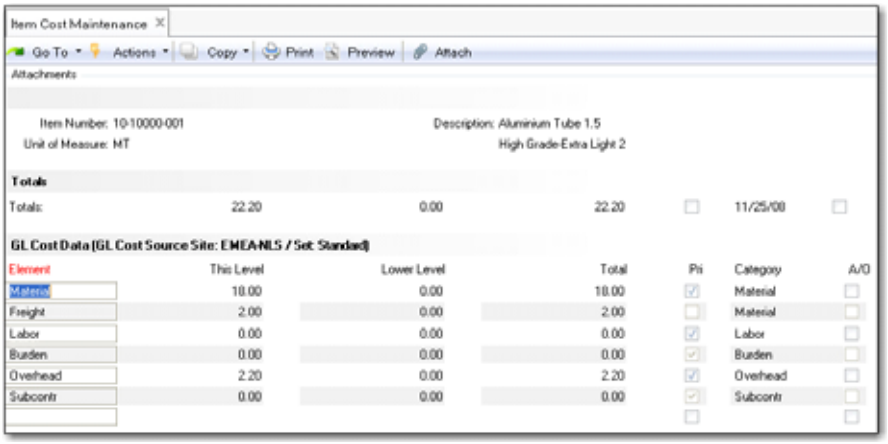
When you have set up logistics cost elements, associate each of them with individual logistics charge codes in Logistics Charge Code Maintenance (2.15.1).

You can also assign default tax settings and logistics suppliers to the logistics charges to facilitate data entry.

Updating Item Costs

Updating Item Costs

- Four menu options
  - Item-Element Cost Maintenance
  - Item Cost Maintenance
  - Item-Site Cost Maintenance
  - Item Master Maintenance

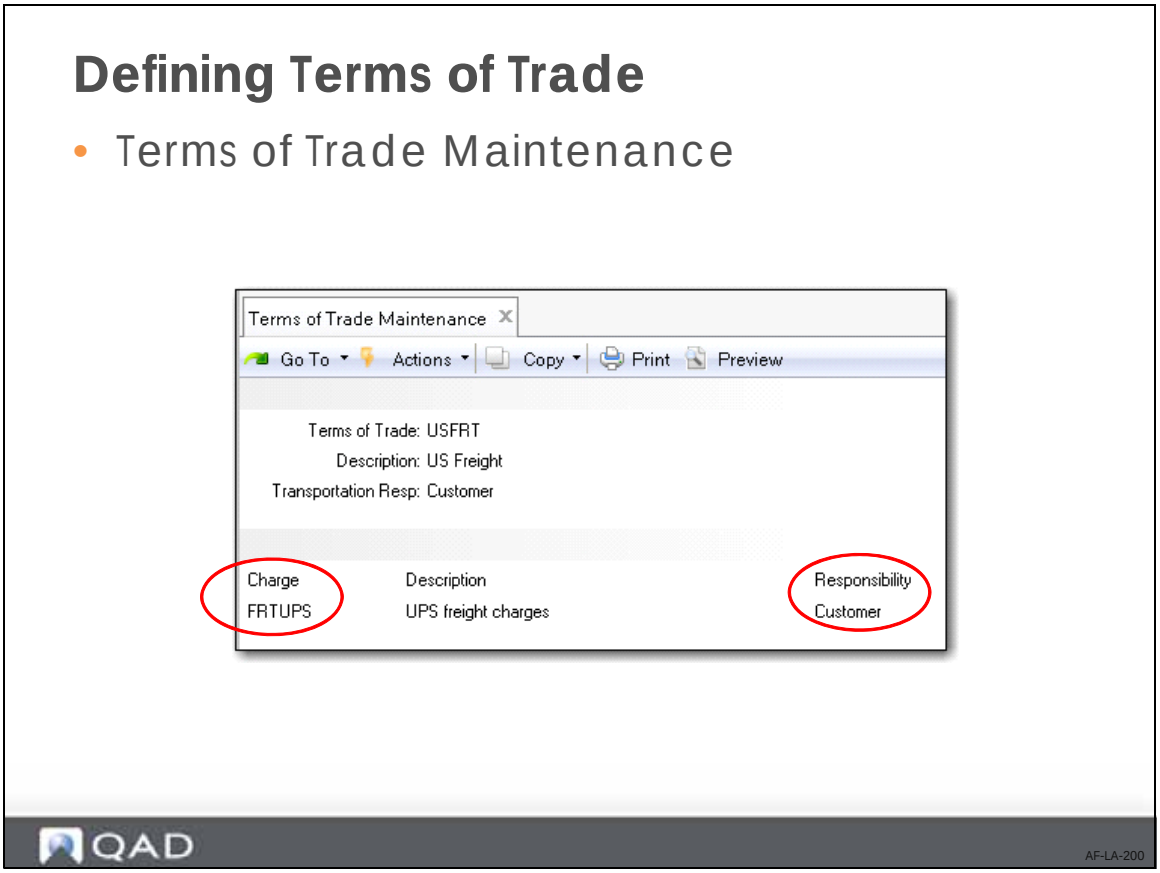


QAD AF-LA-190

Use Item-Element Cost Maintenance (30.17.5), Item Cost Maintenance (1.4.9), Item-Site Cost Maintenance (1.4.18), or Item Master Maintenance (1.4.1) to add logistics cost elements associated with logistics charges to purchased items in the GL cost set and enter this-level logistics costs for those items. You must enter GL cost values in order to accrue logistics charges during purchase receipts.

Add the same cost elements to the current cost set when the last cost method is used for current costs. The value of the current cost will be updated when logistics charges are matched if Current Cost from AP is Yes in Inventory Control.

Defining Terms of Trade



Terms of trade specify both the logistics charges associated with purchasing items from external suppliers and the party responsible for paying each. These trade terms are specific to the purchase of items and define the obligations of the customer and seller for the delivery of goods. Terms of trade are also referred to as *Inco Terms*. Inco Terms are defined by the International Chamber of Commerce and used in international contracts.

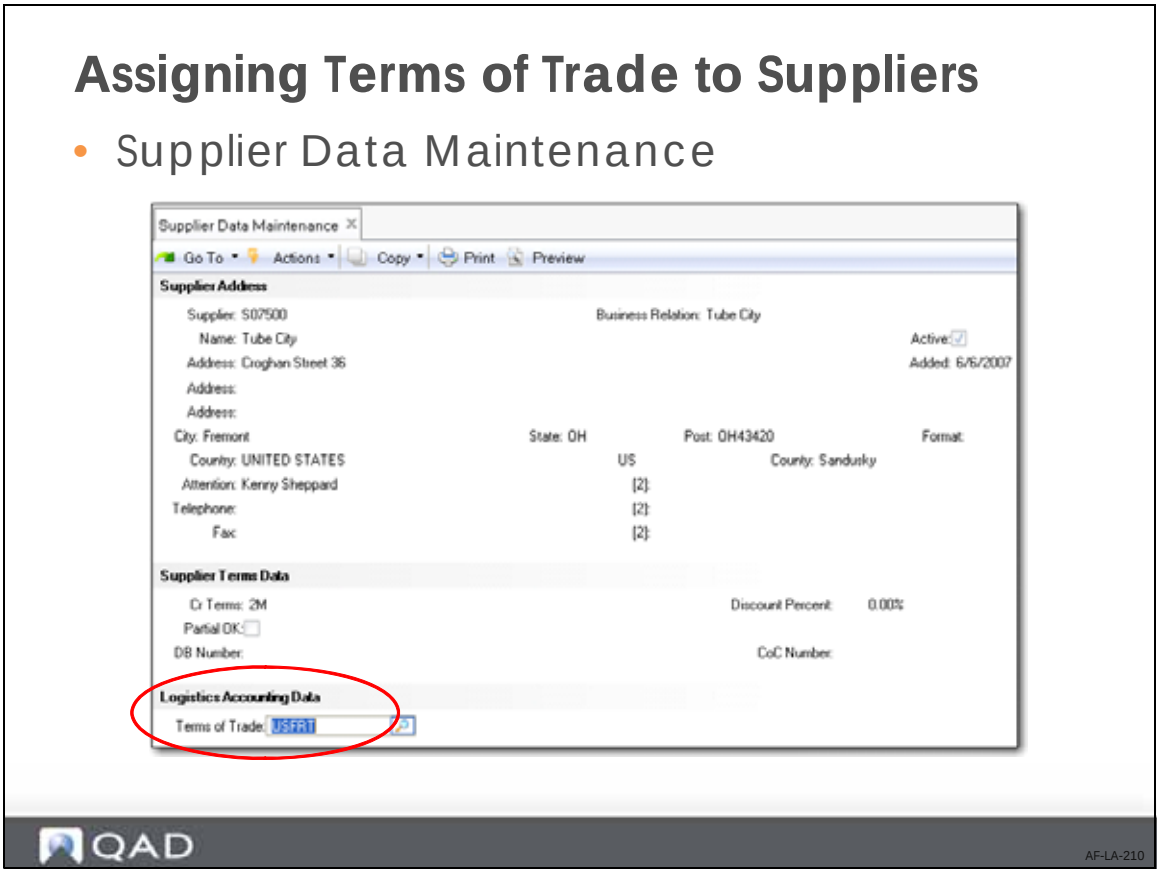
During purchase receipts, the system determines which logistics charges to accrue based on the terms of trade assigned to the purchase order. When the receiving site is responsible for a logistics charge payment, the logistics charge is accrued since the charge is payable to a third-party logistics supplier, not the item supplier. Logistics charges are not accrued when they are the responsibility of the item supplier.

Use Terms of Trade Maintenance (2.15.4) to define new terms of trades.

When you (the customer) are responsible for transporting the goods, the system automatically populates the Transport Days field when a new order is created in Purchase Order Maintenance (5.7), Blanket Order Maintenance (5.3.1), and Supplier Scheduled Order Maintenance (5.5.1.13) with the Transit Days value in Delivery Transit Time Maintenance (2.16.1).

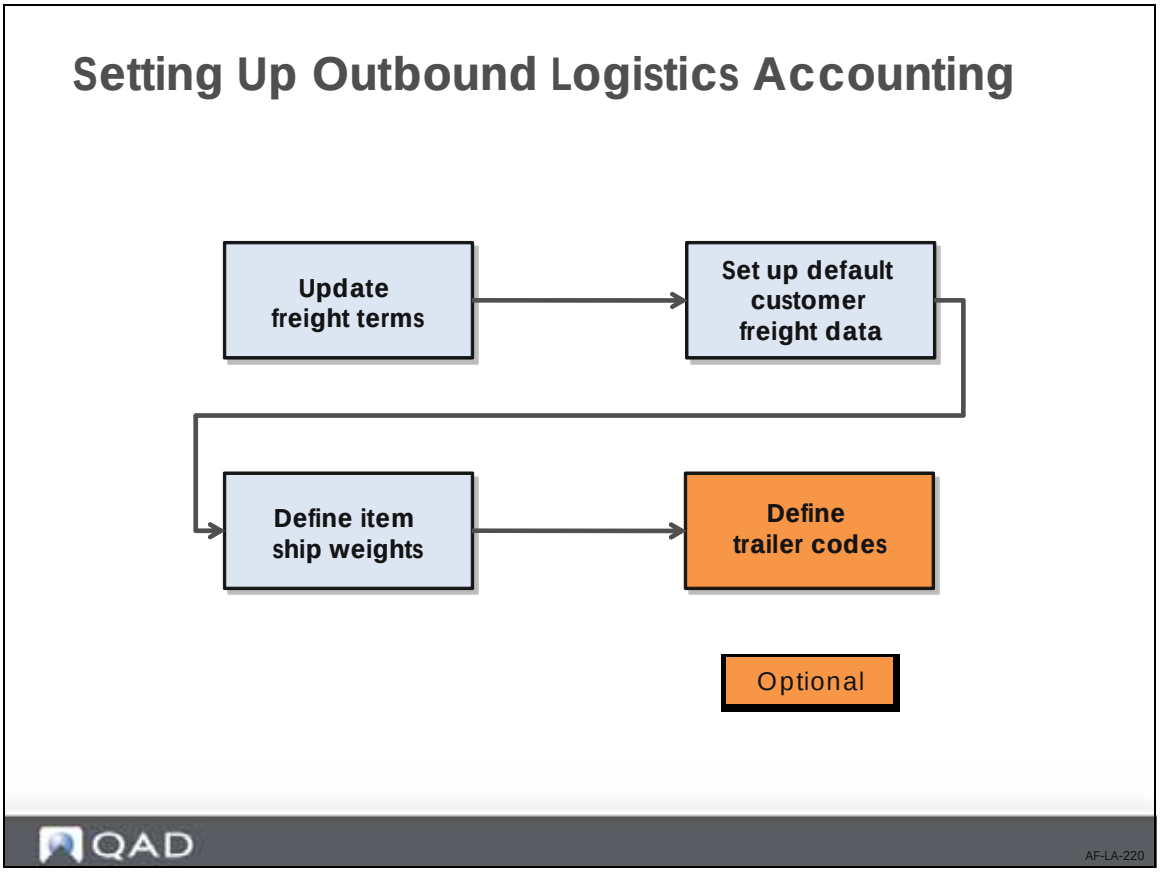
Each terms-of-trade record can include all of the logistics charges associated with a purchase, with the responsible party assigned to each logistics charge.

Assigning Terms of Trade to Suppliers



Assign default terms of trade to applicable item suppliers in Supplier Data Maintenance (2.3.1). The default terms of trade are used when the supplier is entered on the order header of a purchase order, blanket order, or supplier scheduled order.

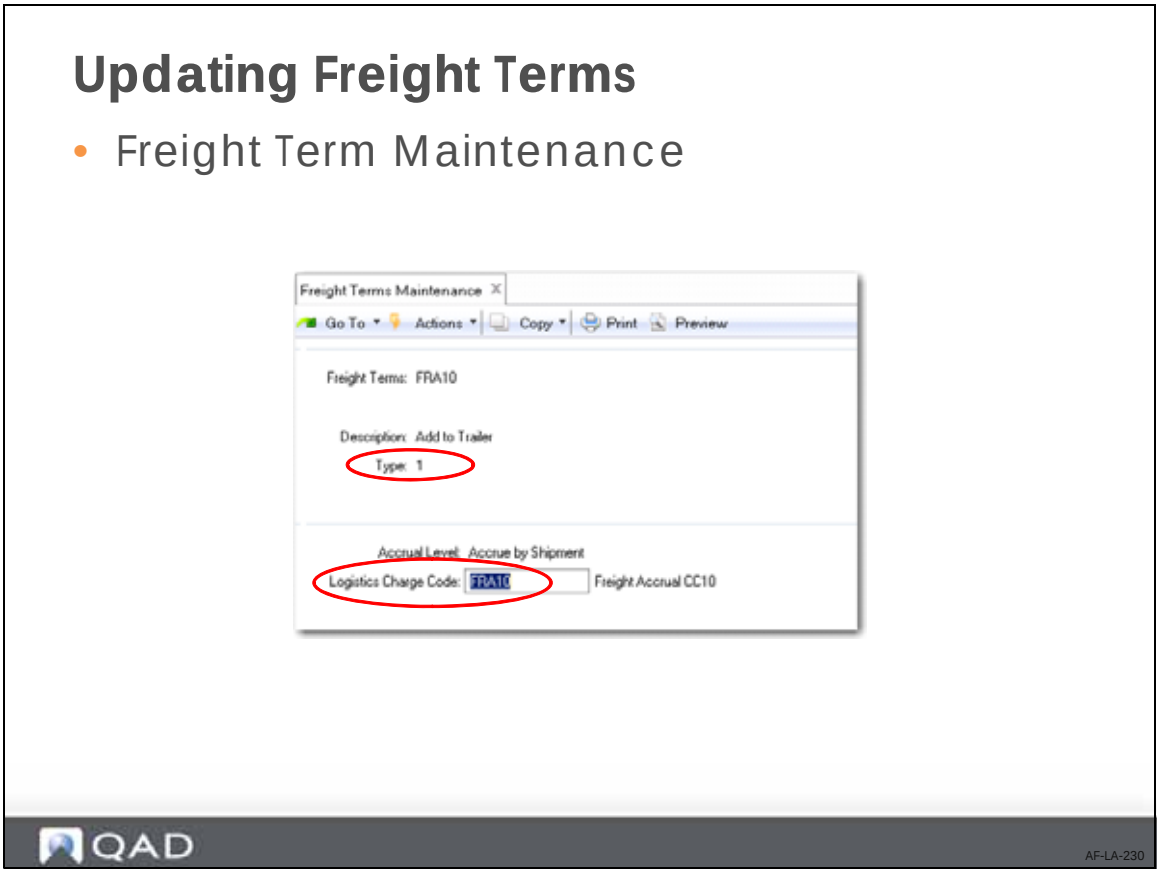
Setting Up Outbound Logistics Accounting



After you have defined outbound accrual, expense, and variance accounts, and assigned them to logistics charges, you can begin the setup for outbound logistics charges.

The required setup involves updating freight terms, customer defaults, and item details. If you use freight terms that involve trailer codes, you also need to create these and configure order defaults.

Updating Freight Terms



Freight terms are set up in Freight List Maintenance (2.20.1), Freight Zone Maintenance (2.20.4), Freight Charges Maintenance (2.20.10), and Freight Terms Maintenance (2.20.13).

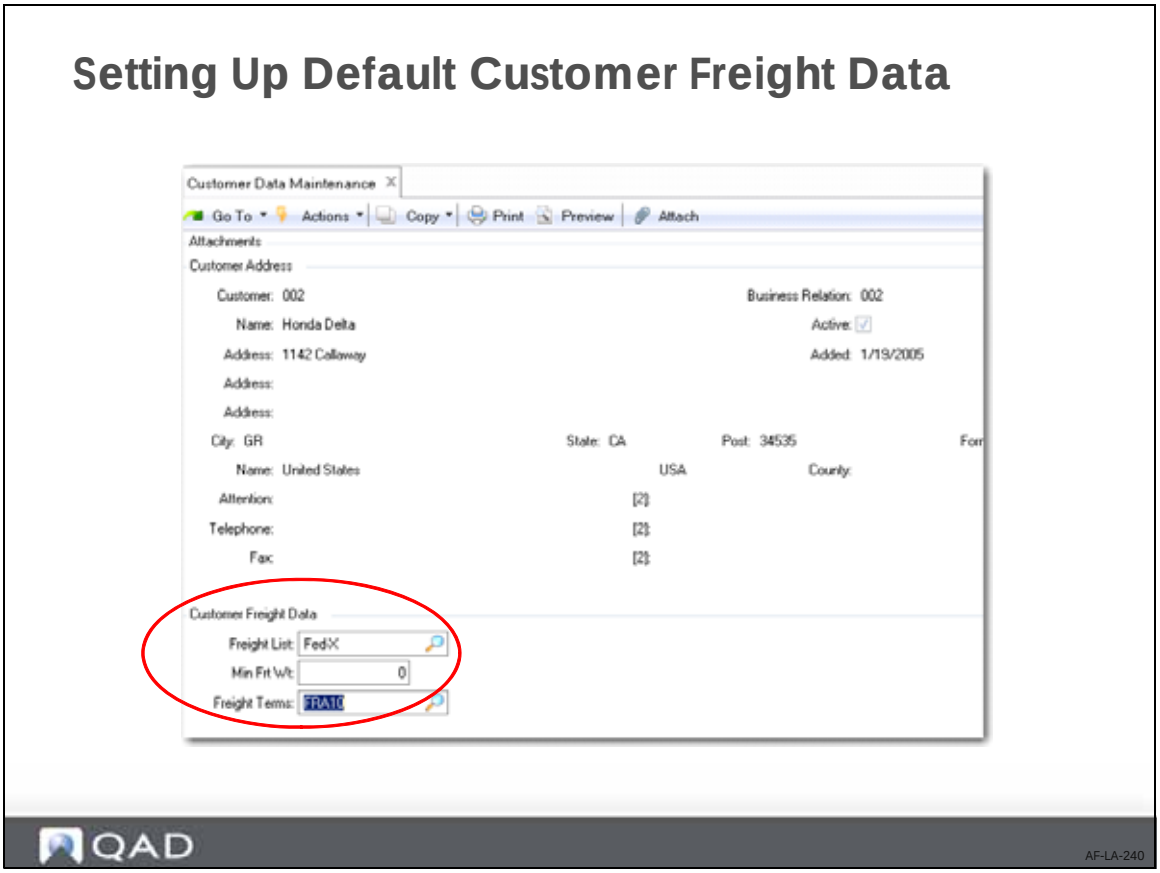
When updating freight terms for Logistics Accounting in Freight Terms Maintenance (2.20.13), assign a logistics charge to each freight terms with an accrual level. The system uses the type code to determine whether freight charges are accrued and, if so, at what level.

- Type 1 (Add) and 2 (Allow): Logistics charges are accrued for the entire shipment.
- Type 3 (Prepaid) and 5 (Include): Logistics charges are accrued for each line item.
- Type 4 (Collect) and 6 (Will Call), logistics charges do not accrue. A logistics charge cannot be assigned to either of these freight terms.

When logistics charges are accrued by shipment or by order line, you must assign the logistics charge code used to track the logistics charges incurred and payable to a third-party carrier.

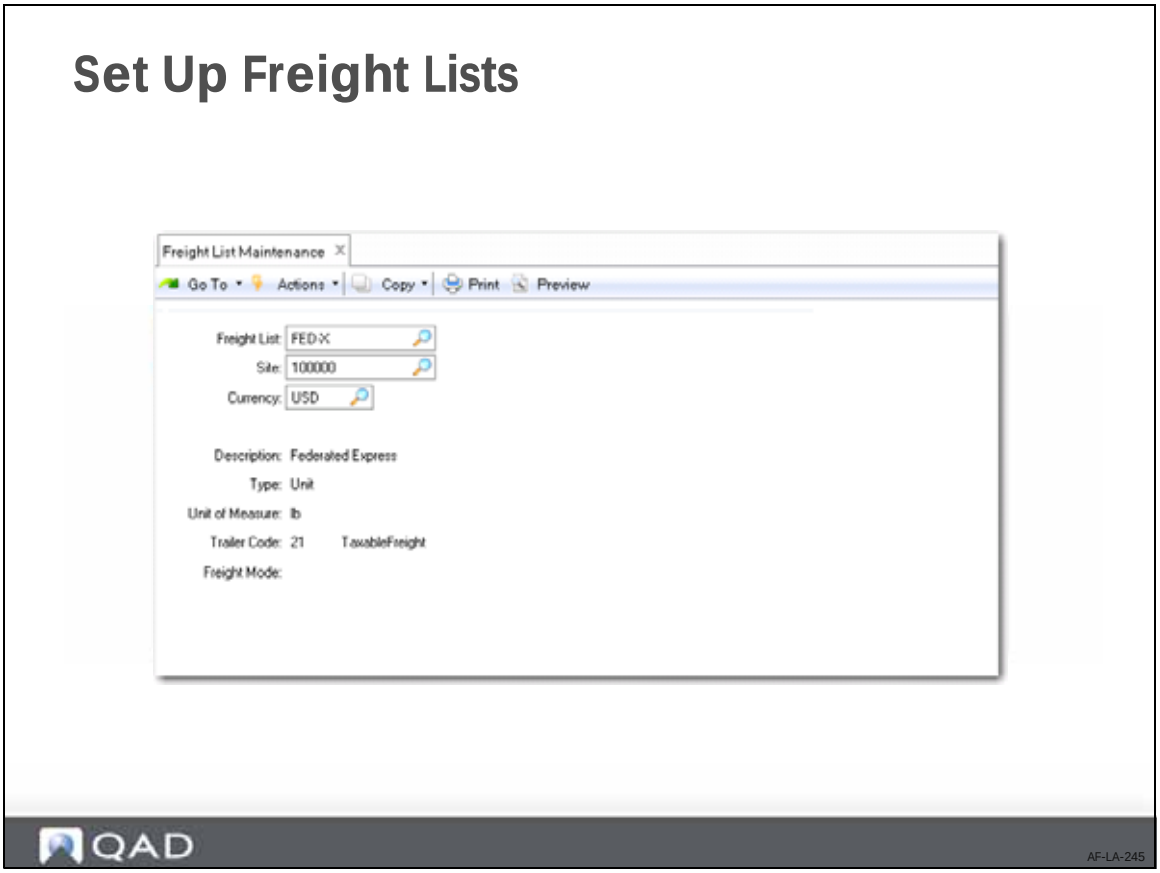
For more details on how to set up freight terms, see *QAD Master Data User Guide*.

Setting Up Default Customer Freight Data



To facilitate data entry and minimize errors, it is recommended that you set up default freight data for each customer. The data you set up in Customer Data Maintenance (2.1.1) will default on orders, but can be updated.

Set Up Freight Lists



Use Freight List Maintenance (2.20.1) to define charges that apply to sales quotes, orders, and RMAs. Typically, you need at least one freight list for each shipping company you use. More than one freight list can be needed if the shipping company supports different types of transportation. For example, a shipping company might ship by train, by truck, by refrigerated truck, and by regular semi-trailer.

Set up freight lists for different currencies if your shipper delivers to other countries. You can also define lists per site if the same shipper transports from more than one warehouse or manufacturing site.

Type. Specify whether freight charges are based on the weight of each unit or on the total weight of the items that use this freight list. Valid entries are:

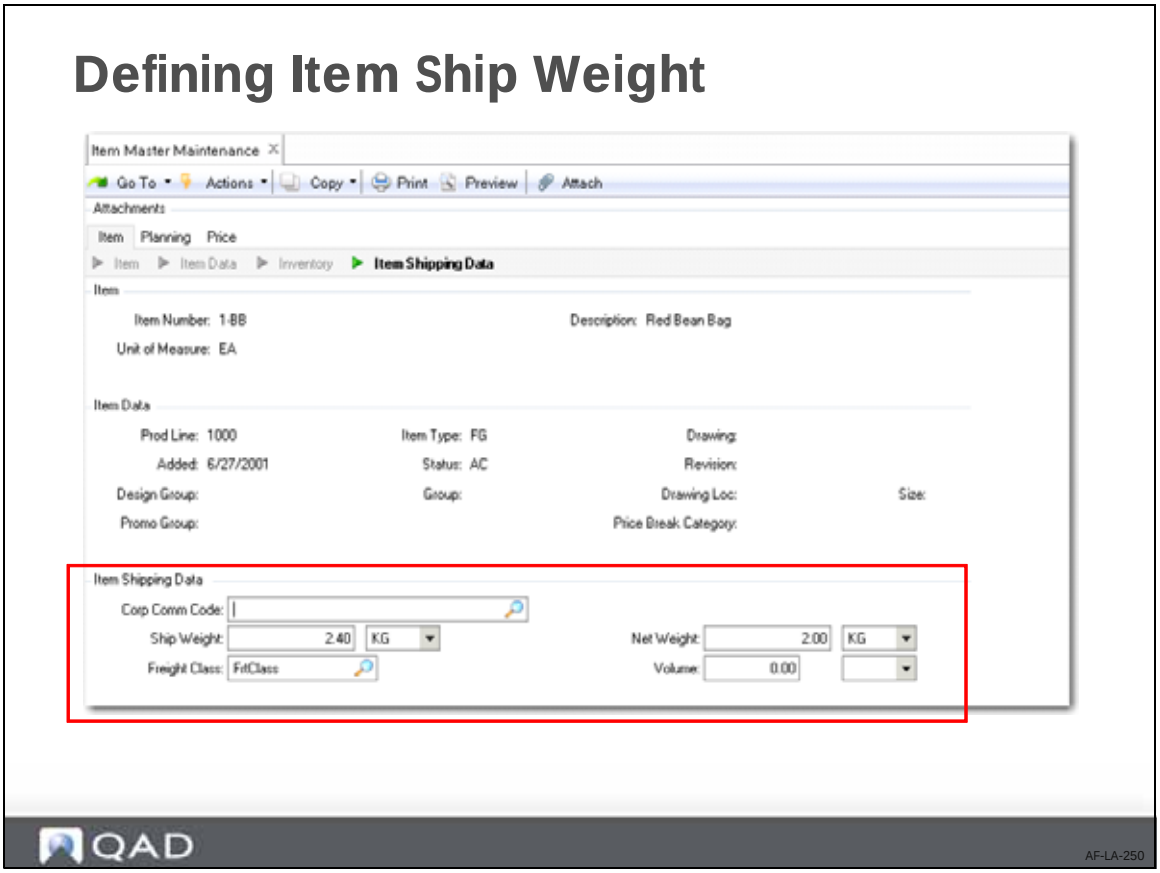
- Unit: Freight charges are calculated for individual units based on each unit's shipping weight.
- Bulk: Freight charges are calculated based on the total weight of applicable items. Weight is calculated for each order line as the unit weight multiplied by the line item quantity.

Trailer Code. This value links a freight list with the appropriate GL account to use when charging amounts on the sales quote, sales order, or pending invoice trailer.

Note If the trailer codes you associate with freight lists are not the same as the default trailer codes in Sales Order Accounting Control (36.9.6), you must set Use SO Freight List Trailer Code to Yes in Sales Order Accounting Control. Otherwise, errors display and freight is not calculated in order maintenance programs.

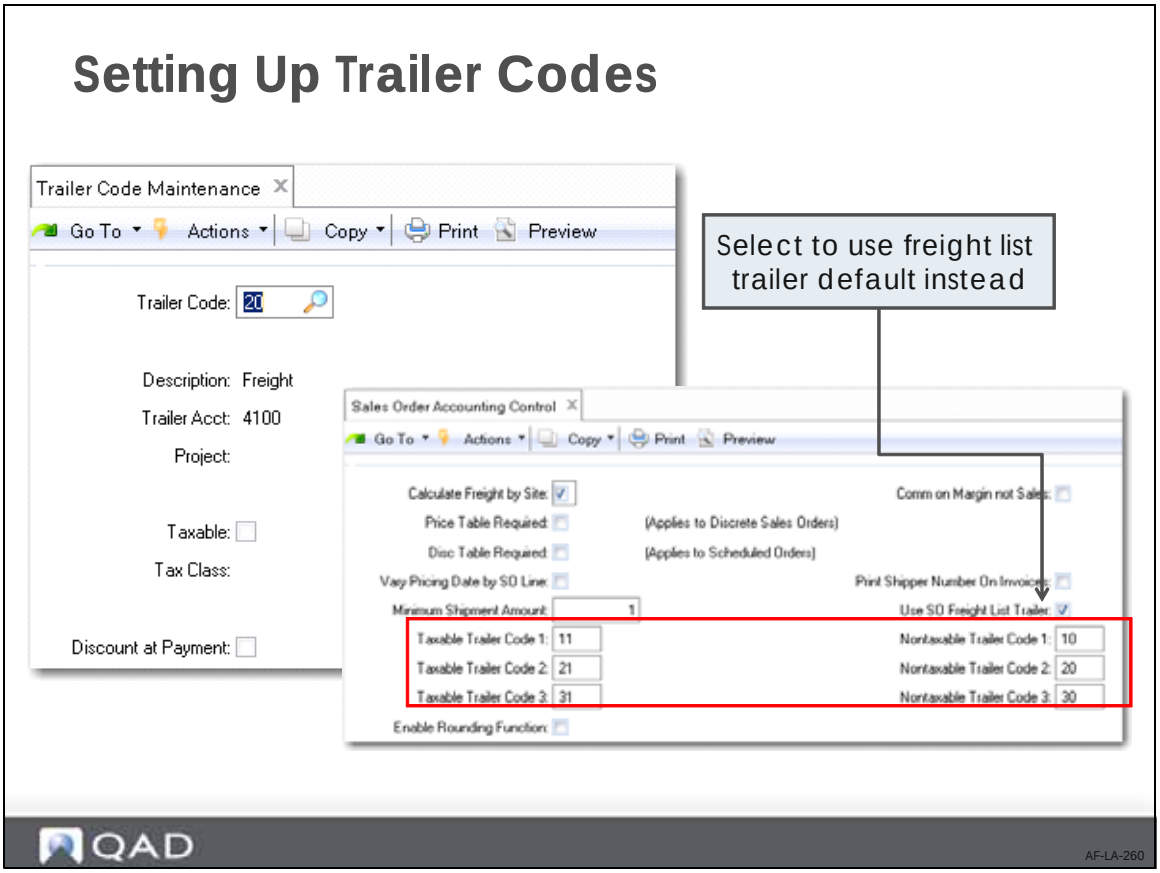
Freight Mode. An optional code that can be used to describe the transportation method. Define values in Generalized Codes Maintenance (36.2.13) for field fr_mode.

Defining Item Ship Weight



Where necessary, update the item records of items you are shipping and receiving to specify the ship weight. Use Item Master Maintenance (1.4.1).

Setting Up Trailer Codes



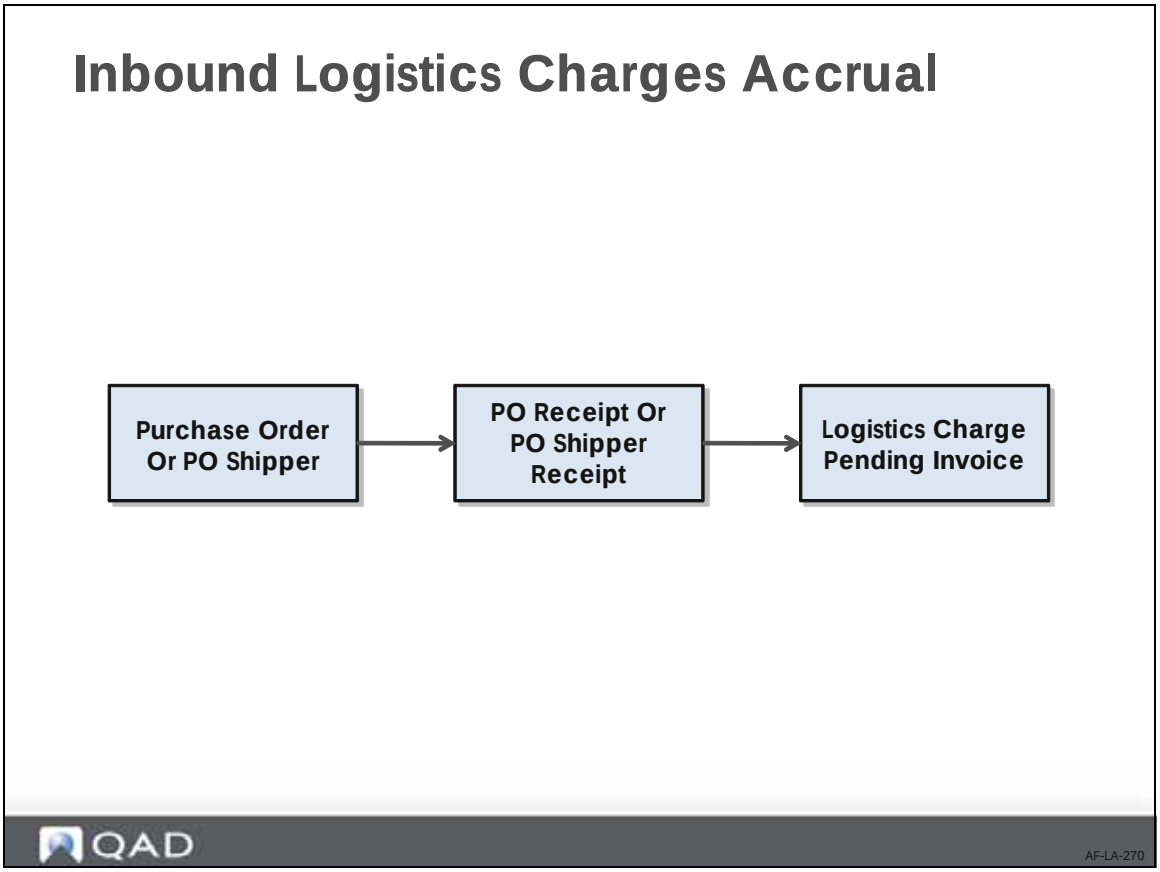
If you use freight terms that involve trailer codes, those need to be set up in Trailer Code Maintenance (2.19.13).

Once established, the three most frequently used taxable and nontaxable trailer codes can be specified as defaults in Sales Order Accounting Control (36.9.6). These defaults display on the trailer of every order, but can be changed manually.

You can also associate a trailer code with freight lists. If you want this trailer code to be used rather than the ones defined in Sales Order Accounting Control, you must set Use SO Freight List Trailer Code to Yes in Sales Order Accounting Control (36.9.6).

For more details on setting up trailer codes, see the *QAD Master Data User Guide*.

Inbound Logistics Charges Accrual

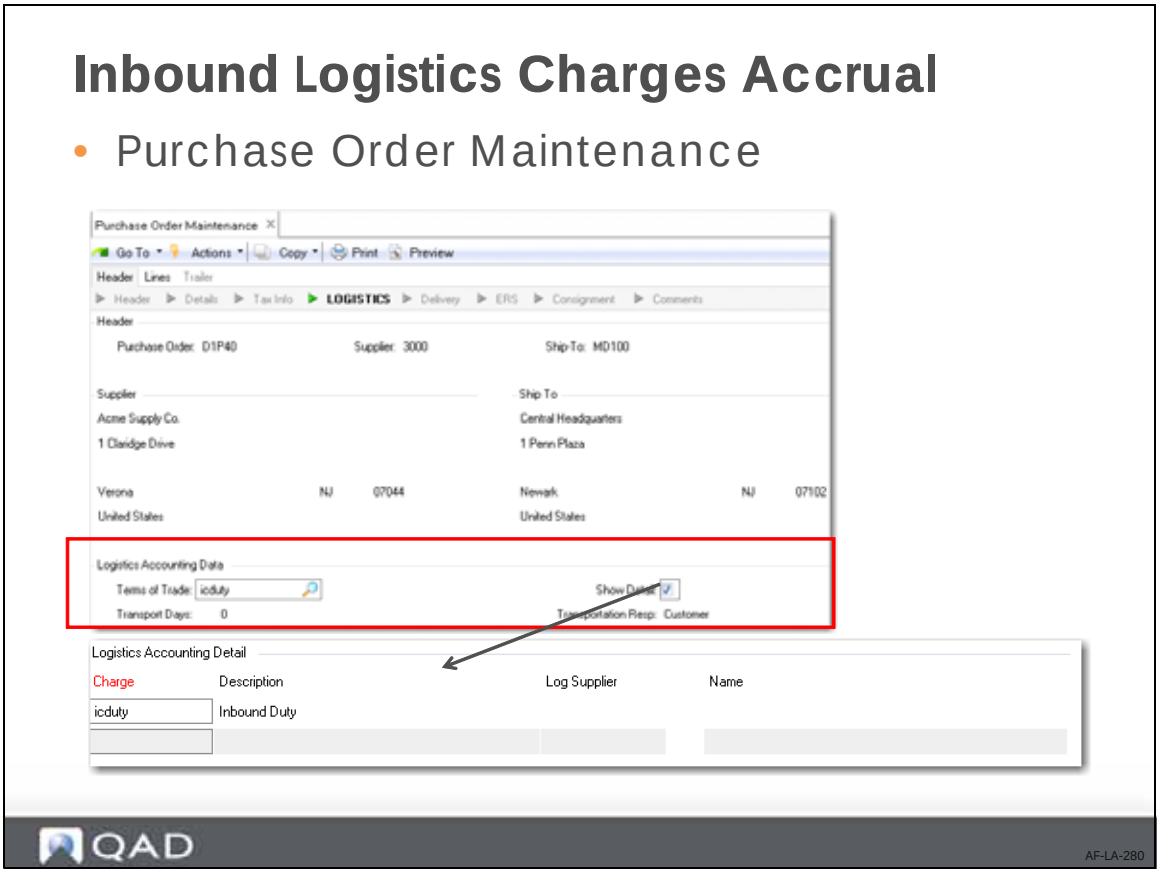


The inbound logistics charges accrual process starts with a purchase order or a shipper containing the required information for the system to accrue the charges appropriately.

The accrual happens during the PO or PO shipper receipt, and results in a logistics charge pending invoice.

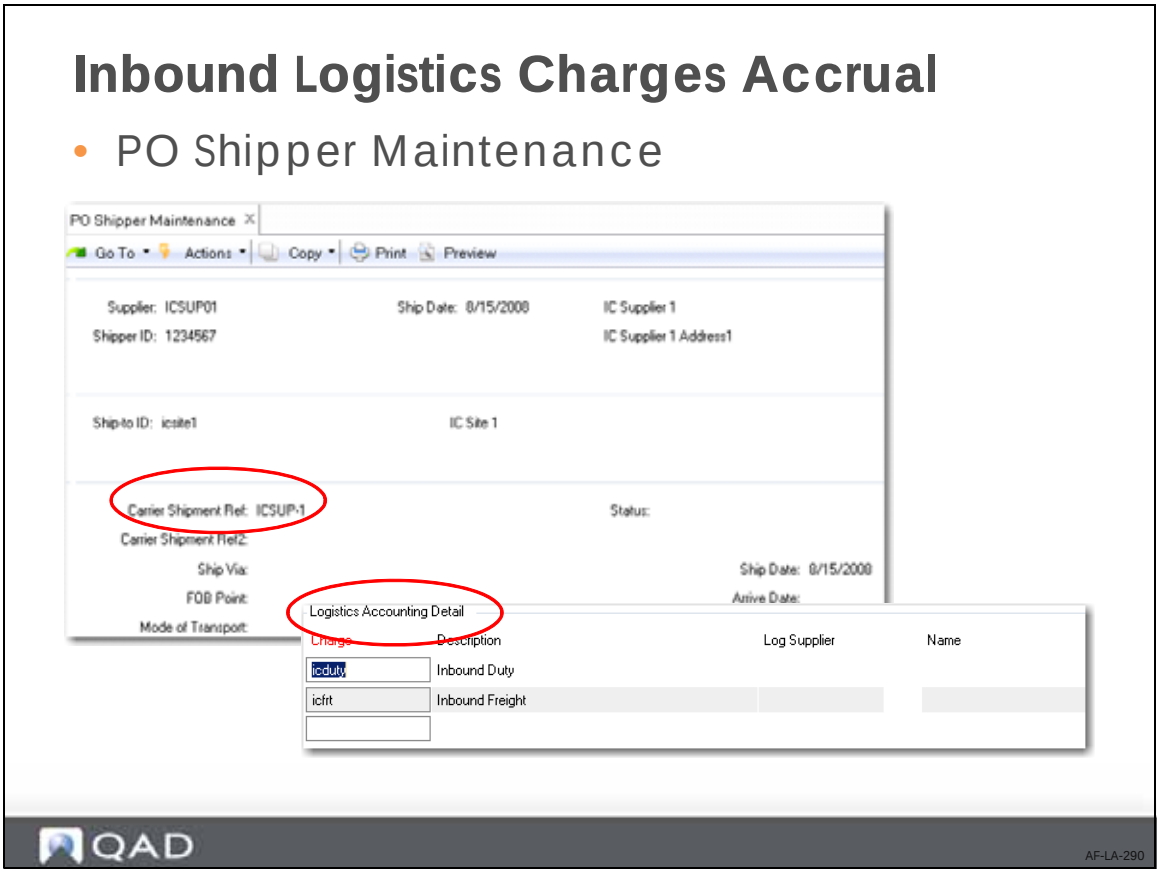
We will now review these steps in more detail.

Purchase Order Maintenance



When you create an order in Purchase Order Maintenance (5.7), Blanket Order Maintenance (5.3.1), or Scheduled Order Maintenance (5.5.1.13), you can specify the terms of trade. After you enter the terms-of-trade code, you can, optionally, display the terms-of-trade detail lines and assign a logistics supplier to each charge that is your responsibility as a customer. Logistics charges that are the responsibility of the item supplier do not display.

PO Shipper Maintenance



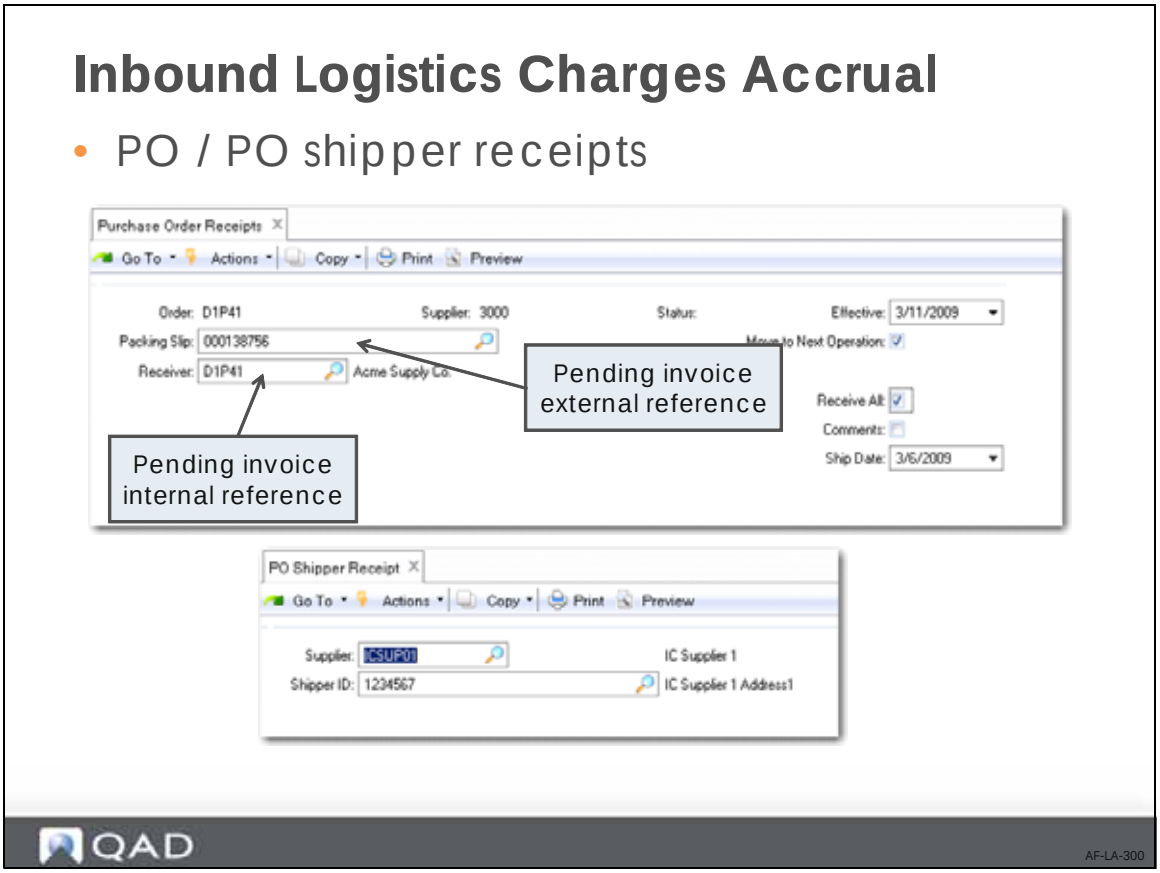
In PO Shipper Maintenance (5.13.14) or PO Fiscal Receiving (5.13.16), the system prompts for additional Logistics Accounting information.

Enter the shipment reference number from the carrier, such as a bill of lading number, carrier tracking number, or packing slip number. The shipment reference is used during receiver matching to help match pending invoices to invoices from logistics suppliers.

When terms of trade are assigned to purchase orders attached to the shipper, the terms-of-trade code assigned to the first PO line is applied to the entire shipper or container.

After you finish entering line items, the terms-of-trade details display. You can specify a supplier for each logistics charge that is your responsibility.

PO and PO Shipper Receipts



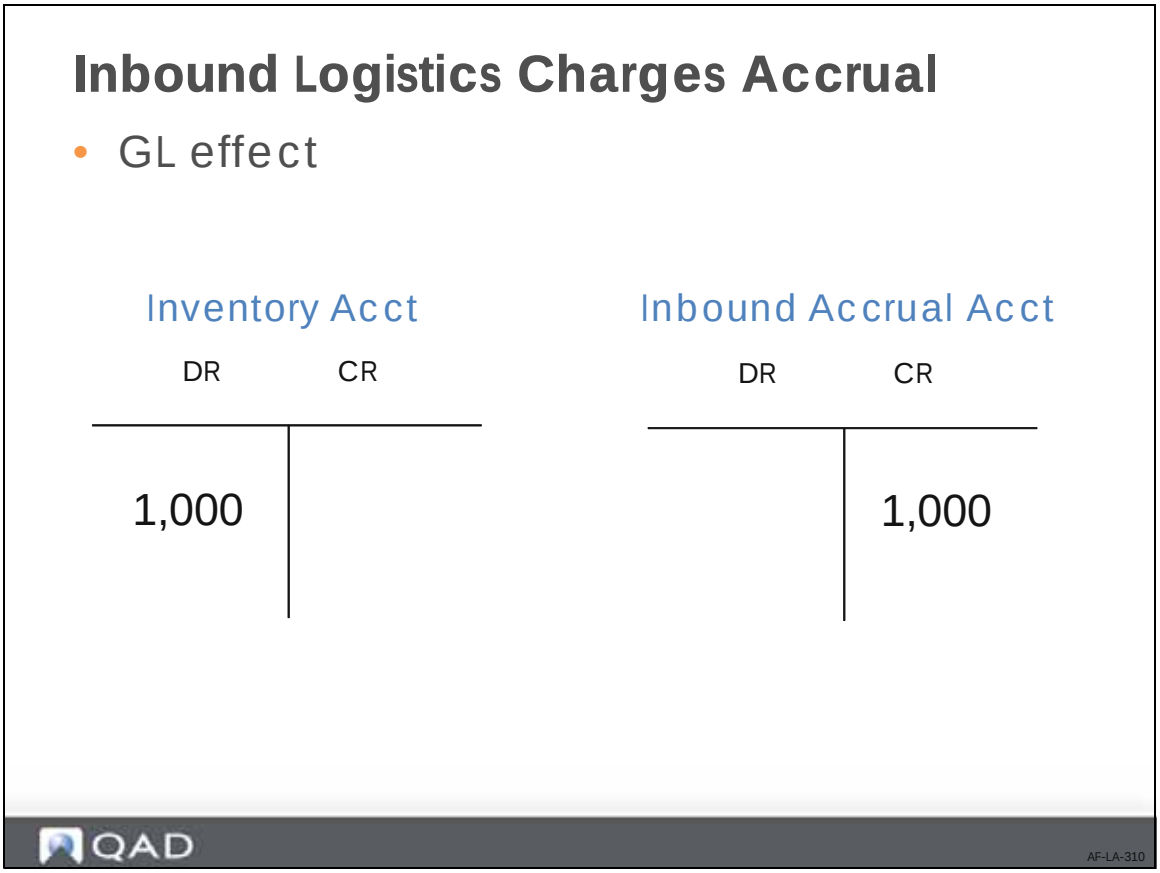
During purchase receipt processing in Purchase Order Receipts (5.13.1) or PO Shipper Receipt (5.13.20), a pending invoice record is created for each logistics charge associated with a purchase receipt that is your responsibility.

Receiving PO line items creates pending invoices for logistics charges and the corresponding GL transactions, and calculates tax.

When a pending invoice is created in Purchase Order Receipts (5.13.1), the receiver number is used as the internal reference and the packing slip number is used as the external reference.

Pending invoices created in PO Shipper Receipt (5.13.20) use the shipper number as the internal reference and the carrier shipment reference from the PO shipper as the external reference.

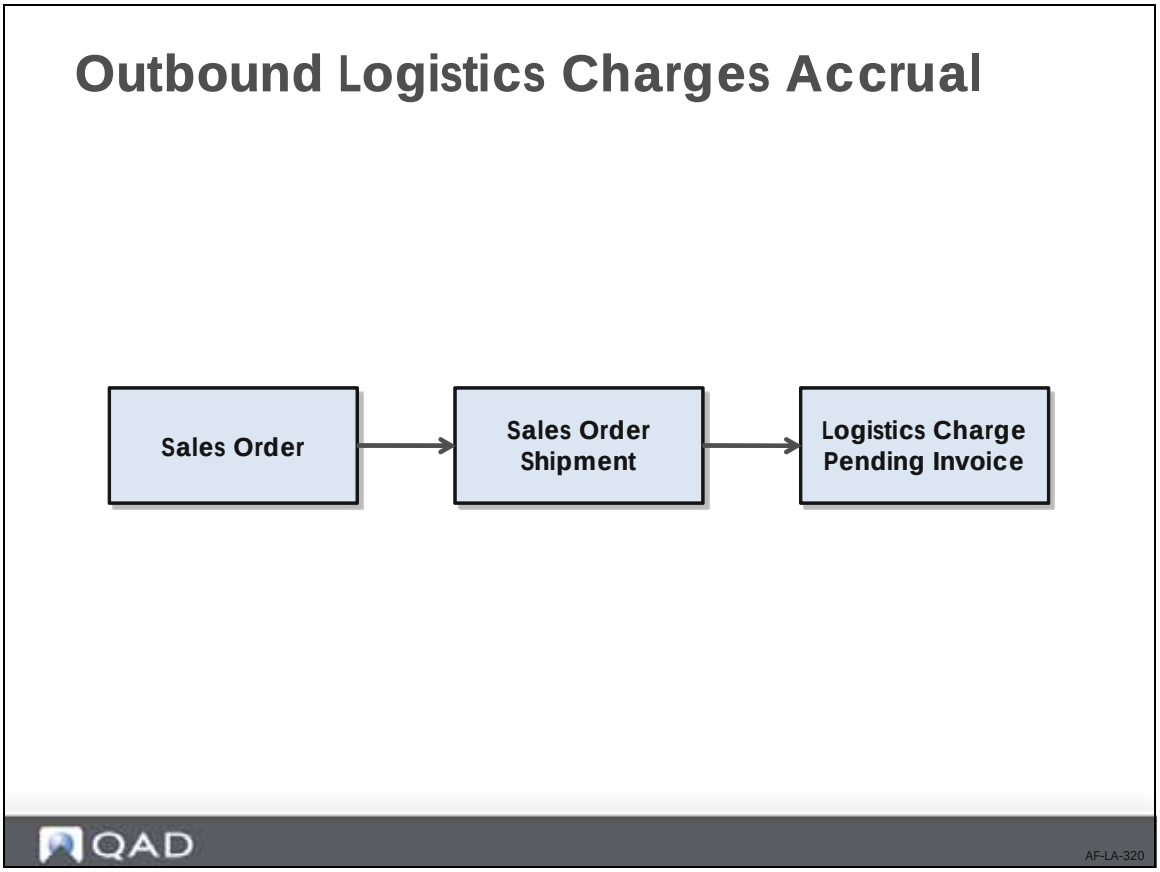
GL Effect



In addition to the GL transactions created during PO receipt for item material cost, the following GL transactions are created for each PO line received with an associated logistics charge:

- Debit inventory for the PO line logistics charge accrual value.
- Credit the inbound accrual account for the logistics charge, product line, site, and supplier type for the same amount.

Outbound Logistics Charges Accrual

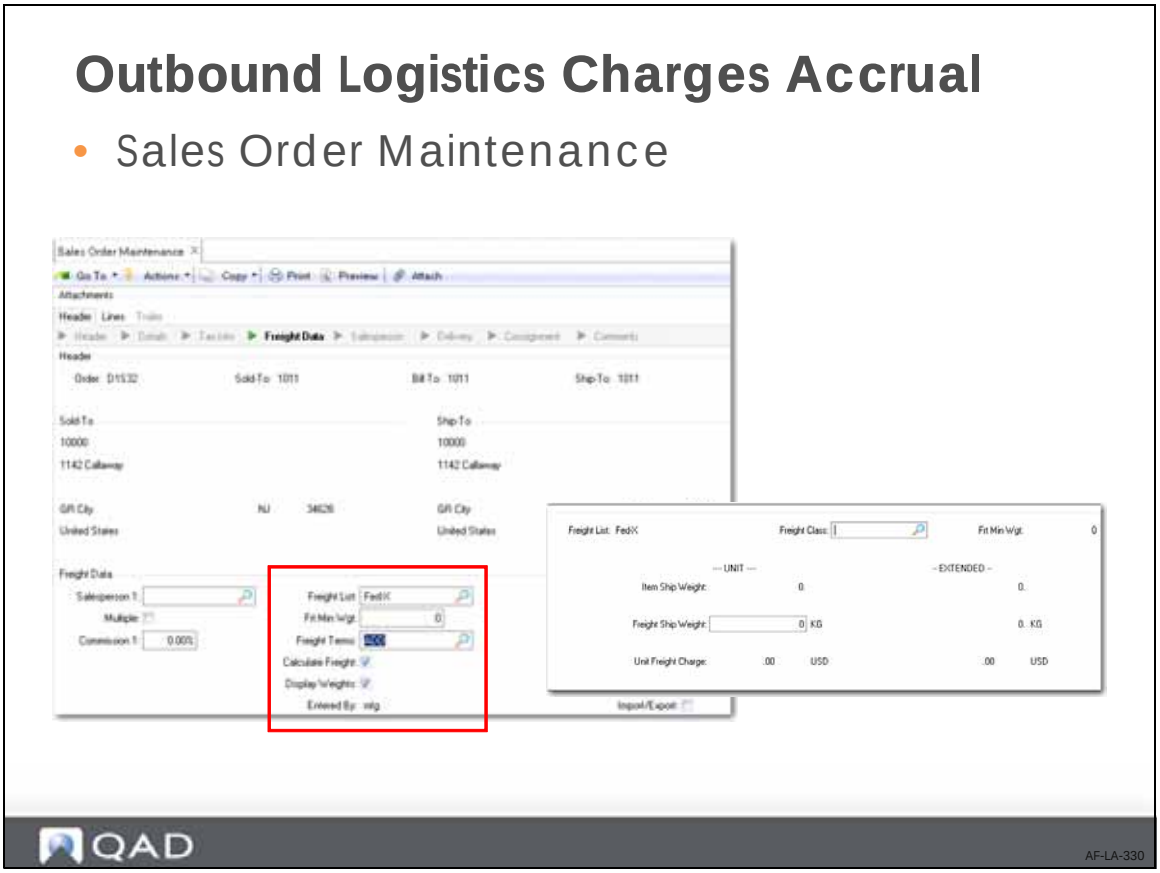


The outbound logistics charges accrual process starts with a sales order (SO) containing the required information for the system to accrue the charges appropriately.

The accrual happens during the SO shipment, and results in a logistics charge pending invoice.

We will now review these steps in more detail.

Sales Order Maintenance



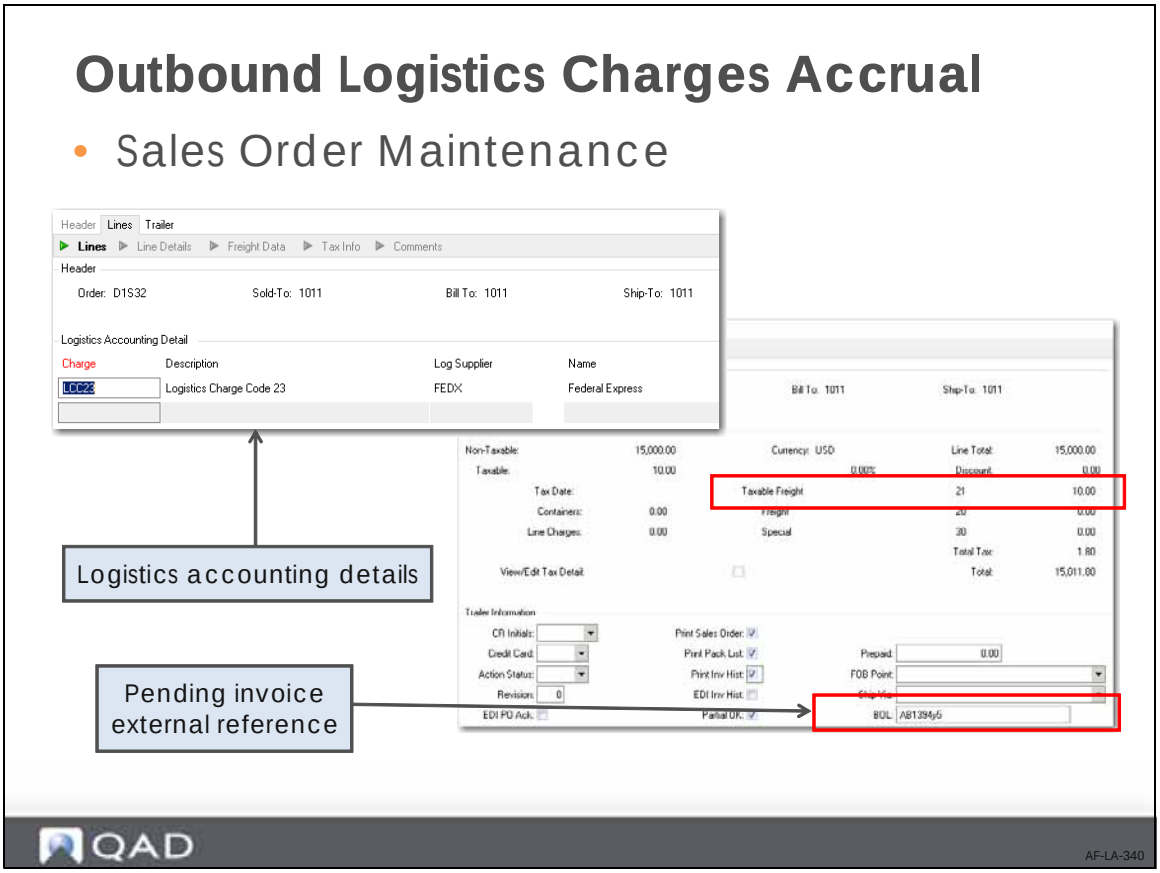
During sales order maintenance, the logistics charge code associated with the freight term and the default supplier, if any, are displayed. The logistics supplier can be changed.

The same Logistics Accounting frames and fields are used in the following programs and their related shipping programs:

- Sales Order Maintenance (7.1.1)
- Sales Quote Maintenance (7.12.1)
- Pending Invoice Maintenance (7.13.1)
- RMA Maintenance (11.7.1.1)
- Distribution Order Workbench (12.17.13)
- Distribution Order Maintenance (12.17.14)
- Distribution Order Processing (12.17.21)

See *QAD Sales User Guide* for more information on sales orders.

Logistics Accounting Details

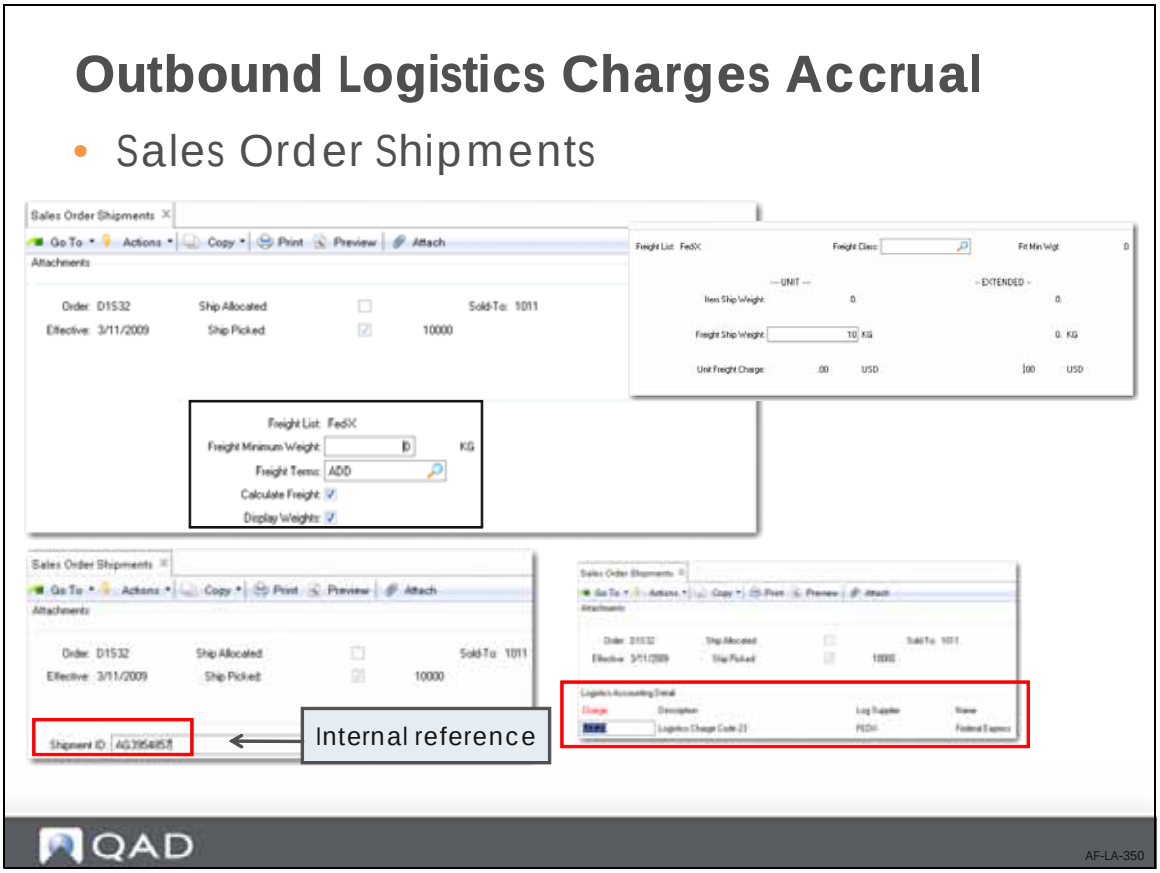


After you have finished entering order line items, the Logistics Accounting detail frame displays when:

- A freight terms code is specified on the order header.
- The freight terms code indicates an accrual level of shipment or line.
- A freight list is specified on at least one order line.

In the trailer, the BOL field value is used as external reference on the pending invoice that is created during shipment.

Sales Order Shipments



Processing a discrete shipment in any of the following programs creates a pending invoice when the freight terms assigned to the order or line indicate an accrual level of shipment and a freight list is specified on at least one order line:

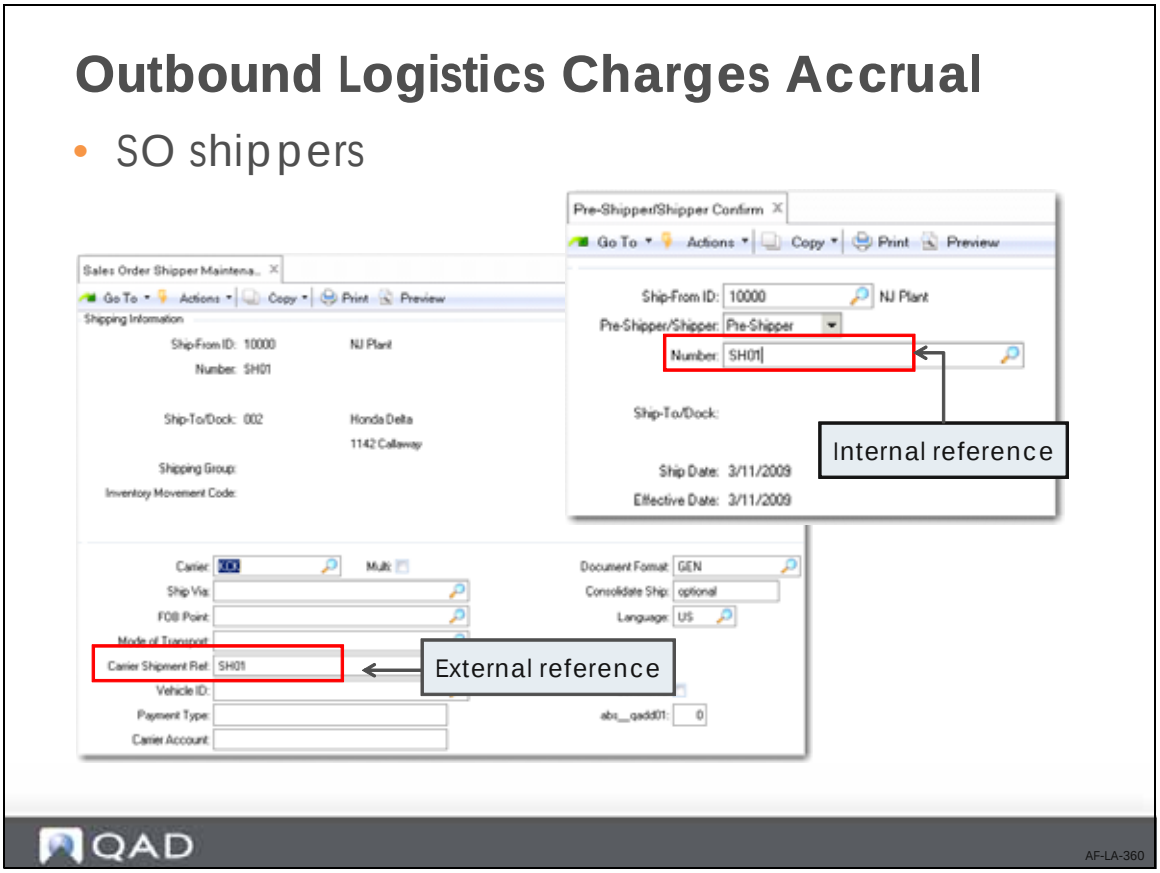
- Sales Order Shipments (7.9.15)
- Pending Invoice Maintenance (7.13.1)
- Distribution Order Processing (12.17.21) or Shipments (12.17.22)
- RMA Maintenance (11.7.1.1), Shipments (11.7.1.16), or Receipts (11.7.1.13)

When a pending invoice is created in discrete shipment programs, the shipment ID number is used as the internal reference and the bill of lading (BOL) number is used as the external reference.

> *Shipment ID.* If the NRM sequence code specified in Logistics Accounting Control is an internal sequence, leave this field blank to have the system assign a number. Otherwise, enter a sequence number. The system validates it against the Sales Order Shipment Sequence ID specified in Logistics Accounting Control.

Processing shipments creates pending invoices for logistics charges and the corresponding GL transactions, and calculates tax on logistics charges.

Sales Order Shippers

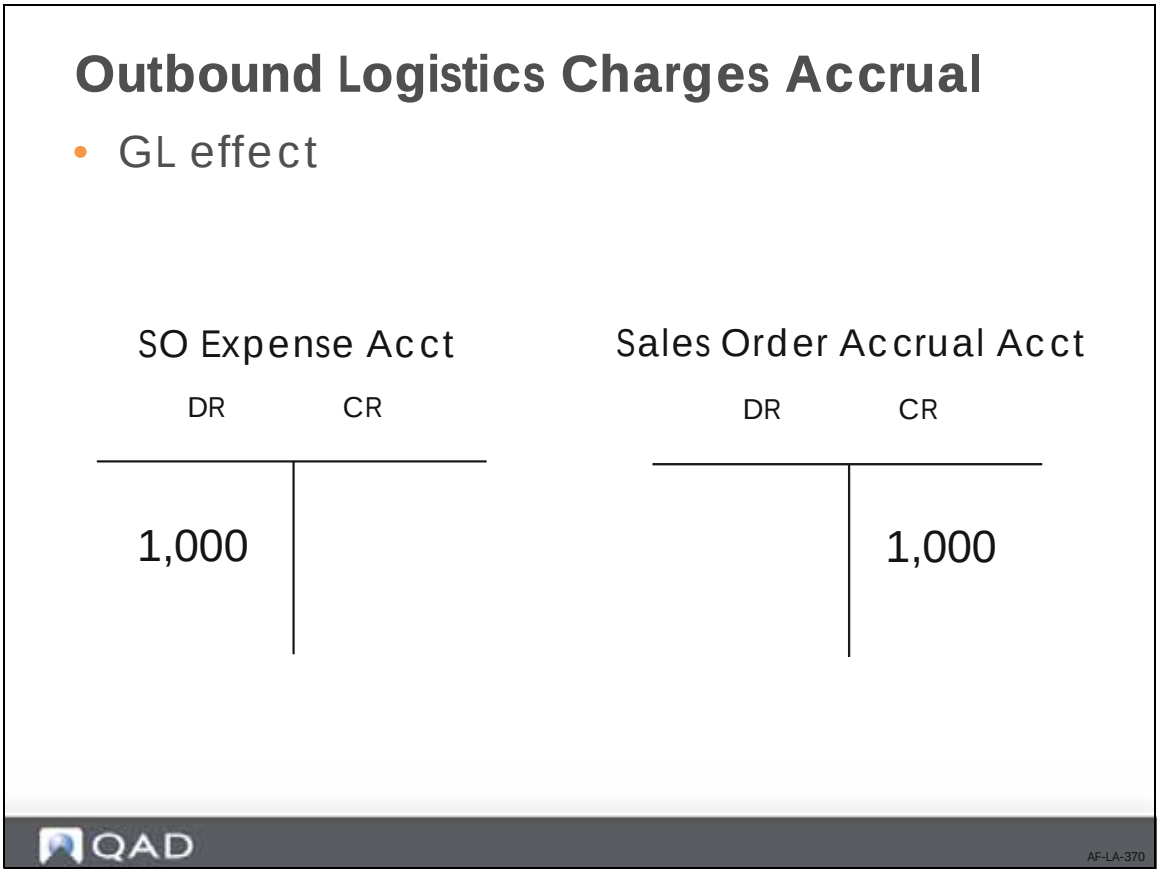


During the confirmation process in Pre-Shipper/Shipper Confirm (7.9.5) or Pre-Shipper/Shipper Auto Confirm (7.9.7), a pending invoice is created and freight charges accrued based on the freight terms assigned to the first sales order attached to the shipper.

Each sales order attached to the shipper must have the same freight terms code; otherwise, an error displays.

Pending invoices created during confirmation use the shipper number as the internal reference and the carrier shipment reference from the shipper as the external reference.

GL Effect

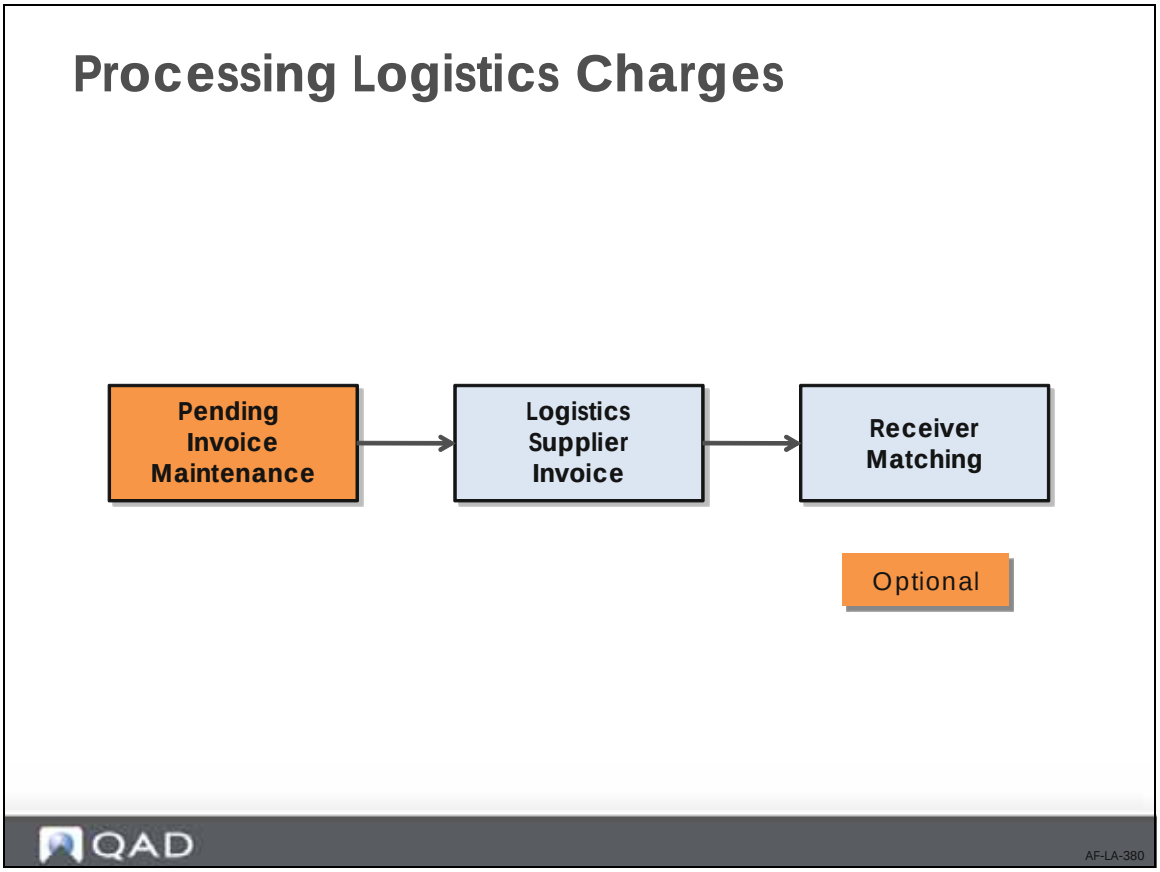


During shipment, the system creates a GL transaction for the entire shipment or for each line, depending on the freight terms.

A sales order shipment creates the following GL transactions:

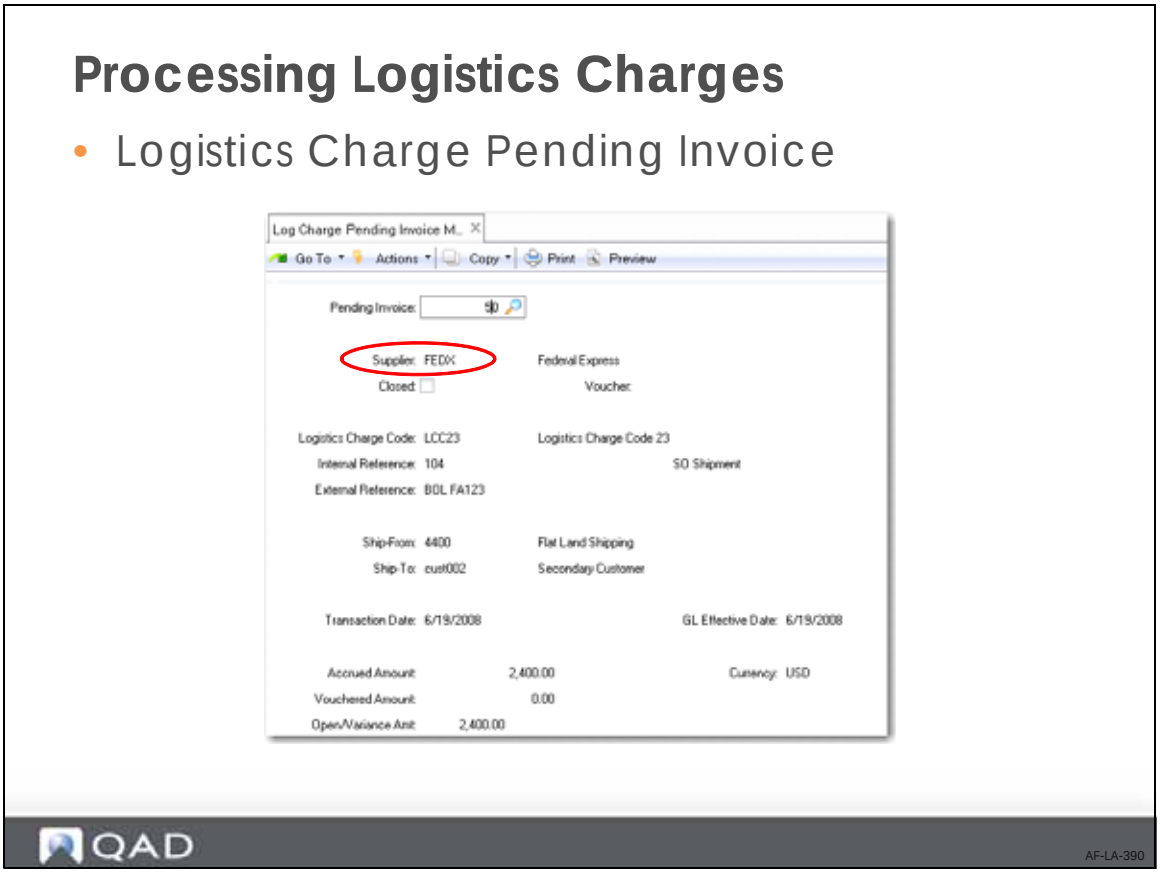
- Debit the Sales Order Expense account for the logistics charge, product line, site, customer type, and channel.
- Credit Sales Order Accrual for the logistics charge, product line, site, and supplier type.

Processing Logistics Charges



This section describes how logistics charges are processed once accrued.

Logistics Charge Pending Invoice



For each PO line received into inventory, the system checks each cost element for that line item in the Material or Overhead category in the GL cost set. If the cost element is linked to a logistics charge code belonging to the PO terms of trade and the charge is your responsibility, a pending invoice is automatically created for that logistics charge.

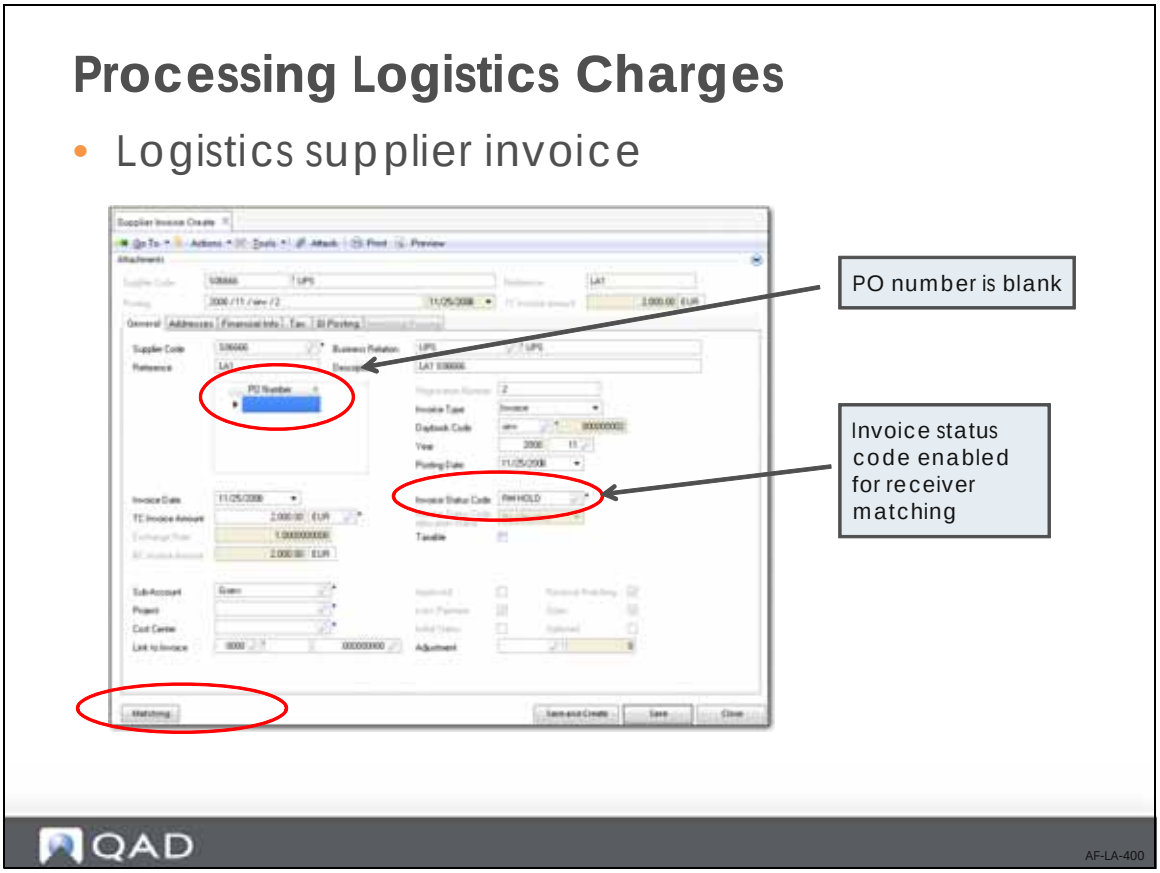
Logistics Charge Pending Invoice Maintenance (2.15.7) can only be used to review a pending invoice and edit the logistics supplier. It is automatically updated with the supplier invoice number and variance details during matching.

Although you can match invoice amounts from logistics suppliers to pending invoices with blank suppliers in Receiver Matching Create (based on the control setting), it is easier to match pending invoices when logistics suppliers are assigned.

When you receive more than one invoice for the same logistics charge, you can enter the supplier from the first invoice and match the amount, then change the supplier on the pending invoice before matching the second invoice.

Example A single pending invoice is created for freight and you receive two invoices, one from a shipping agent for transporting the goods to a local port and another from a local carrier for transporting the goods from the dock to your company warehouse.

Logistics Supplier Invoice

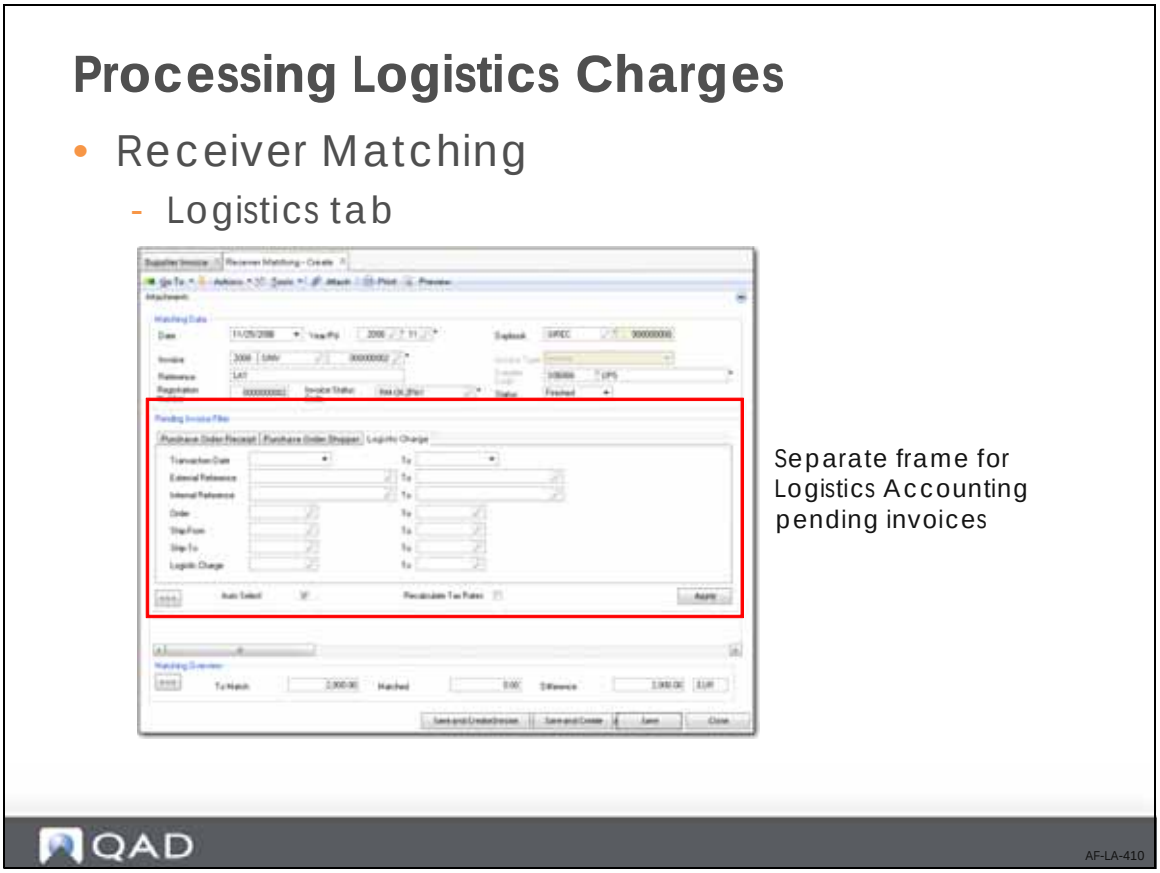


When an invoice is received from a logistics supplier, the total amount of the invoice is recorded in Supplier Invoice Create (28.1.1.1). To capture the logistics costs for individual line items, a portion of the total invoice amount is allocated to each line item on the associated order.

The system apportions inbound and outbound logistics charges to line items on an order when the pending invoice is created, based on the apportion method associated with the logistics charge code. The total invoice amount is allocated to individual line items as a ratio of the accrued logistics charges.

On logistics supplier invoices, the PO number is left blank. The invoice status code is enabled for receiver matching just as for normal orders.

Matching Logistics Charges



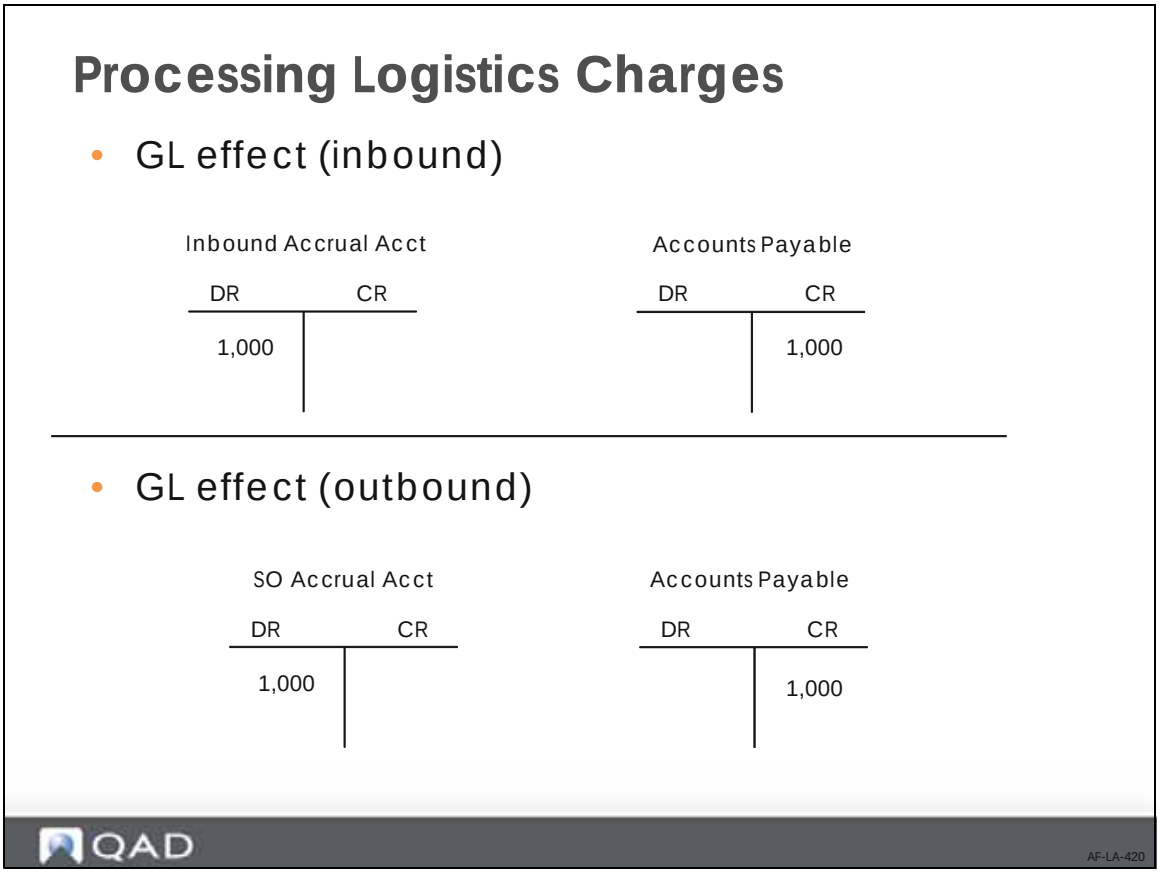
When invoices arrive from logistics suppliers, use the Logistics Charge tab of Receiver Matching Create (28.2.1) to match the accruals on pending logistics charge invoices to the logistics supplier invoice for payment.

See *QAD Financials User Guide* for details on receiver matching.

Variances

When you indicate that matching is complete against a logistics charge by setting Close Line to Yes, the system calculates the variance, if any, as the difference between the invoice amount and the accrued amount less the invoiced amount. Any difference is posted to the variance account for the logistics charge. Variances are calculated, but not recorded, when Close Line is No.

GL Effect



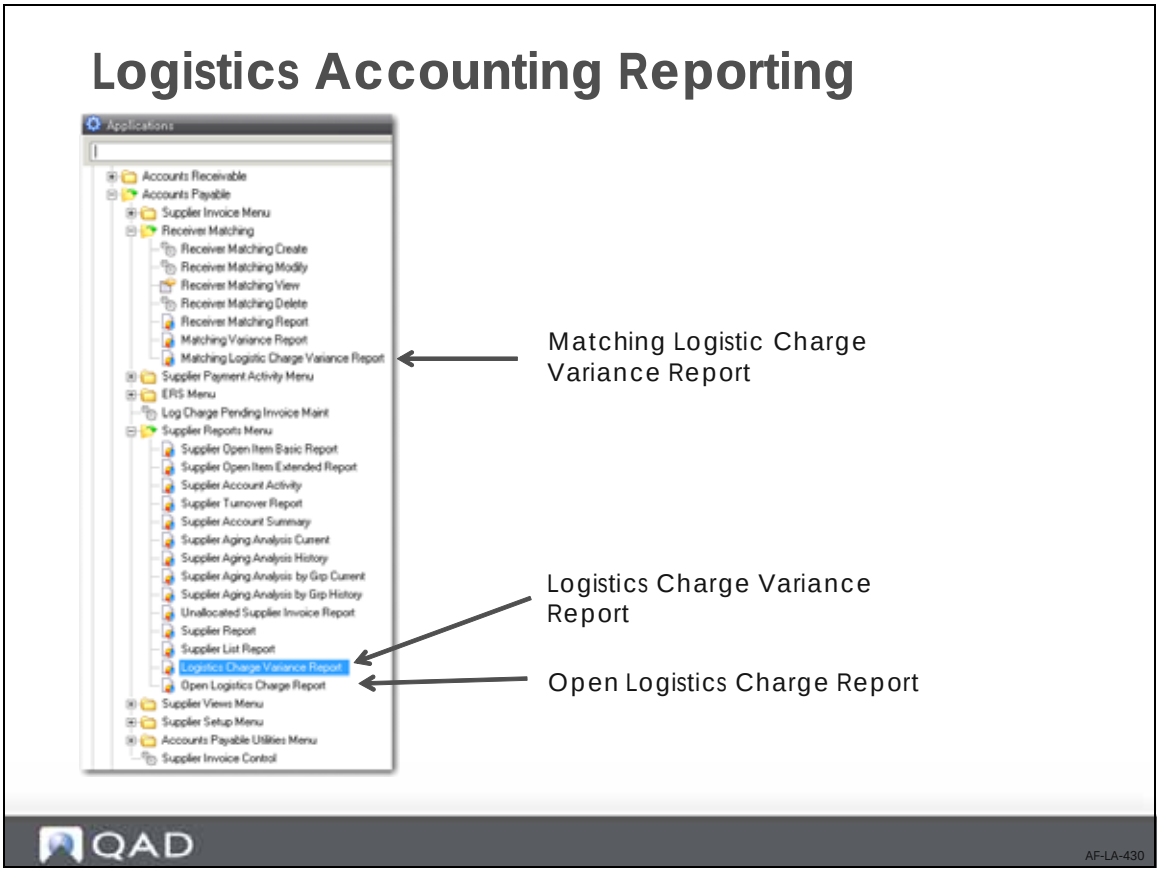
An invoice to a logistics supplier for logistics charges accrued during a purchase receipt (inbound) creates the following GL transactions:

- Debit the inbound accrual account for the logistics charge, product line, site, and supplier type.
- Credit Accounts Payable for the logistics supplier.

An invoice to a logistics supplier for shipments to customers creates the following GL transactions:

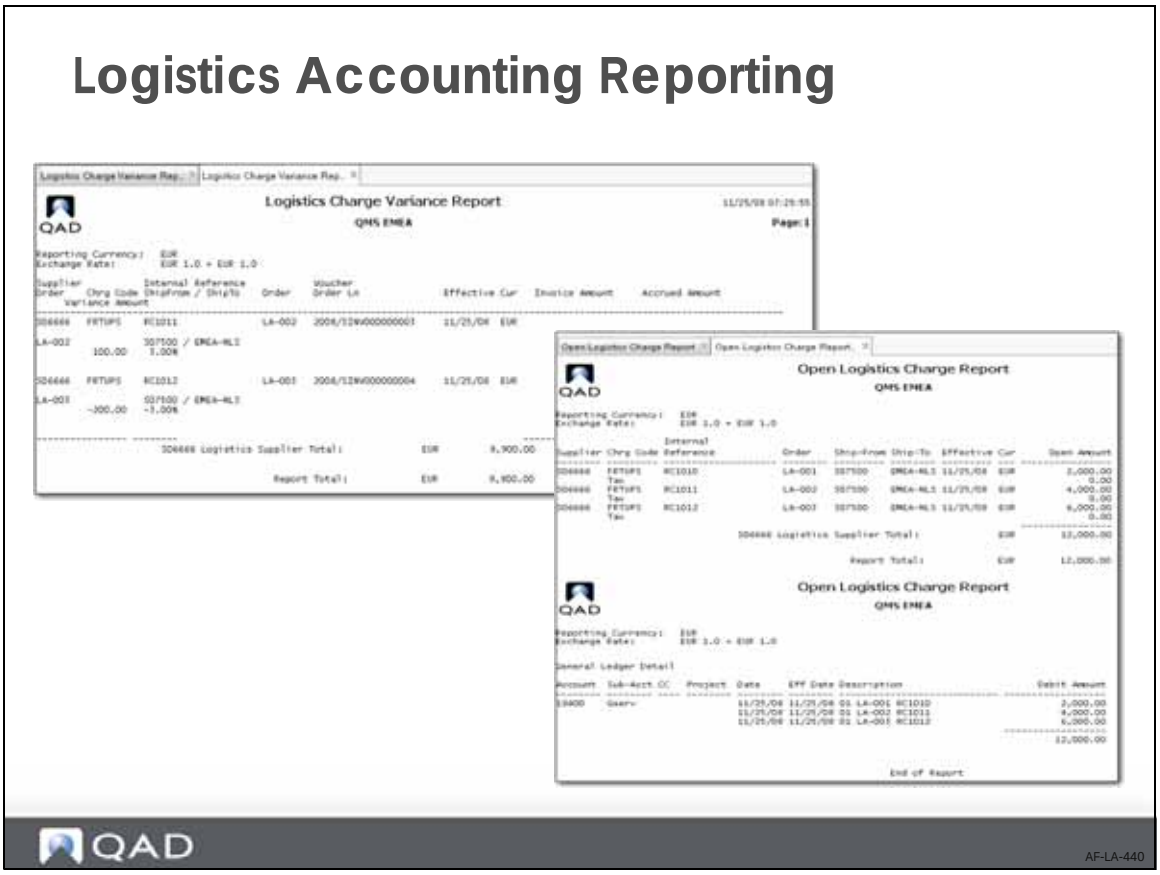
- Debit the Sales Order Accrual account for the logistics charge, product line, site, and supplier type.
- Credit Accounts Payable for the logistics supplier.

Logistics Accounting Reporting



The following three reports are useful for analyzing logistics accounting:

- Matching Logistic Charge Variance Report (28.2.8), which is similar to Matching Variance Report, but is specific to logistics charges.
- Logistics Charge Variance Report (28.17.17), which is another view on logistics charges using operational data
- Open Logistics Charge Report (28.17.18), which is similar to Unmatched PO Receipts, but for logistics charges.



The above slide displays two sample reports.

For a complete list of available Logistics Accounting reports, see *QAD Master Data User Guide*.

Chapter 6

Budgeting

Objectives

Objectives

- Learn how budgeting works in QAD Enterprise Applications
- Learn how to create and update budgets
- Learn how to use the Excel integration for budgets

QAD

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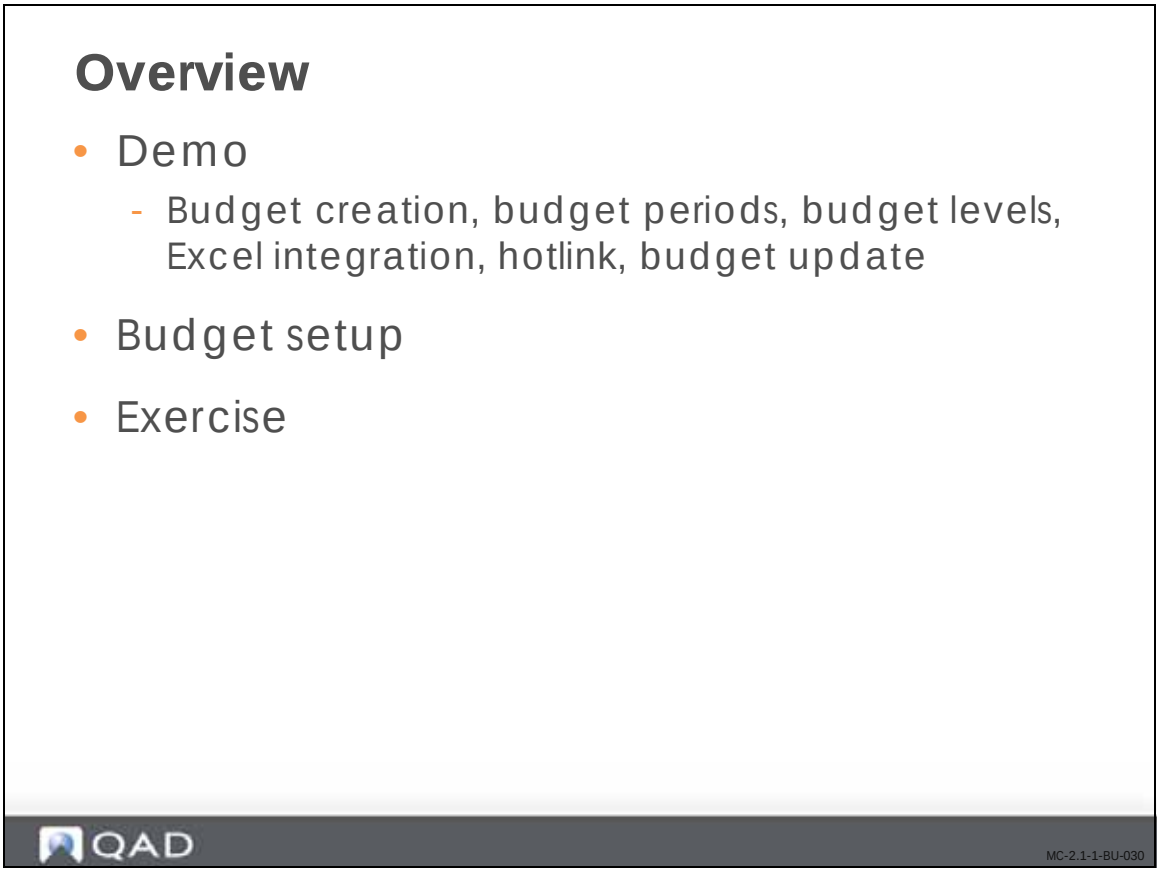
A budget is a set of amounts that is expected to be spent or earned during a given time period. Most organizations compile budgets annually to plan for expenses and revenues.

In this chapter, you will learn how to use the budgeting functionality in QAD Enterprise Applications.

You will learn how to set up and update budgets, both manually and using Excel integration.

Overview



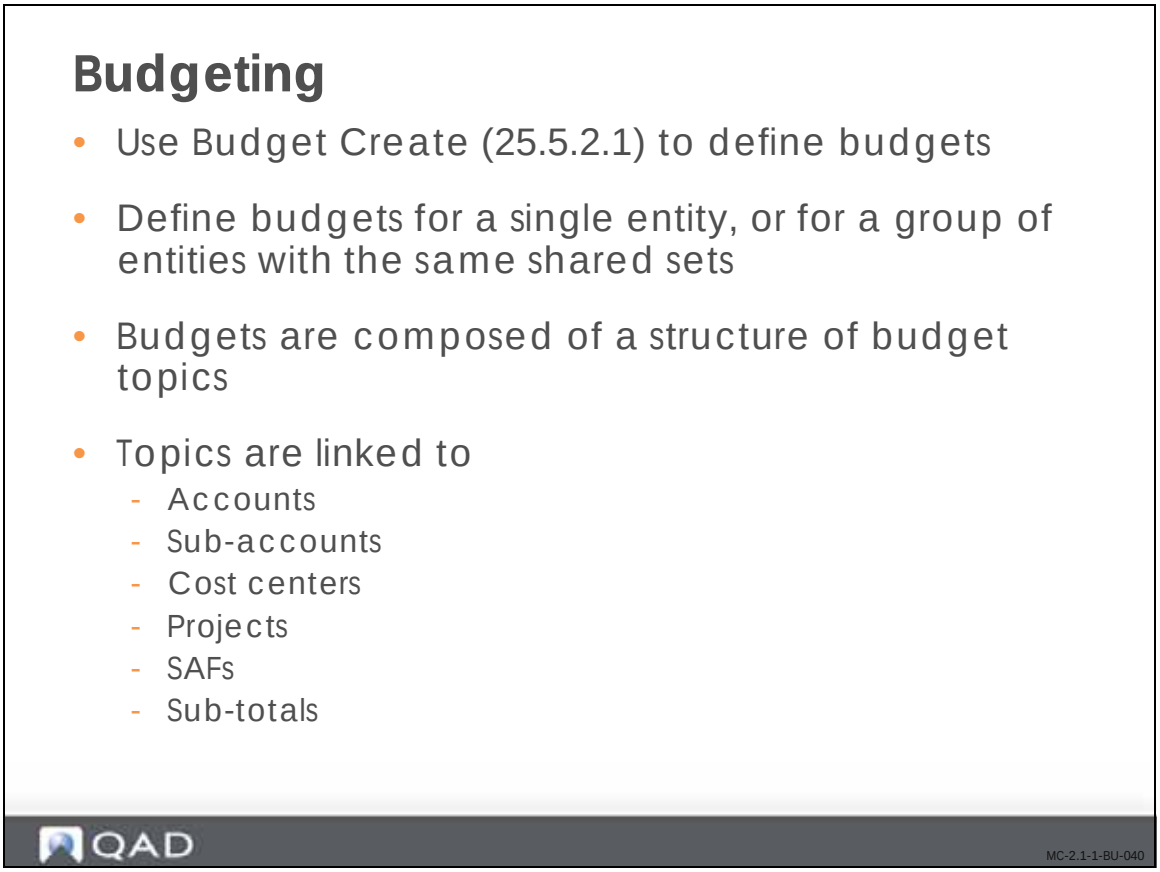
Your instructor will demo the main budgeting functionality including Excel integration.

Then, you will learn about the setup process, which elements it includes and which steps are required, manually and using the Excel integration.

Once your budget is set up, you will learn how to update it using the Excel hotlink.

Finally, you will practice what you have learned by completing an exercise.

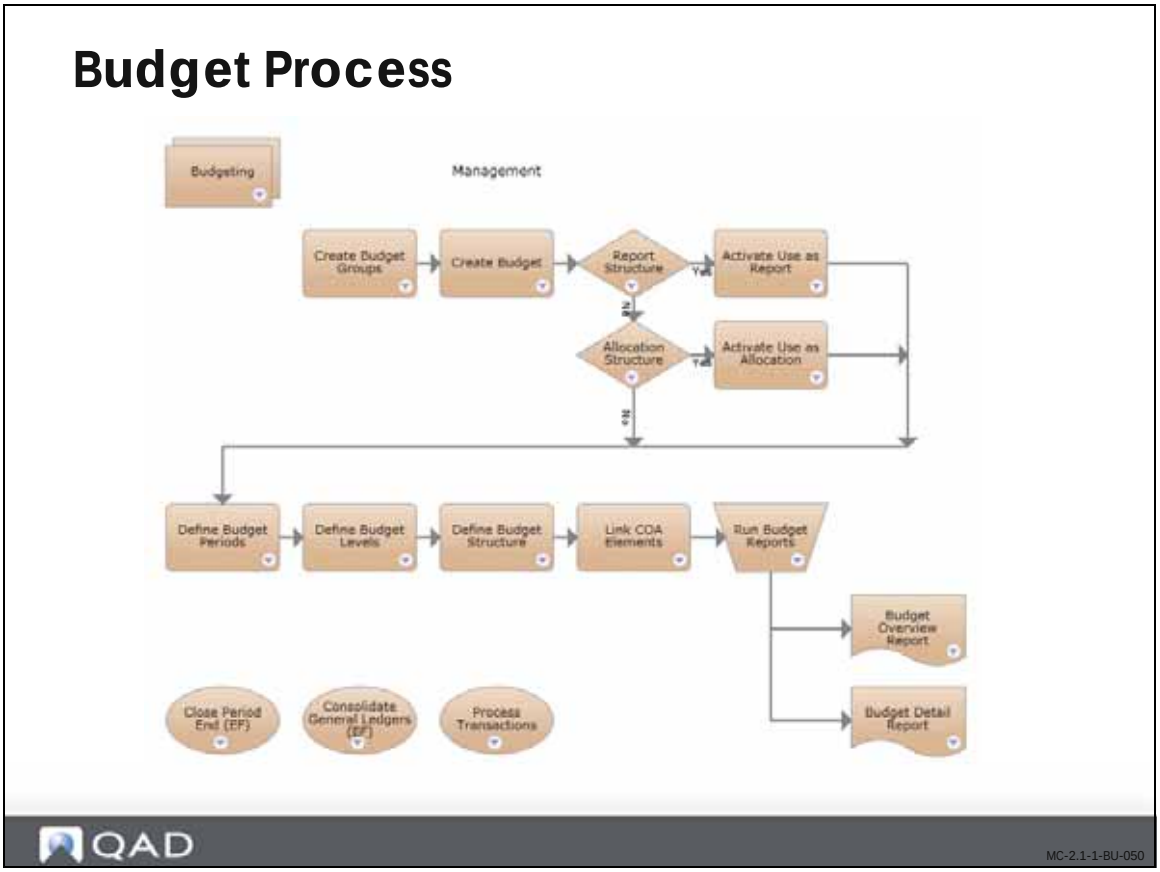
Budgeting



Use the Budget Create (25.5.2.1) activity to define budgets for a single entity or for a group of entities that use the same shared sets. The entities can be in the same or different domains.

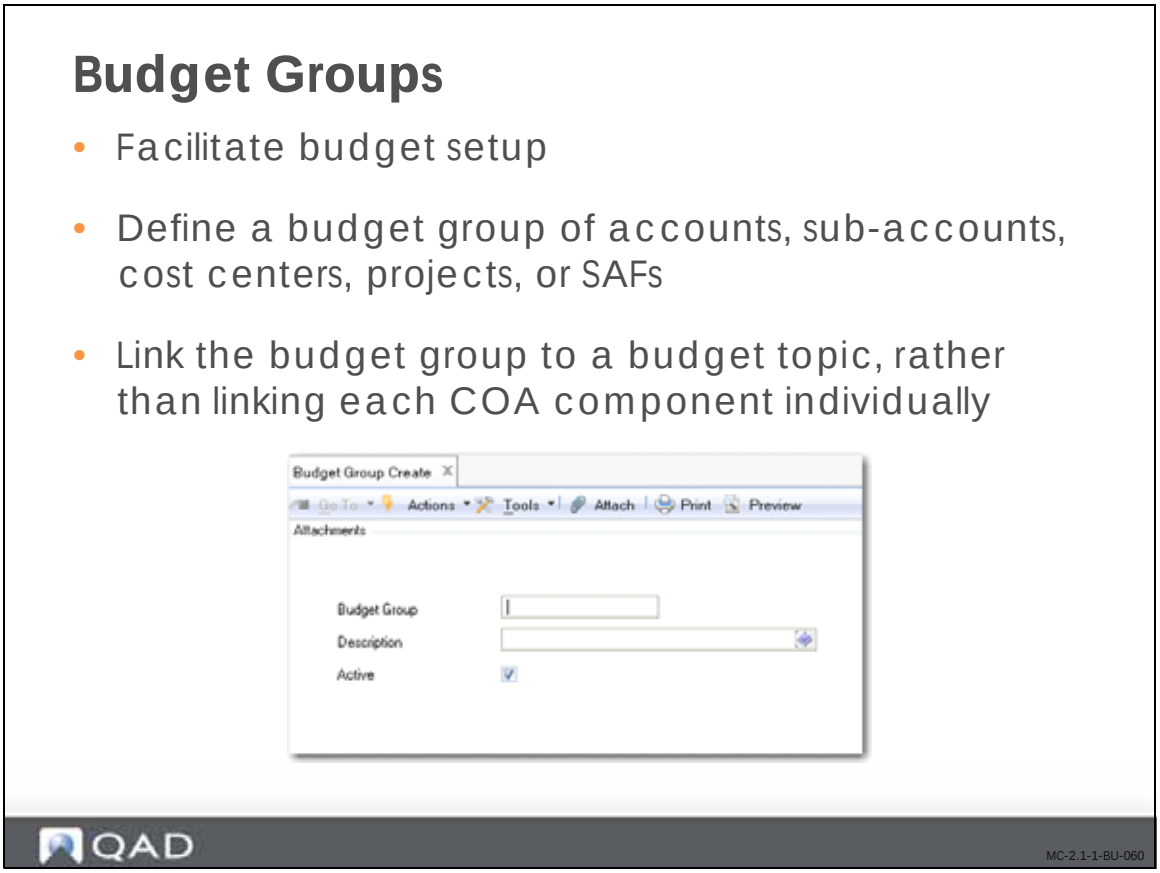
Budgets are composed of a structure of budget topics, each identified by a topic code and linked to a single or group of accounts, sub-accounts, cost centers, projects, or SAFs. You also define the hierarchy of topics for which budget and actuals data will be accumulated, and the position of subtotals and COA components in the hierarchy.

Budget Process



The slide shows the steps involved in the budget business process.

Budget Groups

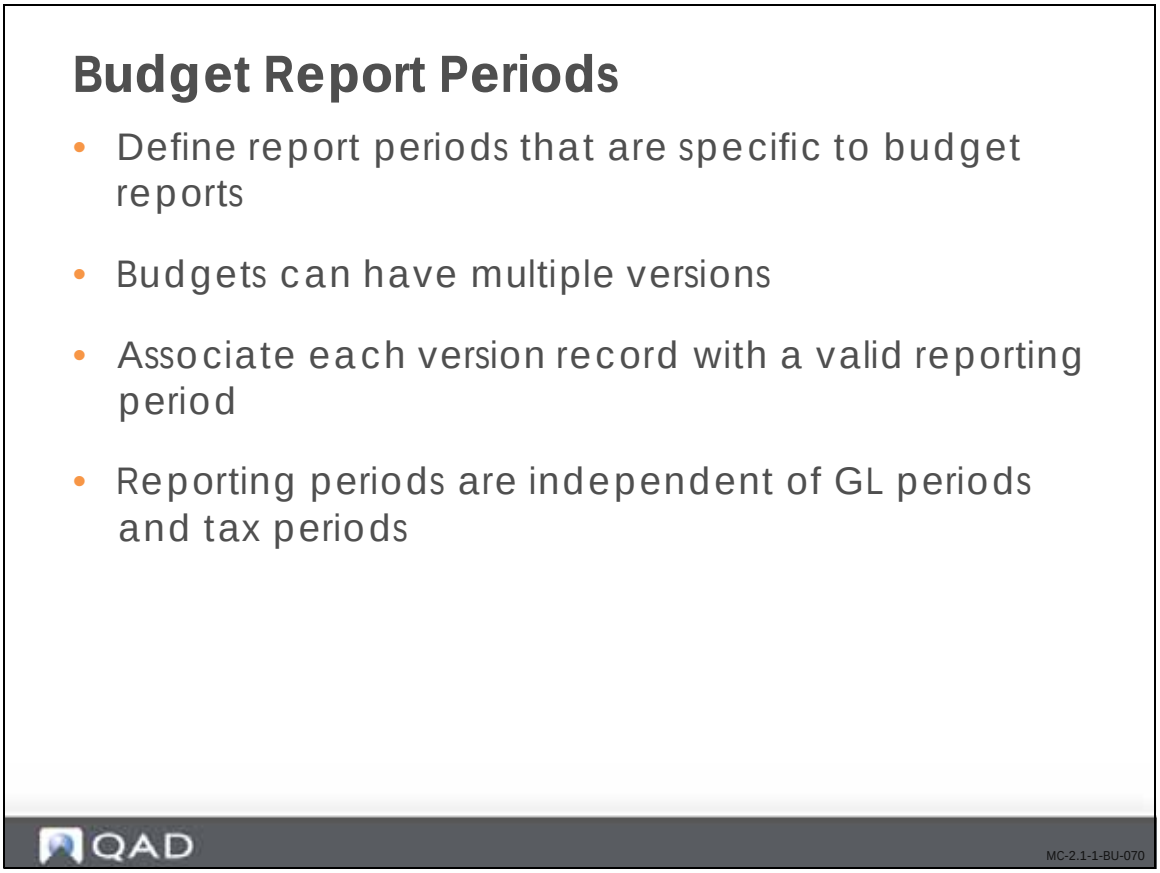


A budget group is any combination of accounts, sub-accounts, cost centers, projects, and SAF codes used to update actuals for a budget topic.

Use Budget Group activities (25.5.2) to create, view, modify, and delete budget groups.

You link a COA component to a budget group by assigning a group name when you create or modify the component definition in, for example, GL Account Create (25.3.13.1) or Cost Center Create (25.3.20.1).

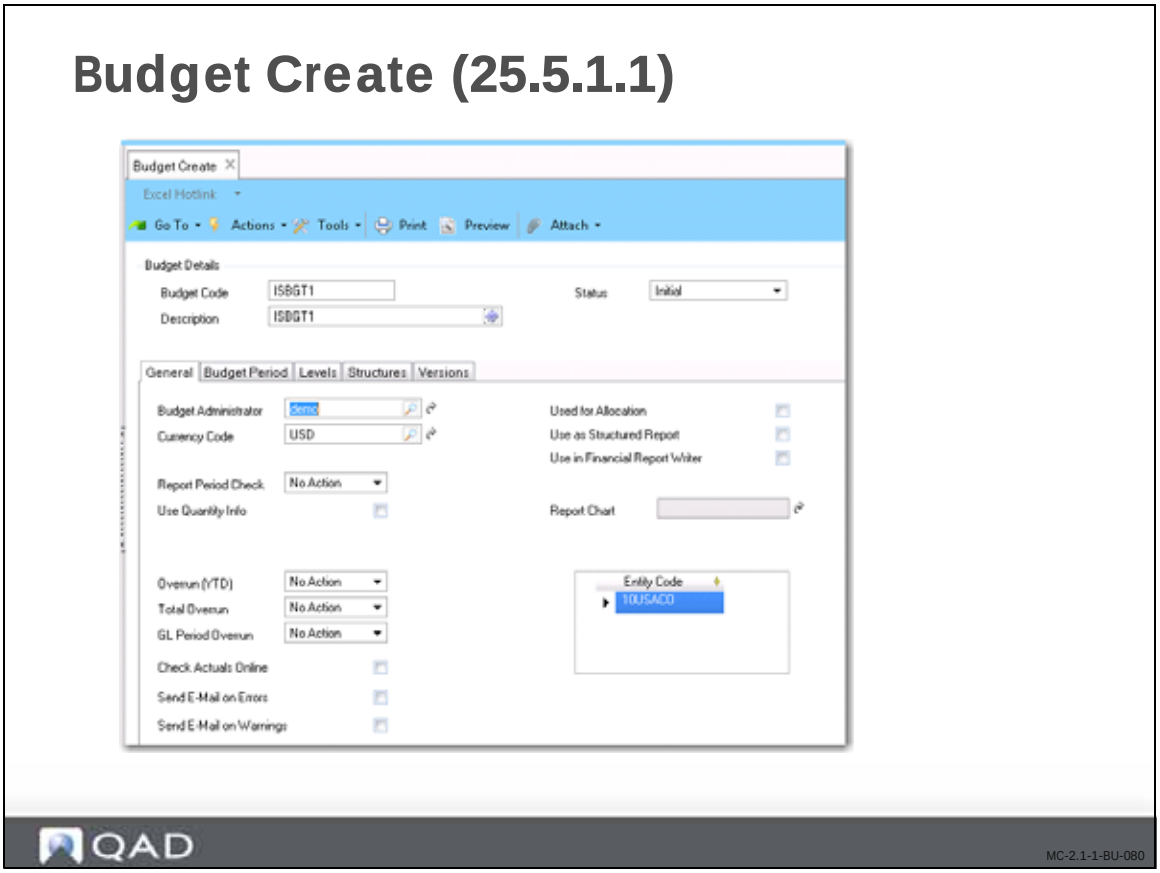
Budget Report Periods



Budgets also include report periods that are linked to budget versions, and are used by the budget reports. Report periods let you mark a specific time span for which you want to produce budget reports. Reporting periods are independent of GL periods and tax periods, and can span multiple GL periods across multiple entities.

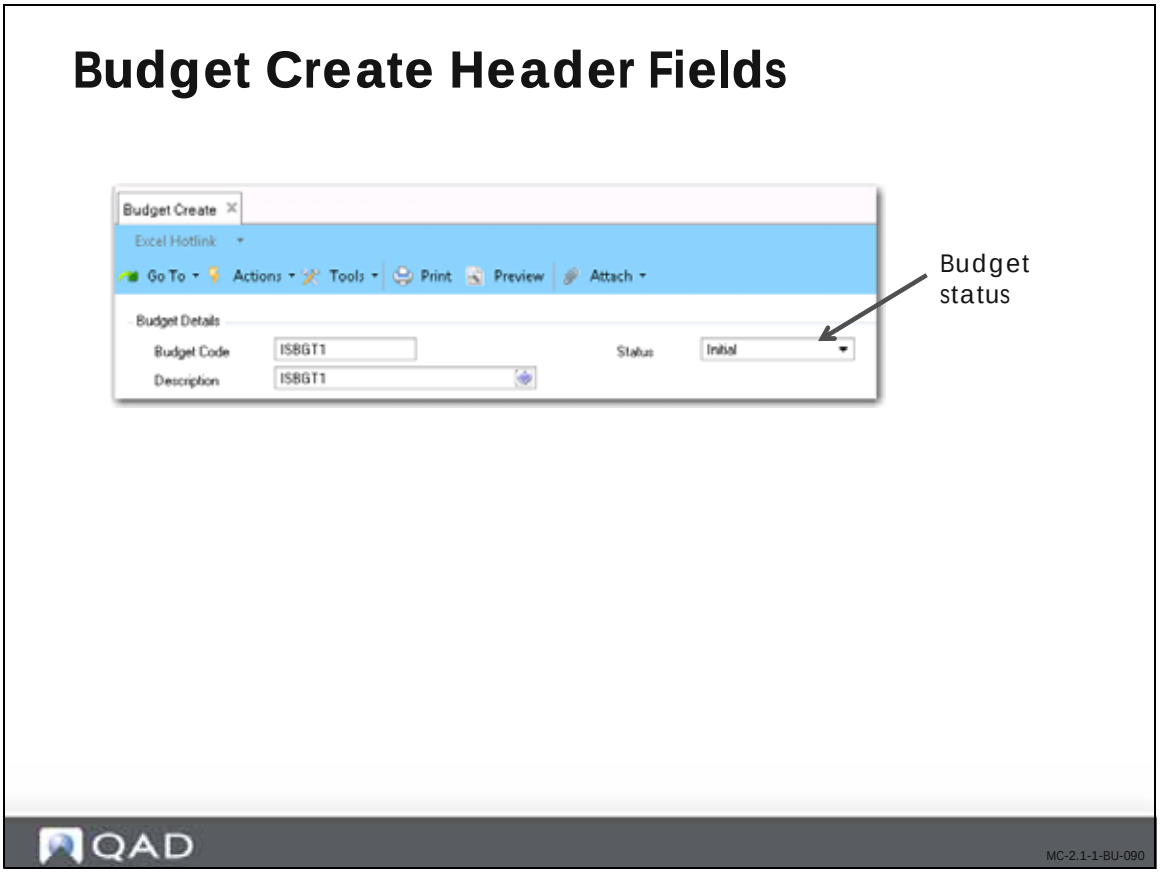
Use Budget Report Period Create (25.4.5.1) to define report periods. Budgets can have multiple versions, and you must associate each version record with a valid reporting period.

Budget Create



Use Budget Create (25.5.1.1) to create budget periods, levels, and structures.

Budget Create Header Fields



In the following are the main fields in the header of Budget Create (25.5.1.1):

Budget Code. Specify a code (maximum 20 characters) to identify the budget.

Status. This field displays the budget status. Budgets can have one of the following statuses:

Initial: The preliminary status of a budget. The status field is read-only and set to Initial until you define budget periods and levels.

Valid: Indicates that the budget can be modified and is ready for use. The status changes automatically from Initial to Valid when you define the budget periods and budget levels. You cannot change a budget status from Valid to Initial.

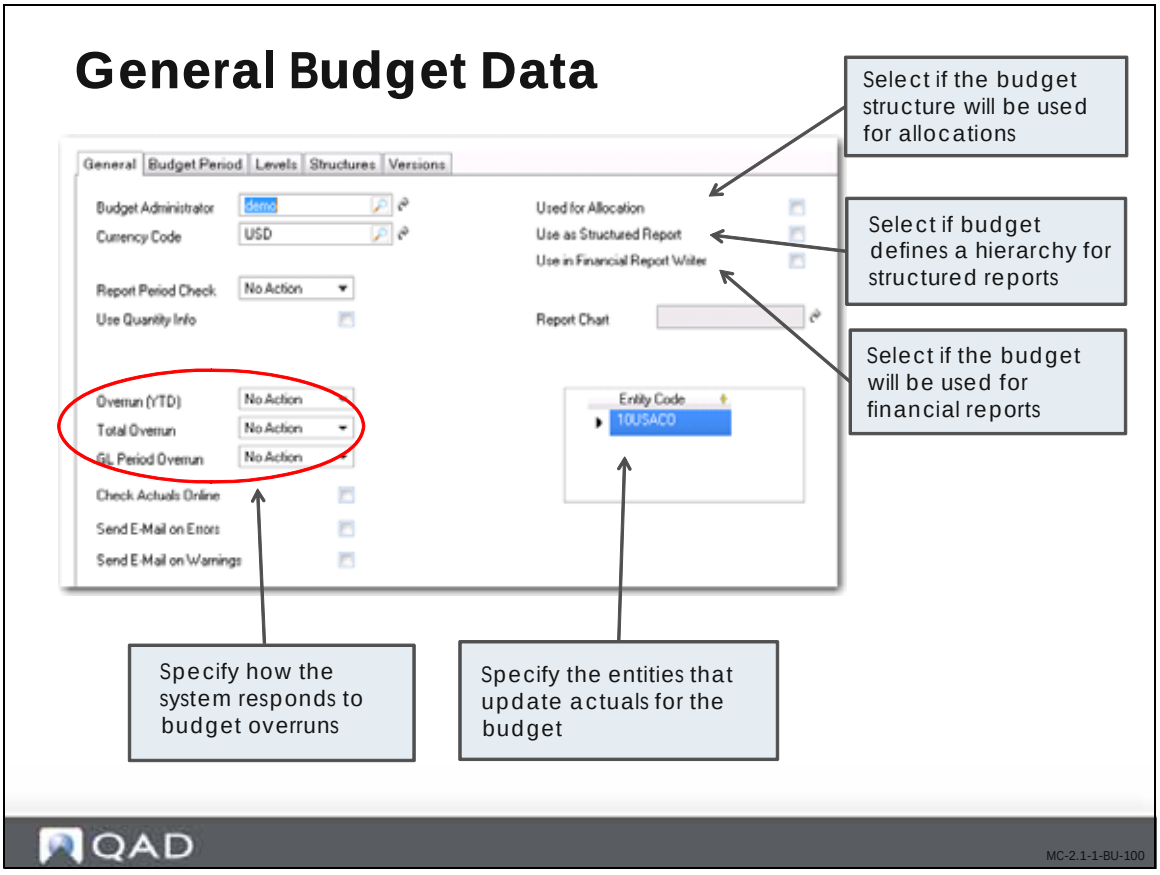
Operational: Indicates that the budget setup is complete, and that actuals will be retrieved by the Budget daemon.

You must manually change the budget status to Operational to allow the actuals to be updated. You can change a budget status from Valid to Operational, and from Operational to Closed.

Note The system generates Budget daemon requests for operational budgets only.

Closed: Indicates that the budget life span is complete. You can reopen the budget by changing its status to Operational.

General Budget Data



Use the General tab to specify the scope of the budget activities and the entities that will provide the budget actuals. The following are the main fields in the General tab:

Currency Code. Specify a budget currency. The field defaults to the base currency for the domain, but you can modify this value.

Note You cannot modify the currency if the budget has a status of Operational.

Report Period Check. Choose whether the system validates if a reporting period is open when a transaction is posted for that period on this topic.

Use Quantity Info. Select this field to include quantities in your budget, such as machine hours, kilowatt hours, or other quantifiable values. These quantities are specified at GL account level only using GL Account Unit of Measure.

Overrun (YTD), Total Overrun, GL Period Overrun. Choose how the system responds if the budget amounts from the start of the budget period to date, for the entire budget, or for a particular budget period are overrun. In each field, the options are No Action, Warning, or Error.

No Action: The system allows the user to enter transactions that cause overruns.

Warning: The system warns the user that the budget is overrun, but allows the user to save the transaction.

Error: The system prevents the user from saving a transaction that overruns the budget figure.

Check Actuals On-Line. Select the field to enable online budget check.

Each time a linked budget account is specified in banking entry, journal entry, customer and supplier invoices, open item adjustment, or petty cash activities, the system will check if the new transaction causes the budget amounts to be overrun.

In addition, if you choose Warning or Error in the Overrun (YTD), Total Overrun, or GL Period Overrun fields, the system will display a warning or error if a transaction causes a budget overrun for the corresponding time frame.

Note This field has an effect only when Online Budget Check is selected in the system settings in System Maintain (36.24.3.1), and when the budget is operational.

Send E-mail on Errors, Send E-mail on Warnings. Select the relevant field to send an e-mail to the budget administrator if an overrun error or warning occurs. The system sends the e-mail to the address defined in User Maintenance (36.3.1) for the user specified in the Budget Administrator field.

Used for Allocation. Select the field if the budget structure will be used for allocations.

GL accounts, sub-accounts, projects, cost centers, and SAFs can be used in allocation structures.

Use as Report. Select the field if the budget structure will be used to define a report hierarchy for the Balance Sheet and Income Statement structured reports.

When you select Use as Report, the system validates and categorizes the report structure data differently than general budget data.

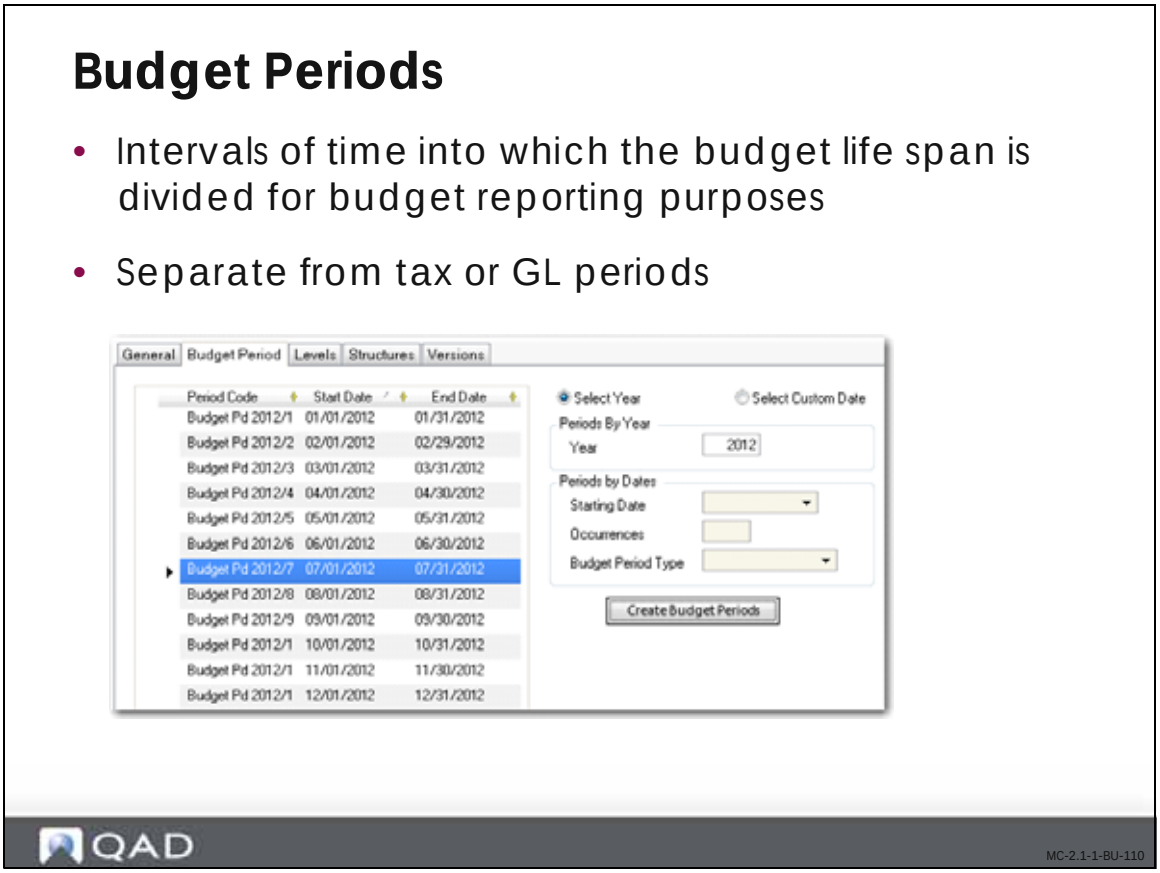
Use in Financial Report Writer. Select this field if the budget is to be used for financial reports. You can include the budget as a column in a report to compare the budget amounts with actual postings. The Use in Financial Report Writer field is exclusive. You cannot select it in combination with the Used for Allocation or the Use as Structured Report fields.

Report Chart. This field is only available if you select the Use in Financial Report Writer field. Enter a valid report chart of accounts or click the lookup and select a report chart of accounts from the Report Chart Search list. When you select a report chart, the Entity Code field is automatically populated with the entities associated with that chart.

Entity Code. Specify the entities that will update actuals for the budget.

Important For Financial Report Writer budgets, the Entity Code field is automatically populated with all entities linked to the report chart. The list of entities is read-only. If you want the budget to apply to only a few entities, add topics at the highest level in the budget structure and link those topics to detailed COA dimensions or report analysis codes that contain the entities you require. This step facilitates the link between the budget structure and the report tree structure.

Budget Periods



Use the Budget Period tab to create the budget periods for which the budget is valid.

Budget periods can be based on GL periods or can be different.

Note The system creates a budget column and a forecast column in the grid in the Structures tab for each budget period you define. If the budget uses quantities, the Structures tab also contains a column for budget quantities and forecast quantities for each budget period.

Budgets can contain a maximum of 54 periods and can run over multiple years. You can also create a single budget period to span an entire year.

You cannot define budget levels or structures until you define the budget periods.

You can define budget periods:

- Manually. Enter all budget period codes and start and end dates manually in the budget periods grid.
- Based on an existing GL calendar year. The budget periods are equivalent to the GL periods of the year you specify. Click the Create Budget Periods button to create the periods.
- From rules. Enter the start date, the number of periods, and define whether the periods are defined by week, month, or quarter. The system then creates the budget period table when you click Create Budget Periods.

Note If you are creating a budget structure for use in Financial Report Writer, the budget periods you enter must correspond with periods used in the Report Cubes. When you open the Budget Period tab, a message is automatically displayed to inform you of this.

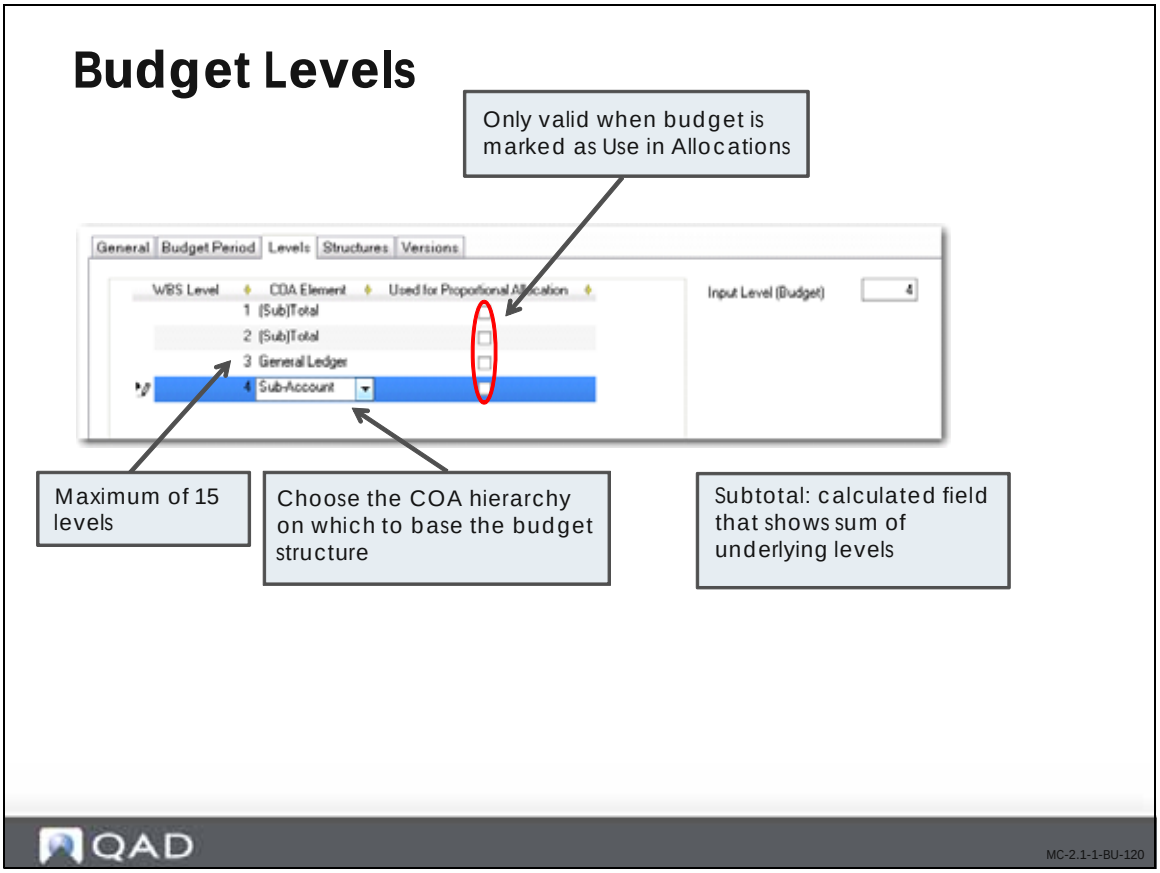
Periods Grid

This grid contains a row for each budget period you define. When creating budget periods manually, right-click to insert a row.

Periods by Year Field. Specify a GL calendar year on which to base the budget periods. The system creates budget periods that are equivalent to the GL periods of the year you specify. Use this option independently of the Periods by Dates fields.

Periods by Dates Fields. The system uses the data in these fields to automatically generate budget periods

Budget Levels

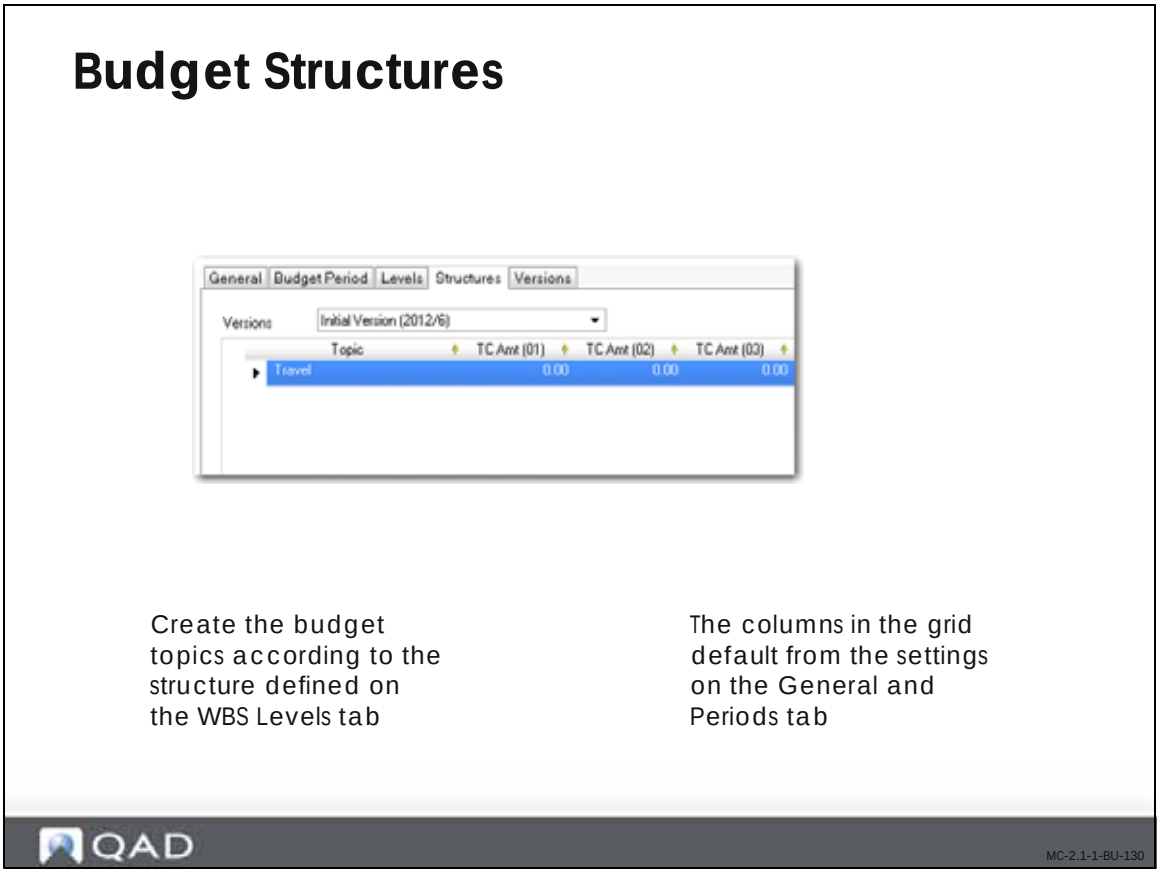


Use the Levels tab to define the hierarchy and level of detail to include in the budget structure. A budget can contain a maximum of 15 levels.

At each level, you can specify whether to include GL accounts, sub-accounts, cost centers, projects, SAFs, or subtotals, and create a sequenced list. A subtotal is a calculated field that shows the sum of all underlying levels, both for budget and actual data. If the budget includes SAFs, they must be at the lowest level within the hierarchy.

Note If you are creating a budget for use in Financial Report Writer, you can use report analysis codes and sub-total or the detailed COA dimensions GL account, sub-account, cost center, project, SAF, entity, and sub-total. A budget composed of COA dimensions cannot use the same dimension on more than one level in the budget and you can only link the related topic node to one item. You cannot link it to a range or a list. An FRW budget cannot have a mixture of report analysis codes and COA dimensions.

Budget Structures

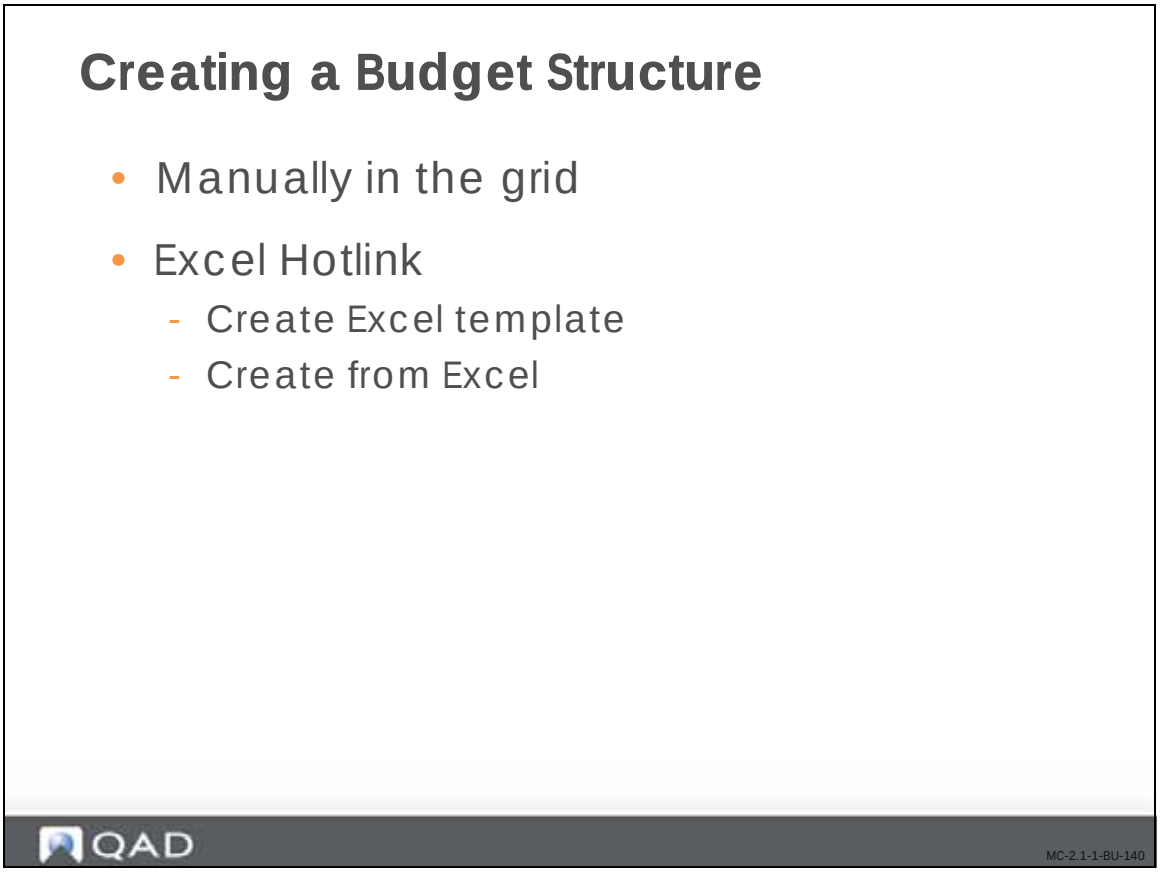


Use the Structures tab to create the budget topics according to the structure defined on the WBS Levels tab, and enter data for each topic. WBS is an abbreviation of Work Breakdown Structure.

The columns in the grid default from the settings on the General and Budget Period tab. The grid contains a column for the topic code, a budget column, and a forecast column for each budget period. In addition, if you select the Use Quantity Info field in the General tab, the grid includes a Budget Quantity and Forecast Quantity column for each budget period.

When you select a topic for an operational budget, the system displays the linked account or COA component and the total actuals for the topic at the bottom of the Structures tab.

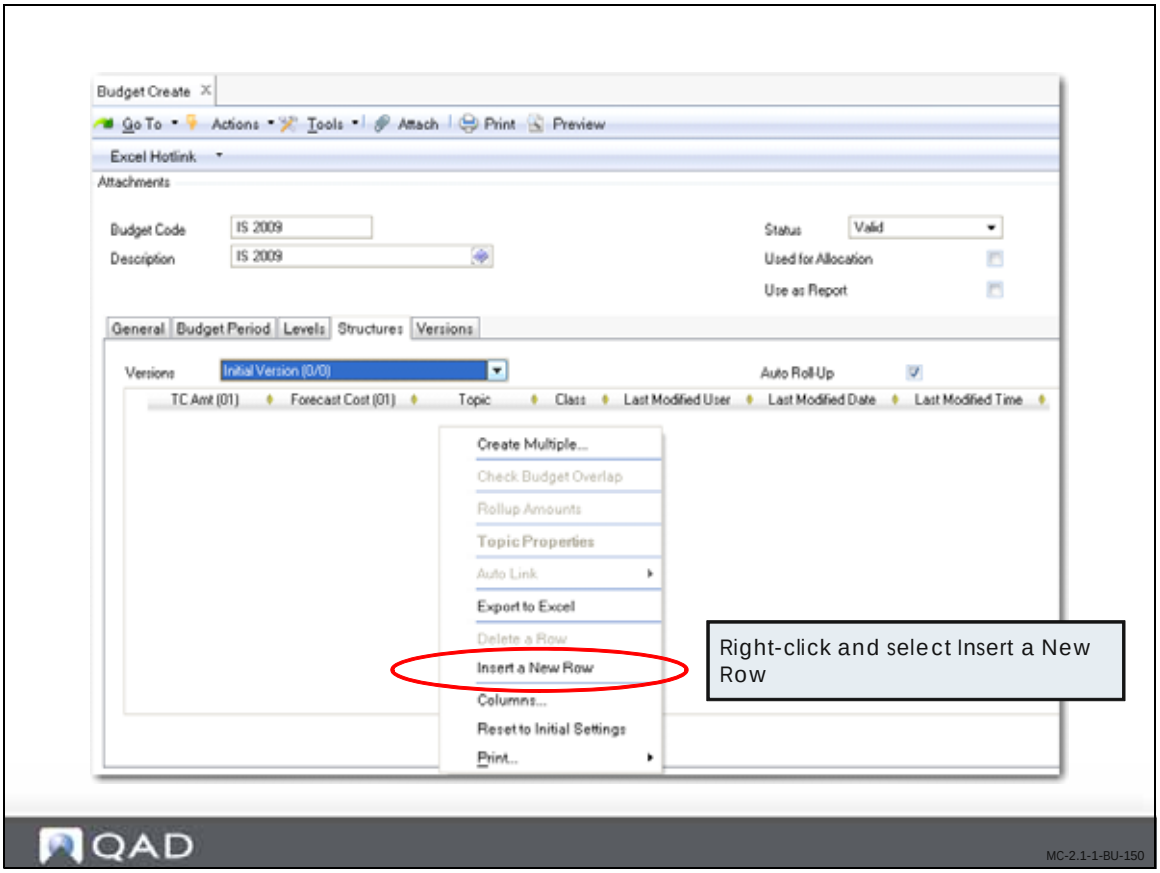
Creating a Budget Structure



The Budgeting functionality in QAD Enterprise Applications lets you create budget structures manually in the application or import an Excel file using the Hotlink.

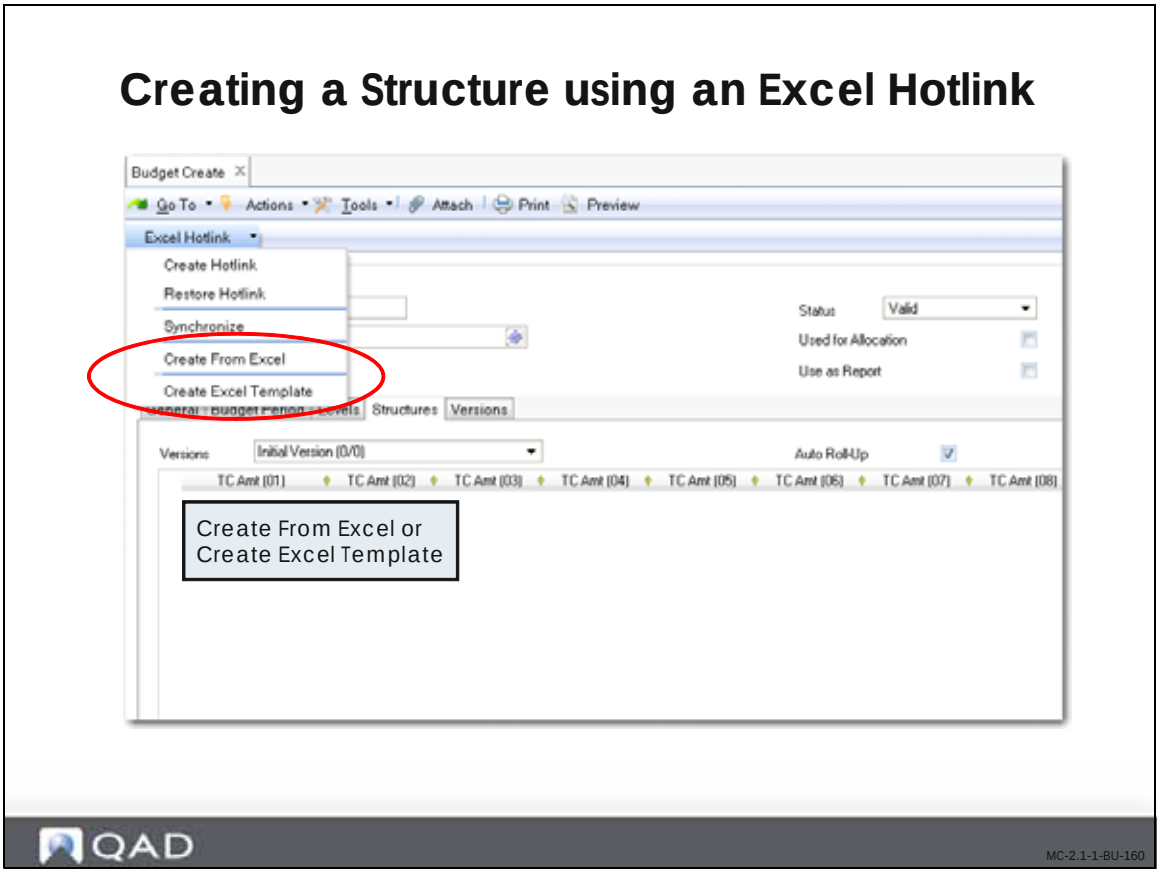
The Excel Hotlink option lets you maintain budget data in Microsoft Excel and then synchronize it with the system. The integration with Excel provided in budgeting is more advanced than that available in other functions.

Creating the Structure Manually in the Grid



To manually create a structure, right-click in the grid in Budget Create (25.5.1.1) to insert a new row.

Creating a Structure using an Excel Hotlink



To create a budget structure based on an Excel worksheet, click Excel Hotlink.

The Excel Hotlink menu is only available when the Structures tab is active; it does not apply to the data in other tabs.

The Create Excel Template and Create From Excel options are similar to the standard Excel integration. You use these when first setting up the budget.

Create the basic structure you want and then create an Excel template without defining the data. When you have completed the definition, you can upload the data using the Create from Excel option.

Linked spreadsheets can only contain the budget structure and budget data. You cannot create new COA links in Excel to import into and update a budget structure.

The menu has the following options:

Create Hotlink. Choose Create Hotlink to create a spreadsheet containing the budget topic structure and any budget values already entered. The first spreadsheet columns correspond to the topic names and are read-only. When you update a value in the spreadsheet, the corresponding value in the relevant column in the Structures tab is updated also.

You must run both Excel and your QAD application simultaneously to maintain the hotlink. You can save data in either the spreadsheet or the budget grid at any stage.

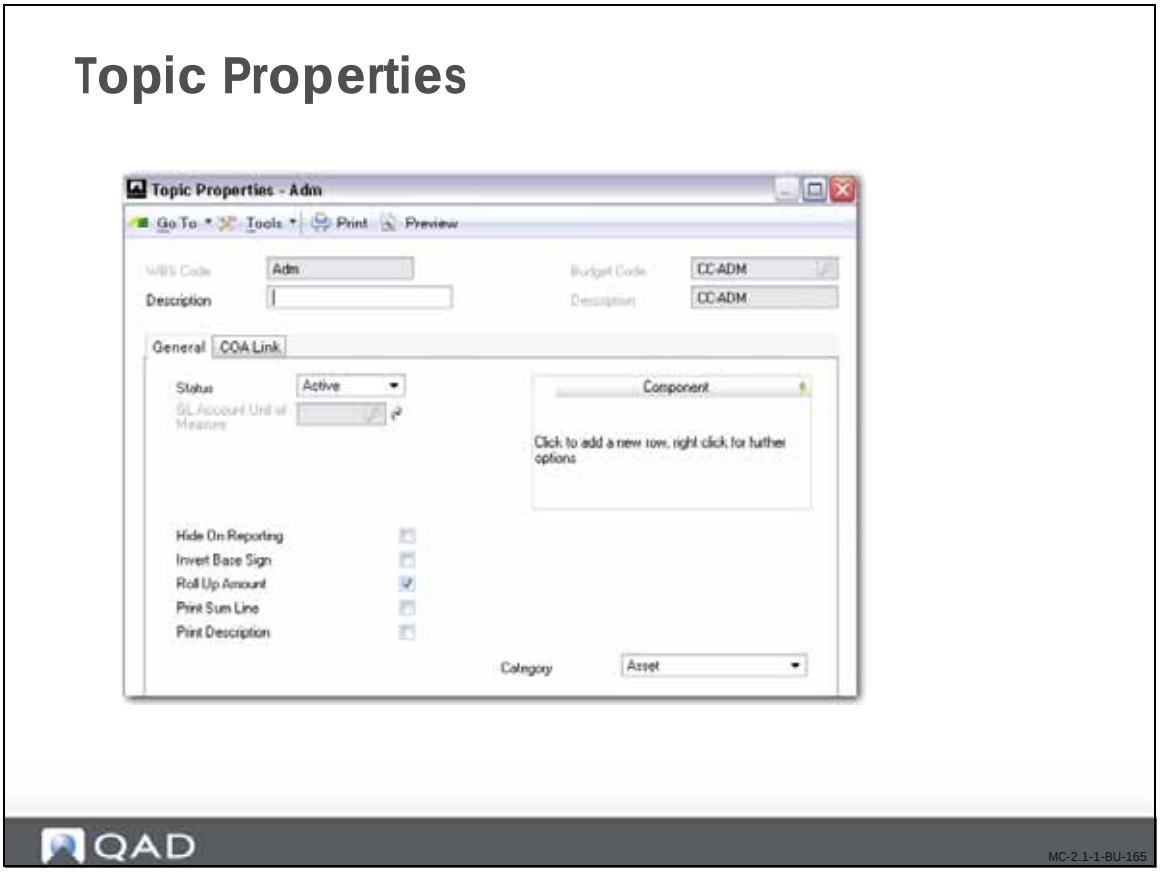
The system stores the spreadsheet file location for each budget. If you plan to share budget maintenance with other users, make sure the file is saved on a shared network drive so it is accessible to them.

Restore Hotlink. Use the Restore Hotlink command to open the spreadsheet associated with a budget.

Synchronize. Use the Synchronize option to replace the budget data in the Structures tab with data in the Excel sheet.

Create from Excel. Use this option to import data defined in a template to initialize the budget structure.

Topic Properties



You can use the Description field to specify a description of the topic that you can optionally print on structured reports. The Description field and Print Description field are only enabled if the Use as Report field is selected on the General tab of Budget Create.

Hide on Reporting. Select the field to hide topics on the Balance Sheet and Income Statement reports. This field relates to report structures only.

Note This field is only enabled for topics if Use as Report is selected in the budget header.

Invert Base Sign. Select the field to invert the operator (+ or –) that identifies positive or negative values. This field relates to report structures only.

Roll Up Amount. Select this field to indicate whether the current topic level can be rolled up to a higher level. This field relates to report structures only.

Print Sum Line. Select the field to print a header or a footer line for the linked accounts. This field relates to report structures only.

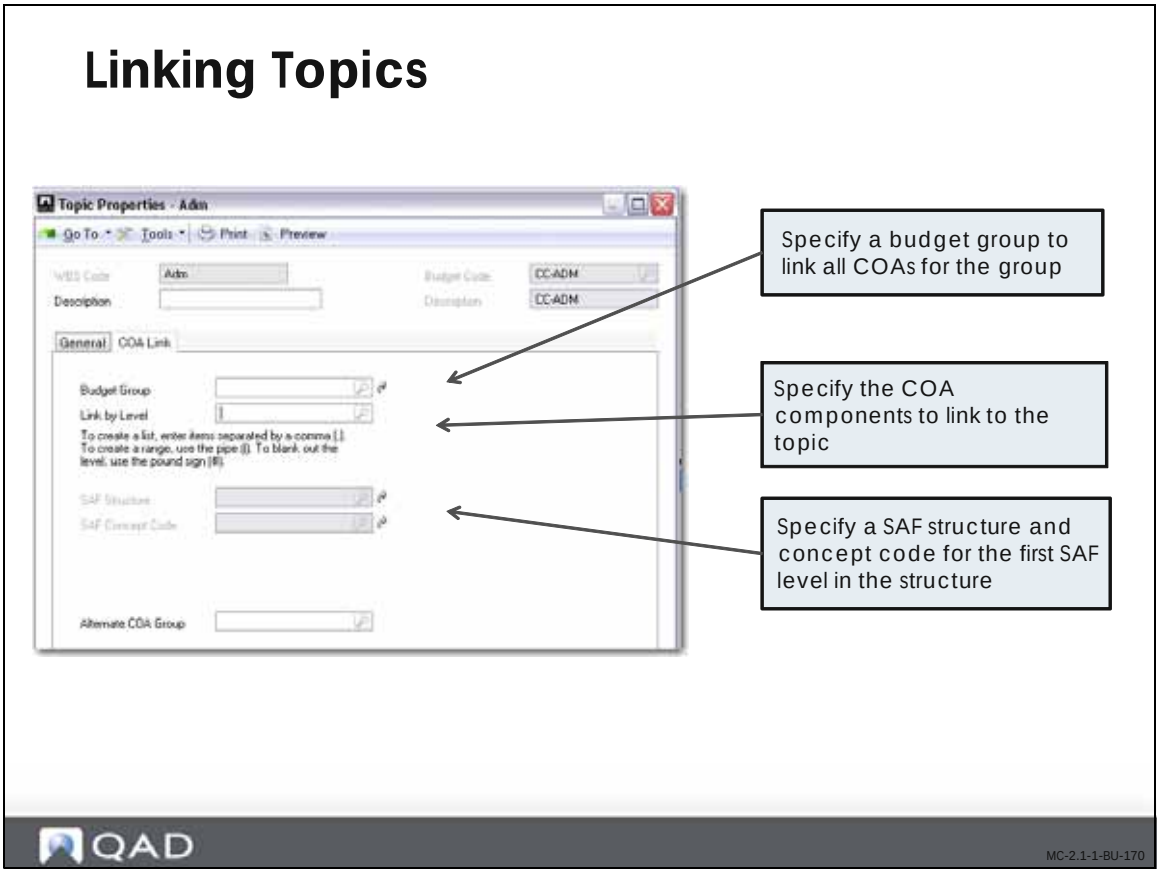
Print Description. Select this field if you want to print the topic description on reports based on this structure. You specify a topic description using the Description field in the Topic Properties header.

The Description field and Print Description field are only enabled if the Use as Report field is selected on the General tab of Budget Create.

Category. Specify the GL category of the accounts linked to the current level in the report structure. This field relates to report structures only.

Note If you create a budget for use in Financial Report Writer, you can only link a COA component to a budget topic by using an analysis code. The General tab is not displayed and the only editable field in the Topic Properties window is the Link by Level field on the COA Link tab.

Linking Topics

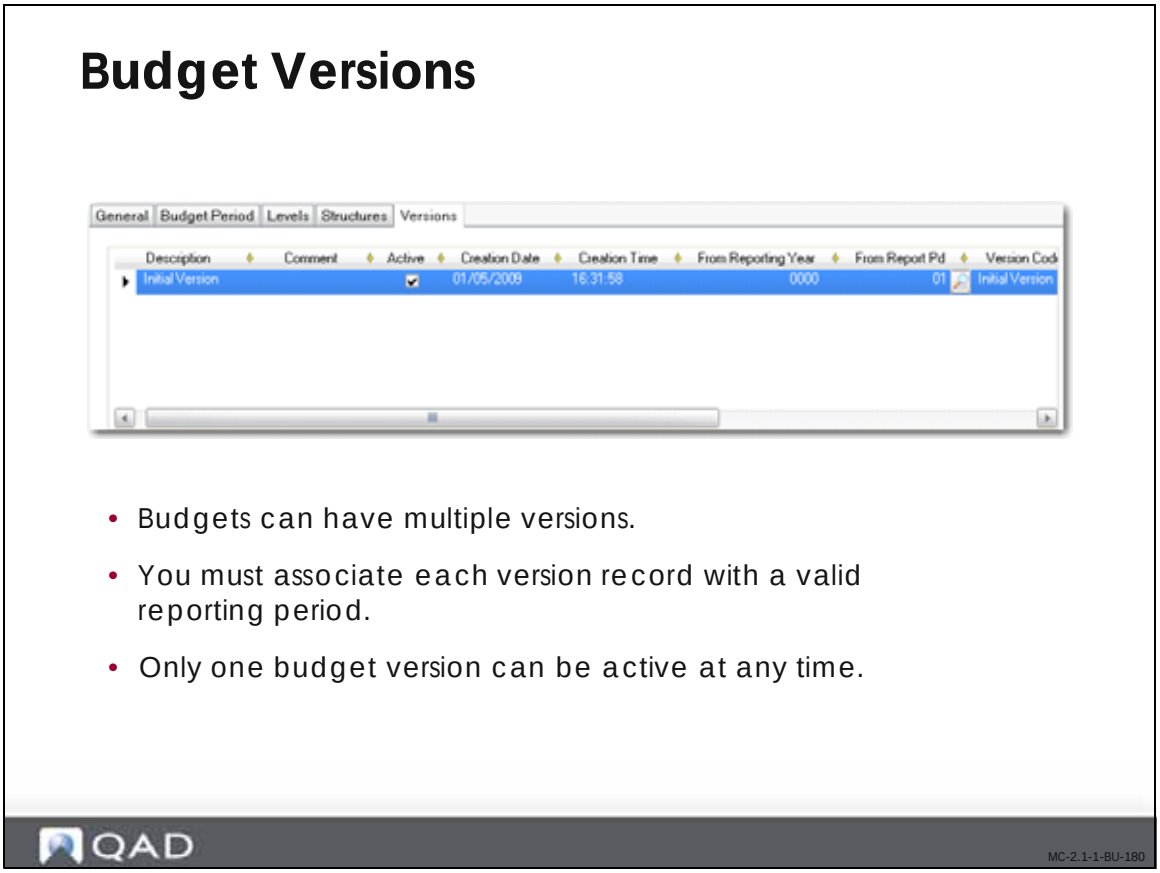


After you define the budget structure, specify the COA components that are the source of the actuals data.

You can link a COA component to a budget topic in a number of ways:

- Budget group. All COA components that belong to this group are linked to the topic.
- Link by level. Specify a single item, a comma-separated list, or a range.
- SAF level, where applicable. For topics at SAF level, specify the SAF structure.

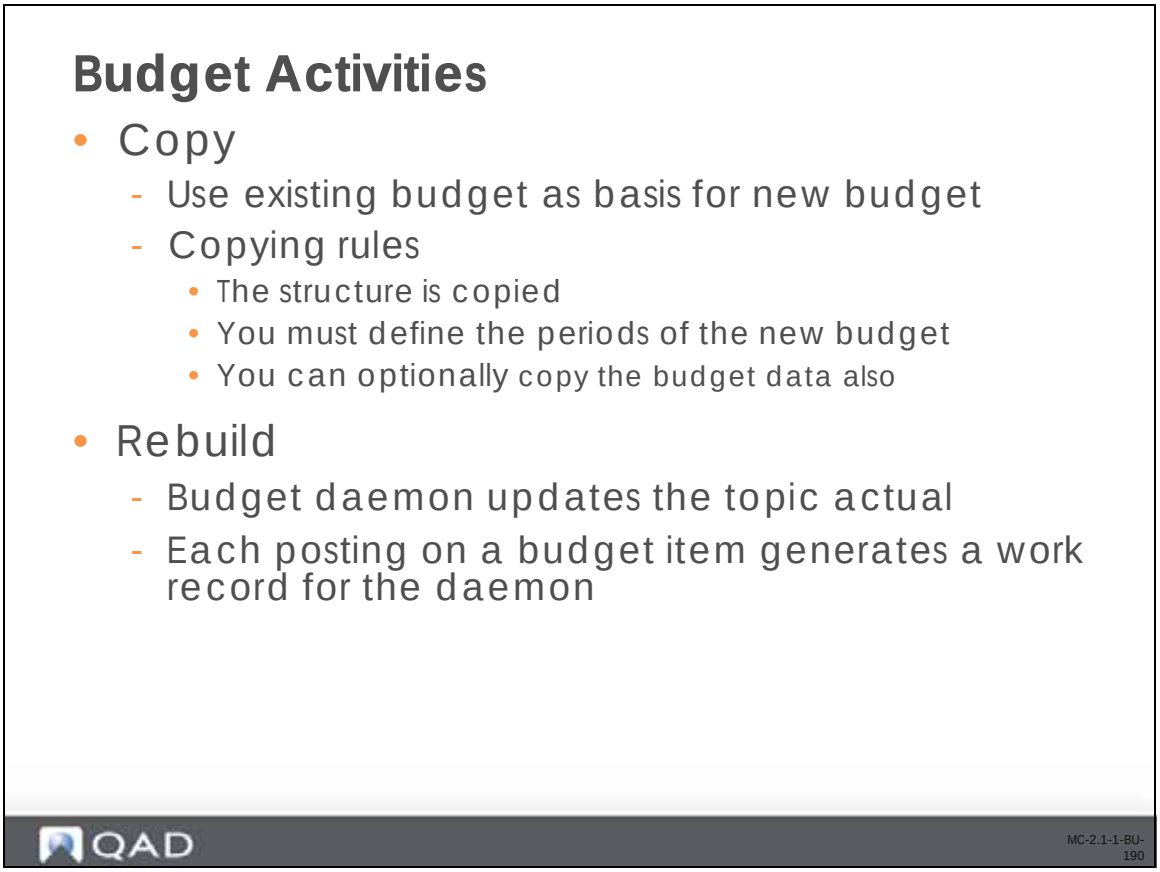
Budget Versions



You can create several versions of the same budget using the Budget Modify All Versions (25.5.1.6) activity. Only one budget version is active at any time, and only this budget version is used for the Online Budget Check when this option is enabled in the General tab.

To create a new budget version, insert a row in the Versions grid.

Budget Activities



Modifying Budgets

A number of restrictions apply when modifying budgets. When creating budgets in Budget Create (25.5.1.1), you cannot modify the data in the Periods and Levels tabs once you have created the budget topics in the Structures tab.

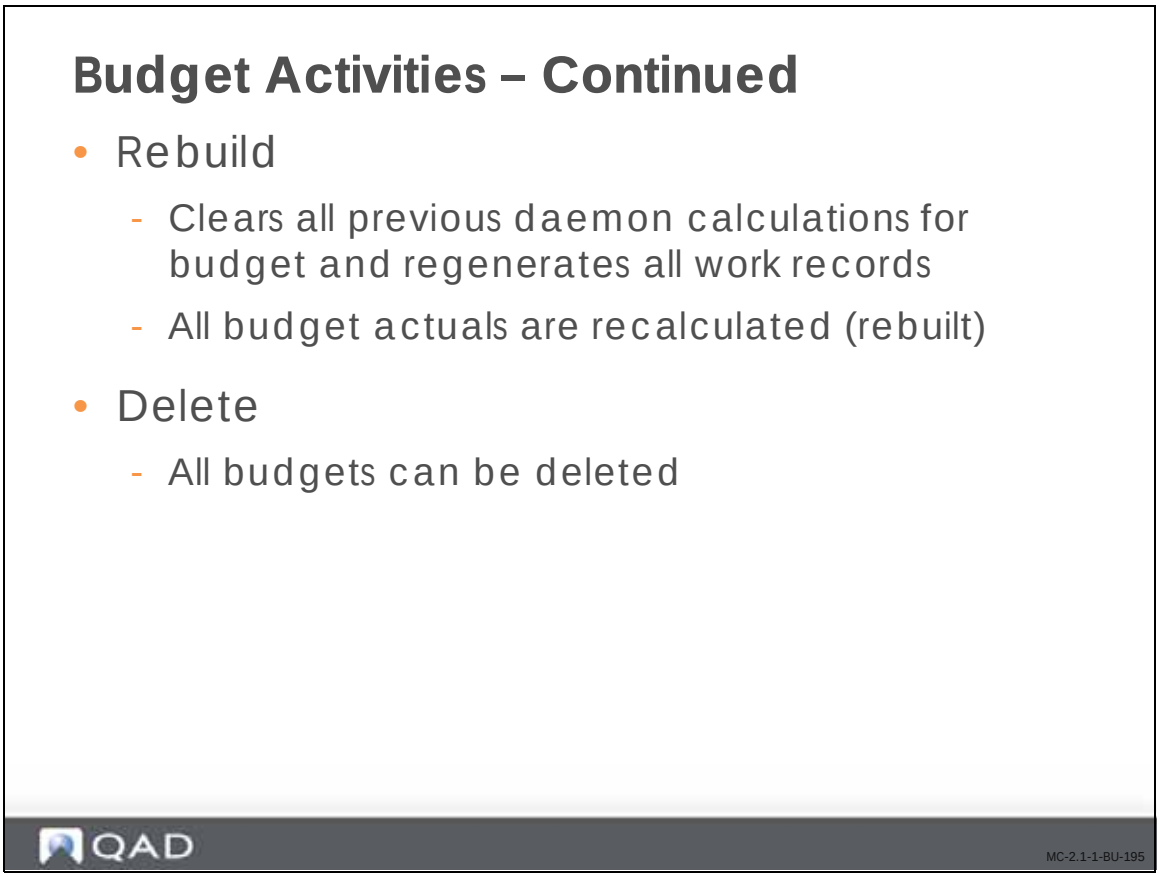
Two activities let you modify saved budgets:

- Budget Modify (25.5.1.2) lets you change the budget data in the Structures tab for the current active budget version. The data in the General, Budget Period, Levels, and Versions tabs cannot be modified.
- Budget Modify All Versions (25.5.1.6) lets you modify budget data in all tabs, except the Levels tab, and save your changes as a new budget version.

You can prevent changes to the general budget data by only assigning access to Budget Modify (25.5.1.2) and limiting access to Budget Modify All Versions (25.5.1.6) to the budget administrator.

Copying Budgets

Budget Copy (25.5.1.5) lets you use an existing budget as the basis for a new budget. When you copy a budget, you copy the budget structure and can, optionally, copy the budget data. However, you must define budget periods for the new budget.



Rebuilding Budgets

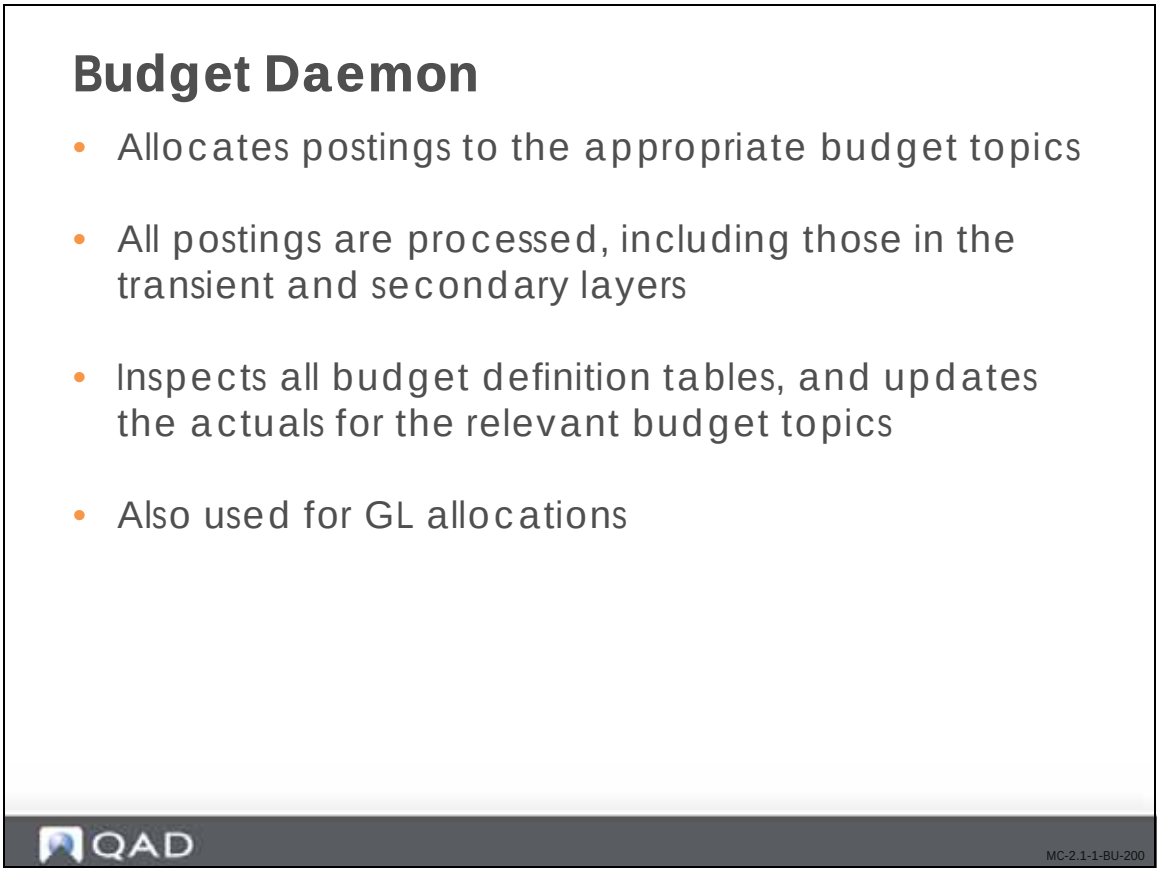
The Budget daemon monitors topic values and ensures that the topic used in a budget has current values. Each posting on the budget item simultaneously generates a work record for the daemon.

The Budget Rebuild (25.5.1.2) activity clears all previous actuals calculations for a specific budget and regenerates all daemon records. Rebuilding recalculates all the actuals.

Deleting Budgets

Any budget can be deleted without restriction.

Budget Daemon



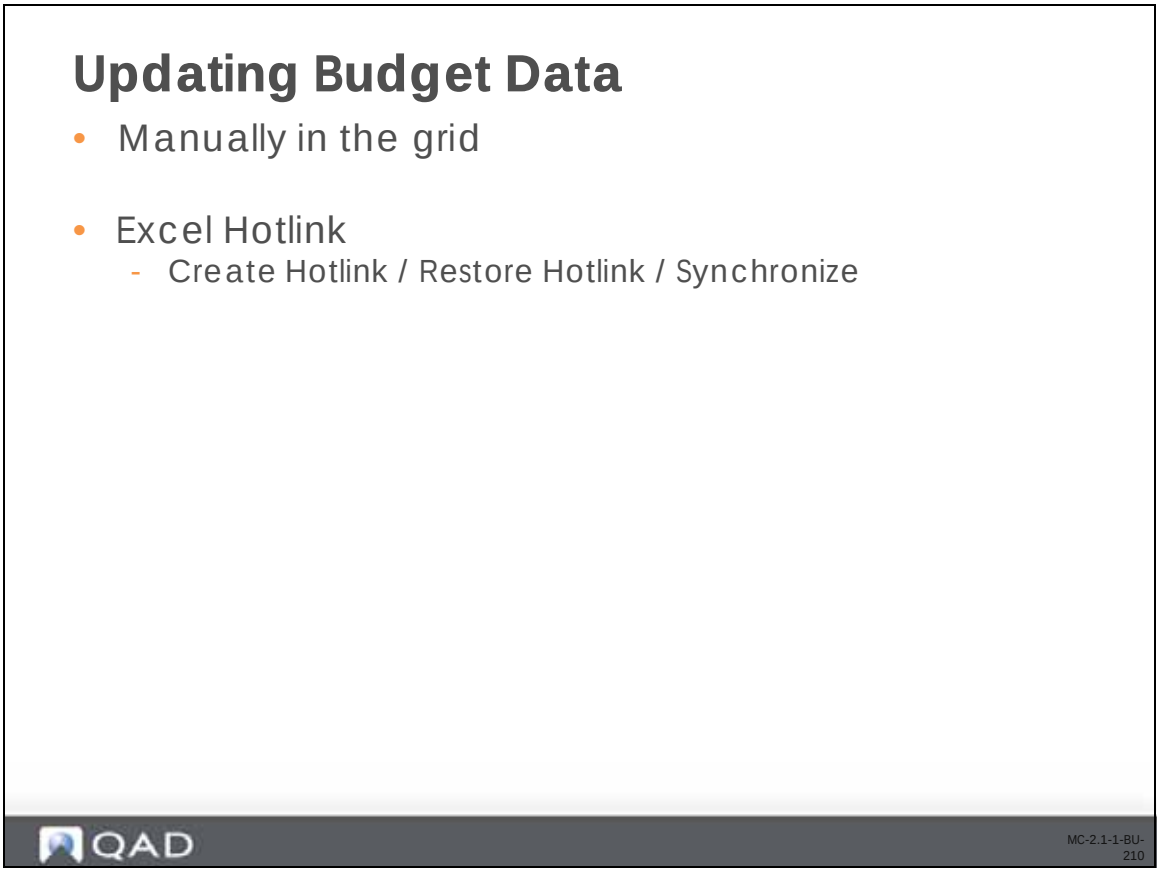
Daemons are server-based processes that let you run background tasks.

The Budget daemon allocates postings to the appropriate budget topics. All postings are processed, including those in the transient and secondary layers.

The Budget daemon inspects all budget definition tables, and updates the actuals for the relevant budget topics.

The Budget daemon should be active when allocations are executed because the allocation functionality uses the same tables. The Budget daemon ensures that the most current values are available for an allocation run. Allocations are discussed in more details in another section.

Updating Budget Data



Once budgets are set up, they can be maintained and updated:

- Manually in the grid
- Using the Microsoft Excel Hotlink.

  Use the Create Hotlink, Restore Hotlink and Synchronize options to update your budget (see “Creating a Budget Structure” on page 148).

Hands-On Exercises

Exercise 1: Create a New Budget using the Excel Hotlink

Log in to 10USACO or 22UKCO.

1. Open System Maintain (36.24.3.1) and check the setting for the Budget Enabled field.

   If the field is cleared, select the field and save the change.

2. Open Budget Report Period Modify (25.4.5.2), and verify if budget periods exist for the current GL calendar year, for example, 2013.

   If records do not exist, use Budget Report Period Create to create budget periods for the current GL calendar year.

   a. Specify the following values:

Field	Data
New Year	Current year, for example, 2013
Create Manually	Yes (Selected)

   b. Click OK.

   c. Save the budget periods.

3. Go to Budget Create (25.5.1.1) and create the following budget:

Field	Data
Budget Code	ISBGT
Description	ISBGT

4. On the Budget Period tab, create four periods for the current GL calendar year (for example, 2013).

   Select Custom Date. Use the Periods by Dates sub-screen to create the periods:

Field	Data
Starting Date	The first day of the GL calendar year. For example, 01/01/2013
Occurrences	4
Budget Period Type	Quarter

5. On the Levels tab, enter three lines by right-clicking on the grid and selecting Insert a New Row.

Field	Data
WBS Level	1,2,3
COA Element	(Sub)Total, (Sub)Total, General Ledger

   The Input Level (Budget) field displays 3.

6. On the Versions tab, enter the following values:

Field	Data
From Report Period	01
From Reporting Year	2013

7 Open the QMI Documentation/Financial Activities folder on the desktop.

8 From the Budgeting folder in the Financials Activities folder, download the file `HO budget create1.xlsx` using File|Download in GoogleDocs.

The file is saved to My Documents/Downloads.

9 Return to the QAD application.

10 Go to the Structures tab of Budget Create, click the Excel Hotlink menu at the top of the screen, and select Create from Excel.

11 In the popup window, select the file `HO budget create1.xlsx` and click Open to review.

After the upload from Excel, the budget amounts are loaded.

12 Save your newly created budget. If you receive an error message about missing WBS/COA links, try the following workaround:

a Change the budget status back to Initial.

b Click the Save button and the budget is saved without COA links.

Exercise 2: Create and Copy a Budget

1 In Budget Create (25.5.1.1), create the following budget:

Field	Data
Budget Code	CC-ADM
Description	CC-ADM

2 In the Budget Period tab, create periods for the current GL calendar year. Click Select Year, specify the current GL calendar year as the year, and then click Create Budget Periods.

3 In the Levels tab, right-click and select Insert a New Row twice to create two levels.

Field	Data
WBS Level	1, 2
COA Element	Cost Center, General Ledger

4 In the Structures tab, right-click and select Insert a New Row. Rename the topic to ADM on this row.

5 Right-click the row and select Topic Properties. In the Topic Properties window, select the COA Link tab.

Field	Data
Budget Group	<leave blank>
Link by Level	ADM (enter or select from lookup)

6 Click OK.

7 In the Structures tab, right-click in the ADM topic row again and select Insert Child Row twice to create two child rows.

8 Name the first child row 7000. Select the row, right-click, and select Auto Link|Current Budget Node.

9 Name the second child row 7020. Select the row, right-click, and select Auto Link|Current Budget Node.

10 On the Versions tab, enter the following values:

Field	Data
From Report Period	01
Reporting Year	Specify the year for which you created the budget, for example, 2013.

11 Change the budget status to Operational.

12 Save your newly created budget.

13 In Budget Copy (25.5.1.5), enter the following data:

Field	Data
Source Budget Code	CC-ADM
Budget Code	CC-MAR
Budget Description	CC-MAR
Copy Budget Figures	Yes (Selected)

14 Click Save.

15 Go to Budget Modify All Versions (25.5.1.6) and select the newly created budget code (CC-MAR).

16 Go to the Structures tab and rename the topic from ADM to MAR.

17 Right-click the row, select Topic Properties, and then go to the COA Link tab. Replace ADM by MAR.

18 Click OK in the Topic Properties window.

19 Save the budget.

Your new budget is ready.

Chapter 7

Budget Reports

Objectives

Objectives

- Understand which budget reports are available
- Learn to run reports for a specific business case

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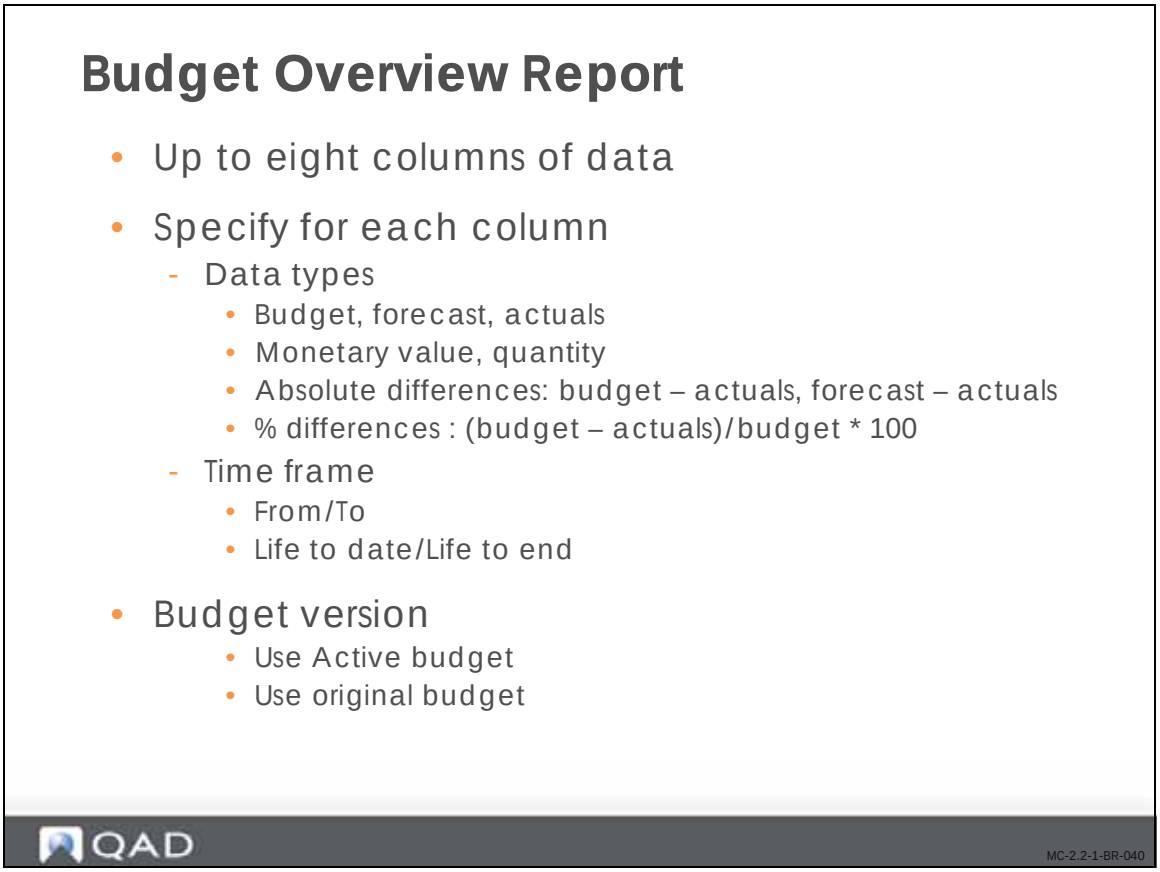
Budget Reports: Definitions

Standard budget reports are available in QAD Financials, with broad capacities.

Two reports let you report on budgets, forecasts, and actuals: the Budget Detail report and the Budget Overview report. You can run the reports for a single entity or across multiple entities. The reports also let you report on non-operational budgets.

Budget Overview Report



The Budget Overview (25.5.3.1) report lists summarized data by budget level. The data that resulted in the actuals are listed at the end of the report.

You can configure this report to display up to eight columns of data and specify what kind of data you want to include in each column. You do this by selecting the measure you want to use to generate the report data from the following list:

- Budget Qty
- Forecast
- Forecast Qty
- Actuals
- Actual Qty
- Budget – Actuals
- Forecast – Actuals
- (Budget – Actuals)/Budget * 100
- (Forecast – Actuals)/Forecast * 100

Other options include the following:

Time Frame Type for Actuals. Indicate how you want the system to select data to report for each of the eight columns:

From – To Period: Analyze data between the range of reporting period specified in Reporting Periods 1–8.

Life To Date: Analyze all data from the start of the budget to today.

Life To End: Analyze all data from the start of the budget to the end of the budget.

Version Measure. Indicate which version of the budget the measures should analyze:

See To Period: Find the version of the budget associated with the To Reporting Period specified for the column. This choice is valid only when Time Frame type is From – To Period.

Use Active Budget: Select actuals from the active budget. This is the typical way of analyzing data.

Use Original Budget: Select actuals from the initial version of the budget.

Budget Detail Report

The Budget Detail (25.5.3.1) report lists detailed actuals by budget topic, with subtotals and a grand total. The report also displays open budget or forecast amounts.

This report has similar options to Budget Overview, but lets you choose one open budget calculation method from the following:

- Budget – Actuals
- Forecast – Actuals

The options for commitments are not currently supported.

The report includes the following other budget-specific selection criteria:

- Budget Code
- Budget Responsible
- Budget WBS Topic
- Operational Budgets Only (Yes/No)
- Reporting Period
- Reporting Year

Hands-On Exercises

Important The exercises in this chapter use the ISBGT and CC-ADM budget codes, which you create using the exercises in Chapter 6, “Budgeting,” on page 133. If you have not completed the exercises in the Budgeting chapter, the ISBGT and CC-ADM budgets will not exist for you to report on using the exercises in this chapter.

Exercise 1: Budget Overview

Log in to entity 10USACO or 22UKCO.

Note To run the Budget Overview report for the parameters outlined in this exercise, you may need to display hidden report criteria using Tools|Manage Filter Fields.

1 Run the Budget Overview (25.5.3.2) report for budget ISBGT.

Field	Data
Budget Code	ISBGT
Measure 1-5	Budget

Time frame:

Field	Data
Reporting Period 1	1
Reporting Period 2	2
Reporting Period 3	3
Reporting Period 4	4
Reporting Period 5	All
Reporting Year 1 - 5	<current GL calendar year>
Version Measure 1 - 5	Use Active Budget
Time Frame Type 1 - 4	From-To Period
Time Frame Type 5	Life to Date
Operational Budgets Only (If this filter field does not appear, make it visible in Tools | Filter Fields)	No

Exercise 2: Budget vs Actuals

Important Ensure that the Budget and History daemons are running and that the status of the CC-Adm budget is operational.

1 Open the QMI Documentation/Financial Activities folder on the desktop.

2 From the Budget Reports folder in the Financials Activities folder, download the `HO budget reports 2<MMM> USD.xlsx` files for the current and next two calendar months/GL periods, where <MMM> represents the month. For example, if the current month is May, download the Excel files for May, June, and July. Use File|Download in GoogleDocs.

Use the files with suffix GBP if working in domain 22UKCO.

The files are saved to My Documents/Downloads.

3 Return to the QAD application.

4 Use Journal Entry Excel Integration (25.13.1.6) to import the three Excel spreadsheets you just downloaded to create actuals data for three months of the current GL calendar year.

5 Run the Budget Overview (25.5.3.2) report for budget CC-Adm.

6 Click Tools | Manage Filter Fields and add filter fields for a total of eight columns. (Report Period, Reporting Year, Time Frame type, Measure, Version Measure)

Field	Data
Budget Code	CC-ADM
Measure 1-4	Budget, Actuals, Budget-Actuals, (Budget-Actuals) / Budget * 100
Measure 5-8	Budget, Actuals, Budget-Actuals, (Budget-Actuals) / Budget * 100
Reporting Period 1-4	Latest GL period from the three months of data imported. If you imported data for, for example, May, June, and July, specify period 7.
Reporting Year 1-8	<current GL calendar year>
Reporting Period 5-8	1 to 12
Time Frame	From-To Period (All)
Version Measure	Use Active Budget (All)

Exercise 3: Budget Detail Report

Log in to 10USACO or 22UKCO

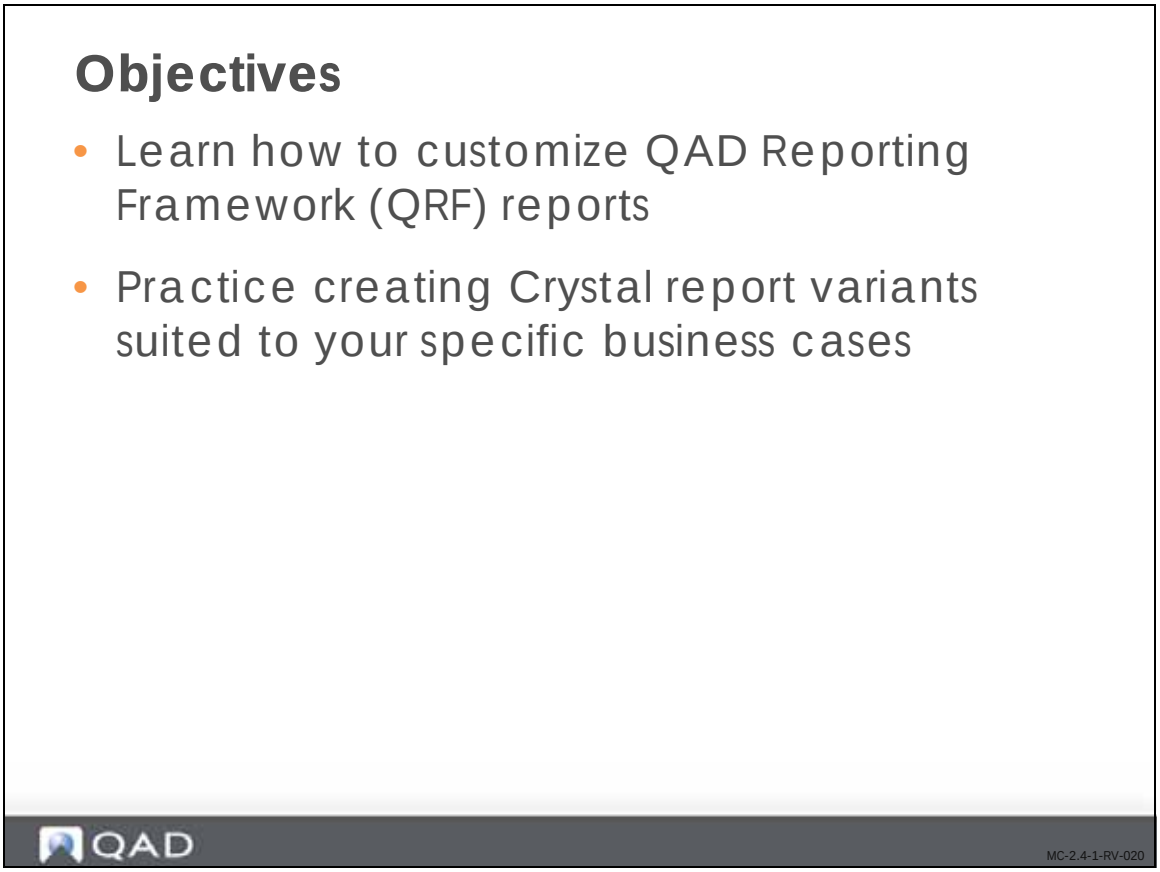
1 Run the Budget Detail (25.5.3.1) report using the following criteria:

Field	Data
Budget Code	CC-ADM
Reporting Period 1	Current and next GL periods
Reporting Year	Current GL calendar year

Chapter 8

Report Customization

Objectives



QAD Enterprise Applications includes two types of reports: reports that present the report output using the QAD Reporting Framework (QRF), which is the current report development standard, and reports that are presented using Crystal Reports. QRF is the preferred standard for Enterprise Financials and, to that end, QAD is involved in a continuing process to convert the remaining Financials Crystal Reports to QRF.

You can customize QRF report settings, create new report filters, or add user-defined fields to the report output.

Note This training guide covers only a small number of topics related to the Reporting Framework. For full coverage, see *QAD Reporting Framework Training Guide*.

Reports developed using Crystal Reports can be customized to optimally support your company processes and best practices. You can:

- Add or remove report filter criteria, assign default values, and save custom report variants by user, role, or system-wide.
- Use the Crystal Reports designer tool to modify the report layout, add and remove data fields, add calculation logic, or change sort order and grouping.
- Customize system-supplied report templates that contain formatting information such as fonts, logo, and paper orientation (landscape, portrait) using the Crystal Reports designer tool.

Note You must have a license to use the Crystal Reports designer tool.

QAD Reporting Framework (QRF)

QAD Reporting Framework (QRF)

- In QAD 2009.1, QAD moved to use QRF
- All new reports for subsequent releases will use QRF

QAD

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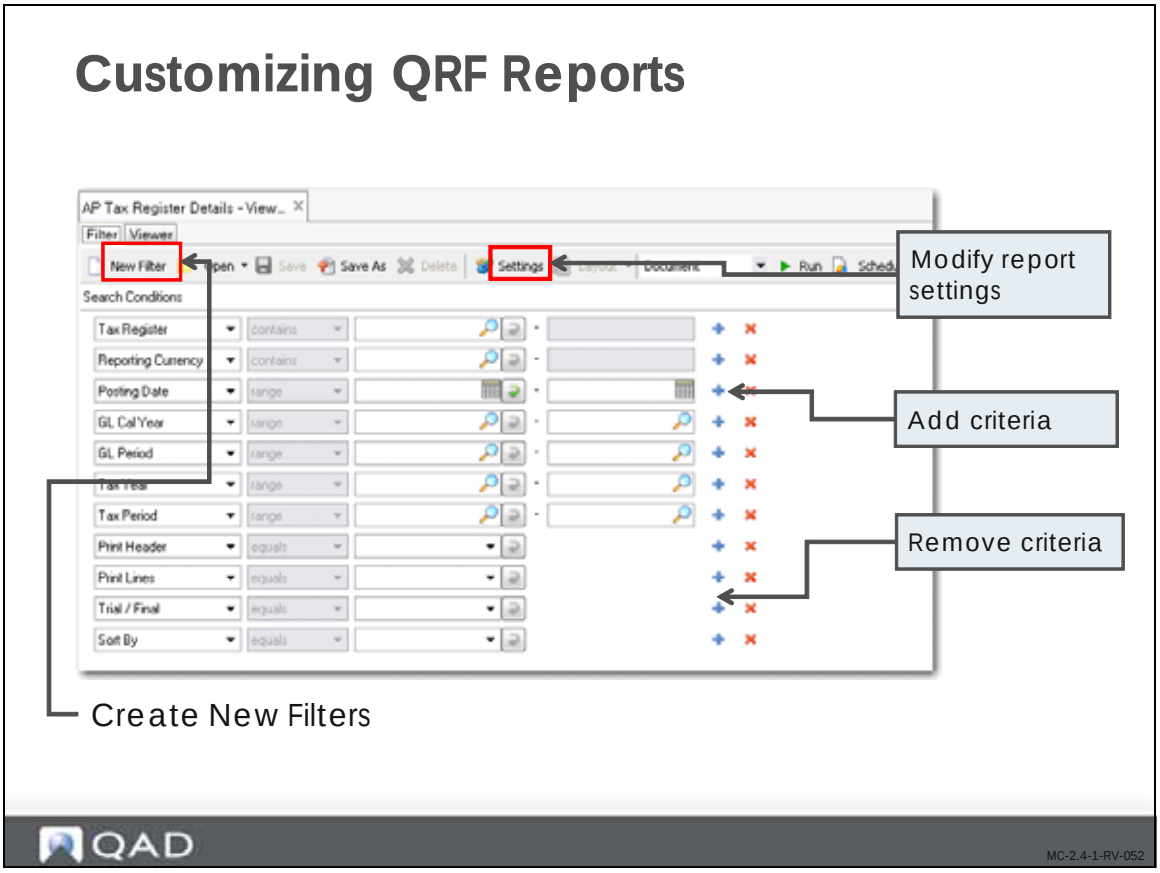
Customizing QRF Reports



By default, a QRF report displays all records available in the source data. However, you can retrieve just a certain range of records in the report; for example, sales records between last September and this March. You do this by setting filter conditions to filter data in the report.

The search operators include the following:

- equals
- not equals
- contains
- range
- starts at (the default)
- greater than
- less than
- is null
- is not null

If you choose the Range operator, enter a beginning value of the range in the first search box. Optionally, enter an ending value of the range in the second search box.

To refine your search further, click the plus (+) icon to add another search row. You can add as many rows as needed, each with different search values and operators. When you specify several criteria, note that multiple criteria for the same field are treated as a logical AND condition.

To remove a search criteria row, click the delete (X) icon.

Optionally, save the new filter conditions as a filter for future reuse.

On the toolbar, select an output format from the list next to the Settings button. You can choose from three output formats when the report is run:

- Document: The report is displayed in the Report Viewer window.
- Excel: The report is generated in Microsoft Excel format. You can save the file and open it in the Report Viewer window.
- PDF: The report is generated in PDF format.

You can also use the Report Settings option to customize how certain elements of data will be displayed in the rendered report.

Changing QRF Report Settings

In the Filter screen of a QRF report, click Settings on the toolbar to open the Report Settings dialog box.

General Tab

Specify whether to display search criteria in the report, and if yes, whether to display this information in the report header or footer.

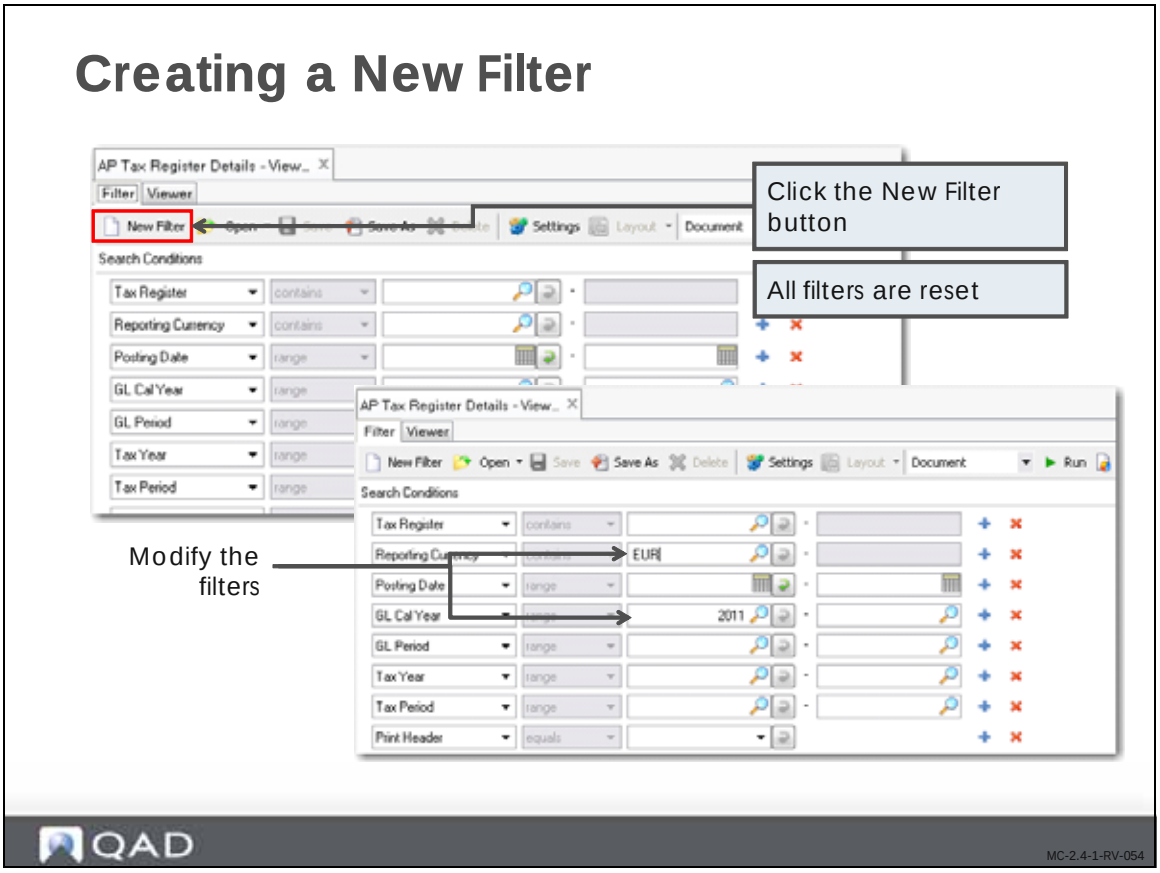
Date Tab

Select a format for dates to be displayed in the report and specify a date separator. You can see a sample of the date format you specify at the bottom of the dialog box.

Decimal Tab

Specify how numbers will be displayed in the report, including decimal separator, decimal digits, grouping separator, and grouping format. A sample number is displayed at the bottom of the dialog box.

Creating a New Filter



If a report always contains a certain range of data and is exported to a certain format, you do not have to define the filter criteria and output settings every time you generate the report. You can save the search conditions and output settings as a filter and open it to load the same set of configurations when you run the report later.

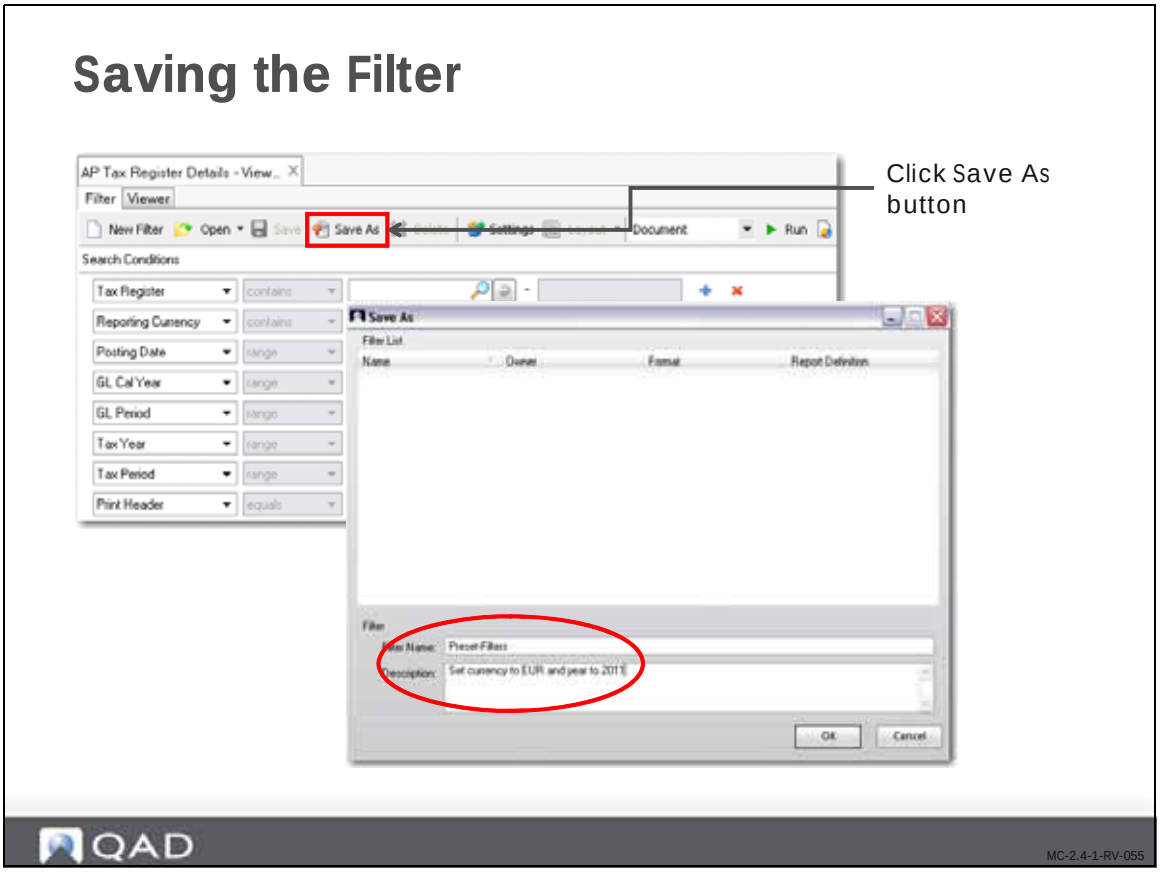
A filter is a personalized set of search conditions and settings, which means that the filters you created can only be accessed and managed by you and the administrator, and no one else.

1. In the Filter window, click New Filter on the toolbar.

   All the search conditions are reset to the default values.

2. Change the filter criteria.

Saving the Filter



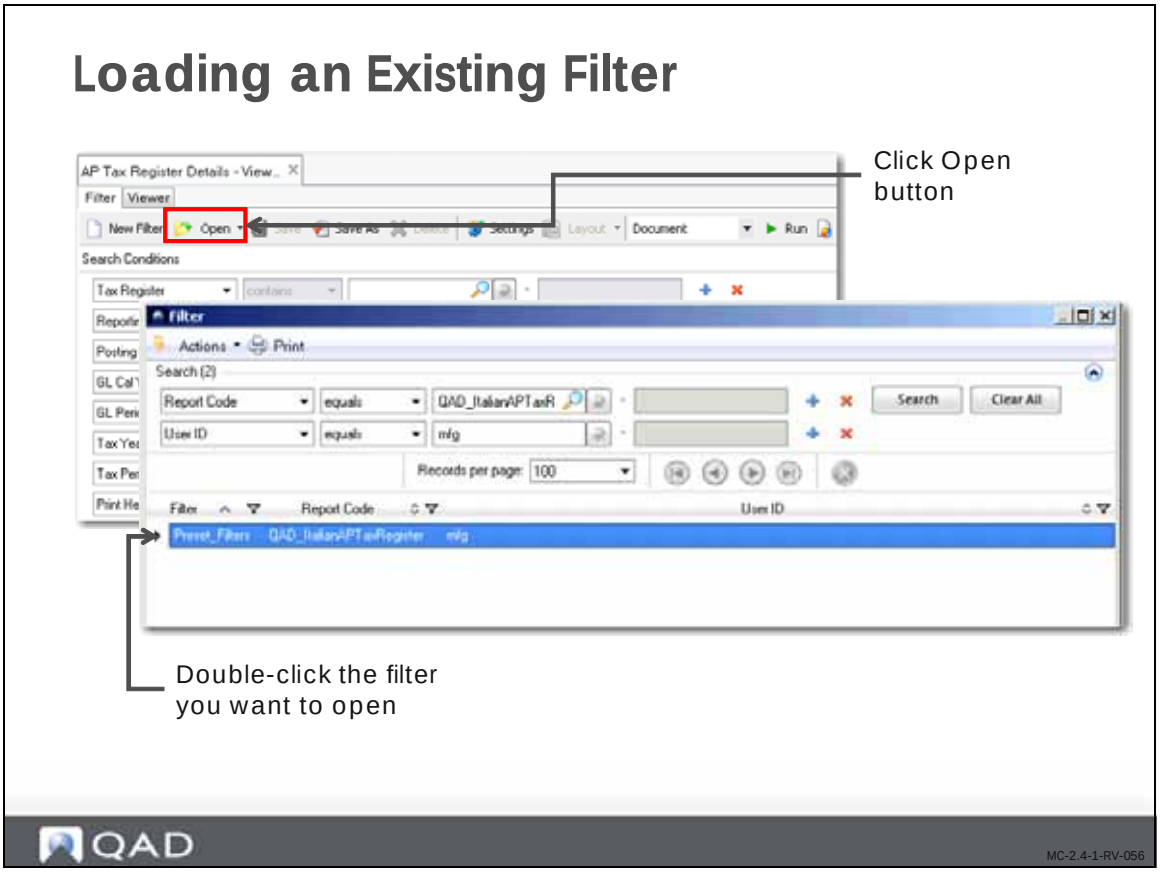
3 On the toolbar, click Save As.

4 In the Save As dialog box, enter a unique filter name, and optionally, a brief description. Then click OK.

The filter is created.

5 If you make further changes to the search conditions, click Save on the toolbar to save the changes.

Loading an Existing Filter



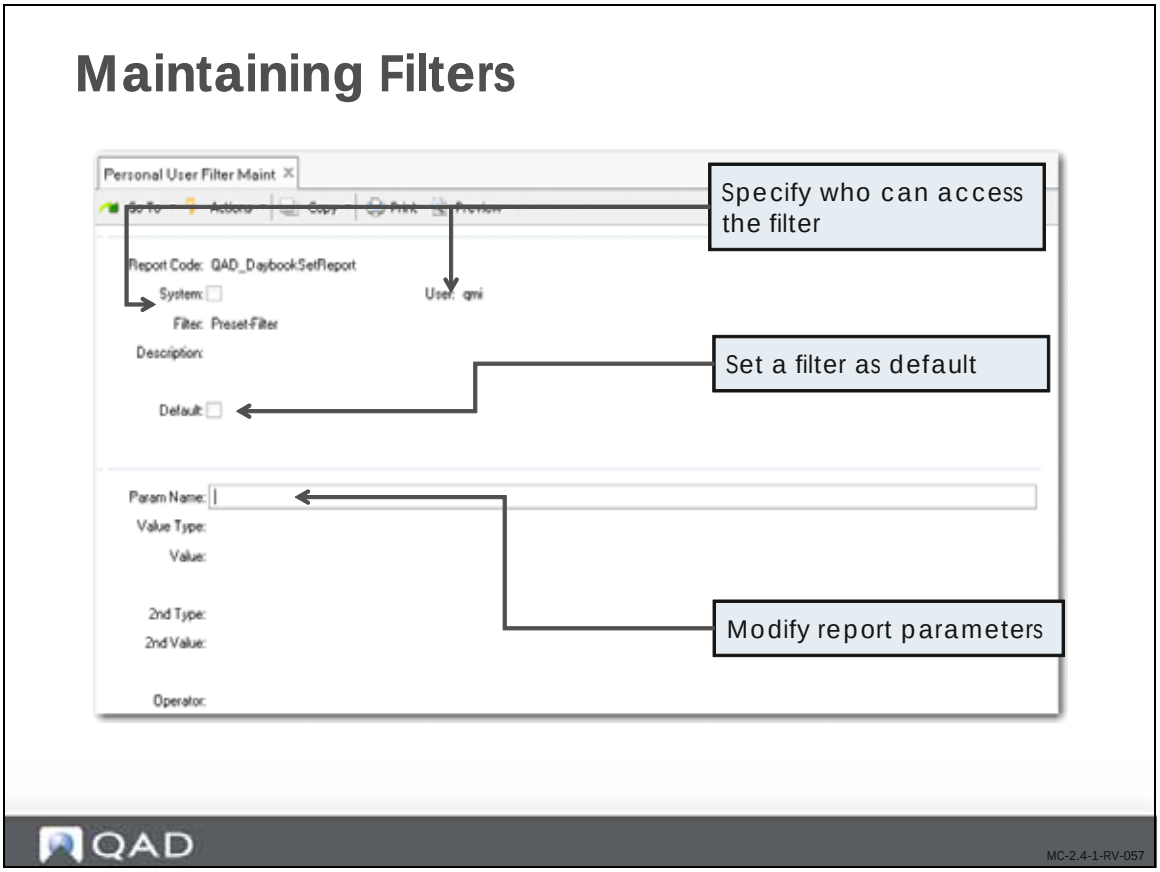
1 On the toolbar, click Open and then select an existing filter from the list.

2 If the list is too long, click More to choose the filter from a browse window.

After you select an existing filter, its search conditions and settings are loaded in the Filter window.

3 If you want to save any changes to the loaded filter, click Save on the toolbar.

Maintaining Filters



Filters are user-specific, and you can use Personal User Filter Maintenance (36.4.21.14) to maintain your own filters.

System. Specify whether or not the filter is system-defined.

User. View or enter the user for whom to define the filter. When the filter is system-defined, this field is disabled.

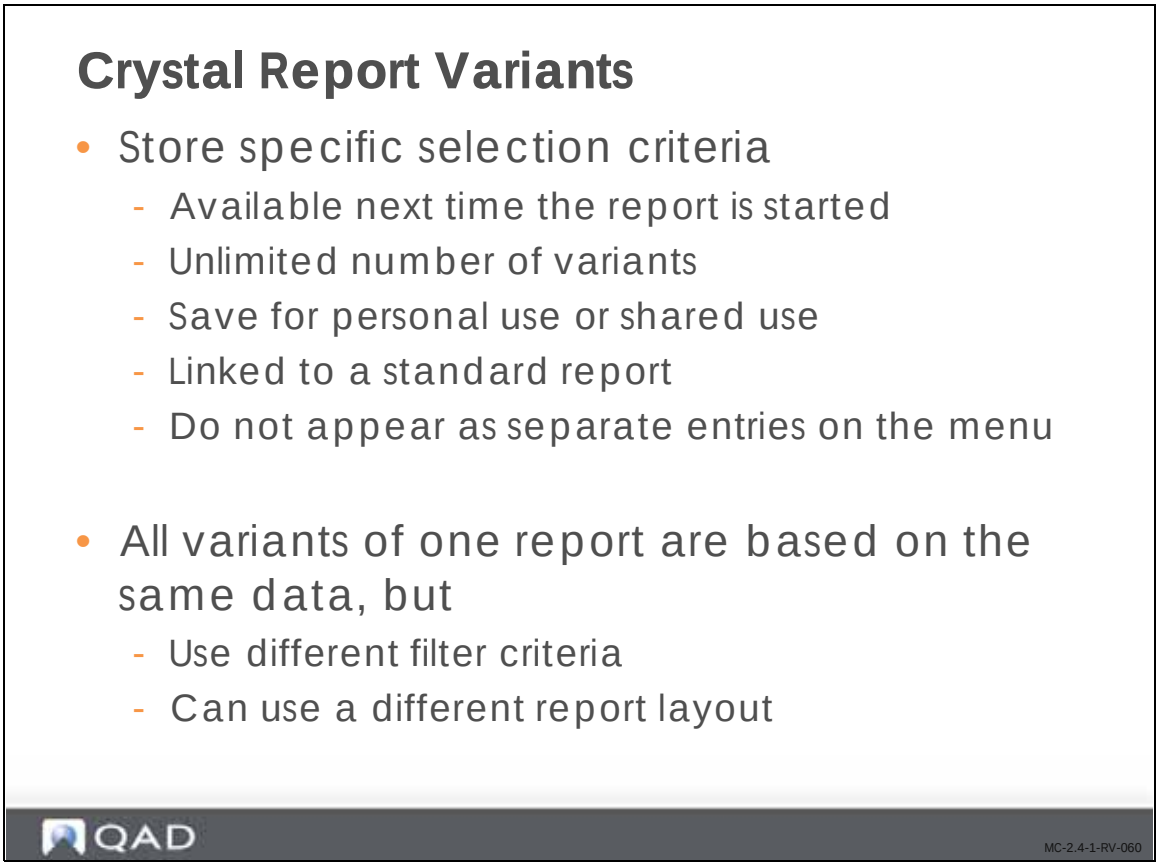
Filter. Enter a filter name.

Description. Enter the description of the filter.

Default. Indicates whether this is the default filter in Report Viewer.

Param Name. Enter a parameter name in the filter criteria. If the parameter name already exists, you can either create a new parameter with the same name or update the existing one.

Crystal Report Variants



Crystal report variants let you store the settings for a report under a user-defined name. By storing settings in a variant, you avoid defining report settings each time the report is run.

You can store an unlimited number of variants for your personal use or share them with other users in a specific role.

Report variants do not appear as separate entries on the menu. They are linked to and accessible from a standard report menu.

Managing Filter Fields

The Manage Filter Fields option in the Tools menu lets you indicate which filter fields to use for the current report variant, and how the fields will appear in the Selection Criteria tab for the report.

You can use Manage Filter Fields to:

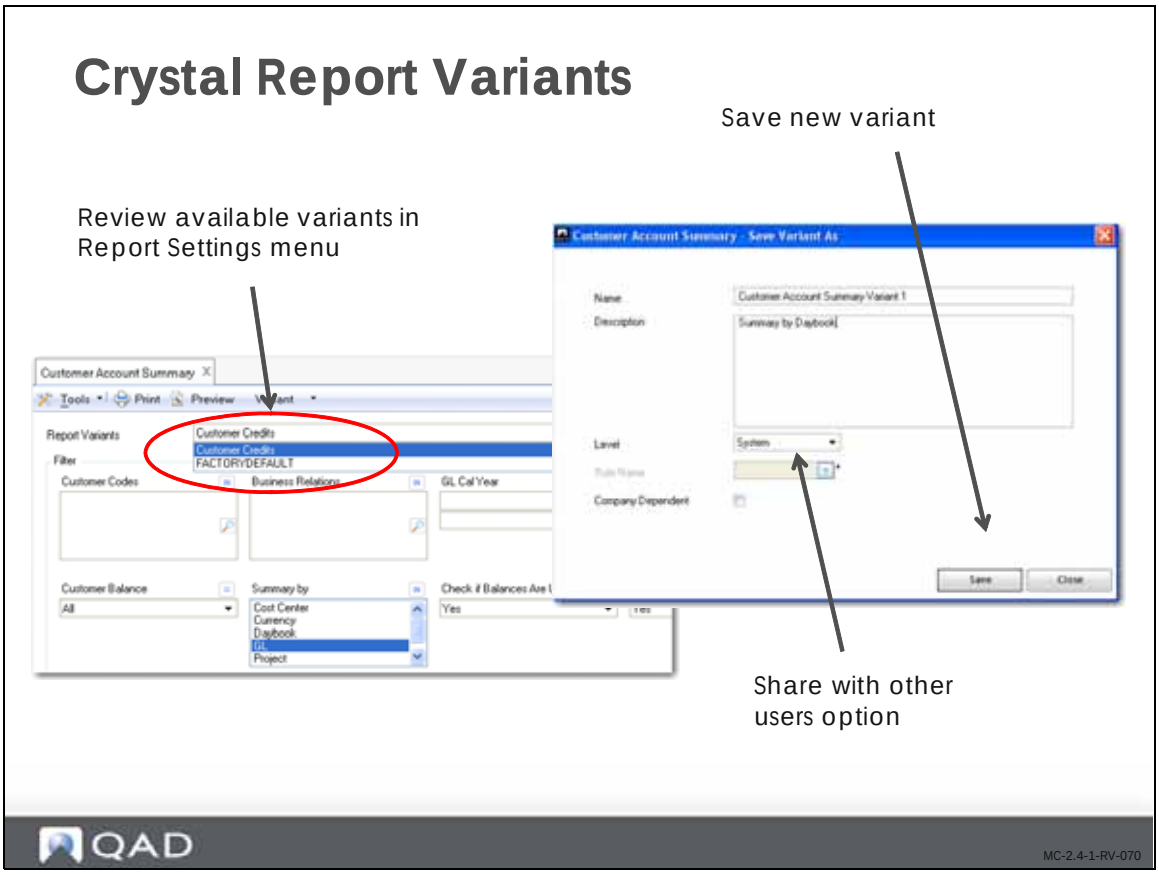
- Change the order in which the filter fields appear in the Selection Criteria tab.
- Specify whether a filter field should appear on the Selection Criteria tab (Use column).
- Define an initial value or range of values for the filter field.

For a detailed explanation of fields, refer to *QAD Financials User Guide*.

Report Options

The Report Options option in the Tools menu lets you specify reporting runtime parameters. These settings are stored at report variant level, and affect how the report is printed.

For a detailed explanation of fields, refer to *QAD Financials User Guide*.



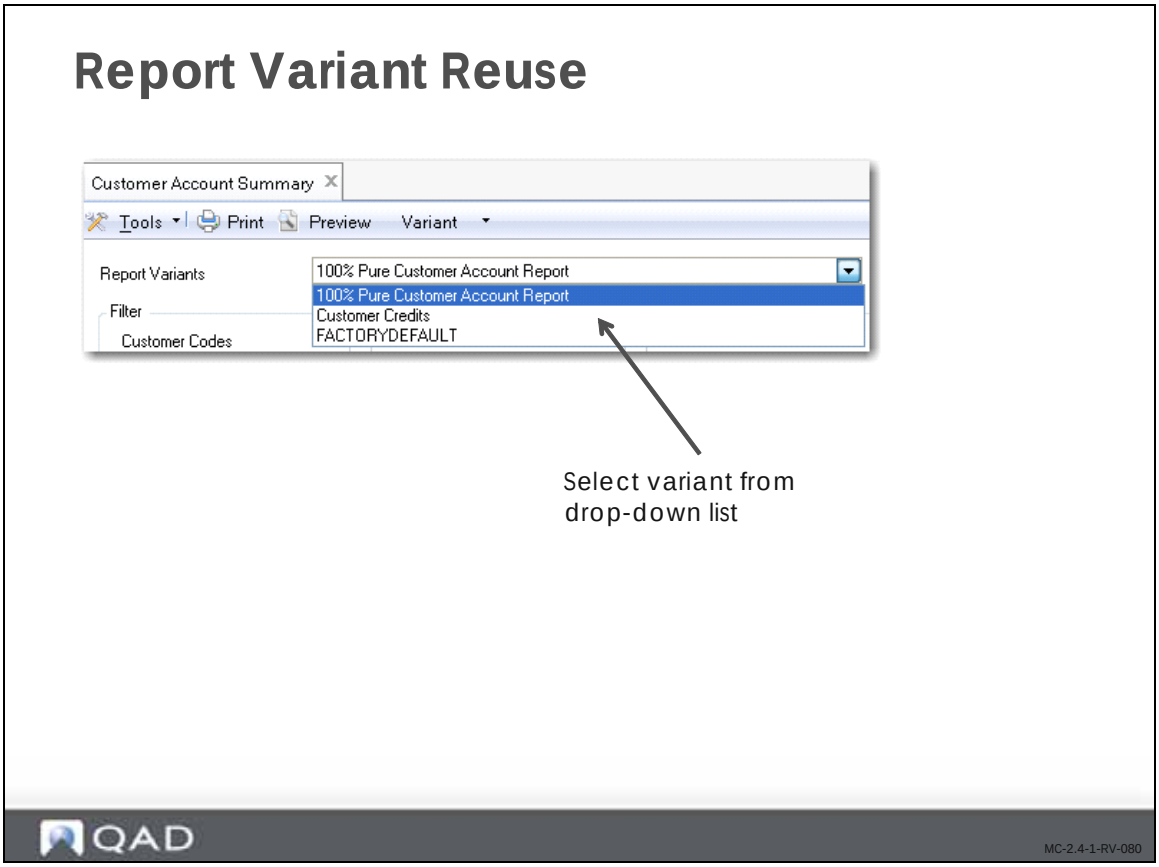
Use the Variants menu to save report variants, and the Variants drop-down list to select saved variants.

You can use an existing report variant, modify the report settings and save them to the existing report variant, or select another report variant to update.

Use Report Variant Delete (36.4.21.25.3) to delete unwanted variants from the system.

Select an option from the Level drop-down list to specify whether you want to keep a variant for your personal use, or share it with other users. For use by you only, select User; to share with other users of the same role, select Role; or to share with all users, select System.

Report Variant Reuse



Once saved, reuse a report variant by selecting it from the drop-down list under Report Variants.

Hands-On Exercises

Exercise 1: QRF Customization

Note Before beginning this exercise, ensure that the GL Transaction report is set to use QRF in Financial Reports Menu Switch (36.24.3.8).

1. Open the GL Transaction report (25.15.1.1).
2. Remove the Layer selection criterion.
3. Open the Report Settings window.
4. In the General tab, set the value in the Search Criteria Display field to None.
5. In the Date tab, set the value in the Show Date Format field to yyyy/M/d.
6. In the Decimal tab, set the value in the Decimal Digits field to 3.
7. Click OK.
8. Select Save As to store your changes.
9. Close the report window and reopen it.
10. Open your report variant.

Exercise 2: SAF Code Report Variant

In this exercise, you will create two report variants for the SAF Code Transaction Detail report (25.15.3.6). The first report should show four grouping levels by GL account, sub-account, SAF 1, and SAF 2. The second report should show three grouping levels by SAF 1, SAF 2, and GL account.

1. Log in to 10USACO or 22UKCO.
2. Open SAF Code Trans Details report (25.15.3.6), and go to Tools | Manage Filter Fields.
3. Enter the following initial values:

Field	Data
Grouping Level 1	GL
Grouping Level 2	Sub-Account
Grouping Level 3	SAF 1
Grouping Level 4	SAF 2

   Note Ensure that you also select the Grouping Level 4 field in the Manage Filter Fields window.

4. Click Save.
5. Save as report variant SAFdetV1.
6. Enter the following initial values:

Field	Data
Grouping Level 1	SAF 1
Grouping Level 2	SAF 2
Grouping Level 3	GL

7 Click Save.

8 Save as report variant SAFdetV2.

Exercise 3: Customer Account Summary Report Variant

Create a report variant for the Customer Account Summary (27.17.4) report for the period 1/2013 until 12/2013, with summary by daybook.

1 Log in to 10USACO or 22UKCO.

2 Open the Customer Account Summary (27.17.4) report.

3 Click Tools | Manage Filter Fields.

4 Enter initial values as follows:

Field	Data
GL Cal Year	2013/ Second Initial Value 2013
Summary by	Daybook

5 Click Save.

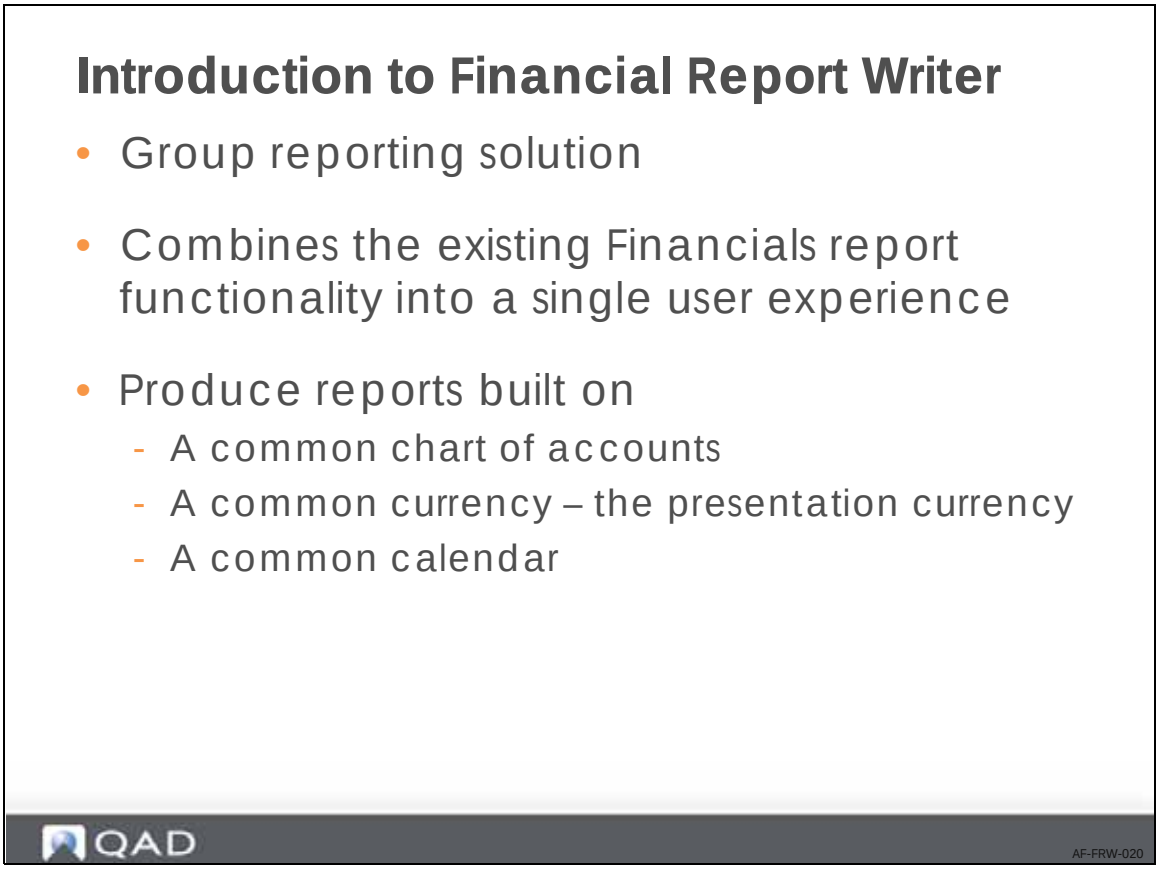
6 Save as report variant CustsumV1.

7 Run the report.

Chapter 9

Financials Report Writer

Overview

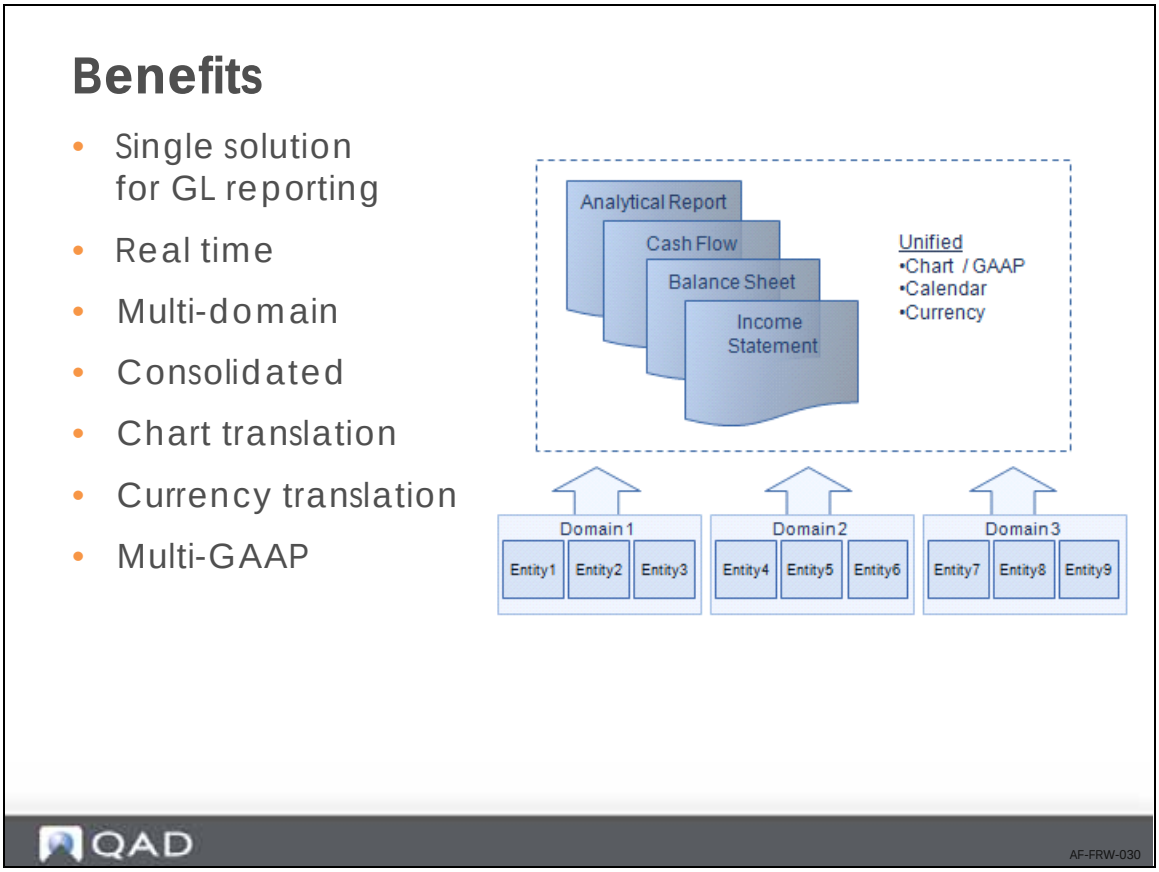


Financial Report Writer is a group reporting solution that combines the existing Financials reporting functionality into a single user experience. It includes multi-entity and multi-domain reporting that lets you map charts of accounts and approximate consolidation results.

Financial Report Writer aggregates financial statements that are built on:

- A common chart of accounts (COA) including all dimensions available in Financials, such as domain, entity, layer, GL account, sub-account, cost center, project, SAFs, intercompany, and currency
- A common currency—the presentation currency
- A common calendar

Benefits



Financial Report Writer is a major uplift of the reporting capabilities in Enterprise Financials. It combines the power of the GL Report Writer with new Enterprise Financials features such as layers, SAFs, intercompany analysis, and statutory currency.

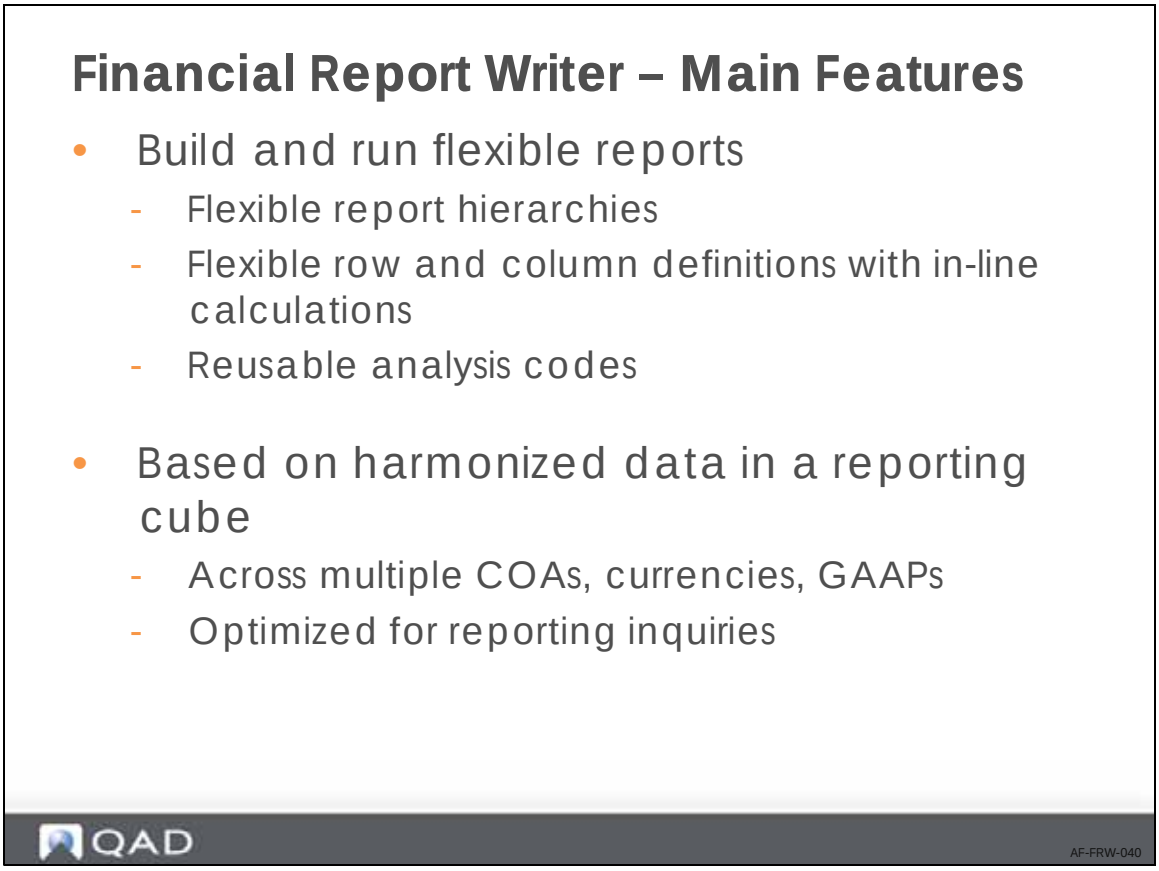
Financial Report Writer provides financial information for accountants and managers on both corporate group level and local domain level. Using Financial Report Writer, you can create financial statements such as balance sheets, income statements, and cash flow statements. You can also create cross-domain analytical reports with many dimensions such as regions, countries, entities, divisions, departments, product lines, and customer groups.

Financial Report Writer also provides an accurate approximation of the consolidation results in real-time without the need to run the consolidation program.

You can produce reports in any required chart of account, in any hierarchy, and according to any GAAP. You can represent report amounts in any presentation currency.

You can also create a report calendar that is different than the local domain GL calendars.

Financial Report Writer — Main Features

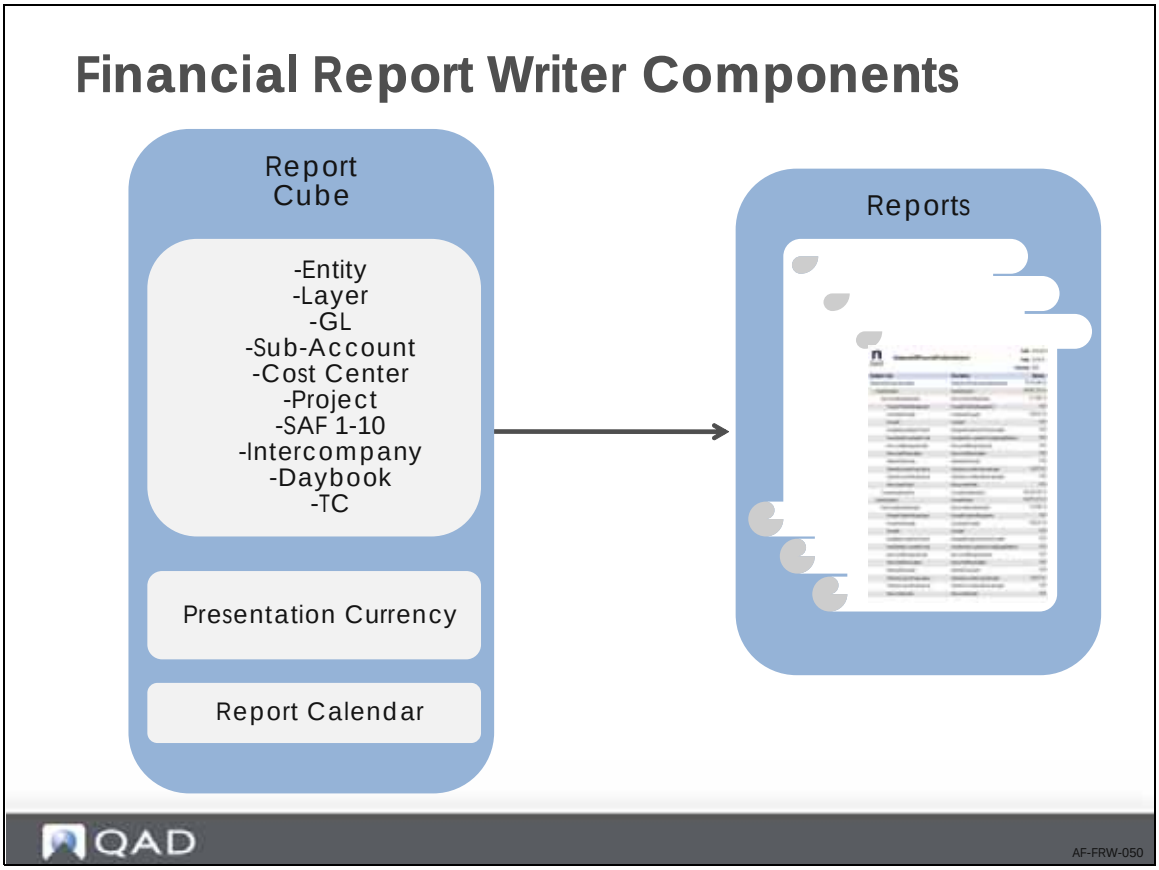


The Financial Report Writer allows great flexibility in creating reports. You can create reporting hierarchies using all COA elements and you can easily change these at any time. The rows and columns of the reports can contain calculations, comparisons with previous periods, or side by side comparisons of entities, cost centers, projects, and so on.

To avoid duplication of effort, reusable analysis codes contain definitions for the data to include in the reports. For example, you can define groups or ranges of GL accounts once and reuse them on many reports.

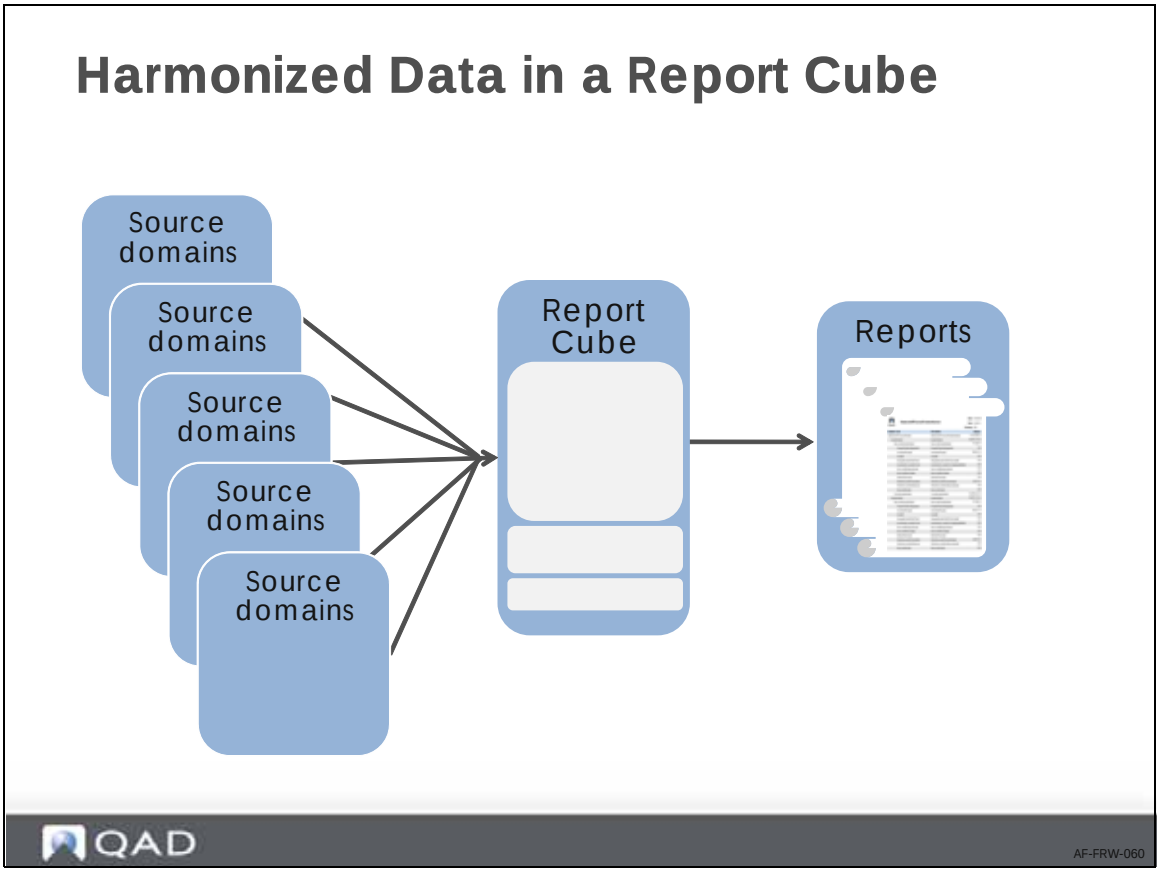
This flexibility is possible because data from the different source domains is stored in report cubes. In the report cubes, the data is harmonized and stored in an optimal format for reporting. A report cube contains data that can come from many domains and this harmonized data allows for consistent reporting.

Financial Report Writer Components



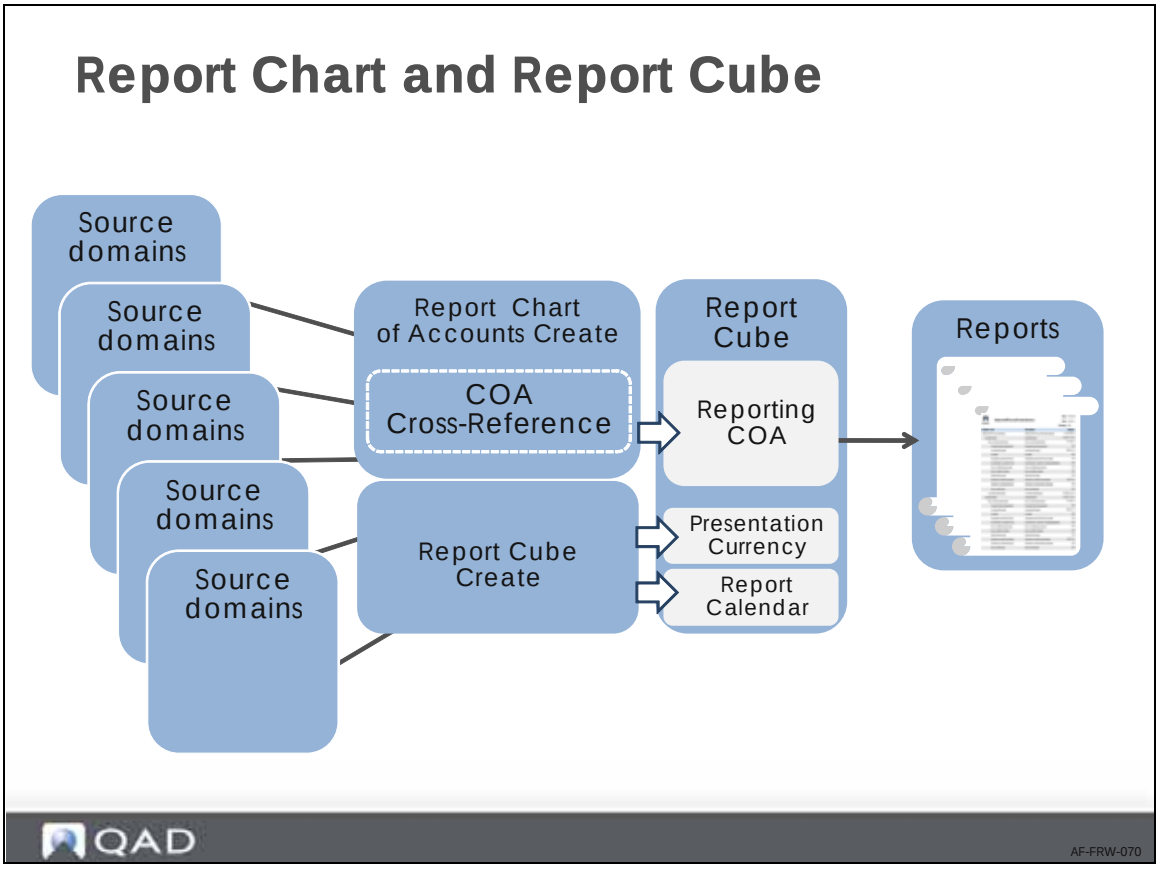
The real power of the Financial Report Writer is the flexible way in which you can build and run reports. It uses the information stored in report cubes to generate reports in any required structure or format.

Harmonized Data in a Report Cube



A report cube contains data that can come from many domains and that is harmonized to allow consistent reporting.

Report Chart and Report Cube



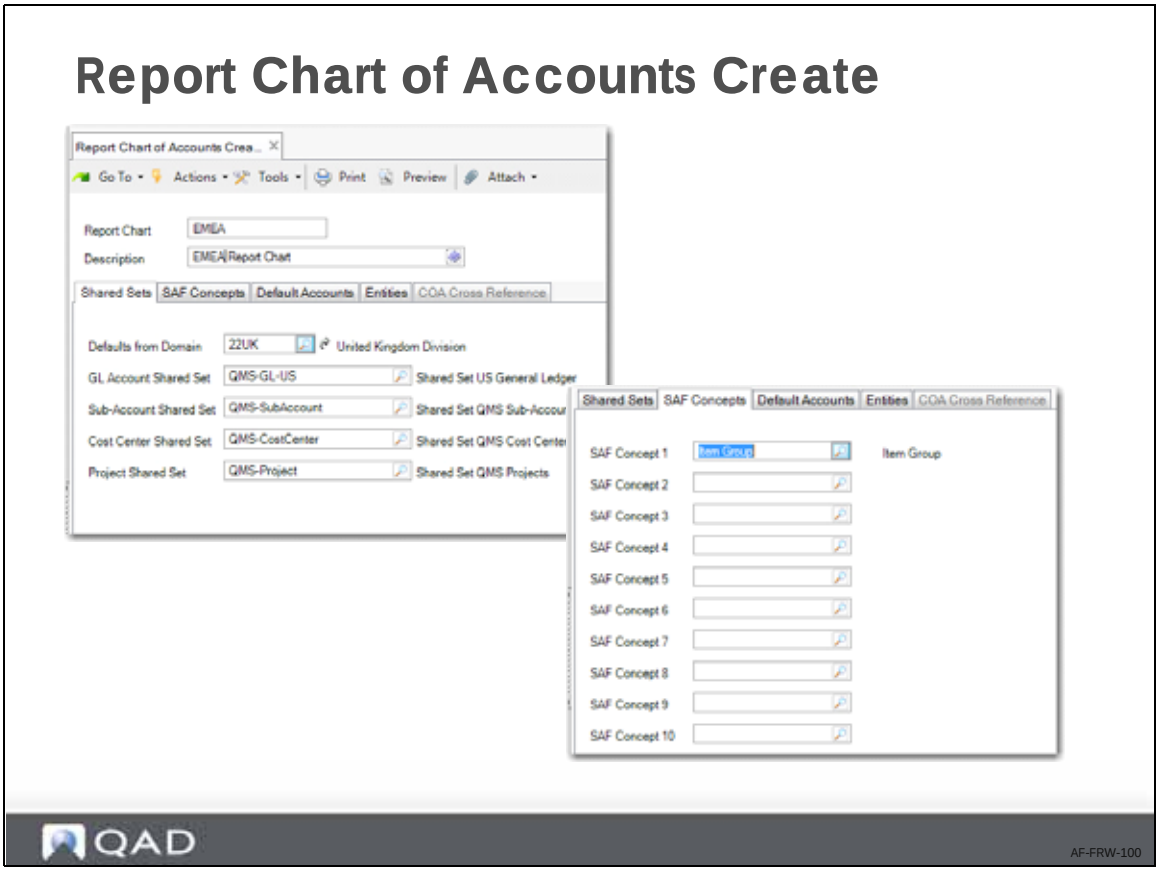
To collect data from different domains in a single report cube, you must perform three setup steps:

1. Use Report Chart of Accounts Create to define how the source domain chart of accounts is mapped to a target report chart of accounts.
2. Create COA cross-references using COA Cross Reference Modify or COA Cross Reference Excel Integration.
3. Use Report Cube Create to define the presentation currency, the currency translation methods, and the exchange rates applied for the report cube. You can also define a report calendar and map that to the GL calendars. You can define multiple presentation currencies.

Financial Report Writer lets you combine the accounting layers of Enterprise Financials in different ways so that each combination represents another GAAP (for example, local GAAP, US-GAAP, or IFRS) and you can then run the same report for different GAAPs.

Financial Report Writer is XBRL enabled, and you can tag all elements in the reports with XBRL XML tags, which are available in the output datasets of the reports.

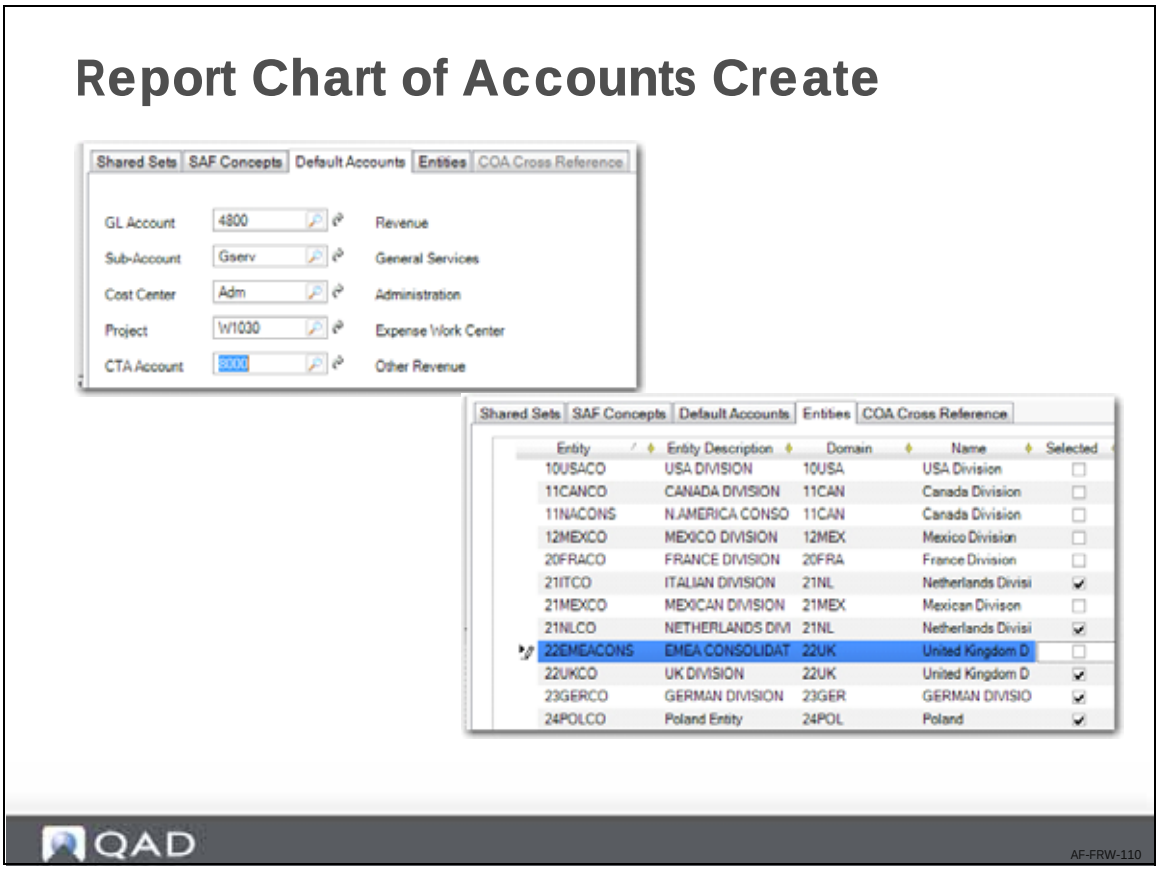
Report Chart of Accounts Create



Use Report Chart of Accounts Create to maintain a common reporting chart of accounts. You can define multiple report COAs.

In the Shared Sets tab, you must define the shared sets for the source chart of accounts.

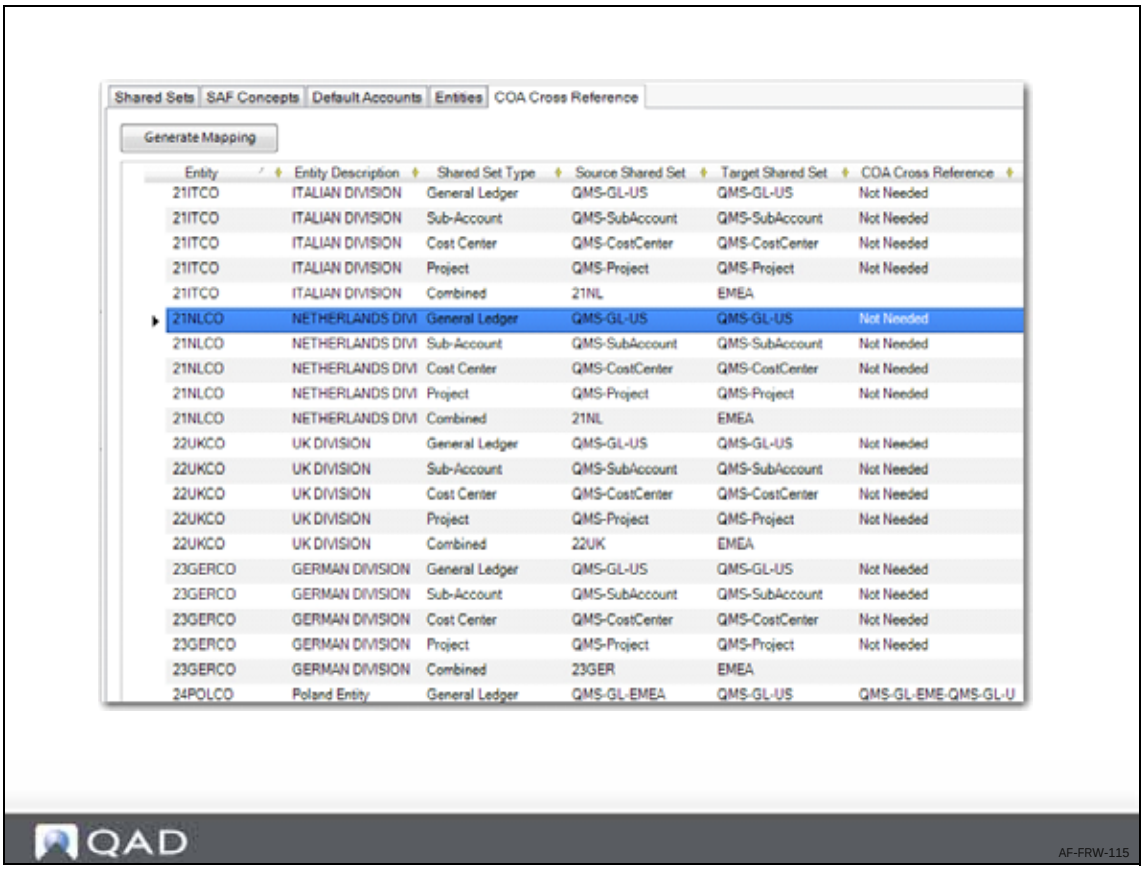
In the SAF Concepts tab, define the SAF concepts that constitute the source chart of accounts. Financial Report Writer can include SAF dimensions and bring SAFs from various structures and concepts together to create a central reporting SAF structure.



In the Default Accounts tab, define the default account, sub-account, cost center, and project (if you are using catch alls) and the currency translation adjustment account, if one is required.

The system uses the default account and analysis to fill in any gaps caused by missing mapping elements in the COA cross-reference used to translate from the source entity COA to the report chart COA. You can also leave these default codes blank to ensure that a missing translation is raised as an error during the generation of report cubes. In general, it is recommended that you leave these codes blank, unless you want to avoid errors generated by gaps in the COA translation. The CTA account is mandatory when you create report cubes that have a presentation currency other than the source entities' base currencies.

In the Entities tab, specify the entities you want to include in Financial Report Writer. You can specify entities from any domain in the system. You must associate at least one entity with a report chart. If you delete or add entities for which COA cross-references are defined, the system displays a reminder that you must regenerate the COA cross-references.



Entity	Entity Description	Shared Set Type	Source Shared Set	Target Shared Set	COA Cross Reference
21ITCO	ITALIAN DIVISION	General Ledger	QMS-GL-US	QMS-GL-US	Not Needed
21ITCO	ITALIAN DIVISION	Sub-Account	QMS-SubAccount	QMS-SubAccount	Not Needed
21ITCO	ITALIAN DIVISION	Cost Center	QMS-CostCenter	QMS-CostCenter	Not Needed
21ITCO	ITALIAN DIVISION	Project	QMS-Project	QMS-Project	Not Needed
21ITCO	ITALIAN DIVISION	Combined	21NL	EMEA	
21NLCO	NETHERLANDS DIVI	General Ledger	QMS-GL-US	QMS-GL-US	Not Needed
21NLCO	NETHERLANDS DIVI	Sub-Account	QMS-SubAccount	QMS-SubAccount	Not Needed
21NLCO	NETHERLANDS DIVI	Cost Center	QMS-CostCenter	QMS-CostCenter	Not Needed
21NLCO	NETHERLANDS DIVI	Project	QMS-Project	QMS-Project	Not Needed
21NLCO	NETHERLANDS DIVI	Combined	21NL	EMEA	
22UKCO	UK DIVISION	General Ledger	QMS-GL-US	QMS-GL-US	Not Needed
22UKCO	UK DIVISION	Sub-Account	QMS-SubAccount	QMS-SubAccount	Not Needed
22UKCO	UK DIVISION	Cost Center	QMS-CostCenter	QMS-CostCenter	Not Needed
22UKCO	UK DIVISION	Project	QMS-Project	QMS-Project	Not Needed
22UKCO	UK DIVISION	Combined	22UK	EMEA	
23GERCO	GERMAN DIVISION	General Ledger	QMS-GL-US	QMS-GL-US	Not Needed
23GERCO	GERMAN DIVISION	Sub-Account	QMS-SubAccount	QMS-SubAccount	Not Needed
23GERCO	GERMAN DIVISION	Cost Center	QMS-CostCenter	QMS-CostCenter	Not Needed
23GERCO	GERMAN DIVISION	Project	QMS-Project	QMS-Project	Not Needed
23GERCO	GERMAN DIVISION	Combined	23GER	EMEA	
24POLCO	Poland Entity	General Ledger	QMS-GL-EMEA	QMS-GL-US	QMS-GL-EME-QMS-GL-U

In the COA Cross Reference tab, specify COA cross-reference codes to map shared sets that are different in the source and target COAs. The COA Cross Reference tab is enabled when a GL shared set is specified in the Shared Sets tab and if at least one entity is specified in the Entities tab.

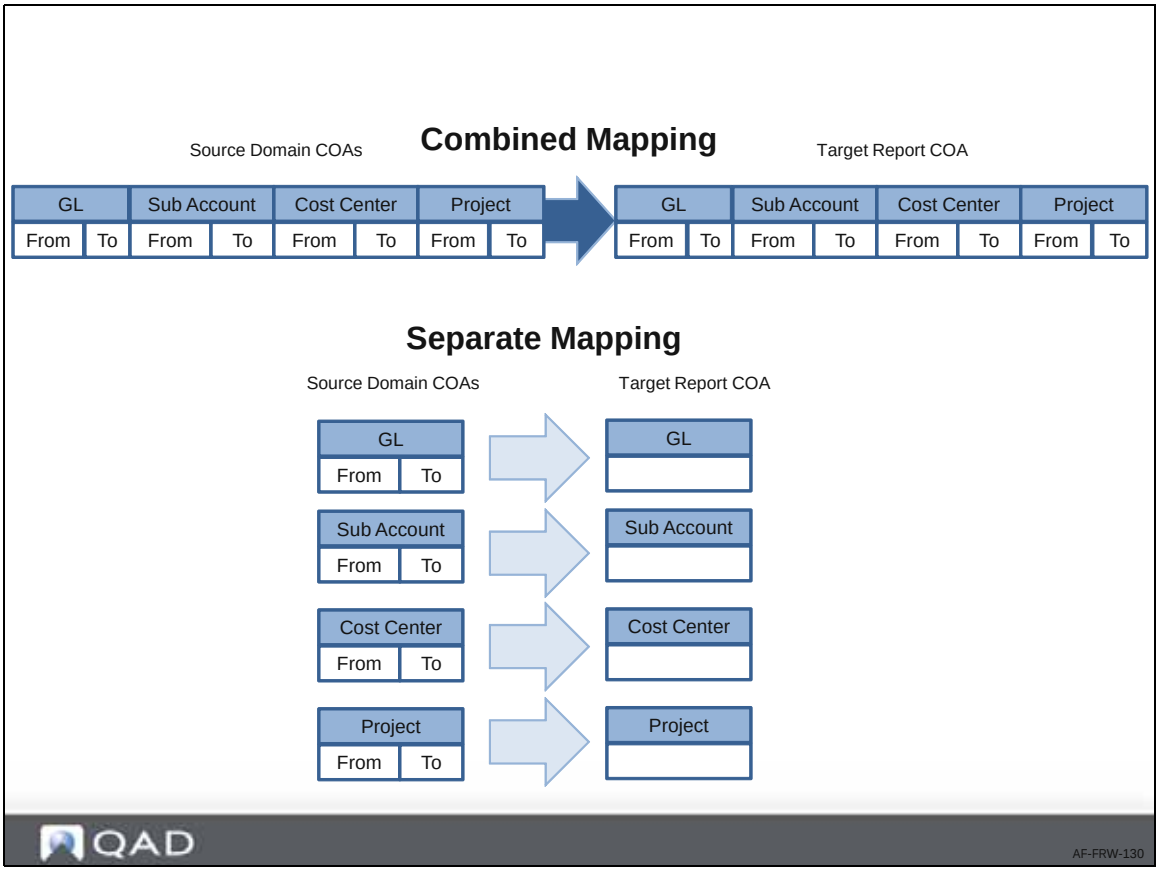
You can enter COA cross-references manually or have the system automatically generate a list of COA cross-references by clicking the Generate Mapping button. The system verifies if an existing COA cross-reference matches the combination of shared sets and retrieves that cross-reference. If there is no matching COA cross-reference, the system creates a COA cross-reference code that combines the source and target shared set names. The system-generated COA cross-references are of type Separate.

When the source and target shared sets are the same for a dimension, the system displays a Not Needed message and skips that shared set. You can manually specify COA cross-references of type Combined, which you can use for exceptions.

Note If you modify a shared set and COA cross-references already exist for that shared set in the COA Cross Reference tab, the system displays a warning to remind you to update the cross-references.

If you have saved a COA cross-reference mapping for a report chart and subsequently modify the target shared sets or entities, you must re-click Generate Mapping. Generate Mapping does not re-generate the mappings for existing entities if the target shared sets have not changed. Therefore, the system does not overwrite any valid prior mappings.

Create COA Cross References



For each dimension that you plan to use in the Financial Report Writer, you must have a complete COA cross-reference of type Separate. This step ensures the accounts are correctly translated when you generate reporting cubes.

The Financial Report Writer shares the COA Cross Reference records with the consolidation functionality. When the same charts are used in source and target, then you do not need to create COA cross references.

You can create a COA cross-reference of type Combined if you need a special mapping for combinations of GL accounts and sub-accounts or combinations of GL accounts and cost centers.

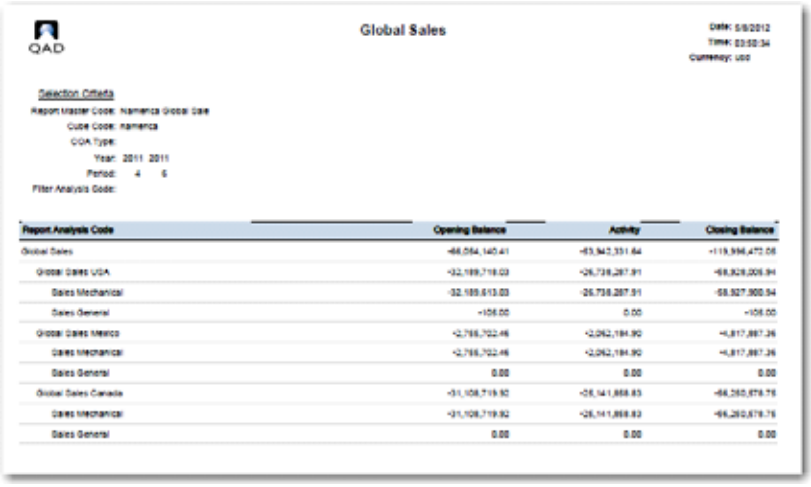
You only need to create COA cross-references of type Combined for exceptions. Financial Report Writer first checks if there is a COA cross-reference of type Combined for a particular accounting key. If a Combined map is found, Financial Report Writer uses that map. Otherwise, the Separate type mappings are used.

Hands-On Exercises

The exercises in this section apply to both US and EMEA training classes.

Exercise 1: Creating a Report COA

Use a chart of account to create a sales report for North America that shows the opening balance, activity, and closing balance for entities 10USACO, 11CANCO, and 12MEXCO.



1. Log in to the training database using the following details:

   User: demo

   Password: qad

2. Ensure that you are in entity 10USACO.

3. Create default COA elements that allow you to use incomplete mappings in the COA cross references:

   a. Create a catch-all GL account 1994 of type Standard. Accept all defaults in GL Account Create (25.3.13.1).

   b. Create a catch-all sub-account, FRWSA. Accept all defaults in Sub-Account Create (25.3.17.1).

   c. Create a catch-all cost center, FRWC. Accept all defaults in Cost Center Create (25.3.20.1).

4 Use Report Chart of Accounts Create (25.16.15.1) to create a common reporting chart of accounts:

Field	Value
Report Chart	NAmerica
Description	North American Chart of Accounts

a In the Shared Sets tab, specify 10USA in the Defaults from Domain field.

b In the SAF Concepts tab, leave all fields blank.

c In the Default Accounts tab, specify the default COA elements that you created previously:

- GL account: 1994
- Sub-account: FRWSA
- Cost center: FRWC
- CTA account: 1994

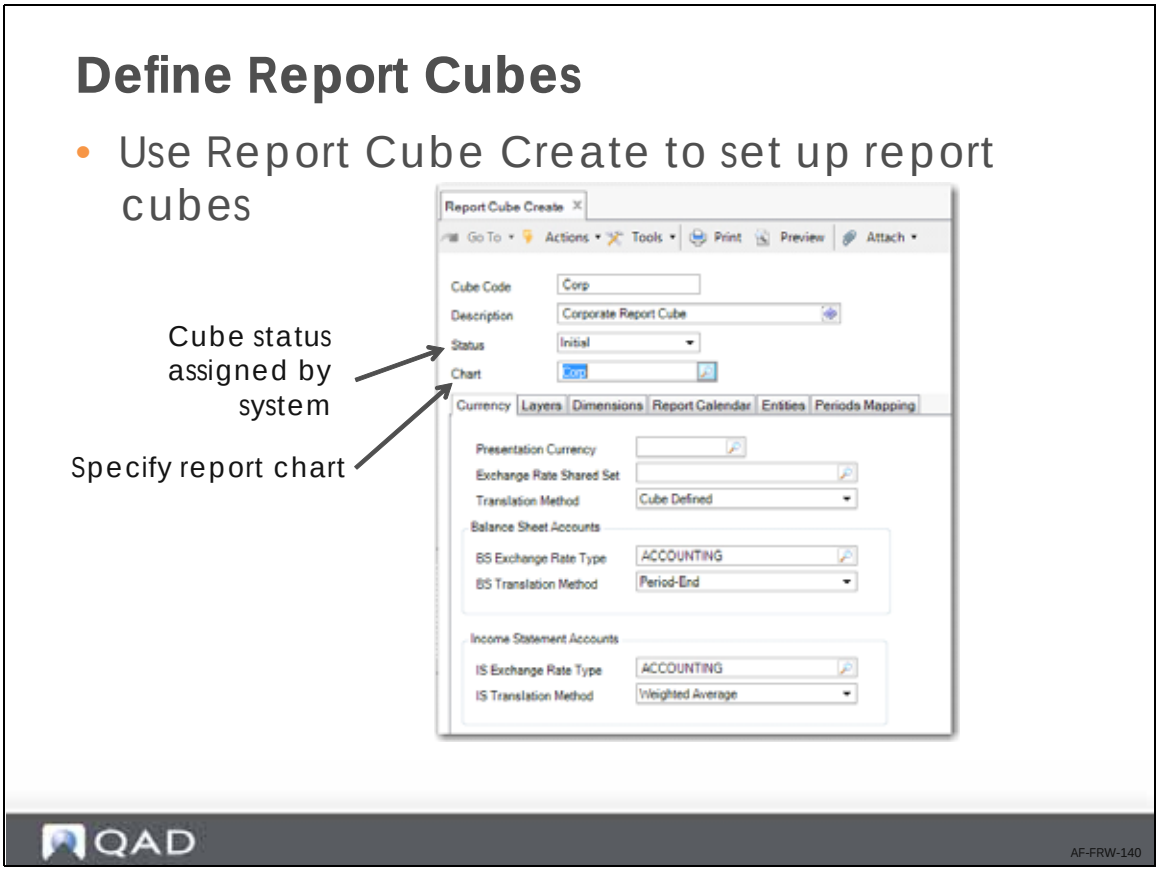
d In the Entities tab, select entities 10USACO, 11CANCO, and 12MEXCO.

e In the COA Cross Reference tab, click Generate Mapping.

f Three mappings require COA cross-references of type Combined. Specify 10COACR in the COA Cross Reference fields for these.

g Save the record.

Define Report Cubes

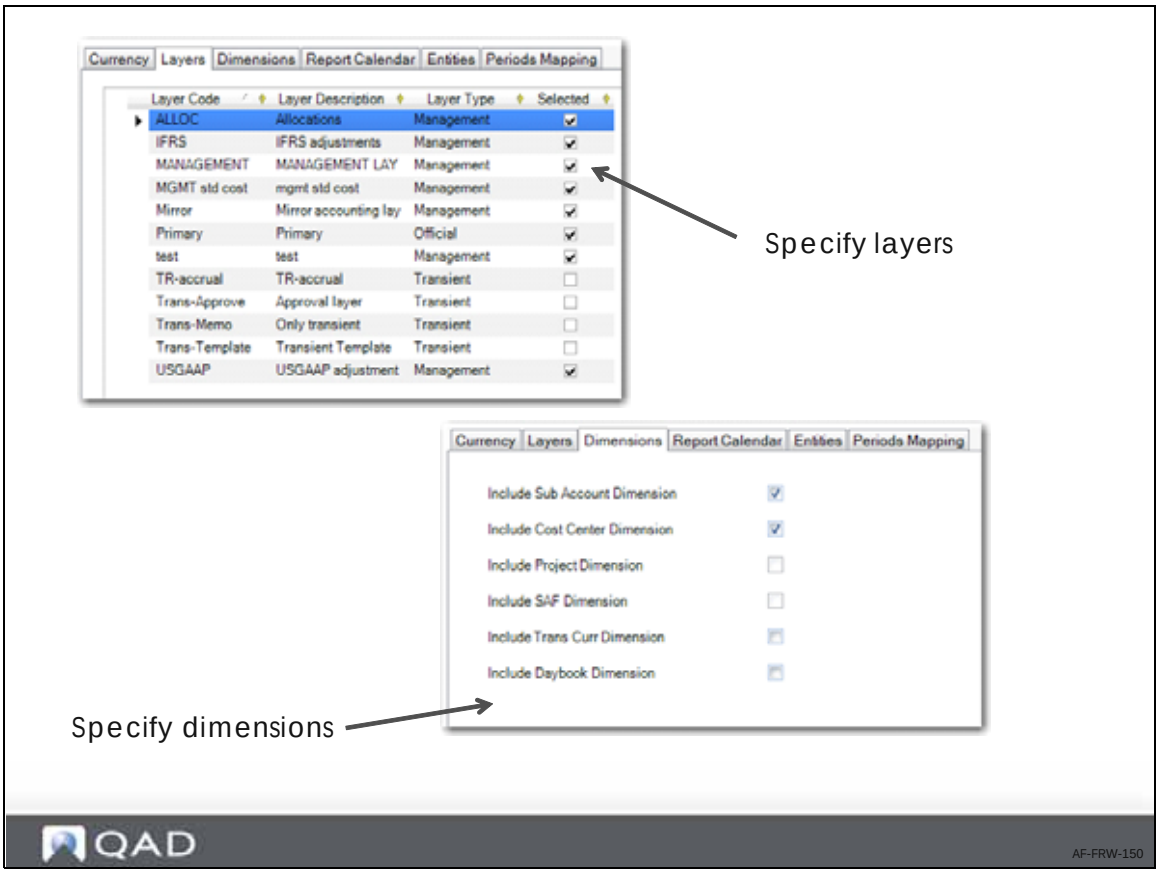


Use Report Cube Create to set up report cubes.

New cubes are assigned the status Initial. When you generate the cube data (using another program), the system updates the cube status to Operational. If the cube generation fails, the daemon process to update the cube fails, or the cube definition is changed, the cube status is automatically updated to Needs Rebuild. If the cube rebuild is successful, you can change the cube status back to Operational.

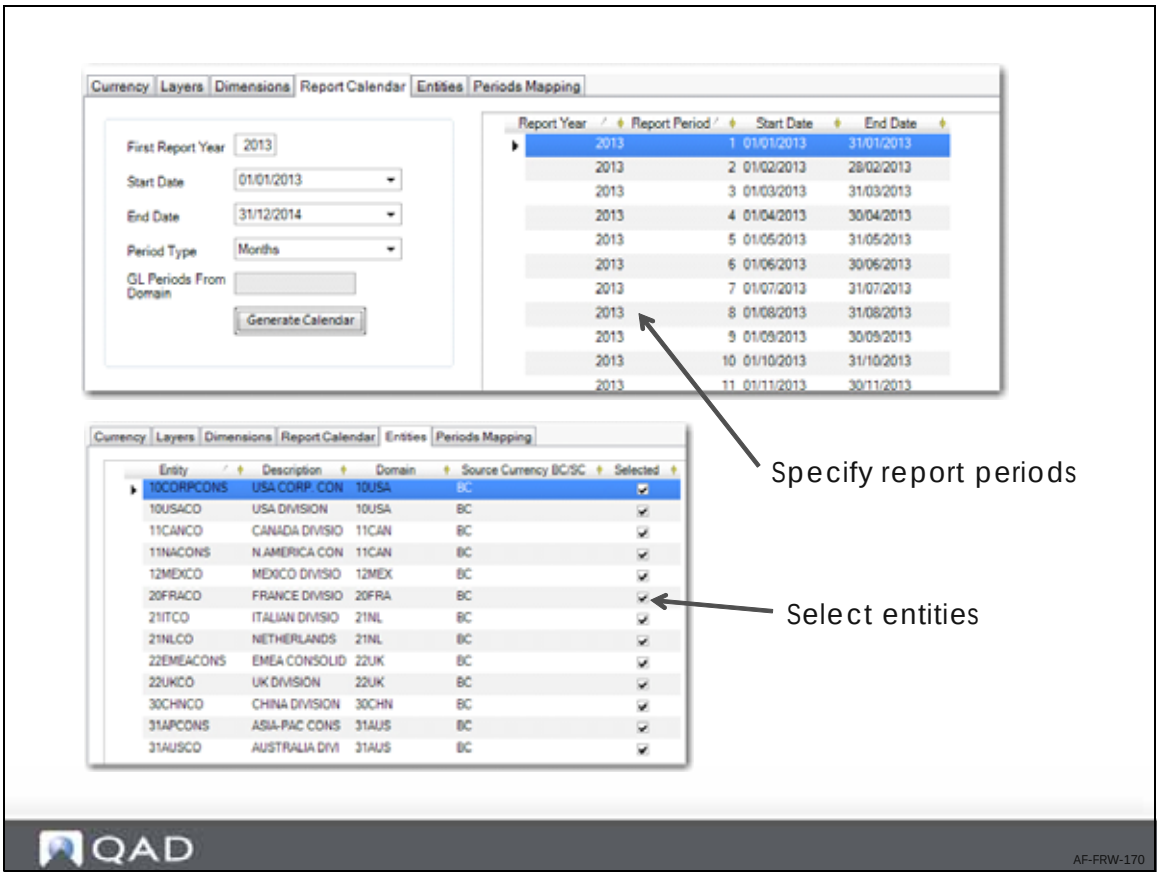
If you no longer need the cube, you can change its status to Inactive. This means the cube is retired. You can change the status of inactive cubes back to Needs Rebuild. Only Operational cubes can be updated by the daemon.

In the Currency tab, specify the presentation currency for the reports and the exchange rates to use.



In the Layers tab, specify the layers to include in the cube. You can exclude layers you do not want to include in the reports; for example, the transient layers used for storing posting templates. You can also create a cube for management reporting that includes management layers and another cube for statutory reporting that only includes the official layer. You can also filter out layers later in the report definition, but this can have a negative impact on performance.

In the Dimensions tab, specify the dimensions to include in the cube. Select the relevant fields to indicate which dimensions to include in the cube. Clear the appropriate fields to exclude dimensions that you do not intend to use, which makes the cube smaller and increases reporting speeds.

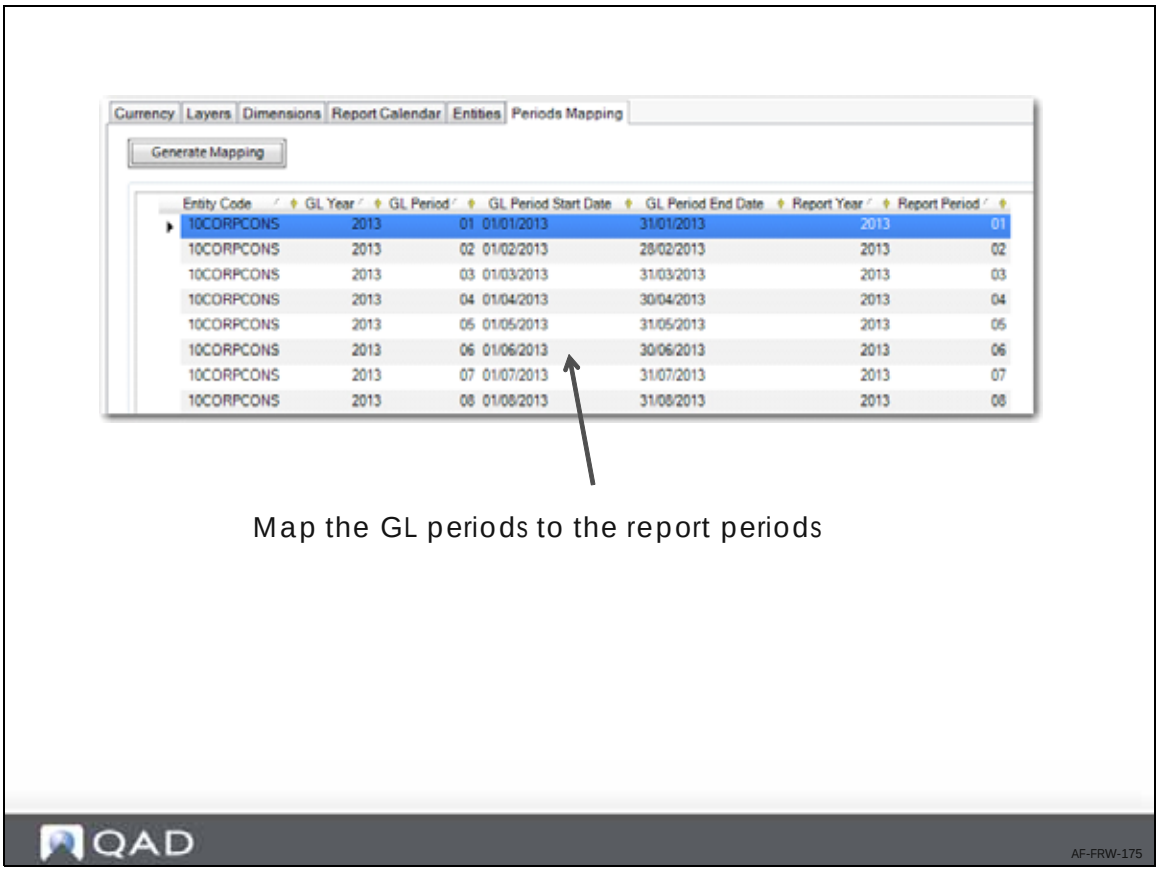


In Report Calendar tab, define the report calendar.

The Entities tab lists the entities that you specified in the report chart. For a new cube, all entities in the report chart are selected by default. Clear the Selected field for the entities that you do not want to include. When you use Report Cube Modify to modify a cube definition, only the entities that were selected previously are selected. Therefore, if you add an entity to the report chart after the cube was created, the additional entity displays in Report Cube Modify as unselected.

Note You must specify at least one entity for each cube. Otherwise, you cannot save the cube data.

If you remove an entity, the period mapping for that entity in the Periods Mapping tab is automatically removed. The process of adding an entity does not automatically add the period mapping. You must do this manually in the Periods Mapping tab.



In the Periods Mapping tab, click Generate Mapping to map the GL calendar to the report calendar for all report periods specified in the Report Calendar tab. The GL periods of the source entities are mapped to report periods. Based on the start and end dates, the system assigns a default mapping proposal. However, you can modify the default mapping. The start and end dates of the GL periods can be different from the start and end dates of the report periods. A GL period cannot be split over multiple report periods.

Each entity GL period that overlaps with a cube report period is listed on the left of the grid and the corresponding report period is listed on the right of the grid. If a GL period overlaps with two report periods, the report period that has the greatest number of overlapping days with the GL period is kept.

You can freely change the report period year and the number assigned by the system for each entity GL period. You can also delete mapping rows. However, for each report period and entity, there must always be at least one period mapping record.

For a cube that has no data associated with it, click the Generate Mapping button to clear the original mapping data and to generate new mappings. When a cube has associated data, you can only add new report periods; you cannot modify the existing periods. In this case, the Generate Mapping button does not clear the old mapping records. It only appends new mapping records at the end of the mapping. You can only modify these newly added records. When you click the Generate Mapping button again, the newly added records are cleared and replaced by new default period records.

Hands-On Exercise

Exercise 2: Creating a Report Cube

1 Create a new report cube using Report Cube Create (25.16.13.1).

Field	Value
Cube Code	NAmerica Cube
Description	North American Report Cube
Status	INITIAL (read-only)
Chart	NAmerica

a In the Currency tab, specify the currency and exchange details:

Field	Value
Presentation Currency	USD
Exchange Rate Shared Set	QMS-ExRate-US
Translation Method	GL Consolidation Method
BS Exchange Rate Type	Accounting
BS Translation Method	Blank
IS Exchange Rate Type	Accounting
IS Translation Method	Blank

b In the Layers tab, select the Primary layer only. Deselect all other layers.

c In the Dimensions tab, include the following values only:

Field	Value
Include Sub Account Dimension	Yes (Selected)
Include Cost Center Dimension	Yes (Selected)

d In the Report Calendar tab, specify a reporting period from Jan 2014 through to December 2014 with a period type of Months. Click Generate Calendar.

e In the Entities tab, the three entities included in the report chart are selected. For the entities, specify BC as the source of their GL balances.

f In the Periods Mapping tab, click Generate Mapping and accept all defaults.

g Save the cube.

2 Stop the Cube daemon using Cube Daemon Stop (36.14.16.18.5).

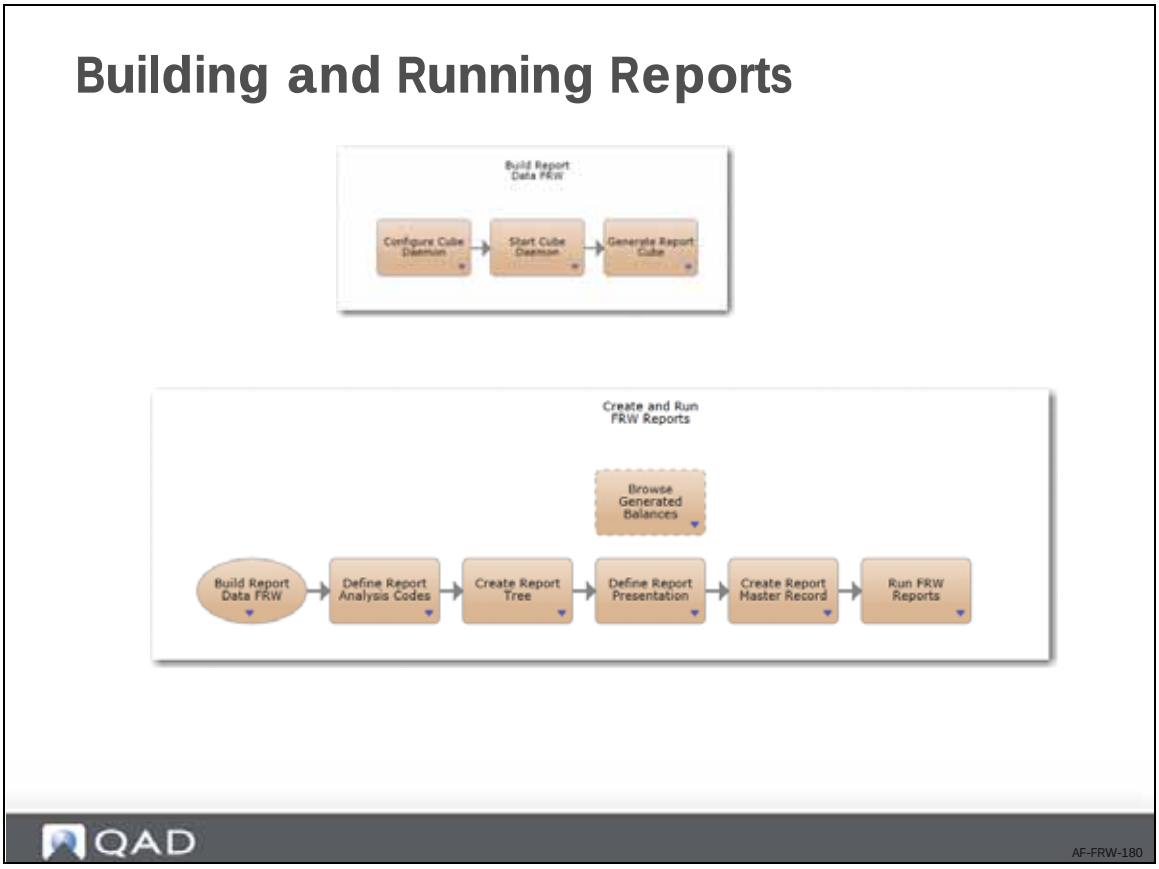
3 Generate your new cube using Report Cube Generate (25.16.3).

   a Specify cube code NAmerica Cube.

   b Accept all defaults.

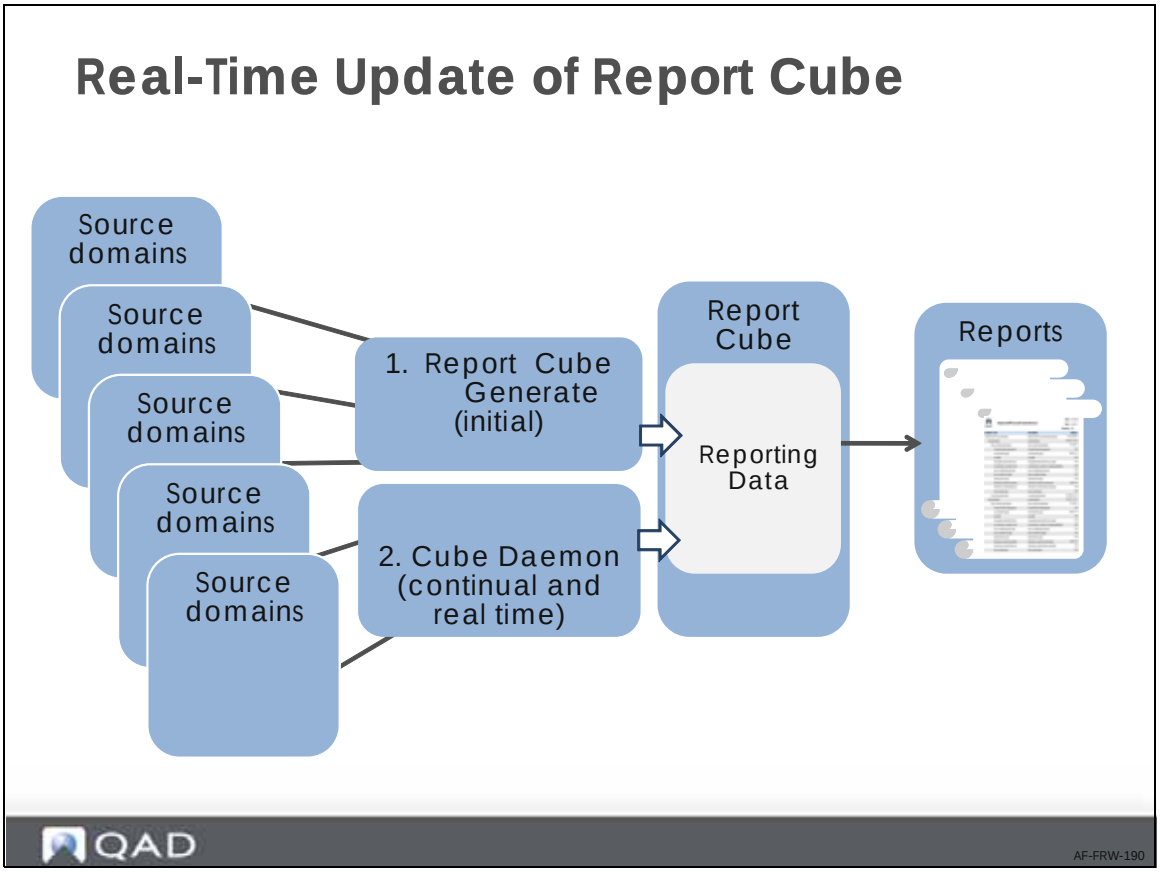
4 Restart the Cube daemon using Cube Daemon Start (36.14.16.18.4).

Building and Running Reports



The slide shows the process maps for building and running Financial Report Writer reports.

Real-Time Update of Report Cube

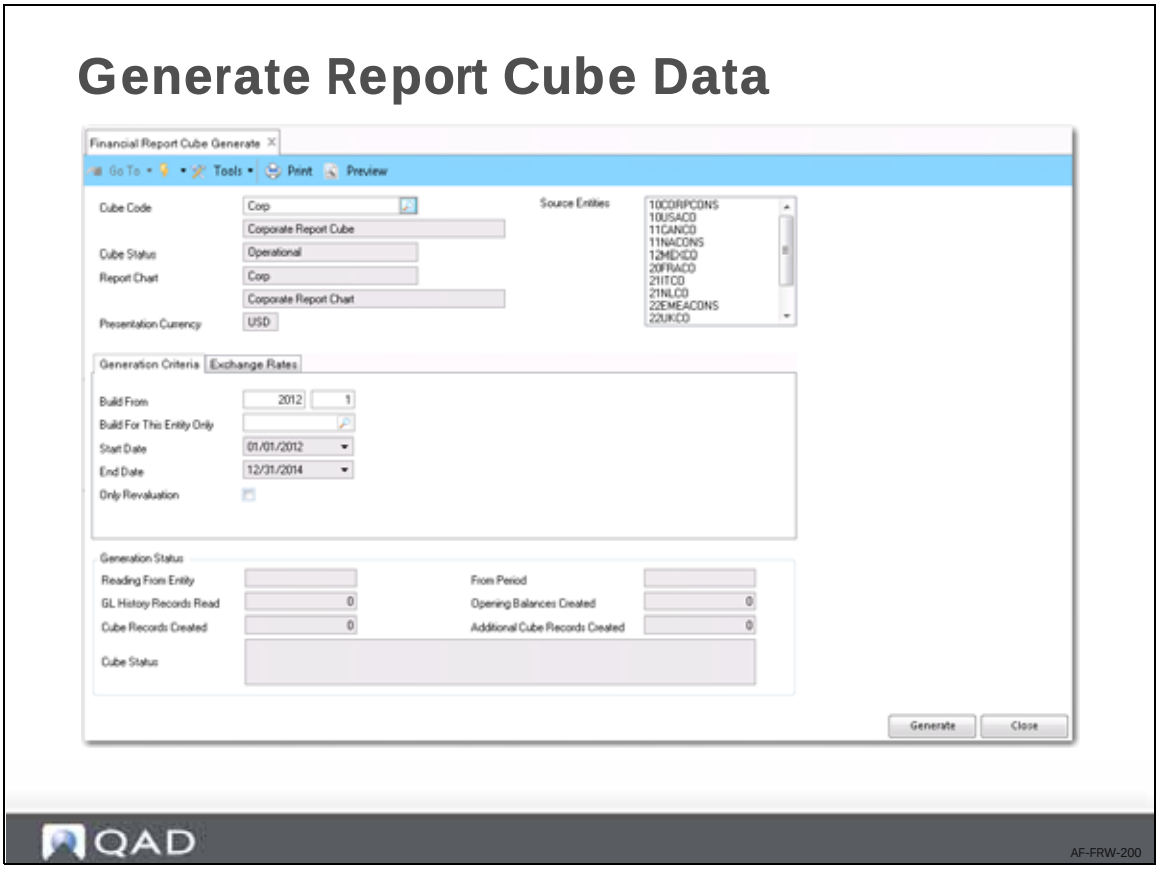


Once the setup is complete, you can populate the report cube with the required information.

You run Financial Report Cube Generate, which builds the initial balances for the cube. During the generation, the GL data of the source entities is read, translated, and the result is stored in the report cube. At the same time, a log file is created that contains information on the build process. After the first successful build, the status of the cube becomes Operational and it is ready for reporting.

From that point onwards, the Cube daemon automatically keeps the balances in the cube up to date in real time.

Generate Report Cube Data

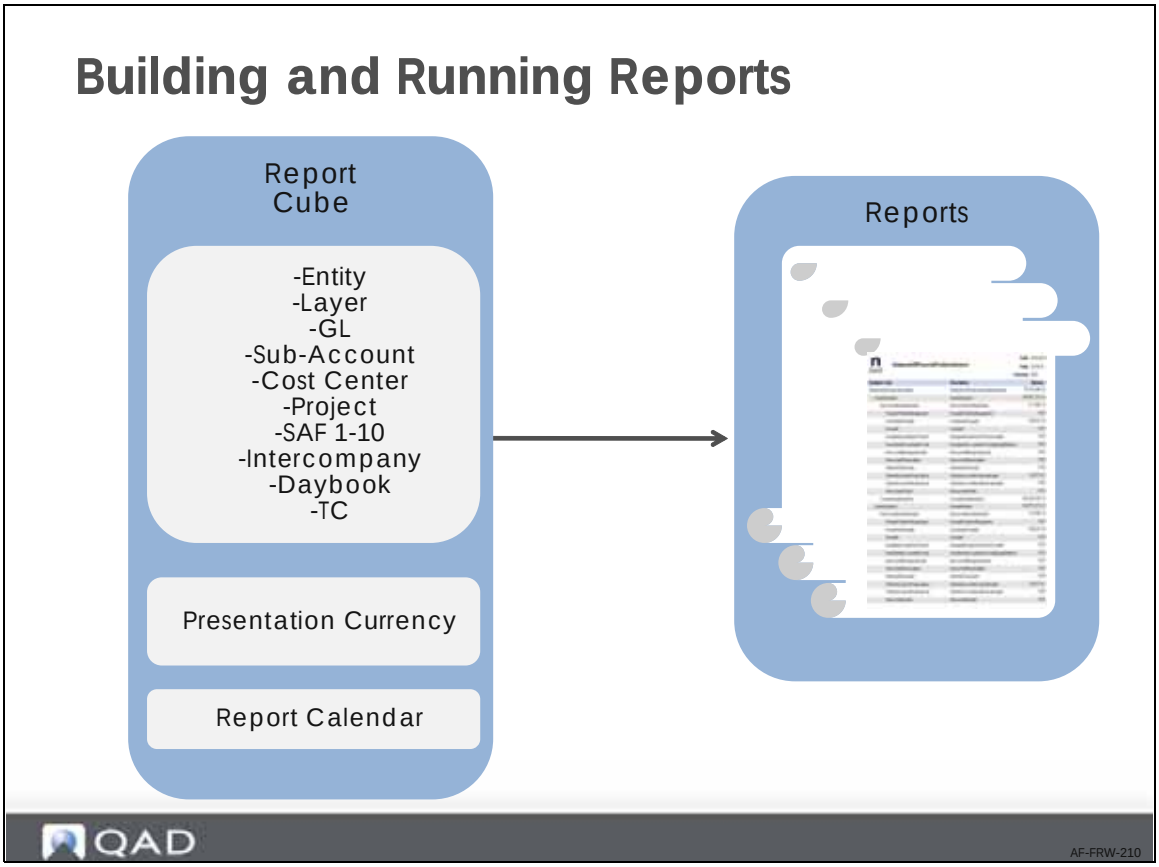


Use Financial Report Cube Generate to generate data to the reporting tables FRWCubeDim and FRWCubeMeas.

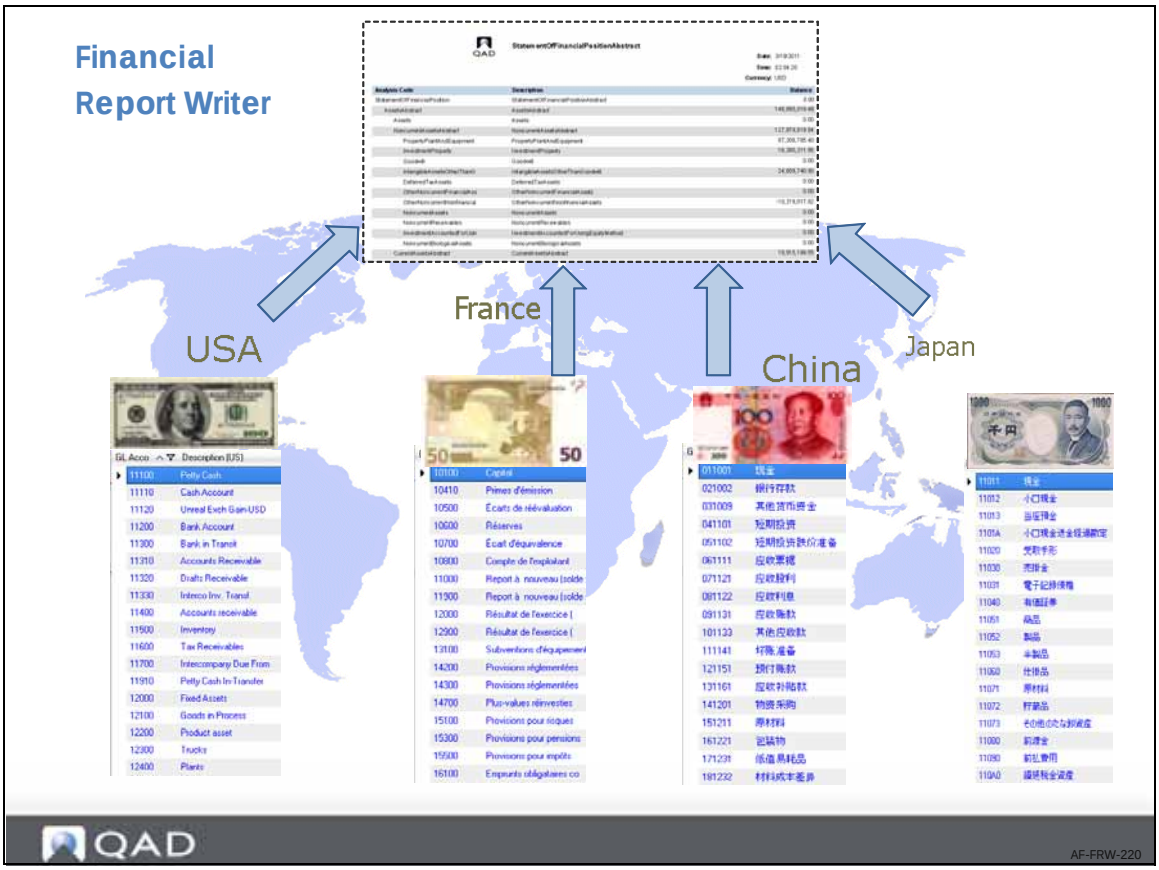
To generate data, select one of the cubes you created during the previous steps. By default, the program generates data for the entire time frame defined in the report calendar of the cube. You can also regenerate a cube from a given start year and period if the previous years or periods defined in the report calendar for the cube contain data.

By default, Report Cube Generate generates data for all entities defined in the entity list of the cube, but you can also regenerate a cube for a single entity.

Building and Running Reports



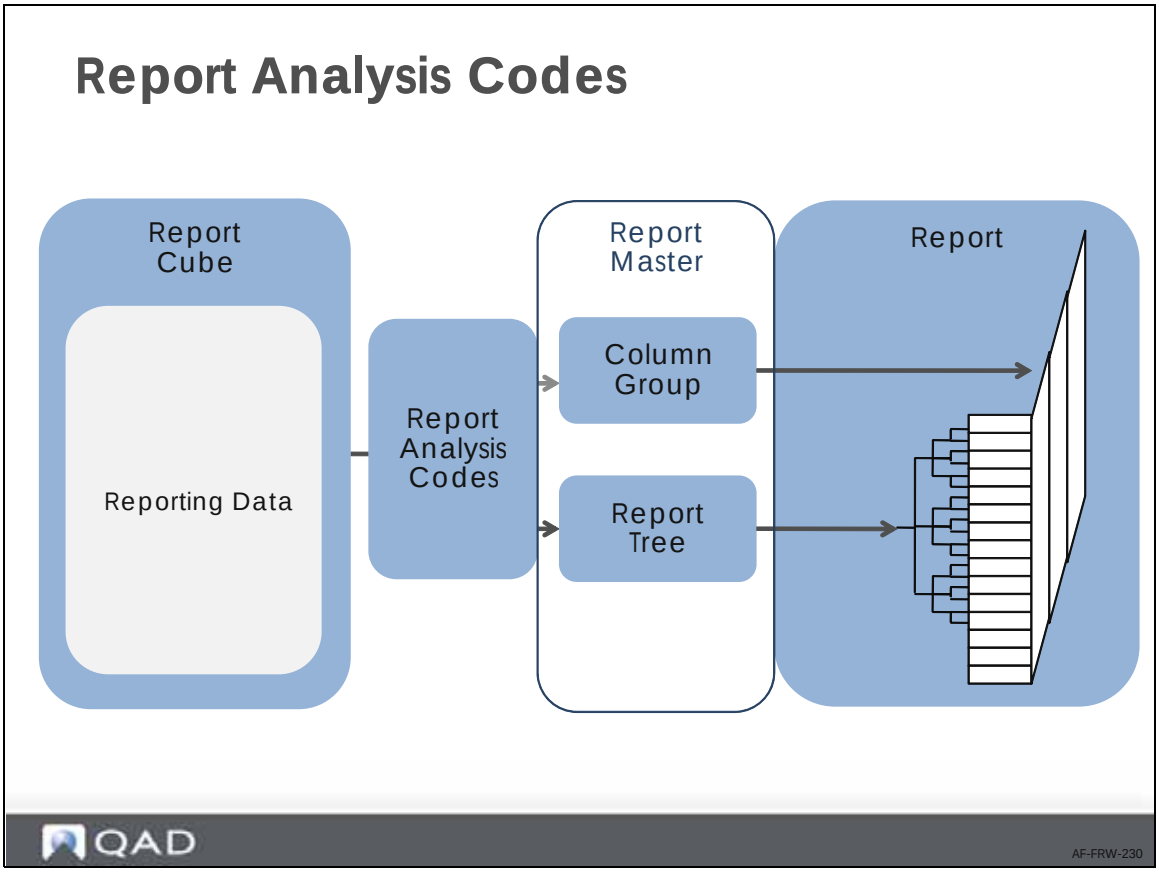
Next, you will see how to build and run reports.



Assume you are running a multi-national company, with operations in different regions around the globe.

Using Financial Report Writer, you can create a consolidated balance sheet, income statement, or management report at any time, which contains the latest figures.

Report Analysis Codes



To create a report, you must create four components:

1. Report analysis codes. Report cube data is stored for each combination of COA elements. This means that a report cube can contain thousands of combinations of COA elements.

   When building a report, it is not very convenient to specify all these combinations individually. Therefore, you can create an object called a report analysis code. Each analysis code contains a set of filters on the accounting dimensions so that data can be retrieved selectively from the cube.

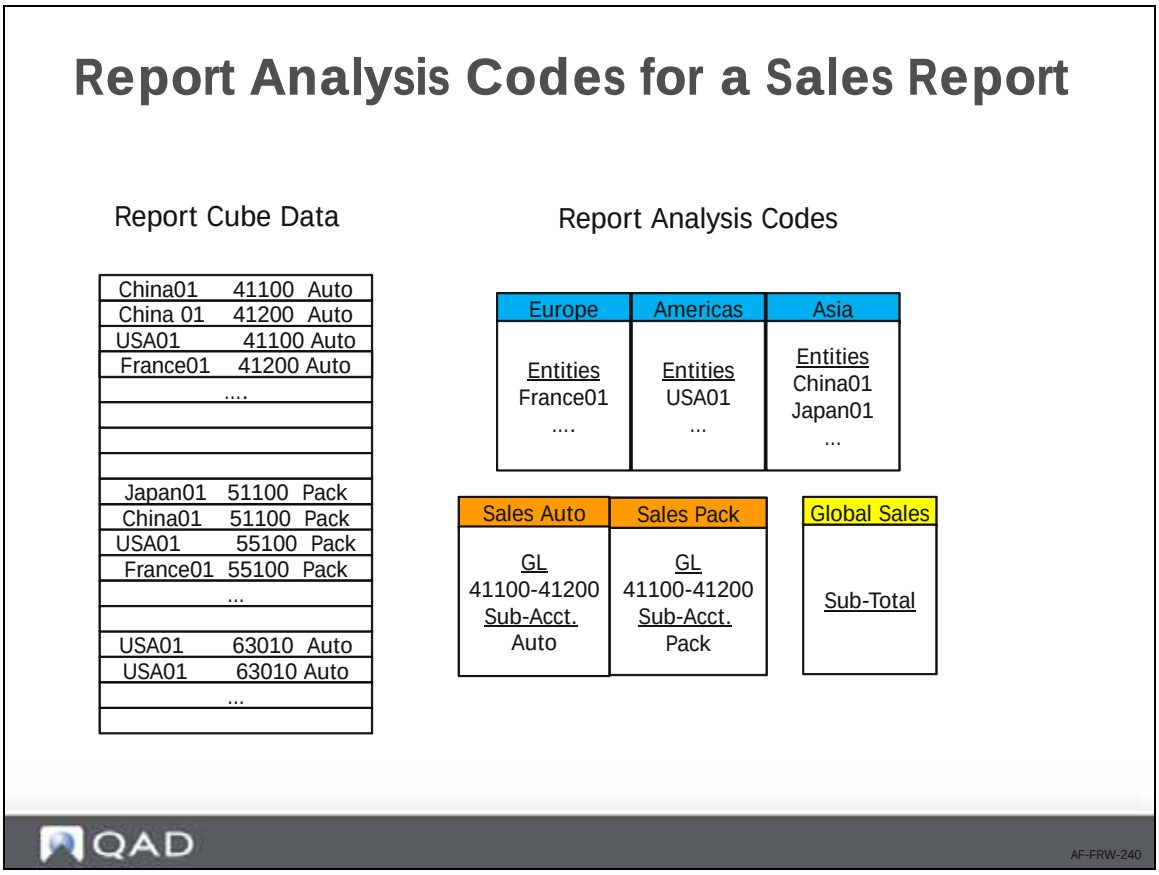
   You can also designate an accounting dimension as a controlling dimension. When generating reports, you can generate a report filtered on each value of the controlling dimension, which saves you having to generate each report individually.

   The report analysis codes are the elementary building blocks for a report tree and, in some cases, for column groups.

2. Report tree. A report tree represents the hierarchy of a report. You build a report tree using report analysis codes as building blocks. Report trees are reusable in multiple reports, and can be built recursively from smaller trees.

3. Column group. In a column group, you define of a set of columns that you want to see on a report.

4 Report master. The report master brings together all the elements required to run a report. In the report master, you can combine a report tree with a column group and give the report a meaningful title. The report master also lets you apply security to a report.



In the example of the Global Sales report, we first create report analysis codes. For each of the regions Europe, Americas, and Asia, we create a report analysis code that lists the entities that belong to the region.

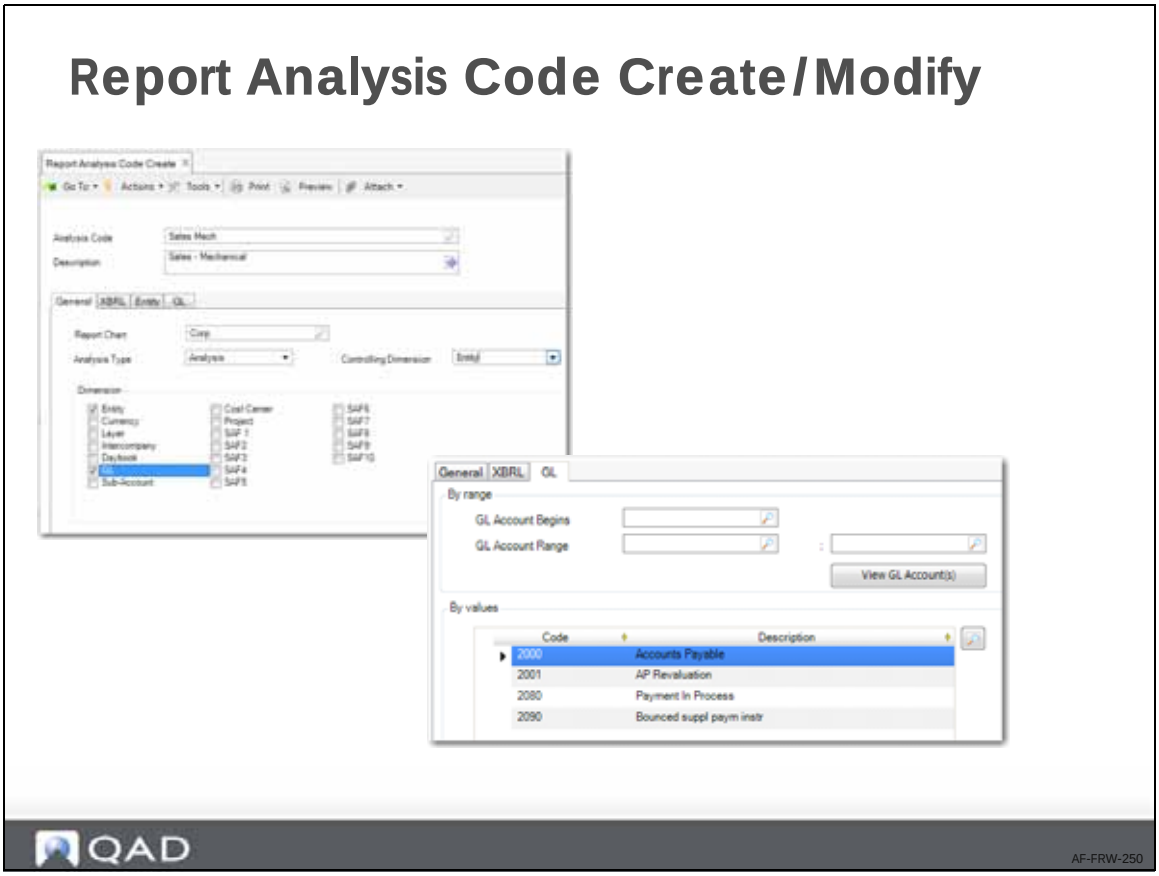
Next, we need two analysis codes for Sales Automotive and Sales Packaging.

- The GL account range 41100 to 41200 contains the sales accounts.
- The sub-accounts Auto and Pack represent the automotive and packaging divisions of the company.

For each report analysis code, you link the appropriate GL account range and sub-account to it.

We also need a report analysis code that represents the global sales total. This analysis code has type S (sub-total) and no COA details.

Report Analysis Code Create/Modify



This slide shows Report Analysis Code Modify.

You can use all accounting dimensions and combine them in report analysis codes—entities, GL accounts, sub-accounts, cost centers, projects, layers, daybooks, intercompany, transaction currency, and up to 10 SAF concepts.

You can create a selection using:

- Ranges
- Begins with
- Manually selected codes

Range and begins with are dynamically completed when new accounts are created later on

A report analysis code can also contain fields for XBRL reporting (taxonomy name, ELR, and XBRL element name).

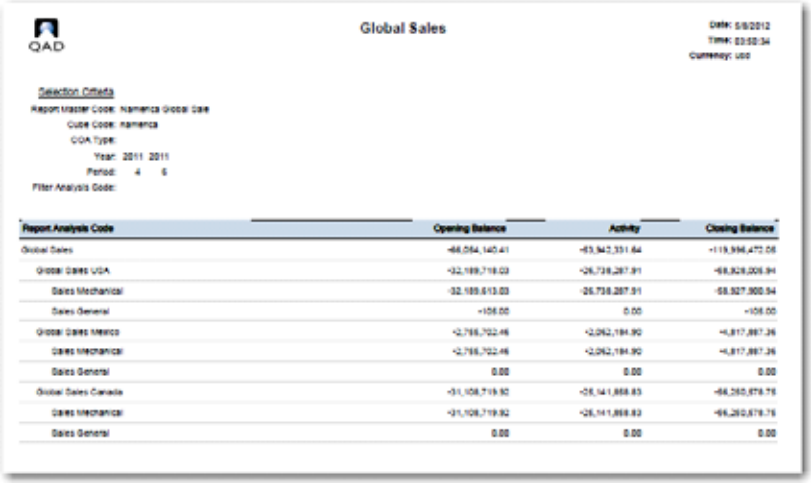
In the General tab, you can also designate a dimension as a controlling dimension. When generating reports, you can generate a report filtered on each value of the controlling dimension, which saves you having to generate each report individually. The drop-down list for the Controlling Dimension field is populated based on the dimensions you select in the Dimension area of the General tab. For example, if you select fields for the GL, Sub-Account, and Daybook dimensions, these three options are available as controlling COA dimensions.

When running a financial report, you can specify an analysis code with a controlling dimension as a Filter Analysis Code to control the bursting. You must also specify Yes in the Report Burst selection field in Financial Report Run. The report run then generates a separate report for each value of the controlling dimension. For example, if the analysis code has a controlling dimension of Entity, the report run generates reports for each entity.

Hands-On Exercise

Exercise 3: Creating Report Analysis Codes

In this exercise, you will create report analysis codes for a Sales report.



1 In Report Analysis Code Create, create the analysis codes listed in the table:

Field	Value
Code 1	
Analysis Code	Global Sales
Report Chart	NAmerica
Analysis Type	Sub-Total
Code 2	
Analysis Code	Global Sales USA
Report Chart	NAmerica
Analysis Type	Analysis
COA Type	Entity
Entity	10USACO
Code 3	
Analysis Code	Global Sales Mexico
Report Chart	NAmerica
Analysis Type	Analysis
COA Type	Entity
Entity	12MEXCO
Code 4	
Analysis Code	Global Sales Canada
Report Chart	NAmerica

Field	Value
Analysis Type	Analysis
COA Type	Entity
Entity	11CANCO
Code 5	
Analysis Code	Sales General
Report Chart	NAmerica
Analysis Type	Analysis
COA Type	GL Account Sub-Account
GL Account Range	4000-4010
Sub-Account	Gserv
Code 6	
Analysis Code	Sales Mechanical
Report Chart	NAmerica
Analysis Type	Analysis
COA Type	GL Account Sub-Account
GL Account Range	4000-4010
Sub-Account	Mech

Report Tree

Report Tree

- Financial Report Writer produces reports based on report trees
- A report tree is a hierarchy composed of report analysis codes

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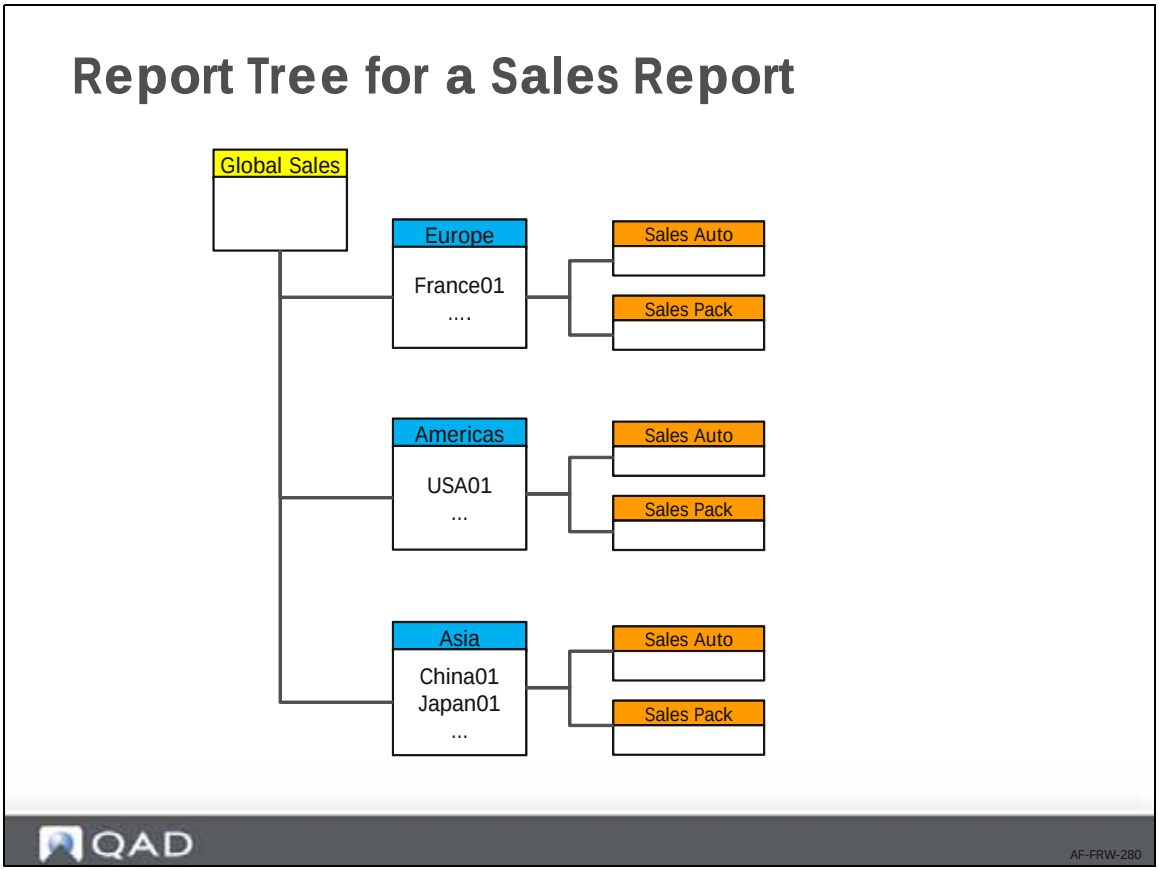
Ways to Create a Report Tree

The Financial Report Writer produces reports based on report trees. Each report tree is a hierarchy composed of report analysis codes. There are two ways to create a report tree.

- Create report analysis codes one by one using Report Analysis Code Maintenance. Next, create the report tree using Report Tree Maintenance. Report Tree Maintenance lets you select report analysis codes from a list and drag them to the tree hierarchy. Alternatively, you can create the report analysis codes in Report Tree Maintenance as you create the tree.
- Create a basic hierarchy in Report Tree Maintenance and export it to Excel. In Excel, you can add more detail to the tree, save the file, and upload it back to Report Tree Maintenance.

Report Tree for a Sales Report

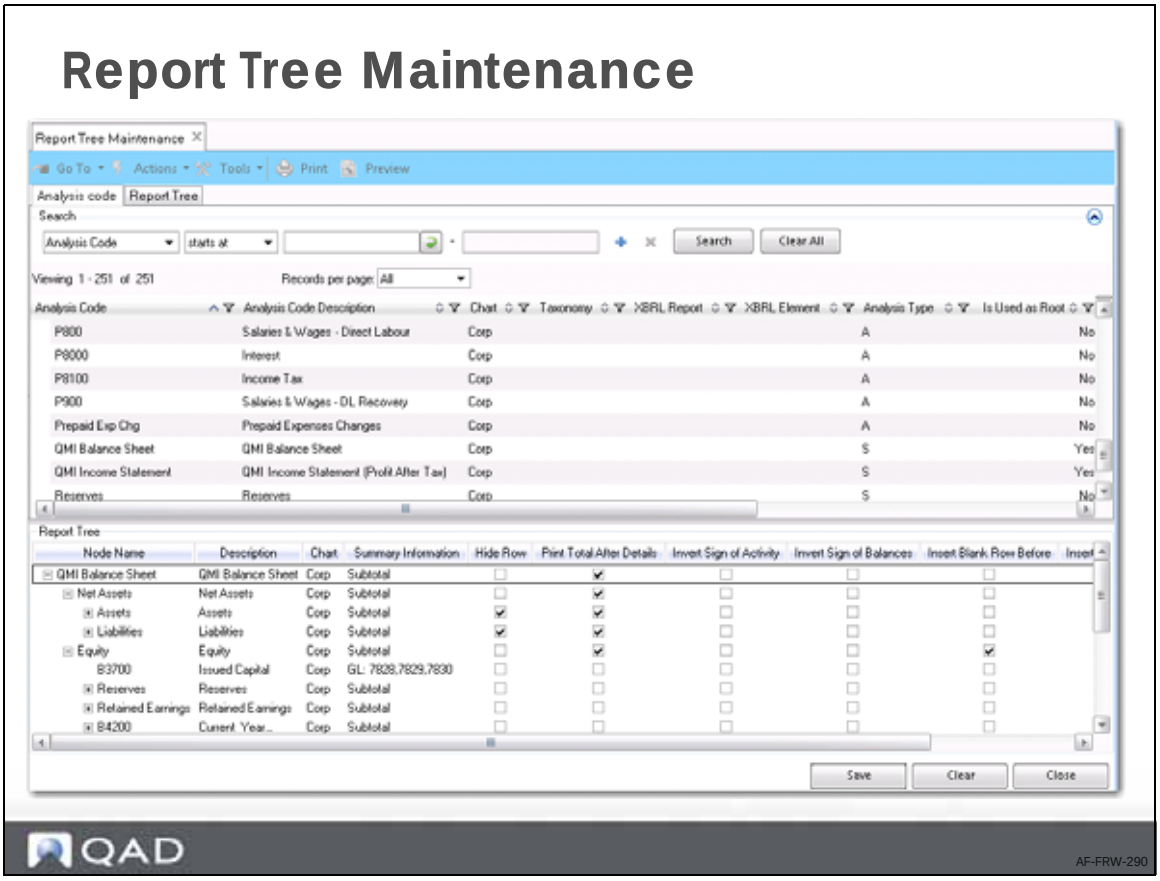


Now, you can build a report tree for the Global Sales report with sub-totals by region (Asia, Europe, and Americas) and, for each region, the sales for Sales Automotive and Sales Packaging.

The higher levels in the report hierarchy automatically represent the sum of the underlying details, but, in some cases, special calculations are required. For the calculations, you can create report analysis codes of type Calculation. Calculation analysis codes let you define calculations using other analysis codes as components.

Addition, subtraction, percentages, and ratios are typical calculations.

Report Tree Maintenance



This slide shows Report Tree Maintenance.

You select report analysis codes from the list (browser), and drag them to the work area and drop them on any location in the tree. You can also create a report analysis code by right-clicking in the lower pane.

The Row Style field, which enables you to specify the appearance of a row in the report, is also available in the lower pane of Report Tree Maintenance. You can enter keywords in this field to format text in a report row as bold, underlined, and highlighted. Simply include the keywords you want to include, separated by a comma. For example, to format a report as bold and highlighted, enter bold,high in this column. The three keywords are:

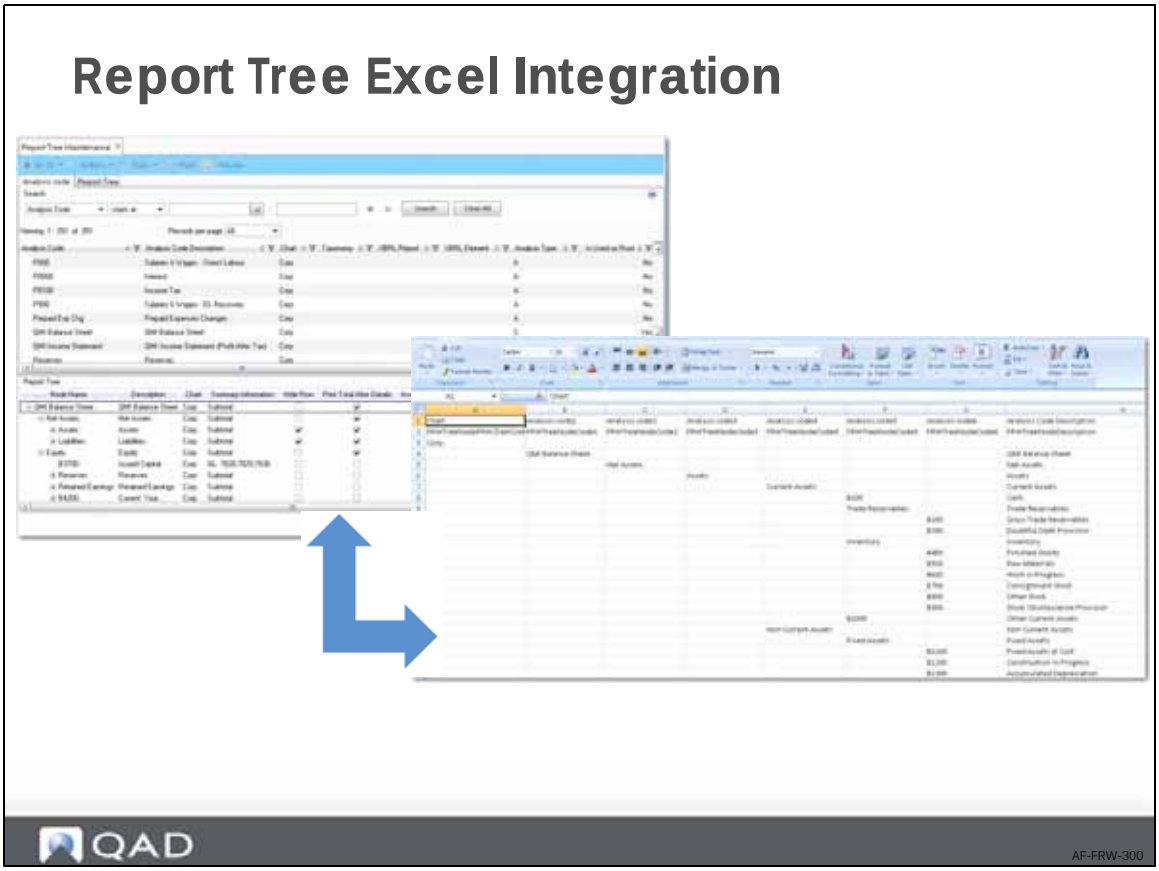
- bold
- line
- high

In the Row Style field, you can also indicate that for transactions related to a particular leaf node, a report must display credit balances only or debit balances only. To show accounts with debit balances only, enter “dronly” in the Row Style field. To show accounts with credit balances only, enter “cronly” in the Row Style field. The option to display debit amounts only or credit amounts only is useful in Balance Sheet reports, where you can show, for example, bank accounts with a debit balance under Assets and bank accounts with a credit balance under Liabilities.

To insert a page break between different levels of detail, enter “page” in the Row Style field in Report Tree Maintenance at the level after which you want the page break. For example, if the highest level of information in the report tree is GL, and the next level is Entity, enter “page” in the Row Style field for the GL node. On the report, the entity details start on a new page after the GL details.

Select the Show Details field for any leaf node for which you want to print GL transactions in detail on the report. For this option to take effect, you must choose the Selected value in the Print GL Transactions field in Report Master Create. When running the report in Financial Report Run, you must also set the Print Details report selection criteria to Yes.

Report Tree Excel Integration



The Financial Report Writer has an Excel Integration function that allows you to import and export report trees and the underlying report analysis codes.

When you import a report tree automatically, the system creates the underlying report analysis codes or updates the existing analysis codes. Excel integration is a powerful tool that lets you create many different reports in a short time and maintain report hierarchies.

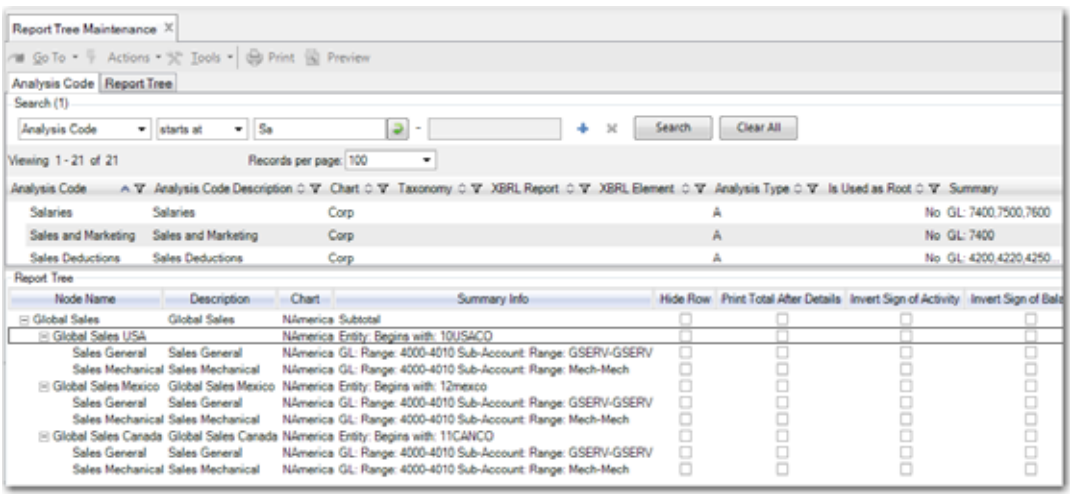
Hands-On Exercise

Exercise 4: Creating a Report Tree

1 Create the report tree structure using Report Tree Maintenance (25.16.14).

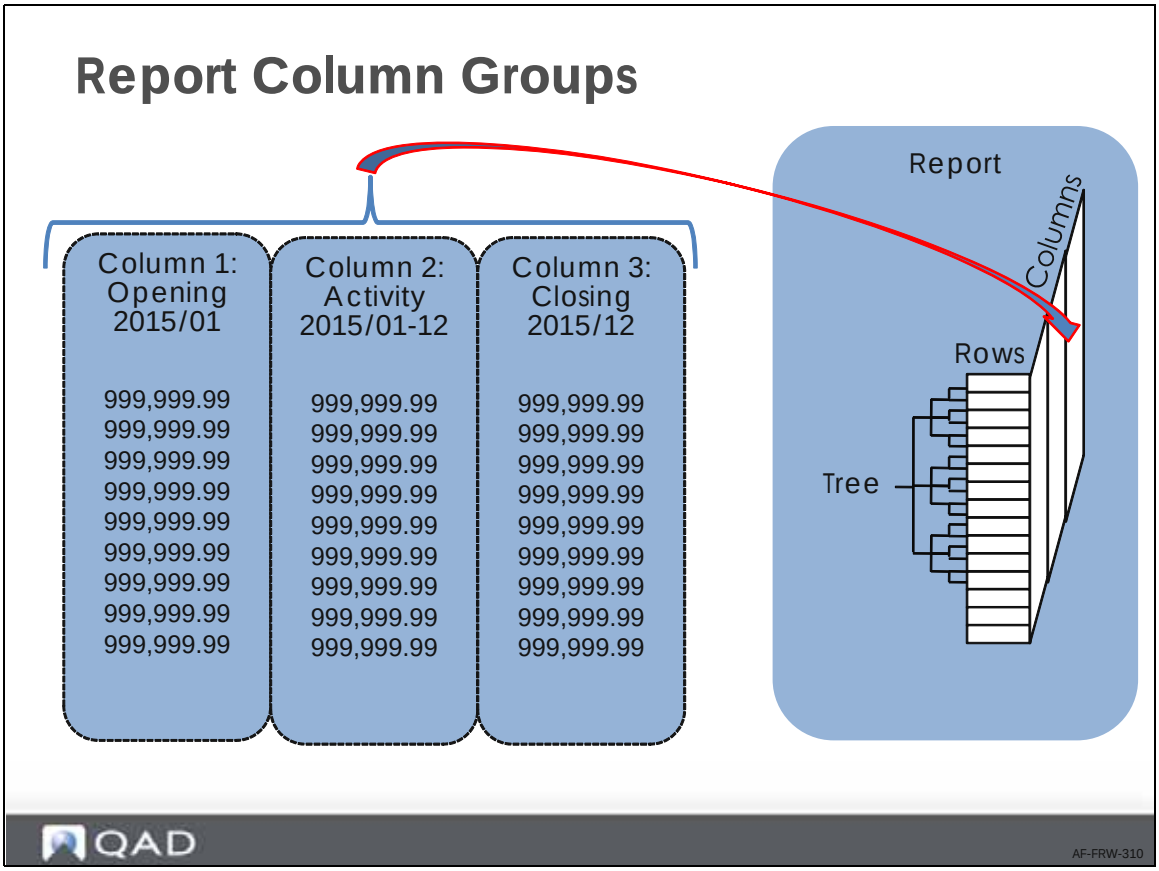
2 Drag and drop the analysis codes you created in Exercise 3 to look as follows:

Global Sales
- Global Sales USA
  - Sales General
  - Sales Mechanical
- Global Sales Mexico
  - Sales General
  - Sales Mechanical
- Global Sales Canada
  - Sales General
  - Sales Mechanical



3 Save the report tree.

Report Column Groups

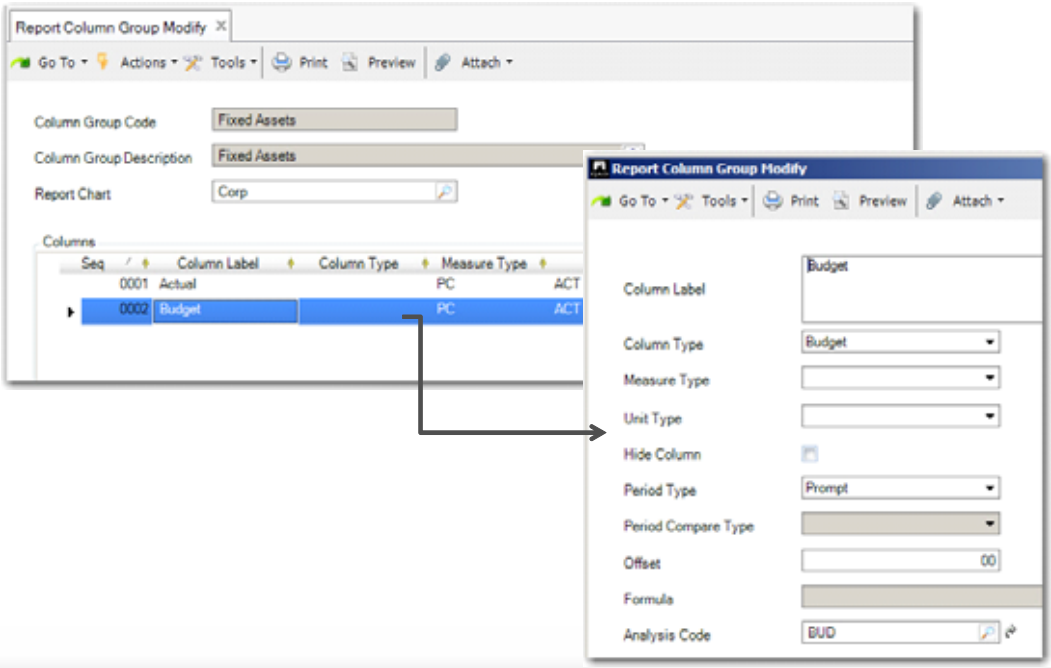


Use Report Column Group Create to define the columns that you want to display on a report. For each column, you can define the type of content, for example, opening balances, closing balances, activities, quantities, and so on.

You can use columns to compare results with those of previous periods. You can create calculations using columns, and have separate columns for entities, cost centers, and so on. This allows side-by-side comparisons on a single report.

The Sales Report example uses three columns: the opening balance, the activity in the selected period, and a closing balance.

Report Column Group Create/Modify



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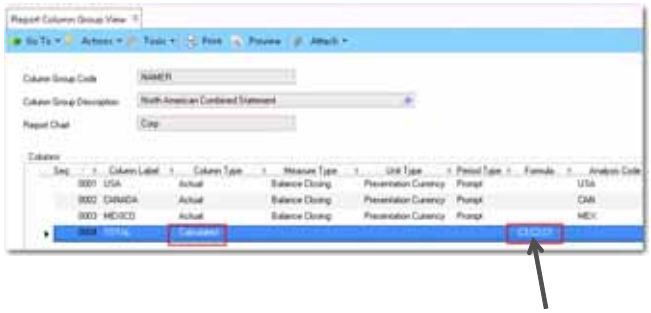
AF-FRW-320

Column Calculations

- Specify Calculated in the Measure Type field
- Enter the calculation in the Formula field



Summation type calculation – list of columns separated by commas

AF-FRW-325

You can enter two types of calculations: summations or multiplication/division.

Summation calculations: If you enter a list of columns, each separated by a comma (“,”), you can sum the balances of the columns. For example, if you enter C1,C2,C5, the calculation results in the sum of columns 1, 2, and 5. In summation calculations, you can also subtract by placing the column between brackets. For example, if you enter C1,(C2),C5, the calculation results in the sum of columns 1 - 2 + 5.

Multiplication/division calculations: To create a multiplication/division calculation, you can enter a maximum of three factors separated by * or /. For example, if you enter C1/C2*C5, the calculation first divides Column 1 by Column 2, and then multiplies the result by Column 5.

You can also use constants in multiplication/division calculations. For example, if you enter C1/C2*100, the calculation first divides Column 1 by Column 2, and then multiplies the result by 100. This method is useful for percentage calculations. The component columns (Column 1 and Column 2) must be part of the same column group.

You cannot combine summations and multiplication/division type calculations in a single formula. However, you can use the column that contains the result of a calculation as a component for a calculation in another column.

Example

Column 4 has a measure type of Calculated and uses the formula C1,(C2),C3. Column 6 also has a measure type of Calculated and uses the formula C4/C5*100. This results in the formula C6 = ((C1 - C2 + C3)/C5)*100).

Cascaded Calculations

You cannot use brackets in multiplication/division type calculations. You can address this restriction using cascaded calculations.

Example

You want to calculate the result of the formula C5 = C1/(C2*C3), but you cannot use brackets in a multiplication/division type calculation. The formula C5 = C1/C2*C3 does not give the correct result because it first divides C1 by C2, and then multiplies the result by C3. To get the result you require, first create the formula C4 = C2*C3 and then create a second formula C5 = C1/C4.

Important Be careful not to create circular references when using cascaded calculations. Circular references cause Financial Report Run to stop with an error message.

You cannot use the calculation sequences C4=C1*C2, C5=C3/C4, and C2=C5/C6 in a column group. The value of column C2 depends on the value of column C5, calculated by the second calculation in the sequence. Similarly, the value of column C5 depends indirectly on the value of column C2, calculated as a result of the first two calculations.

Hands-On Exercise

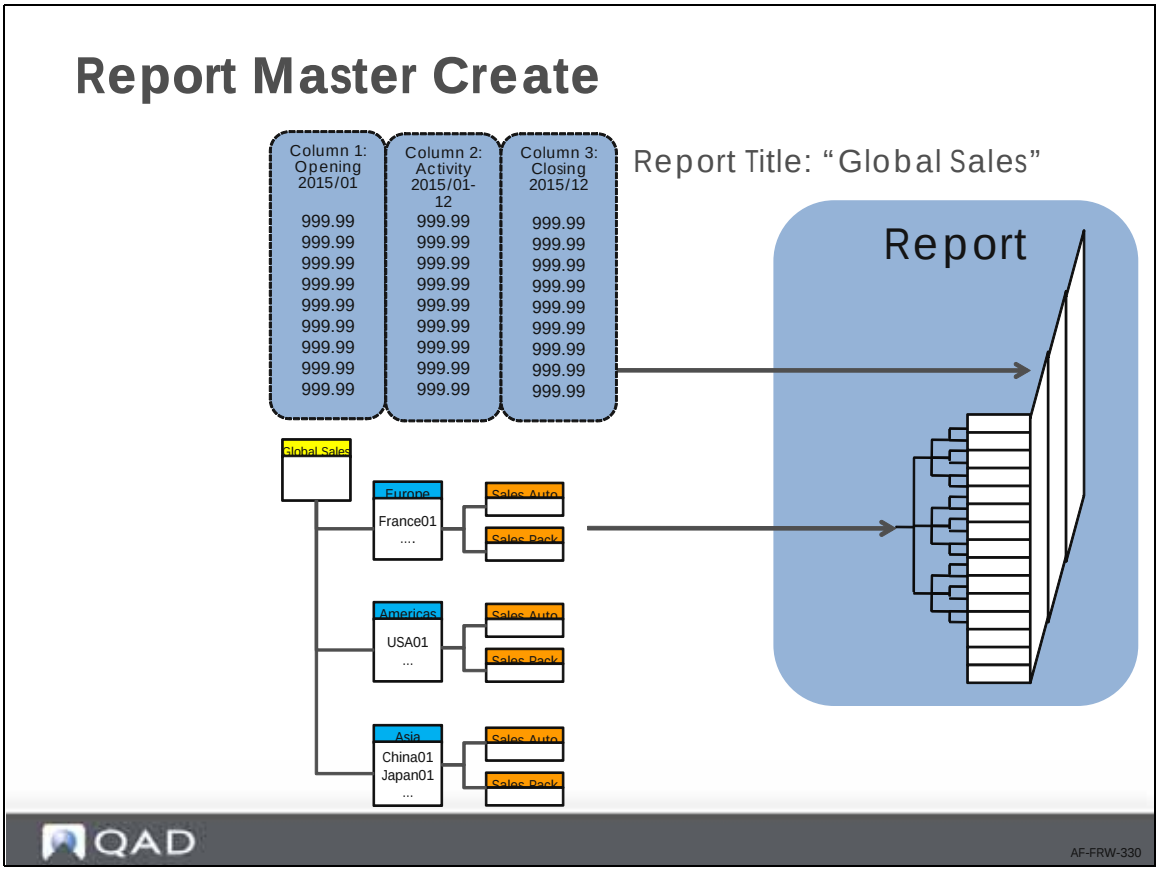
Exercise 5: Creating Report Columns

In this exercise, you will create three columns for your Sales report: Opening Balance, Activity, and Closing Balance.

1 In Report Column Group Create (25.16.12.1), create the following column group:

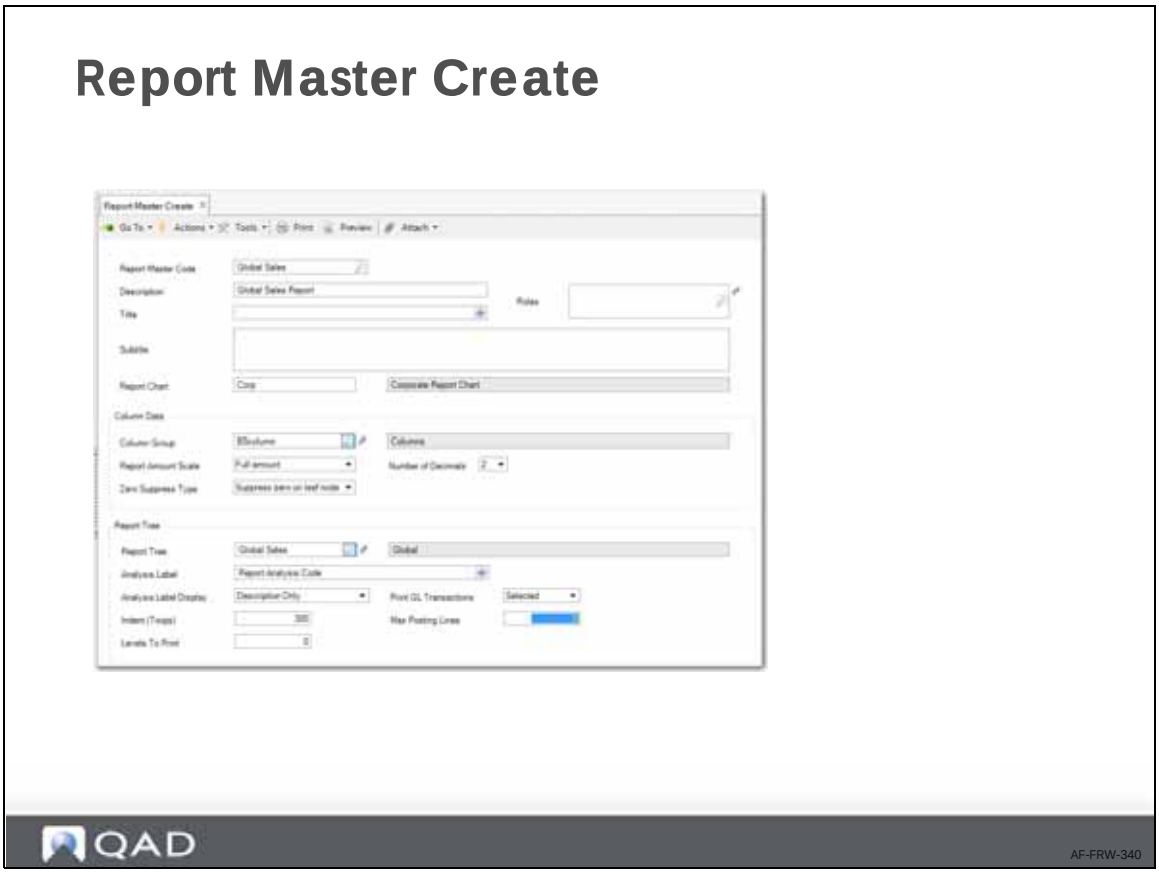
Field	**Value**
Column Group Code	NA Sales Column
Column Group Description	NA Sales Column
Report Chart	NAmerica
Sequence 1	
Column Label	Opening Balance
Column Type	Actual
Measure Type	Balance Opening
Unit Type	Presentation Currency
Period Type	Prompt
Sequence 2	
Column Label	Activity
Column Type	Actual
Measure Type	Activity
Unit Type	Presentation Currency
Period Type	Prompt
Sequence 3	
Column Label	Closing Balance
Column Type	Actual
Measure Type	Balance Closing
Unit Type	Presentation Currency
Period Type	Prompt

Report Master Create



Financial Report Writer produces reports that have variable layouts. The report hierarchy is defined when you create a report tree. The report columns are defined in Report Column Group Create and these two elements are combined in a report master record. The report master also controls a number of general report layout options.

Creating a report master record is also the last step in the setup before you can actually run a report. You can create as many report master records as you need different report layouts. The report tree and the column group components of the report master are linked to a report chart. As a result, the report master is linked to the same report chart as the report tree and column group that are part of the report master.



To create a report master, open Report Master Create (25.16.11.1).

Hands-On Exercises

Exercise 6: Defining the Report Master

In this exercise, you will link the column group NA Sales Column, created in the previous exercise, to the tree structure Global Sales using Report Master Create.

1 Use Report Master Create (25.16.11.1) to create the following report master:

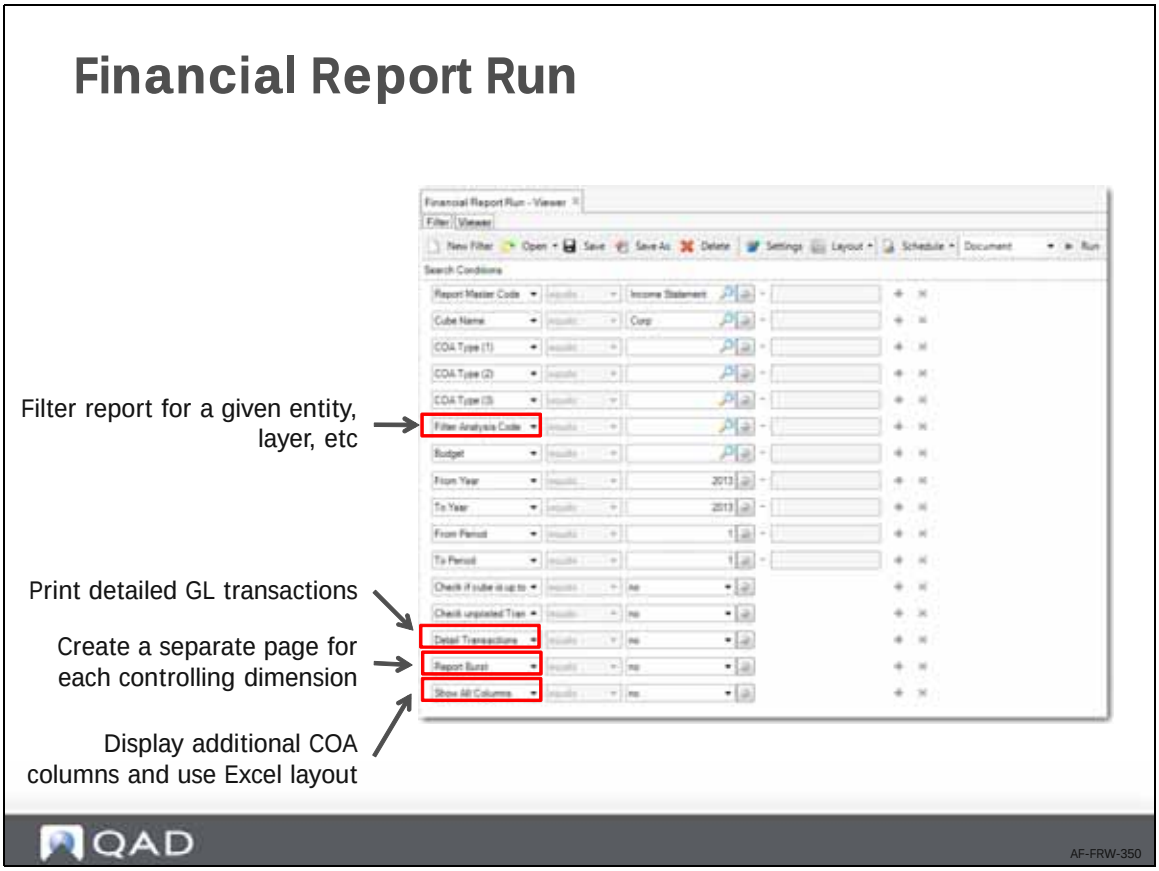
Field	Value
Report Master Code	NA Global Sales
Description	North America Global Sales
Report Chart	NAmerica
Column Group	NA Sales Column
Report Tree	Global Sales

2 Use Financial Report Run (25.16.20) to generate the NA Global Sales report for the year 2014 and periods 1 through 6.

   a Create a report in PDF format.

   b Create a report in Excel format, and save it to your desktop.

Financial Report Run



Using Financial Report Run, you can run all reports of Financial Report Writer.

You specify a report master code and the a report cube to retrieve the balances from.

Next, you specify the selected period range (from-to).

The selection screen has a COA Type option that allows you to explode the report in detail (for example, individual GL accounts, cost centers, and so on).

Another option allows you to specify a Filter Analysis Code. Using this option, you can filter the entire report for a given entity, layer, and so on. If you have configured a report analysis code to have a controlling dimension and want to generate reports for that dimension, specify the analysis code in this field. To create separate sub-reports for the controlling dimension, you must also set the Report Burst selection criteria to Yes.

You click the Run button and, within seconds, you have the result on the screen or in any other desired output format. For example, you can create a generic report for all entities and run the report for a given single entity by adding a filter for that entity.

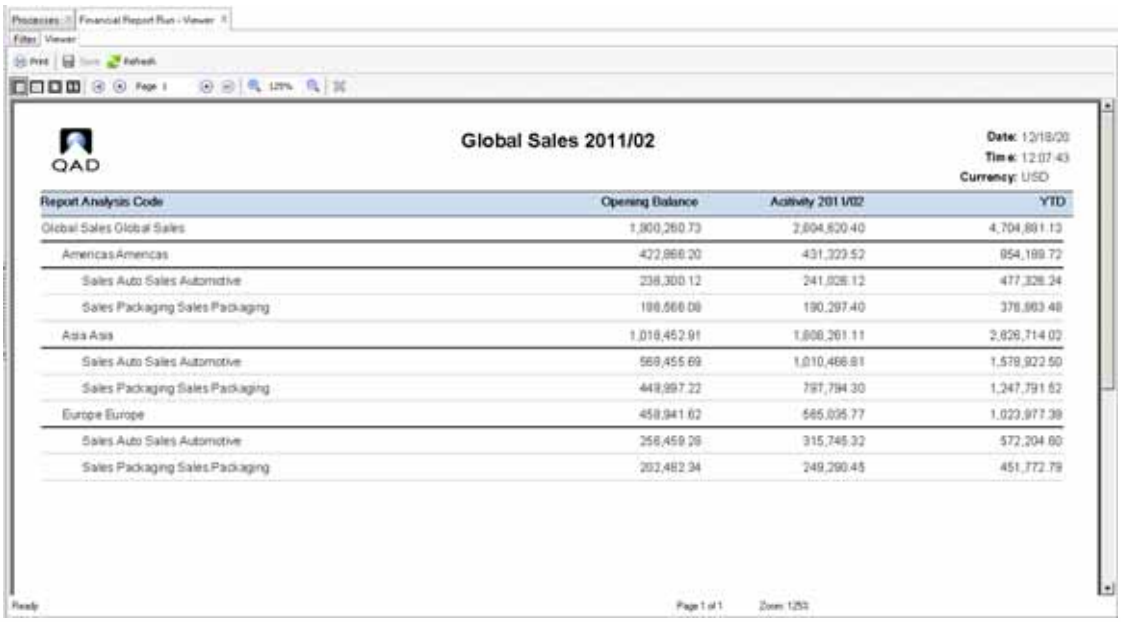
You can print transaction details on the report. To use this option, you must also select All or Selected in the Print GL Transactions field on the report master. If you set the Detailed Transactions field to Yes, but have not configured the required setup in Report Master Create or in Report Tree Maintenance, the report displays an error message.

If you have set up controlling dimensions for report analysis codes, a Report Burst selection setting of Yes allows you to create a separate report page for each controlling dimension. You must also specify the report analysis code with the controlling dimension in the Filter Analysis Code. Select No in Report Burst to create a separate report page for each controlling dimension.

You also have the option to display additional columns on the report. To use this option, select Yes in Show COA Columns. When you set Show COA Columns to Yes and Detail Transaction to Yes, the report displays additional COA columns and uses an Excel layout to allow the additional COA columns to display.

If you set Show COA Columns to Yes, but the COA Type fields are blank and the Detail Transactions field is set to No, an error message displays indicating that the Show COA Columns option requires a COA Type and that Detail Transactions must be set to Yes.

Global Sales Report



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Global Sales 2011/02

Date: 12/18/20
Time: 12:07:43
Currency: USD

Report Analysis Code	Opening Balance	Activity 2011/02	YTD
Global Sales Global Sales	1,900,260.73	2,804,620.40	4,704,881.13
Americas Americas	422,866.20	431,323.52	854,189.72
Sales Auto Sales Automotive	236,300.12	241,026.12	477,326.24
Sales Packaging Sales Packaging	186,566.08	190,297.40	376,863.48
Asia Asia	1,018,452.91	1,808,261.11	2,826,714.02
Sales Auto Sales Automotive	569,455.69	1,010,466.81	1,579,922.50
Sales Packaging Sales Packaging	449,997.22	797,794.30	1,247,791.52
Europe Europe	458,941.62	565,035.77	1,023,977.39
Sales Auto Sales Automotive	256,459.28	315,745.32	572,204.60
Sales Packaging Sales Packaging	202,482.34	249,290.45	451,772.79

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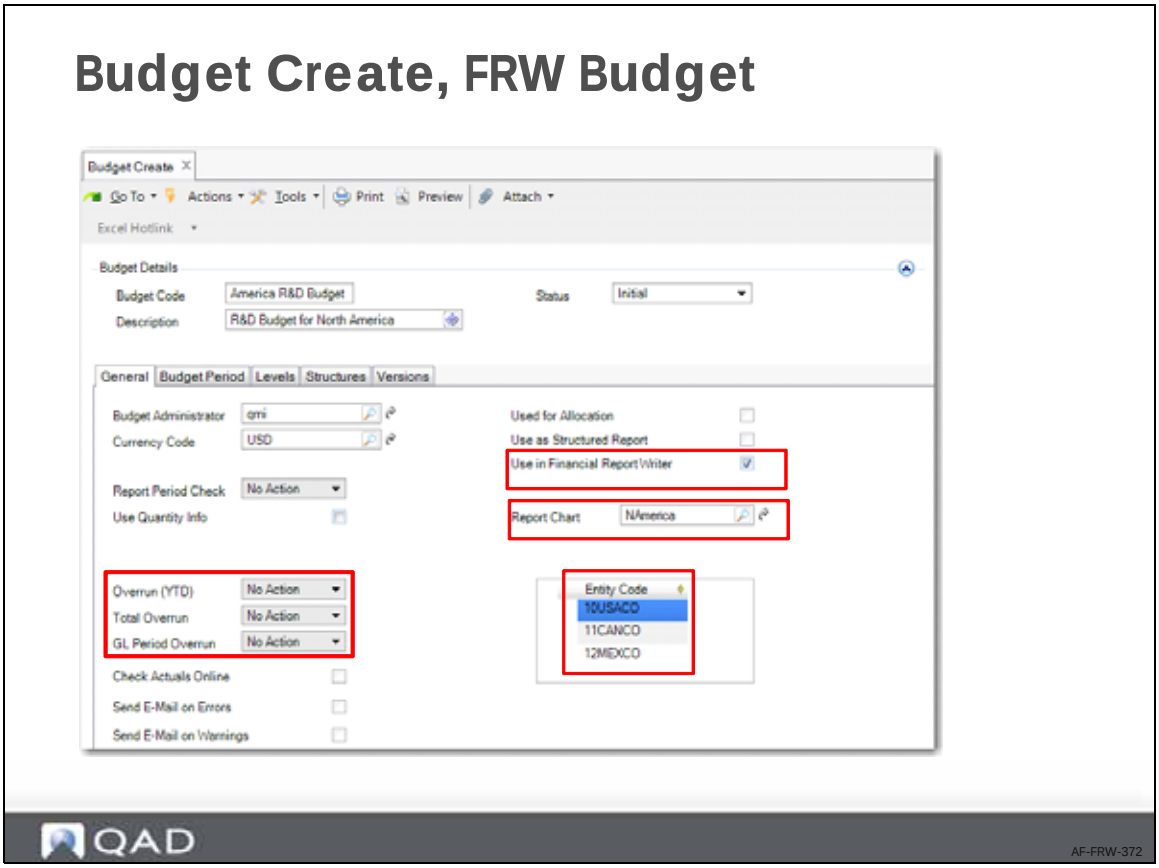
Budgets in Financial Reports

Budgets in Financial Reports

- Budget specifically for use in Financial Report Writer
- Link budget structure to financial reports using analysis codes or detailed COA dimensions
- Options:
  - Manually create budget in Budget Create
  - Import a prepared budget from Excel
- Add budget totals as report columns

QAD AF-FRW-370

Budget Create, FRW Budget



1 Open Budget Create (25.5.5.1).

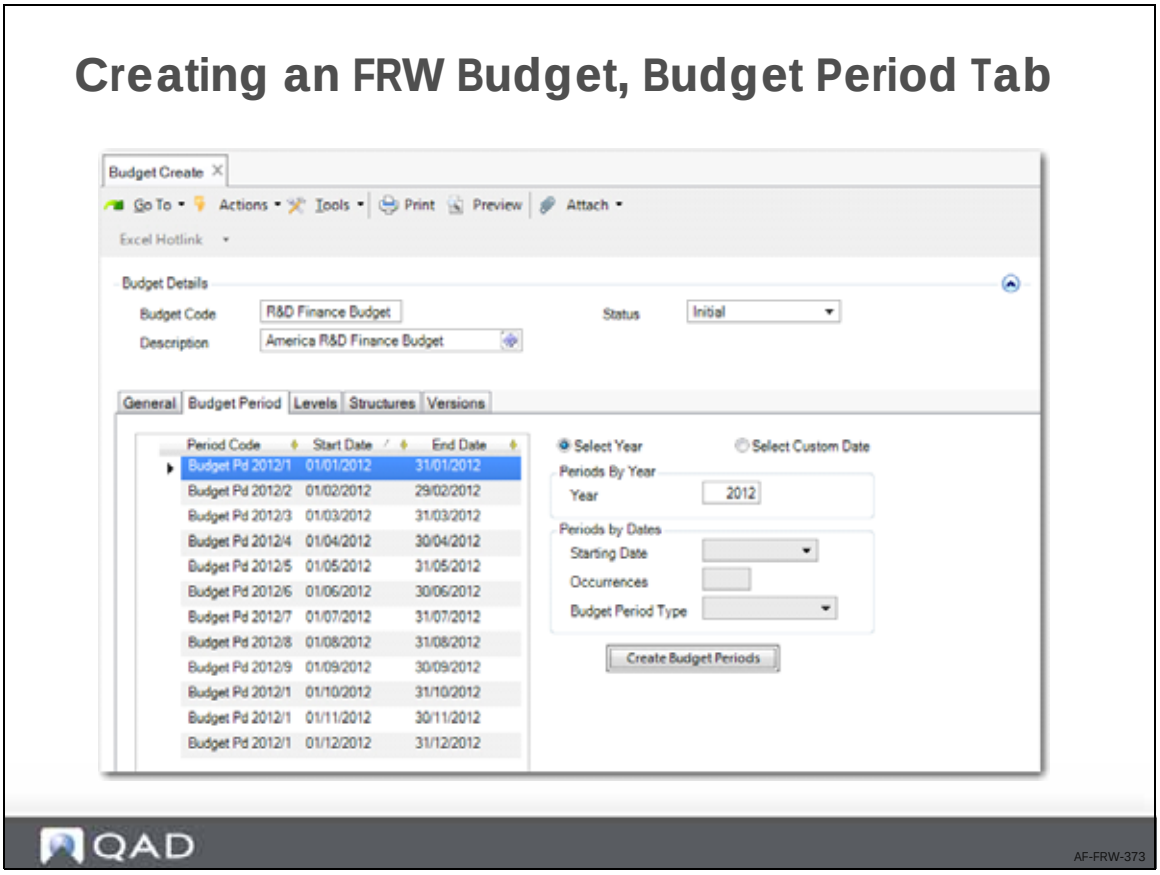
2 In the Budget Details section, supply a meaningful budget code and description. In the example in these steps, you are creating a simple budget for North American R&D Finance.

3 On the General tab, select Use In Financial Report Writer.

Note When you select Use In Financial Report Writer, the fields Report Period Check, Overrun (YTD), Total Overrun, and GL Period Overrun are no longer available. This restriction applies because budget checks are not currently supported for this type of budget. A budget for use in financial reports cannot be reused for any other purpose. If you want to use the budget for something else, create a copy.

4 On the General tab, select a report chart of accounts, which is a mandatory step. When you select a report chart, the Entity Code field is automatically populated with the entities associated with that report chart and becomes read-only. If you want to create a budget for specific entities, create topics in the Structure tab that are linked to detailed COA dimensions or report analysis codes that contain those entities.

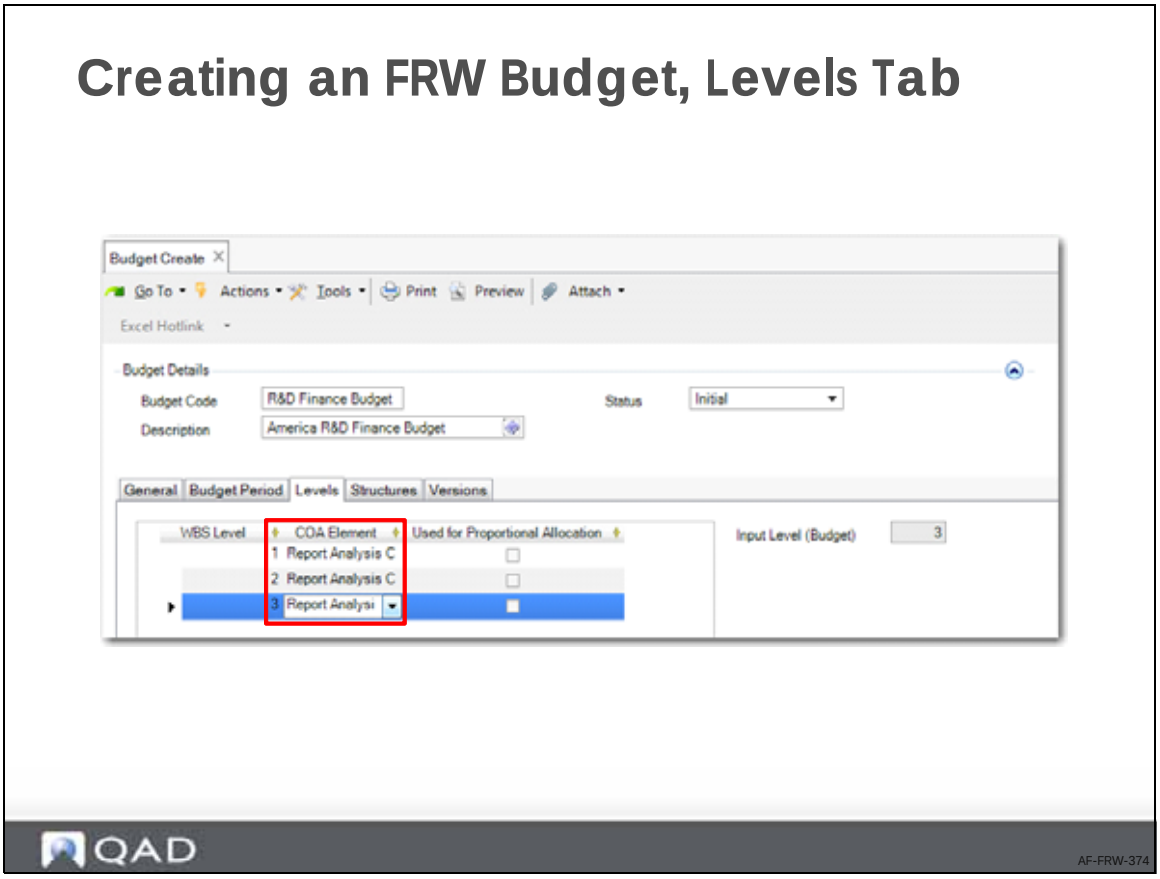
Creating an FRW Budget, Budget Period Tab



5 When you select the Budget Period tab, a message is displayed that the budget periods you enter must correspond with periods used in the report cube. Add the periods you want the budget to cover.

Not all the year periods of the cube and the budget must be the same. For example, a cube can have data for 2010, 2011, and 2012 with 12 months in each year. The budget can be for only one of these years with the same 12 months in it. Alternatively, the budget can run into the future with a greater number of periods than the cube. However, as long as the same periods are used in the budget and the cube, the budget is acceptable.

Creating an FRW Budget, Levels Tab

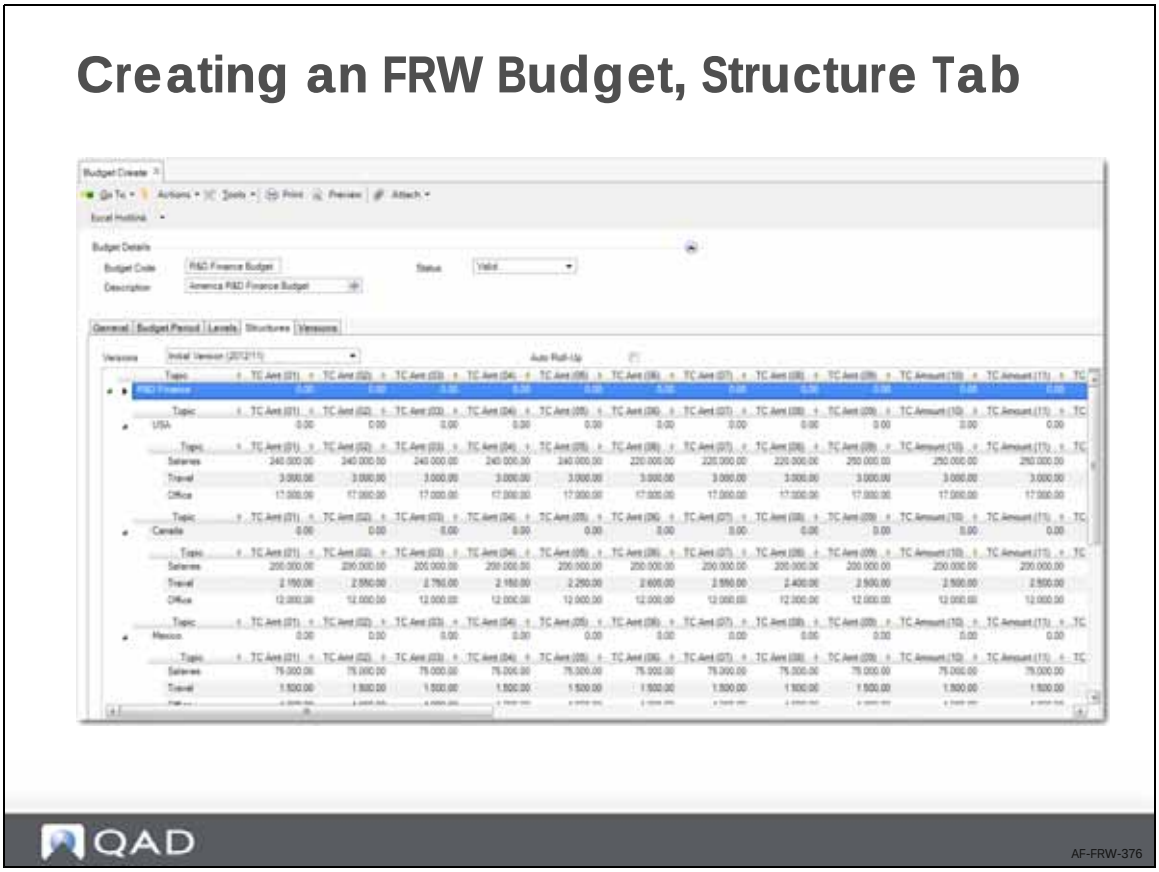


6 Select the Levels tab.

If you are creating a budget for use in Financial Report Writer, you can use report analysis codes and sub-total or the detailed COA dimensions GL account, sub-account, cost center, project, SAF, entity, and sub-total. A budget composed of COA dimensions cannot use the same dimension on more than one level in the budget and you can only link the related topic node to one item. You cannot link it to a range or a list. An FRW budget cannot have a mixture of report analysis codes and COA dimensions.

You can now specify a top level at which to link the budget to a COA dimension or report analysis code. You can add as many levels of these as you need for your budget. In this example, there are three levels of analysis code because there are three levels in the budget structure: R&D Finance (cost center), Country (entity code), and cost (GL category).

Creating an FRW Budget, Structure Tab



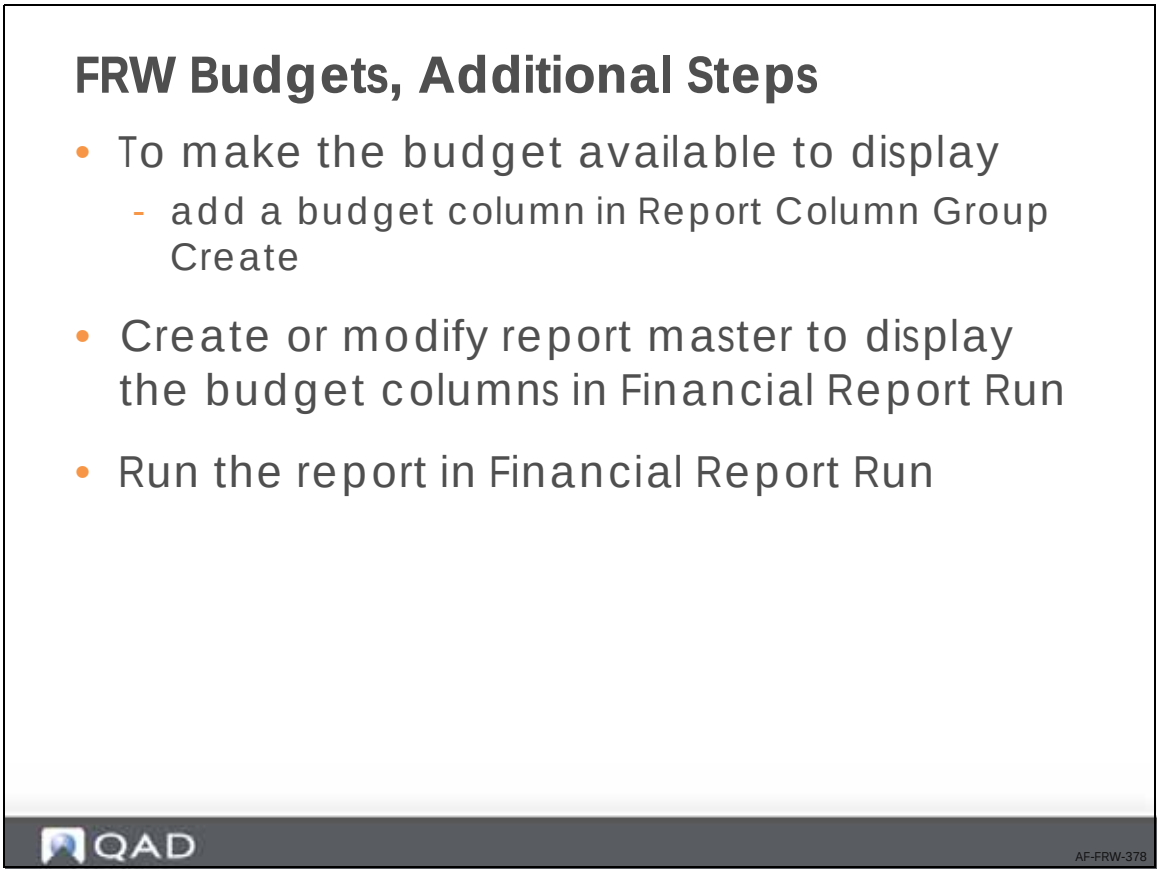
7 Select the Structures tab.

a If you want to create a budget from an Excel file, click the Excel hotlink and navigate to the file you want to use to create your budget. If your budget topic names match existing analysis codes, you can right-click and use the Autolink option on the context menu to automatically associate each topic with an analysis code.

b Alternatively, you can manually add the topics that you want to include in your budget by selecting an analysis code in the Topic field lookup. If, however, you want your topics to have particular labels, enter the text you want to appear in the Topic field. Right-click the line and use the Topic Properties option to link the topic to an analysis code. The Topic label continues to display the original text you entered.

In this simple example imported from Excel, there are three activities to budget for in each entity.

FRW Budgets, Additional Steps



8 No changes to the Versions tab are necessary. To create your budget for use in Financial Report Writer, click Save.

9 To make the budget amounts available to display, add a budget column in Report Column Group Create.

10 Create or modify a report master so that the budget columns are displayed in Financial Report Run.

11 Run the report in Financial Report Run.

FRW Report with Budget Column

FRW Report with Budget Column

QAD

R&D Global Expenses for 2012/08 - 10

Date: 12/9/2012
Time: 03:42:36
Currency: USD

Report Analysis Code				Budget USA		Budget
R&D Finance						
USA	0.00	0.00	0.00	780,000.00	0.00	780,000.00
Salary Cost	0.00	0.00	0.00	720,000.00	0.00	720,000.00
Travel Cost	0.00	0.00	0.00	9,000.00	0.00	9,000.00
Office Cost	0.00	0.00	0.00	51,000.00	0.00	51,000.00
Canada	0.00	0.00	0.00	0.00	643,400.00	643,400.00
Salary Cost	0.00	0.00	0.00	0.00	600,000.00	600,000.00
Travel Cost	0.00	0.00	0.00	0.00	7,400.00	7,400.00
Office Cost	0.00	0.00	0.00	0.00	36,000.00	36,000.00
Mexico	0.00	0.00	0.00	0.00	0.00	241,500.00
Salary Cost	0.00	0.00	0.00	0.00	0.00	225,000.00
Travel Cost	0.00	0.00	0.00	0.00	0.00	4,500.00
Office Cost	0.00	0.00	0.00	0.00	0.00	12,000.00
Total R&D Finance	0.00	0.00	0.00	780,000.00	643,400.00	1,664,900.00

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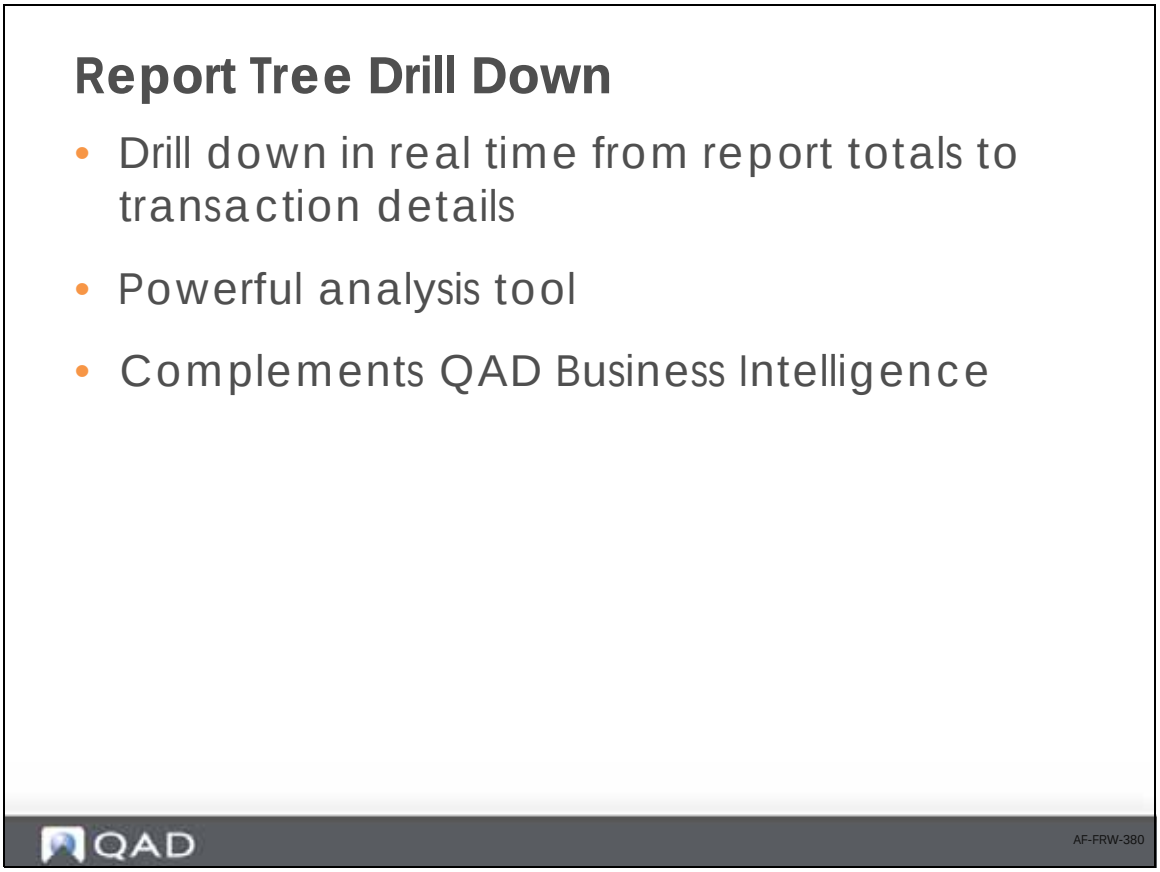
Report Tree Drill Down



The Report Tree Drill Down functionality enables you to investigate totals and balances in a financial report. You can view any report tree and drill down into the hierarchy right down to transaction level. This makes Report Tree Drill Down a powerful analysis tool.

Prerequisites for Report Tree Drill Down

Prerequisites for Report Tree Drill Down

- Report chart and report cube
- Report analysis and report tree
- Report Tree View Create

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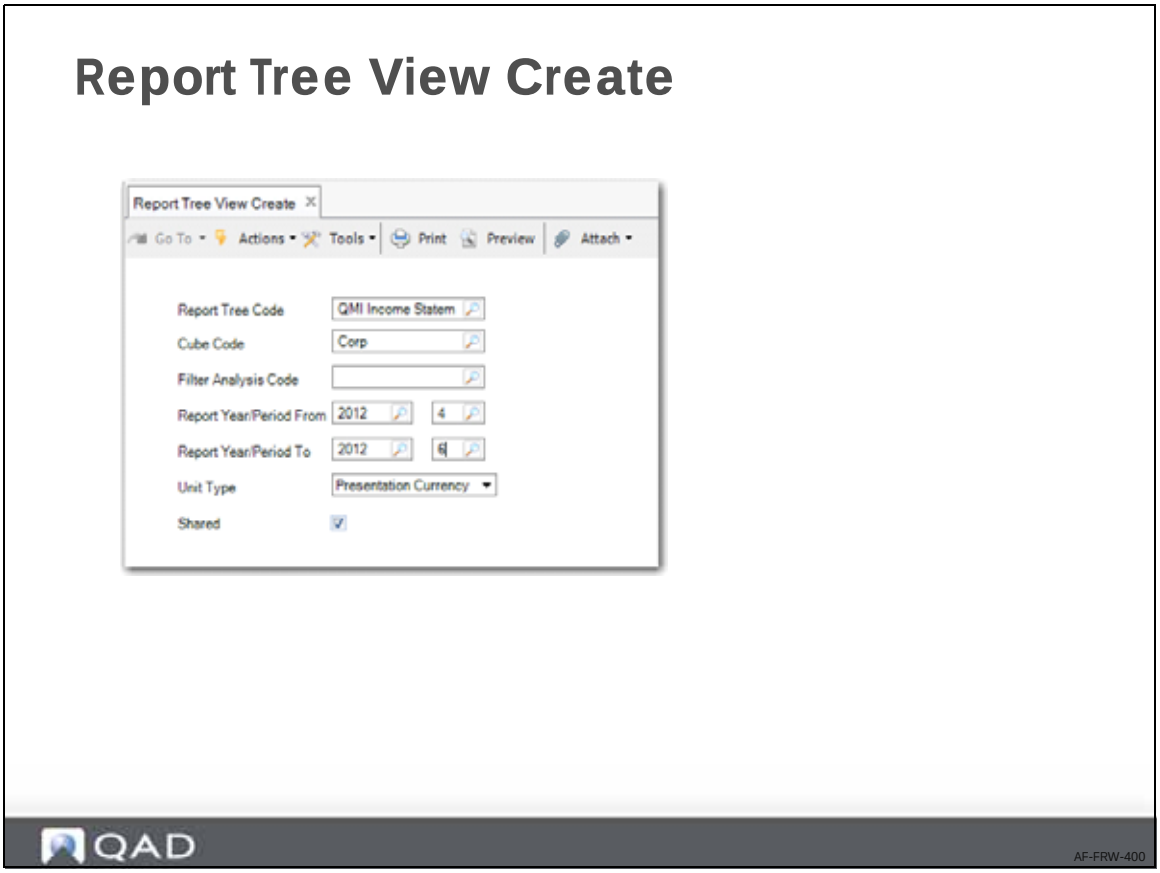
Report Tree View Create



To use Report Tree Drill Down, you must first create a view of the relevant report tree using Report Tree View Create (25.16.7.1). Each field on this screen corresponds to a dimension of the report cube.

Report Tree Code. Enter a meaningful report tree code. This field is mandatory.

Cube Code. Enter a cube code. This field is mandatory.

Filter Analysis Code. You can use this field to specify a particular analysis code to filter the view you create. This field is optional.

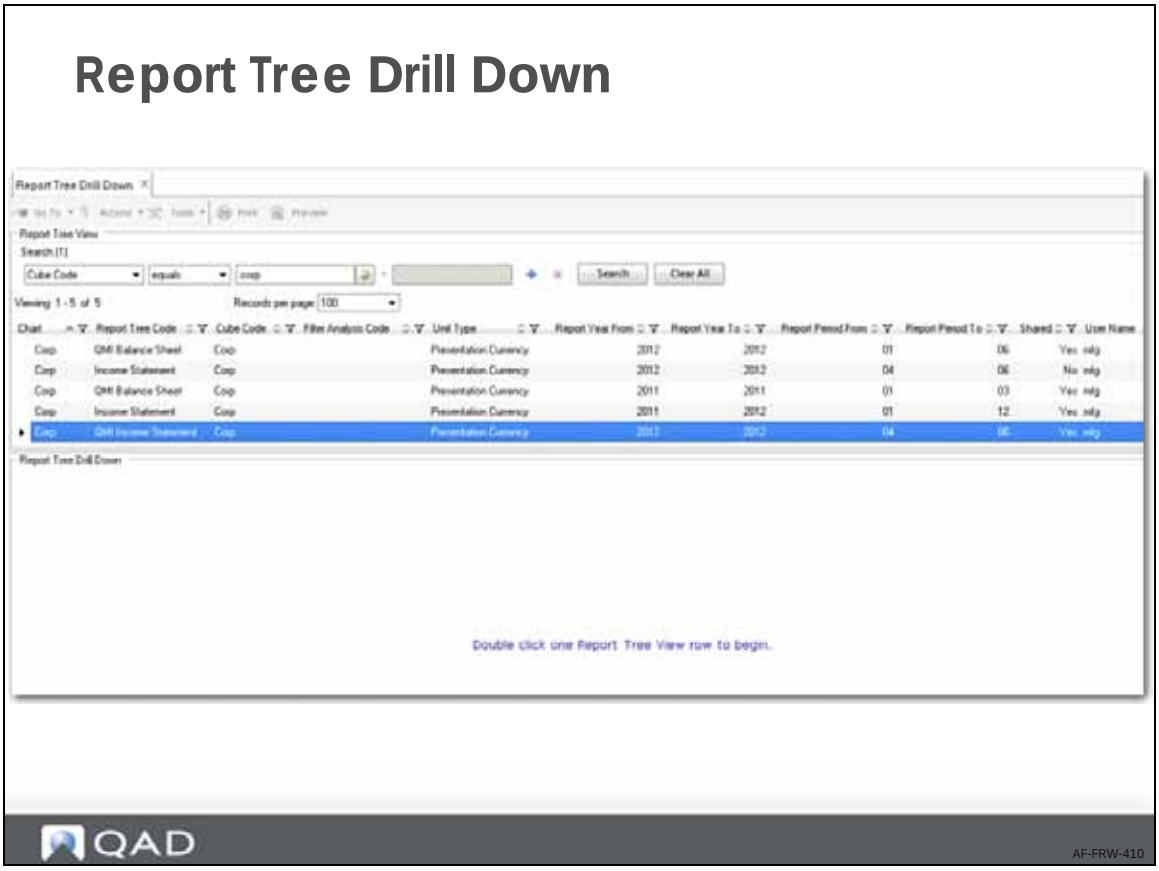
Report Year/Period From. Specify the start period for your report tree view. This field is mandatory.

Report Year/Period To. Specify the end period for your report tree view. This field is mandatory.

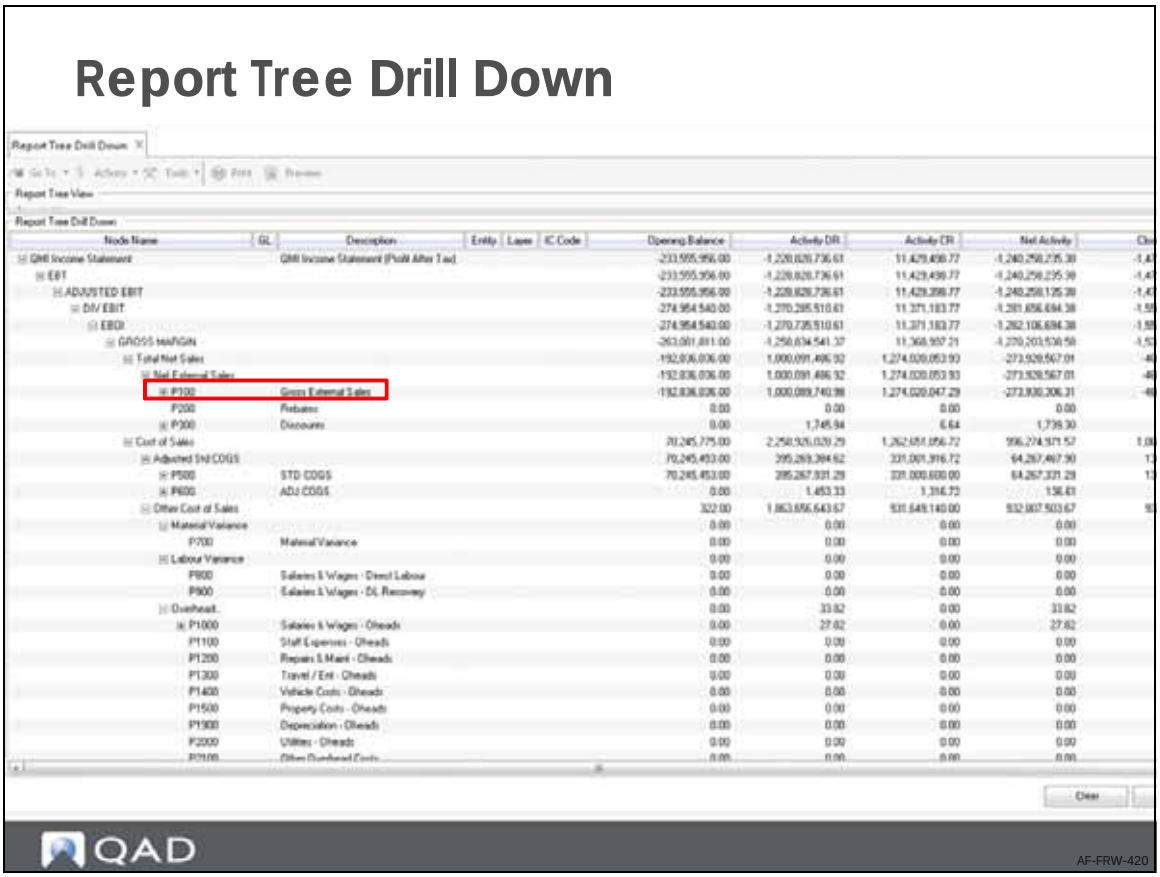
Unit Type. You can choose to display by presentation currency or by source currency. The source currency depends on a setting in your cube. Therefore, the source currency is either the statutory currency or the base currency.

Shared. If you do not want other users to see your view, clear this field. By default, this field is selected. This means that other users can see this report tree view.

Report Tree Drill Down



After you create a report tree view, it is available for you to drill into using Report Tree Drill Down (25.16.7.4). Each column in the Report Tree View grid corresponds to a field in Report Tree View Create. In addition to these columns, the first column in the grid—the Chart column—enables you to see the views related to a particular chart of accounts.

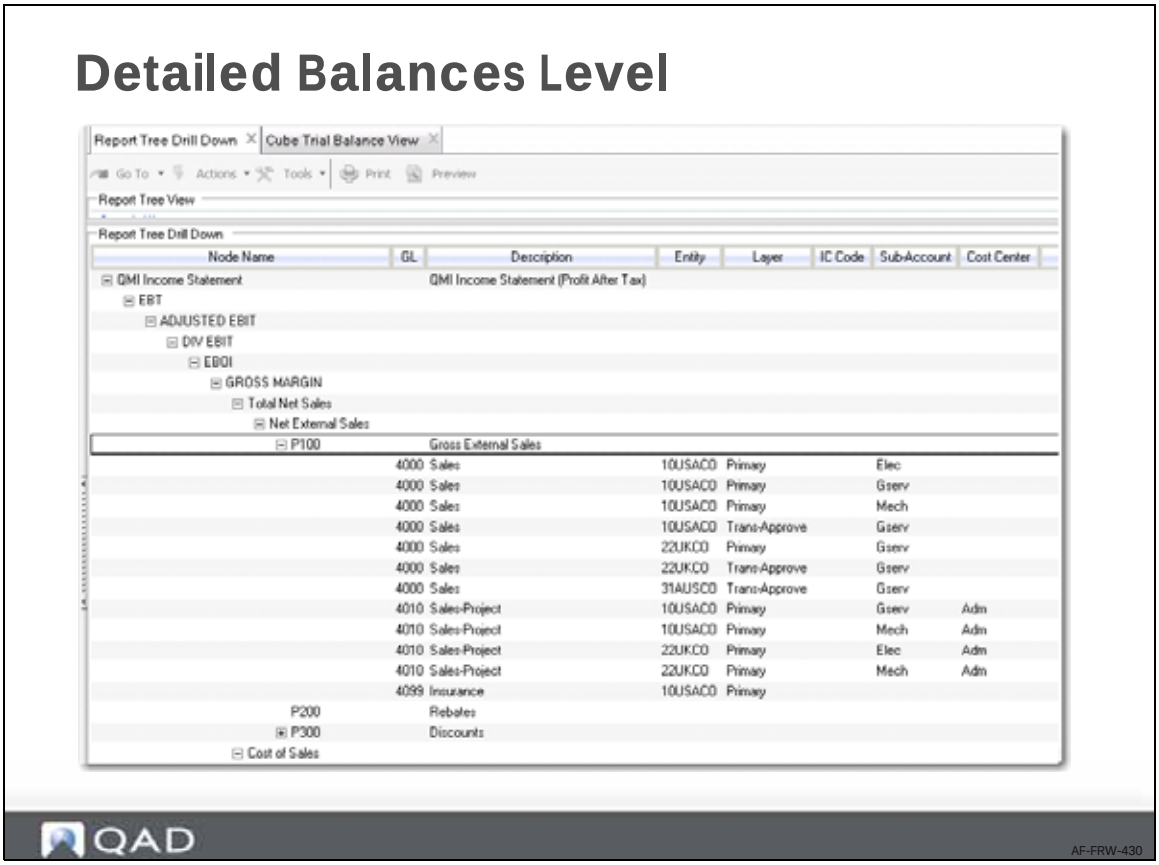


When you double-click the report tree view row you want to view, the tree is displayed in the Report Tree Drill Down area in the same hierarchy as in the financial report. You can then explore elements in the hierarchy step-by-step. By default, the report tree is displayed with all nodes expanded, except for the deepest level.

The columns in the Report Tree Drill Down area give you a consolidated view of the report tree. The columns displayed correspond to the dimensions in the report cube. Therefore, you can see different columns, depending on the report cube that the view is based on. Some dimensions are always available such as entity, layer, and intercompany code.

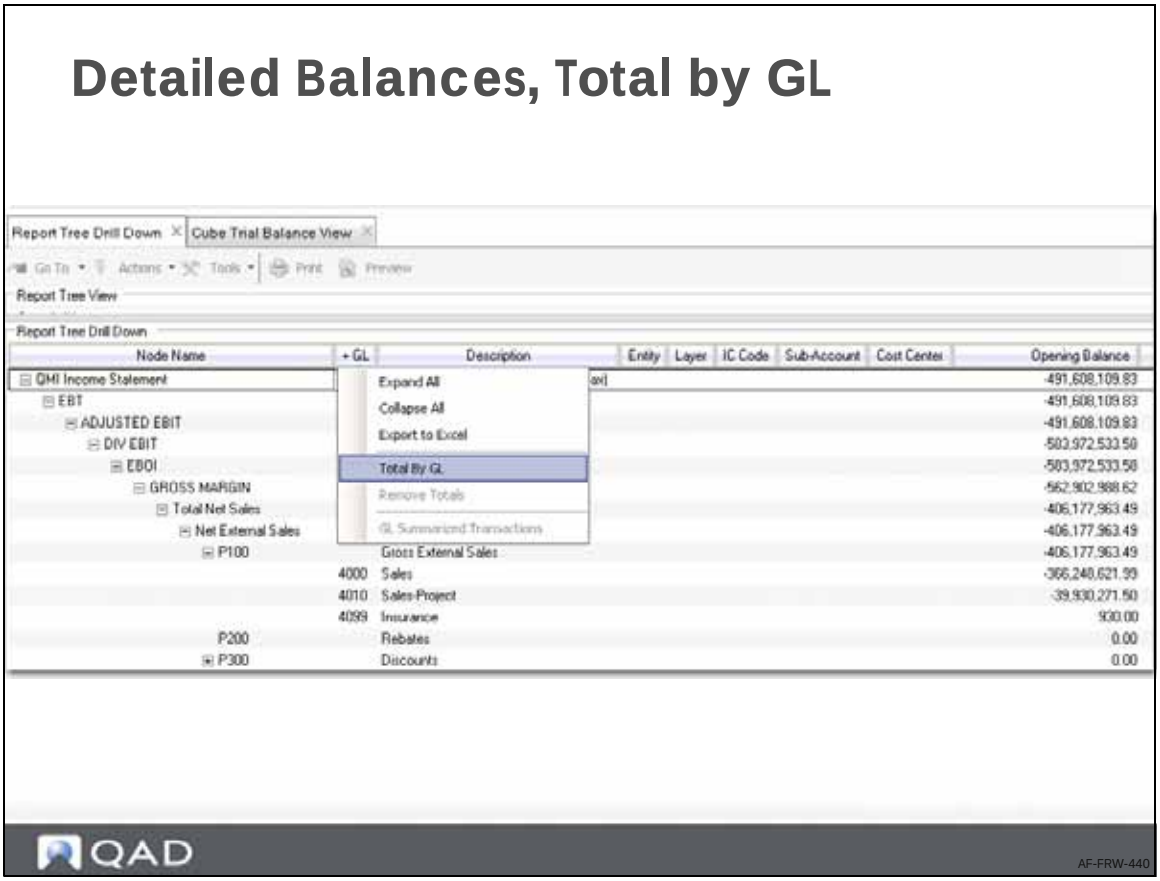
To make it easier for you to organize the data, you can drag and drop the columns into different positions on the screen. To move a column, click the column header you want to move and drag it to the required position. When you perform this operation, red arrows are displayed to guide you.

Detailed Balances Level



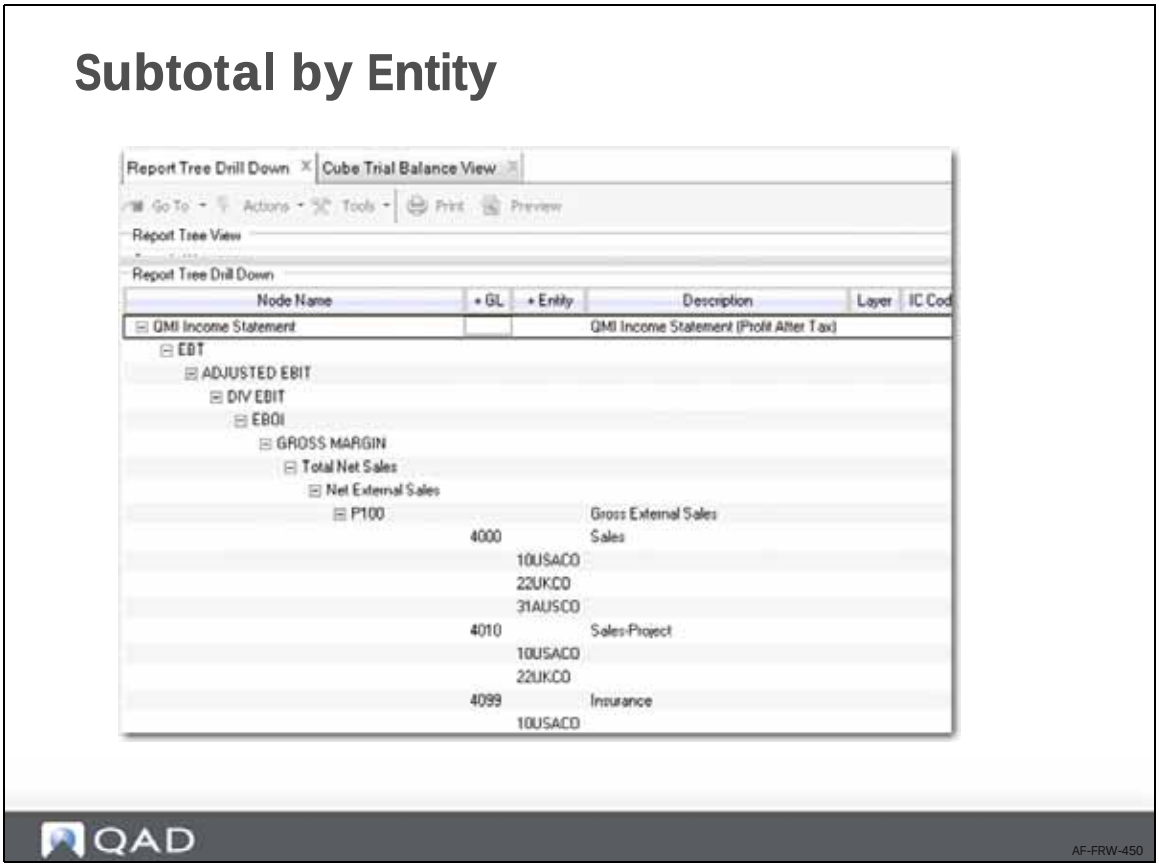
The deepest level contains the balances as stored in the report cube.

Detailed Balances, Total by GL



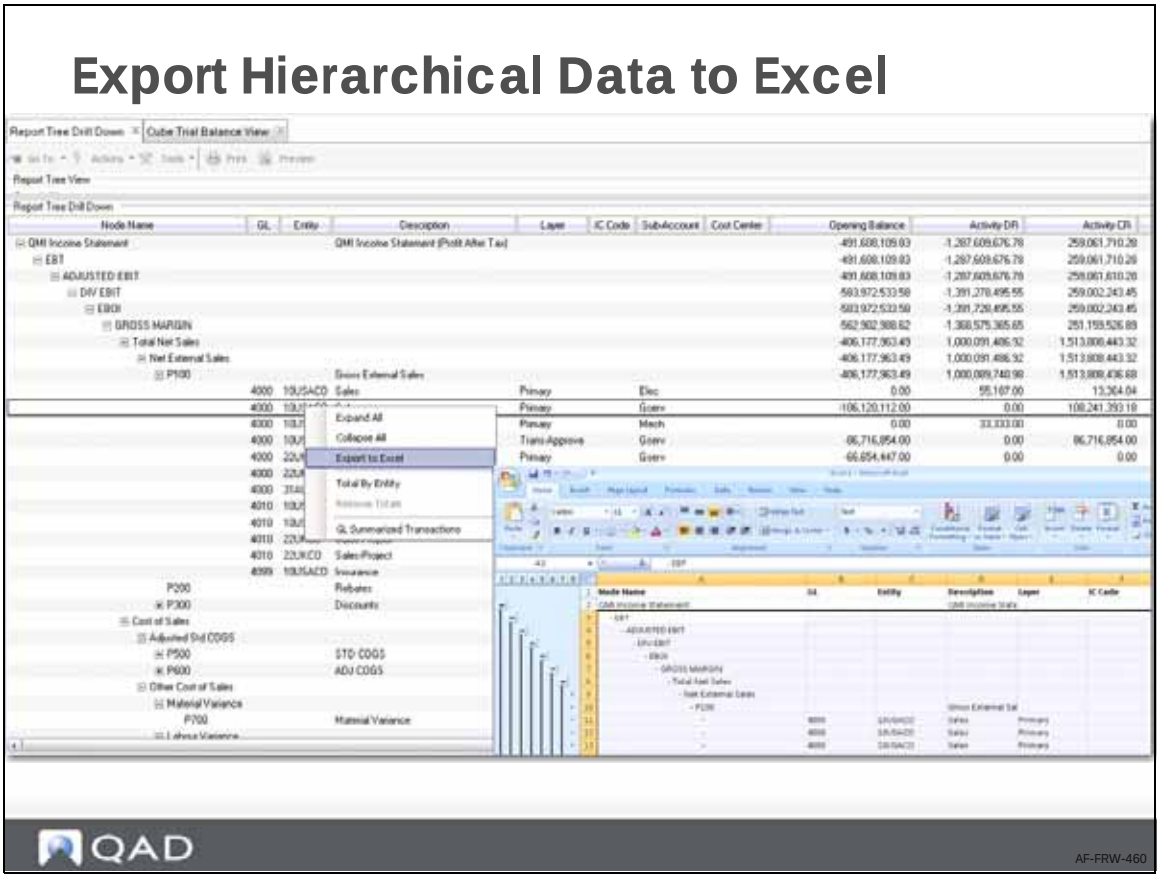
At the deepest levels in the tree, you can group the data to make totals or subtotals for any of the dimensions. When there are no totals on the tree and you right-click a line that has activity in the displayed period, you can select GL Summarized Transactions. This enables you to drill deeper than the balances displayed in the report tree hierarchy.

Subtotal by Entity



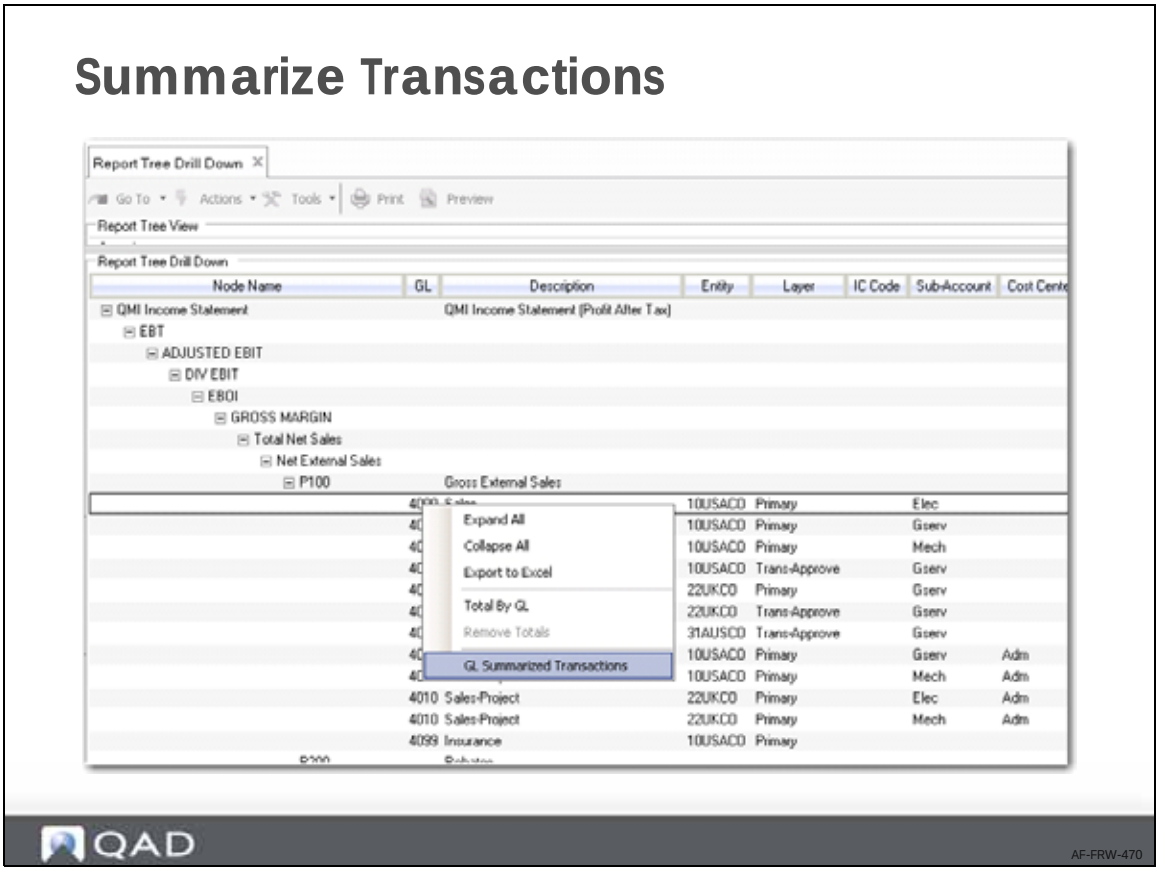
At the deepest levels, you can group the data to make totals or subtotals for any of the dimensions. For example, you can right-click anywhere in the Entity column and retrieve totals per entity.

Export Hierarchical Data to Excel



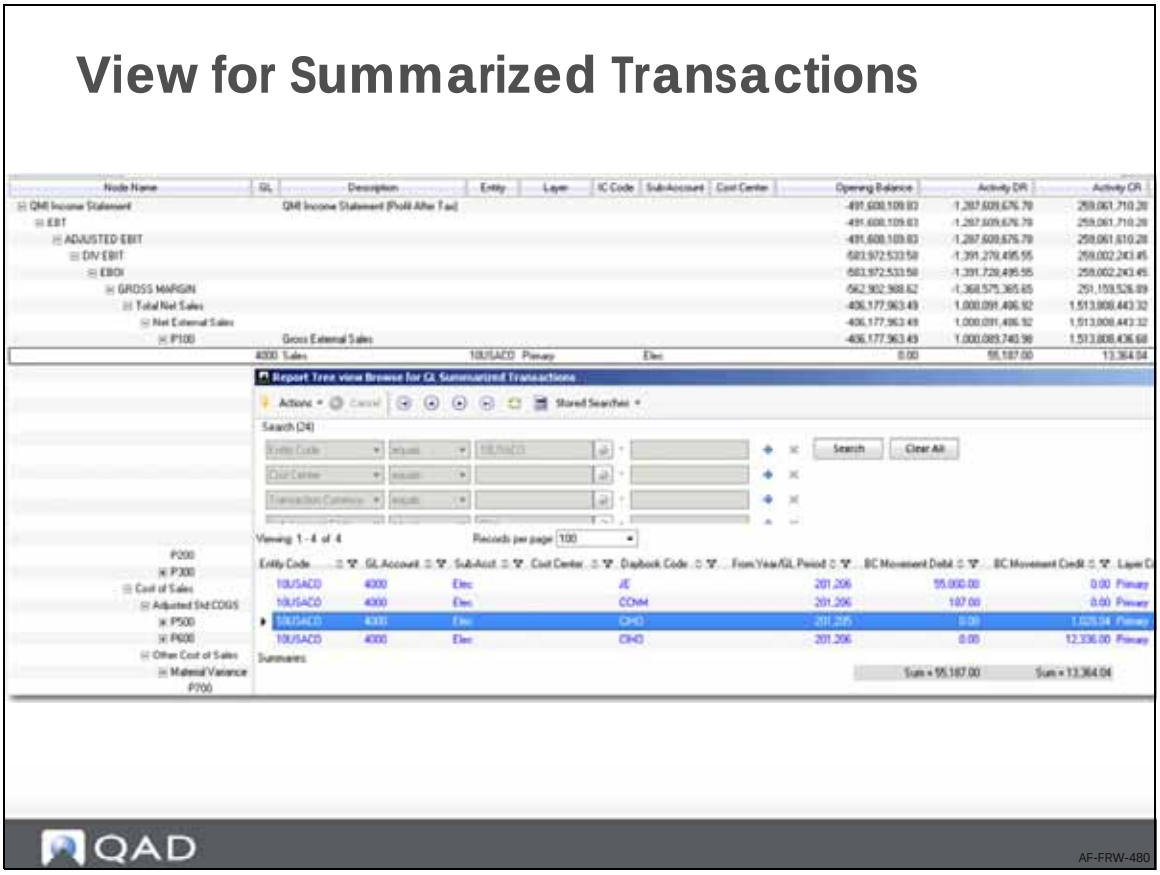
When you select Export to Excel, you export the whole tree to Excel. The tree is exported exactly as you have it displayed in the Report Tree Drill Down. In Excel, you can also conduct further analysis by expanding and collapsing nodes with one click.

Summarize Transactions



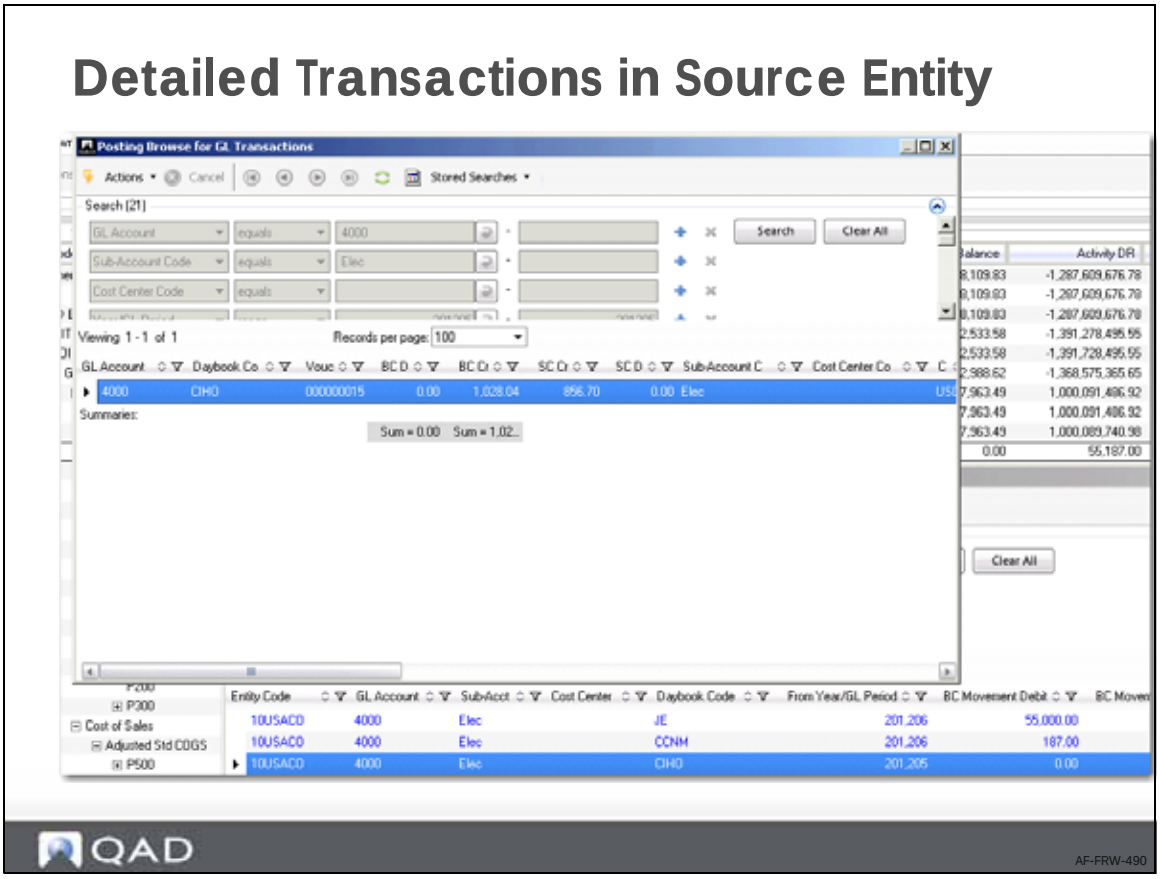
When there are no totals on the tree and you right-click a line that has activity in the displayed period, you can select GL Summarized Transactions. This facility enables you to drill deeper than the balances displayed in the report tree hierarchy.

View for Summarized Transactions



When you choose GL Summarized Transactions, the system displays the Report Tree View Browse for GL Summarized Transactions. This browse displays the balances in the source entities (PostingHist table) that contribute to the balance in the report tree row. From this window, you can drill into the GL transactions and view the original transaction if you know the type of transaction you are looking for.

Detailed Transactions in Source Entity



Chapter 10

Allocations

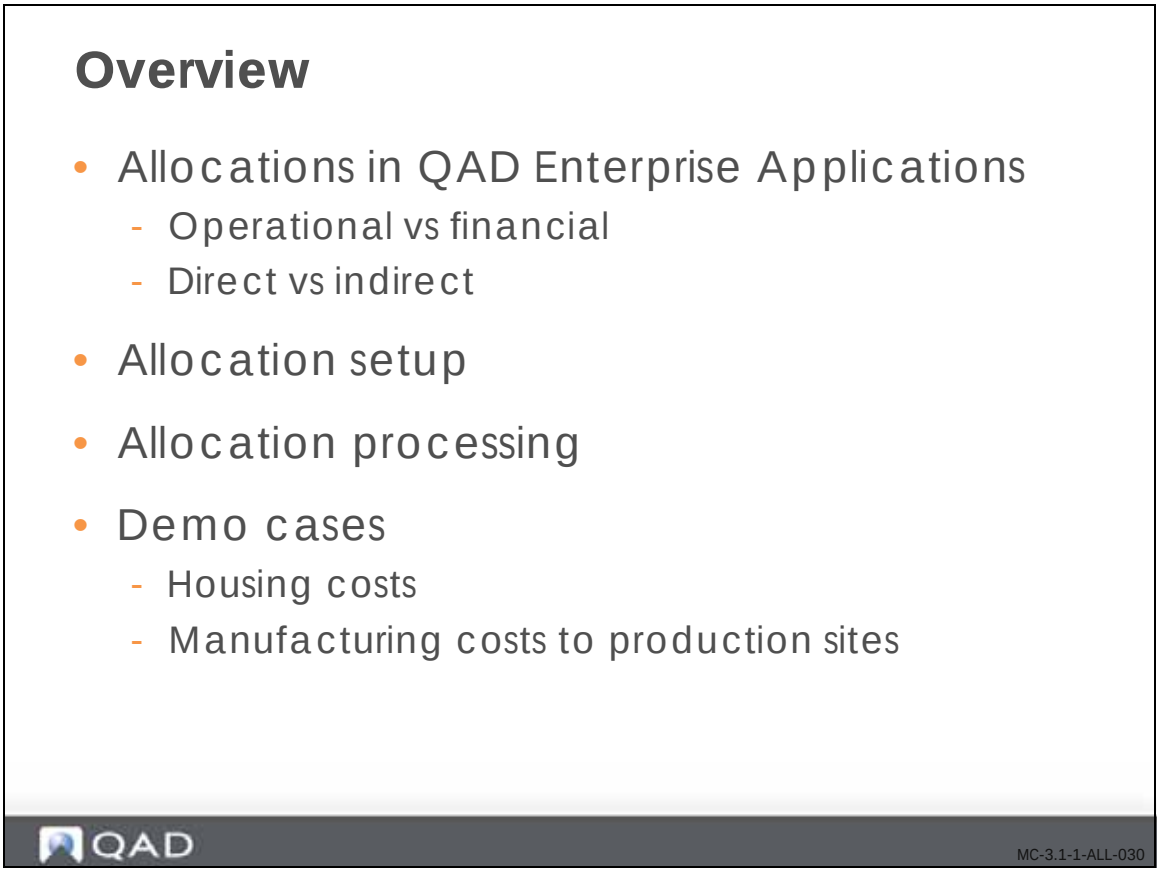
Objectives

Objectives

- Learn about allocation capabilities in QAD Financials
- Learn how to set up and use allocations for your business case

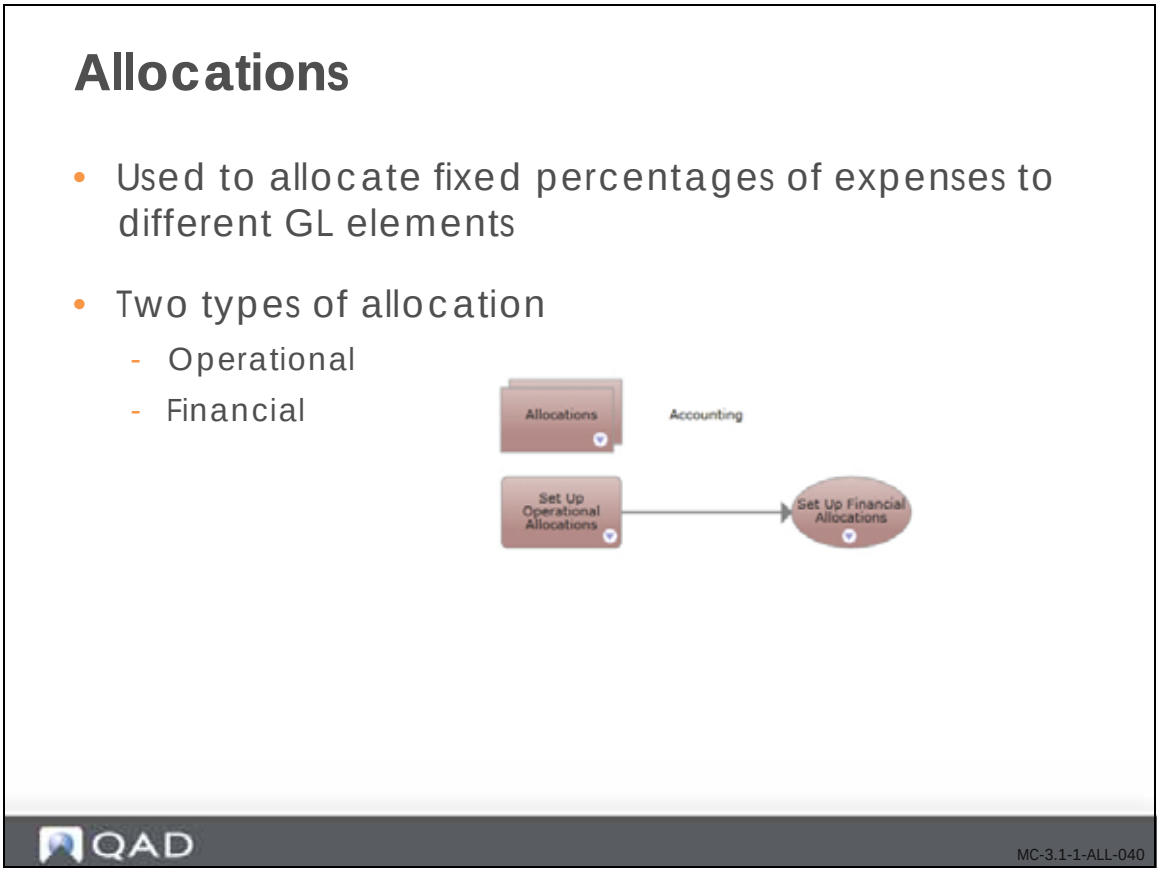
QAD MC-3.1-1-ALL-020

Overview



In this section, you will learn about the two different types of allocations. You will learn in detail how to set up financial allocations and how they are processed. Finally, you will review two demonstration cases to illustrate what you have learned.

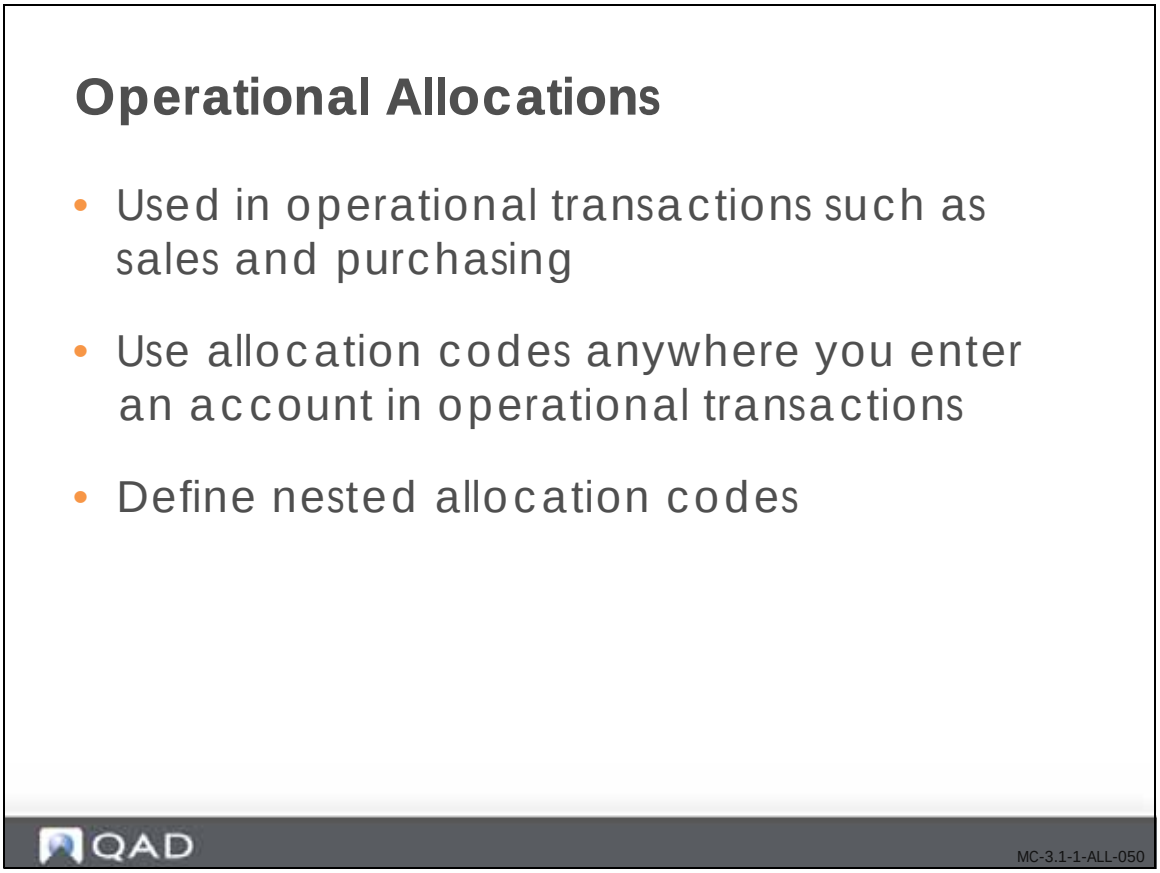
Allocations



The system supports two types of allocations:

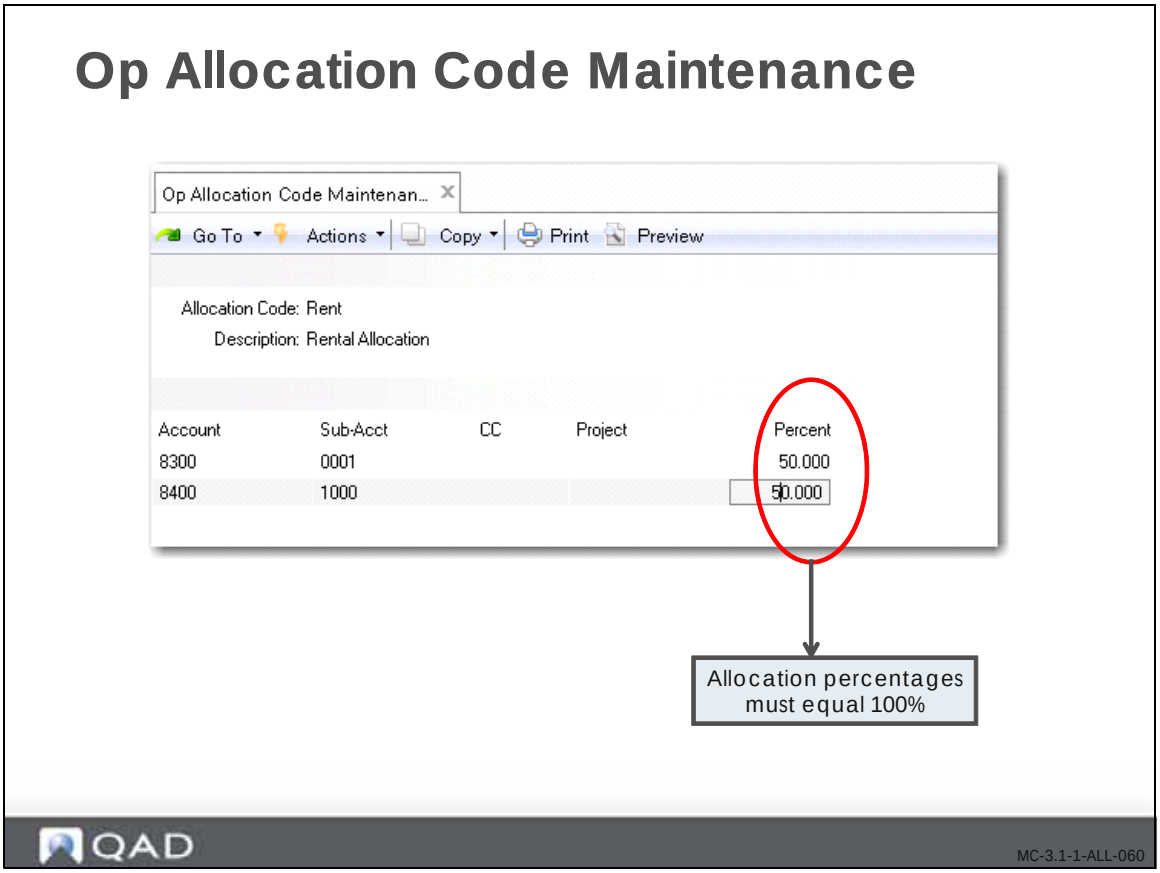
- Operational allocation codes are used in operational transactions, such as sales and purchasing.
- More complex allocations can be set up for use in GL transactions within financial modules.

Operational Allocations



To simplify data entry in operational transactions, use Operational Allocation Code Maintenance (25.3.23) to define codes that allocate fixed percentages of expenses to different accounts, sub-accounts, cost centers, and projects.

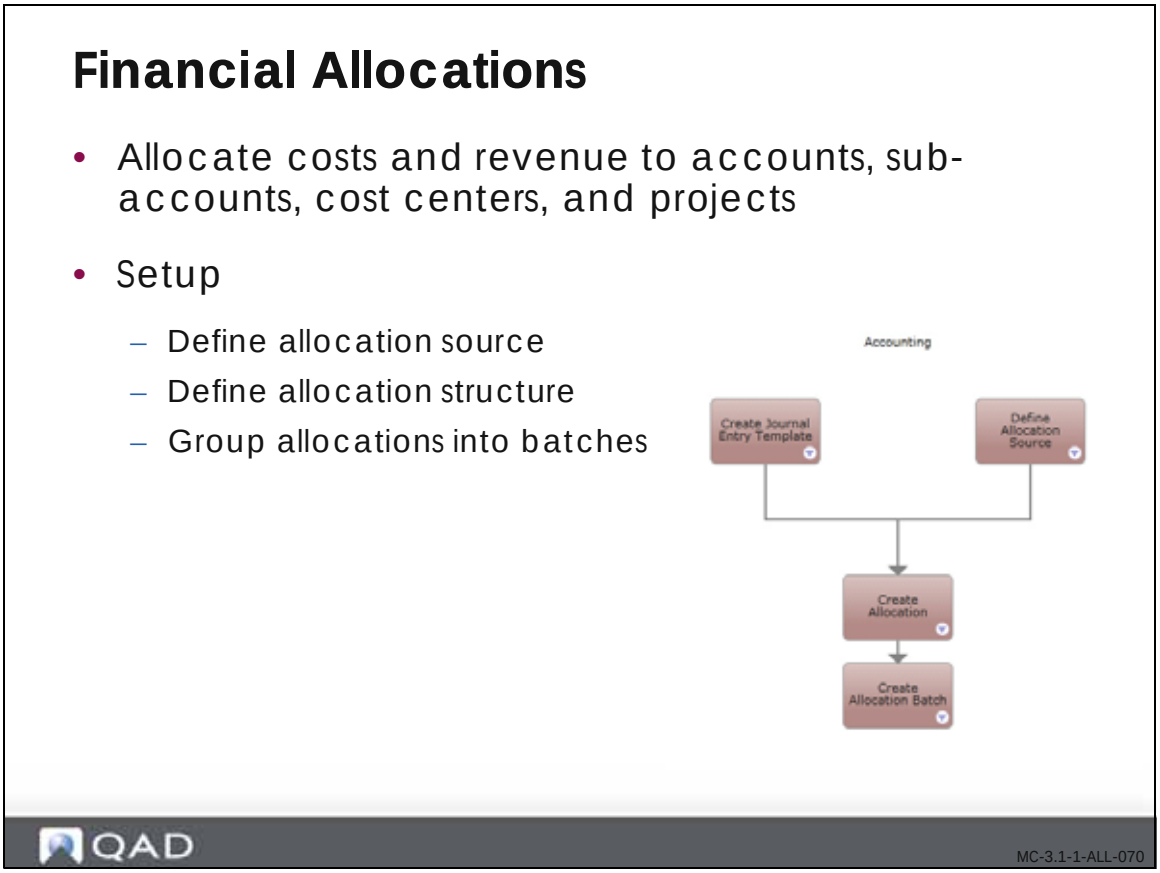
Op Allocation Code Maintenance



Create operational allocation codes using Op Allocation Code Maintenance (25.3.23). Define the specific accounts, sub-accounts, cost centers, and projects that a transaction must be split amongst, and the percentages to allocate to each. The percentages must total 100%.

You can define nested allocation codes so that one allocation code references another. When the system calculates amounts, it explodes each level of allocation codes, multiplying the amount to be apportioned by the percentages at each level.

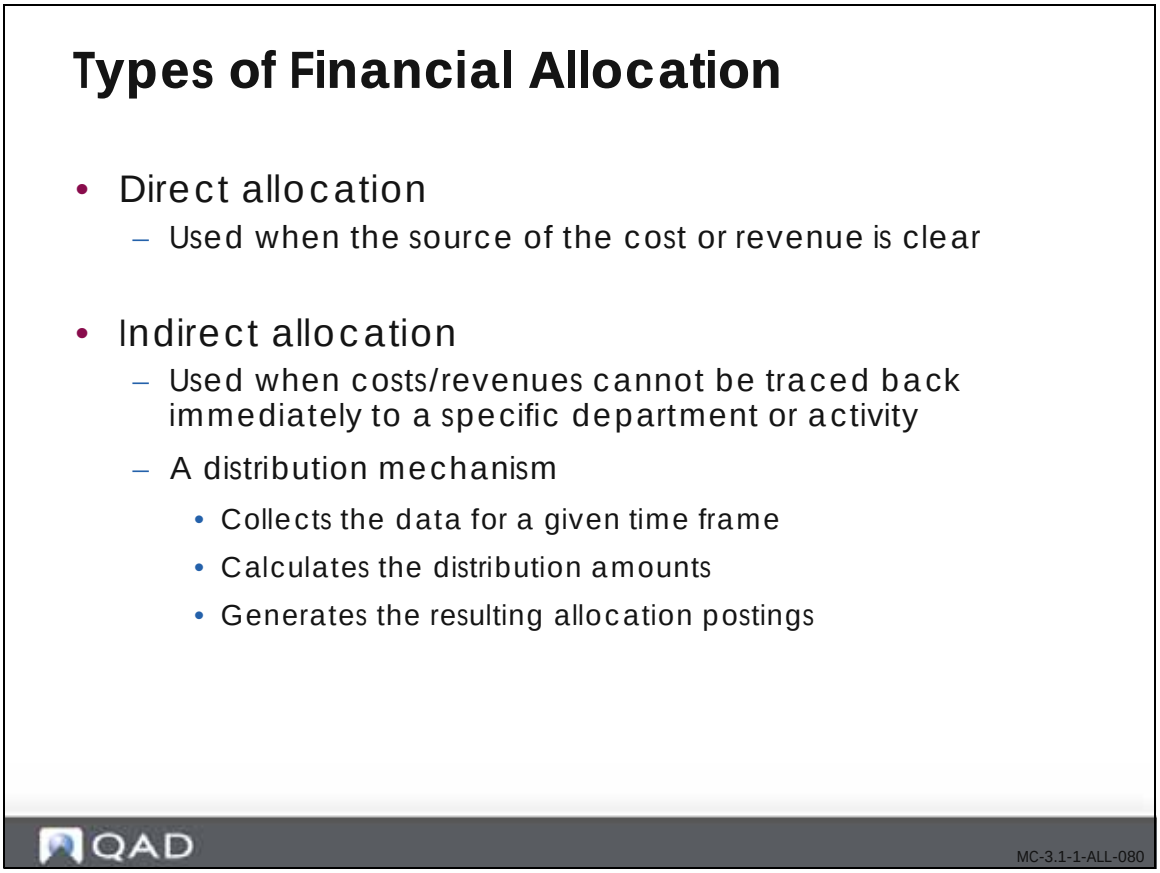
Financial Allocations



Use the GL Allocation activities (25.3.22) to identify types of cost and automatically distribute them to the correct cost targets. Configure allocations using the following sequence of steps:

1. Define the allocation structure. Allocation structures consist of a source, a target, and the transfer algorithm between them.
2. Group allocations into batches.
3. Configure recursive allocations to reuse a previous allocation run as input for the next.
4. Interrupt and restart the execution of a batch.
5. Validate the results of the allocation run before final posting.

Types of Financial Allocations

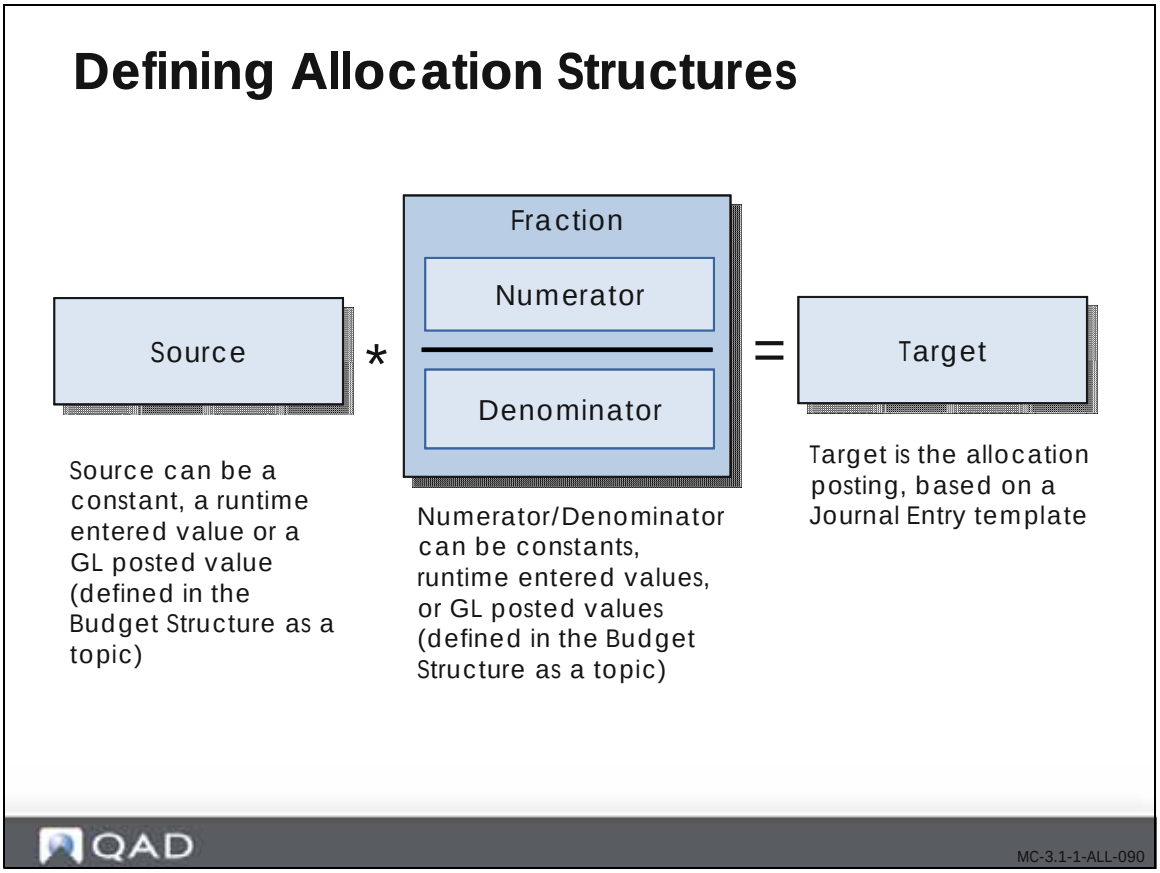


A direct cost can be traced directly to the source. For example, when a department purchases office furniture for its own use, the cost is a direct cost. Direct costs can be further subdivided into:

- Assignable costs are charged directly to the account or sub-account without allocation.
- Shared costs cannot be directly assigned to a cost objective, but are charged instead to an intermediate cost pool.

An indirect cost cannot be traced directly to one source. For example, a company electricity bill covers the electricity usage for all company departments. Initially, the bill is allocated to an overhead cost center, and later re-allocated over all the departments. You use allocation to distribute indirect costs to the various direct activities that benefited. For this, you must define a cost allocation plan.

Defining Allocation Structures



An allocation consists of the following elements:

Source. This is the base amount for the allocation.

Fraction. This is a factor applied to the source amount to calculate the amount to be posted to the target.

Target. This consists of the COA elements, such as account, sub-account or cost center, to which the fraction is to be posted.

Allocation Sources

- Constant Value

  The source is a value that is entered in the allocation definition. The value can be entered in the base currency or as a combination of base currency and quantity.

- Standard Charge

  Standard charges are calculated by multiplying the quantity and unit price. Both values are entered in the allocation definition. The per-unit cost for electricity is an example of a standard cost.

- WBS Topic

  Work Breakdown Structure (WBS) topics are used in budgets to provide analysis for budget costs, and are also used in allocations as a source type.

Fractions

- Constant Factor

  The fraction can be a constant multiplier that is entered in the allocation definition and which can also be reviewed and changed during the execution of the allocation batch.

- Real Fraction

  The fraction can be a real fraction defined by its numerator and denominator. Both the numerator and denominator are WBS topics from which the value or quantity is retrieved. When the allocation is run, the source value is multiplied by the constant value or the real fraction.

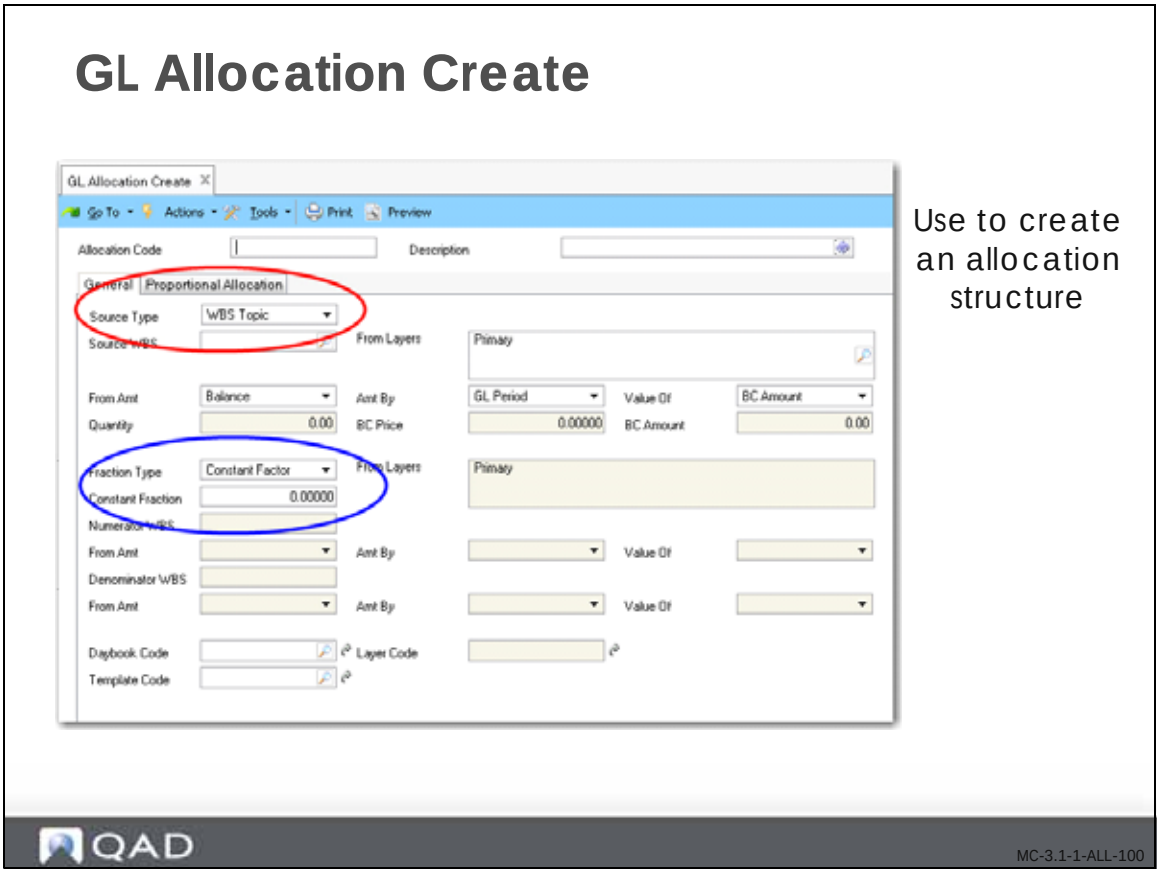
- Proportional Fraction

  A proportional fraction uses multiple fractions. Only the denominator is specified to calculate the fractions. The denominator is a WBS topic. The numerators are defined based on the denominator. There are as many numerators (and, thus, fractions) as composing elements in the denominator.

Allocation Targets

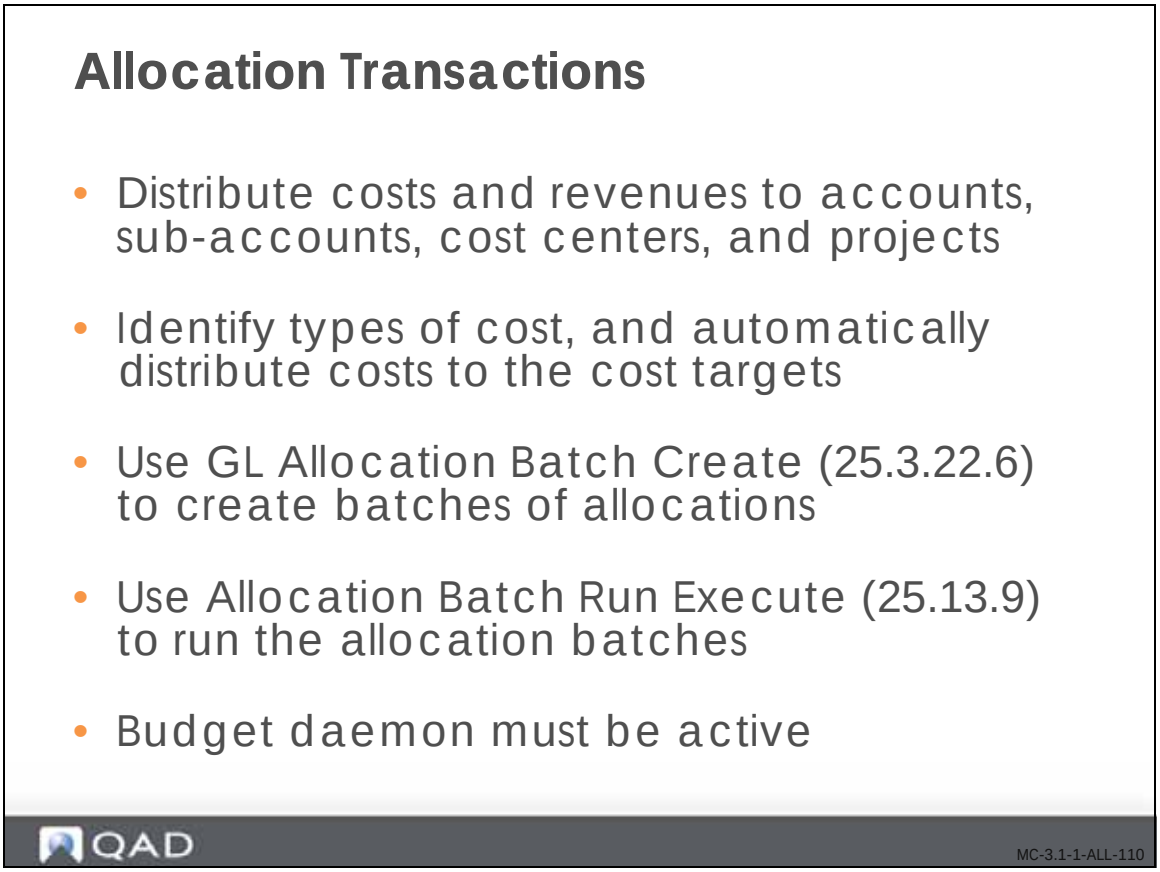
You must define a posting template to specify how the amounts calculated by applying the fractions to the source amounts are to be posted.

GL Allocation Create



Use GL Allocation Create (25.3.22.1) to set up your allocation structure.

Allocation Transactions

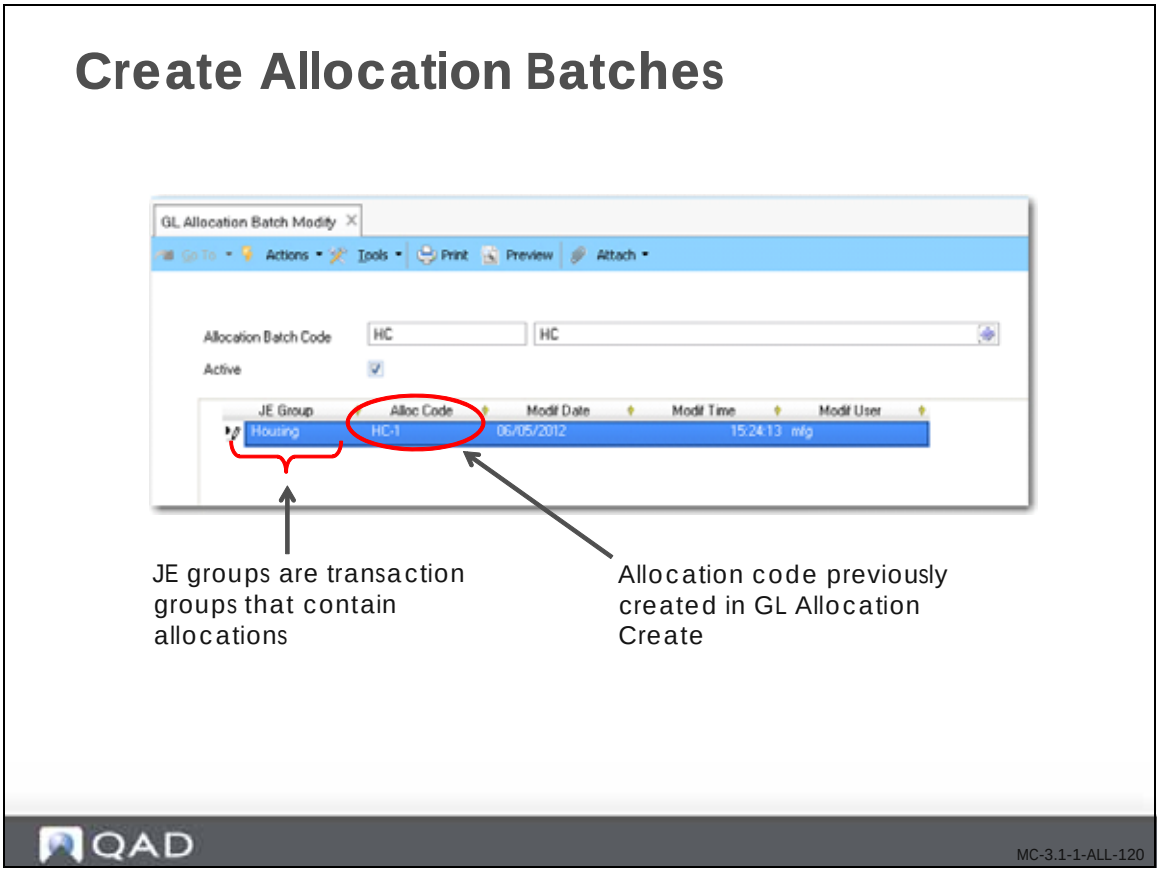


Allocation is the process of distributing costs and revenues to the appropriate accounts, sub-accounts, cost centers, and projects. Once your allocation structures are set up, you need to run them in batch.

The GL Allocation Batch Create (25.3.22.6) and Allocation Batch Run Execute (25.13.9) activities let you create and run batches of allocations that you have previously defined.

The Budget daemon should be active when allocations are run because the allocation functionality uses the same tables. The Budget daemon ensures that the most current values are available for an allocation run.

Create Allocation Batches



Use Allocation Batch Run Execute (25.13.9) to run multiple allocations simultaneously. This activity also runs allocations in sequence, using the result of one allocation as the source of the next. An allocation batch can contain one or multiple allocation codes.

JE Group. JE group identifiers are used in allocation batch processing. If the allocation batch run is canceled, only the current JE group is reversed or unprocessed. The JE groups that are already processed remain processed.

Alloc Code. Specify an allocation code to include in the JE group.

Run Allocation Batch

Run Allocation Batch

- The Budget daemon calculates the allocation batch figures.

Note: The Budget daemon must be running.

- The result of the allocation run is immediately posted.

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By default, the system runs all selected lines in the Allocation Batch Run Execute screen, except when a batch has already run for the same target period. The system also keeps a log file of previously run allocations.

An allocation batch is run correctly if the figures it uses from the Budget module are valid. These figures are calculated by the Budget daemon.

The result of an allocation is immediately posted. By using a transient layer daybook as target—the recommended approach—you can review the allocation postings, and correct or delete them as necessary. You then assign them to the primary or the secondary layer.

Field Descriptions

Allocation Batch. Specify the allocation batch to run.

Processing Status. This field displays the status of the current allocation batch.

Source GL Period. Select the source data from this period only or cumulative data from the start of the GL calendar year up to the end of this period.

Target GL Period, Posting Date. Specify the target period and posting date.

Number Of Groups. Specify the number of JE groups selected for execution.

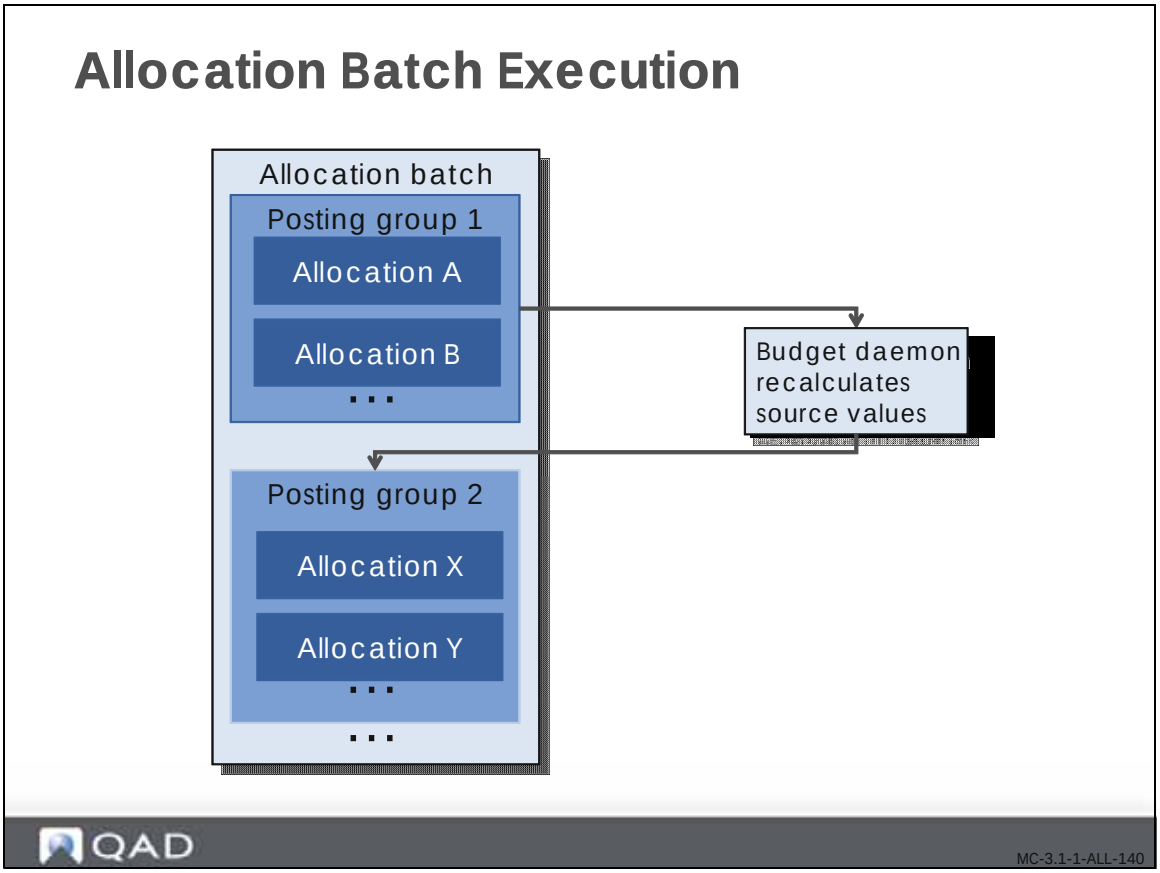
To Be Processed. This field displays the number of JE groups still to process.

Processed. This field displays the number of JE groups already processed.

Click Apply to display the allocation batch details in the grid

The result of a JE group run is always a single journal entry

Allocation Batch Execution



The system runs all of the allocations in the JE group. This ensures that when an allocation batch run is interrupted, the system does not stop the batch run until all allocations in the current group have been run.

The system checks for unprocessed daemon records before running each allocation in the batch, and displays a warning when unprocessed records exist.

When an allocation batch is interrupted, you can restart the batch for the same GL period. All allocations already run are deselected to ensure that they are not re-run.

Demo Case 1

Demo 1: Allocate Housing Costs

- Collect the electricity, water, and heating costs for a month
- Allocate the total costs to the company departments, according to fixed distribution
  - Adm: 10%
  - Mfg: 40%
  - R&D: 30%
  - Sls: 20%
- Post to a transient layer
- Review and final posting to the primary/official layer

QAD MC-3.1-1-ALL-150

Demo Case 1: Accounts Involved

Demo Case 1: Accounts Involved

43000	Housing Expense	no Expense
43100	Electricity	no Expense
43200	Water	no Expense
43300	Heating	no Expense
43999	Housing Alloc Transfer	no Expense

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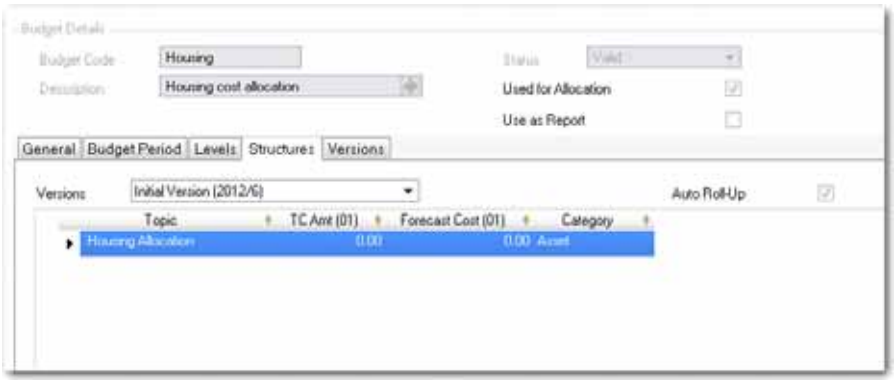
Demo Case 1: Source

Demo Case 1: Source



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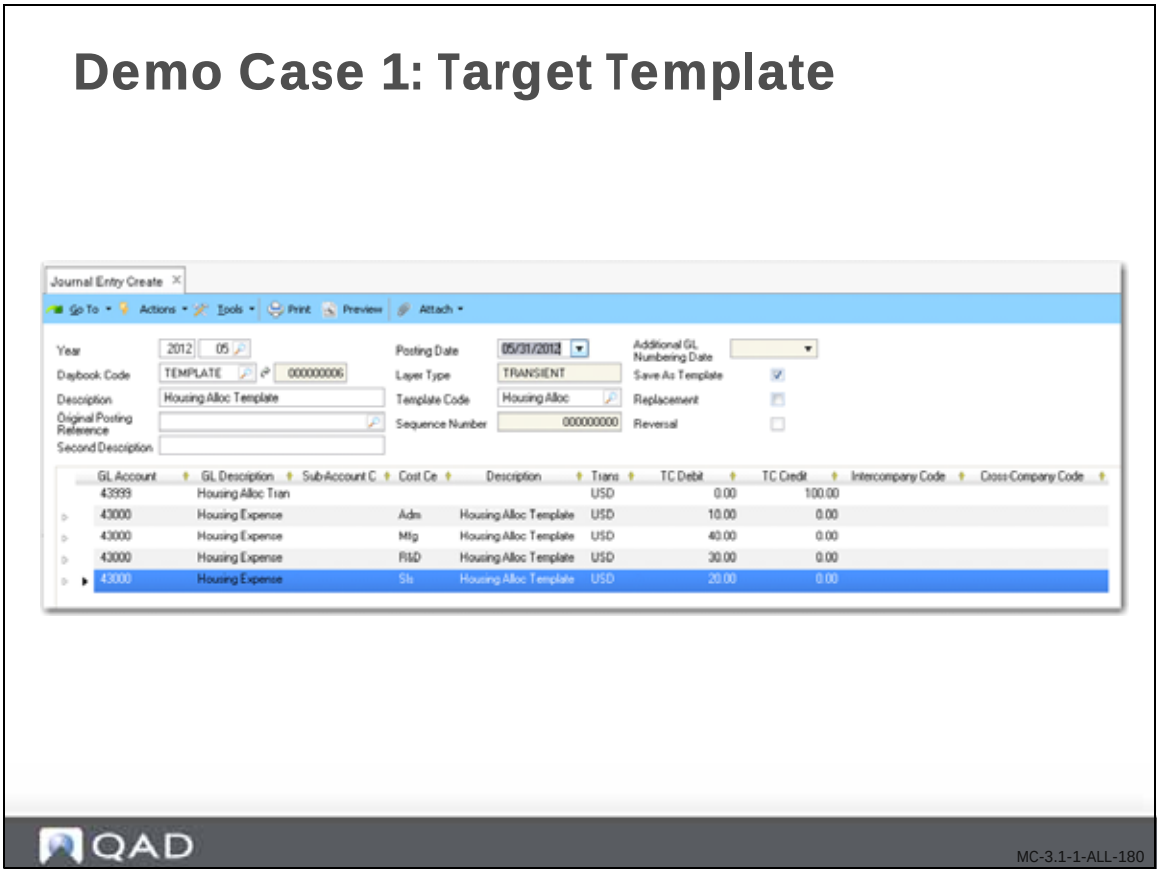
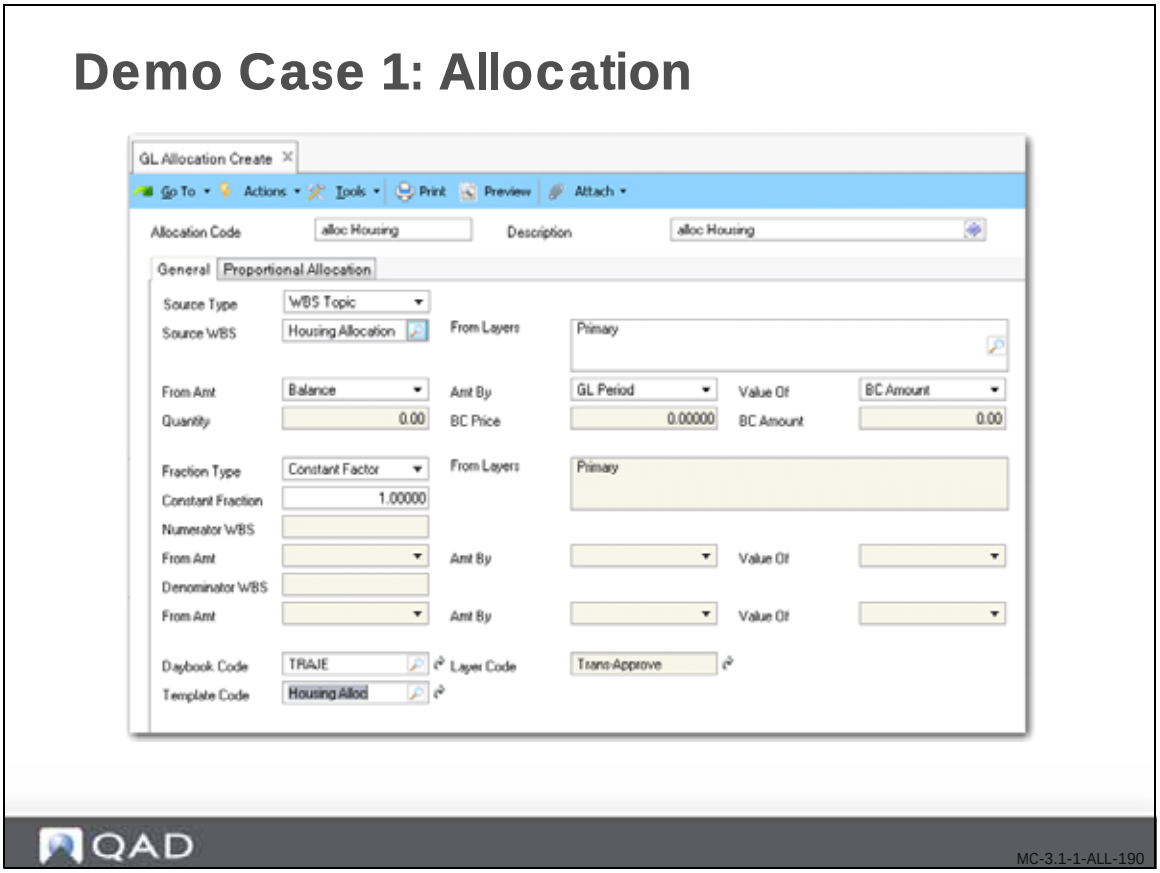
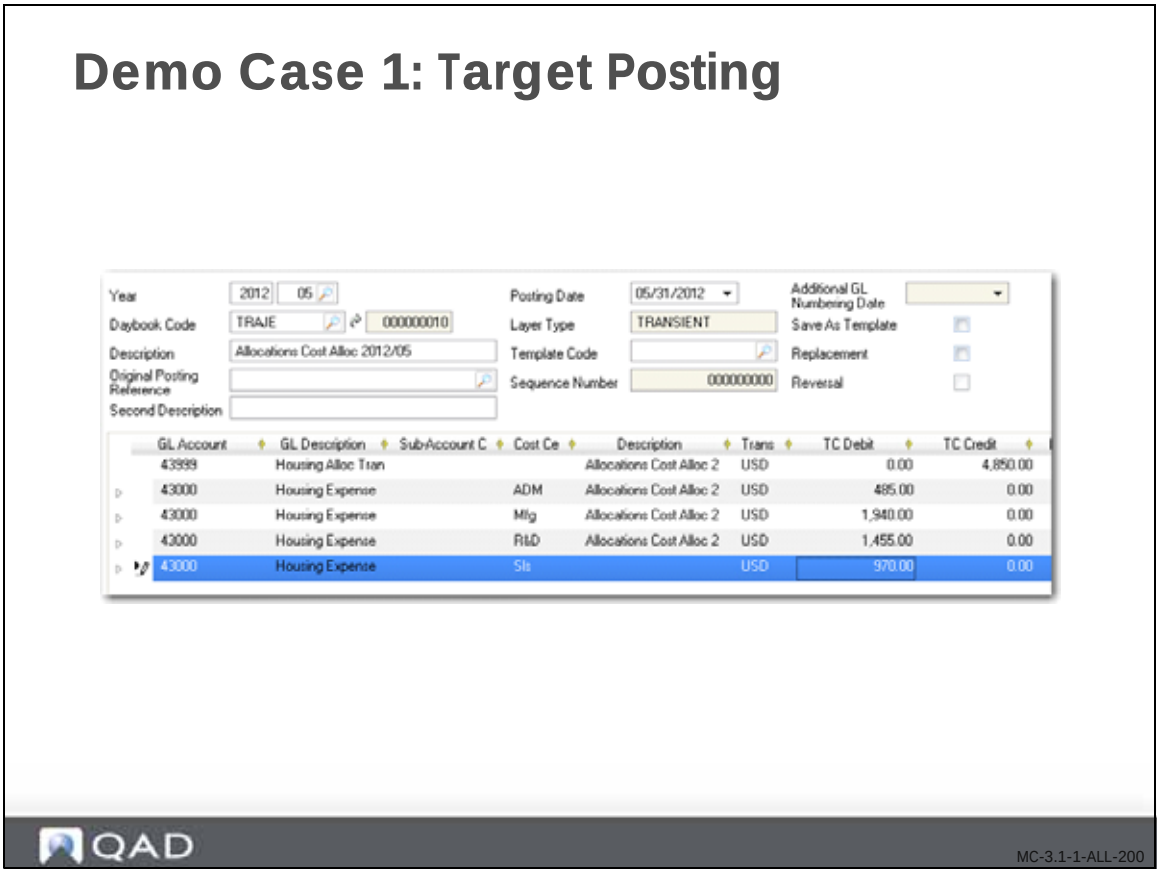
Demo Case 1: Target Template



Demo Case 1: Allocation



Demo Case 1: Target Posting



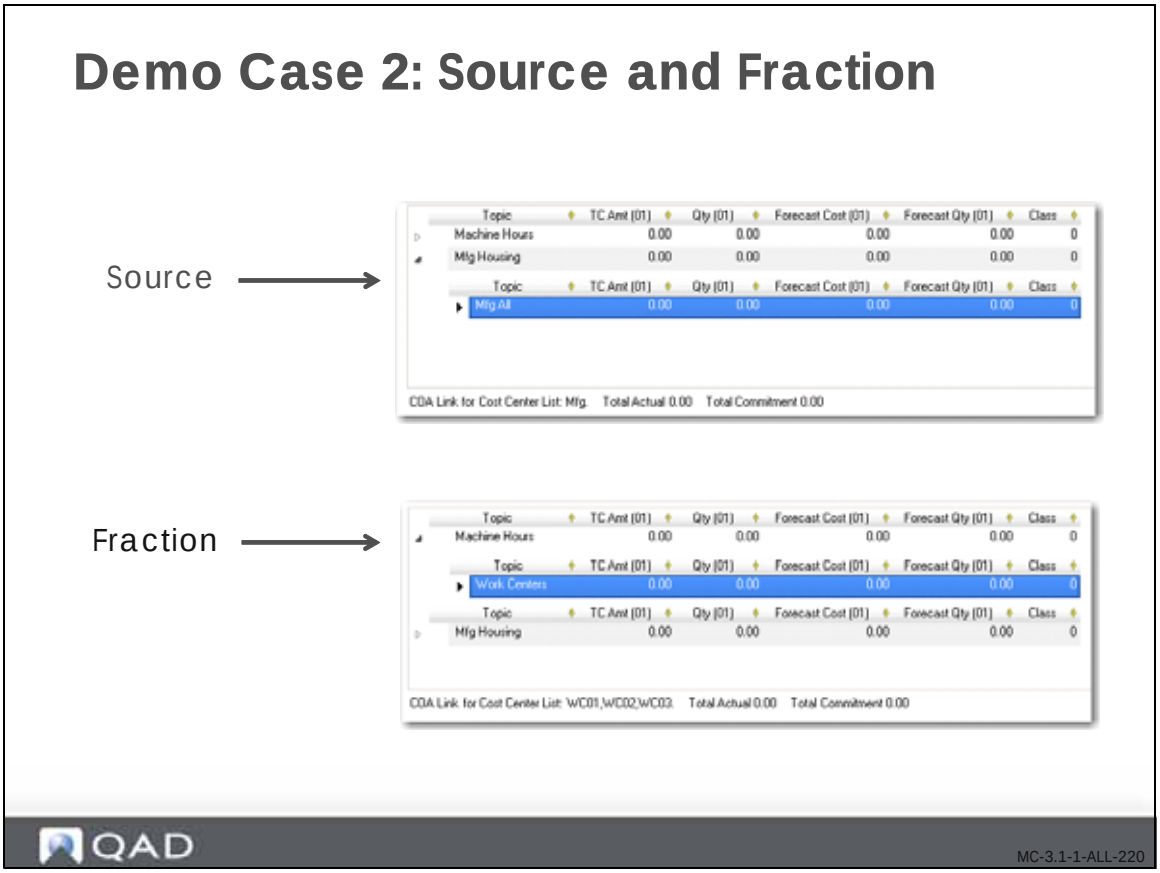
Demo Case 2: Allocate Manufacturing Costs

Demo 2: Allocate Manufacturing Costs

- Allocate manufacturing costs to production sites
- Allocate the cost proportional to the machine hours run in each site
  - WC01: 150 HRS
  - WC02: 170 HRS
  - WC03: 100 HRS

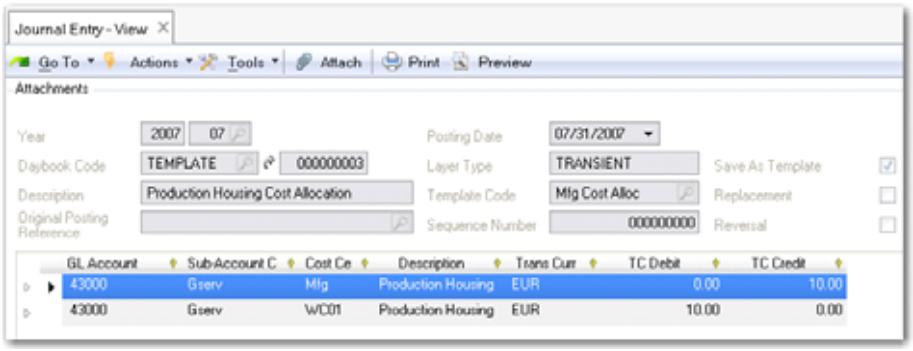
QAD MC-3.1-1-ALL-210

Demo Case 2: Source and Fraction



Demo Case 2: Target Template

Demo Case 2: Target Template



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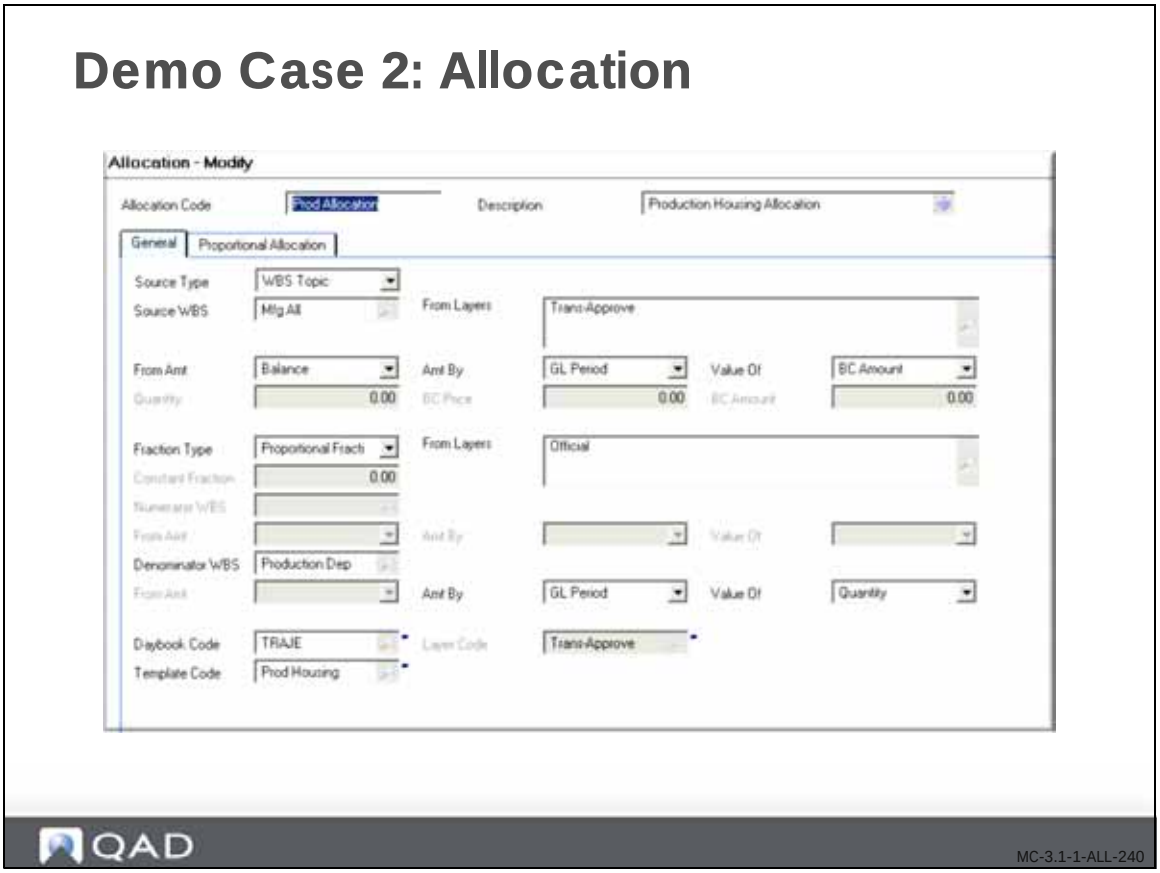
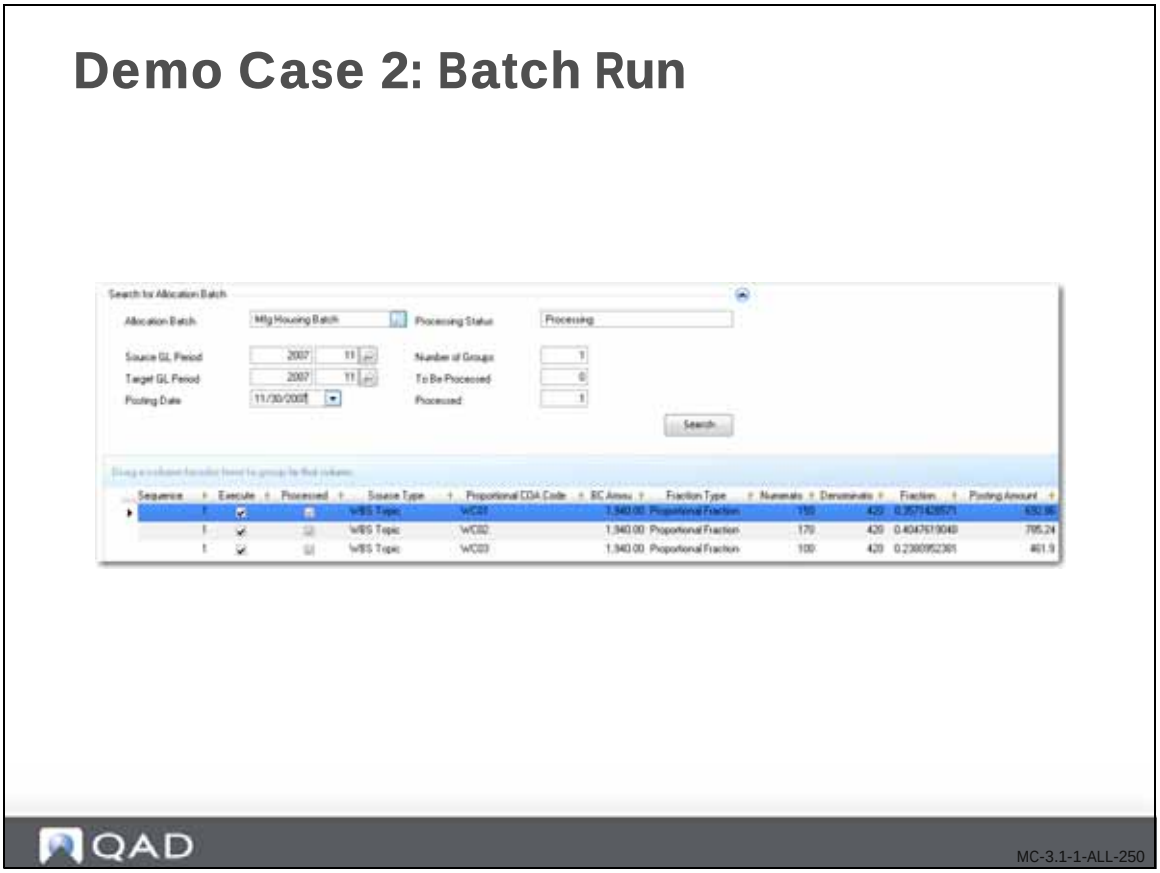
Demo Case 2: Allocation

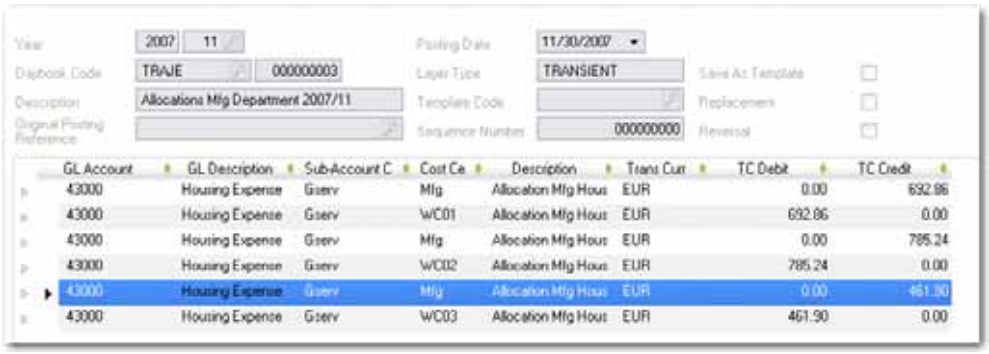


Demo Case 2: Batch Run



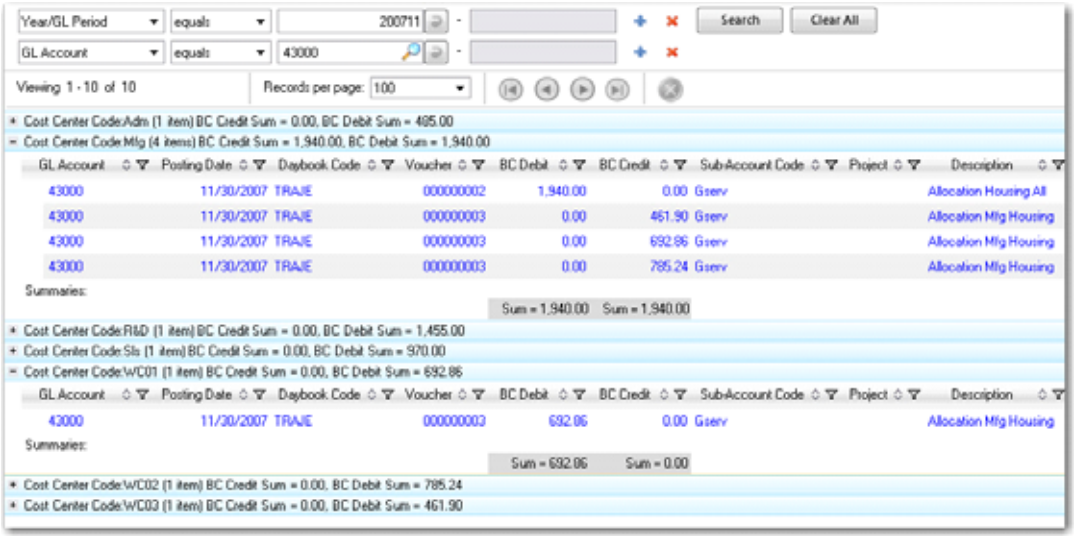
Demo Case 2: Target Posting

Demo Case 2: Target Posting



GL Account	GL Description	Sub-Account C	Cost Ce	Description	Trans Curr	TC Debit	TC Credit
43000	Housing Expense	Gserv	Mfg	Allocation Mfg Hous	EUR	0.00	692.86
43000	Housing Expense	Gserv	WC01	Allocation Mfg Hous	EUR	692.86	0.00
43000	Housing Expense	Gserv	Mfg	Allocation Mfg Hous	EUR	0.00	785.24
43000	Housing Expense	Gserv	WC02	Allocation Mfg Hous	EUR	785.24	0.00
43000	Housing Expense	Gserv	Mfg	Allocation Mfg Hous	EUR	0.00	461.90
43000	Housing Expense	Gserv	WC03	Allocation Mfg Hous	EUR	461.90	0.00

QAD MC-3.1-1-ALL-260


Year/GL Period
equals
200711
Search
Clear All
GL Account
equals
43000
Viewing 1 - 10 of 10
Records per page: 100
Cost Center Code:Adm (1 item) BC Credit Sum = 0.00, BC Debit Sum = 495.00
Cost Center Code:Mfg (4 items) BC Credit Sum = 1,940.00, BC Debit Sum = 1,940.00
GL Account Posting Date Daybook Code Voucher BC Debit BC Credit Sub-Account Code Project Description
43000 11/30/2007 TRAJE 000000002 1,940.00 0.00 Gserv Allocation Housing All
43000 11/30/2007 TRAJE 000000003 0.00 461.90 Gserv Allocation Mfg Housing
43000 11/30/2007 TRAJE 000000003 0.00 692.86 Gserv Allocation Mfg Housing
43000 11/30/2007 TRAJE 000000003 0.00 785.24 Gserv Allocation Mfg Housing
Summaries:
Sum = 1,940.00 Sum = 1,940.00
Cost Center Code:R&D (1 item) BC Credit Sum = 0.00, BC Debit Sum = 1,455.00
Cost Center Code:Sls (1 item) BC Credit Sum = 0.00, BC Debit Sum = 970.00
Cost Center Code:WC01 (1 item) BC Credit Sum = 0.00, BC Debit Sum = 692.86
GL Account Posting Date Daybook Code Voucher BC Debit BC Credit Sub-Account Code Project Description
43000 11/30/2007 TRAJE 000000003 692.86 0.00 Gserv Allocation Mfg Housing
Summaries:
Sum = 692.86 Sum = 0.00
Cost Center Code:WC02 (1 item) BC Credit Sum = 0.00, BC Debit Sum = 785.24
Cost Center Code:WC03 (1 item) BC Credit Sum = 0.00, BC Debit Sum = 461.90
QAD
MC-3.1-1-ALL-270

Cost Center/GL/Sub-Account	Year / Post GL Pd Date	Voucher	Reference	Description	BC Debit	BC Credit/Curr	TC Debit	TC Credit	Qty Unit
Mfg	Manufacturing General			Opening Balance:	N/A	N/A			0.00
				Period Total:	1,940.00	1,940.00			
				Ending Balance:	N/A	N/A			
43000	Housing Expense			Opening Balance	N/A	N/A			0.00
				Period Total	1,940.00	1,940.00			
				Ending Balance	N/A	N/A			
Gsem	General Services			Opening Balance	N/A	N/A			0.00
				Period Total	1,940.00	1,940.00			
				Ending Balance	N/A	N/A			
				Transactions					
	2007/11/30/2007	TRAJE000000002		Allocation Housing All	1,940.00	0.00 EUR	1,940.00	0.00	0.00
	2007/11/30/2007	TRAJE000000003		Allocation Mfg Housing	0.00	692.88 EUR	0.00	692.88	0.00
	2007/11/30/2007	TRAJE000000003		Allocation Mfg Housing	0.00	765.24 EUR	0.00	765.24	0.00
	2007/11/30/2007	TRAJE000000003		Allocation Mfg Housing	0.00	481.90 EUR	0.00	481.90	0.00

Cost Center/GL/Sub-Account	Year / Post GL Pd Date	Voucher	Reference	Description	BC Debit	BC Credit/Curr	TC Debit	TC Credit	Qty Unit
				Opening Balance	N/A	N/A			175.00
				Period Total	1.00	0.00			
				Ending Balance	N/A	N/A			
				Transactions					
	2007/11/30/2007	TRAJE000000001		Machine Hours 11/2007	1.00	0.00 EUR	1.00	0.00	175.00 HRS
WC03	Work Center 3			Opening Balance:	N/A	N/A			100.00
				Period Total:	462.90	0.00			
				Ending Balance:	N/A	N/A			
43000	Housing Expense			Opening Balance	N/A	N/A			0.00
				Period Total	481.90	0.00			
				Ending Balance	N/A	N/A			
Gsem	General Services			Opening Balance	N/A	N/A			0.00
				Period Total	481.90	0.00			
				Ending Balance	N/A	N/A			
				Transactions					
	2007/11/30/2007	TRAJE000000001		Allocation Mfg Housing	481.90	0.00 EUR	481.90	0.00	0.00
Z90000	Machine Hours Center			Opening Balance	N/A	N/A			150.00
				Period Total	1.00	0.00			
				Ending Balance	N/A	N/A			

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Hands-On Exercises (US)

Exercise 1: Constant Value Source

Every month, housing expenses must be allocated to the following cost centers:

- Adm: 40%
- Log: 10%
- Mar: 20%
- Mfg: 30%

In this exercise, you will create the corresponding allocation, create an allocation batch, and run the batch for the GL period prior to the current period.

1 In GL Account Create (25.3.13.1), create account 7399.

Field	Data
Account	7399
Description	HC alloc offset
GL Type	Standard Account
Budget Enabled	Yes
Category	Expense
Posting tab	
Balance/P&L	Profit and Loss Account
Auto/Manual	Manual
Debit/Credit	Debit
Analysis tab	
Analysis	None

2 In Journal Entry Create (25.13.1.1), create a template for the posting:

Let the year and posting date default.

Field	Data
Daybook Code	Template
Save as Template	Yes
Description	CVS alloc template
Template Code	Templ 1

The following are the postings in 10USACO:

GL Account	GL Desc.	Sub-Account	Cost Center	BC Debit	BC Credit
7399	HC alloc offset				100.00
7300	Housing Expense	Gserv	Adm	40.00	
7300	Housing Expense	Gserv	Log	10.00	
7300	Housing Expense	Gserv	Mar	20.00	
7300	Housing Expense	Gserv	Mfg	30.00	

3 Save your changes.

4 In GL Allocation Create (25.3.22.1), create an allocation

Field	Data
Allocation Code	CVS H01
Description	CVS H01
Source Type	Constant Value
From Layers	Primary
Quantity	0
BC Amount	10,000.00
Fraction type	Constant Factor
From Layers	Primary
Constant Fraction	1.00
Daybook Code	TRAJE
Template Code	Templ 1
Layer Code	Trans-Approve

5 Save your allocation.

6 In GL Allocation Batch Create (25.3.22.6), create the following allocation batch:

Field	Data
Allocation Batch Code	ConstVS
Description	ConstVS
JE Group	GR1
Alloc Code	CVS H01

7 Save the allocation batch.

8 Run GL Allocation Batch Run Execute (25.13.9) in the previous period of the system date.

Field	Data
Allocation Batch	ConstVS
Source Period	Enter the period previous to the current.
Target GL Period	Specify the same period as the source.
Posting Date	The last day of the target GL period.

9 Click Search.

Field	Data
Grid	
Sequence	1
JE Group	GR1
Execute	Yes
Allocation Code	CVS H01
BC Amount	10,000.00
Posting Amount	10,000.00
Posting Reference	2013/TRAJE/nnn

10 Click Execute to run the allocation batch.

11 In Journal Entry View (25.13.1.3), search for transactions in daybook TRAJE with the same posting date as the allocation batch posting date you entered.

12 Review the transaction.

13 The same result can be obtained using another QAD Financials functionality: how?

Exercise 2: Allocation using WBS Source 10USACO

In this exercise, you will create a GL allocation for housing costs using:

1 Using GL Account Create (25.3.13.1) or GL Account Excel Integration (25.3.13.5), create the following accounts:

Acct	Desc	GL Type	Cat.	Analysis	Bal/P&L	DR/CR	Auto/Manual
7301	HC1	Standard Acct	Expense	None	P&L	Debit	Manual
7302	HC2	Standard Acct	Expense	None	P&L	Debit	Manual
7303	HC3	Standard Acct	Expense	None	P&L	Debit	Manual

2 In Journal Entry Create (25.13.1.1), create the following journal entry:

Field	Data
Posting Date	Last date of previous GL calendar period
Daybook Code	Template
Description	Alloc H02
Template Code	HC-alloc-1
Save as Template	Yes

The postings are:

GL Account	GL Desc.	Sub-Account	CC	Debit	Credit
7399	HC alloc offset				1000.00
7300	Housing Expense	Gserv	Adm	250.00	
7300	Housing Expense	Gserv	Mfg	450.00	
7300	Housing Expense	Gserv	R&D	100.00	
7300	Housing Expense	Gserv	Sls	200.00	

3 Click Save.

4 In Budget Create (25.5.1.1), create the following WBS structure.

Field	Data
Budget Code	HC-1
Description	HC-1
Used for Allocatiion	Yes

5 In the Budget Period tab, right-click in the grid and select Insert a New Row. Update the new row as follows:

Field	Data
Period Code	Period
Start Date	01/01/16
End Date	12/31/16

6 In the Levels tab, right-click in the grid and select Insert a New Row.

Field	Data
WB Level	1
COA Element	General Ledger

7 In the Structures tab, right-click in the grid and select Insert a New Row.

8 Name the topic HC alloc HO2.

9 Right-click the topic and select Topic Properties.

The Topic Properties window opens.

10 In the Topic Properties window, select the COA Link tab.

- Budget Group: leave blank.
- Link by Level: specify 7301, 7302, 7303

11 Click OK.

12 Change the budget status to Operational and save.

13 In GL Allocation Create (25.3.22.1), create the following allocation:

Field	Data
Allocation Code	HC-1
Description	HC-1
General tab	
Source Type	WBS Topic
Source WBS	HC alloc H02
From Layers	Primary
From Amt	Balance
Amt By	GL Period
Value Of	BC Amount
Fraction Type	Constant Factor
Constant Fraction	1
Daybook Code	TRAJE
Template Code	HC-alloc-1

14 Save the allocation.

15 In GL Allocation Batch Create (25.3.22.6), create the following batch.

Field	Data
Allocation Batch Code	HC
Description	HC

Field	Data
Right-click in the grid and insert a row.	
JE Group	GR-1
Alloc Code	HC-1

16 Save the allocation batch.

17 Open the QMI Documentation/Financial Activities folder on the desktop.

18 From the Allocations folder in the Financials Activities folder, download the file `Alloc HC act1 USD.xlsx` using File|Download in GoogleDocs.

The file is saved to My Documents/Downloads.

19 Return to the QAD application.

20 Use Journal Entry Excel Integration (25.13.1.6) to import the transactions in the `Alloc HC act1 USD.xlsx` Excel spreadsheet.

21 The result should be a transaction with the description “Housing exp.”

22 Modify the grid line in Journal Entry Excel Integration so the transaction uses the previous GL period to the current and the last posting date of the previous GL period.

23 Save the newly imported data.

24 Open GL Allocation Batch Run Execute (25.13.9) and specify the following:

Field	Data
Allocation Batch	HC
Source GL Period	Enter the period previous to the current.
Target GL Period	Specify the same period as the source.
Posting Date	Last date of previous GL period
Number of Groups	1
To Be Processed	1

25 Click Search. The allocation batch details display in the grid.

Field	Data
Sequence	1
JE Group	GR-1
Execute	Yes
Allocation Code	HC-1
Source WBS Topic	
BC Amount	4,850.00
Posting Amount	4,850.00
Posting Reference	2013/TRAJE/nnn

26 Run the allocation batch.

27 In Journal Entry View (25.13.1.3), review the newly created journal entry.

Field	Data
Posting Date	04/30/13
Daybook Code	TRAJE

Exercise 3: Proportional Allocation

In this exercise, you will create a GL allocation to further allocate housing costs allocated to the cost center Mfg.

1 In Journal Entry Create (25.13.1.1), create the following template:

Field	Data
Year	2013/5
Posting Date	05/31/13
Daybook Code	TEMPLATE
Save as Template	Yes
Description	Proportional Allocation Template
Template Code	Propalloc1

GL Acct	GL Desc	Sub-Acct	CC	Debit	Credit
7300	Housing Expense	GServ	Mfg		100.00
7300	Housing Expense	GServ	WC01	100.00	

2 Click Save.

3 In GL Account Create (25.3.13.1), create the following accounts. Ensure you select the Quantity field and enter a unit of measure.

GL Account	Description	GL Type	Category	Budget Enabled	Budget Group
Z9000	Machine HRS	Standard Account	Expense	Yes	<blank>
Z9001	Offset Mach. HRS	Standard Account	Expense	Yes	<blank>

Bal./P&L	DR/CR	Auto/Manual	Quantity	GL Acct UM	Analysis Type (Analysis Tab)
P&L	Debit	Manual	Yes	HRS	Cost Center
P&L	Debit	Manual	Yes	HRS	None

4 In Budget Create (25.5.1.1), create the allocation basis structure, and ensure that the Use Quantity Info field is selected.

Field	Data
Budget Code	Propalloc1
Description	Propalloc1
Used for Allocation	Yes
General tab	
Use Quantity Info	Yes
Budget Period tab	
Right-click in the grid and insert a row.	

Field	Data
Period Code	Period
Start Date	01/01/2013
End Date	12/31/2013

5 In the Levels tab, right-click in the grid and select Insert a New Row.

WB Level	COA Element	Used for Proportional Allocation
1	General Ledger	No (Cleared)
2	Cost Center	Yes (Selected)

6 In the Structures tab, right-click in the grid and select Insert a New Row twice.

7 Name the first topic “7300.”

8 Right-click the row and select Topic Properties.

9 On the COA Link tab, specify 7300 in the Link by Level field. Click OK.

10 Name the second topic “Z9000.”

11 Right-click the second topic row and select Topic Properties.

12 On the COA Link tab, specify Z9000 in the Link by Level field. Click OK.

13 In the first topic, right-click and select Insert Child Row.

14 Name the child topic “MFG” and then select Topic Properties.

15 On the COA Link tab, specify Mfg in the Link by Level field. Click OK.

16 In the second topic, right-click and select Insert Child Row.

17 Name the child topic “WC0x” and right-click and select Topic Properties.

18 On the COA Link tab, specify WC01, WC02, and WC03 in the Link by Level field, separated by commas. Click OK.

19 Go to the Versions tab and enter a version using the GL calendar year and GL period.

20 Change the budget status to Operational and save.

21 In GL Allocation Create (25.3.22.1), create the following allocation.

Ensure that you select the layers in which the data is posted.

Field	Data
Allocation Code	MfghrsHC-1
Description	MfghrsHC-1
Source Type	WBS Topic
Source WBS	Mfg
From Layers	Trans-Approve
From Amt	Balance
Amt By	GL Period
Value Of	BC Amount

Field	Data
Fraction Type	Proportional Fraction
From Layers	Trans-Approve
Denominator WBS	WC0x. See the important note below the table.
Amt By	GL Period
Value of	Qty
Daybook Code	TRAJE
Template Code	Propalloc1

Important The Denominator WBS must be the same as the topic code you assigned in step 16 on page 291.

22 In the Proportional Allocation tab, create three lines, one for each cost center. Right-click to insert a new row.

Field	Data
Cost Center Code	WC01
Cost Center Code	WC02
Cost Center Code	WC03

23 Save the allocation.

24 In GL Allocation Batch Create (25.3.22.6), create the following allocation batch.

Field	Data
Allocation Batch Code	MfgHC / MfgHC
JE Group	GR1
Alloc Code	MfghrsHC-1

25 Save your changes.

26 Open the QMI Documentation/Financial Activities folder on the desktop.

27 From the Allocations folder in the Financials Activities folder, download the file `Alloc mfgHC act2 USD.xlsx` using File|Download in GoogleDocs.

The file is saved to My Documents/Downloads.

28 Return to the QAD application.

29 Use Journal Entry Excel Integration (25.13.1.6) to import transactions in the `Alloc mfgHC act2 USD.xlsx` Excel spreadsheet.

The result should be a transaction with the description “Machine Hours.”

The actual amount to allocate to the cost center Mfg is 2000. This figure is the result of the previous hands-on.

a Ensure that, for cost center Mfg, you have 2000 on account 7300 (US).

b If you skipped the previous hands-on, post the 2000 as follows:

Daybook: TRAJE

Period: Previous GL period

GL 7300 (US) 2000 Debit USD

GL 2470 (US) 2000 Credit USD

If a sub-account is required, use Gserv.

30 In GL Allocation Batch Run Execute (25.13.9), run the following allocation batch:

Field	Data
Allocation Batch	MfgHC
Source GL Period	Previous GL period
Target GL Period	Previous GL period
Number of Groups	1
To Be Processed	1
Click Apply	

31 Go to Journal Entry View (25.13.1.3) and verify the entry.

GL Acct	Sub-Acct	CC	DR	CR
7300	GServ	Mfg	0	714.29
7300	Gserv	WC01	714.29	0
7300	GServ	Mfg	0	809.52
7300	GServ	WC02	809.52	0
7300	GServ	Mfg		476.19
7300	GServ	WC03	476.19	0

Hands-On Exercises (EMEA)

Exercise 1: Constant Value Source (EMEA)

Every month, housing expenses must be allocated to the following cost centers:

- Adm: 40%
- Log: 10%
- Mar: 20%
- Mfg: 30%

In this exercise, you will create the corresponding allocation, create an allocation batch, and run the batch for the GL period prior to the current period.

1 In GL Account Create (25.3.13.1), create account 7399.

Field	Data
Account	7399
Description	HC alloc offset
GL Type	Standard Account
Budget Enabled	Yes
Category	Expense

Field	Data
Posting tab	
Balance/P&L	Profit and Loss Account
Auto/Manual	Manual
Debit/Credit	Debit
Analysis tab	
Analysis	None

2 In Journal Entry Create (25.13.1.1), create a template for the posting:

Let the year and posting date default.

Field	Data
Daybook Code	Template
Save as Template	Yes
Description	CVS alloc template
Template Code	Templ 1

The postings are:

GL Account	GL Desc.	Sub-Account	Cost Center	BC Debit	BC Credit
7399	HC alloc offset				100.00
7300	Housing Expense	Gserv	Adm	40.00	
7300	Housing Expense	Gserv	Log	10.00	
7300	Housing Expense	Gserv	Mar	20.00	
7300	Housing Expense	Gserv	Mfg	30.00	

3 Save the template.

4 In GL Allocation Create (25.3.22.1), create an allocation

Field	Data
Allocation Code	CVS H01
Description	CVS H01
Source Type	Constant Value
From Layers	Primary
Quantity	0
BC Amount	10,000.00
Fraction Type	Constant Factor
From Layers	Primary
Constant Fraction	1.00
Daybook Code	TRAJE
Template Code	Templ 1
Layer Code	Trans-Approve

5 In GL Allocation Batch Create (25.3.22.6), create the following allocation batch:

Field	Data
Allocation Batch Code	ConstVS
Description	ConstVS
JE Group	GR1
Alloc Code	CVS H01

6 Save the allocation batch.

7 Run Allocation Batch Run Execute (25.13.9) in the previous period of the system date.

Field	Data
Allocation Batch	ConstVS
Source Period	Enter the period previous to the current.
Target GL Period	Enter the same period as the source.
Posting Date	Specify the last day of the period previous to the current.

8 Click Search.

Field	Data
Grid	
Sequence	1
JE Group	GR1
Execute	Yes (Selected)
Allocation Code	CVS H01
BC Amount	10,000.00
Posting Amount	10,000.00
Posting Reference	2013/TRAJE/nnn

9 Click Execute to run the allocation batch.

10 In Journal Entry View (25.13.1.3), search for transactions in daybook TRAJE with the same posting date as the allocation batch posting date you entered.

11 Review the transaction.

12 The same result can be obtained using another QAD Financials functionality: how?

Exercise 2: Allocation using WBS Source (EMEA)

In this exercise, you will create a GL allocation for housing costs.

1 Using GL Account Create (25.3.13.1) or GL Account Excel Integration (25.3.13.5), create the following accounts:

Acct	Desc	GL Type	Cat.	Analysis	Bal/P&L	DR/CR	Auto/Manual
7301	HC1	Standard Acct	Expense	None	P&L	Debit	Manual
7302	HC2	Standard Acct	Expense	None	P&L	Debit	Manual
7303	HC3	Standard Acct	Expense	None	P&L	Debit	Manual

2 In Journal Entry Create (25.13.1.1), create the following journal entry:

Field	Data
Posting Date	05/31/13
Daybook Code	Template
Description	Alloc H02
Template Code	HC-alloc-1
Save as Template	Yes (Selected)

The postings are:

GL Account	GL Desc.	Sub-Account	CC	Debit	Credit
7399	HC alloc offset				1000.00
7300	Housing Expense	Gserv	Adm	250.00	
7300	Housing Expense	Gserv	Mfg	450.00	
7300	Housing Expense	Gserv	R&D	100.00	
7300	Housing Expense	Gserv	Sls	200.00	

3 In Budget Create (25.5.1.1), create the following WBS structure.

Field	Data
Budget Code	HC-1
Description	HC-1
Used for Allocation	Yes
Budget Period tab	
Period Code	Period
Start Date	01/01/13
End Date	12/31/13
Level Tab	

4 Right-click in the grid and select Insert a New Row.

Field	Data
WB Level	1
COA Element	General Ledger

5 In the Structures tab, Insert a new row.

Topic: HC alloc HO2

6 Right-click the topic and select Topic Properties.

7 Select the COA Link tab.

- Budget Group: leave blank.
- Link by Level: use the lookup and select GL accounts 7301, 7302, 7303 (press Ctrl and click).

8 Click OK to save.

9 Change the budget status to Operational and save.

10 In GL Allocation Create (25.3.22.1), create the following allocation:

Field	Data
Allocation Code	HC-1
Description	HC-1
General tab	
Source Type	WBS Topic
Source WBS	HC alloc H02
From Layers	Primary
From Amt	Balance
Amt By	GL Period
Value of	BC Amount
Fraction Type	Constant Factor
Constant Fraction	1
Daybook Code	TRAJE
Template Code	HC-alloc-1

11 In GL Allocation Batch Create (25.3.22.6), create the following batch.

Field	Data
Allocation Batch Code	HC
Description	HC
Right-click in the grid and insert a row.	
JE Group	GR-1
Alloc Code	HC-1

12 Open the QMI Documentation/Financial Activities folder on the desktop.

13 From the Allocations folder in the Financials Activities folder, download the file `Alloc HC act1 GBP.xlsx` using File|Download in GoogleDocs.

The file is saved to My Documents/Downloads.

14 Return to the QAD application.

15 Use Journal Entry Excel Integration (25.13.1.6) to import the transactions in the `Alloc HC act1 GBP.xlsx` Excel spreadsheet.

The result should be a transaction with the description “Housing exp.”

16 Go to GL Allocation Batch Run Execute (25.13.9).

Field	Data
Allocation Batch	HC
Source GL Period	Previous GL period
Target GL Period	Previous GL period
Posting Date	Last date of GL period
Number of Groups	1
To Be Processed	1

17 Click Search. The allocation batch details display in the grid.

Field	Data
Sequence	1
JE Group	GR1
Execute	Yes
Allocation Code	HC-1
Source WBS Topic	
BC Amount	4,850.00
Posting Amount	4,850.00
Posting Reference	2013/TRAJE/nnn

18 In Journal Entry View (25.13.1.3), review the newly-created journal entry.

Field	Data
Posting Date	Last date of previous GL period
Daybook Code	TRAJE

Exercise 3: Proportional Allocation (EMEA)

In this exercise, you will create a GL allocation to further allocate housing costs currently allocated to the cost center Mfg.

1 In Journal Entry Create (25.13.1.1), create the template:

Field	Data
Year	2013/5
Posting Date	05/31/13
Daybook Code	TEMPLATE
Save as Template	Yes (check)
Description	Proportional Allocation Template
Template Code	Propalloc1

Description: Proportional allocation template

Template Code: Propalloc1

GL Acct	GL Desc	Sub-Acct	CC	Debit	Credit
7300	Housing Expense	GServ	Mfg		100.00
7300	Housing Expense	GServ	WC01	100.00	

2 In GL Account Create (25.3.13.1), create the following accounts. Ensure you select the Quantity field and enter a unit of measure.

GL Acct	Desc	GL Type	Cat.	Budget Enabled	Budget Group
Z9000	Machine HRS	Standard Account	Expense	Yes	<blank>
Z9001	Offset Mach. HRS	Standard Account	Expense	Yes	<blank>

Bal./P&L	DR/CR	Auto/Manual	Quantity	GL Acct UM	Analysis Type (Analysis Tab)
P&L	Debit	Manual	Yes	HRS	Cost Center
P&L	Debit	Manual	Yes	HRS	None

3 In Budget Create (25.5.1.1), create the allocation basis structure, and ensure that the Use Quantity Info field is selected.

Field	Data
Budget Code	Propalloc1
Description	Propalloc1
Used for Allocation	Yes
General tab	
Use Quantity Info:	Yes
Budget Period tab	
Right-click in the grid and insert a row.	
Period Code	Period
Start Date	01/01/2013
End Date	12/31/2013

4 In the Levels tab, right-click in the grid and select Insert a New Row.

WB Level	COA Element	Used for Proportional Allocation
1	General Ledger	No (uncheck)
2	Cost Center	Yes (check)

5 In the Structures tab, right-click in the grid and select Insert a New Row twice.

6 Name the first topic “7300.”

7 Right-click the row and select Topic Properties.

8 On the COA Link tab, specify GL account 7300 in the Link by Level field. Click OK.

9 Name the second topic “Z9000.”

10 Right-click the second topic row and select Topic Properties.

11 On the COA Link tab, specify GL account Z9000 in the Link by Level field. Click OK.

12 In the first topic, right-click and select Insert Child Row.

13 Name the child topic “MFG” and then select Topic Properties.

14 On the COA tab, specify cost center Mfg in the Link by Level field. Click OK.

15 In the second topic, right-click and select Insert Child Row.

16 Name the child topic “WC0x” and right-click and select Topic Properties.

17 On the COA Link tab, enter cost centers WC01, WC02, and WC0 in the Link by Level field, separated by commas. Click OK.

18 Go to the Versions tab and enter a version using the GL calendar year and GL period.

19 Change the budget status to Operational and save.

20 In GL Allocation Create (25.3.22.1), create the following allocation. Ensure that you select the layers in which the data is posted.

Field	Data
Allocation Code	MfghrsHC-1
Description	MfghrsHC-1
Source Type	WBS Topic
Source WBS	Mfg
From Layers	Trans-Approve
From Amt	Balance
Amt By	GL Period
Value Of	BC Amount
Fraction Type	Proportional Fraction
From Layers	Trans-Approve
Denominator WBS	WC0x See the important note below the table
Amt By	GL Period
Value of	Qty
Daybook Code	TRAJE
Template Code	Propalloc1

Important The Denominator WBS must be the same as the topic code you assigned in step 16 on page 299.

21 In the Proportional Allocation tab, create three lines, one for each cost center. Right-click to insert a new row.

Field	Data
Cost Center Code	WC01
Cost Center Code	WC02
Cost Center Code	WC03

22 In GL Allocation Batch Create (25.3.22.6), create the following allocation batch:

Field	Data
Allocation Batch Code	MfgHC
JE Group	GR1
Alloc Code	MfghrsHC-1

23 Open the QMI Documentation/Financial Activities folder on the desktop.

24 From the Allocations folder in the Financials Activities folder, download the file `Alloc mfgHC act2 GBP.xlsx` using File|Download in GoogleDocs.

The file is saved to My Documents/Downloads.

25 Return to the QAD application.

26 Use Journal Entry Excel Integration (25.13.1.6) to import transactions in the `Alloc mfgHC act2 GBP.xlsx` Excel spreadsheet.

The result should be a transaction with the description “Machine Hours.”

The actual amount to allocate to the cost center Mfg is 2000. This figure is the result of the previous hands-on.

a Ensure that, for cost center Mfg, you have 2000 on account 7300.

b If you skipped the previous hands-on, post the 2000 as follows:

Daybook: TRAJE

Period: Previous GL period

7300 2000 Debit GBP

2470 2000 Credit GBP

If a sub-account is required, use Gserv.

27 In GL Allocation Batch Run Execute (25.13.9), run the allocation batch.

Field	Data
Allocation Batch	MfgHC
Source GL Period	Previous GL period
Target GL Period	Previous GL period
Number of Groups	1
To Be Processed	1
Click Search	

28 In Journal Entry View (25.13.1.3), verify the entry.

GL Acct	Sub-Acct	CC	DR	CR
7300	GServ	Mfg	0	714.29
7300	Gserv	WC01	714.29	0
7300	GServ	Mfg	0	809.52
7300	GServ	WC02	809.52	0
7300	GServ	Mfg		476.19
7300	GServ	WC03	476.19	0

Chapter 11

COA Mask

Objectives

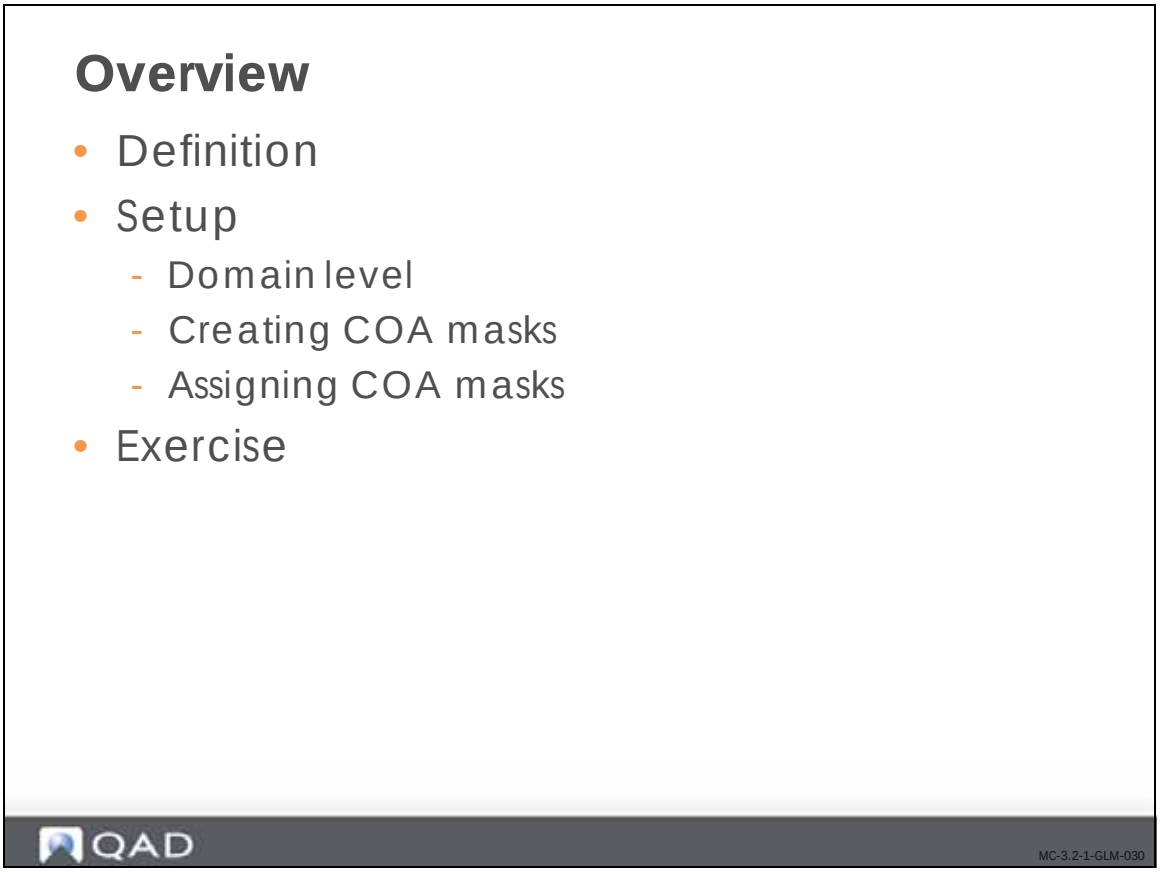
Objectives

- Learn about the concept of COA masks
- Learn how to activate, create, and assign COA masks
- Use the COA mask functionality to validate GL account, sub-account, cost center, and project combinations

QAD

MC-3.2-1-GLM-020

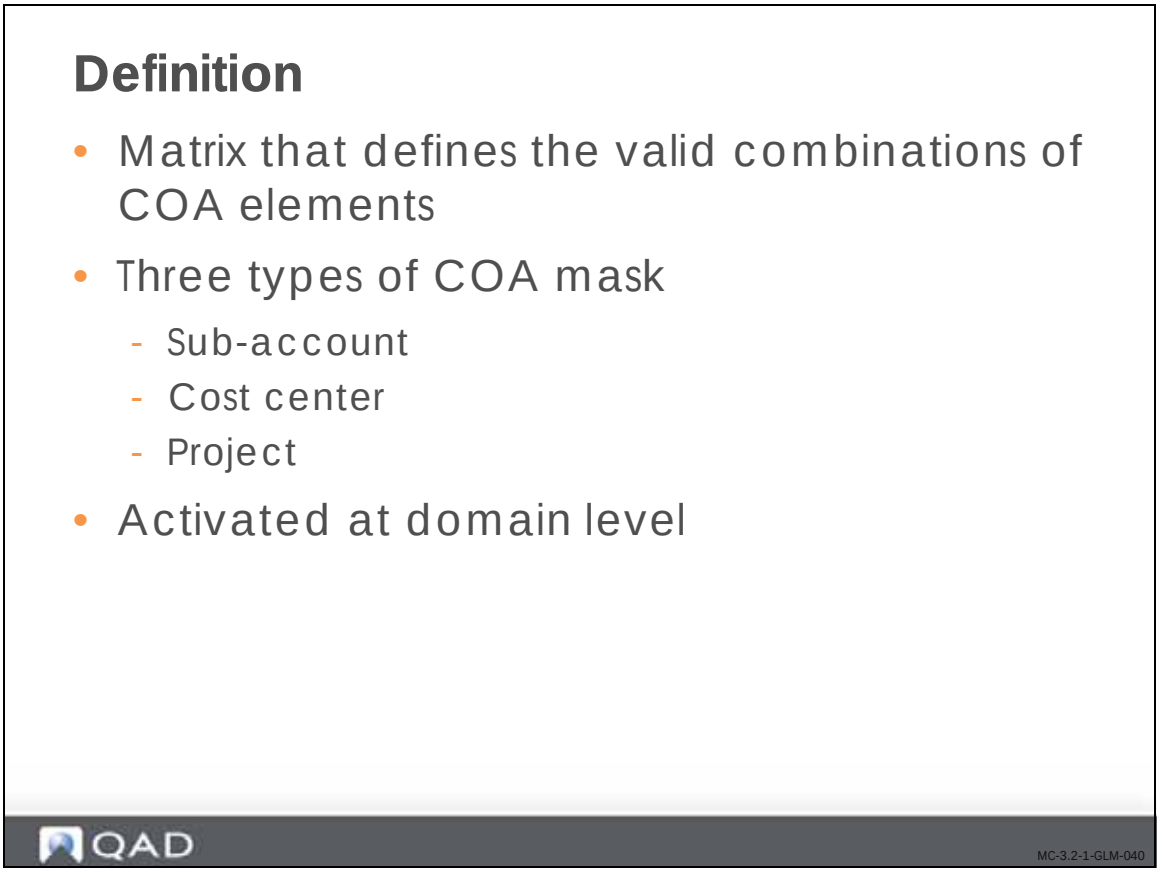
Overview



In this section, we will first define COA masks, and then learn how to set up and use them.

Finally, an exercise will let you practice your newly-acquired knowledge.

Definition



A COA mask is a matrix that defines the combinations of GL accounts, sub-accounts, cost centers, and projects to which you can post transactions.

Three COA element types have COA mask maintenance functions:

- Sub-Account Mask Create (25.3.9.1.1)

  You specify a sub-account COA mask code and list the ranges of GL accounts with which sub-accounts assigned that COA mask can be combined.
- Cost Center Mask Create (25.3.9.2.1)

  You specify a cost center COA mask code and list the ranges of GL accounts and sub-accounts with which cost centers assigned that COA mask can be combined.
- Project Mask Create (25.3.9.3.1)

  You specify a project COA mask code and list the ranges of GL accounts, sub-accounts, and cost centers with which projects assigned that COA mask can be combined.

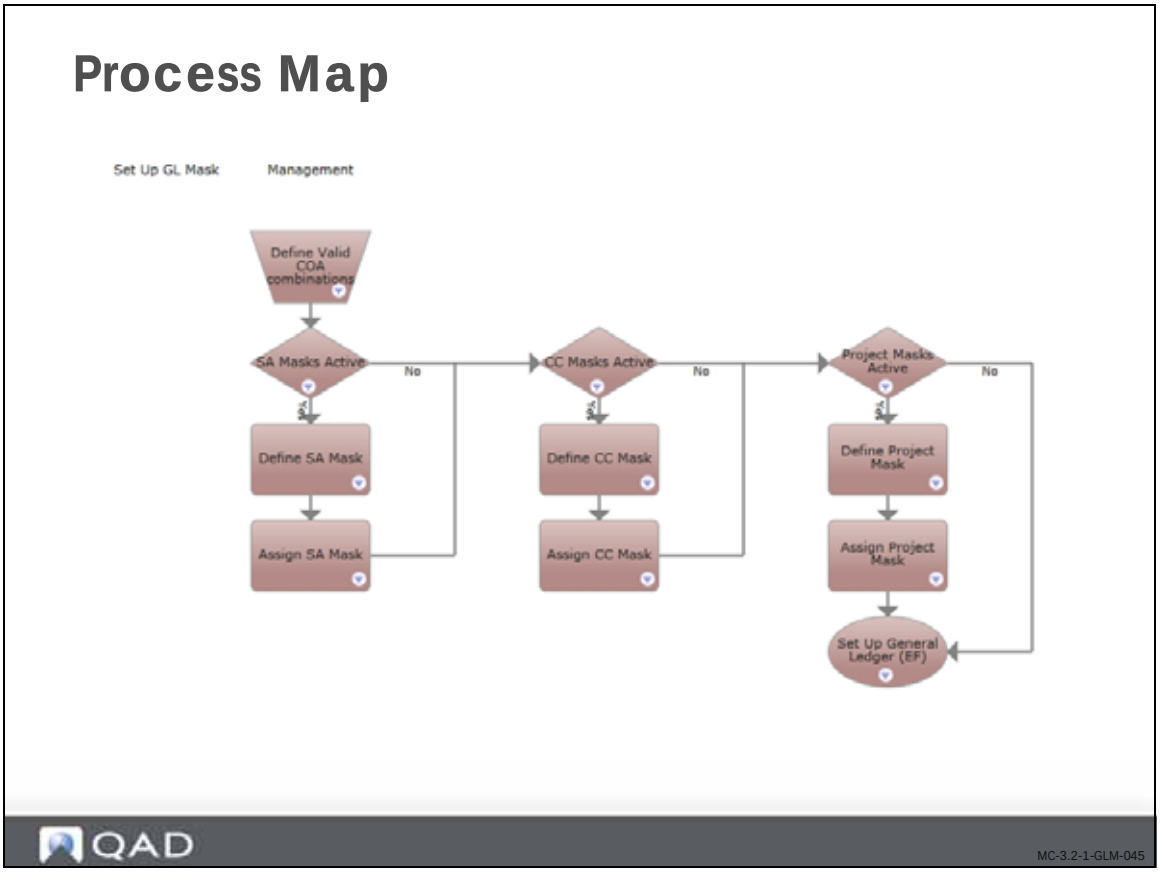
You assign a COA mask to an element using the COA Mask fields in Sub-Account Create/Modify, Cost Center Create/Modify, and Project Create/Modify. The COA mask code you specify must be of the same type as the COA element. One COA mask can be reused by many COA elements.

Important When you change COA mask settings for a domain, you must log off the application and log on again for the changes to take effect.

COA masks are defined at domain level, and as part of a shared set. Three control fields in Domain Create (36.1.1.1.1) indicate which COA mask types are active: Sub-Account Mask, Cost Center Mask, and Project Mask. You can only define a COA mask if it has been activated in Domain Create. Postings will be validated for each of the types marked as active.

The system will also use the COA masks you define to restrict lookup values wherever account combinations are entered. For example, if sub-account COA masks are active and you create a journal entry posting line and specify the GL account, the sub-account lookup will only let you select from the sub-accounts that can be used with the GL account you specified.

Process Map

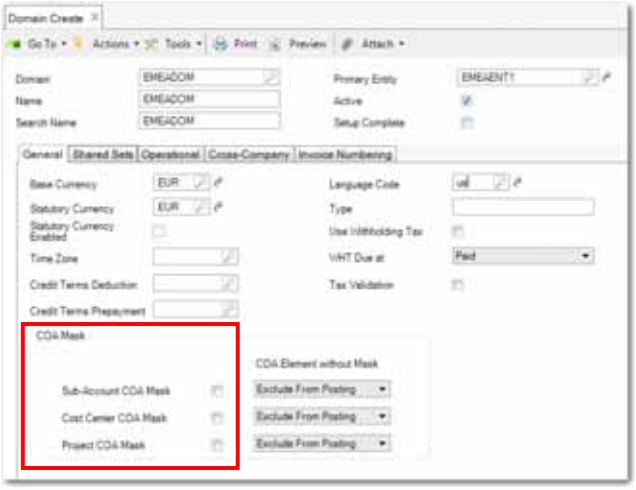


The slide shows the process map for activating, creating, and assigning COA masks.

Domain COA Mask Settings

Domain COA Mask Settings

- Domain Modify (36.1.1.1.2)
  - Valid for all entities in the current domain



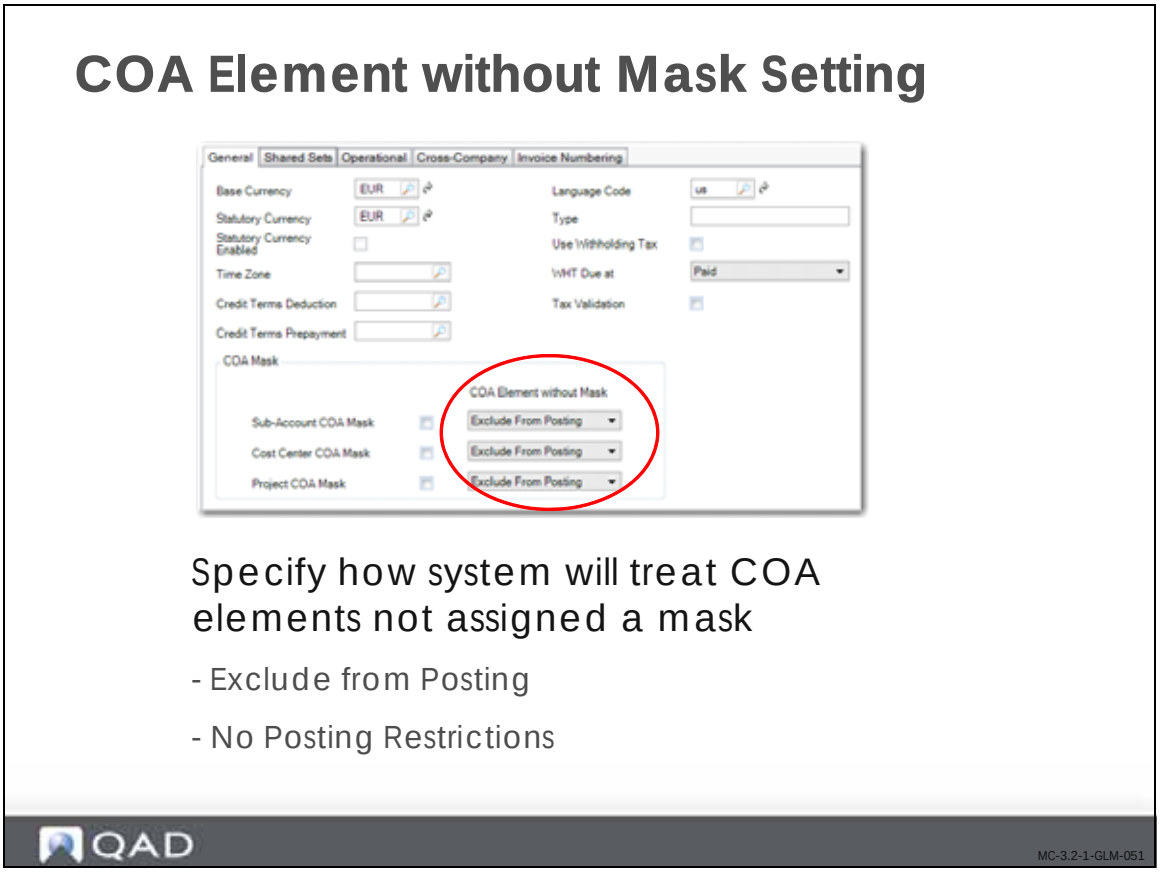
- Use the check boxes to activate combinations of GL elements to validate during posting.
  - Sub-accounts
  - Cost centers
  - Projects

QAD MC-3.2-1-GLM-050

The mask you define applies to all transactions posted for the current domain. You define the mask on the domain level, and it is used by all entities in the domain.

When you select Sub-Account Mask, Cost Center Mask, or Project Mask, you define the combinations of COA elements the system validates when you post a transaction.

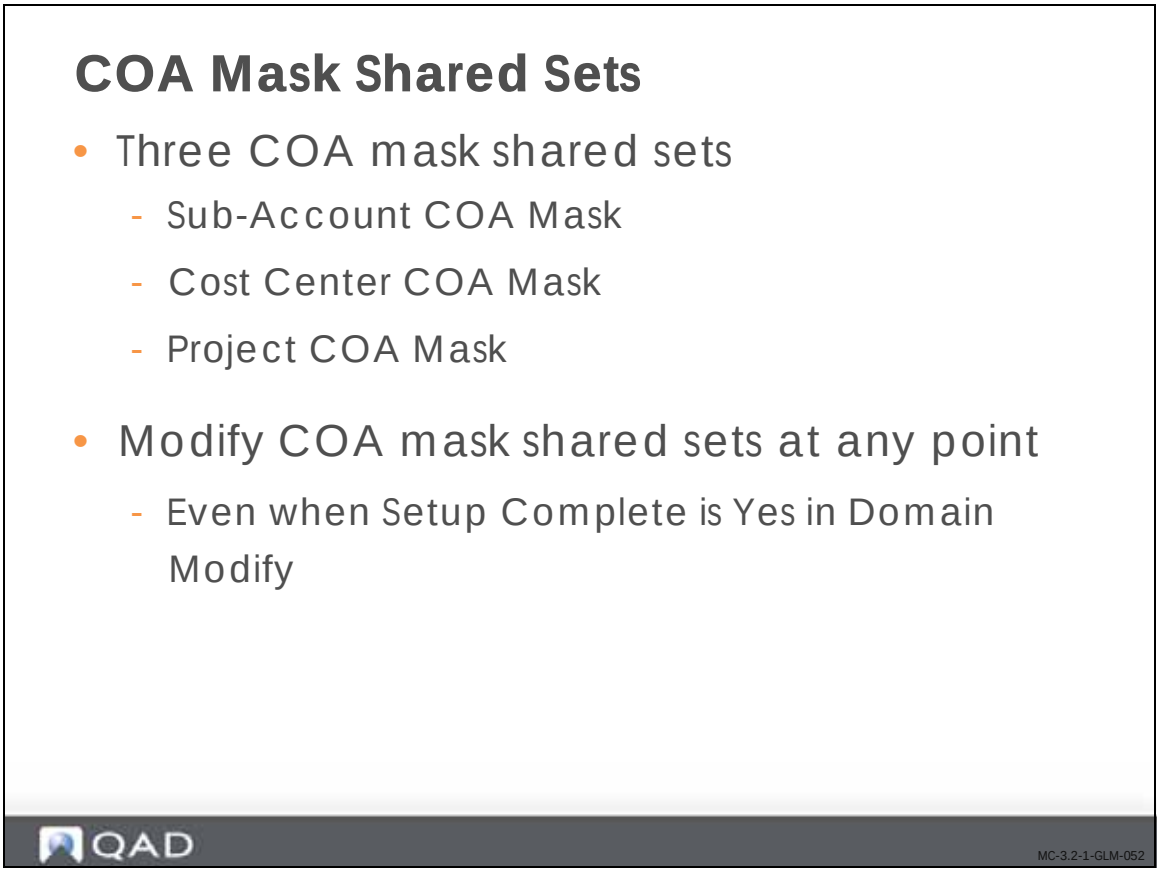
COA Element without Mask Setting



Three additional fields in Domain Create control how the system treats COA elements that are not assigned a COA mask. The COA Element without Mask fields contain two options: No Posting Restrictions and Exclude from Posting.

If, for example, you activate cost center masks and select No Posting Restrictions in the COA Element without Mask field, cost centers that are not assigned a COA mask can be used in any posting. Alternatively, if you select Exclude from Posting in the COA Element without Mask field, cost centers that are not assigned a COA mask cannot be used in postings.

COA Mask Shared Sets



COA masks can be shared by multiple domains, and are, therefore, stored at shared set level. You can share a set of COA masks across domains using shared sets of the following types:

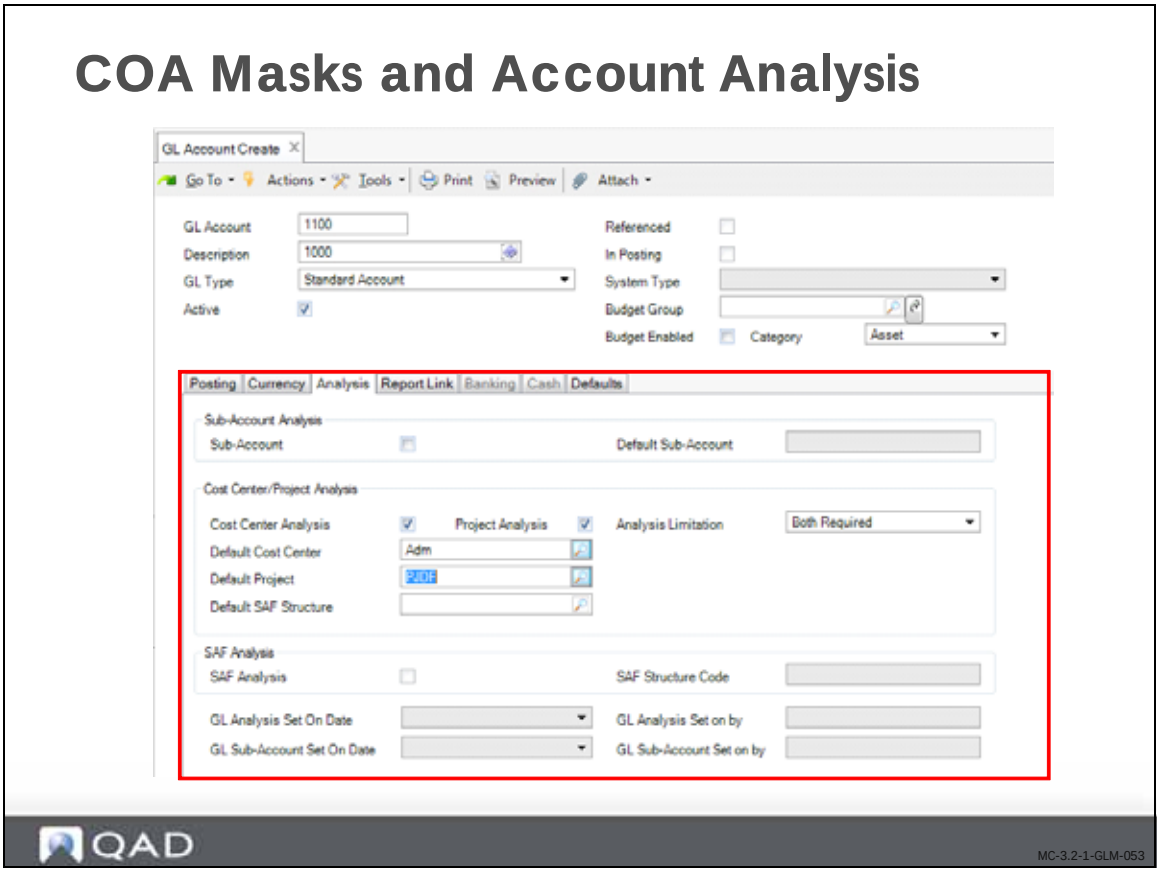
- Sub-Account Mask Shared Set
- Cost Center Mask Shared Set
- Project Mask Shared Set

The COA mask codes are stored in the shared sets, and you can share COA masks regardless of how the COA elements are shared. The COA mask ranges are stored according to the COA shared sets for the current domain.

Different domains that use the same chart of account can use different sets of COA masks. For example, the same sub-account COA mask can be shared by Domain1 and Domain2, a particular project COA mask can be used by Domain1 only, and a different project COA mask can be used by Domain2.

When domain setup is complete, you can no longer modify the shared sets assigned to the domain. However, this restriction does not apply to the three COA mask shared sets, which can be modified at any time.

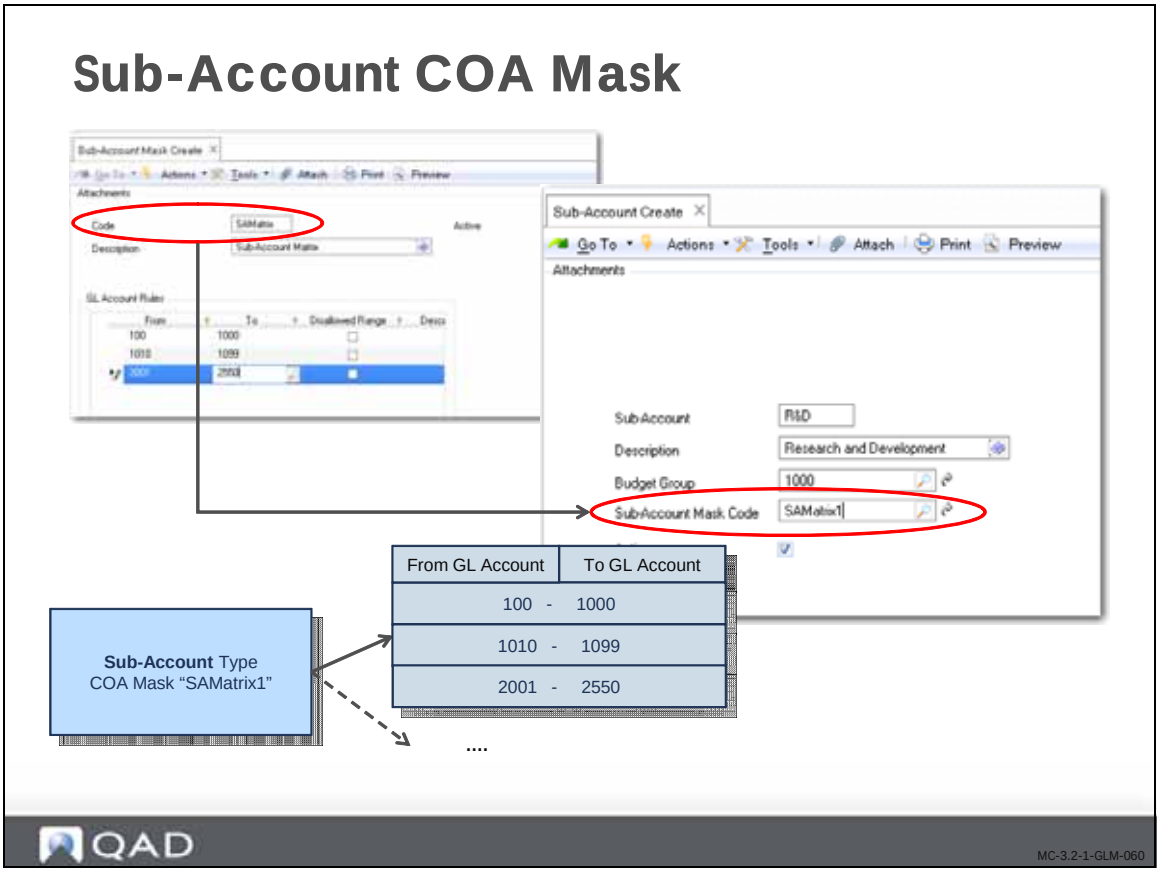
COA Masks and Account Analysis



COA mask combinations are synchronized with the analysis you define for GL accounts. You define the default sub-account, cost center, and project for an account on the account Analysis tab, and these combinations must match those of the active COA masks.

When you have defined Both as the analysis type, and At Least One or None as the analysis limitation in GL Account Create, the cost center and project analysis for the account does not have to match the COA mask combination exactly. Instead, the system checks the COA mask for at least one of the elements in the combination. If this is found, the posting is validated. If the COA mask contains any cost center or project in combination with the account, you can choose to leave the cost center or project fields blank for the account when generating a posting.

Sub-Account COA Mask



Use Sub-Account Mask Create (25.3.9.1.1) to define the ranges of GL accounts with which a sub-account can be combined in postings. The sub-account mask is then assigned to the sub-account using Sub-Account Create (25.3.17.1) or Sub-Account Modify (25.3.17.2). If you assign a COA mask to a sub-account, the system will prevent it from being used with any GL account not specified within the ranges defined in Sub-Account Mask Create.

Note You can use Sub-Account Mask Excel Integration (25.3.9.1.6) to import a sub-account mask matrix. You can also create a sub-account mask based on an existing mask using Sub-Account Mask Copy (25.3.9.1.5).

Use the grid to define the ranges of GL accounts that can be used with this sub-account. Each range is defined for the COA shared sets that the current domain is using. A range can be shared at COA shared set level.

You can define multiple ranges of GL accounts for which you can use the sub-account. Normal ranges cannot overlap. However, disallowed ranges can overlap normal ranges.

Specifying Ranges in Grids

To define the range of values for which a COA mask applies, insert a new row into the rules grid. Then, complete the From and To fields to define a range.

You must define at least one range in a COA mask grid. The ranges are stored according to the COA shared sets of the current domain, and a COA mask code can include ranges for different COA shared sets.

Blanks

If you specify a non-blank value in the From field and a blank in the To field, this indicates that you want to map all values beginning with the non-blank value to the end of the range.

If you specify a blank in the From field and a non-blank value in the To field, this indicates that you want to map all values from the beginning of the range up to the non-blank value.

Assigning Masks

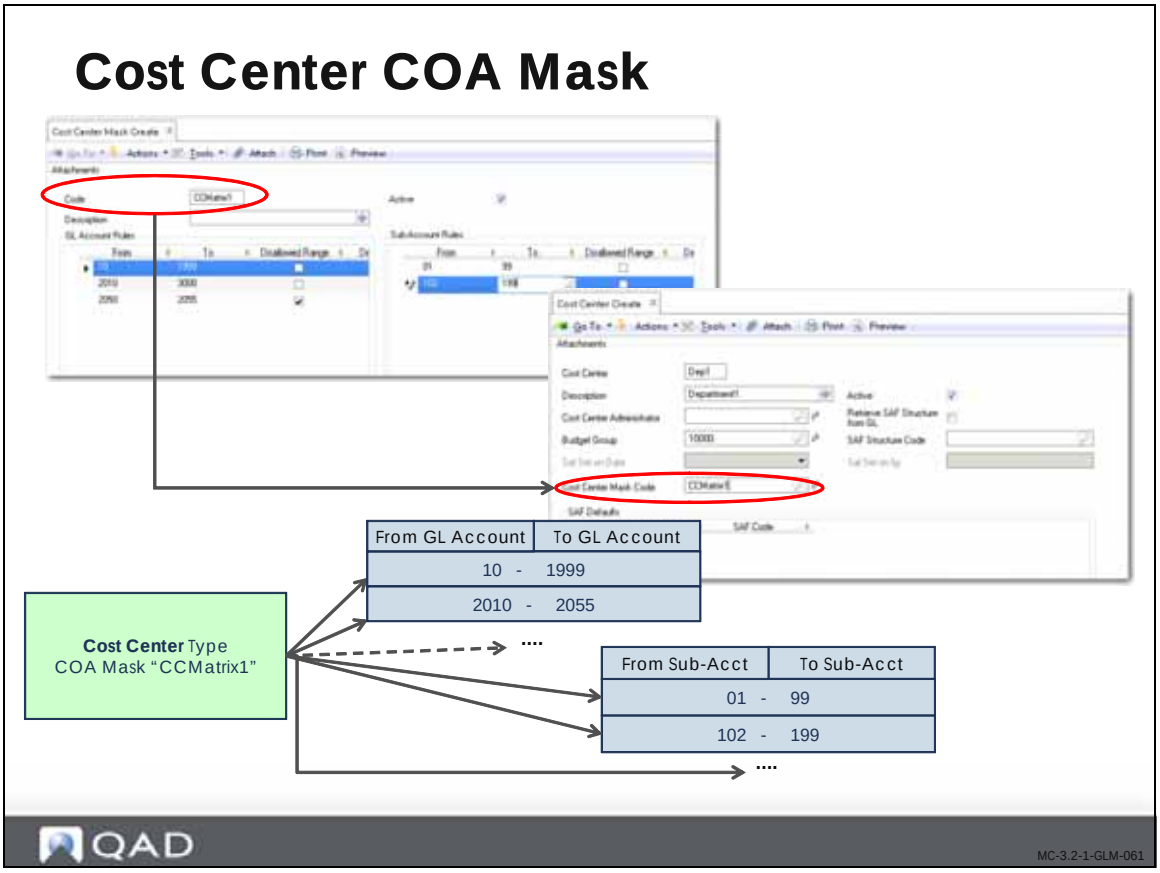
You assign a COA mask code to a sub-account by specifying the mask in the Sub-Account Mask Code field in Sub-Account Create or Sub-Account Modify. You can click the lookup to list all sub-account masks for the assigned sub-account COA mask shared set.

You can also create a new sub-account mask as required by clicking the GoTo button to the right of the Sub-Account Mask Code field. The GoTo opens Sub-Account Mask Create (25.3.9.1.1). If you have already assigned a COA mask to the sub-account, the GoTo button displays Sub-Account Mask View (25.3.9.1.3) and also lets you display a related view showing all sub-accounts linked to that COA mask.

The COA Element without Mask field in Domain Create controls how the system treats sub-accounts that are not assigned a sub-account COA mask. If sub-account COA masks are enabled for the current domain and the COA Element without Mask field is set to Exclude from Posting, the system prevents all sub-accounts without a sub-account COA mask from being used in postings. If the COA Element without Mask field is set to No Posting Restrictions, you can use the sub-account with any GL account.

If sub-account COA masks are not enabled for the current domain, the Sub-Account Mask Code field is read-only.

Cost Center COA Mask



Use Cost Center Mask Create (25.3.9.2.1) to specify the ranges of GL accounts and sub-accounts that you can use in combination with a particular cost center.

Note You can use Cost Center Mask Excel Integration (25.3.9.2.6) to import a cost center mask matrix. You can also create a cost center mask based on an existing mask using Cost Center Mask Copy (25.3.9.2.5).

You then associate the COA mask with a cost center by specifying the cost center COA mask code in the COA Mask field in the cost center record in Cost Center Create.

If you have activated cost center COA masks in Domain Create, you must specify ranges in at least one of the two grids in Cost Center Mask Create.

Assigning Masks

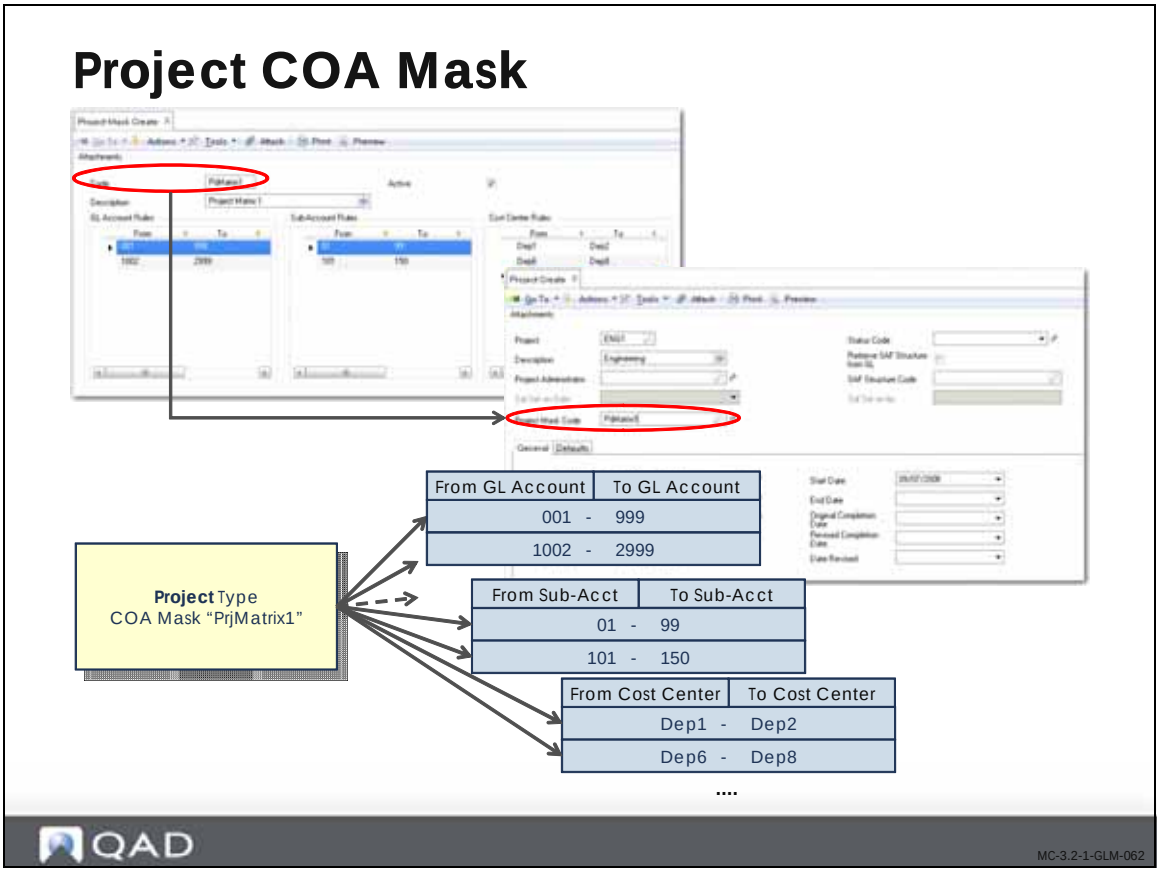
You assign a COA mask code to a cost center by specifying it in the Cost Center Mask Code field in Cost Center Create or Cost Center Modify. You can click the lookup to list all cost center masks for the assigned cost center COA mask shared set.

You can also create a new cost center mask as required by clicking the GoTo button to the right of the Cost Center Mask Code field. The GoTo opens Cost Center Mask Create (25.3.9.2.1). If you have already assigned a COA mask to the cost center, the GoTo button displays Cost Center Mask View (25.3.9.2.3) and also lets you display a related view showing all cost centers linked to that COA mask.

The COA Element without Mask field in Domain Create controls how the system treats cost centers that are not assigned a cost center COA mask. If cost center COA masks are enabled for the current domain and the COA Element without Mask field is set to Exclude from Posting, the system prevents all cost centers without a cost center COA mask from being used in postings. If the COA Element without Mask field is set to No Posting Restrictions, you can use the cost center in combination with any GL account or sub-account.

If cost center COA masks are not enabled for the current domain, the Cost Center Mask Code field is read-only.

Project COA Mask



Use Project Mask Create (25.3.9.3.1) to specify the ranges of GL accounts, sub-accounts, and cost centers that you can use in combination with a particular project when posting.

Note You can use Project Mask Excel Integration (25.3.9.3.6) to import a project mask matrix. You can also create a project mask based on an existing mask using Project Mask Copy (25.3.9.3.5).

You then associate the COA mask with a project by specifying the project COA mask code in the COA Mask field in Project Create.

If you have activated project COA masks in Domain Create, you must specify ranges in at least one of the three grids in Project Mask Code Create.

Assigning Masks

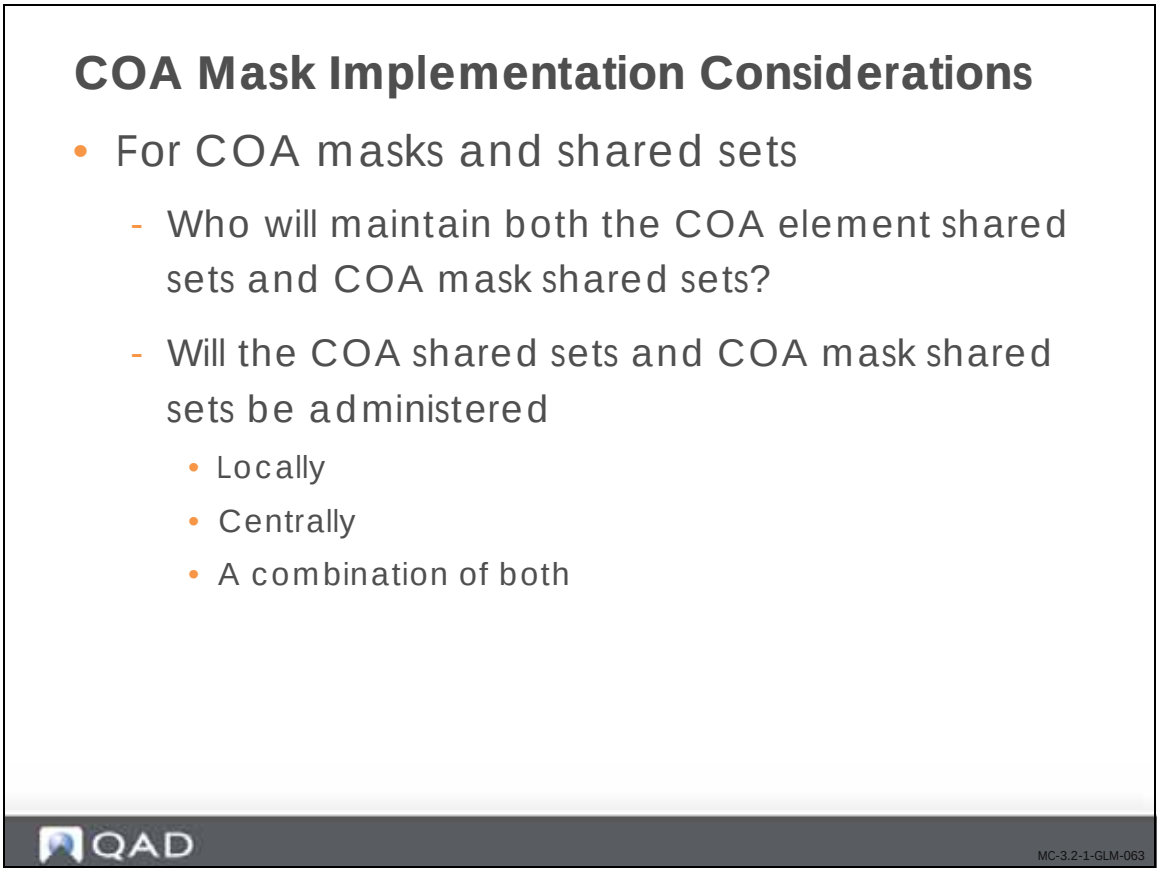
You assign a COA mask code to a project by specifying it in the Project Mask Code field in Project Create or Project. Click the lookup to list all project masks for the assigned project COA mask shared set.

You can also create a new project mask as required by clicking the GoTo button to the right of the Project Mask Code field. The GoTo opens Project Mask Create (25.3.9.3.1). If you have already assigned a COA mask to the project, the GoTo button displays Project Mask View (25.3.9.3.3) and also lets you access a related view showing all projects linked to that COA mask.

The COA Element without Mask field in Domain Create controls how the system treats projects that are not assigned a project COA mask. If project COA masks are enabled for the current domain and the COA Element without Mask field is set to Exclude from Posting, the system prevents all projects without a COA mask from being used in postings. If the COA Element without Mask field is set to No Posting Restrictions, you can use the project in combination with any GL account, sub-account, or cost center.

If project COA masks are not enabled for the current domain, the Project Mask Code field is read-only.

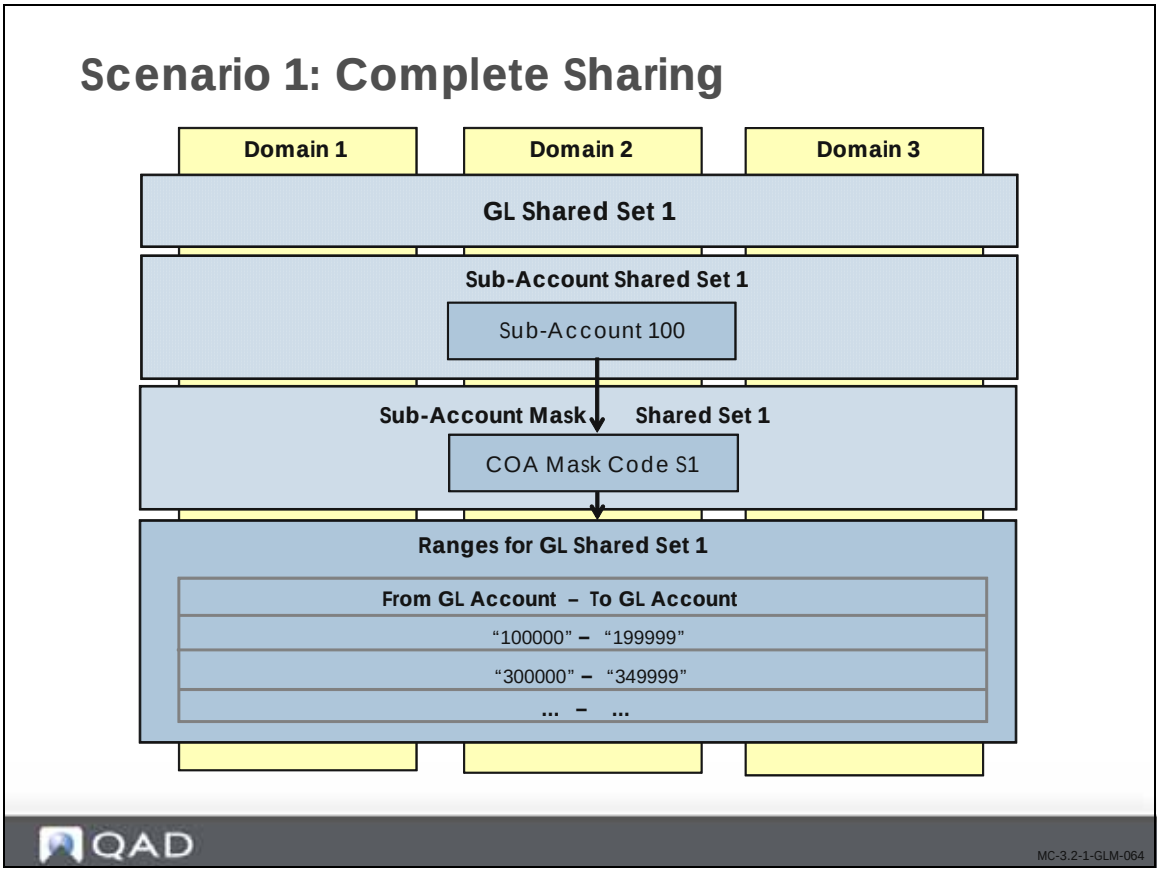
COA Mask Implementation Considerations



Before implementing COA masks and shared sets, you must first determine who will be responsible for maintaining both the COA element shared sets and COA mask shared sets. You must also consider whether the COA shared sets and COA mask shared sets will be administered locally or centrally, or a combination of both.

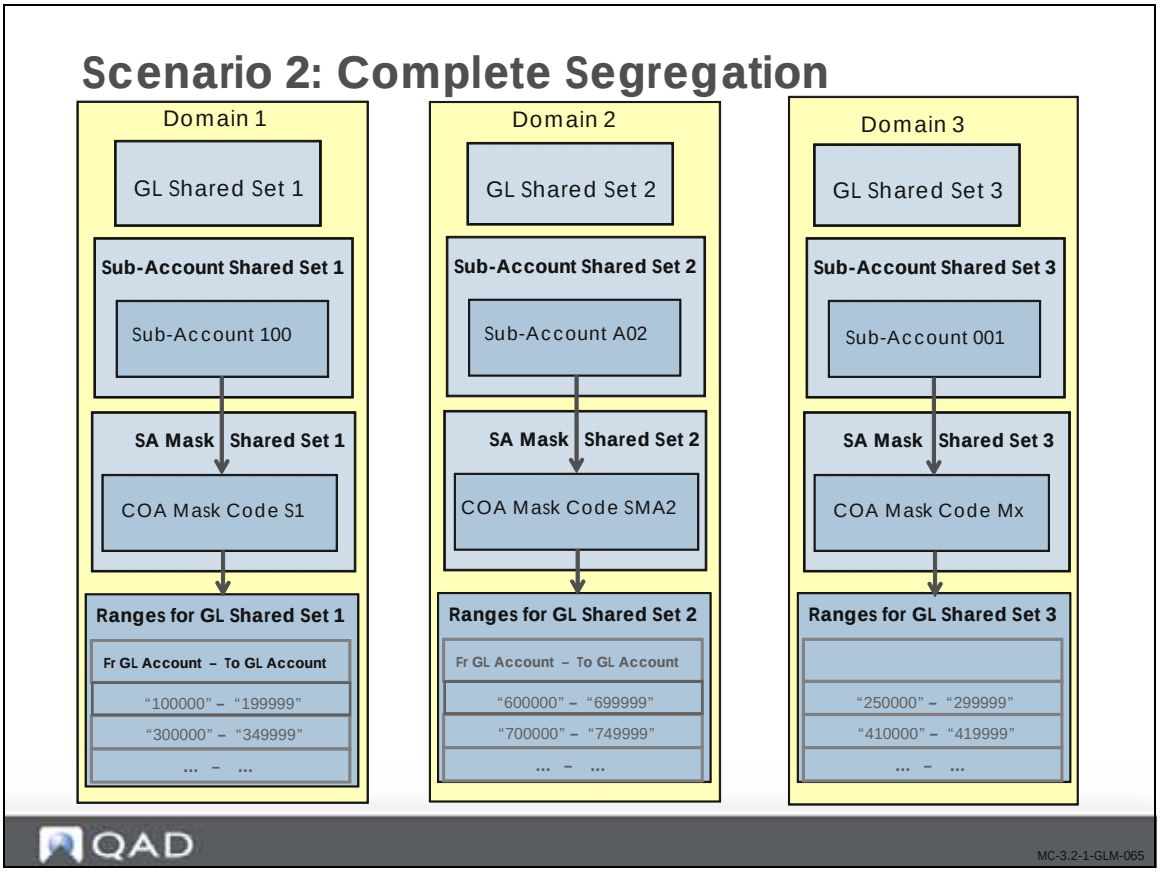
Both of these considerations greatly influence the setup of the COA masks and their shared sets, as described in the following scenarios.

Scenario 1: Complete Sharing



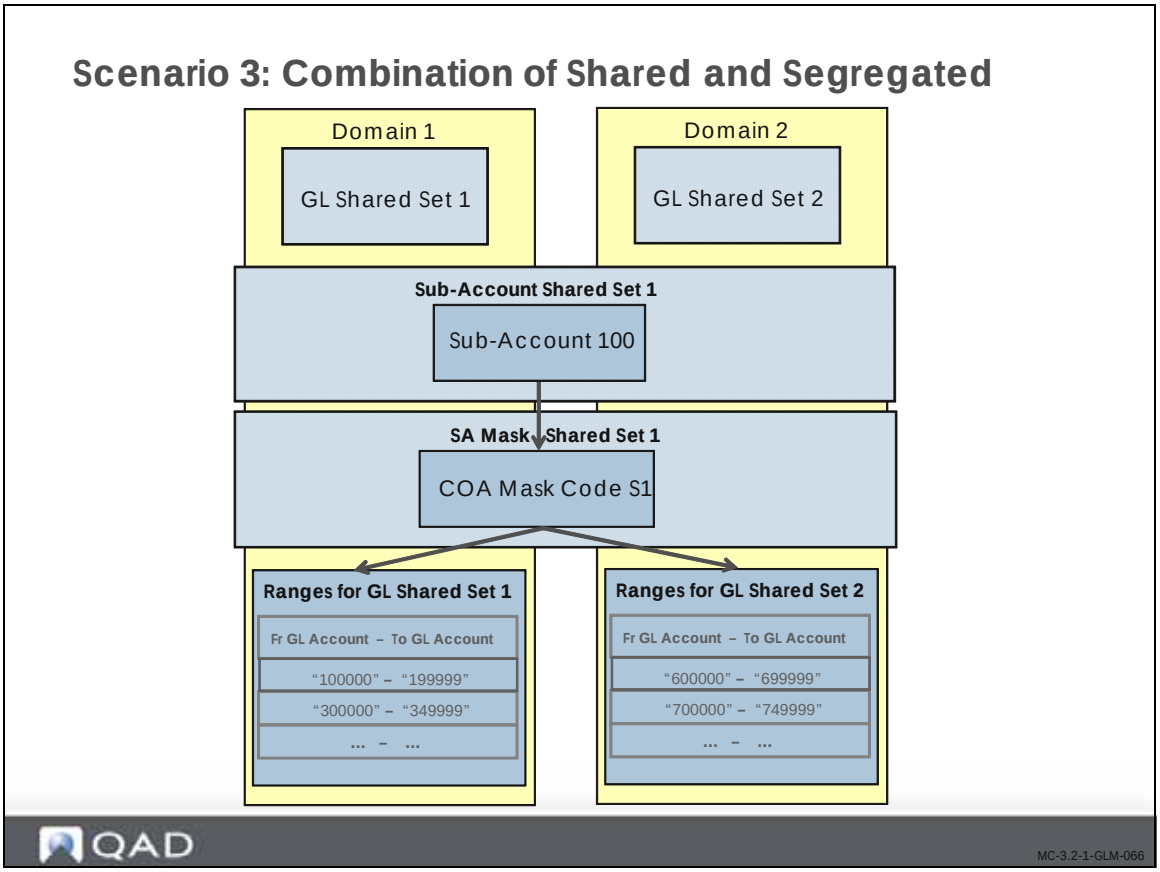
In this scenario, the GL shared set, sub-account shared set, and sub-account mask shared sets are administered centrally in the organization's head office by corporate finance and accounting personnel. The data is then shared across all domains.

Scenario 2: Complete Segregation



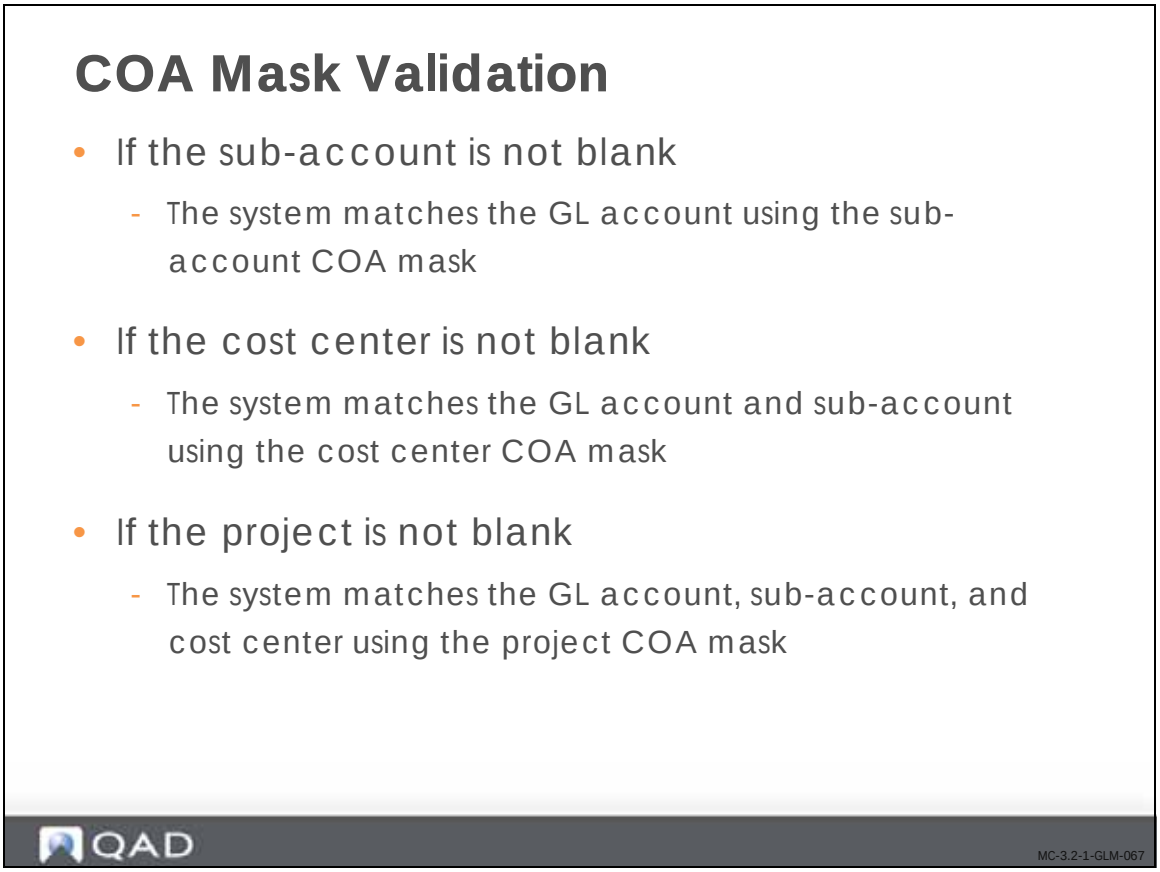
In this scenario, the GL account, sub-account, and sub-account mask shared sets are maintained locally by each site's finance and accounting personnel. An organization can separate shared sets due to varying levels of complexity within the COA and within the COA masks for each domain.

Scenario 3: Combination of Shared and Segregated



In scenario 3, the GL shared sets are not shared across domains and are maintained locally by each site's finance and accounting personnel. The sub-account and sub-account mask shared sets are shared across domains, and are maintained by one person centrally in the corporate head office.

COA Mask Validation



The system validates the COA mask for a given GL combination using the following method:

- If the sub-account in the GL combination is not blank, the system matches the GL account using the sub-account COA mask.
- If the cost center in the GL combination is not blank, the system matches the GL account and sub-account using the cost center COA mask.
- If the project in the GL combination is not blank, the system matches the GL account, sub-account, and cost center using the project COA mask.

Validation Example

Validation Example

Sub-Account Mask assigned to sub-account 28

GL Account From	GL Account To	Disallowed?
010	1999	No
2002	3000	No
2050	2055	Yes

Cost Center Mask assigned to cost center Dep2

GL Account From	GL Account To	Disallowed?	Sub-Account From	Sub-Account To	Disallowed?
010	1999	No	01	99	No
2002	3000	No	102	199	No
2050	2055	Yes			

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Sub-Account 28 and cost center Dep2 are assigned the COA masks shown in the slide.

Validation Example – Continued

Project Mask assigned to project Eng

GL From	GL To	Disallowed?	S-A From	S-A To	Disallowed?	CC From	CC To	Disallowed?
001	9999	No	01	99	No	Dep1	Dep2	No
100		No	101	150	Yes	Dep6	Dep8	Yes
						Dep8	Dep9	No

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MC-3.2-1-GLM-070

Project Eng is assigned the COA mask shown in the slide.

When postings are validated all three masks are used in conjunction to form a validation matrix.

Postings and Validation

Postings and Validation

GL Account	Sub-Account	Cost Center	Project	Validated?
998	100	Dep1	Eng	No
1004	28	Dep2	Eng	Yes
2000	10	Dep8	Eng	No
2997	123	Dep9	Eng	No

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The postings in the above slide are validated using the COA masks shown in the previous two slides.

The posting with GL account 998, sub-account 100, and cost center Dep1 fails to validate because sub-account 100 is not defined in the sub-account range for the project mask.

The posting with GL account 1004, sub-account 28, and cost center Dep2 is validated because the project mask assigned to project Engineering includes GL account 1004, sub-account 28, and cost center Dep2 within its valid ranges.

The posting with GL account 200, sub-account 10, and cost center Dep8 fails to validate because Dep8 is part of a disallowed range.

The posting with GL account 2997, sub-account 123, and cost center Dep9 fails to validate because sub-account 123 is part of a disallowed range.

Hands-On Exercise

Log in to 10USACO or 22UKCO

Enable the COA masks for Sub-Account and Cost Center.

Create masks for sub-accounts and cost centers. Assign the masks to the relevant sub-accounts and cost centers.

Test the COA mask by creating journal entries with valid, and invalid COA mask combinations

After the exercise, disable the COA masks again in Domain Modify (36.1.1.1.2)

Steps

1. Open Domain Modify (36.1.1.1.2).
2. Enter the domain name that is relevant to your chosen entity (10USA or 22UK).
3. On the General tab, enable sub-account and cost center COA masks by selecting the relevant fields.
4. Set the COA Element without Mask fields to Exclude from Posting.
5. Save your changes.
6. Log off the application and log in again
7. In Sub-Account Mask Create (25.3.9.1.1), create the sub-account mask SAMK1.

   In the GL Account Rules grid, enter the following for both 10USACO and 22UKCO:

Row	From	To	Disallowed Range
1	2470	2470	No
2	7000	7999	No
3	7500	7500	Yes

8. Save the mask.
9. In Sub-Account Modify (25.3.17.2), assign the mask to sub-accounts GServ, Mech, and Elec.
10. In Cost Center Mask Create (25.3.9.2.1), create the cost center mask CCMK1.

    For both 10USACO and 22UKCO, enter the following combinations:

GL Account Rules				Sub-Account Rules			
Row	From	To	Disallowed Range	Row	From	To	Disallowed Range
1	2470	2470	No	1	Elec	Mech	No
2	7000	7999	No	2	Ho	Ho	Yes
3	7500	7500	Yes				

11. Save the mask.
12. Using Cost Center Modify (25.3.20.2), assign the CCMK1 mask to cost centers Adm and Mar.
13. Save your changes.
14. Go to Journal Entry Create (25.13.1.1).
15. Create two journal entries using daybook TRAJE:
    - 1 journal entry with a valid combination of accounts
    - 1 journal entry where all combinations are invalid

In both 10USACO and 22UKCO, enter the following journal entries:

JE1				
Account	**Sub-Account**	**Cost Center**	**Debit**	**Credit**
7000	Gserv	ADM	1000	
7010	Gserv	ADM	2000	
2470	Gserv			3000

JE2				
Account	**Sub-Account**	**Cost Center**	**Debit**	**Credit**
7500	Ho	Fin	5000	
2470	Ho			5000

16 Verify that the system validates as intended.

17 Disable the masks again in Domain Modify (36.1.1.1.2).

18 Log off the application, and log in again.

Chapter 12

User-Defined Fields

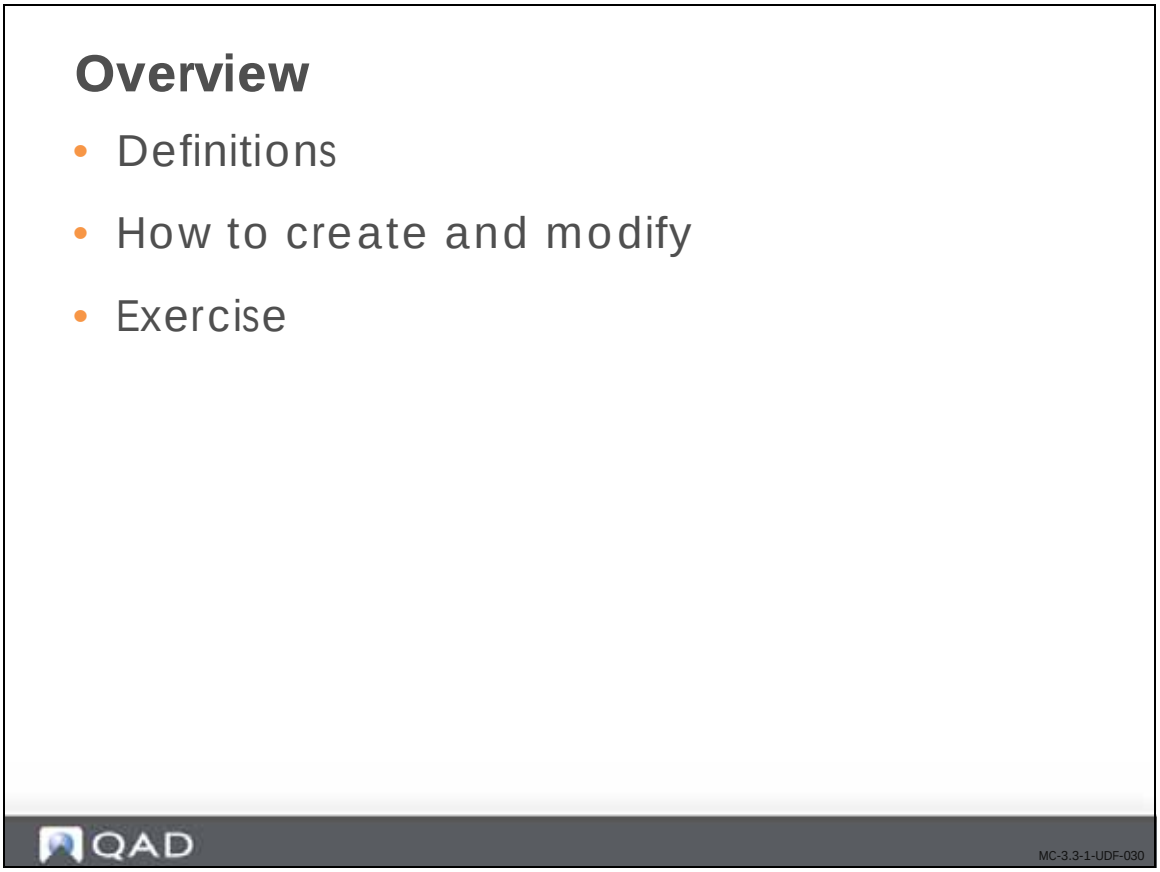
Objective

Objective

- Learn how to create and use user-defined fields in QAD Enterprise Applications

MC-3.3-1-UDF-020

Overview

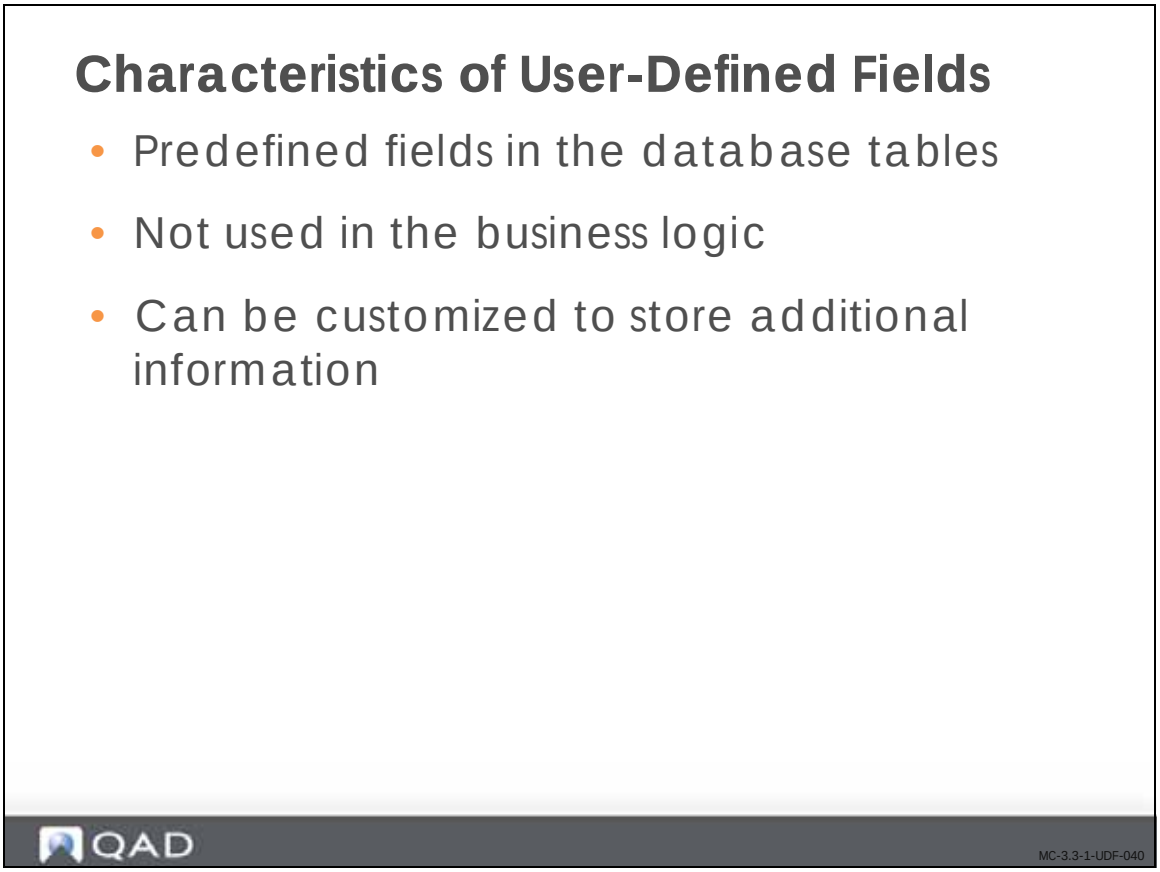


In this section, you will learn how to create and use user-defined fields.

We will first review some definitions, then learn the process.

Hands-on exercises are provided in the following chapter on screen customization.

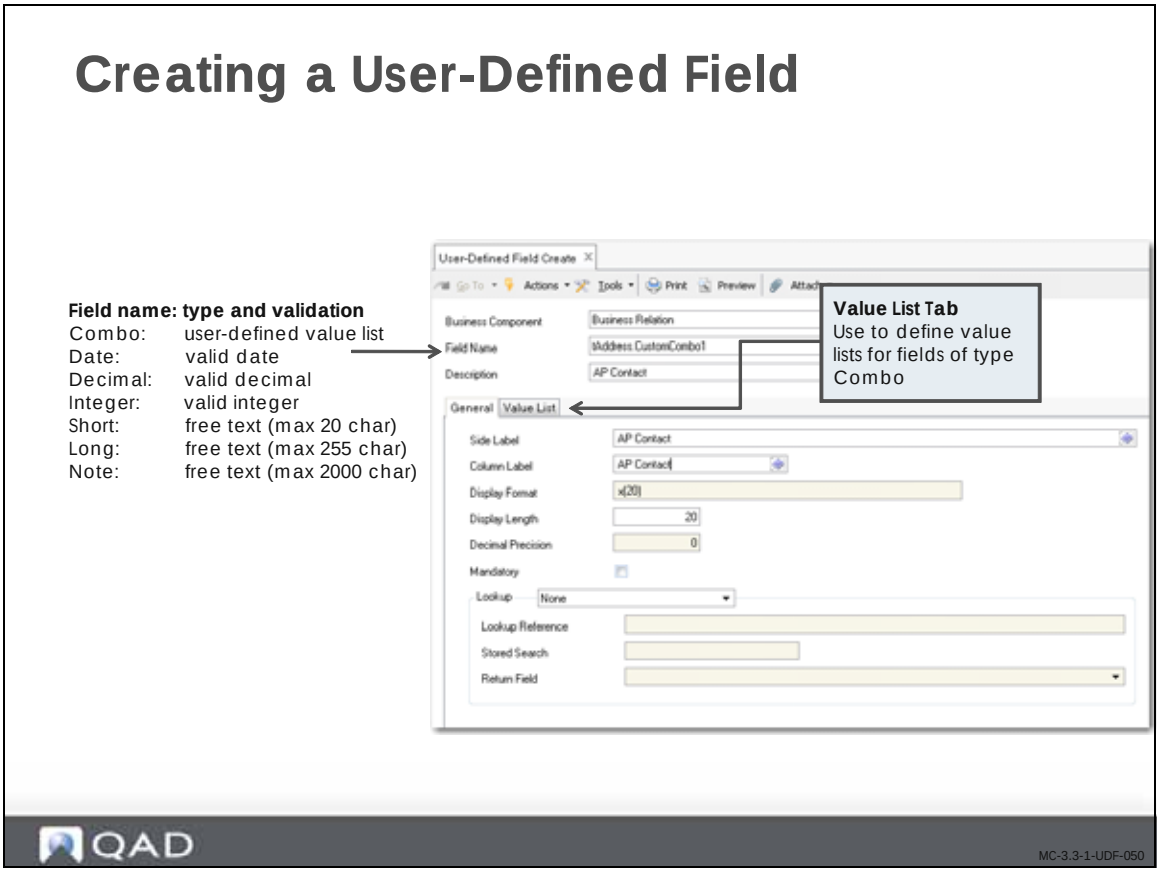
Characteristics of User-Defined Fields



User-Defined Fields (UDFs) are predefined fields in the database tables that are not used in the business logic, and can be customized to store additional information specific to your business requirements.

UDFs are available for all Enterprise Financials business components in the Financials module, both on master data, such as business relations and suppliers, and for transactional components, such as supplier invoices.

Creating a User-Defined Field



Use the User-Defined Field activities (36.4.12) to create, modify, view, and delete UDFs.

The following UDFs are available for each category of field:

Type	Number	Validation
Combo	10	User-defined value list.
Date	5	Valid date.
Decimal	5	Valid decimal.
Integer	5	Valid (signed) integer.
Short	10	Free text (maximum 20 characters) or value retrieved through lookup.
Long	2	Free text (maximum 255 characters) or value retrieved through lookup.
Note	1	Free text (maximum 2000 characters).
QAD Reserved	4	These fields are reserved for use by QAD only. There are four types of QAD reserved field: • QADCO1: Free text (maximum 20 characters) or value retrieved through lookup • QADCO2: Free text (maximum 255 characters) or value retrieved through lookup • QADT01: Valid date • QADD01: Valid decimal

Lookup. Select the type of lookup to associate with the new field. The Lookup field is enabled if you select a CustomShort, CustomLong, or CustomCombo type field in the Field Name field in the header.

The possible values are:

- None: If you select the None option, the Lookup Reference, Stored Search, and Return Field are disabled.
- Stored Search: If you select the Stored Search option, you must use the Lookup Reference and Stored Search fields to identify the stored search.
- Browse: If you select the Browse option, the Stored Search field is updated to display the label Browse and the Lookup Reference field becomes read-only. You then use the Browse field to specify the relevant browse definition.
- Generalized Code: If you select Generalized Code, the Lookup Reference field lets you select values from the Generalized Codes (code_mstr) table. If you select the Generalized Code option for a CustomCombo type field, the Value List tab is disabled in the User-Defined Field screen.
- Other: If you select Other, you can define a custom query in the Lookup Reference field. The Stored Search and Return Field fields are disabled.

If you are creating a CustomCombo field, you can only select the values None or Generalized Code.

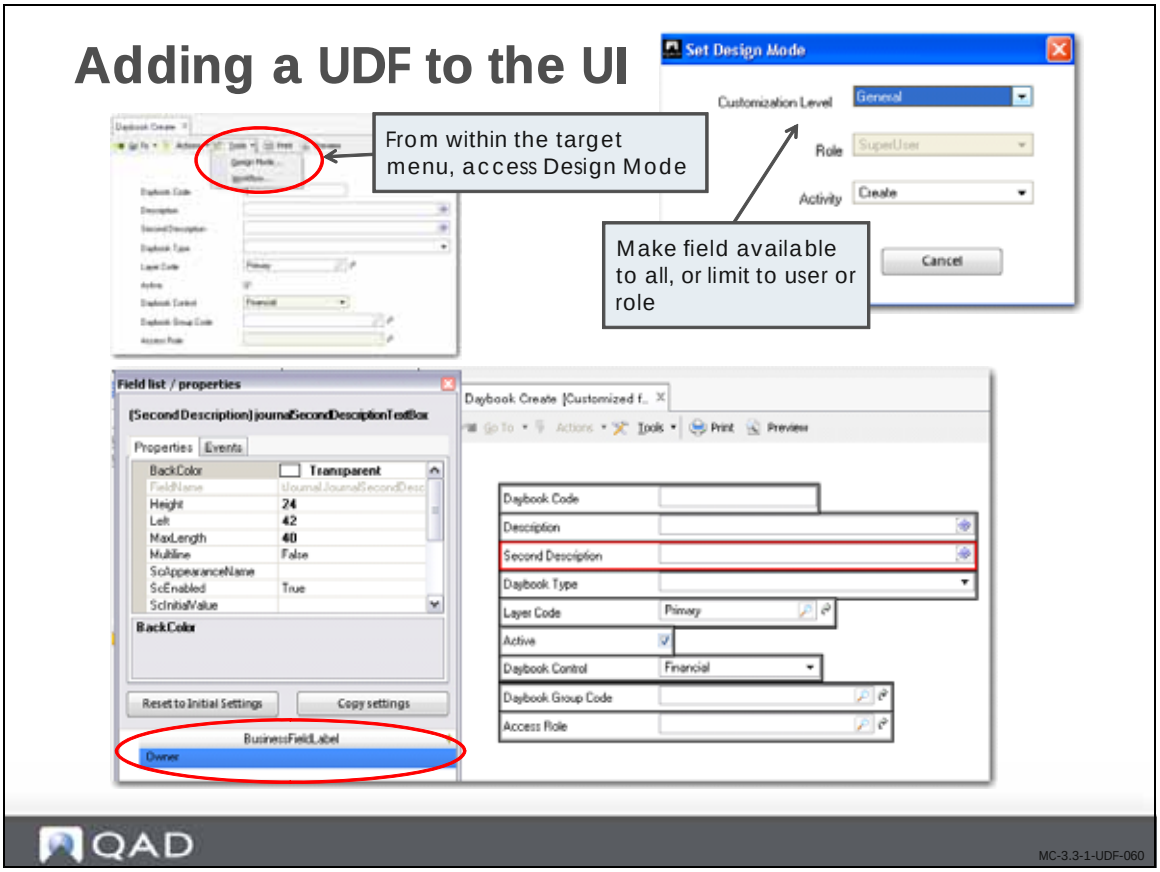
Lookup Reference. Click the lookup to select a query from the list of predefined queries. This field lets you specify a standard lookup to associate with the user-defined field. Users can then select a value from the lookup. For example, you can add a UDF to the Customer Invoice object and give it the name Supplier Code, and specify the Supplier lookup as the Lookup Reference. When users create customer invoices, the Supplier Code UDF appears in Customer Invoice Create, and there is a lookup button next to that field listing all supplier codes.

The Lookup Reference field is enabled when you select a field of type CustomShort or CustomLong in the Field Name field.

Value List Tab

Use the Value List tab to define the list of values for a drop-down list UDF. Right-click and choose Insert a New Row to specify a value.

Adding a User-Defined Field to the UI

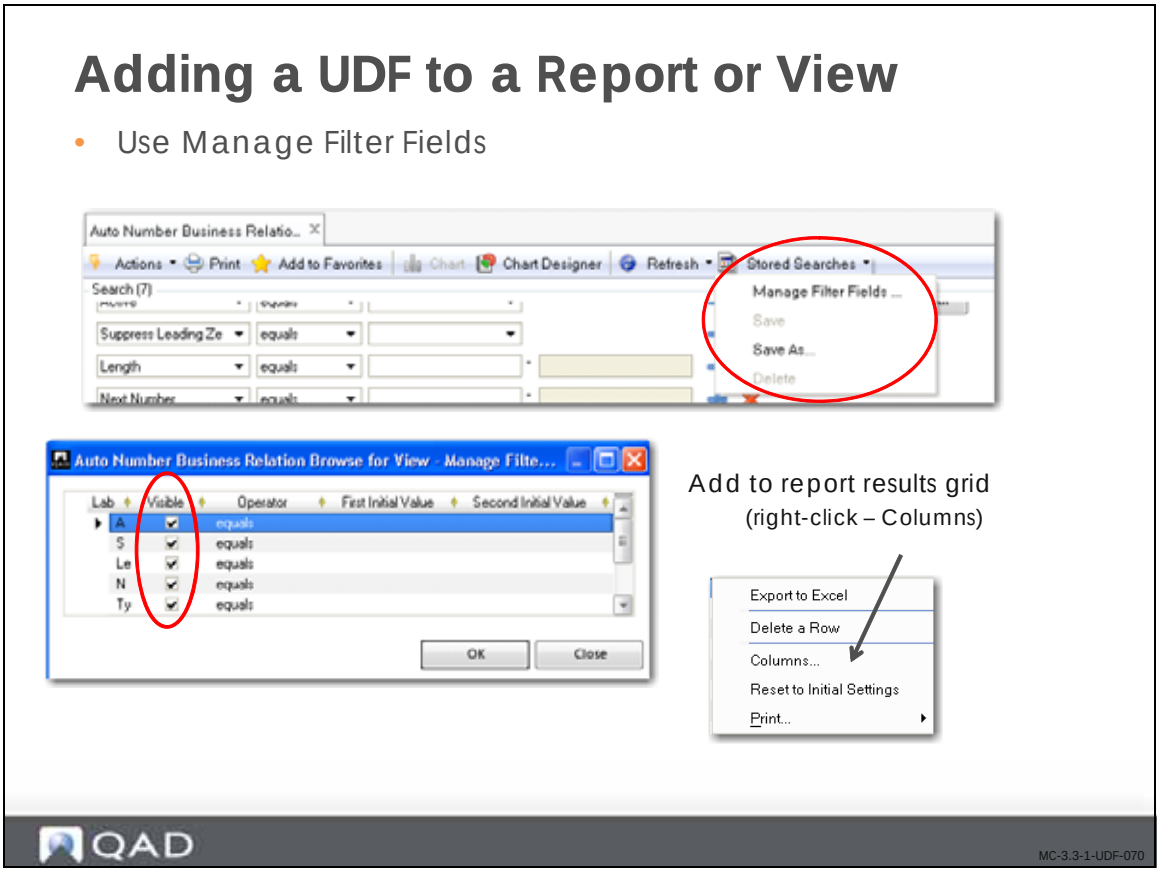


Use design mode to add UDFs to the appropriate screen. When you create a UDF for a component, it is stored in the BusinessFieldLabel pane of the design window.

To add a UDF to a screen, select it and drag it from the Business Field Label section to its new position on the screen.

When saving changes, you can choose to make the new field available to a user, a role, or all.

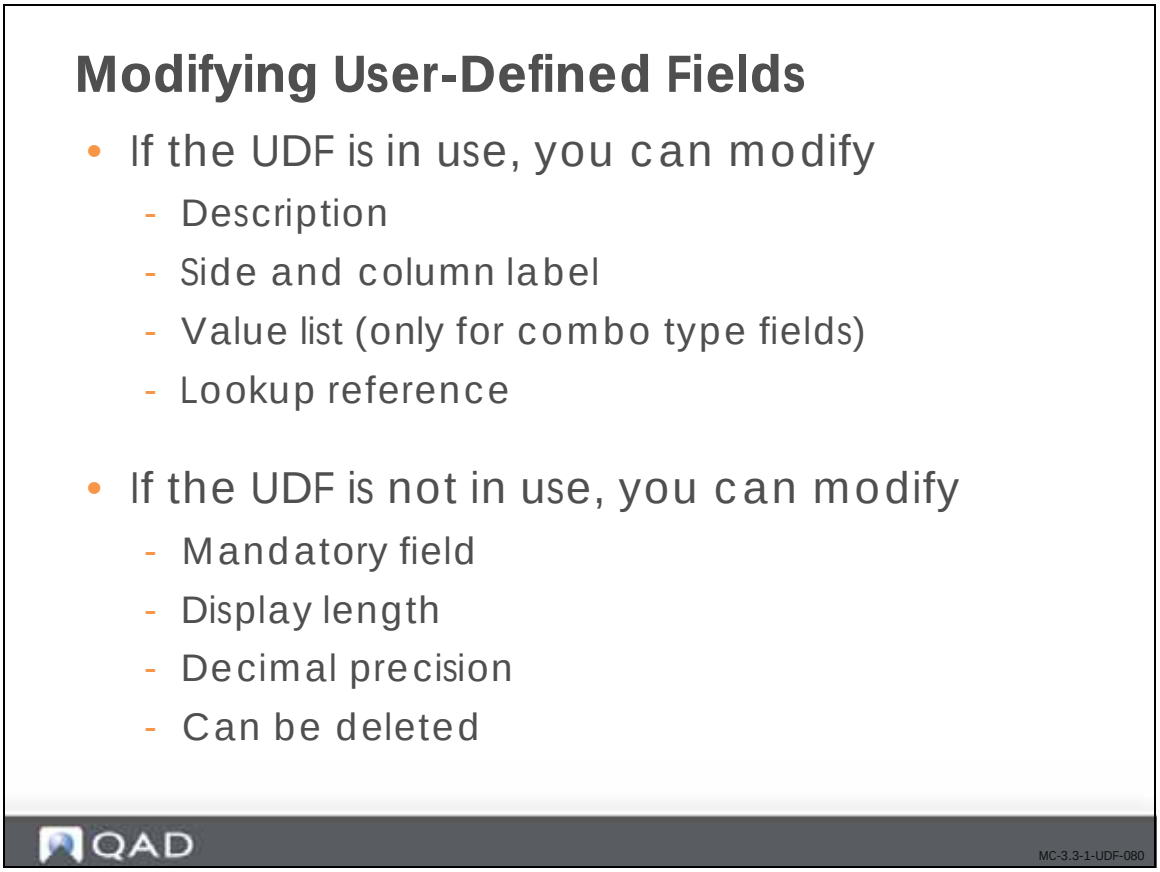
Adding a User-Defined Field to a Report or View



When activated, a UDF can be designated as a filter field in the Search Criteria and can be added to the Search Criteria Result Grid. UDFs are also available for Excel integration, if this functionality is available for the component you have customized.

To include a UDF in the selection criteria for a report or in the report itself, you must adapt the selection and the report logic.

Modifying User-Defined Fields



The range of UDF properties you can modify depends on whether the field has been used. A UDF is considered used if it appears on the UI and at least one value has been stored for it in the database.

If the UDF is used, you can modify the following properties:

- Description
- Side Label
- Column Label
- Value list (for Combo type UDFs only)
- Lookup Reference, Stored Search, Stored Search Return (for Short and Long type UDFs only)

If a UDF is not used, you can modify the following additional properties:

- Mandatory
- Display Length
- Decimal Precision (for decimal type UDFs only)

You can delete a UDF if it has not been used. Go to User-Defined Field Delete (36.4.12.4). Select the field you want to delete. Click Delete. If the UDF has been used, that is, if a value has been entered in the field and stored in a record, you cannot delete the UDF. Instead, you can go to Design Mode and make the field invisible. in this case, the field still exists, but it is not visible and not usable.

Chapter 13

Screen Customization

Objectives

Objectives

- Understand the benefits of screen customization
- Learn how to customize screens for your own business case

QAD

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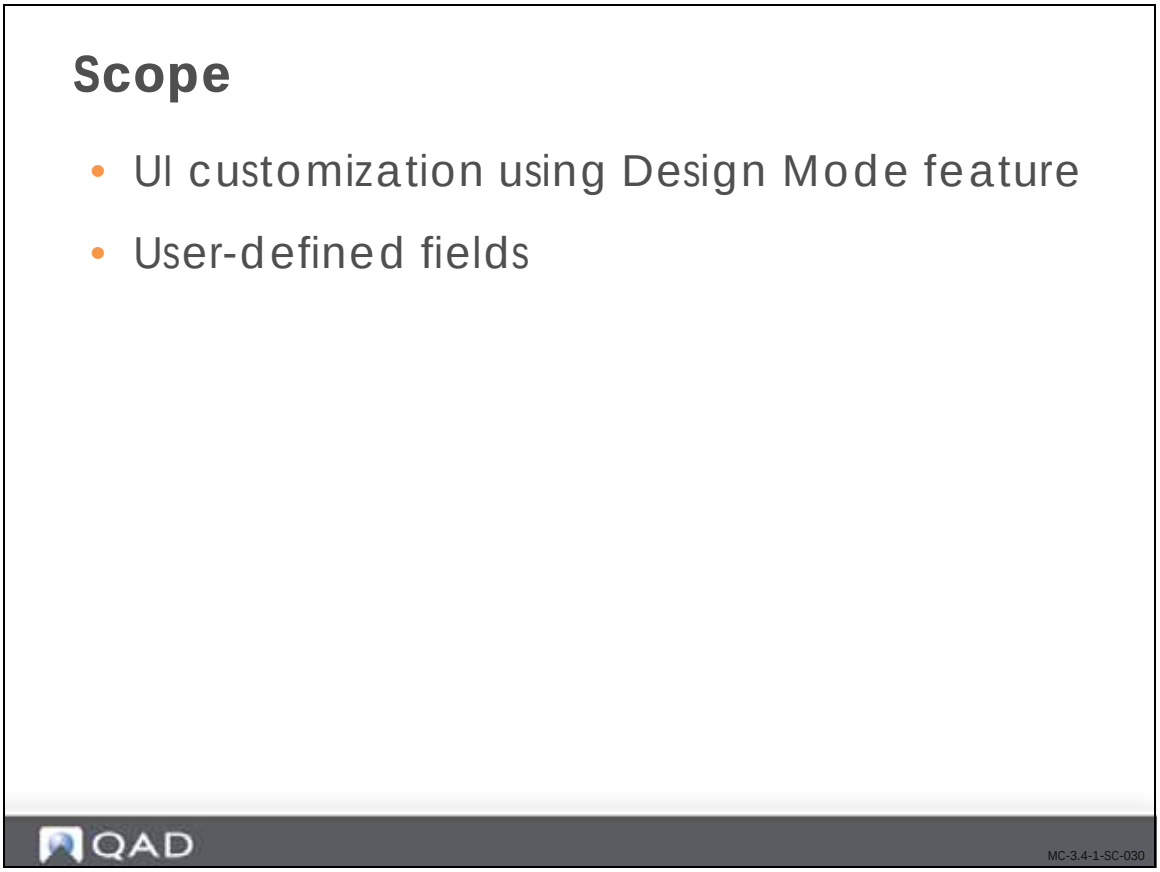
Scope

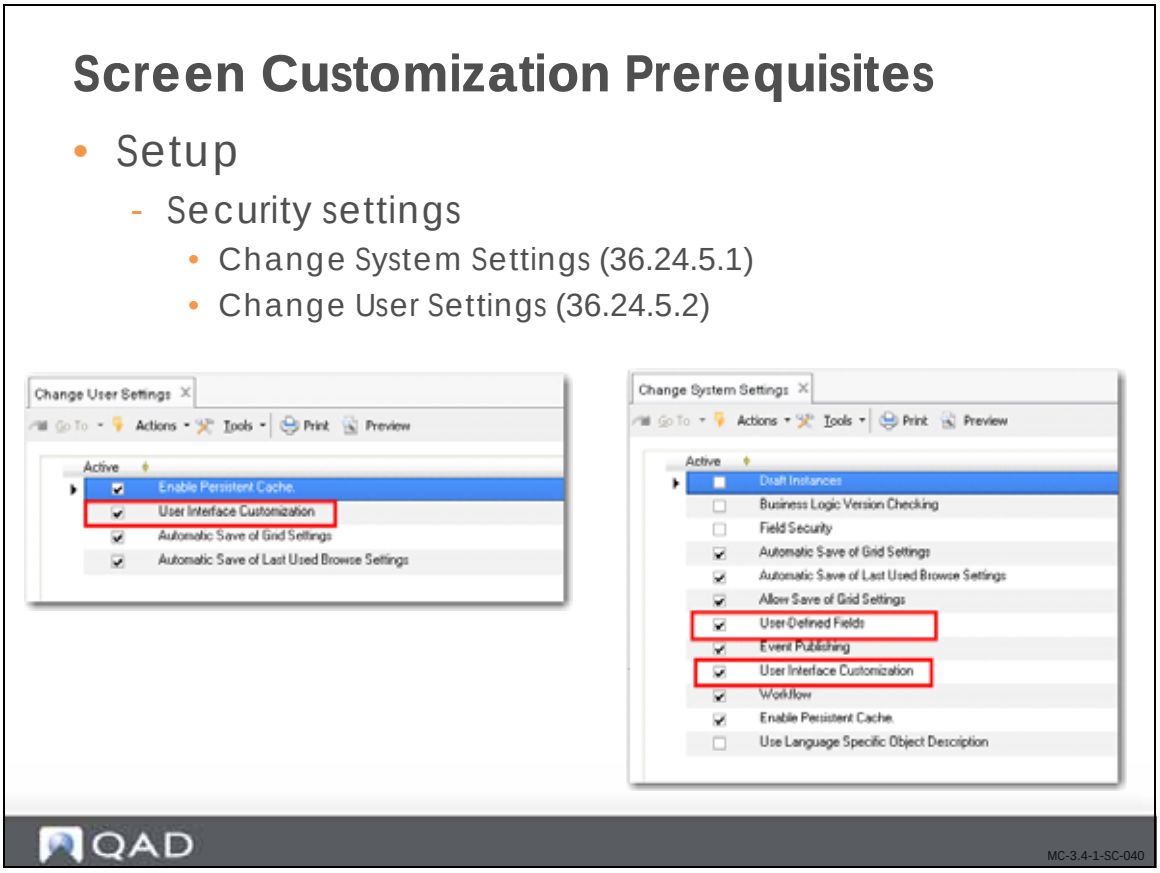


The system supports many ways that users and administrators can tailor the user interface of component-based functions including:

- Customizing the user interface using the Design Mode feature.
- Creating your own user-defined fields and add them to the user interface using the User-Defined Fields feature.

In addition to the customization of component-based functions, you can modify other aspects of the UI. The features a particular user can access depends on the system and user settings, and the user's permissions. See *QAD System Administration User Guide* for a discussion of settings and *QAD Security and Controls User Guide* for more information on permissions.

Screen Customization Prerequisites



To use Design Mode, you must be assigned access to the Customization activity at either the user, role, or general level. If none of these three activities is linked to any of your roles, the Design Mode option is not available in the Tools menu.

Checking for the existence of a screen customization before displaying each screen requires additional system resources and processing time. If you are not using customizations or some users are not using them, this check can be disabled using a setting that can be defined at both the system and user level.

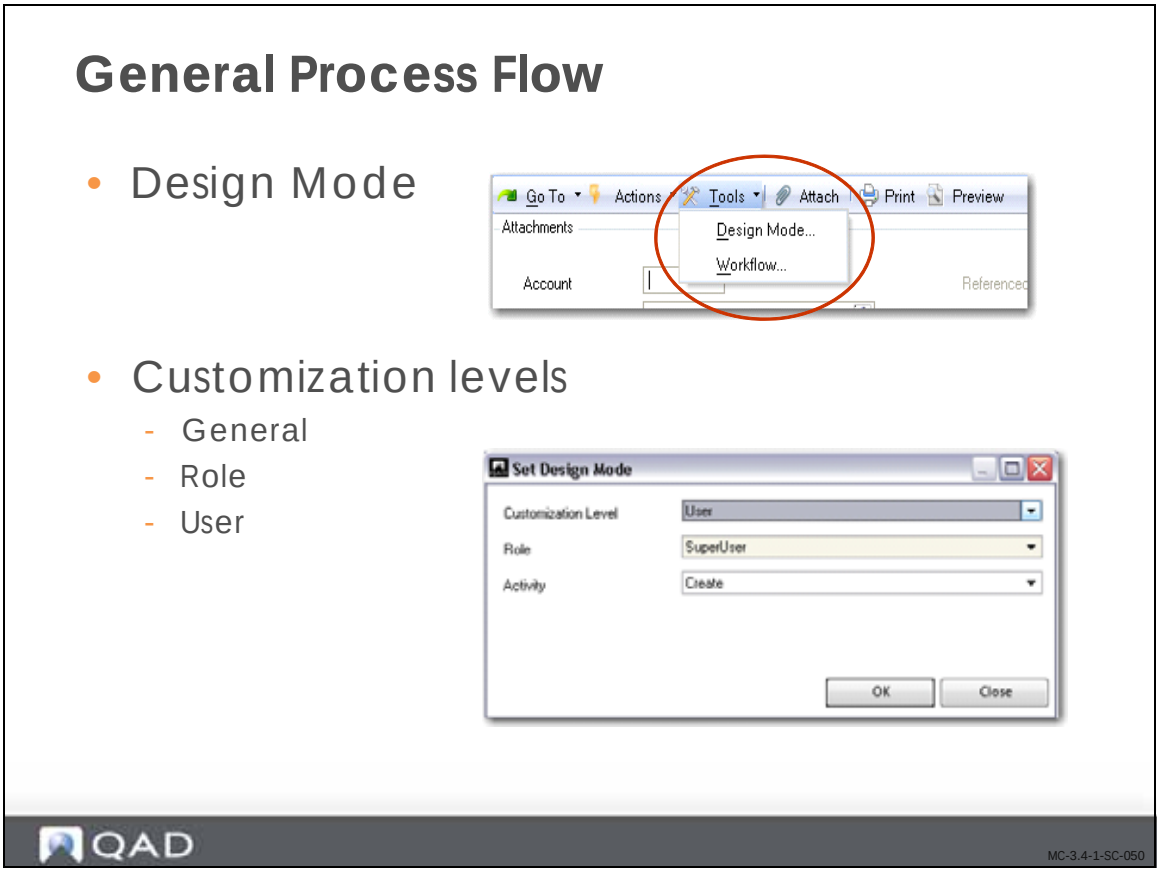
- A system administrator can clear the User Interface Customization setting in Change System Settings (36.24.5.1) to prevent the system from ever looking for existing UI customizations. Users can still use Design Mode—if Design Mode activities are linked to their roles, but customized screens will not be displayed.
- If User Interface Customization is enabled at the system level, each user can clear the User Interface Customization setting in Change User Settings (36.24.5.2) to disable the check for existing UI customizations for themselves. The user can still use Design Mode—if Design Mode activities are linked to their role, but customized screens will not be displayed.

Note If customization is disabled at system level, individual users cannot enable it.

See *QAD Security and Controls User Guide* for more information on setting up role permissions.

Important In order to perform the screen customizations described in this chapter, you must be assigned the UI design role, which provides you with the relevant role permissions.

General Process Flow



Design Mode lets you add, move, or remove fields, and modify field properties. In addition, you can create predefined column views for screens that contain grids.

The customizations you create apply to either yourself, all users that belong to your default role, or all users in the system. This is determined when you save the customization.

You access design mode by selecting Design Mode in the Tools menu in the screen that you want to customize.

When you select Design Mode, the system prompts you to choose a customization level.

1. Choose the level for the customizations:

   General. The customizations are effective for all users.

   Role. The customizations are effective for all users with the same default role as you.

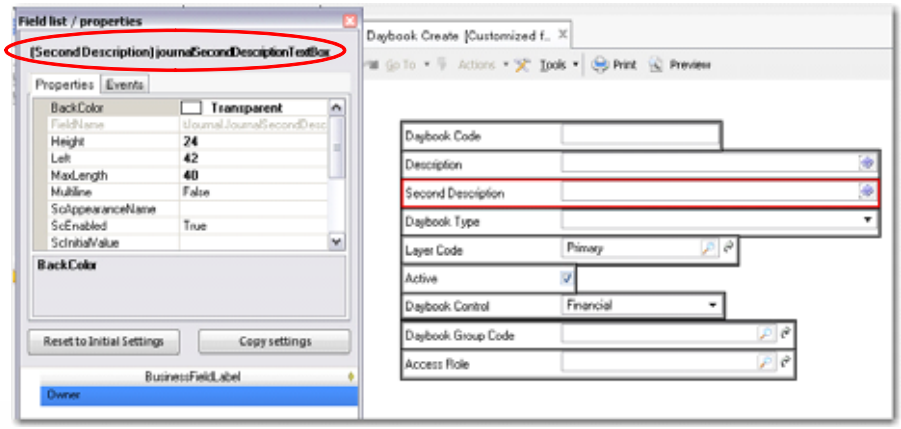
   User. The customizations are effective for you only.

2. If you chose the Role customization level, select the role for which the customizations apply.

3. Select the component activity for which the customization applies; for example, Create, Modify, or Delete.

General Process Flow – Continued

- Highlight a field on the UI to
  - Change its properties
  - Remove it from the UI
  - Move it to another position
  - Add a user-defined field



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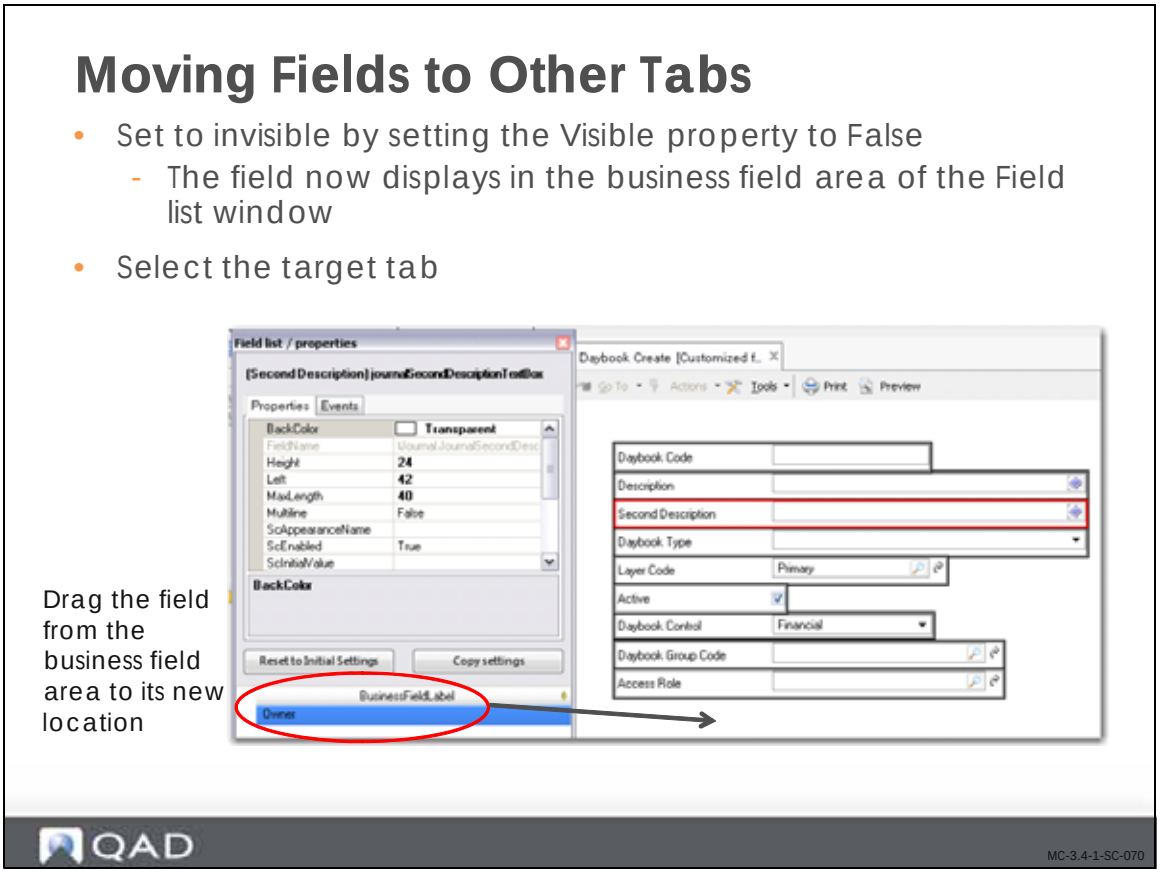
In Design Mode, a gray border is displayed around all fields. When you select a field, its border color changes to red. By selecting the border, you can drag and drop a field or modify its properties.

Moving Fields to Other Tabs



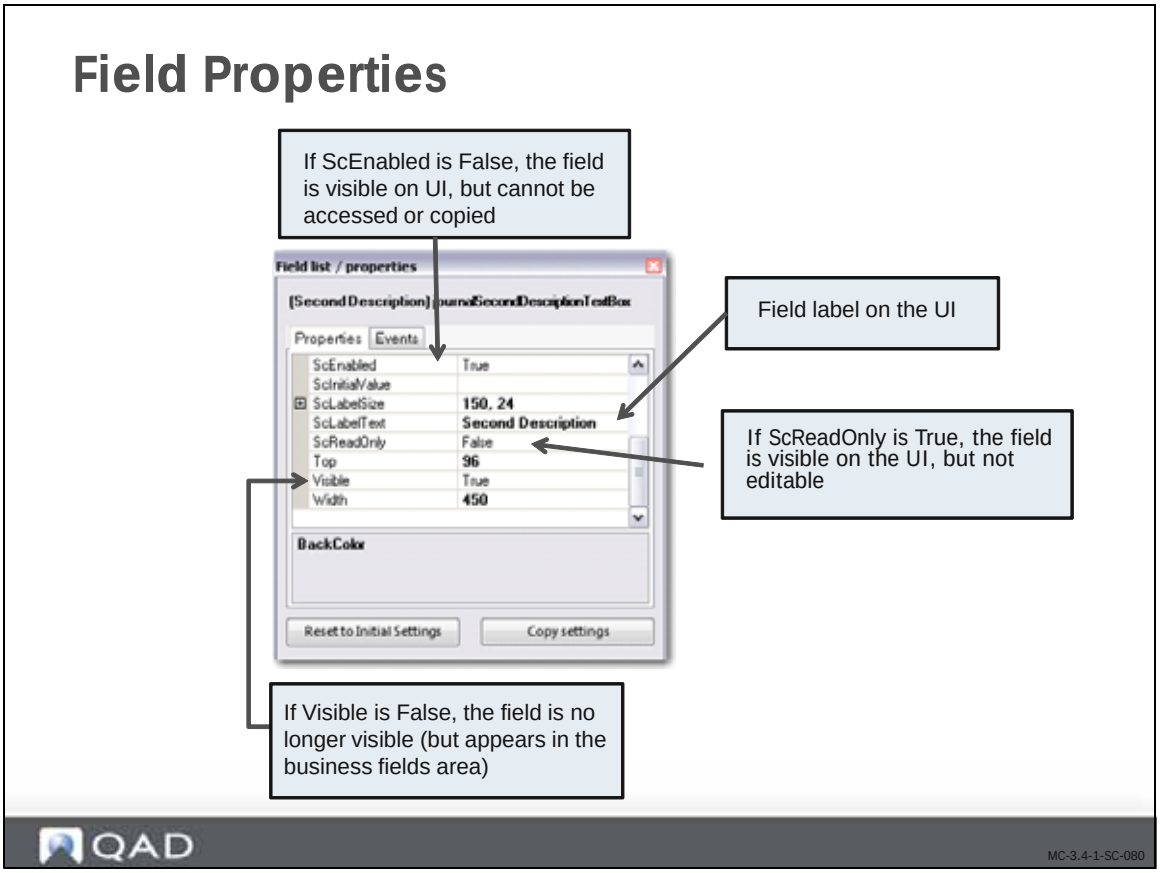
You can remove a field from the UI by clicking on the field to activate it and setting the Visible property to False.

The field is then stored in the BusinessFieldLabel pane of the design fame. To return the field to the UI, click it and drag it from the BusinessFieldLabel pane to the screen.

You can move a field within the UI by dragging it to its new location or by modifying the position properties. You cannot drag a field from one tab to another. To reposition a field to a new tab:

1. Set the Visible property to False. The field now displays in the business field area of the Field List window.
2. Select the target tab to activate it.
3. Drag the field from the storage area to its new location.

Field Properties



The Field list/properties window displays the properties that control the appearance of the selected field.

The window contains two tabs, Properties and Events.

Field Descriptions

BackColor. Specify the color schema for the field. The system applies any color modifications you make to the field border, and not the actual input zone.

Modify the numeric red, green, and blue properties of the field, or select a color from the drop-down list.

Height. Specify the height of the field (label and input zone) in pixels.

Left. Specify the field position in pixels, relative to the left of the screen.

Max Length. Specify the maximum length of the field.

ScAppearanceName. Specify a user-defined setting from the `Appearances.xml` file to apply to the field. The `Appearances.xml` file contains settings for color, shadowing, and alignment.

ScEnabled. Specify True or False to enable or disable the field.

If you set the property to False, the field continues to display on the screen, but it is no longer accessible in the UI. It cannot be tabbed to and its value cannot be copied.

ScInitialValue. Specify the initial value of the field. This field can be used for defaulting when several possible values exist, for example, a daybook in Supplier Invoice Create.

ScLabelSize. Specify the amount of space in pixels (width and height) to allocate to the field label.

ScLabelText. Specify the label text for the field.

ScReadOnly. Select True or False from the drop-down list to indicate whether the field is read-only or editable. When set to True, the field cannot be updated, but can be tabbed to and its contents can be selected and copied.

Top. Specify the field position in pixels, relative to the upper left corner of the screen.

Visible. Select True from the drop-down list to make the field visible on the UI. Select False to hide the field (including the label).

Note Fields that are hidden from the UI are listed in the BusinessFieldLabel section of the design window.

Width. Specify the width of the field (label and input zone) in pixels.

BusinessFieldLabel. This section of the design window lists fields that have been hidden on the UI or user-defined fields that have been defined but not yet placed on the UI.

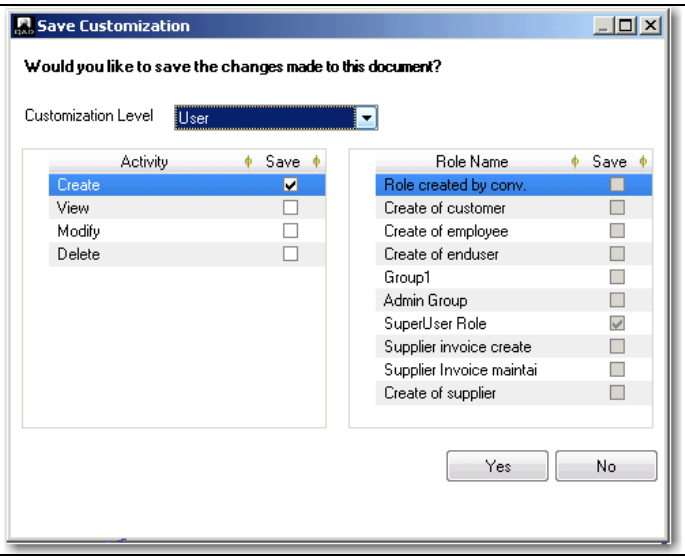
Use the two buttons as follows:

Reset to Initial Settings resets the properties of the field to the initial settings shipped with the application. The system prompts you to confirm the reset operation.

Copy Settings copies the properties of the selected field to another customization level. You can choose the level and the role or user, if applicable.

To apply your customizations to the UI, choose Tools and Design Mode.

The system prompts you to confirm the changes and lets you select other activities for the business component to which to apply the customizations.



Field Descriptions

Customization Level. Select the level at which the customization applies.

Activity. The Save Customization screen lets you apply your customizations to other screens related to the function you customized. This varies depending on the activities defined for each component, but you can typically apply your customizations to the following screen types:

Create: Select to apply your layout customizations when the screen is used to create a new record.

View: Select to apply your layout customizations when using the screen to view a record.

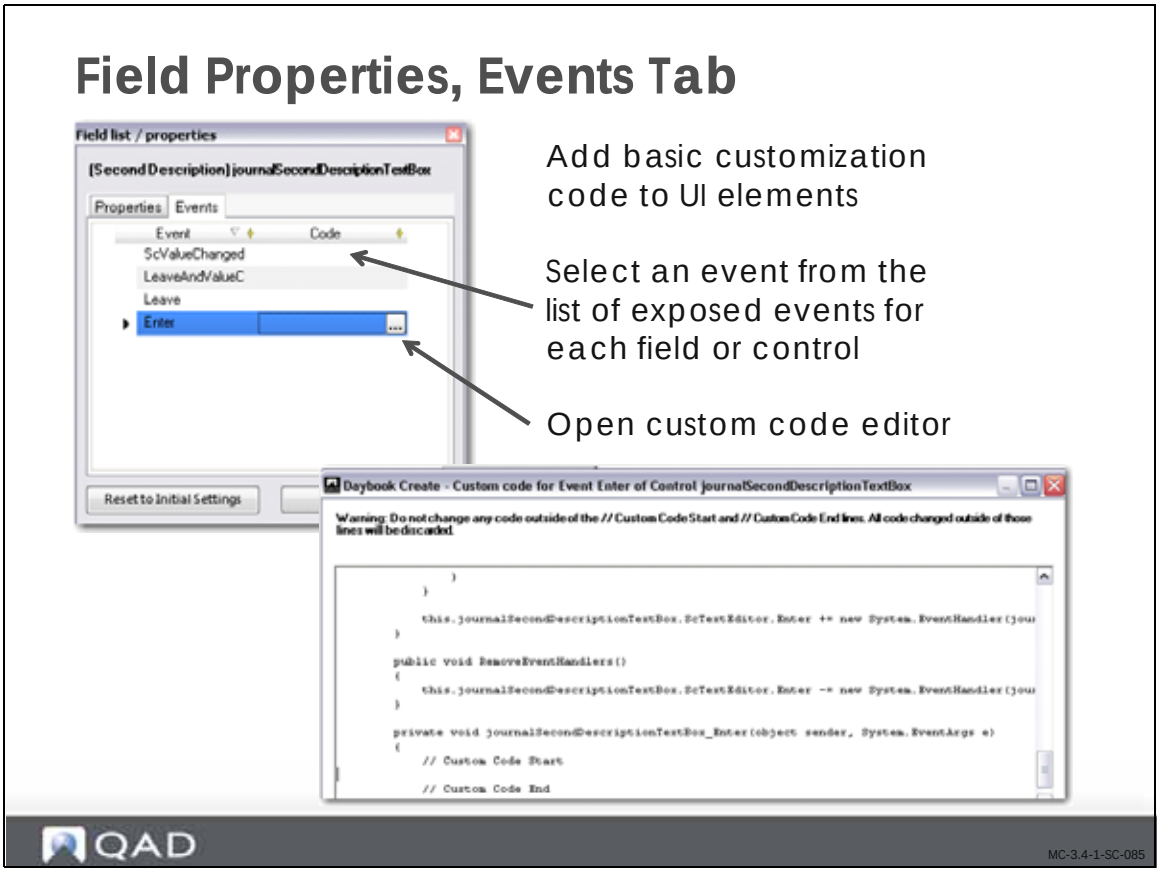
Modify: Select to include your layout customizations when using the screen to modify a record.

Delete: Select to include your layout customizations when using the screen to delete a record.

Role Name. Select the roles for which the customizations apply. These fields are activated when you select Role in the Customization Level field.

Click Yes to apply the changes to the selected activities. Click No to close the screen without applying the changes.

Field Properties, Events Tab



The Events tab lets you use the events and properties of UI controls to add basic customization code to UI elements. Examples of events include the following:

- Enter, which controls the behavior of a field when it gets focus.
- Leave, which controls the behavior of a field when the field loses focus.

You can select an event from a list of available exposed events for each field or control on the screen for which you are using Design Mode. For any event you select, you can alter the properties of other fields and controls, and specify conditions under which the properties must be altered.

In the Events tab, the list of events is sorted alphabetically. When you select an event, a button appears to the right of the event in the Code column. Click this button to open an editor in which you can build a condition and an action (in the case of `True` or `False` values).

In the Custom Code for Event editor, you can customize the code using non-intrusive customization.

Hands-On Exercises

Log in to 10USACO or 22UKCO.

Exercise 1: Rearrange Fields in Customer Modify

In this exercise, you will hide the BLWI Group field in the Customer record for all activities. You will also move the Print Reminder and Print Statement fields.

1. Open Customer Modify (27.20.1.2) and select any customer in the grid to open the main screen. Go to the Payment tab.
2. On the object menu bar, click Tools and select Design Mode.
3. In the pop-up window, specify General in the Customization Level field and click OK.
4. Select the BLWI Group Code field.

   It is now highlighted in red.
5. In the Field list / properties window, set the Visible property to False.
6. Click back to the Payment tab of Customer Modify. Select the Print Reminder field and move it under the Statement Cycle field (drag and drop).
7. Select the Print Statement field and move it under the Print Reminder field.
8. Close the Field list / properties window by clicking on the red X. In the Save Customization window, select:

   Customization Level: General

   Activity: Select Save all
9. Click Yes to save.
10. Verify the end result on your screen.

Exercise 2: Make a Field Read-Only

In this exercise, you will make the Exchange Rate field in Supplier Invoice Create read-only.

1. In Supplier Invoice Create (28.1.1.1), click Tools and select Design Mode. In the pop-up window, select General in the Customization Level field and Create in the Activity field.
2. Click Continue.
3. Highlight the Exchange Rate field. In the Field list / properties window, change the ScReadOnly property to True.
4. Close the Field list /properties window.
5. In the Save Customization screen, select only Save Create. Click Yes.
6. Verify the result on your screen.

Exercise 3: Create a User-Defined Field

In this exercise, you will create a user-defined field for the GL Account business component, and create a value list for the field.

1 In User-Defined Field Create (36.4.12.2.1), create a field with the following parameters:

Field	**Data**
Business Component	GL Account
Field Name	tGL.CustomCombo2
Description	Account Representative
General tab	
Side Label	Account Representative
Column Label	Acct Representative
Display Format	X(20)
Display Length	20
Mandatory	No

2 In the Value List tab, right-click in the grid and select Add a New Row. Specify the following custom values:
   - Chief Accountant
   - Jr. Accountant
   - Sr. Accountant

3 Click Save.

4 In GL Account Modify (25.3.13.2), select any account to open the main window.

5 Click Tools and select Design Mode. In the pop-up window, select the Customization Level to General and click OK.

6 In the Field List/Properties window, you will see the new field at the end of the BusinessFieldLabel panel.

7 Drag the field and drop it in the GL Account Modify screen next to the Active field.

8 Close the Field List/Properties window.

9 In the Save Customization window, select Save for all activities. Click Yes to save.

   Your UDF should now display on your screen, with a drop-down list attached.

10 Return to the GL Account Browse for Modify window.

11 Click a search criteria drop-down list (Account, for example). The new field should appear on this list.

12 Right-click the first row in the grid and select Columns. You can select your new UDF and make it visible on the UI.

Exercise 4: Create a Second User-Defined Field

In this exercise, you will create a user-defined field for the GL Account business component, and position the field on the UI.

1 In User-Defined Field Create (36.4.12.2.1), create a field using the following parameters:

Field	**Data**
Business Component	GL Account
Field Name	tGL.CustomShort1
Description	User in Charge
General tab	
Side Label	User in Charge
Column Label	User in Charge
Display Format	X(20)
Display Length	20
Mandatory	No
Lookup	Stored Search
Lookup Reference	/BUser.SelectUser
Stored Search	FACTORYDEFAULT
Return Field from Stored Search	tUsr.UsrLogin

2 Click Save.

3 In GL Account Modify (25.3.13.2), select any account to open the main window. Click Tools and select Design Mode.

4 In the pop-up window, set the Customization Level to General and click OK.

5 In the Field List/Properties window, you will see the new field at the end of the BusinessFieldLabel panel.

6 Drag this field and drop it in the GL Account Modify screen next to the Referenced field.

7 Close the Field List/Properties window.

8 In the Save Customization window, select Save for all activities. Click Yes to save.

Results: In the GL Account Modify screen, the new field should display with your login as default value.

Chapter 14

Self-Billing

Objectives

Objectives

- Understand the self-bill workflow
- Learn what options are available for creating self-bills
- Learn how to create self-bills
- Learn how to adjust self-bills

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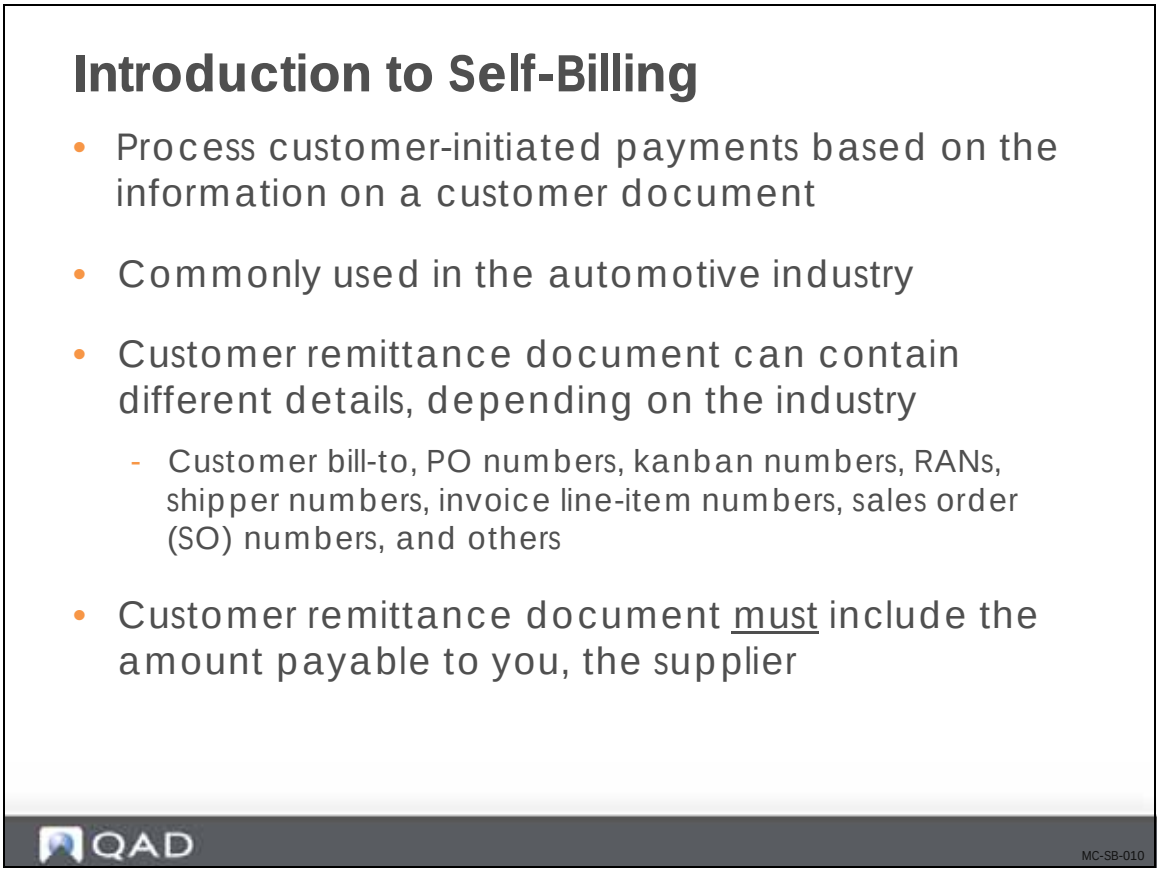
Introduction to Self-Billing

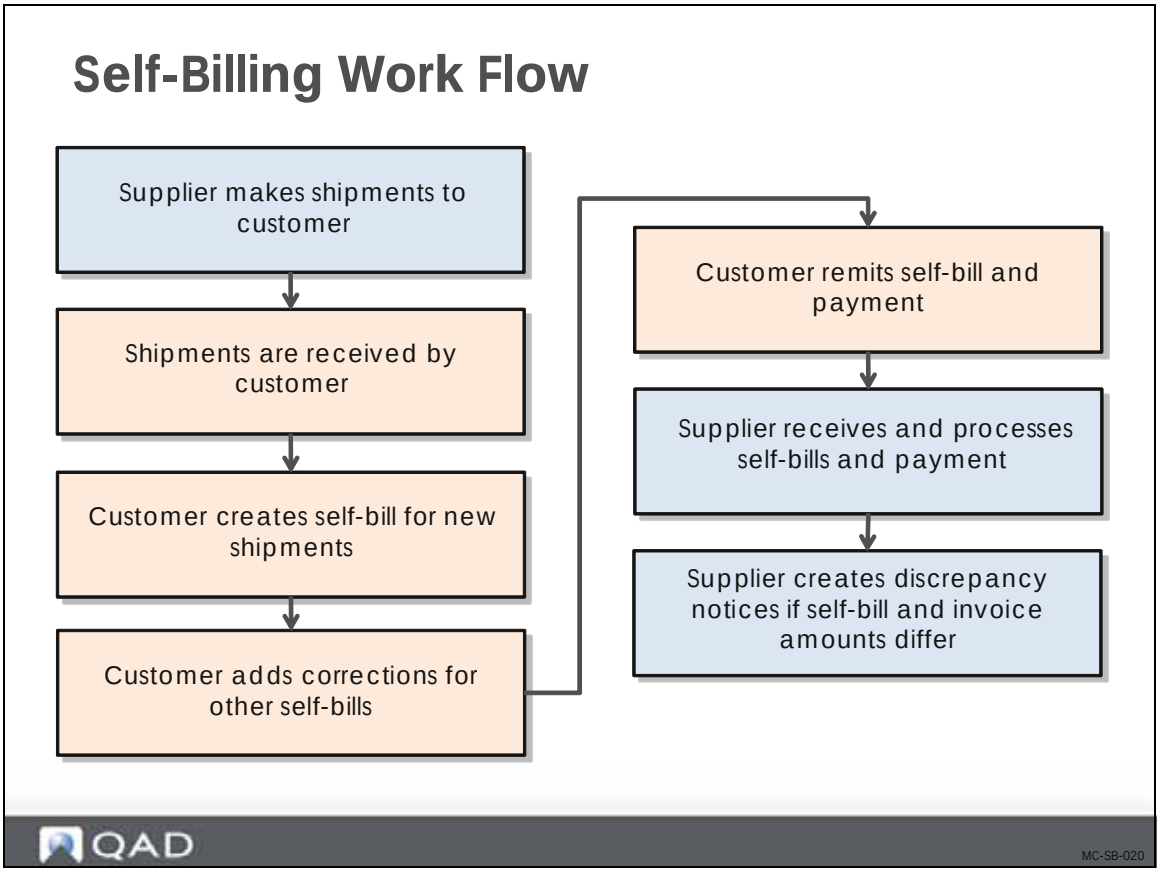


Use the Self-Billing module to process customer-initiated payments by applying payment to invoices based on line-item shipper details, including:

- Customer details
- Purchase order (PO) number
- Kanban number
- Release authorization number (RAN)
- Evaluated receipt settlement (ERS) payment references

In the automotive industry, suppliers often do not send invoices to their customers. Instead, the customer remits a self-bill. This document details shipments received and the amount due to the supplier for these shipments. The amount also reflects any deductions for defective or damaged parts, and any other pertinent credits due. This document is called a self-bill because the customer decides the payable amount instead of relying on an invoice from the supplier.

Self-Billing Work Flow



The slide shows the traditional self-billing workflow.

The self-bill is remitted to the supplier, who then processes it and compares it with open invoices. When the self-bill information is entered into the system, it is matched to invoices for that customer.

If the supplier notes any discrepancy between the self-bill and their records, the customer must be notified within a predefined period for corrections to be made. In some situations, a self-bill is remitted and only later is the payment made. In other situations, payment can accompany the self-bill.

The payment remitted reflects the self-bill and any agreed-upon corrections from previous self-bills. Each supplier-customer relationship usually sets up specific rules for reconciling discrepancies. Sometimes these must be written off as losses by either the supplier or the customer.

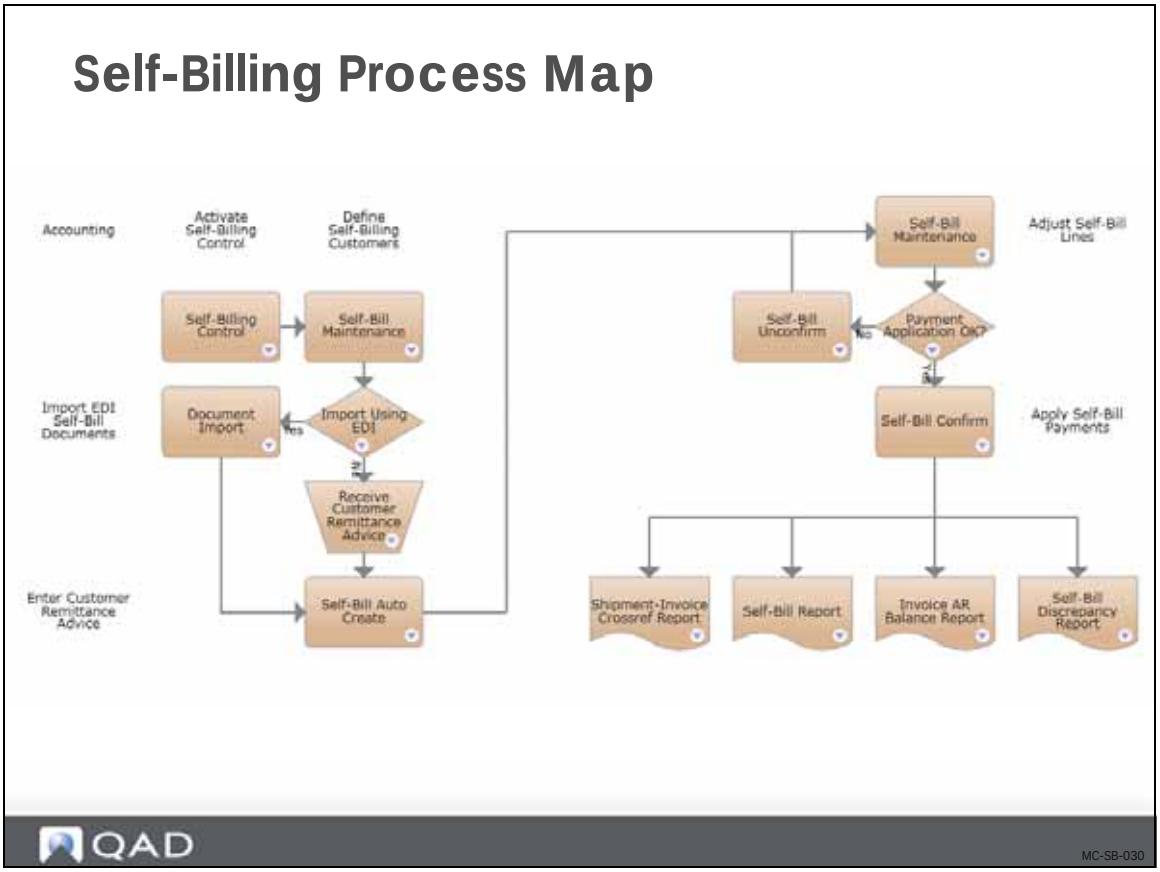
Non-Traditional Self-Bill Process

Many industries do not use the traditional self-billing methodology. In some situations, suppliers do send invoices to their customers. However, customers disregard these and, as in the traditional self-billing environment, send their own type of remittance advice document to their supplier. This customer remittance document contains different details, based on the specific industry. These details can include customer bill-to, PO numbers, kanban numbers, RANs, shipper numbers, invoice line-item numbers, sales order (SO) numbers, and others.

The customer remittance document must always include an amount payable to the supplier. This can also be in the form of an ERS payment. The amount can reflect any adjustments for defective or damaged parts and any other pertinent credits due.

Unlike the traditional self-bill process, other industries do not necessarily rely on the customer-remitted document number as reference to the original supplier invoice. Instead, the supplied information must be used to reconcile the customer's remittance document to the supplier's invoice records.

Self-Billing Process Map

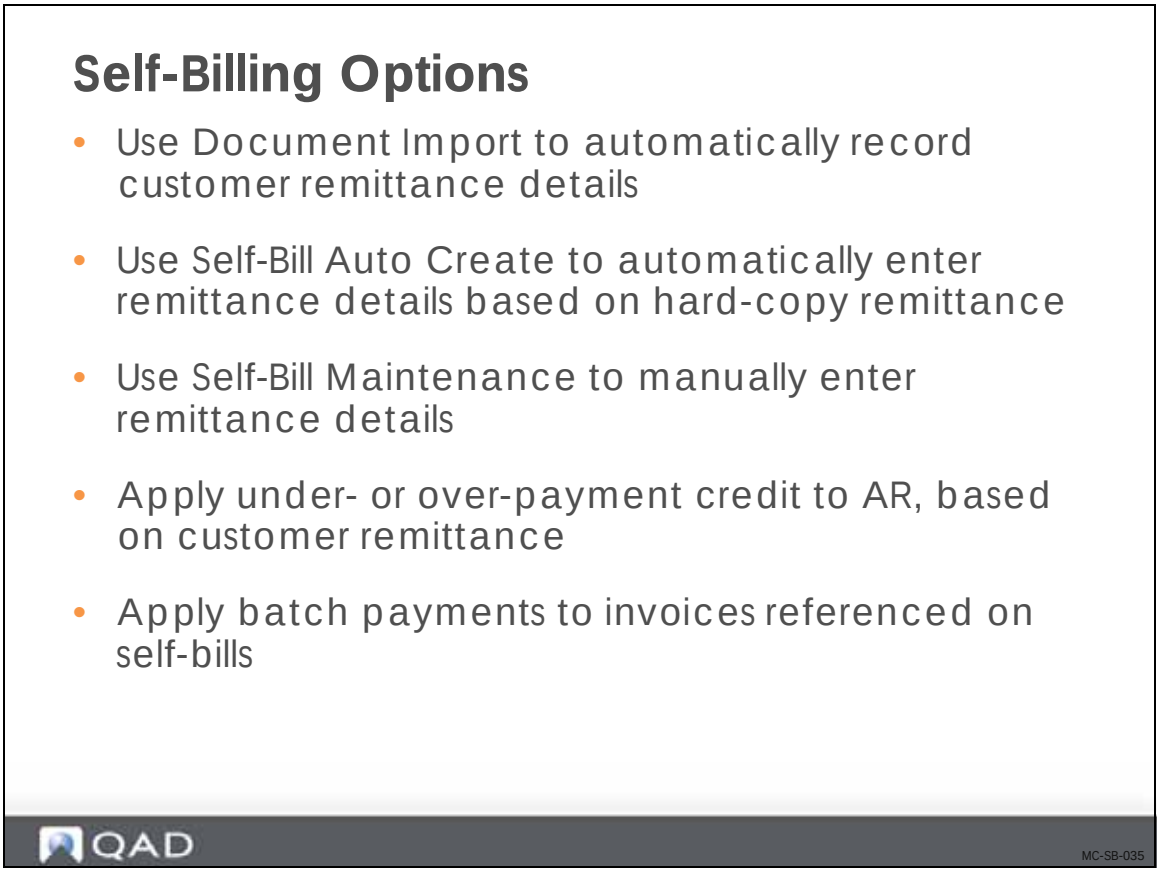


The slide shows the Self-Billing process map, which in part of the Accounts Receivable set of process maps.

The process map shows the steps required to set up self-billing and to process customer remittance information to create self-bills. The map also shows the self-billing reports you can run.

When using the Self-Billing process map in the system, you can click the nodes to access the screens that let you perform self-billing activities.

Self-Billing Options



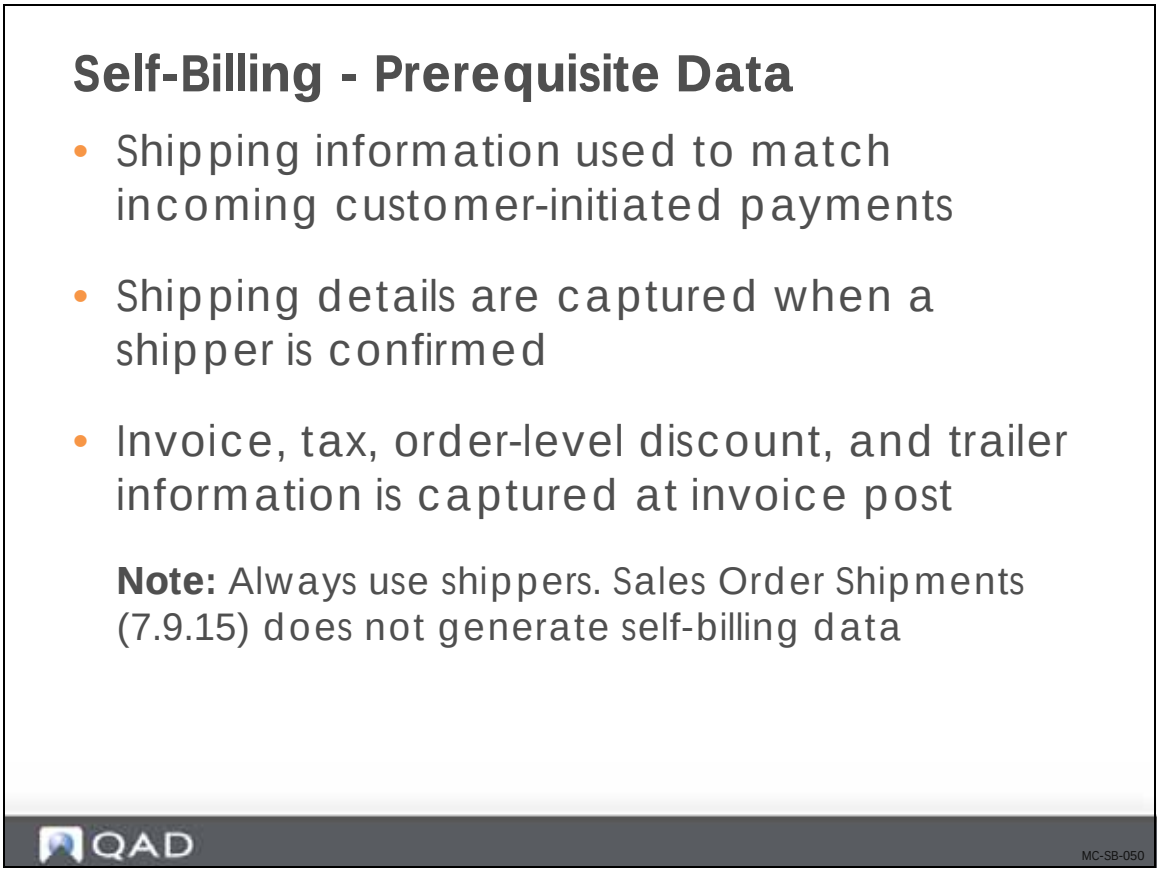
A number of self-billing options are available to you. You can:

- Create new self-bills by automatically loading customer remittance information using EDI Document Import (35.13).
- Use Self-Bill Auto Create (27.6.12.4) to automatically create self-bills by entering information from hard-copy customer remittance advice.
- Use Self-Bill Maintenance (27.6.12.1) to manually create self-bills.

In addition, you can use self-bills as the basis to:

- Apply under- or over-payment credit to accounts receivable.
- Apply batch payments to invoice references on self-bills.

Self-Billing—Prerequisite Data

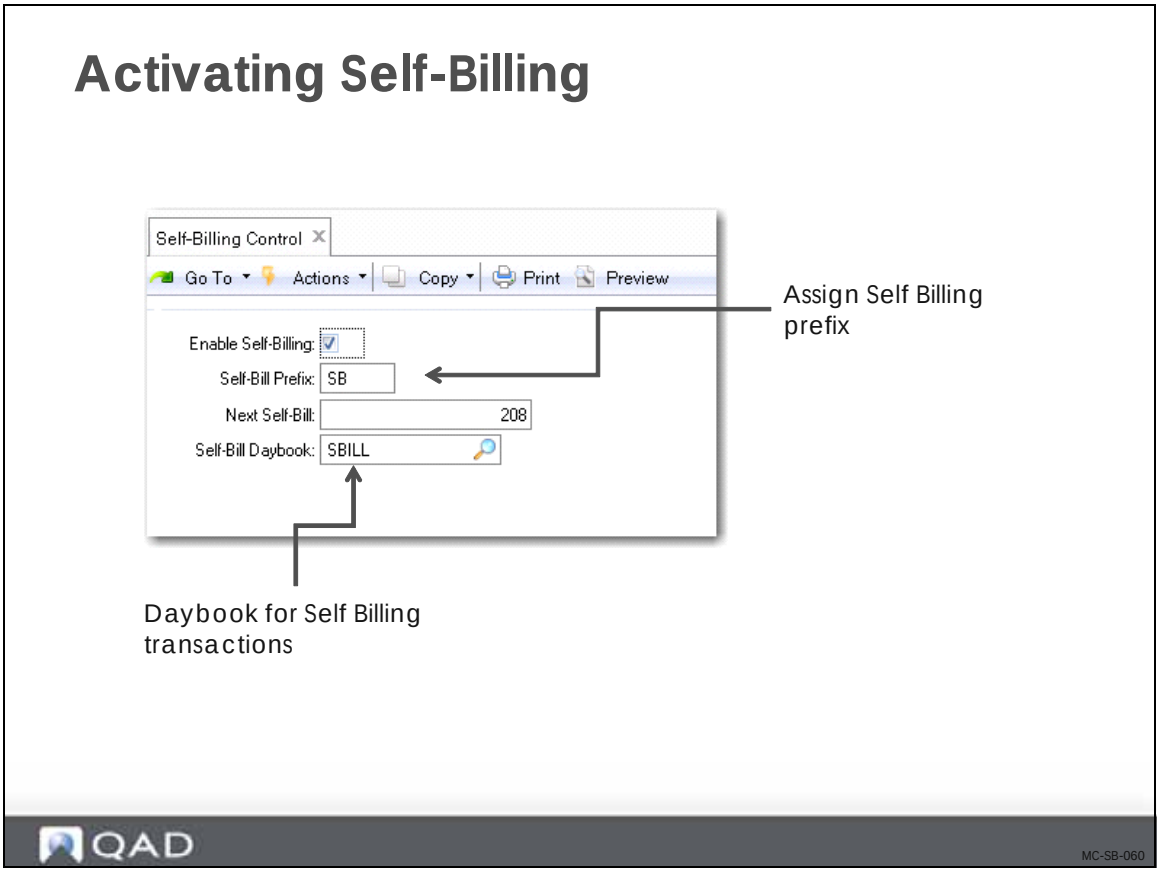


AR Self-Billing uses processed shipping information to match incoming customer-initiated payments. The system must first process shipping information for the incoming remittance.

Shipment details are captured at the time a shipper is confirmed. Invoice, tax, order-level discount, and trailer information is captured at the time of invoice posting.

Note The Sales Order Shipments (7.9.15) does not capture self-billing information.

Activating Self-Billing



You activate self-billing using Self-Billing Control (27.6.12.24). The following describes the three fields other than the Enable Self-Billing field:

Self-Bill Prefix. Define the three-character, self-bill numbering prefix according to your requirements. In cases where the customer supplies the remittance prefix and number, you can choose to leave this field blank.

Next Self-Bill. Enter the next self-bill number (maximum 22 characters). In cases where the customer supplies the remittance number, you can choose to leave this field blank.

Self-Bill Daybook. Select a self-billing daybook to use for self-billing transactions. You must define at least one daybook of type Self-Bill Invoices in the system.

Setting Up Self-Billing for Customers

Setting Up Self-Billing for Customers

- Activate Self-Billing for a customer in Customer Data Maintenance
- Select the Capture Self Billing Information field

Note: this field only appears after you activate Self Billing in Self-Billing Control

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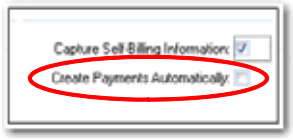
Configure the following self-billing fields in Customer Data Maintenance (2.1.1):

> *Capture Self-Billing Information.* Select this field to capture self-billing information for this customer bill-to address. When sales orders or schedules are used with shippers, this field triggers the creation of shipment invoice cross-reference records for every line item of a shipment. These cross-reference records are updated when the invoice is created, and can then be retrieved by the Self-Billing program. The records do not include sales order shipment postings.

This field is displayed only after you activate self-billing in Self-Billing Control.

Setting Up Self-Billing for Customers

- Activate creation of payments from Self-Billing transactions



- Customer payment will have status For Collection or Paid

  Note: this field only appears after you activate Self Billing in Self-Billing Control

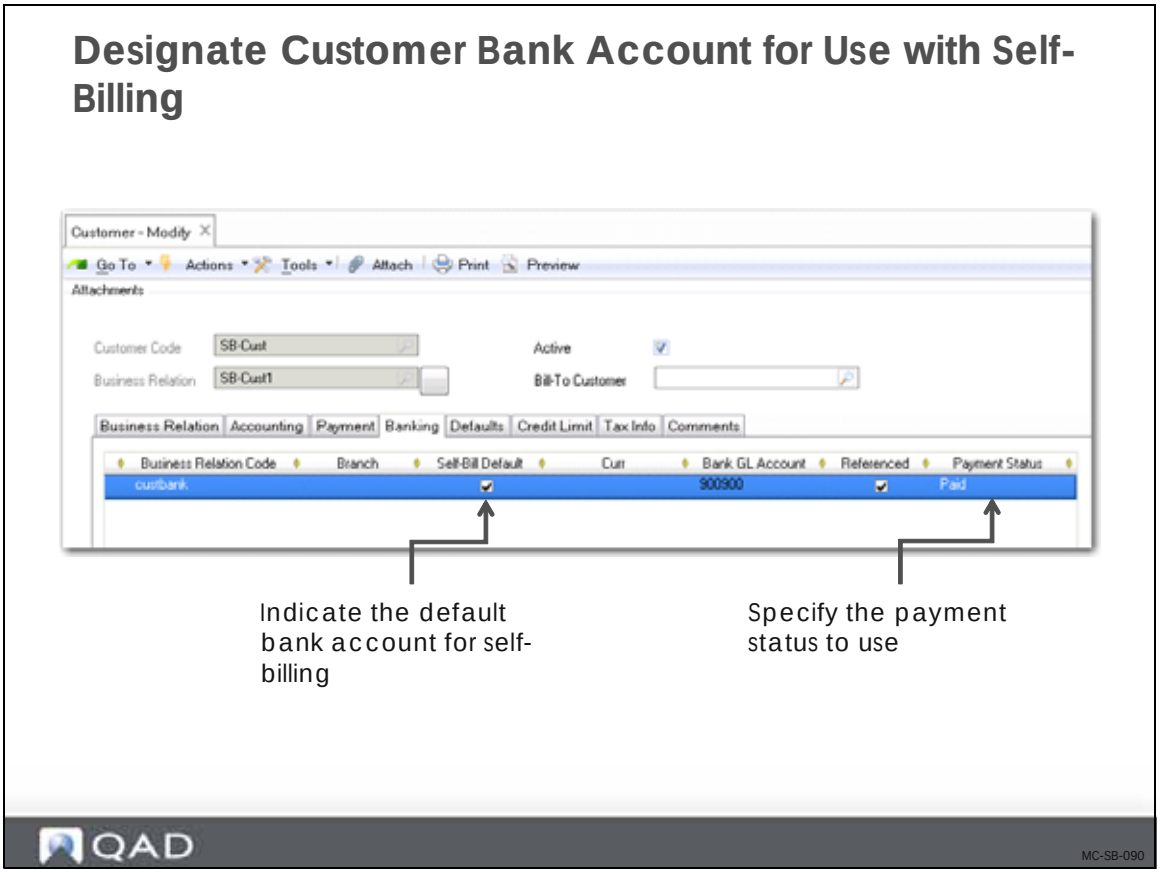
QAD MC-SB-080

Create Payments Automatically. Select this field to automatically create a customer payment from the self-bill transaction. The customer payment is created with a status of For Collection, or Paid. The default customer bank account to be used for the payment is selected on the Banking tab of the Customer record, and you must also select a status for the payment from a drop-down menu on this tab.

You can then process the payment using the standard customer payments flow. If you do not select this field, you process the self-billing invoice using any of the other customer payment processes or a banking entry.

This field is displayed only after you activate self-billing in Self-Billing Control.

Designate Customer Bank Account for Use with Self-Billing



You must indicate the bank account to use for a customer's self-bills by selecting the Self-Bill Default field for the account in the Banking tab of Customer Create or Customer Modify.

As stated previously, the customer payment is created with a status of For Collection (if this status is already defined for the customer), or Paid (if no status is defined for the customer). Therefore, you must ensure that both these statuses are defined in Customer Payment Status Create for the self-bill default customer bank GL account.

You must also specify a status for self-bill payments from the customer bank account using the Payment Status drop-down list in the Banking tab of Customer Create or Customer Modify. Ensure that you assign the status of Paid.

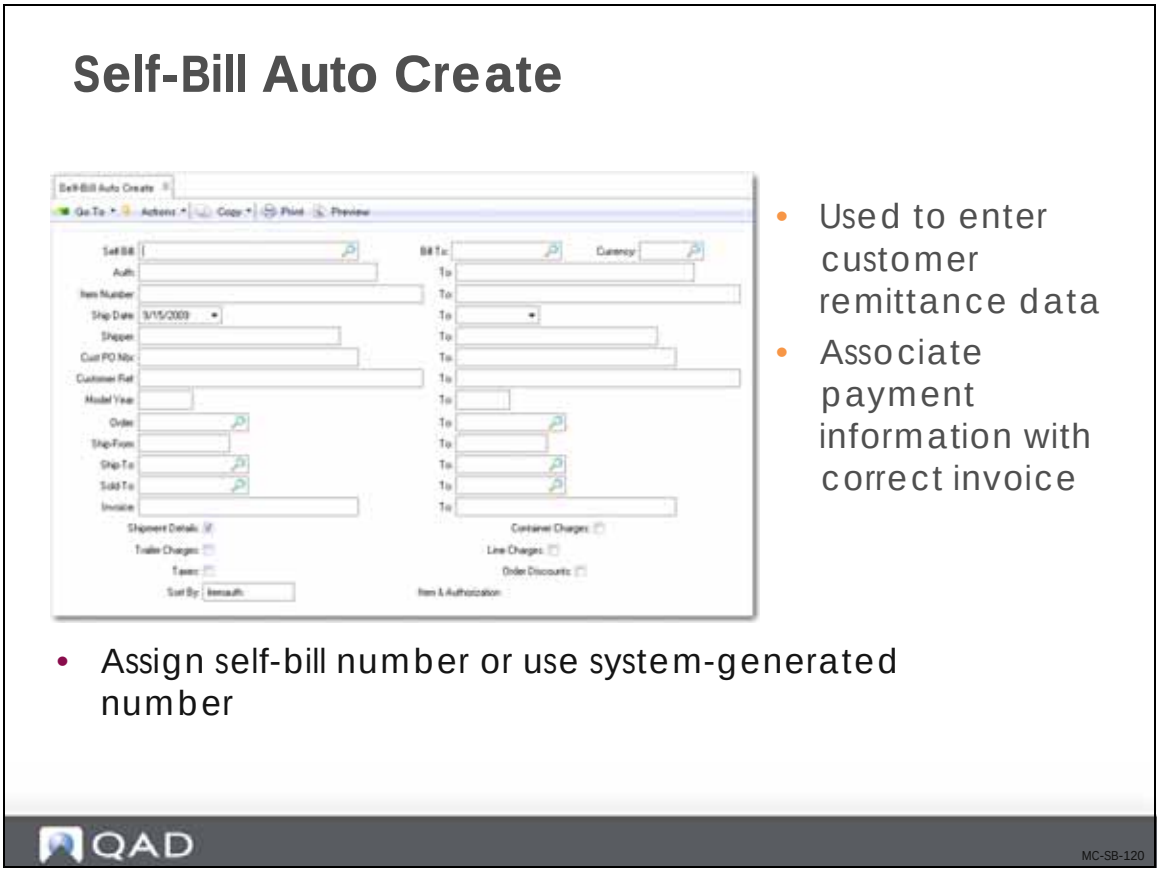
Self-Billing Data

Self-Billing Data

- Can include
  - Adjustments and corrections from previous self-bills
  - Partial payment for a shipment
  - Full payment for a shipment
  - Trailer charges for selected invoices (including freight and handling charges)
  - Tax charges on selected invoices

QAD MC-SB-100

Self-Bill Auto Create



Self-Bill Auto Create (27.6.12.4) lets you enter customer remittance advice into your system. Specify a range of selection criteria as shown on the customer's remittance advice, and then associate the payment information with the correct invoice. You can assign a self-bill number to the document you are creating, or let the system auto-generate the self-bill number.

To create a self-bill:

1. Enter a previously-created self-bill number, or leave Self-Bill blank when creating a new self-bill.
2. Enter any identifying information in the auto-create selection screen. Enter as much or as little information as you have from the customer's remittance advice you are re-creating. Significant information you should enter is:
   - Shipper number
   - Sold-to
   - Ship-to
   - Item number
   - Date of shipment
   - Authorization number

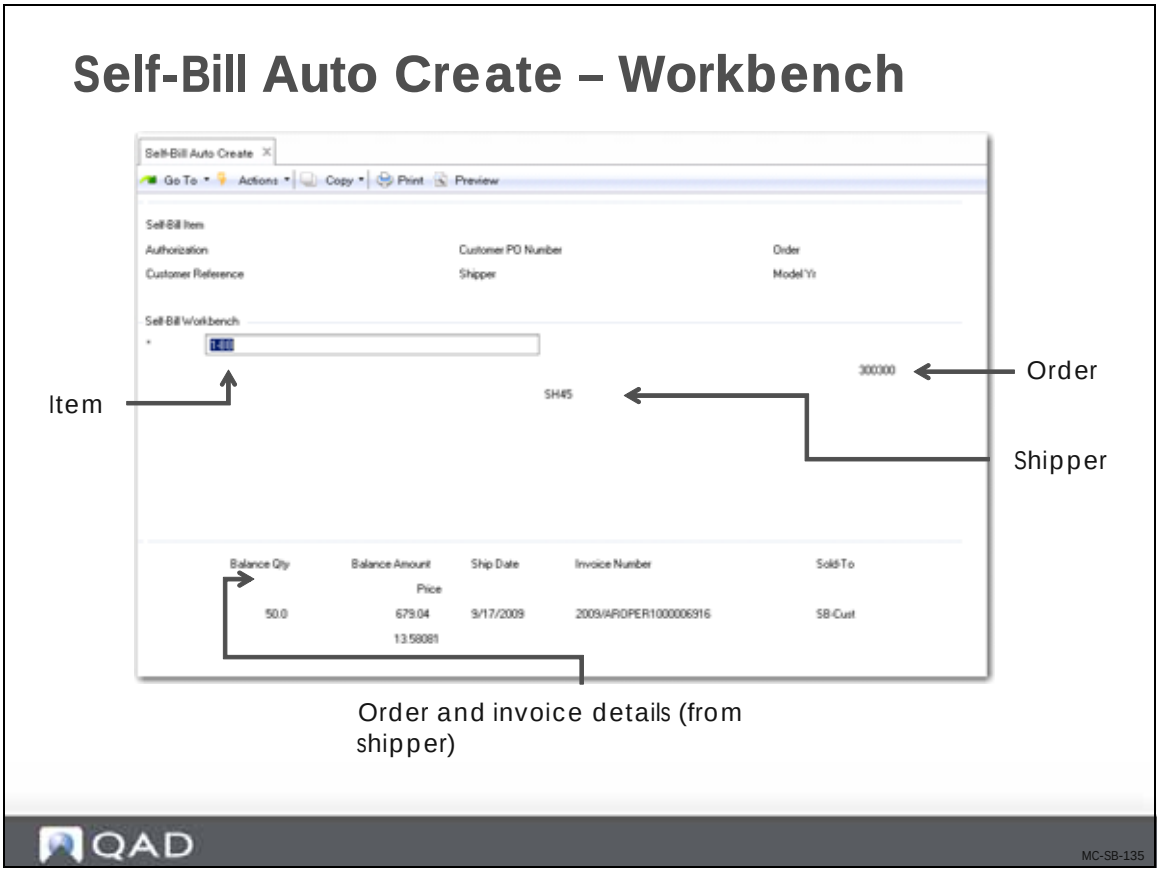
   Note The more selection criteria you provide, the narrower and more accurate your selection becomes.

3 Specify whether to include shipment details, trailer charges, taxes, container charges, line charges, or order discounts on the selection display screen.

When you click Next in the Self-Bill Auto Create main screen and if the system can locate shipper data that matches your selection criteria, the Workbench frame displays.

See *QAD Financials User Guide* for more information on Self-Bill Auto Create.

Self-Bill Auto Create — Workbench

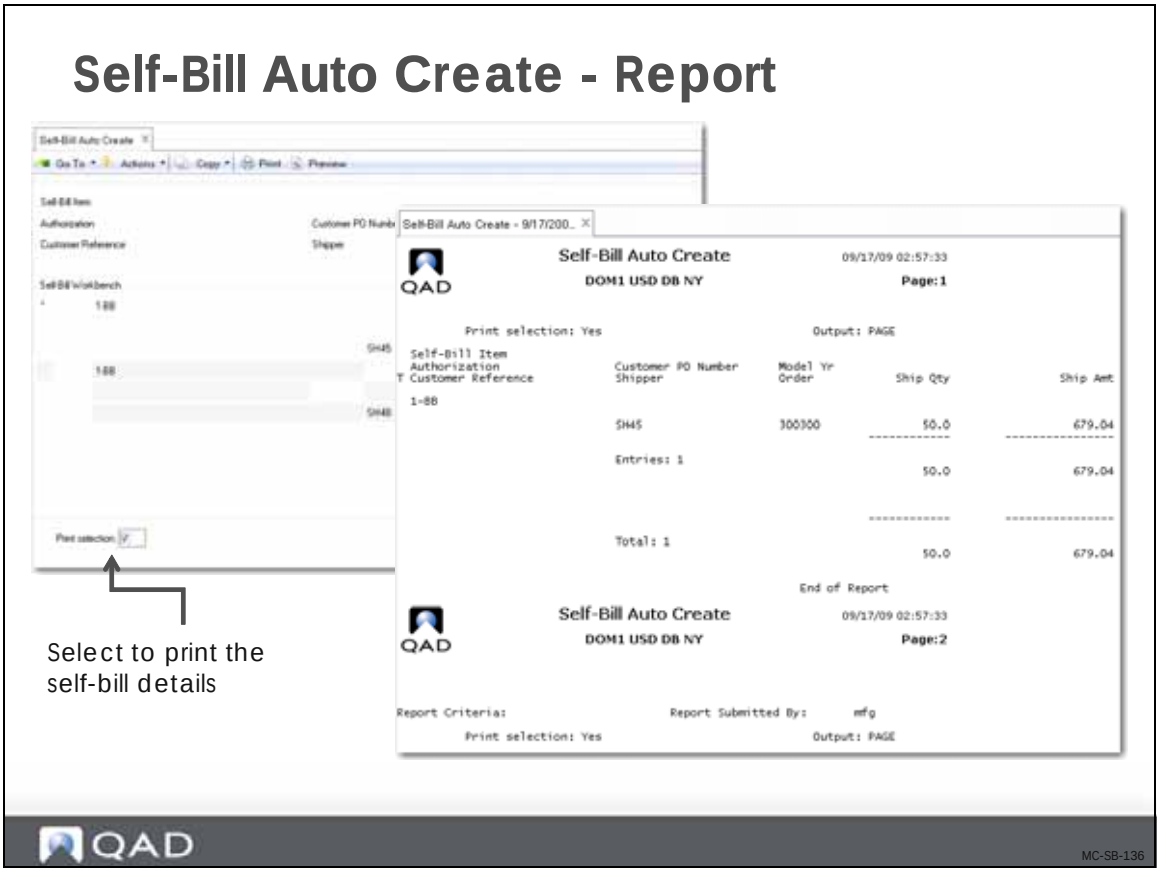


The system analyzes your customer's shipment data and displays a list of possible shipper numbers that might be associated with the customer's remittance advice document. This information is displayed in the screen according to the sort order you previously indicated.

Use the workbench area to refine your selection by deselecting any lines that should not be referenced by this self-bill. The item number is the customer's item number, which was originally used on the order.

- Use Next/Previous functions to navigate from entry to entry.
- Deselect any entry that does not belong on the self-bill. An asterisk (*) indicates selection.

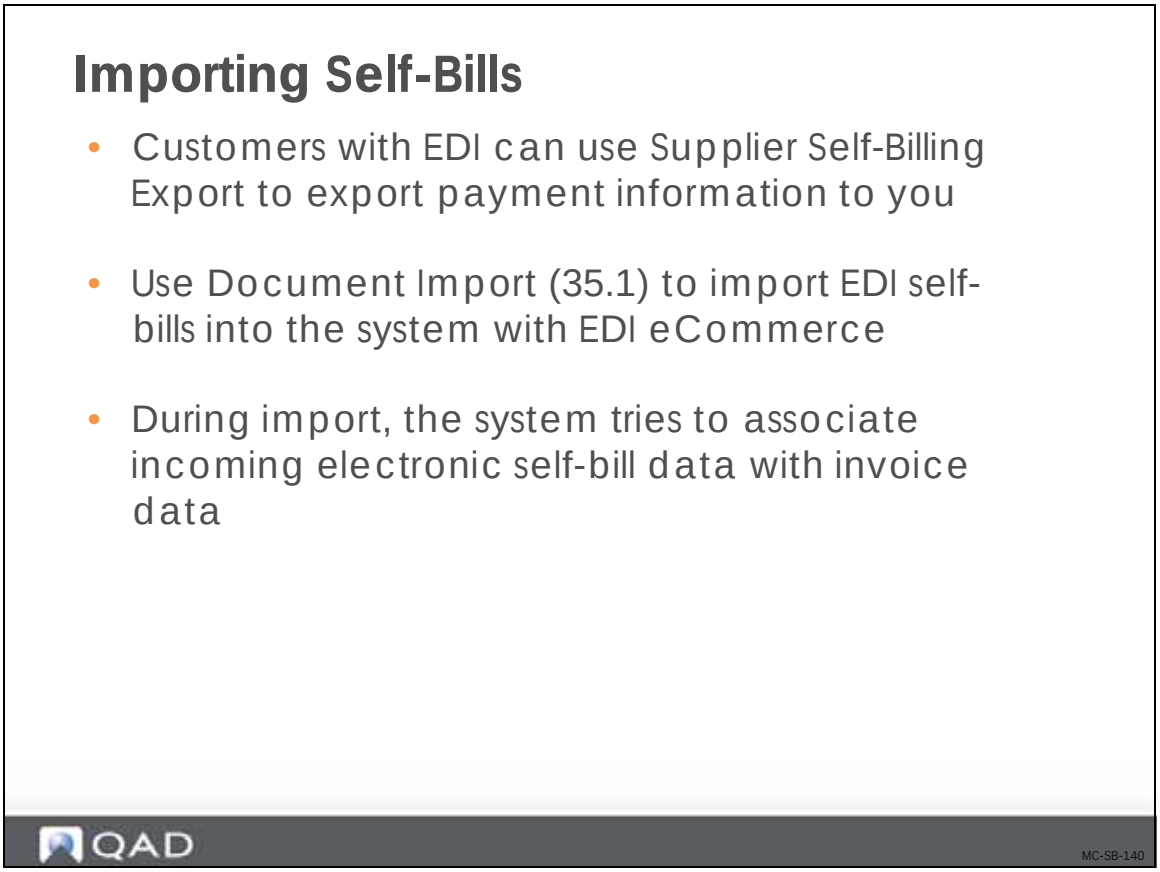
Self-Bill Auto Create — Report



You can print a report of the shipment details for which you created self-bills by selecting the Print Selection field at the end of the Workbench frame. You then select the output type and click Next to generate the report.

See *QAD Financials User Guide* for more information on Self-Bill Auto Create.

Importing Self-Bills



Use Document Import (35.1) to import EDI self-bills into the system with EDI eCommerce. This function loads self-bill information from an EDI file and processes it to create a self-bill document in your QAD database.

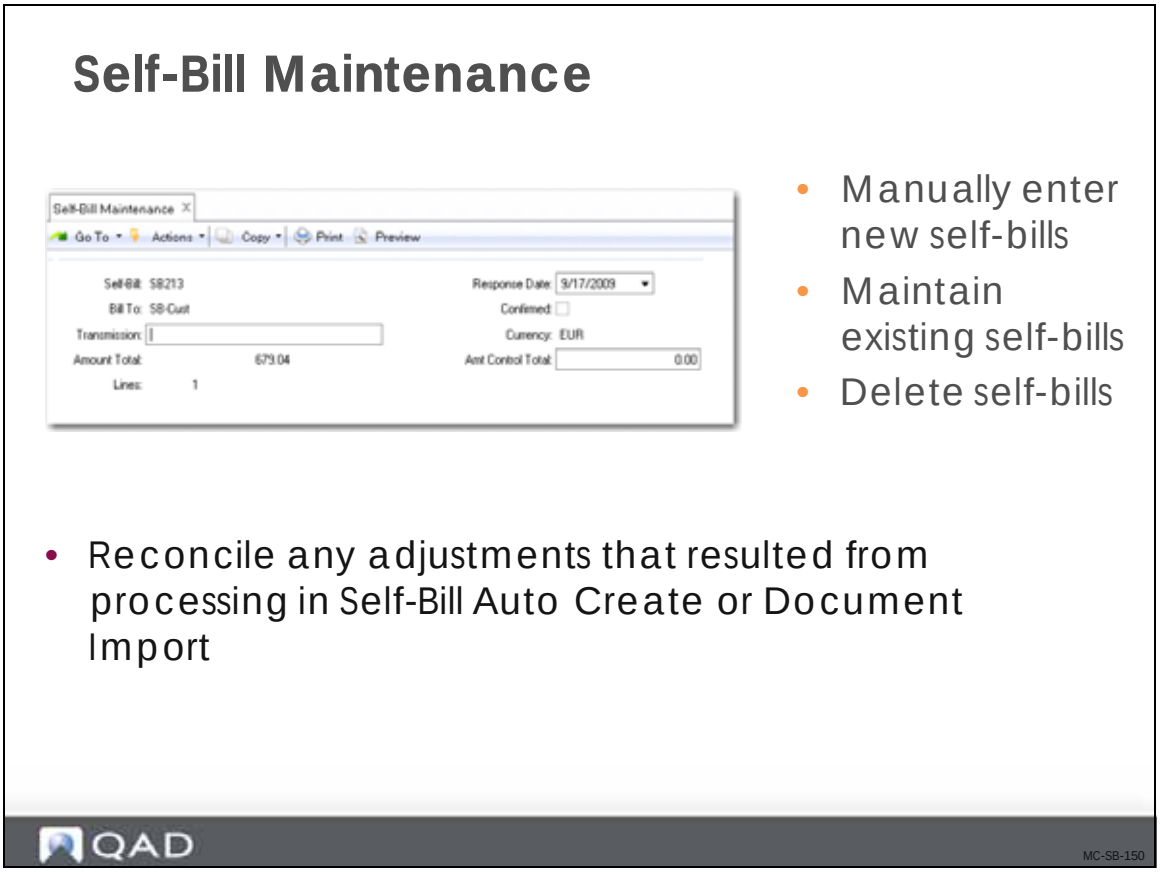
Note For more details on EDI eCommerce, see *QAD EDI eCommerce User Guide*.

During import, the system tries to associate incoming electronic self-bill data with invoice data. Once loaded into your database, the information can be manually modified using Self-Bill Maintenance.

EDI self-bill lines should always be associated with a QAD invoice number. However, the system might not be able to make this association for some self-bill lines due to incorrect or incomplete information in the EDI file. These problems are reported in the EDI load report produced during import.

Lines that the import process cannot associate are tagged as adjustment entry lines. You can manually associate adjustment self-bill lines to the correct invoice in Self-Bill Maintenance.

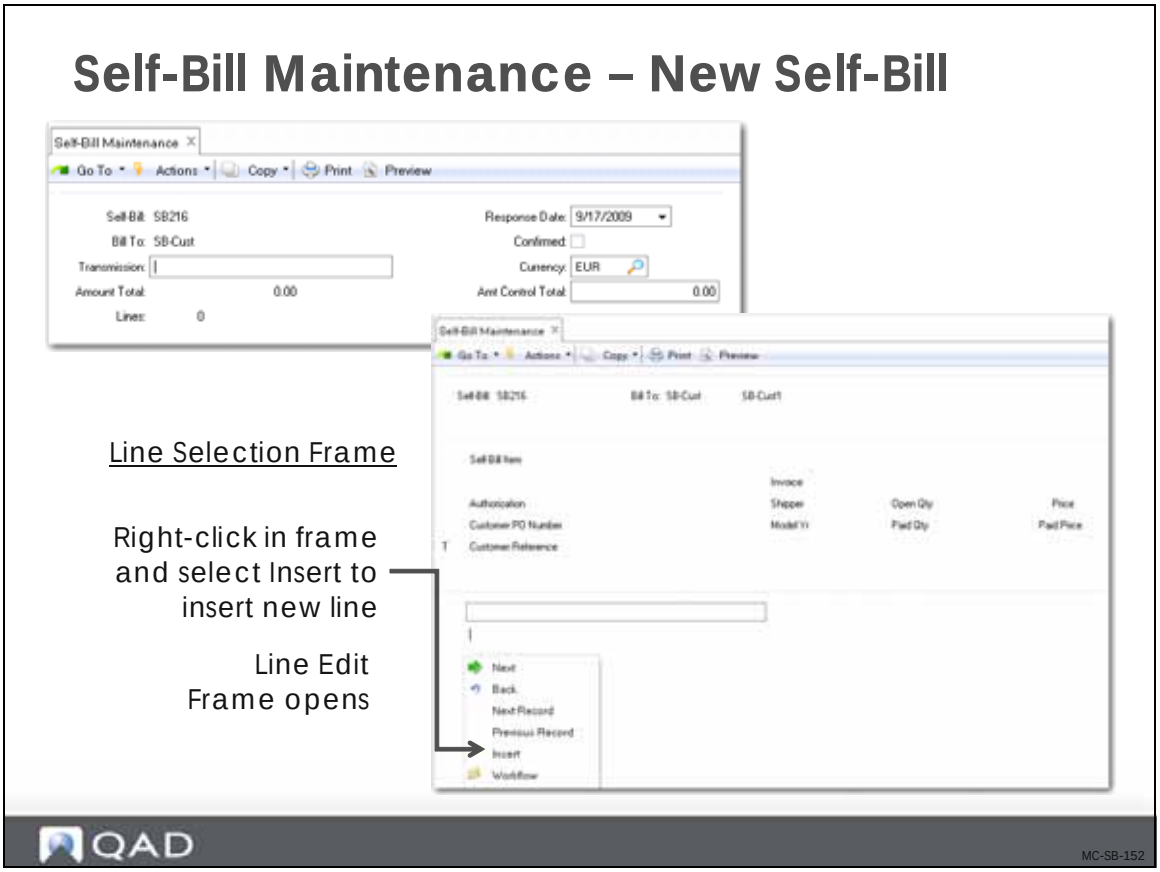
Self-Bill Maintenance



Use Self-Bill Maintenance (27.6.12.1) to manually enter new self-bills and delete and maintain existing self-bills. Use this function to reconcile any adjustment lines that result from processing a self-bill using Self-Bill Auto Create (27.6.12.4) or Document Import (35.1).

In certain situations, you might not be able to associate some lines from a customer's remittance advice to the self-bill you are creating. These lines are labeled adjustment self-bill lines. You must manually associate these lines with the corresponding invoice lines using Self-Bill Maintenance (27.6.12.1).

Self-Bill Maintenance — New Self-Bill



You usually use Self-Bill Auto Create or Document Import to create a new self-bill. However, under some circumstances you might have to use Self-Bill Maintenance to create a new self-bill.

Follow these steps to create a new self-bill using Self-Bill Maintenance. In the program header do the following:

1. Enter a new self-bill number.

   Leave blank for the system to create a new number from the information in the control program.

2. Enter or select a customer bill-to address.

   On a new self-bill, information defaults for Response Date and Currency.

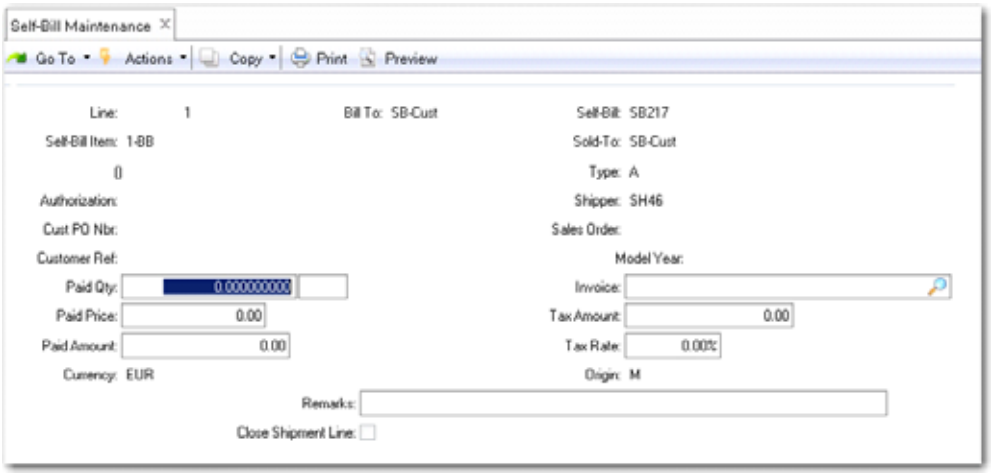
3. Edit Transmission, Response Date, and Amt Control Total as needed. Press Next.

   A self-bill line selection frame is displayed.

4. Right-click the blank self-bill line and choose Insert to insert a line.

   The self-bill line edit frame is displayed.

Self-Bill Maintenance – New Self-Bill



Line Edit Frame

Enter details to create a new self-bill

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5 Enter the Self-Bill Item or Sold-To.

6 Enter any other identifying information available. If you enter an item number associated with a customer item in Customer Item Maintenance (1.16), the customer item number is displayed below the Self-Bill Item field.

When you press Next, the system matches shipment invoice records based on the information in these fields.

For Type:

- Leave blank if entering a shipment line.
- Enter A for an adjustment line. Use this code when creating an adjustment line to reference a write-off.
- Enter C for trailer charges line.
- Enter D for discount line.
- Enter T for tax line.
- Enter L for line charges line.
- Enter X for container charges line.

7 When the system finds multiple matches for the information you enter, a shipment selection frame is displayed. Use this frame to select the correct line.

- Use the arrow keys to scroll from line to line.
- Press Enter to select the correct line.

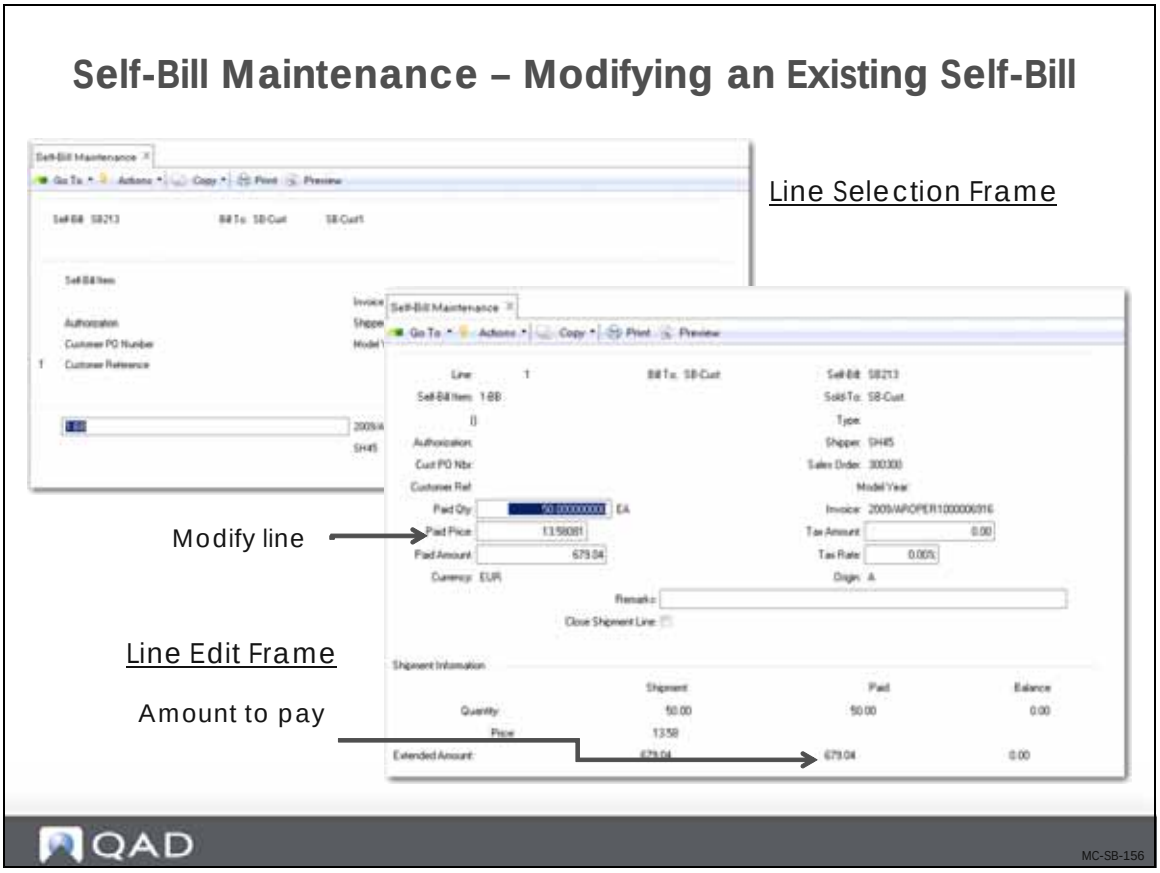
If only one match is found, or after you select the correct shipment line from the line match frame, the financial detail frame is displayed.

8 Enter or edit financial details and remarks for the line. Press Next.

Matching shipment information is displayed in the last frame.

See *QAD Financials User Guide* for more information on Self-Bill Maintenance.

Self-Bill Maintenance — Modifying an Existing Self-Bill



After using Document Import to process EDI self-bills or Self-Bill Auto Create to automatically create self-bills, use Self-Bill Maintenance to make any adjustments.

Once the header information has been entered into the Self-Bill Maintenance header or you have finished the initial auto-create procedure, the line selection frame is displayed. Use this frame to edit, delete, or add new self-bill lines. Use this frame also to link adjustment self-bill lines to shipments, which in effect changes self-bill adjustment lines to shipment self-bill lines.

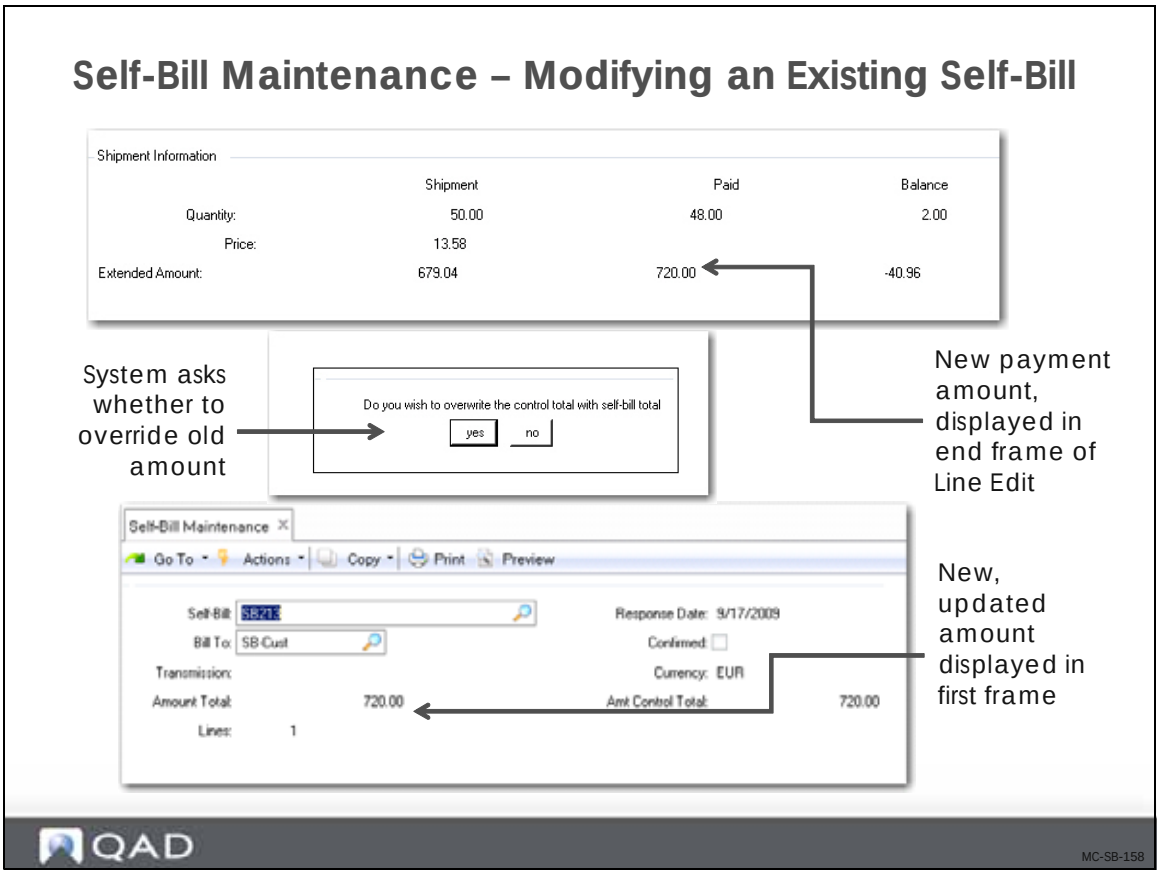
When modifying an existing self-bill in the Self-Bill Maintenance, you cannot edit the Self-Bill, Bill-To, or Currency fields in the header, which default from Self-Bill Auto Create.

Use the following steps to modify a self-bill:

1. In the header frame of Self-Bill Maintenance, enter the Bill-To and Self-Bill number of the self-bill you want to modify.
2. Click Next twice.
3. In the Line Selection Frame, select the self-bill line that you want to edit and press Next.

   The Line Edit Frame opens.
4. Adjust the quantity, price, or amount to pay as required.

   The new amount is displayed at the end of the Line Edit frame (see the next slide).

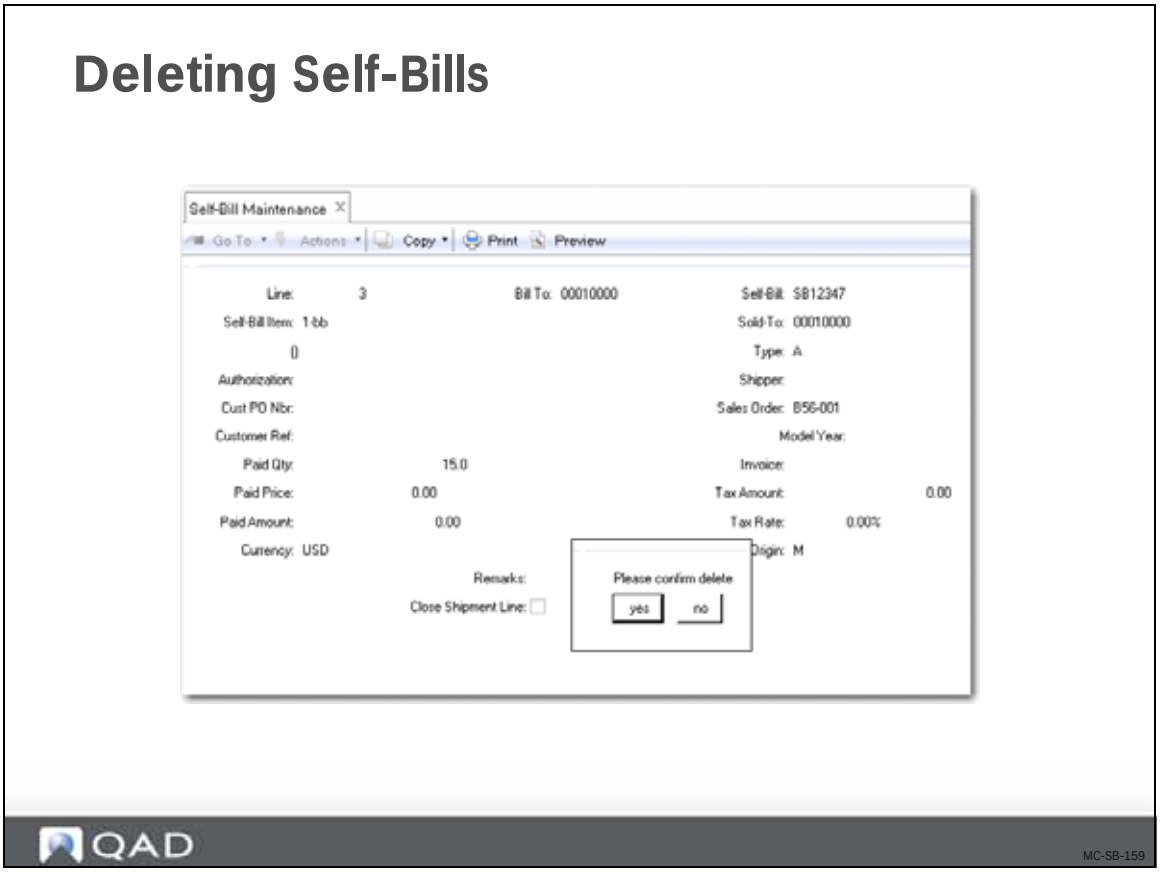


5 When you click Next, the system asks you whether you want to overwrite the original self-bill amount.

6 When you click Next and eventually return to the first frame in Self-Bill Maintenance, the frame displays the updated amount (720 Euros, the original amount was 679.04 Euros).

See *QAD Financials User Guide* for more information on Self-Bill Maintenance.

Deleting Self-Bills



You can use Self-Bill Maintenance (27.6.12.1) to delete an entire self-bill or a specific self-bill line. When a self-bill or a self-bill line is deleted, any shipment-invoice cross-reference records associated with it are released and the invoice lines can be selected on another self-bill.

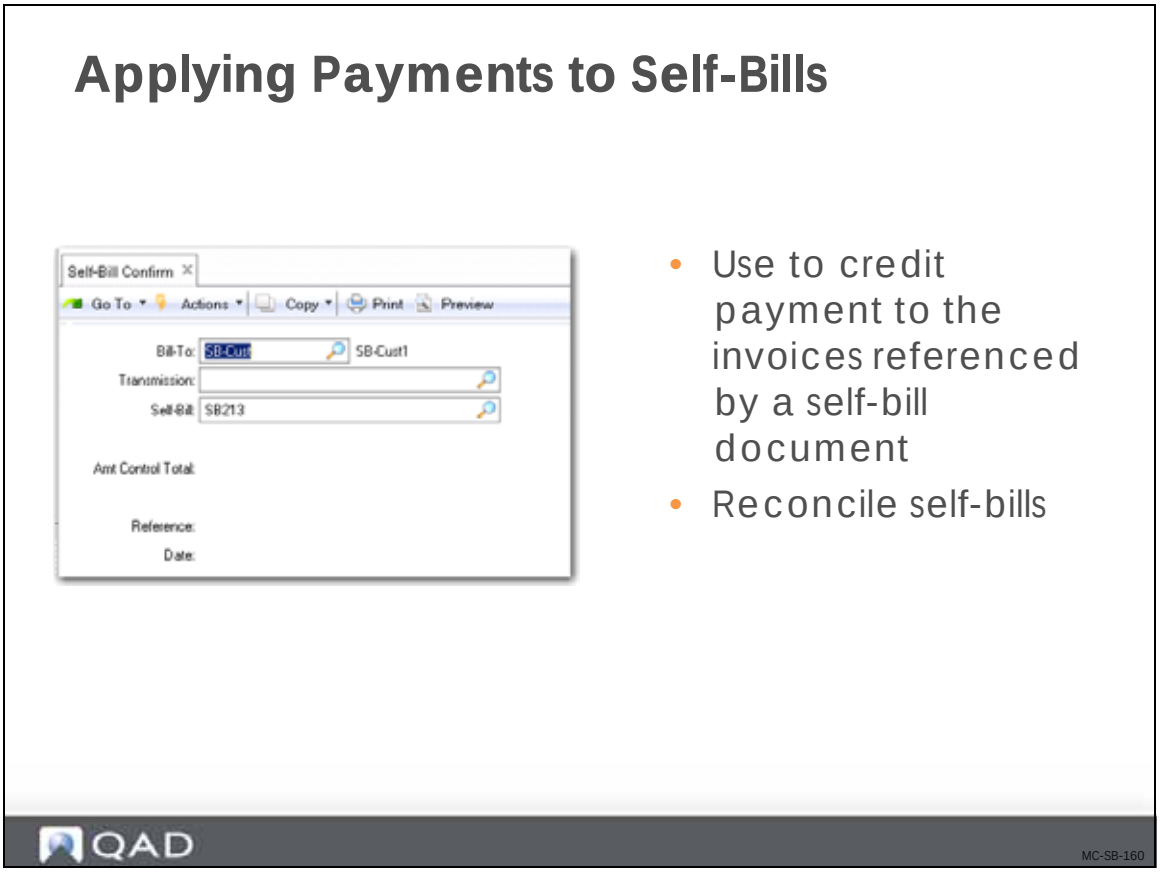
Note A self-bill or self-bill line cannot be deleted if payment has been applied to it.

To delete a self-bill line:

1. Select the self-bill that has the line you want to delete.
2. In the line selection frame, select the line to delete. Press Delete.

The self-bill line detail frame and a delete confirmation prompt appear.

Applying Payments to Self-Bills



Once a self-bill has been created and payment has been received, payment must be credited to the appropriate QAD invoices. Use Self-Bill Confirm (27.6.12.7) to apply payment to all of the invoices that are referenced by a self-bill document.

Important You cannot apply payment to a self-bill if the Amt Total does not equal the Amt Control Total.

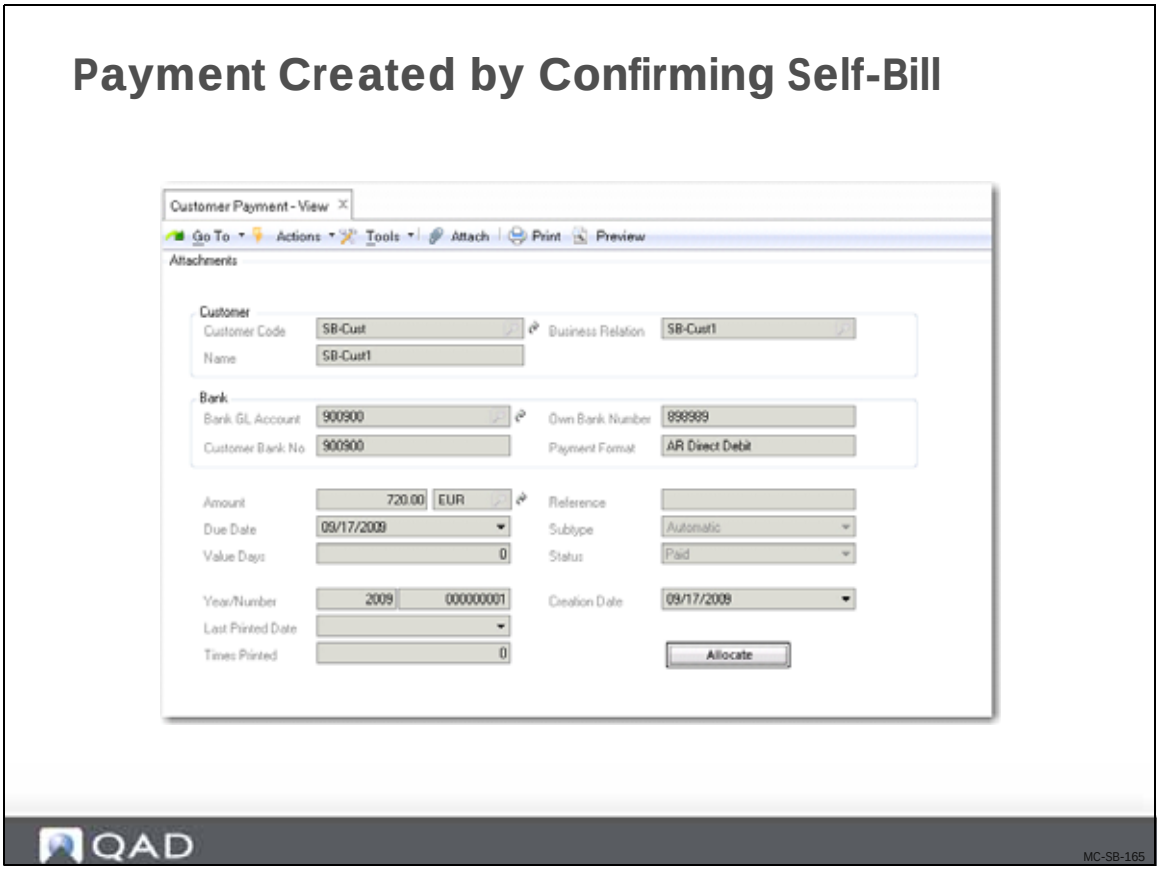
When you use this program to apply payment, the payment is applied to the invoice specified on the self-bill detail line.

When a payment is applied, four different situations are possible:

- Payment is credited to the invoice.
- When no invoice is specified—the Invoice field is blank—the amount paid is applied to unapplied cash with a reference to the self-bill and the self-bill line.
- When payment is greater than the amount open on the invoice, the overpayment amount is applied to unapplied cash with a reference to the invoice.
- When payment is greater than the invoice line, the overpayment is applied to unapplied cash with a reference to the self-bill and self-bill line.

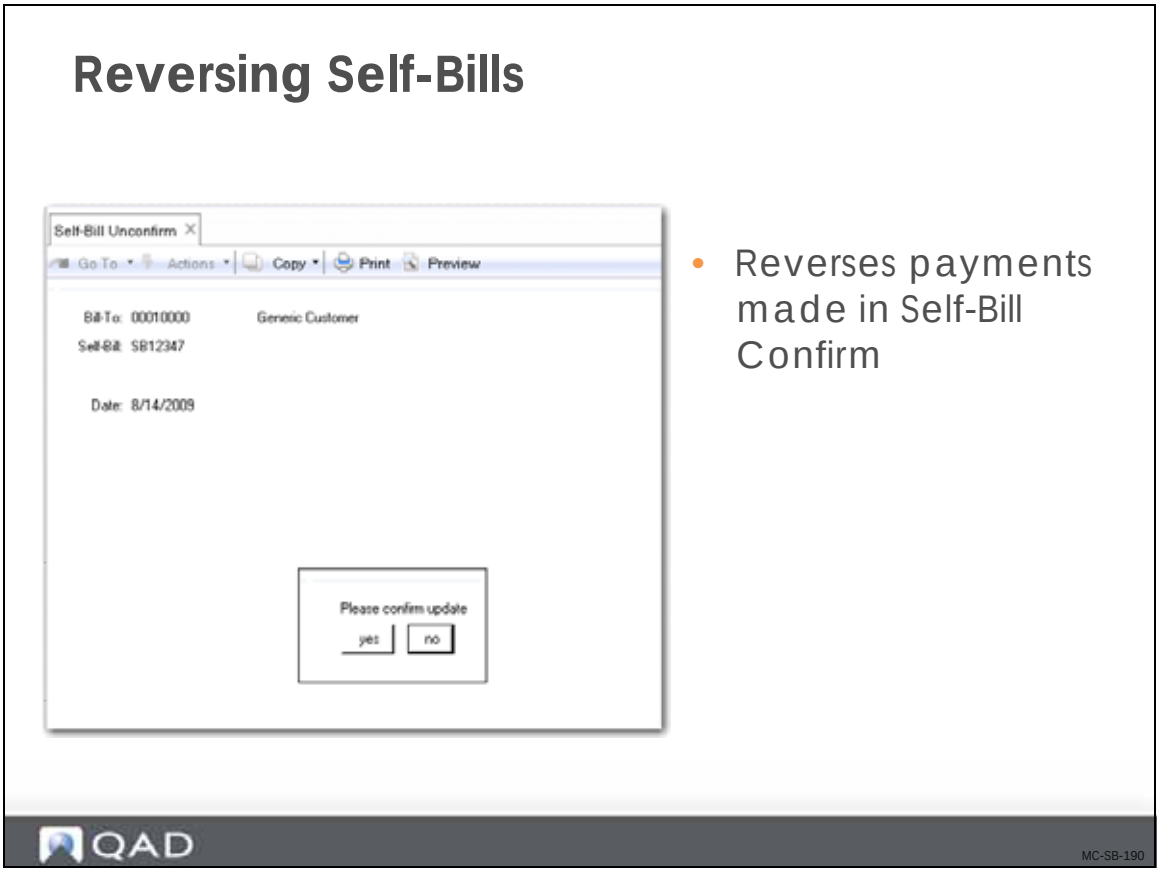
See *QAD Financials User Guide* for more information on Self-Bill Confirm.

Payment Created by Confirming Self-Bill



The slide displays the customer payment automatically created by confirming the payment in Self-Bill Confirm (27.6.12.7).

Reversing Self-Bills



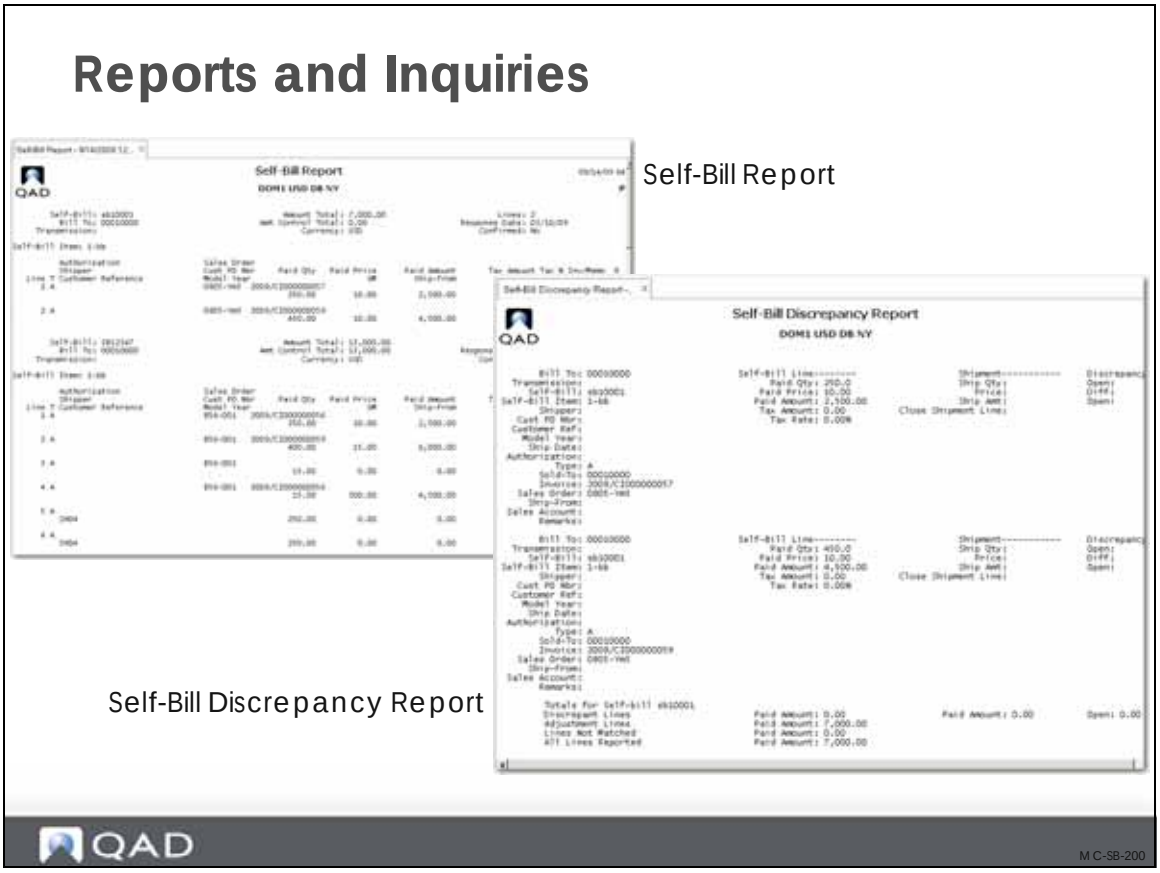
If you need to reverse a payment, use Self-Bill Unconfirm (27.6.12.8). This program reverses payments made in Self-Bill Confirm (27.6.12.7).

Payments cannot be reversed if:

- Unapplied cash related to the self-bill has been used to pay another invoice.
- The payment period is not a valid, open GL period.

See *QAD Financials User Guide* for more information on Self-Bill Unconfirm.

Report and Inquiries



Use Self-Bill Report (27.6.12.13) to review self-bill detail information. Use the selection criteria and sort options to sort and narrow down the information reported.

Use Self-Bill Discrepancy Report (27.6.12.10) to view discrepancy details associated with a self-bill document. Use the details provided by this report to reconcile discrepancies in self-bills. This report shows the three types of discrepancies that prevent you from applying payment to a self-bill.

- Discrepant Lines: Lines matched to invoice shipment data where the invoice shipment data has an open quantity, an open amount, or a price difference.
- Adjustment Lines: Lines marked with a type A. These lines could not be matched when the self-bill was originally created.
- Lines Not Matched: Lines that can be matched to invoice shipment data, but for some reason were not. These are marked as type blank.

Reports and Inquiries – Continued

Invoice AR Balance Report | Invoice AR Balance Report - S/...

QAD

Invoice AR Balance Report

DOM1 USD DB NY

Bill To	Invoice Number	Invoice Date	Effective	Due Date	Status Code	Cur	Original A	Open Amount
00010000	2009/ARCMJOUR000000003	02/25/09	02/25/09	05/29/09	QAD-ALLOC	USD	150.00	150.00
00010000	2009/ARFINV000000001	02/25/09	02/25/09	05/29/09	QAD-ALLOC	USD	880.00	880.00
00010000	2009/ARFINV000000001	02/25/09	02/25/09	05/29/09	QAD-ALLOC	USD	9,990.00	9,990.00
00010000	2009/ARFINV000000002	02/25/09	02/25/09	05/29/09	QAD-ALLOC	USD	1,111.00	1,111.00
00010000	2009/ARDPER1000006823	03/18/09	03/18/09	06/19/09	QAD-ALLOC	USD	150.00	150.00
00010000	2009/ARDPER1000006842	03/18/09	03/18/09	06/19/09	QAD-ALLOC	USD	550.00	550.00
00010000	2009/ARDPER1000006870	07/28/09	07/28/09	10/29/09	QAD-ALLOC	USD	10.00	10.00
00010000	2009/ARDPER1000006871	07/28/09	07/28/09	10/29/09	QAD-ALLOC	USD	15.00	15.00
00010000	2009/ARDPER1000006872	07/28/09	07/28/09	10/29/09	QAD-ALLOC	USD	20.00	20.00
00010000	2009/CI000000056	04/23/09	04/23/09	05/23/09	QAD-ALLOC	USD	1,000.00	1,000.00

Self-Bill Adjustment Lns Pegged To Invoice

Self-Bill	T	Paid Qty	Paid Price	Paid Amount	Tax Amount	Tax Rate
SB12347	A	250.0	10.00	2,500.00	0.00	0.00%
SB12347	A	15.0	300.00	4,500.00	0.00	0.00%

Invoice AR Balance Report

QAD

MC-SB-210

Use Invoice AR Balance Report (27.6.12.11) to determine what portion of invoices referenced by the self-bill have been paid. Internally, the system maintains a map between every self-bill line and an invoice. Applying payment to a self-bill means applying payment to the associated invoices.

Reports and Inquiries – Continued

Shipment-Invoice Crossref Re...

QAD

Shipment-Invoice Crossref Report

DOM1 USD DB NY

Self-Bill Item / Authorization / Customer PO Number / T Customer Reference / cit#1	Shipper / Order / Model Yr	Invoice / Ship Dt	Ship Qty / Open Qty	Price	Ship Amt / Balance	Ship-From / C
	SH23					
	sojul1	07/10/09	25.0		2,500.00	C1000
			0.0	100.00	0.00	no
CIT#5						
authxx	SH13	2009/ARDPER1000006851				
PDEK1	EK-cu4	06/08/09	150.0		75,000.00	c1001
			0.0	500.00	0.00	no
AUTHXXX	SH19	2009/ARDPER1000006854				
SAP003a	D1570	06/29/09	150.0		75,000.00	C1001
			0.0	500.00	0.00	no
AUTHXXX	SH25	2009/ARDPER1000006859				
JULP01	JUL10	07/10/09	150.0		75,000.00	C1001
			0.0	500.00	0.00	no
imhpart1						
	SH08					
	d1s51	04/23/09	10.0		100.00	imhsite
			0.0	10.00	0.00	no

Shipment-Invoice Crossref Report

QAD

MC-SB-220

The shipment-invoice cross-reference structure holds the map between shipment-related details such as shipper number or authorization number and associated QAD invoice numbers.

Shipment-Invoice Crossref Report (27.6.12.15) facilitates inquiries into the self-bill cross-reference structures in the system.

Chapter 15

Consolidation

Objectives

Objectives

- Understand the scope and capabilities of consolidation in QAD EE
- Learn how to set up and run consolidation for a specific business case

QAD

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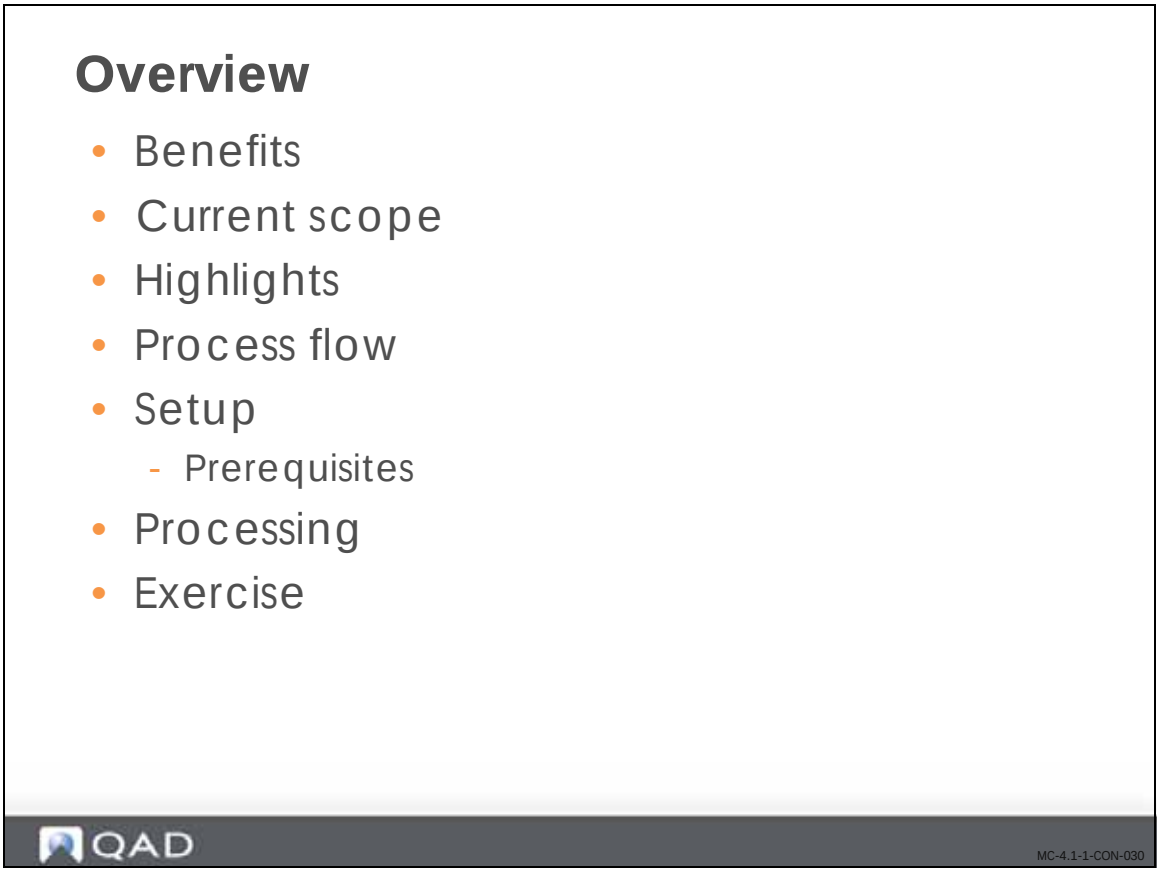
Overview

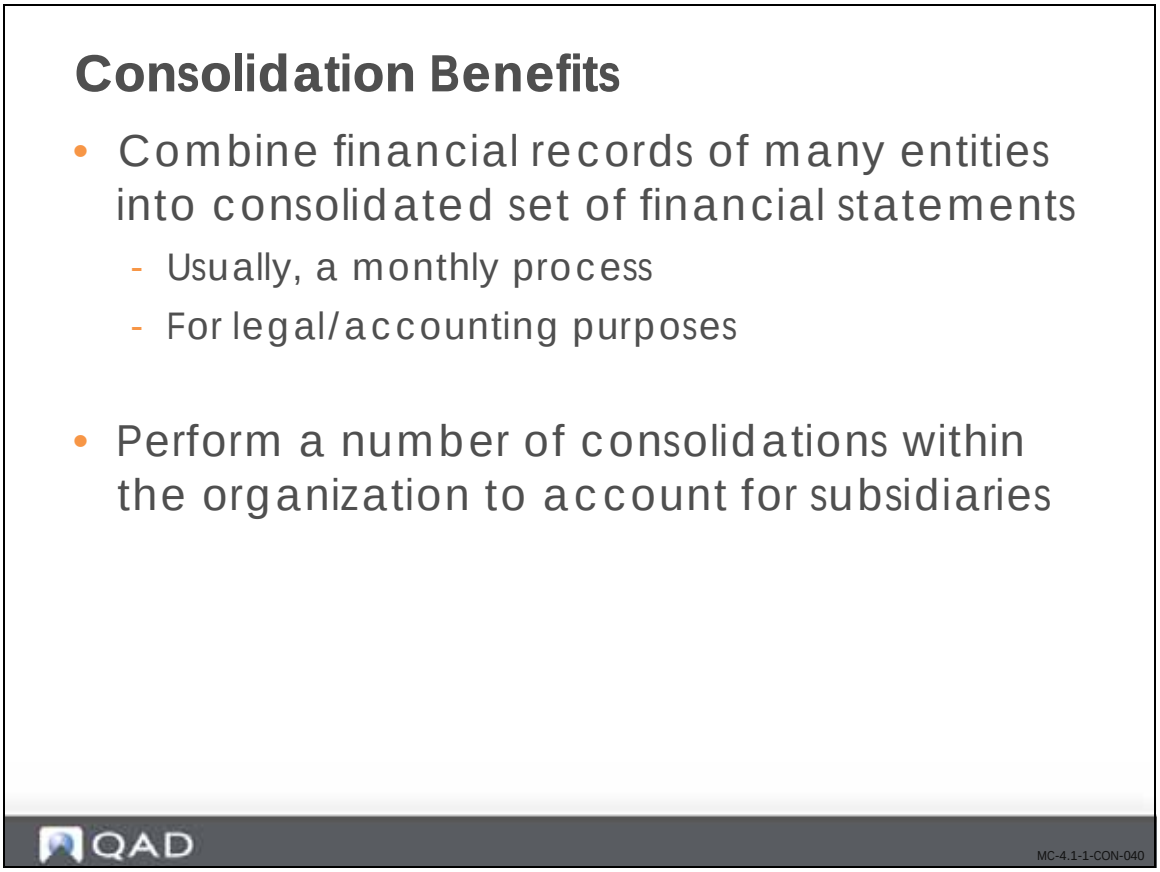


This section reviews the highlights of the consolidation functionality in QAD Enterprise Applications, including its benefits and current scope.

We will then study the consolidation process—from setup to processing—in more detail.

Finally, you will practice your newly-acquired knowledge with a hands-on exercise.

Consolidation Benefits



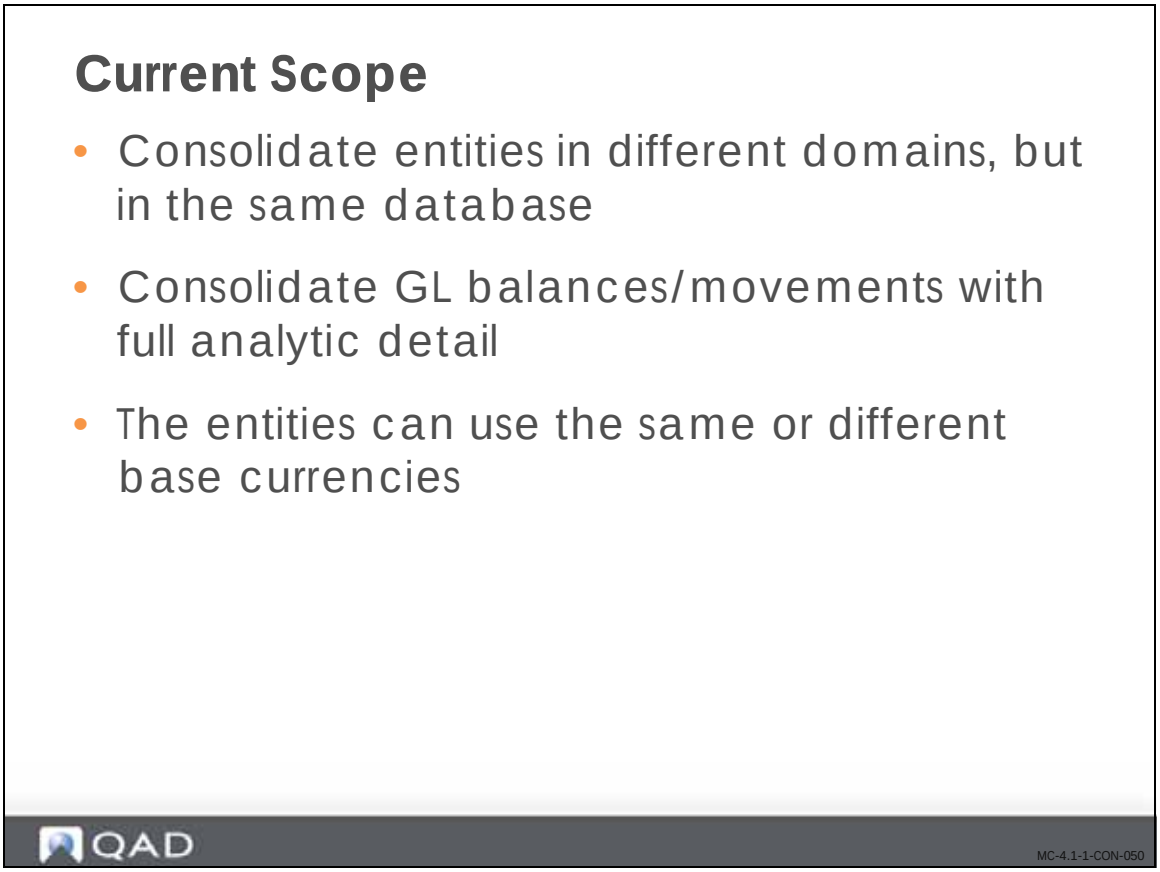
Consolidation is usually a monthly review process, giving an immediate financial summary of a multi-entity organization.

You can perform a number of consolidations within the organization to account for subsidiaries that have been taken over by the parent organization.

In order to consolidate, you must identify the entities with accounts you want to consolidate, and set up a consolidation entity in which to store the consolidation data. All accounts in the source entities are mapped to corresponding consolidation accounts in the consolidation entity.

The consolidation functionality responds to a legal and accounting requirement.

Current Scope

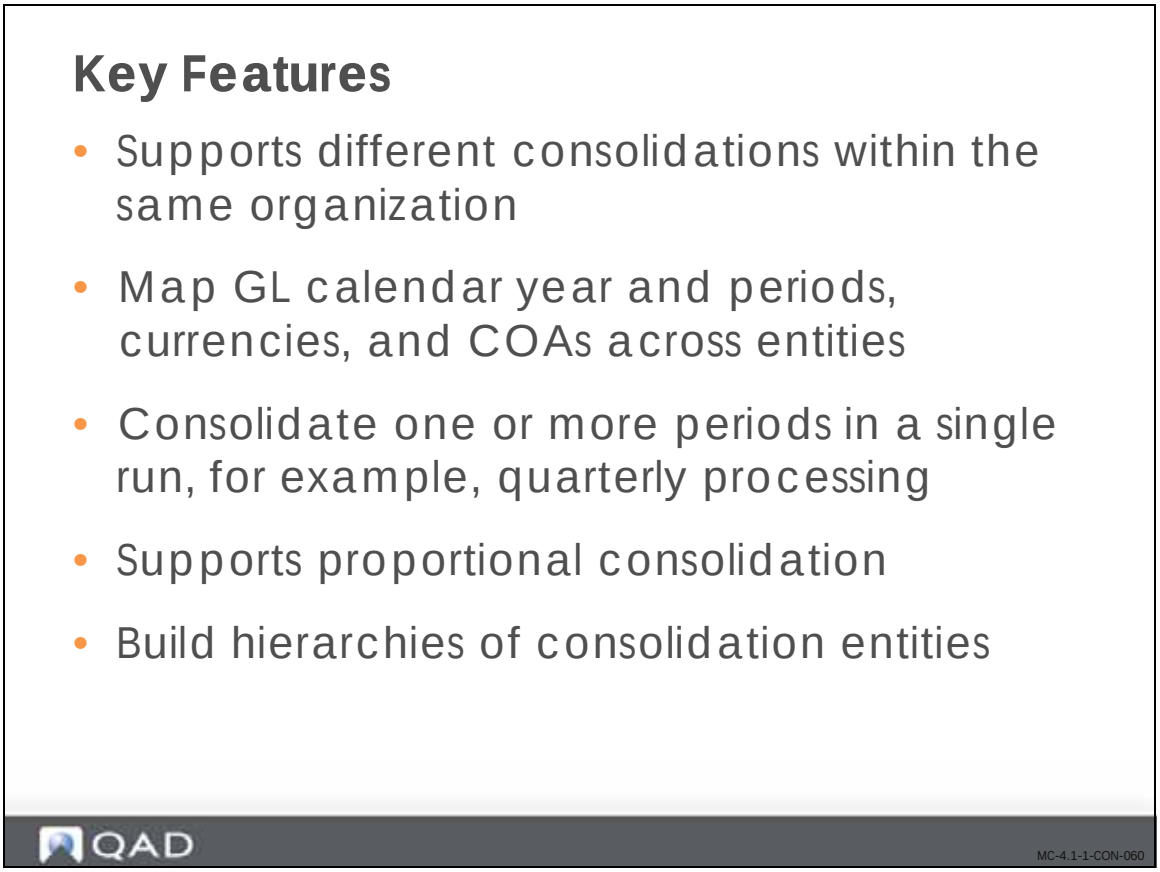


The consolidation functionality requires that the entities to consolidate be in the same database, but they can belong to different domains.

You can, optionally, include the full GL analytic detail in a consolidation, for example, sub-account, cost center, project, and SAF structures, or only part of it.

The entities involved in consolidation do not need to have the same base currency.

Key Features



The consolidation functionality in QAD Enterprise Applications lets you perform multiple consolidations within one system, and is, therefore, of great benefit to large organizations,

Again, you can include all GL analytical elements in a consolidation.

Proportional consolidation is an option, and we will review this later in more detail.

The entities involved in a consolidation do not need to have to have the same GL calendar. Additionally, a consolidation can be run for one or several periods at a time.

In a consolidation entity, the same reporting capabilities exist as for non-consolidation entities.

Key Features — Continued

Key Features – Continued

- Consolidate separately by accounting layer
- Fast balance-level consolidation
- Supports simulations
- Automatic tracking of intercompany transactions to support elimination
- For multiple consolidations
  - Supports incremental elimination as well as full elimination

QAD

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Consolidation Process

Consolidation Process

- Transfer GL balances from source entities to a target (consolidation) entity using journal entries
  - Account, sub-account, and intercompany codes
  - 100% or partial consolidation
  - Staged consolidation through different currencies is available
- Allows further manual postings after consolidation
  - Report on intercompany codes is basis for intercompany elimination
  - Allows simulation postings or other postings in consolidation entity

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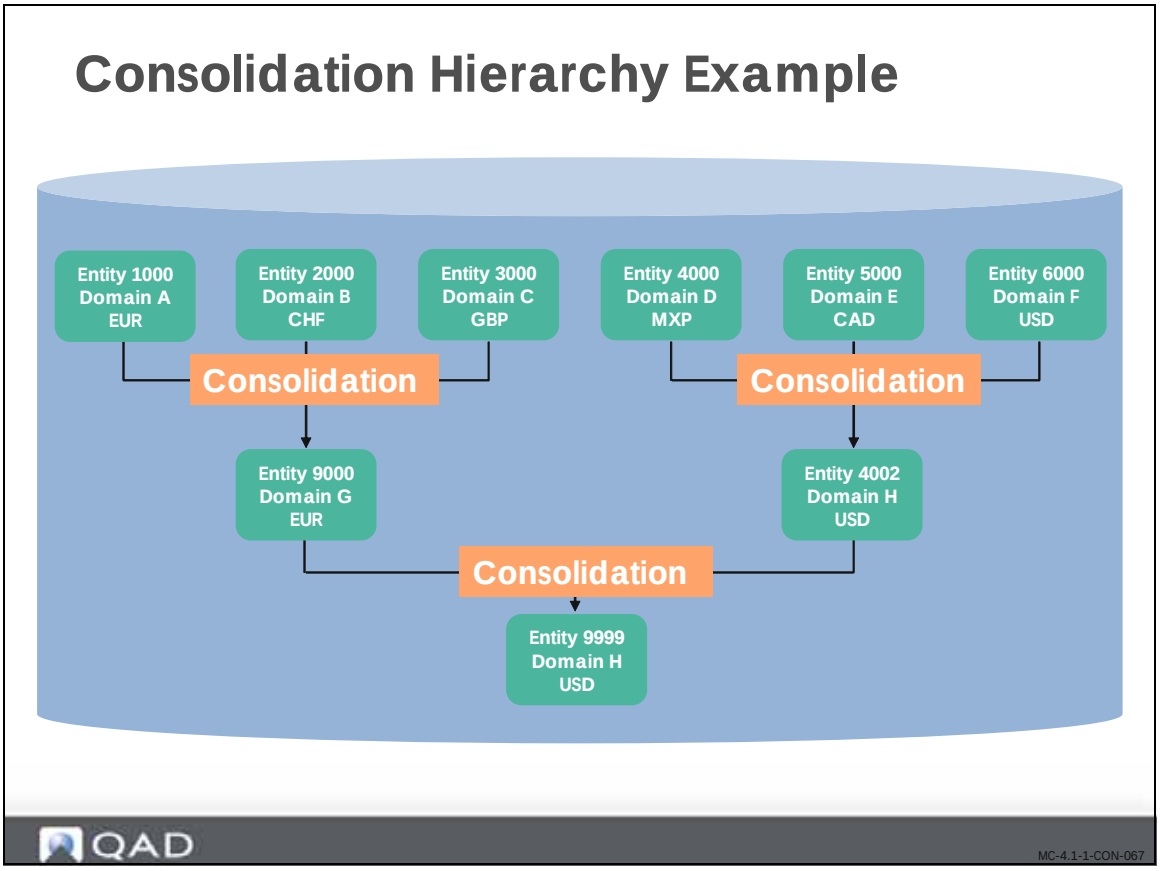
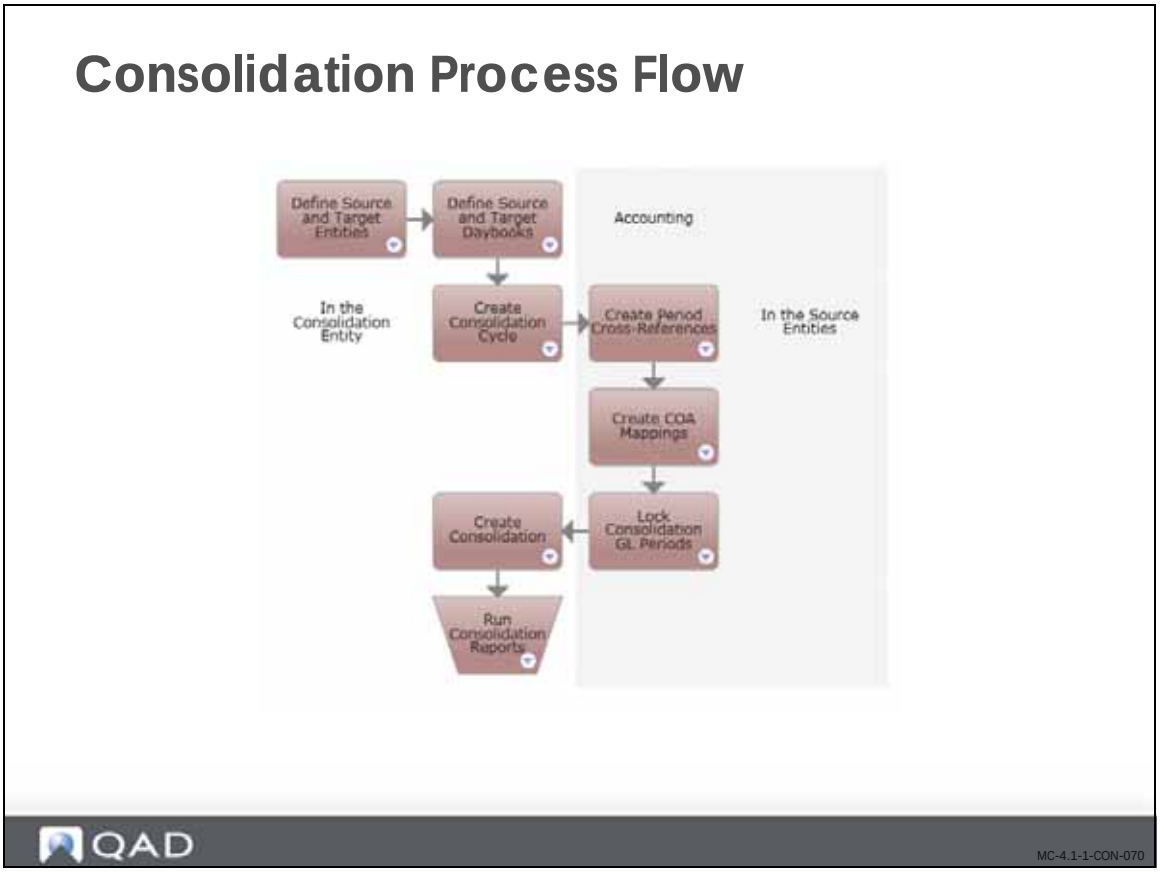
Consolidation Hierarchy Example



An organization has subsidiaries represented by entities 9000 and 4002. Entity 9000 in turn has subsidiary entities 1000, 2000, and 3000, and 4002 has subsidiary entities 4000, 5000, and 6000. The organization performs consolidations for subsidiary entities 1000, 2000, and 3000 in entity 9000, for entities 4000, 5000, and 6000 in entity 4002, and, finally, for entities 9000 and 4002 in entity 9999.

Consolidation Process Flow



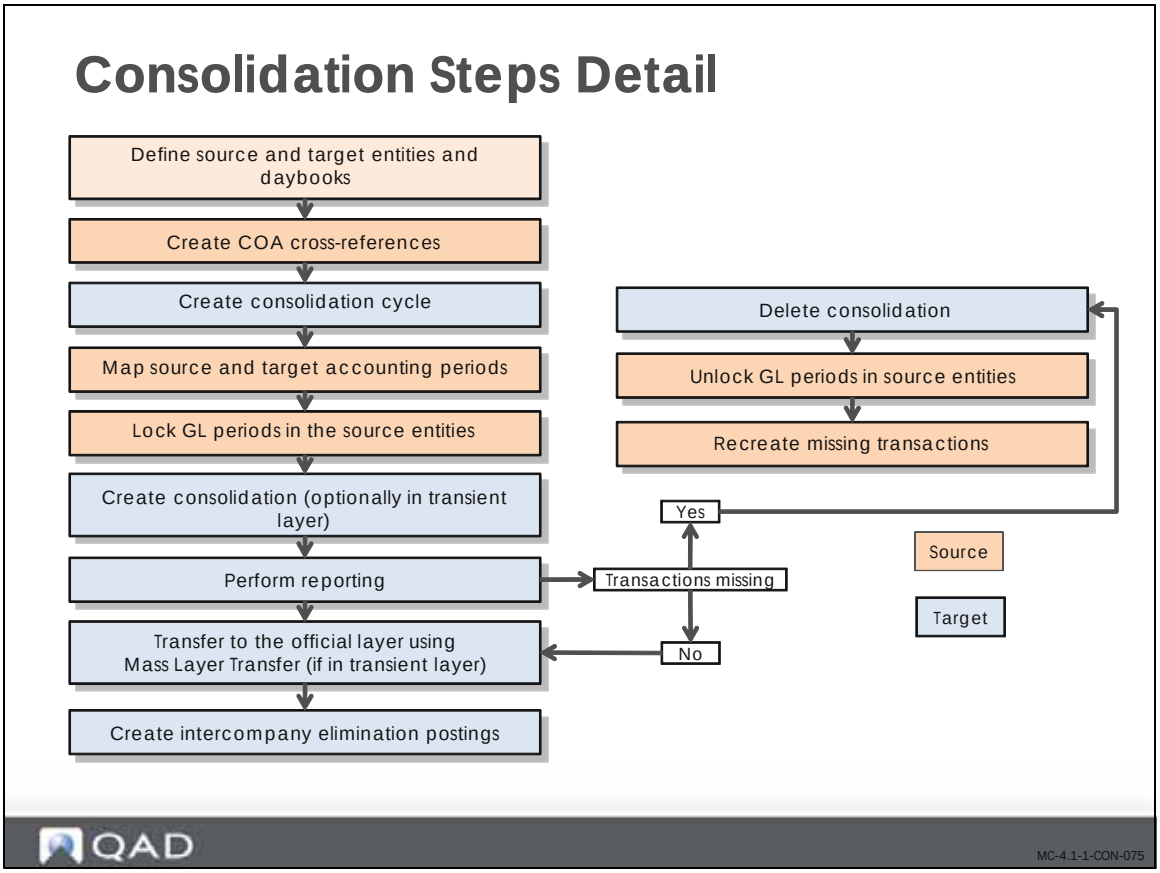
The system uses source and target entities in the consolidation process. Source entities are the subsidiary entities whose accounts you want to consolidate. The target entity is the consolidation entity in which you combine the source account balances.

From within the consolidation entity, you create a consolidation cycle, which identifies the source entities, the daybooks to be used for balances in each entity, and the participation percentage to be applied to each entity.

Consolidation is performed for specific GL periods, and you must align your consolidation entity GL periods with those of the source entities. You must also map GL elements in your source entities to the consolidation accounts in your consolidation entity.

Important After you have created the consolidation, you must perform an additional step to eliminate intercompany postings. See “Intercompany Elimination Postings” on page 408.

Consolidation Steps Detail

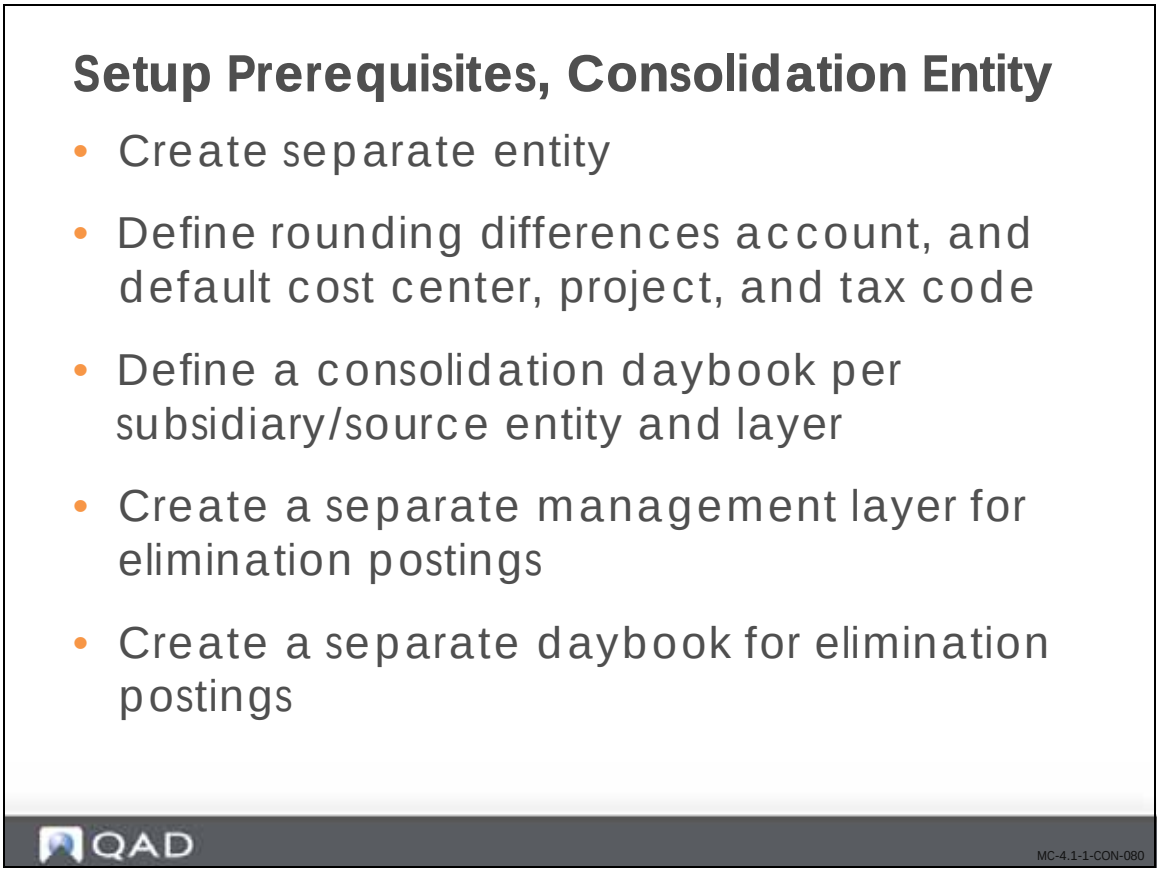


You set up and run consolidation in the following order:

1. Create the source and target entities and daybooks required for consolidation.
2. From within each of the source entities, map source and target GL accounts and, optionally, sub-accounts, cost centers and projects, to create COA cross references for use in the consolidation cycle. Each subsidiary entity and the COA cross reference it uses must belong to the same domain.
3. From within the consolidation entity, create the consolidation cycle, which defines the source entities and daybooks to use.
4. From within each of the source entities, define a range of GL periods to be mapped to the consolidation GL calendar.
5. From within each of the source entities, lock the GL periods that are to be included in the consolidation.
6. From within the consolidation entity, create the consolidation. In this step, you define source and target accounting layers, set the GL period range, and run the consolidation.
7. Perform reporting.
8. Create elimination postings.

We will now review these steps in more detail.

Setup Prerequisites



Prior to creating a consolidation cycle, the following setup is required:

Consolidation (Target) Entity

You must set up a new, separate consolidation entity, including the business relation.

You must create a rounding difference account, default cost center, project codes, and tax code for the consolidation entity.

Additionally, you must create a consolidation daybook for each source entity and layer.

Setup Prerequisites, Source Entity

- COA cross-references
  - GL accounts, sub-accounts, cost centers, projects
- Period cross-references
- Exchange rate consolidation method
  - For each GL account in the consolidation entity
  - Settings in GL account Currency tab

QAD MC-4.1-1-CON-090

In each source entity, use COA Cross Reference Create (25.3.14.1) to create mappings between the GL dimensions in source and consolidation entities.

Special attention is required when mapping open item accounts, cross-company accounts and tax accounts. When posting to any of these accounts, the system requires additional input that cannot be given during consolidation posting. Therefore, all accounts of one of these three types should be matched to standard accounts in the consolidation entity. For intercompany accounts, this results in a zero balance, as expected.

Use Consolidation Period Cross-Reference Maintain (25.19.1.3) to create cross-references between GL periods in a source entity and GL periods in consolidation entities.

Finally, for each GL account of a specific shared set, select the consolidation method in the currency tab of GL Account Create (25.3.13.1) or GL Account Modify (25.3.13.2).

Consolidation can be performed between entities using the same or different base currencies. When the entities are in domains with different base currencies, the system converts transactions in the base currency of the source entity into the base currency of the consolidation entity using rates in the exchange rate shared set of the consolidation entity. The exact rate used is determined for each account based on the setting of the Consolidation Method field in the Currency tab of GL Account Create. This field can have one of the following values:

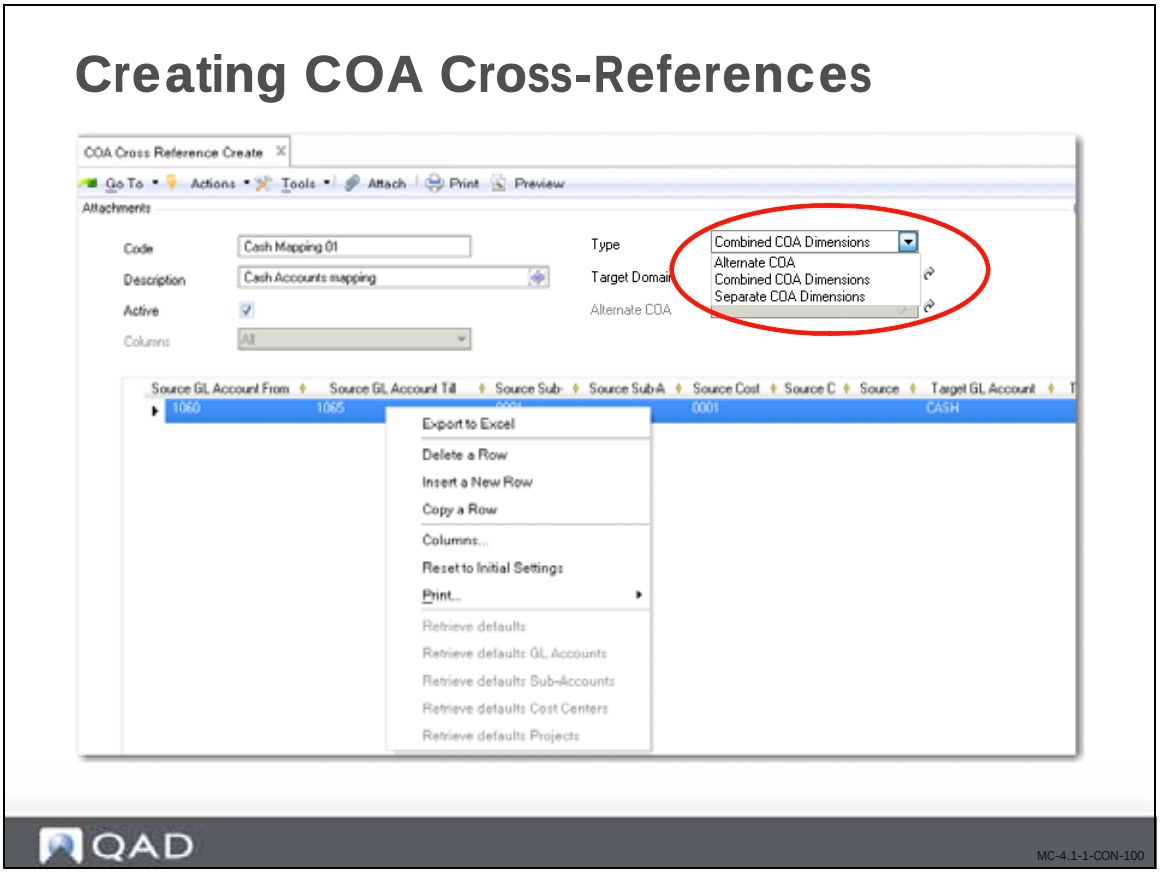
- Actual Rate (accounting rate at period end, also known as current rate)
- Historical Rate
- Simple Average Rate

- User-Defined Rate (Own Method)
- Weighted Average Rate

These methods are described in detail in the *QAD Financials User Guide*.

When different methods are used, exchange rate differences can result. These are posted to the Rounding Differences account specified in Consolidation Cycle Create (25.9.1.7).

Creating COA Cross-References

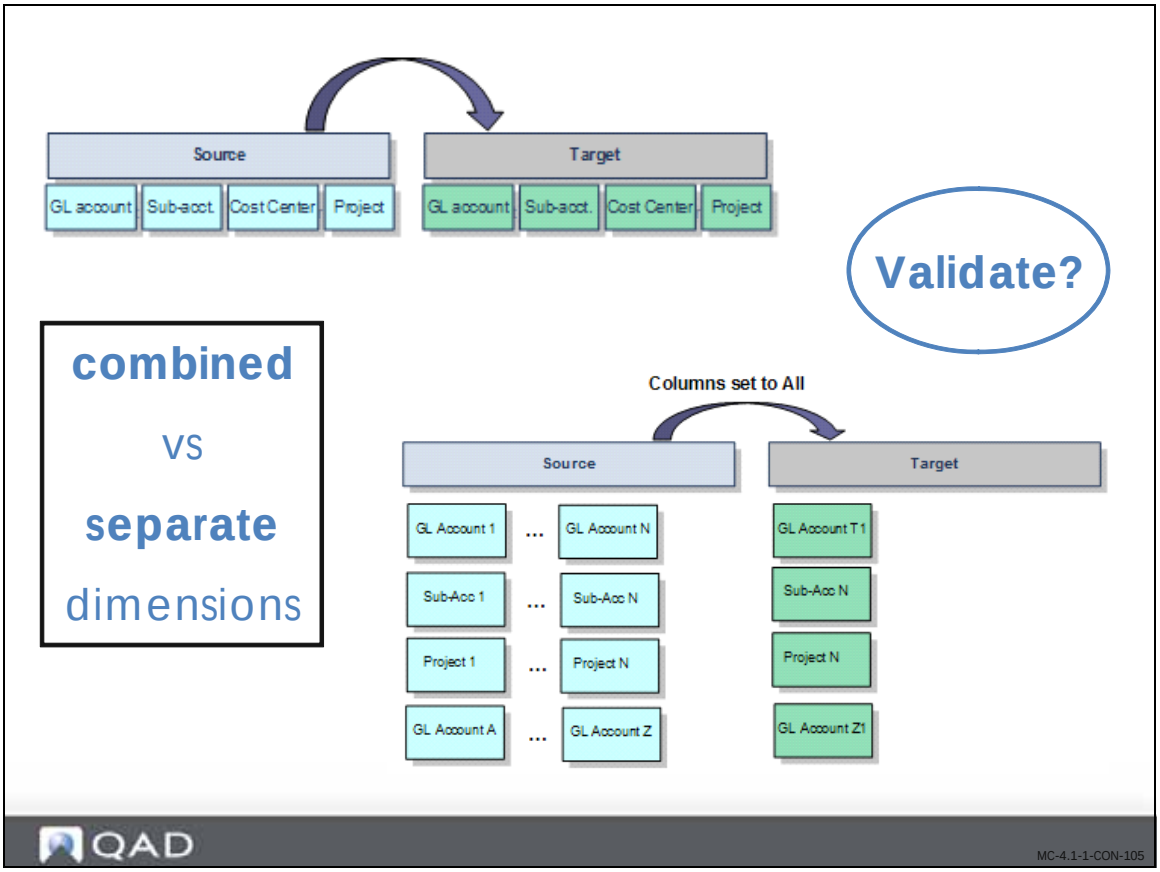


Use COA Cross Reference Create (25.3.14.1) to define mappings between the source and target entity charts of accounts. You can choose between two different types of cross-references: combined, or separate COA dimensions. The third available type is reserved for the setup of alternate COAs. On the next slide, we will explain more about the two consolidation types.

You must create a cross-reference structure in the same domain as the source entity. The target domain is the consolidation entity's domain. Each cross reference should be valid. For details on the validations performed, refer to the *QAD Financials User Guide*. Many-to-one combinations are possible.

A Copy function, as well as Excel integration, are available when creating COA cross-references.

Combined vs Separate GL Dimensions Types



When the cross reference type is **Combined GL Dimensions**, you specify cross-references from source GL combinations (account, sub-account, cost center, project, SAF) to target GL combinations. The system reads the GL combination from the source transaction, and looks for a match in the cross-reference table of the consolidation entity's domain, in the following order:

- Matching account, sub-account, cost center, and project
- Matching account, sub-account, cost center, and blank project
- Matching account, sub-account, blank cost center, and project
- Matching account, sub-account, blank cost center, and blank project
- Matching account, blank sub-account, blank cost center, and blank project

If no match is found, the transaction is posted to the same GL combination as the source transaction.

When the cross reference type is **Separate GL Dimensions**, you can specify cross-references from separate source GL COA elements to separate target GL COA elements (GL accounts to target GL account, sub-accounts to target sub-accounts, and so on).

When creating separate COA cross-references, use the Columns field to indicate the type of mapping to filter on—All, GL Account, Sub-Account, Cost Center, or Project. The filter lets you focus on one element at a time, and you can change the filter type during input.

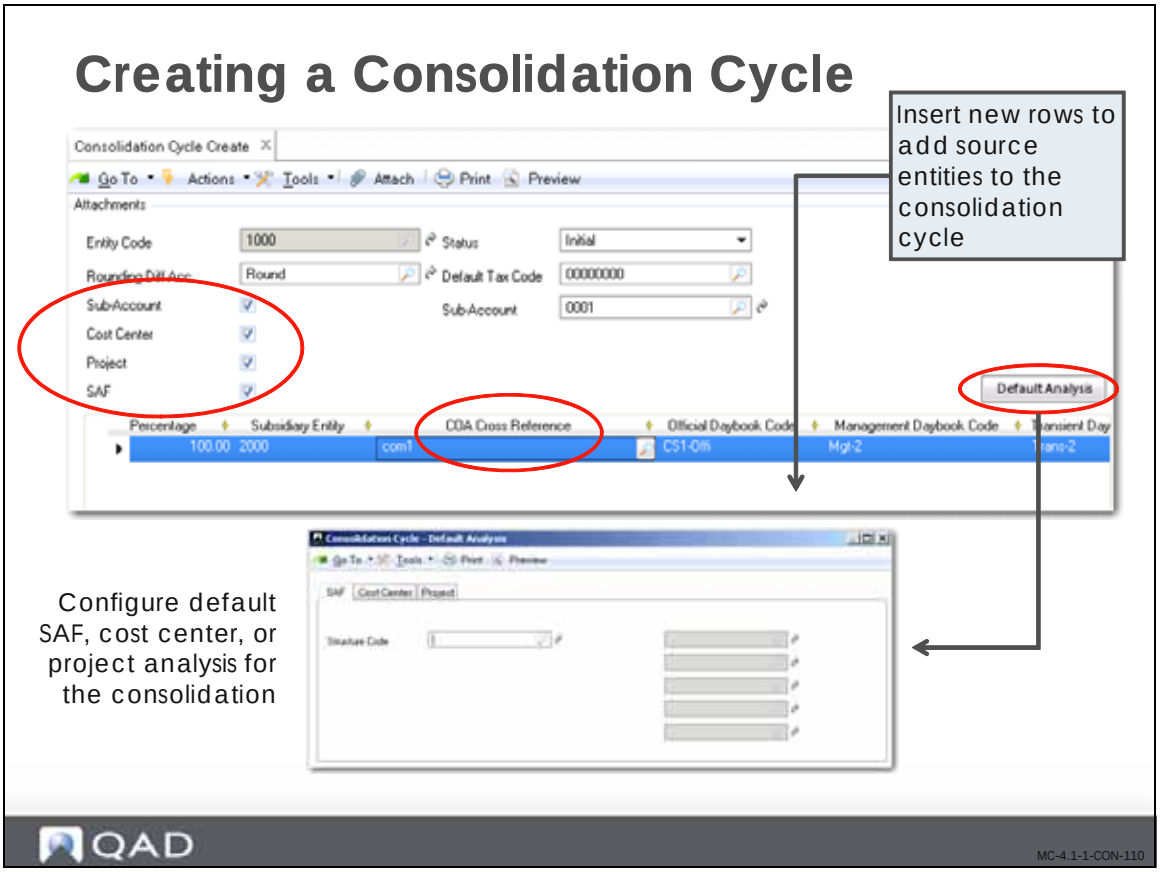
By selecting the Validate option at the end of the COA Cross Reference Create, you can validate the cross references that you have defined against posting history. If the cross reference type is Separated GL Dimensions or Combined GL Dimensions, you can indicate whether or not to validate the sub-account, cost center, or project.

If gaps exist in the cross reference mappings used in a report or consolidation, the system will display an error. If there are any overlaps in the cross reference mappings you create, the system will use the first mapping record it finds in the grid.

Note that the validation option does not prevent saving; it is only a means to verify and detect conflicts with the current posting history.

Refer to the *QAD Financials User Guide* for a detailed explanation of validation in COA Cross Reference Create (25.3.14.1).

Creating a Consolidation Cycle



When the prerequisites are set up for the source and target entities, a consolidation cycle can be created.

Use Consolidation Cycle Create (25.19.1.7) to create a consolidation cycle in the consolidation entity that defines the consolidation structure. You indicate the source and target entities; and whether consolidation is full or proportional.

An entity can be a consolidation entity for several source entities in one consolidation cycle and a source entity in another consolidation cycle. The consolidation process is started in the consolidation entity for a range of periods or for one period.

You add source entities to the consolidation cycle by inserting a new row.

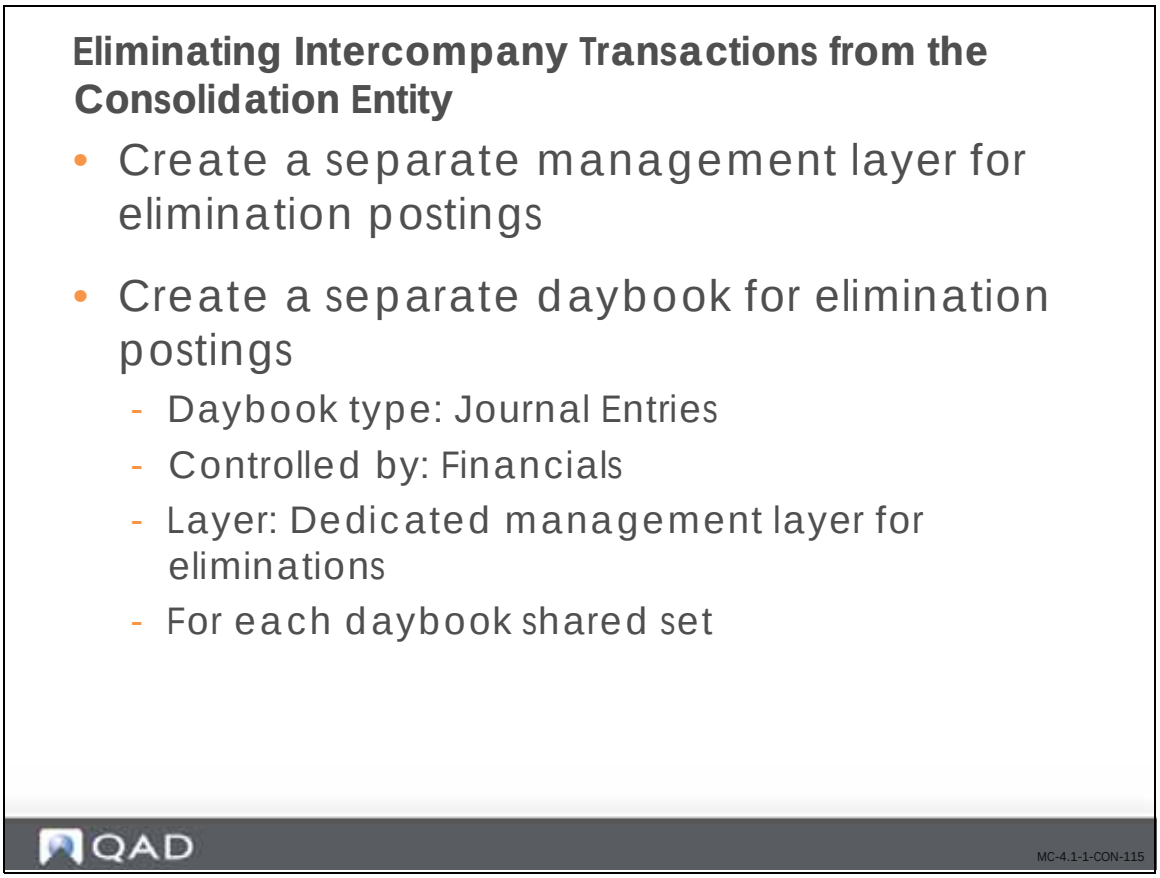
You also add the daybook codes for the consolidation transactions. You specify a daybook for each source layer, and the system posts the consolidation transactions to the appropriate consolidation daybook.

Indicate whether sub-accounts, cost centers, projects, and SAFs should be included in the consolidation.

On each row, specify the COA cross-reference code used for each source entity in this consolidation cycle. When a consolidation cycle's status is changed to Valid or Operational, cross-references are validated.

Click the Default Analysis button to display a new window with multiple tabs where you can configure default SAF, Cost Center, or Project analysis for the consolidation. When source transactions use any of these, and the Sub-Accounts, Cost Center, Project, and SAF fields are not selected, the system applies the defaults you define here to the consolidation transactions.

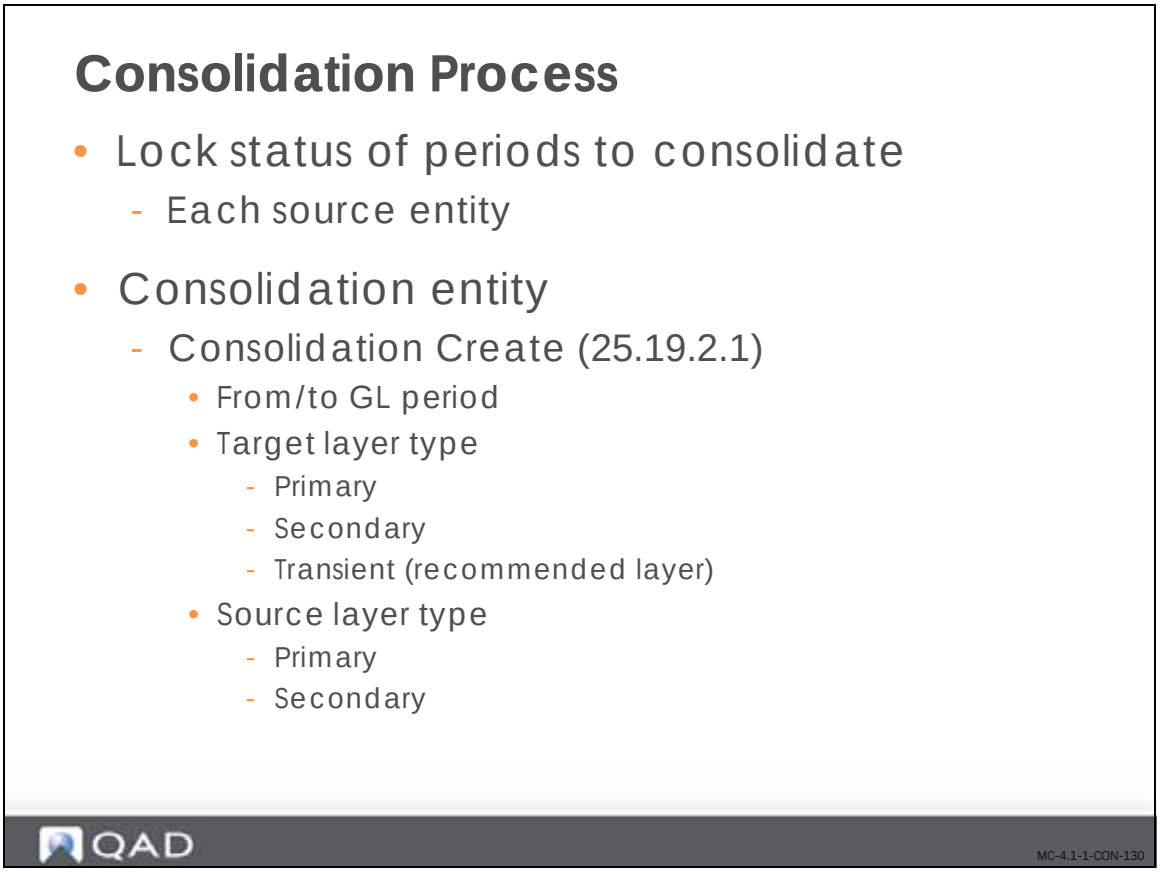
Eliminating Intercompany Transactions from the Consolidation Entity



The slide describes the setup required before you can eliminate intercompany postings from your consolidation.

1. Create a separate management layer in the consolidation entity for elimination postings.
2. Create a separate daybook for elimination postings in each consolidation entity. If you are consolidating at several levels, it is recommended that you create a daybook for each shared set.
   a. Set the daybook type to Journal Entries and the control type to Financials.
   b. In the Layer Code field, specify the dedicated management layer that you created for intercompany eliminations.

Consolidation Process



You run the consolidation cycle you have defined using Consolidation Create (25.19.2.1) within the consolidation entity. You can run the consolidation for primary or secondary layer transactions, but not simultaneously. It is recommended that you first run a consolidation posting to the transient layer, before posting it to the actual target layer.

Before creating a consolidation, you must ensure that:

- The GL periods in the source entities are locked.
- No unposted transactions exist in the source entities.
- You have mapped all new source accounts and sub-accounts.

You select source and target layers when configuring the consolidation. You can only select the primary or secondary layers for source entities. When you select a secondary source layer, the system retrieves all the secondary layers created in the source entity. For example, if you have created secondary layers for different types of IFRS or GAAP reporting, the system retrieves all of these layers and displays them on the Source Layers tab. You then choose which layers to include.

When the consolidation is completed, you can review the GL postings and generate reports.

As a result of the consolidation run:

- The daybooks in the consolidation entity are updated with the GL transactions in the source transaction currency and in the target base or consolidation currency.

- The system locks the entity, period, and layer combination in order to avoid another run. If you are running the consolidation in the transient layer, you have the option to review the postings, and to delete this consolidation and create a new one, if necessary. Consolidations in the primary layer cannot be deleted.
- The system keeps a history of all consolidation runs with the following attributes:
  - Consolidation run number
  - Date and time of the run
  - Source entities
  - Periods
  - Layer type

Use the Consolidation activities to create, delete, and view consolidations:

- Create. Configure and run a new consolidation. You run the consolidation by clicking Save.
- View. Display all consolidation runs with all fields in read-only mode.
- Delete. Delete a consolidation run. You can only delete consolidations in the transient layer.

Consolidation Process – Continued

- Consolidation entity
  - After validation, transfer the consolidation from the transient to the primary (official) layer
  - Identify the intercompany transactions and perform the elimination postings

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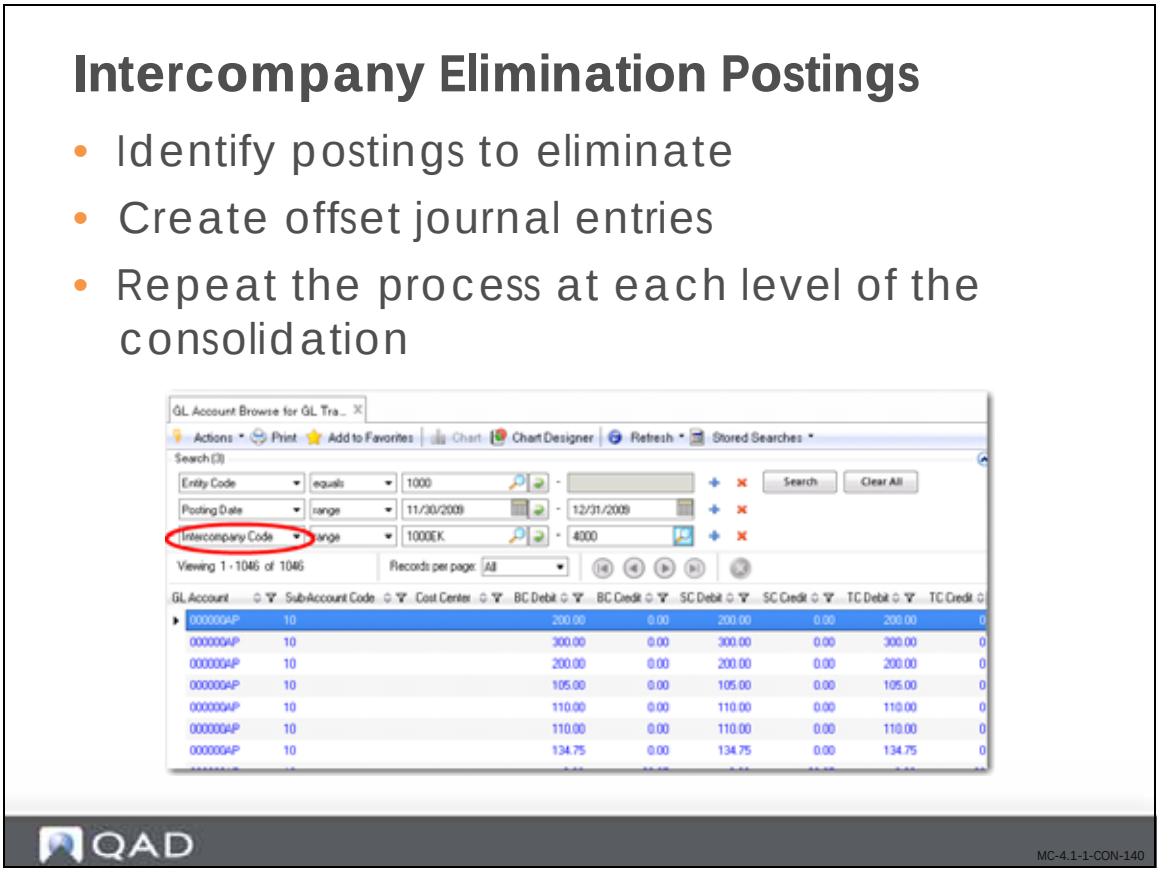
Intercompany Elimination Postings



The section describes how to identify and eliminate intercompany postings in your consolidation.

1. Identify the postings to eliminate using one of the following methods:
   - Use GL Transactions View Extended (25.15.2.10) or Trial Balance View (25.15.2.9), and filter by intercompany code to display intercompany transactions.
   - Run the GL Transactions by Intercompany Code report (25.15.1.5) to identify intercompany transactions to eliminate.
2. In the consolidation entity, create and post a journal entry that offsets intercompany transactions.

   The elimination posting can consist of a single journal entry posted to one of the new journal entries type daybooks you created in “Eliminating Intercompany Transactions from the Consolidation Entity” on page 404. For ease of entry, you can use a posting template.
3. At each level of consolidation, repeat the process of identifying intercompany transactions and creating netting postings to eliminate them.

Special Considerations for Staged Consolidations

For staged consolidations, where you consolidate the local entities first, followed by regional entities, and then global entities, you can take one of two approaches to eliminating intercompany postings from your consolidation:

- Incremental eliminations

  Consolidate the management layer containing the elimination postings to a higher level in the consolidation. At the higher level, only create postings to eliminate the intercompany positions at that level.

- Full elimination at each level

  Do not consolidate the management layer that contains the elimination postings to a higher level in the consolidation. At the higher level in the consolidation, create new, complete journal entries that eliminate all intercompany positions up to that consolidation level.

Hands-On Exercises (US)

General Information

In this exercise, you will create a new consolidation entity (GR-CONS). In GR-CONS, you are going to consolidate the existing consolidation entity, 11NACONS.

Before you can do that, you have to consolidate the operational entities (10USACO, 11CANCO, and 12MEXCO) into 11NACONS.

Exercise 1: Consolidation Setup (US)

In domain 11CAN, create a new consolidation entity GR-CONS using the same address details as 11NACONS.

- Create all consolidation settings in GR-CONS:
- Daybooks for 11NACONS both in transient and primary layer
- Consolidation cycle: 100% 11NACONS
- Check all other settings as required.
- Validate the consolidation setup in 11NACONS

1 Log in to 11CAN domain, entity 11NACONS.

2 In Business Relation Create (36.1.4.3.1), create the following business relation:

Field	Data
Name	GRCONS

a On the Address Info tab, right-click and select Insert a New Row. Add the address details:

Field	Data
Address	Specify an address.
Zip	Specify the zip.
City	Specify a city.
Country Code	CA
Click OK	
General Tab	
Domain Restricted	No
Internal Entity	Yes
Intercompany	Yes
Intercompany Code	GRCONS
Customer/Supplier Compensation Allowed	No

b Click Save.

3 In Entity Create (36.1.1.2.1), create the following entity:

Field	Data
Entity Code	GR-CONS
Business Relation	GRCONS
Domain	11CAN
General Tab	
Reverse P&L Revaluation	Yes
Consolidation Entity	Yes

4 Let the other fields default.

5 Click Save.

6 In User Domain/Entity Access Maintain (36.3.4), specify the following details:

Field	Data
User	demo
Domain	11CAN
Entity	GR-CONS

7 Click Search.

In the grid, select the Link and Default Domain fields for the user, domain, and entity code indicated.

8 Click Save.

9 In Role Membership Maintain (36.3.6.6), specify the following:

Field	Data
User	demo
Domain	11CAN
Role	SuperUser
Entity	GR-CONS

10 Click Search.

In the grid, select the Link and Default Role fields for the user, domain, and entity code indicated.

11 Click Save.

12 Log out, and log back in as:

User: demo

Password: qad

13 Change workspace to 11CAN-GR-CONS.

14 In Daybook Create (25.8.1.1), create the following daybook:

Field	Data
Daybook Code	ConsNAof
Description	ConsNAof

Field	Data
Daybook Type	Consolidation
Layer Code	Primary
Daybook Control	Financial
Daybook Group	If daybook groups are active, choose the default consolidation value from the lookup.

15 Click Save and Create, and create a second daybook with the following details:

Field	Data
Daybook Code	ConsNAtr
Description	ConsNAtr
Daybook Type	Consolidation
Layer Code	Trans-Approve
Daybook Control	Financial
Daybook Group	If daybook groups are active, choose the default consolidation value from the lookup.

16 Click Save.

17 In SAF Concept Create (25.3.7.1.1), create the following concept:

Field	Data
SAF Concept Code	ConsDef
Description	Consolidation Default

18 Click Save.

19 In SAF Code Create (25.3.7.2.1), create the following value:

Field	Data
SAF Code	SCD
Description	SAF Consolidation Default
SAF Concept Code	ConsDef

20 In SAF Structure Create (25.3.7.4.1), create the following structure:

Field	Data
Structure Code	Consol
Description	SAF Consolidation

21 Right-click in the grid and select Insert a New Row.

Field	Data
SAF Concept	ConsDef
Default SAF Value	SCD

22 Change to workspace 11CAN-11NACONS.

23 In COA Cross-Reference Create (25.3.14.1), enter the following data:

Field	Data
COA Cross Reference	GR-CONS-COA
Description	Consolidation cross reference
Active	Yes (Selected)
Type	Separate COA Dimensions
Target Domain	11CAN
Columns	All

24 In the grid, right-click and select Retrieve Defaults.

25 If needed, map GL accounts in source of type tax, open item, and cross company to a standard GL account in the consolidation/target COA.

26 Click Save.

27 Change Workspace to the source entity to be consolidated (GR-CONS).

28 In Consolidation Cycle Create (25.19.1.7), create the following cycle:

Field	Data
Entity Code	GR-CONS
Status	Initial
Cur Adj Translation Account	9890
Default Tax Code	0000000

29 Click Default Analysis, and specify the following details:

Field	Data
SAF Tab	
Structure Code	Consol
SAF Code	ConsolDef
SAF	SCD
Cost Center Tab	
Cost Center Code	Adm
Project Tab	
Project	P01030

30 Click OK.

31 In the consolidation cycle grid, right-click and select Insert a New Row.

Field	Data
Percentage	100
Subsidiary Entity	11NACONS
Official Daybook Code	ConsNAof
Transient Daybook Code	ConsNAtr
COA Cross-Reference	GR-CONS-COA

32 Click Save.

33 Change Workspace to the source entity to be consolidated (11NACONS).

34 In Consolidation Period Cross-Ref Maintain (25.19.1.3), create the following period cross-references:

Consolidation Entity: GR-CONS

Cons Year	Source Year	Source GL Period	Cons Period
2009	2009	01	1
2009	2009	02	2
2009	2009	03	3
....			
2010	2010	01	1
2010	2010	02	2
Etc...			

35 Click Save.

36 In 11NACONS, open the consolidation cycle 11NACONS in Consolidation Cycle Modify.

37 Specify Gserv as the default sub-account.

38 Select the SAFs check box.

39 Click Default Analysis, and specify the following details:

Field	Data
SAF Tab	
Structure Code:	Consol
SAF Code:	ConsolDef
SAF:	SCD

40 Click OK.

41 Save the consolidation cycle.

42 Change Workspace to subsidiary entity 10USACO.

43 In Consolidation Period Cross-Ref Maintain (25.19.1.3), ensure that period cross-references exist for the periods you are consolidating. The consolidation entity is 11NACONS.

44 In Entity GL Period Lock, lock the periods for which you are consolidating (GL calendar year 2013 and GL periods 1 to 6). The periods may already be locked.

45 In COA Cross Reference Modify, open cross-reference 10COACR. Right-click in the grid and select Retrieve Defaults. Save the record.

46 Change Workspace to subsidiary entity 11CANCO, and repeat the previous three steps. Use cross-reference 11COACR.

47 Change Workspace to subsidiary entity 12MEXCO, and repeat the same three steps. Use cross-reference 12COACR.

48 Change Workspace to 10CORPCONS.

49 Open the 10CORPCONS consolidation cycle in Consolidation Cycle Modify.

50 Change the status to Initial and save.

51 Change Workspace to the source entity to be consolidated (GR-CONS).

52 In Consolidation Cycle Modify (25.19.1.8), change the status to Operational, specify the value Gserv in the Sub-Account field, and save.

Exercise 2: Consolidation Run (US)

Run a consolidation in 11NACONS for the period 2013/03 to 2013/06

1 Log in to workspace 11CAN/11NACONS.

2 In Entity GL Period Lock, lock the periods for which you are consolidating (GL calendar year 2013 and GL periods 1 to 5). Leave period 6 open to all GL transaction types. The other periods may already be locked.

3 In Consolidation Create (25.19.2.1), create a trial consolidation in the transient layer:

Field	Data
From GL Period	2013/1
To GL Period	2013/6
Source Layer Type	Official
Target Layer Type	Transient

Subsidiary Entities:

Field	Data
Percentage	100
Official Daybook	CON-US-O
Entity Code	10USACO
Transient Daybook	CON-US-T
Activation	Yes

Field	Data
Percentage	100
Primary Daybook	CON-CA-O
Entity Code	11CANCO
Transient Daybook	CON-CA-T
Activation	Yes

Field	Data
Percentage	100
Primary Daybook	CON-MX-O
Entity Code	12MEXCO
Transient Daybook	CON-MX-T
Activation	Yes

4 Save the consolidation.

5 In Journal Entry View (25.13.1.3), enter Year = 2013, Period = 6 and Daybook Code: CON-US-T.

6 Click Search to review the transactions in 10USACO

7 Repeat the previous two steps with Daybook Code = CON-CA-T to review the transactions in 11CANCO.

8 Repeat the previous two steps with Daybook Code = CON-MX-T to review the transactions in 12MEXCO.

9 Review the transactions.

10 In Consolidation Delete (25.19.2.3), delete the trial consolidations:

Field	Data
From GL Cal Year	2013
To GL Cal Year	2013
Entity Code	10USACO

11 Click Search. Confirm in the new window.

Field	Data
From GL Cal Year	2013
To GL Cal Year	2013
Entity Code	11CANCO

12 Click Search. Confirm in the new window.

Field	Data
From GL Cal Year	2013
To GL Cal Year	2013
Entity Code	12MEXCO

13 Click Search. Confirm in the new window.

14 In Consolidation Create (25.19.2.1), create the consolidation again in the official layer.

Field	Data
From GL Period	2013/3
To GL Period	2013/6
Target Layer Type	Official
Source Layer Type	Official

Subsidiary Entities:

Field	Data
Percentage	100
Official Daybook	CON-US-O
Entity Code	10USACO
Transient Daybook	CON-US-T
Activation	Yes

Field	Data
Percentage	100
Primary Daybook	CON-CA-O
Entity Code	11CANCO
Transient Daybook	CON-CA-T
Activation	Yes

Field	Data
Percentage	100
Primary Daybook	CON-MX-O
Entity Code	12MEXCO
Transient Daybook	CON-MX-T
Activation	Yes

15 In Entity GL Period Lock, lock GL period 6.

16 In COA Cross Reference Modify, open cross-reference GR-CONS-COA. Right-click in the grid and select Retrieve Defaults. Save the record.

17 Log in to the consolidation entity GR-CONS (change workspace) to create the second consolidation.

18 In Entity GL Period Lock, lock GL periods 1 to 5 for the year 2013. Ensure that period 6 is unlocked and open to all transaction types.

19 Ensure that tax periods exist for the year (Tax Period Create/Tax Period Modify).

20 In Consolidation Create (25.19.2.1), create the following record:

Field	Data
From GL Period	2013/3
To GL Period	2013/6
Target Layer Type	Transient
Source Layer Type	Official

Subsidiary Entities:

Field	Data
Percentage	100
Primary Daybook	ConsNAof
Entity Code	11NACONS
Transient Daybook	ConsNAtr
Activation	Yes

21 Go to Journal Entry View (25.13.1.3) to review the created transaction.

22 Enter GL calendar year 2013 and daybook code ConsNAtr to search.

23 In Consolidation Delete (25.19.2.3), delete the trial consolidation you just created.

24 In Consolidation Create (25.19.2.1), recreate the same consolidation in the primary layer.

25 In Journal Entry View (25.13.1.3), review the transactions.

Hands-On Exercises (EMEA)

General Information

In this exercise, you will create a new consolidation entity (GR-CONS). In GR-CONS, you are going to consolidate the existing consolidation entity 22EMEACONS.

Before you can do that, you will have to consolidate the operational entities (for EMEA: 20FRACO, 21NLCO, and 22UKCO) into 22EMEACONS.

Exercise 1: Consolidation Setup (EMEA)

In domain 22UK create a new (consolidation) entity GR-CONS (use same address details as 22EMEACONS).

Create all consolidation settings in GR-CONS:

- Daybooks for 22EMEACONS both in transient and primary layer
- Consolidation cycle: 100% 22EMEACONS
- Check all other settings as required.
- Validate the consolidation setup in 22EMEACONS

Steps:

1 Log in to 22UK domain, entity 22EMEACONS.

2 In Business Relation Create (36.1.4.3.1), create the following business relation:

Field	Data
Name	GRCONS

a On the Address Info tab, right-click and select Insert a New Row. Add the address details:

Field	Data
Address	Address
Zip	Zip
City	City
Country Code	GB
Click OK	
General Tab	
Domain Restricted	No
Internal Entity	Yes
Intercompany	Yes
Intercompany Code	GRCONS
Customer/Supplier Compensation Allowed	No

b Click Save.

3 In Entity Create (36.1.1.2.1), create the following entity:

Field	Data
Entity Code	GR-CONS
Business Relation	GRCONS
Domain	22UK
General Tab	
Reverse P&L Revaluation	Yes
Consolidation Entity	Yes

4 Let the other fields default.

5 Click Save.

6 In User Domain/Entity Access Maintain (36.3.4), specify the following details:

Field	Data
User	demo
Domain	22UK
Entity	GR-CONS

7 Click Search.

In the grid, select the Link and Default Domain fields for the user, domain, and entity code indicated.

8 Click Save.

9 In Role Membership Maintain (36.3.6.6), specify the following:

Field	Data
User	demo
Domain	22UK
Role	SuperUser
Entity	GR-CONS

10 Click Search.

In the grid, select the Link and Default Role fields for the user, domain, and entity code indicated.

11 Click Save.

12 Log out, and log back in as:

User: demo

Password: qad

13 Change workspace to 22UK-GR-CONS.

14 In Daybook Create (25.8.1.1), create the following daybook:

Field	Data
Daybook Code	ConsEMof
Description	ConsEMof
Daybook Type	Consolidation
Layer Code	Primary
Daybook Control	Financial
Daybook Group	If daybook groups are active, choose the default consolidation value from the lookup.

15 Click Save and Create, and create a second daybook with the following details:

Field	Data
Daybook Code	ConsEMtr
Description	ConsEMtr
Daybook Type	Consolidation
Layer Code	Trans-Approve
Daybook Control	Financial
Daybook Group	If daybook groups are active, choose the default consolidation value from the lookup.

16 Click Save.

17 In SAF Concept Create (25.3.7.1.1), create the following concept:

Field	Data
SAF Concept Code	ConsDef
Description	Consolidation Default

18 In SAF Code Create (25.3.7.2.1), create the following value:

Field	Data
SAF Code	SCD
Description	SAF Consolidation Default
SAF Concept Code	ConsDef

19 In SAF Structure Create (25.3.7.4.1), create the following structure:

Field	Data
Structure Code	Consol
Description	SAF Consolidation

20 Right-click in the grid and select Insert a New Row.

Field	Data
SAF Concept	ConsDef
Default SAF Value	SCD

21 Change to workspace 22UK-22EMEACONS.

22 In COA Cross Reference Create (25.3.14.1), enter the following data:

Field	Data
COA Cross Reference:	GR-CONS-EMEA-COA
Description	Consolidation cross reference
Active	Yes (Selected)
Type	Separate COA Dimension
Target Domain	22UK
Columns	All

23 In the grid, right-click and select Retrieve Defaults.

24 If needed, map GL accounts in source of type tax, open item, and cross company to a standard GL account in the consolidation/target COA.

25 Click Save.

26 Change Workspace to the source entity to be consolidated (GR-CONS).

27 In Consolidation Cycle Create (25.19.1.7), create the following cycle:

Field	Data
Entity Code	GR-CONS
Status	Initial
Rounding Diff Acc	9890
Default Tax Code	0000000
Default Sub-Account	Gserv

28 Click Default Analysis, and specify the following details:

Field	Data
SAF Tab	
Structure Code	Consol
SAF Code	ConsolDef
SAF	SCD
Cost Center Tab	
Cost Center Code	Adm
Project Tab	
Project	P01030

29 In the consolidation cycle grid, right-click and select Insert a New Row

Field	Data
Percentage	100
Subsidiary Entity	22EMEACONS
Primary Daybook Code	ConsEMof
Transient Daybook Code	ConsEMtr
COA Cross-Reference	GR-CONS-EMEA-COA

30 Click Save.

31 Change Workspace to the source entity to be consolidated (22EMEACONS).

32 In Consolidation Period Cross-Ref Maintain (25.19.1.3), create the following period cross-references:

Consolidation Entity: GR-CONS

Cons Year	Source Year	Source GL Period	Cons Period
2009	2009	01	1
2009	2009	02	2
2009	2009	03	3
....			
2010	2010	01	1
2010	2010	02	2
Etc...			

33 Click Save.

34 In 22EMEACONS, open the consolidation cycle 22EMEACONS in Consolidation Cycle Modify.

35 Click Default Analysis, and specify the following details:

Field	Data
SAF Tab	
Structure Code	Consol
SAF Code	ConsolDef
SAF	SCD

36 Click OK.

37 Save the consolidation cycle.

38 Change Workspace to subsidiary entity 20FRACO.

39 In Consolidation Period Cross-Ref Maintain (25.19.1.3), ensure that period cross-references exist for the periods you are consolidating. The consolidation entity is 22EMEACONS.

40 In Entity GL Period Lock, lock the periods for which you are consolidating (GL calendar year 2013 and GL periods 1 to 6). The periods may already be locked.

41 In COA Cross Reference Modify, open cross reference FR-EMEA. Right-click in the grid and select Retrieve Defaults to update the COA list.

42 In the header, change the Columns field to GL Account. Scroll to the end of the list in the grid and map any unmapped accounts. Save your changes.

43 Change Workspace to subsidiary entity 21NLCO.

44 Repeat the three steps taken for 20FRACO. In COA Cross Reference Modify, use cross-reference 21COACR.

45 Change Workspace to subsidiary entity 22UKCO.

46 Repeat the three steps taken for 20FRACO and 21NLCO. In COA Cross Reference Modify, use cross-reference 22COACR.

47 Change Workspace to 10CORPCONS.

48 Open the 10CORPCONS consolidation cycle in Consolidation Cycle Modify.

49 Delete the row that has 22EMEACONS.

50 Save your changes.

51 Change Workspace to the source entity to be consolidated (GR-CONS).

52 In Consolidation Cycle Modify (25.19.1.8), change the status to Operational, specify the value Gserv in the Sub-Account field.

53 Save your changes.

Exercise 2: Consolidation Run (EMEA)

Run a consolidation in 22EMEACONS to consolidate 20FRACO, 21NLCO, and 22UKCO into 22EMEACONS. The consolidation is run for the period 2013/03 to 2013/06.

- Create the consolidation in transient layer first and verify the postings.
- Delete the transient posting.
- Re-do the consolidation in the primary layer.
- Repeat the process in GR-CONS to consolidate 22EMEACONS into GR-CONS.
- Ensure that there are transactions in the periods to consolidate.

1 Log in to workspace 22UK/22EMEACONS.

2 In Entity GL Period Lock, lock the periods for which you are consolidating (GL calendar year 2013 and GL periods 1 to 5). Leave period 6 open to all GL transaction types. The other periods may already be locked.

3 In Consolidation Create (25.19.2.1), create a trial consolidation in the transient layer:

Field	Data
From GL Period	2013/1
To GL Period	2013/6
Target Layer Type	Transient
Source Layer Type	Official

Subsidiary Entities:

Field	Data
Percentage	100
Primary Daybook	CON-FR-O
Entity Code	20FRACO
Transient Daybook	CON-FR-T
Activation	Yes

Field	Data
Percentage	100
Primary Daybook	CON-NL-O
Entity Code	21NLCO
Transient Daybook	CON-NL-T
Activation	Yes

Field	Data
Percentage	100
Primary Daybook	CON-UK-O
Entity Code	22UKCO
Transient Daybook	CON-UK-T
Activation	Yes

4 Save the consolidation.

5 In Journal Entry View (25.13.1.3), enter Year = 2013, Period = 6 and Daybook Code: CON-FR-T.

6 Click Search to review the transaction in 22FRACO.

7 Repeat the previous steps with Daybook Code = CON-NL-T to review the transaction in 21NLCO.

8 Repeat the previous steps with Daybook Code = CON-UK-T to review the transaction in 22UKCO.

9 Review the transactions.

10 In Consolidation Delete (25.19.2.3), delete the trial consolidations:

Field	Data
From GL Cal Year	2013
To GL Cal Year	2013
Entity Code	20FRACO

Field	Data
From GL Cal Year	2013
To GL Cal Year	2013
Entity Code	21NLCO

11 Click Search. Confirm in the new window.

Field	Data
From GL Cal Year:	2013
To GL Cal Year:	2013
Entity Code:	22UKCO

12 Click Search. Confirm in the new window.

13 In Consolidation Create (25.19.2.1), create the consolidation—again in the official layer.

Field	Data
From GL Period	2013/3
To GL Period	2013/6
Target Layer Type	Official
Source Layer Type	Official

Subsidiary Entities:

Field	Data
Percentage	100
Primary Daybook	CON-FR-O
Entity Code	22FRCO
Transient Daybook	CON-FR-T
Activation	Yes

Field	Data
Percentage	100
Primary Daybook	CON-NL-O
Entity Code	21NLCO
Transient Daybook	CON-NL-T
Activation	Yes

Field	Data
Percentage	100
Primary Daybook	CON-UK-O
Entity Code	22UKCO
Transient Daybook	CON-UK-T
Activation	Yes

14 Save the consolidation.

15 Log in to the consolidation entity GR-CONS (change workspace) to create the second consolidation.

16 In Entity GL Period Lock, lock GL periods 3 to 5 for the year 2013. Ensure that period 6 is unlocked and open to all transaction types.

17 In Consolidation Create (25.19.2.1), create the following:

Field	Data
From GL Period	2013/3
To GL Period	2013/6
Target Layer Type	Transient
Source Layer Type	Official

Subsidiary Entities:

Field	Data
Percentage	100
Primary Daybook	ConsEMof
Entity Code	22EMEACONS
Transient Daybook	ConsEMtr
Activation	Yes

18 Go to Journal Entry View (25.13.1.3) to review the created transaction.

19 Enter GL calendar year 2013 and daybook code ConsEMtr to search.

20 In Consolidation Delete (25.19.2.3), delete the trial consolidation you just created.

21 In Consolidation Create (25.19.2.1), recreate the same consolidation in the official layer.

22 In Journal Entry View (25.13.1.3), review the transactions.

Chapter 16

Advanced Banking Setup

Objectives

Objectives

- Learn how to work with bank payment file formats in QAD Enterprise Applications
  - Technical setup
  - Functional setup and use

QAD

MC-4.3-1-PF-020

Business Case

This section describes how to install a preconfigured electronic payment format in QAD Financials.

Payment formats are used in customer and supplier payments to define the layout of the payment output. These codes ensure that each payment from your account is formatted according to the requirements of the receiving customer or supplier bank. Each individual payment contains your own bank account details, the required format, and the correct customer and supplier account information.

Payment formats determine aspects of the payment such as:

- Whether the payment is for AR or AP
- Whether it is domestic, foreign, or both
- Which payment instrument to use, such as check, draft, or electronic transfer

Payment electronic formats are used with paper-based payments, such as checks or drafts, and with electronic payments, such as direct debit or electronic transfer. Formats tend to be common to certain regions. For example, US banks tend to deal with AP and AR checks, while AP electronic transfers and AR direct debits are more commonly used by Northern European banks, and checks, drafts, and transfers by Southern European banks. Payment formats are defined at system level in Financials.

Preconfigured formats are available on the QAD Support Web site for download and can be loaded in the system using standard EDI eCommerce functions. These formats are designed for specific banking systems, and are used to create electronic payment files to be transferred to these banks.

During the EDI load, you specify configuration details, such as the location on the operating system where generated payment files should be placed and the file name extension of the electronic payment file produced using the bank format.

You ensure that supplier and customer payments automatically use the correct format by linking the format to your bank account, and then associating the linked account number to the supplier or customer bank account number. Once the account numbers are linked, the system selects the correct format.

When you create a customer or supplier payment, the customer or supplier default bank is automatically displayed in the payment screen. If you have defined multiple account numbers for a supplier or customer, you can select another account number for the payment, but only if it has been linked to a format.

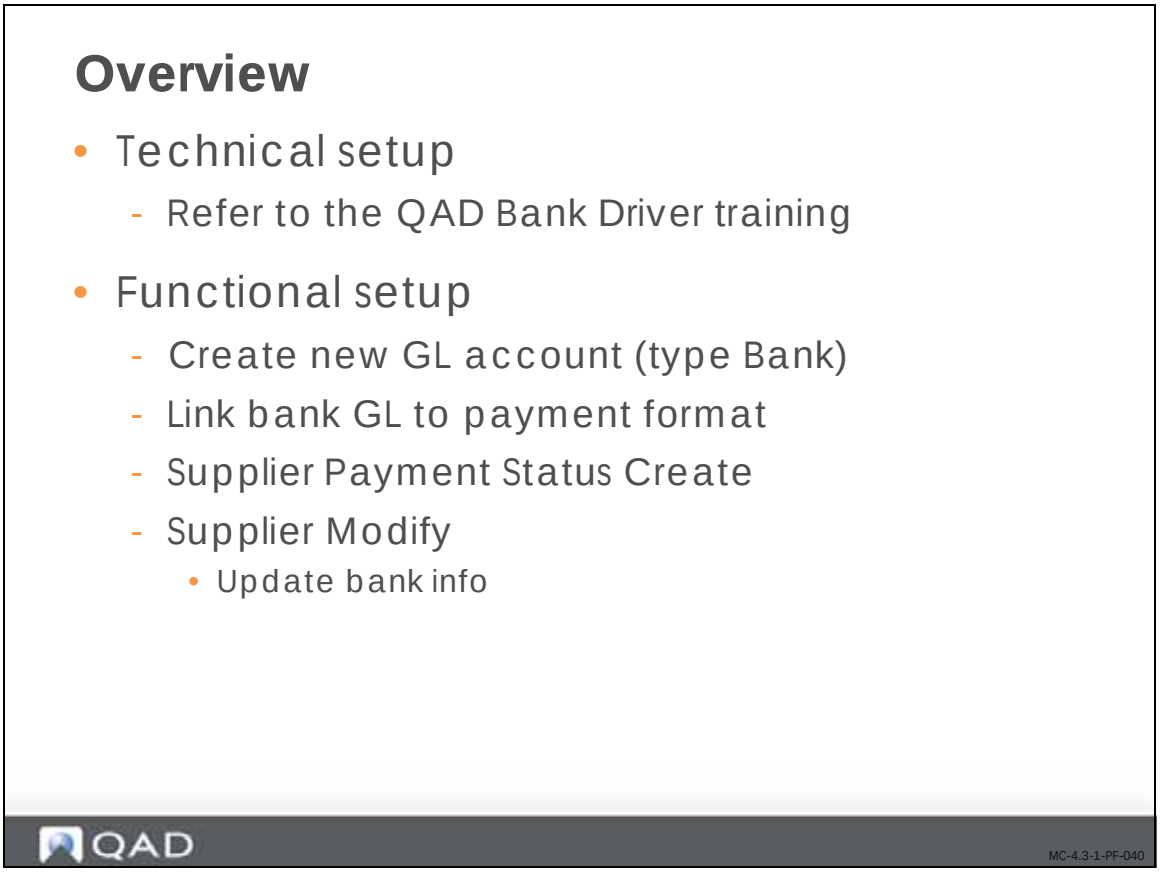
Manual or paper payments and electronic payments are treated differently in the system, and require different formats.

The system lets you change the default bank account and payment format within a supplier payment selection, provided the status of the selection is Initial, and the bank account and linked format have already been configured.

We will now learn how to install and set up a preconfigured payment format file based on a business case.

A company opens a bank account in The Netherlands. This bank uses a specific electronic file format that I need to use to process payments. QAD provides preconfigured format files. How do I install this file, and set my system up to use it?

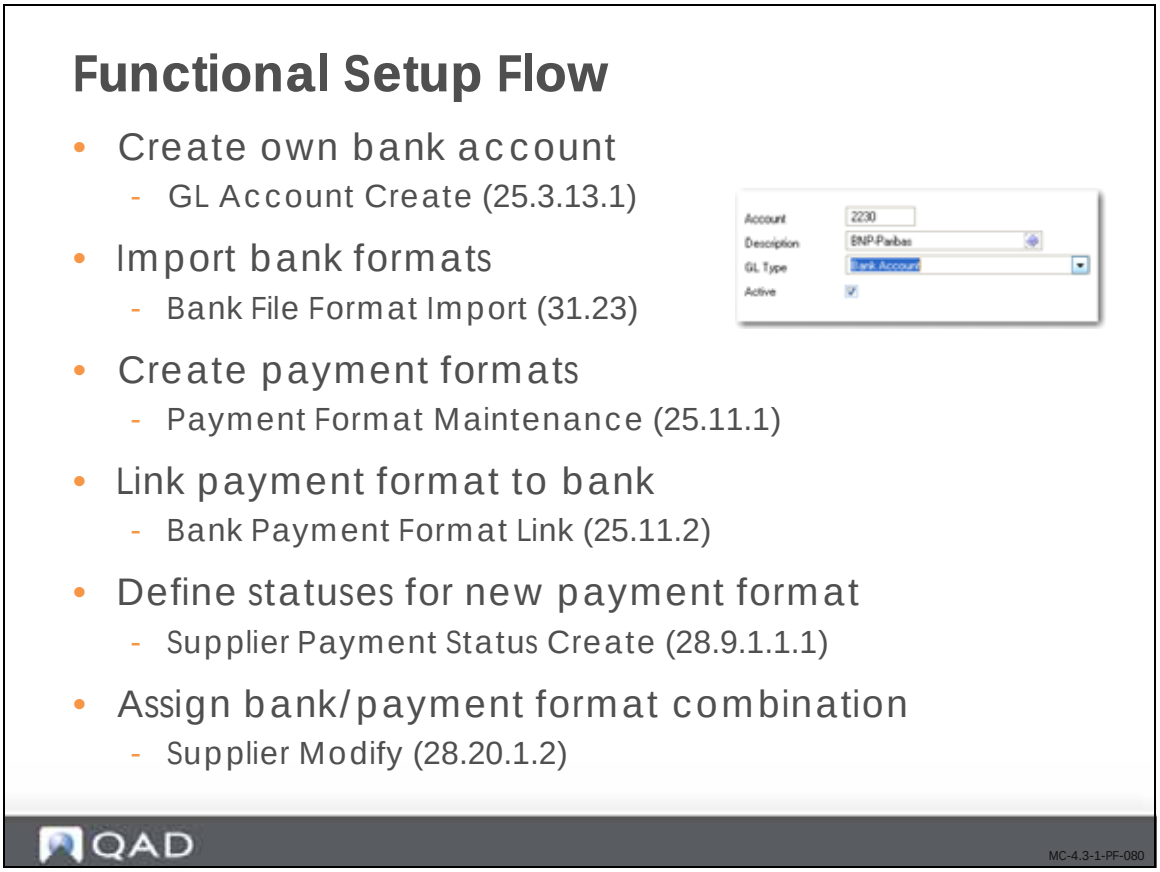
Overview



You must define both technical and functional data before you can generate customer and supplier payments.

For information on the bank driver technical setup, please refer to the QAD bank driver training material.

Functional Setup Flow

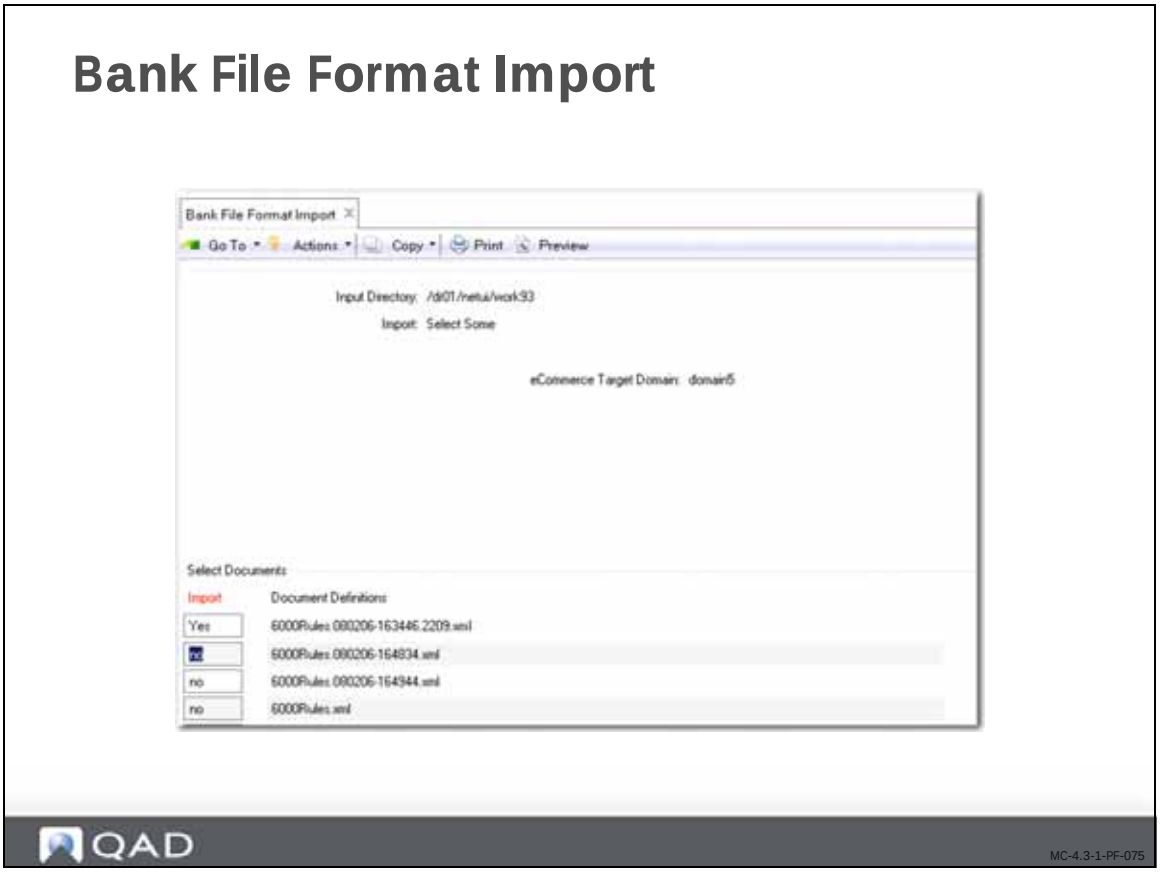


On the functional side, the following steps are required. The steps are described in detail in the *QAD Financials Fundamentals Training Guide* and *QAD Financials User Guide*.

1. Create an own bank account.
2. Create a new payment format.

   Optionally, you can load predefined bank payment formats for use in electronic banking. See “Bank File Format Import” on page 433. Payment formats are stored at system level.
3. Link the payment formats to your entity bank account.
4. Define payment statuses for the new format.
5. Associate your bank account and the correct linked format with the customer and supplier bank account numbers specified on the Banking tab of the Customer or Supplier function.

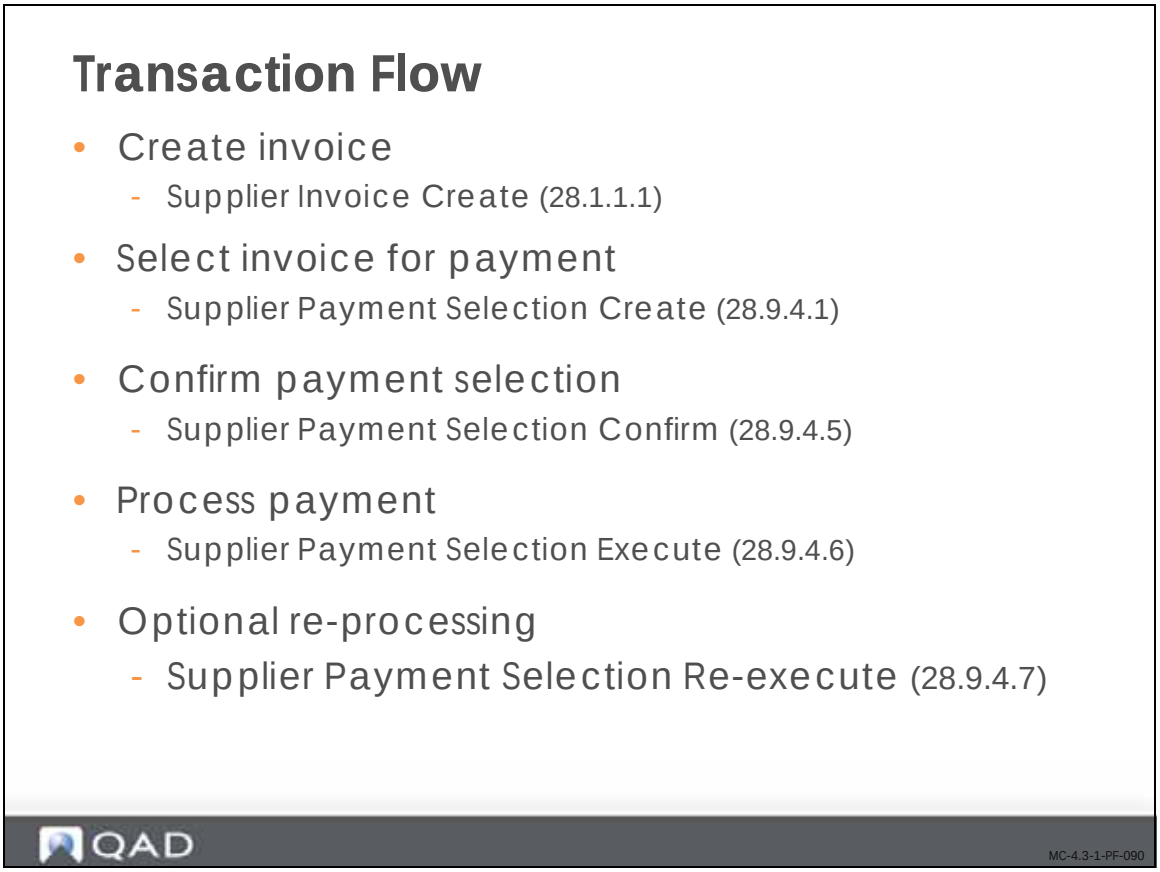
Bank File Format Import



Use Bank File Format Import to import predefined bank format XML files for use with electronic bank payments. Each imported format file is specific to an individual bank and contains the payment information and attributes required for that bank. Once the file is imported, a payment format with the same name is displayed in Payment Format Maintenance. You can then link this format to the bank account you intend to use for electronic payments.

The format definition files are usually delivered by the bank in zipped XML format. You unzip the files to a server directory and then load the files into the system using the Import function.

Transaction Flow

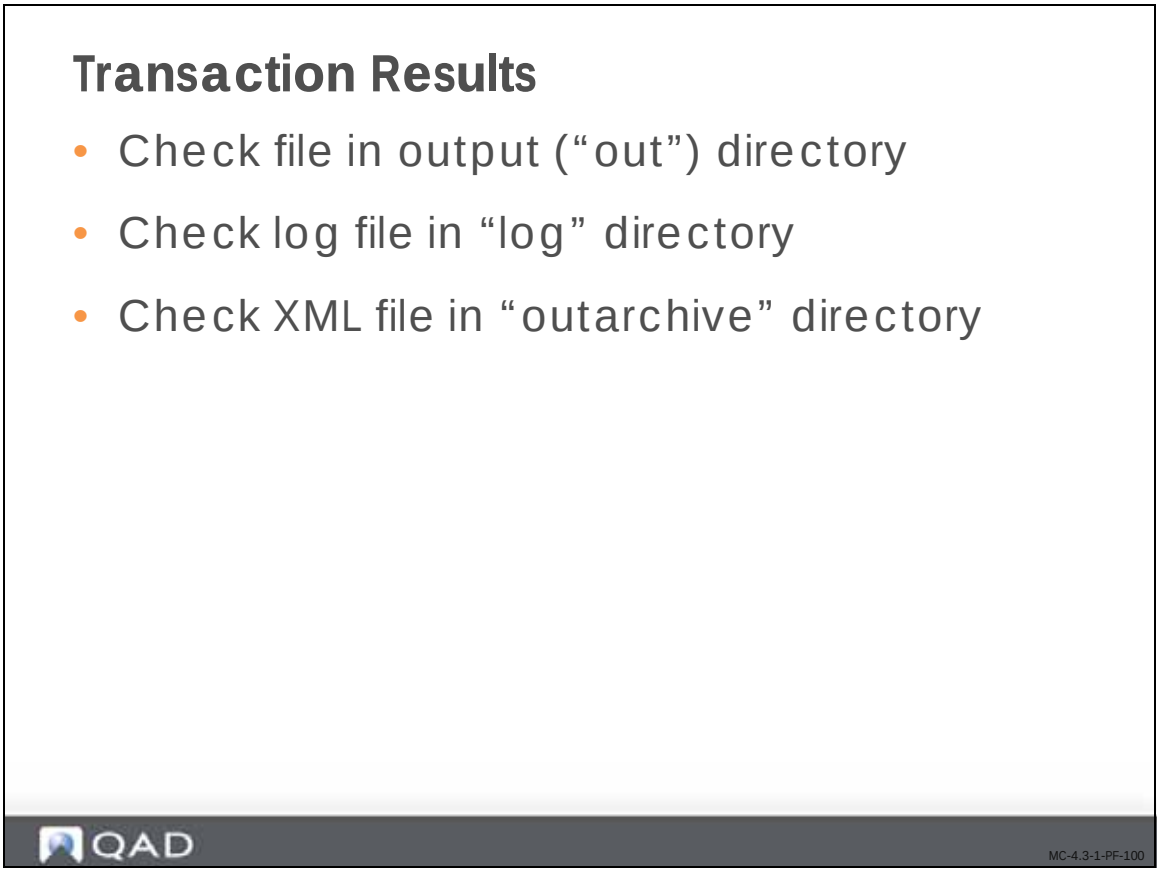


When the setup is complete, you can create invoices using the payment information, combine the formats in payment selections, and run the selections to generate payment files. These activities are described in *QAD Financials User Guide*, and are described in the *QAD Financials Fundamentals Training Guide* also.

You can specify a different account number for the same bank, or a different account number and bank account. The new account number, account, and payment instrument combination must be already defined in Bank Payment Format Link and must be defined for the same entity as the original combination.

You must also have defined a payment status that uses the new bank account, payment account, and payment instrument.

Transaction Results



You can verify the results of a payment transaction in three locations:

- Check the output file in the "out" directory specified in eCommerce Control.
- Check the log file in the "log" directory.
- Check the output XML file in the "outarchive" directory.

Changing Bank and Payment Format Details

Changing Bank and Payment Format Details

- Learn how to change for a payment selection:
  - Own bank account
  - Payment format

MC-4.3-1-PF-110

Changing Bank and Payment Format Details: Business Case

- You have created a payment selection
- You want to run the payment selection from another own bank number
- You want to change the payment format

MC-4.3-1-PF-120

If you create a supplier payment selection, and then decide to run the payment from a different bank account than the one used the original payment selection, you can update the own bank number from the payment selection.

It is also possible to change the payment format of the payment selection.

Overview

Changing Bank and Payment Format Details: Overview

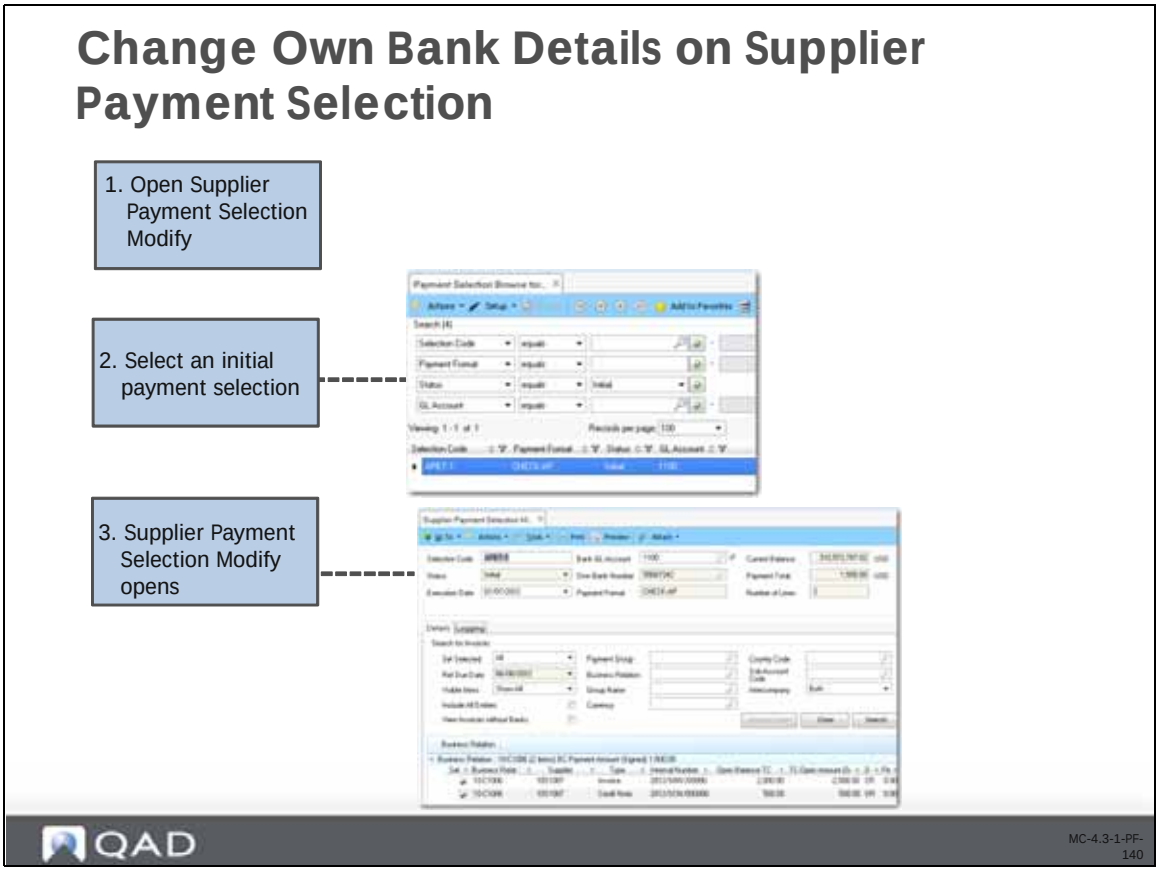
- Change your own bank account or banking details for AR and AP payments
- Customer Mass Payment Change
- Supplier Mass Payment Change

QAD MC-4.3-1-PF-130

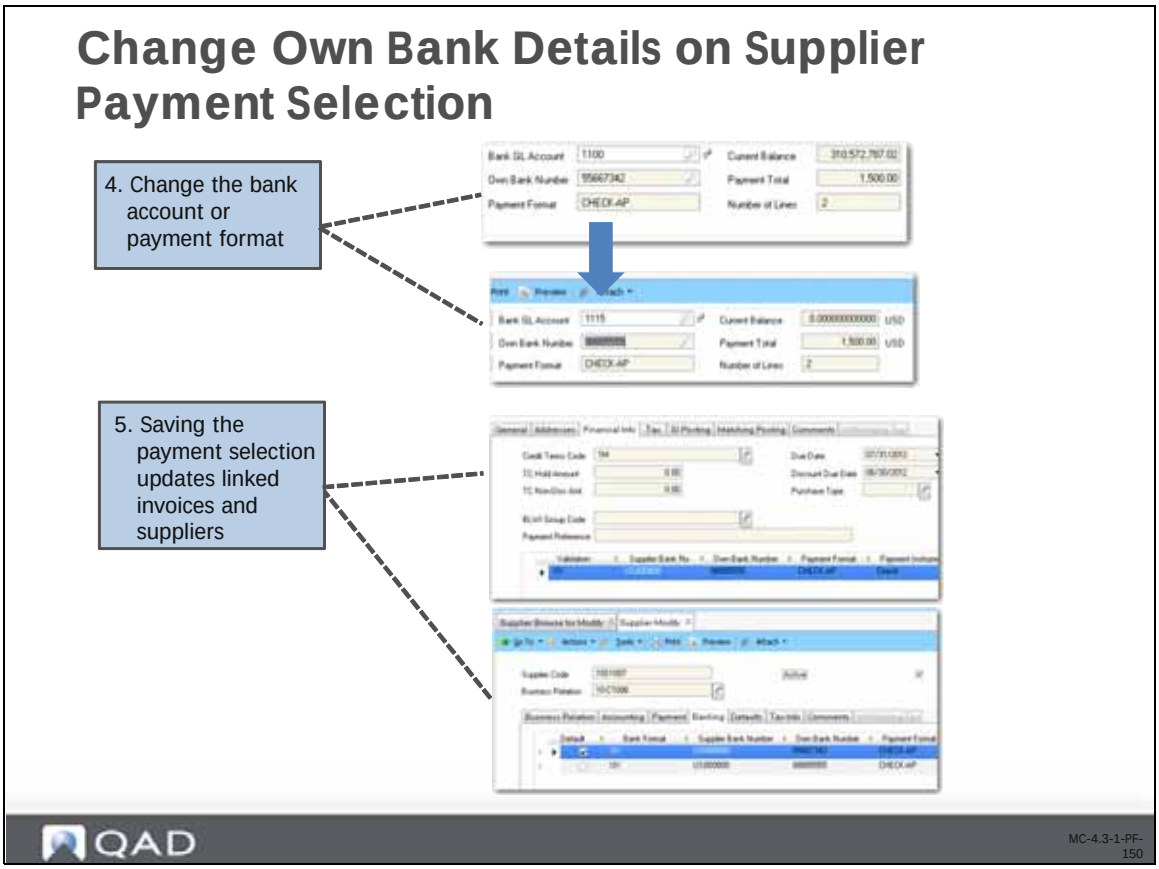
When using a customer or supplier payment to process invoices, the system loads the default account number, own bank account, and payment format defined for this customer or supplier into the payment fields. These banking details are then used for all open items contained in the payment.

Businesses often need to change the default own bank account and payment format during the payment cycle. Therefore, you can change the payment banking details for a customer or supplier payment in any status other than Paid. This means that you can create and allocate a payment to open items for one or multiple customers or suppliers, each with different banking details. When the allocation is complete, you can then select a different own bank number and payment format in the payment header.

Change Own Bank Details on Supplier Payment Selection



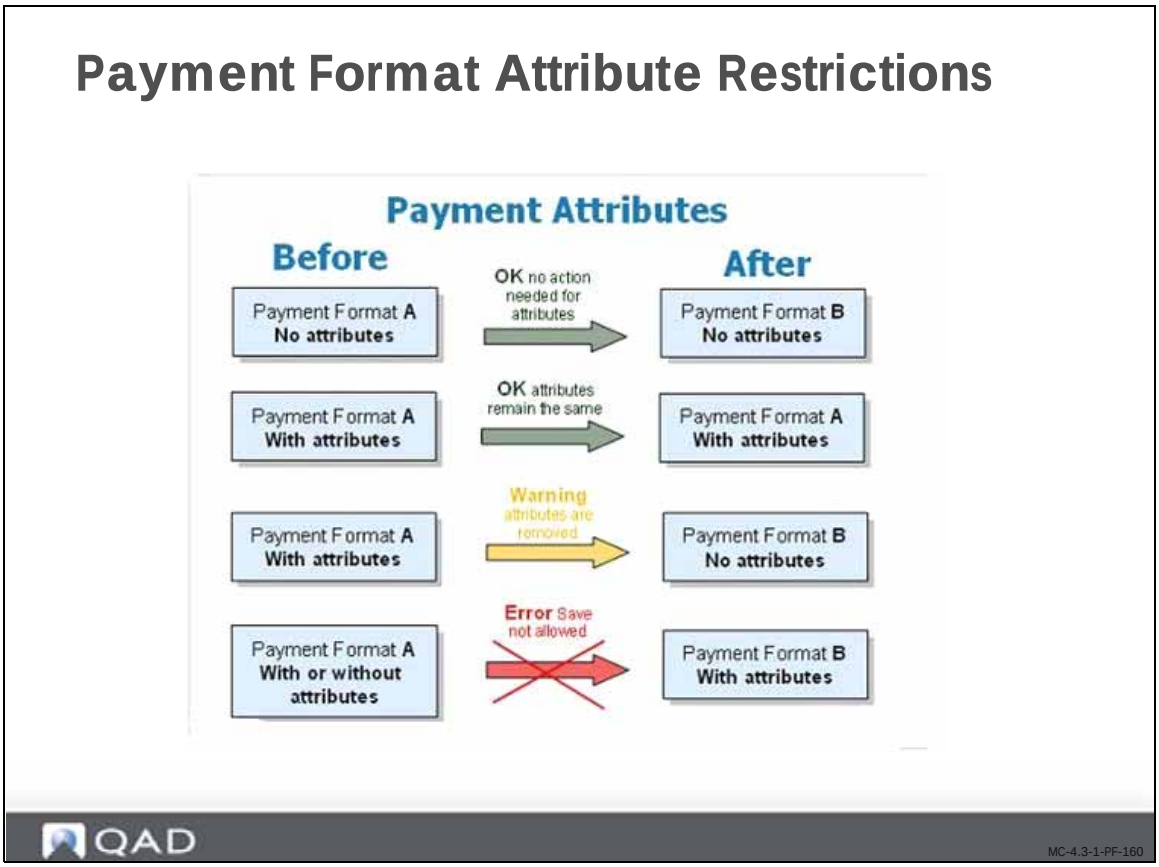
In Supplier Payment Selection Modify (28.9.4.2), select a payment selection with the status Initial.



Select another own bank/account number and payment format. (this can be subject to certain restrictions – see later).

The system updates the payment details for all the open items included in the payment selection and adds the newly-selected own bank account and payment format to the supplier's master data.

Payment Format Attribute Restrictions

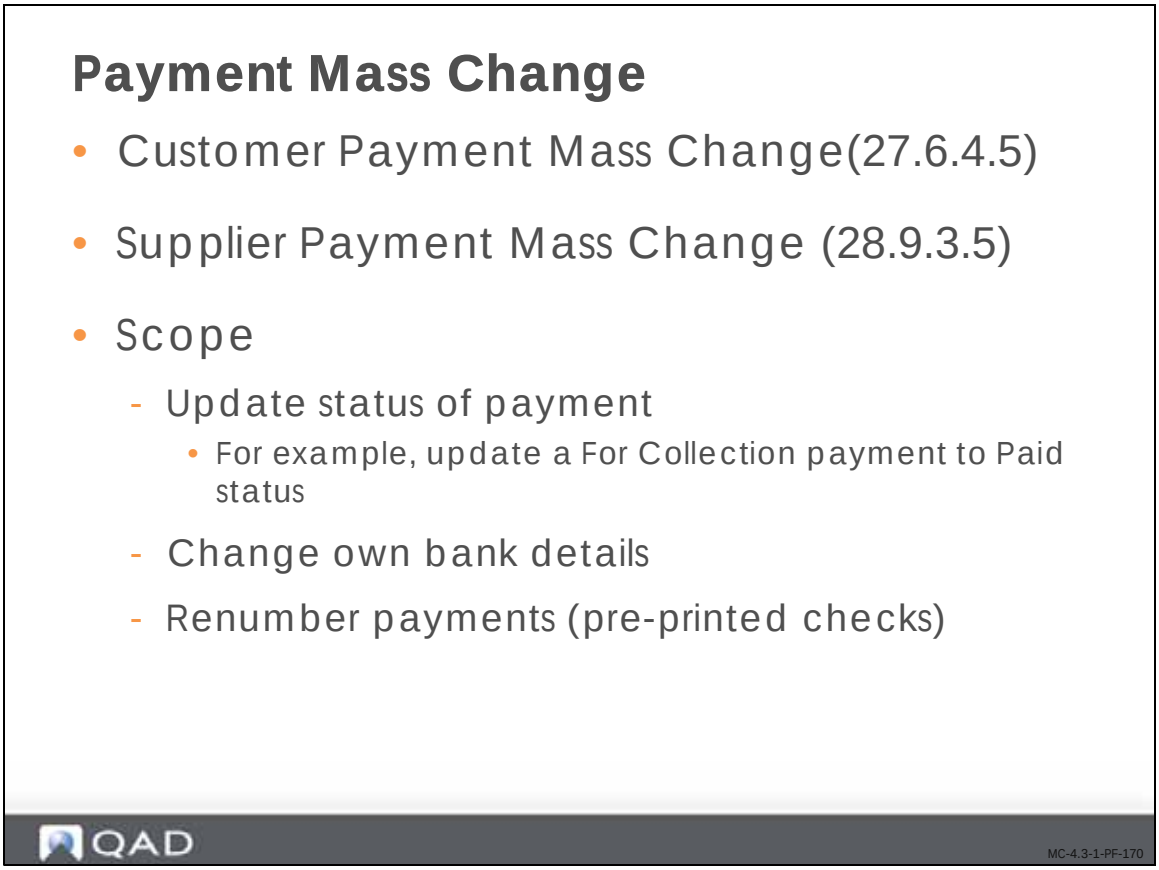


The original and new payment formats used in the payment selection update process can contain payment attributes, and the attributes of a new payment format must be consistent with the attributes applied to the original open item. The following restrictions apply:

1. If you change the payment format to a different payment format, and neither payment format has attributes, you can change the own bank number (and the linked payment format).
2. If you change the payment format to a payment format of the same type and both payment formats have attributes, you can change the own bank, but the attributes must remain the same.
3. If you change the payment format from a format with attributes to a different format without attributes, you can change the own bank number. The system displays a warning that the attributes linked to the open items will be removed.
4. If the payment format is changed to a different payment format with attributes, the own bank number cannot be changed.

When the format selected for the payment is different than the open item format and has attributes, the system prevents you from allocating to open items. This is because the new format attributes can conflict with those of the open items.

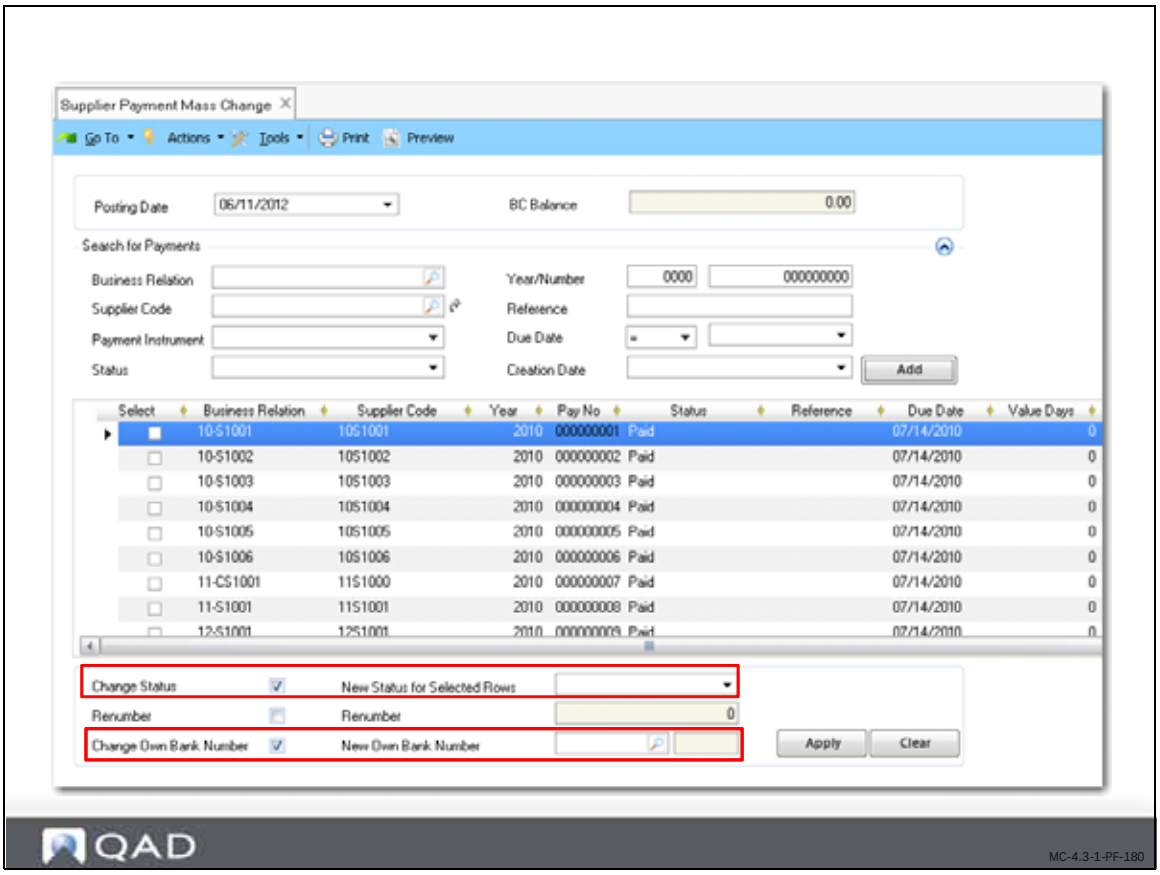
Payment Mass Change



Use Payment Mass Change to confirm the status transitions of one or more payments and, if required, to change the bank details for selected payments.

You typically change the status of single payments by modifying the original payment and using the change status activity to handle multiple payments at one time. This activity helps streamline the completion of a payment processing flow. For example, if the bank notifies you that a set of checks has cleared, you can update the status of all the checks at one time.

You can also use the Payment Mass Change activity to renumber payments, such as printed checks, if needed. However, it is recommending to restrict the renumbering of payments and only use this option in special circumstances.



When completing customer or supplier payments, you can decide for cash flow or other reasons to change the bank account or account number into which the payment is made. The Change Own Bank Number option lets you specify a different bank account and account number for selected payments. This option exists in both Customer Payment Mass Change (27.6.4.5) and Supplier Payment Mass Change (28.9.3.5).

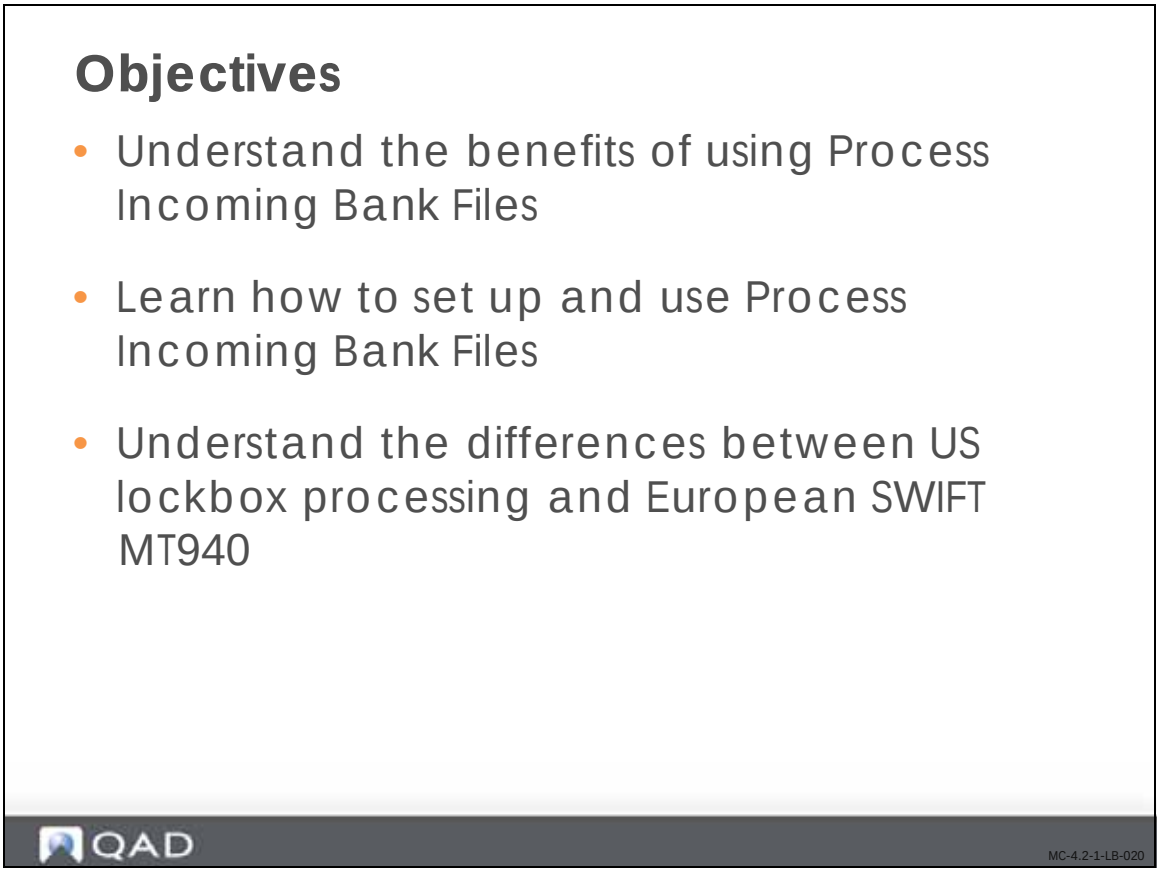
You can specify a different account number for the same bank, or a different account number and bank account. The new account number, account, and payment instrument combination must be already defined in Bank Payment Format Link and must be defined for the same entity as the original combination.

You must also have defined a payment status that uses the new bank account, payment account, and payment instrument.

Chapter 17

Process Incoming Bank Files

Objectives



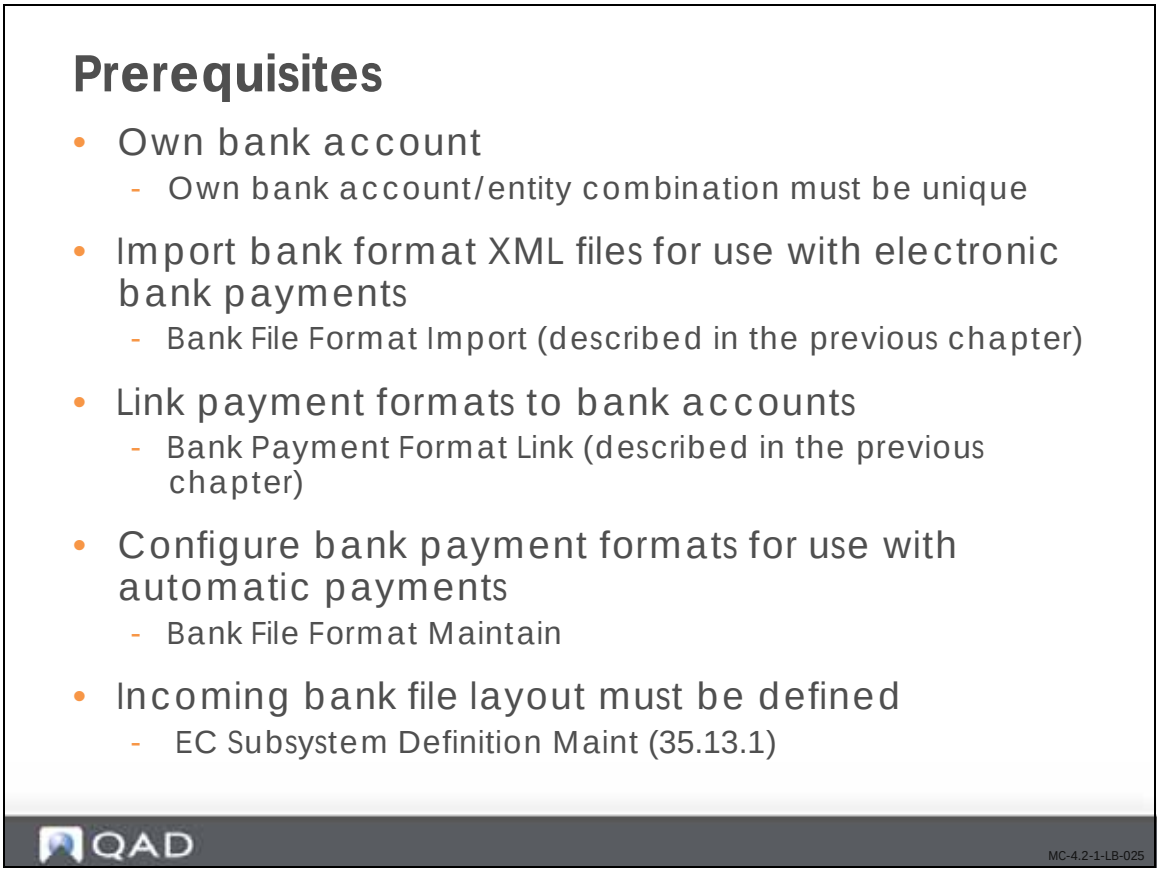
This section describes how to set up and use the electronic banking functions in Financials.

You can import bank statements electronically from external systems, and convert transaction data contained in electronic bank files into automatic customer and supplier payments.

This chapter describes two of the most common worldwide methods for transferring and processing electronic bank files: lockbox processing, used in the US, and SWIFT MT940, more commonly used in Europe.

Your instructor will then demonstrate the whole bank file import process.

Prerequisites

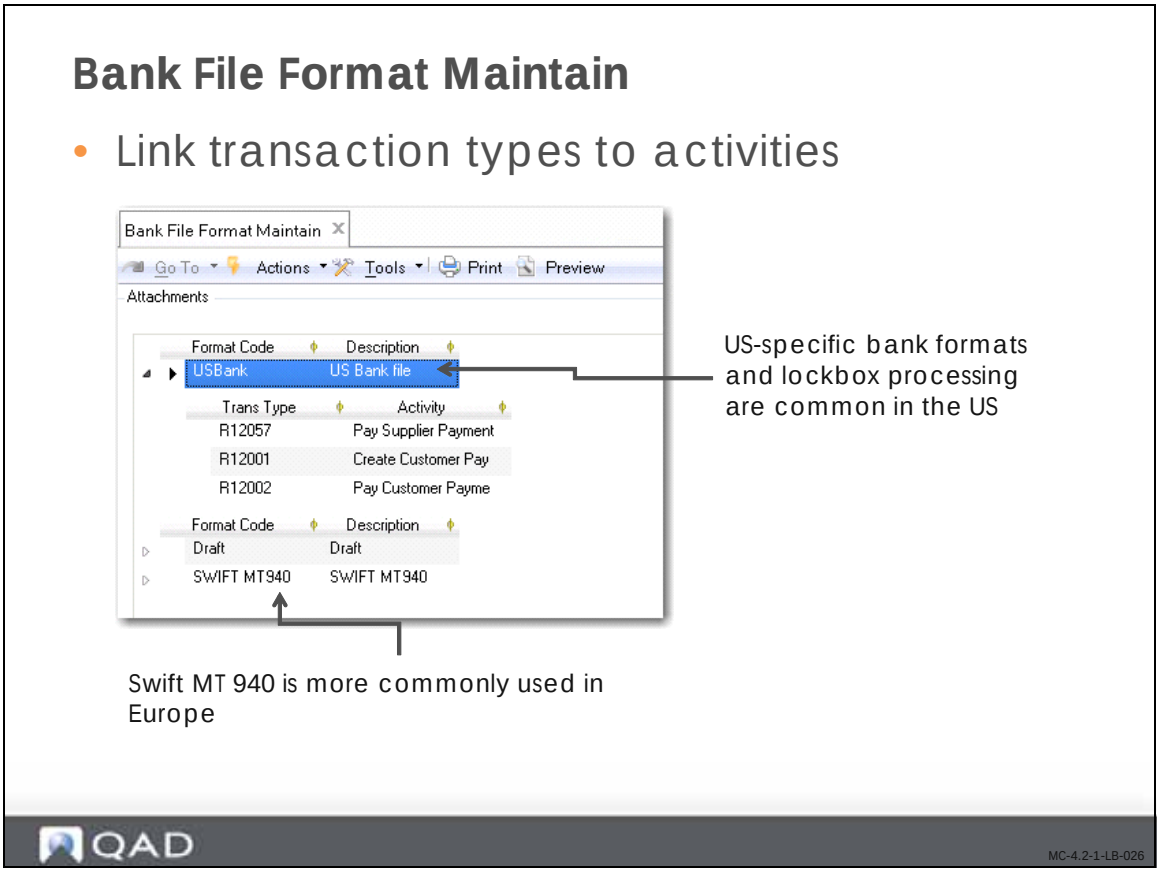


This section lists the setup required before you can process transactions electronically.

The setup includes:

- Ensuring the combination of own bank account and entity is unique.
- Importing predefined bank format XML files for use with electronic bank payments using Bank File Format Import. This setup step is described in “Bank File Format Import” on page 433.
- Linking payment formats to bank accounts. This setup step is described in “Functional Setup Flow” on page 432.
- Configuring bank payment formats for use with automatic payments from bank payment files. This is described in “Bank File Format Maintain” on page 448.
- Checking payment file extensions. See “EC Subsystem Definition” on page 449.

Bank File Format Maintain



In Bank File Format Maintenance (31.1.9), link the transaction codes to activities.

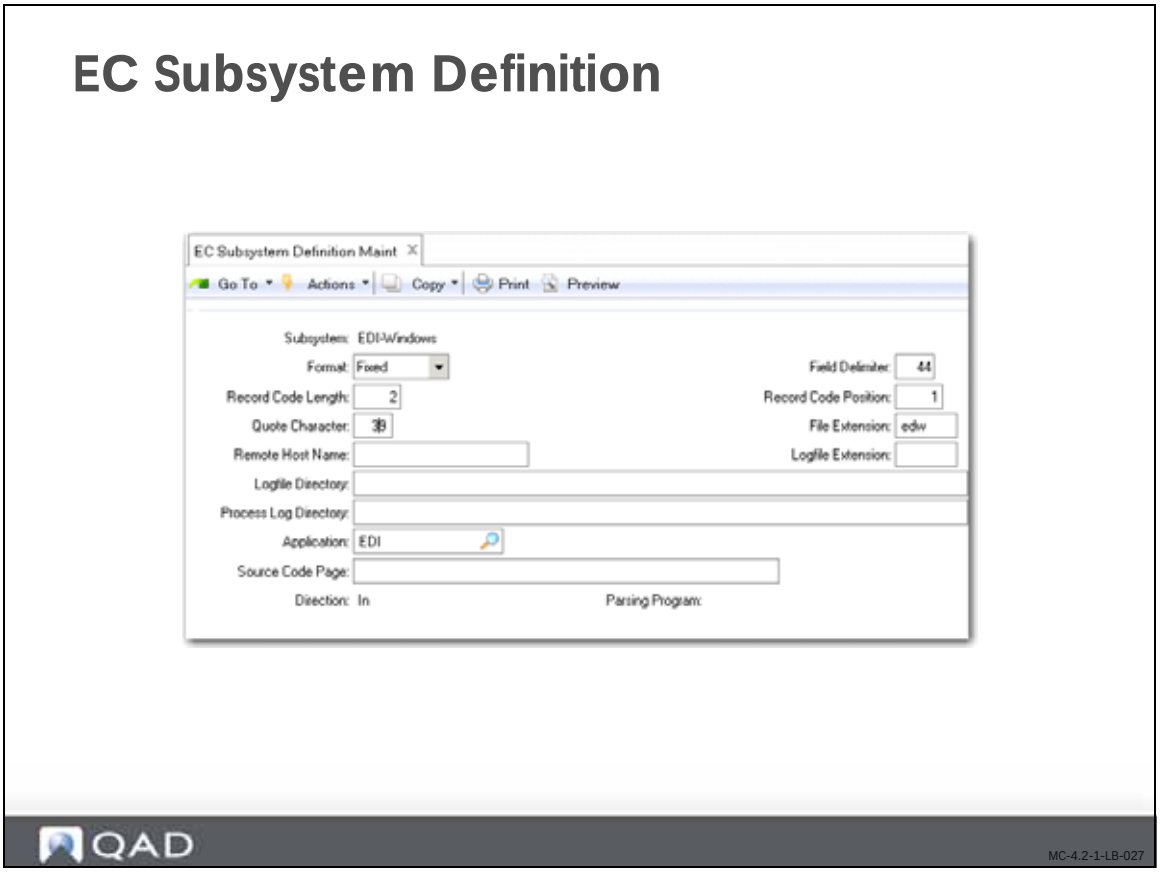
Bank payment files contain transaction codes, which identify the types of payment contained in the file. These codes are mapped to the system actions Create Customer Payment, Pay Customer Payment, or Pay Supplier Payment. This ensures that the correct type of automatic payment is created for each transaction.

For example, Wells Fargo uses the code R12057 to identify supplier payment transaction messages within payment files. This code is mapped to the system action Pay Supplier Payment. When you import a Wells Fargo payment file, the system maps all supplier payment transaction messages to the action Pay Supplier Payment. Once the messages are validated and processed, the system performs the action to which the transaction code is mapped. In this instance, the system invokes the Pay Supplier Payment action for all messages that are coded R057. It then retrieves the original supplier payments for these transactions and changes their status from For Collection to Paid.

The system uses the payment format linked to your bank account to store the mapping information. To enable auto-generated payments, you must link a payment format containing the correct mappings to your bank account when initiating the customer or supplier payment process. For example, to process Wells Fargo bank files, you must link the payment format containing the Wells Fargo transaction mapping to your account as part of the initial setup for customer or supplier payments. This ensures that when you import Wells Fargo payment files, the system can automatically complete the payment cycle.

Bank File Format Maintain (31.1.9) lets you create and view the transaction code mappings.

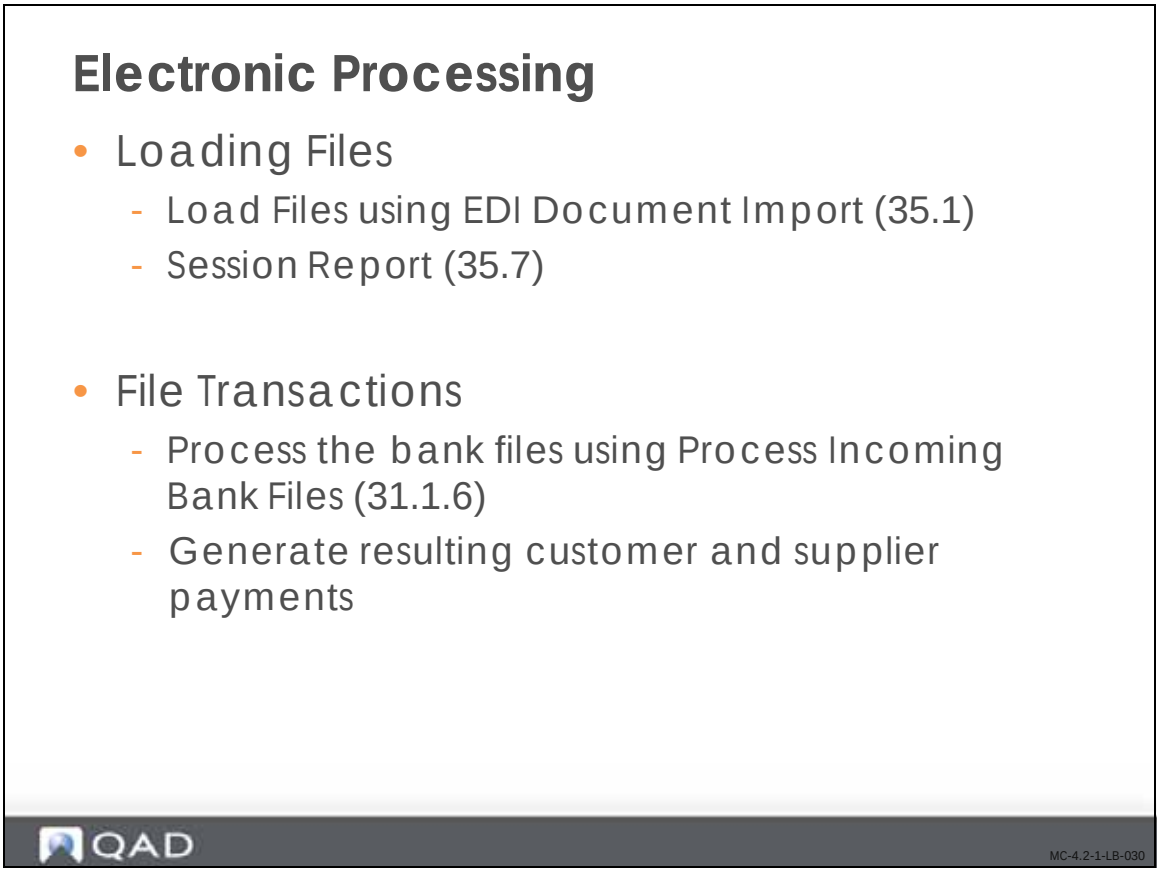
EC Subsystem Definition



The system uses standard EDI eCommerce functions to select the external payment files from the location on your network where they are stored, and to save them as Financials payment files for processing.

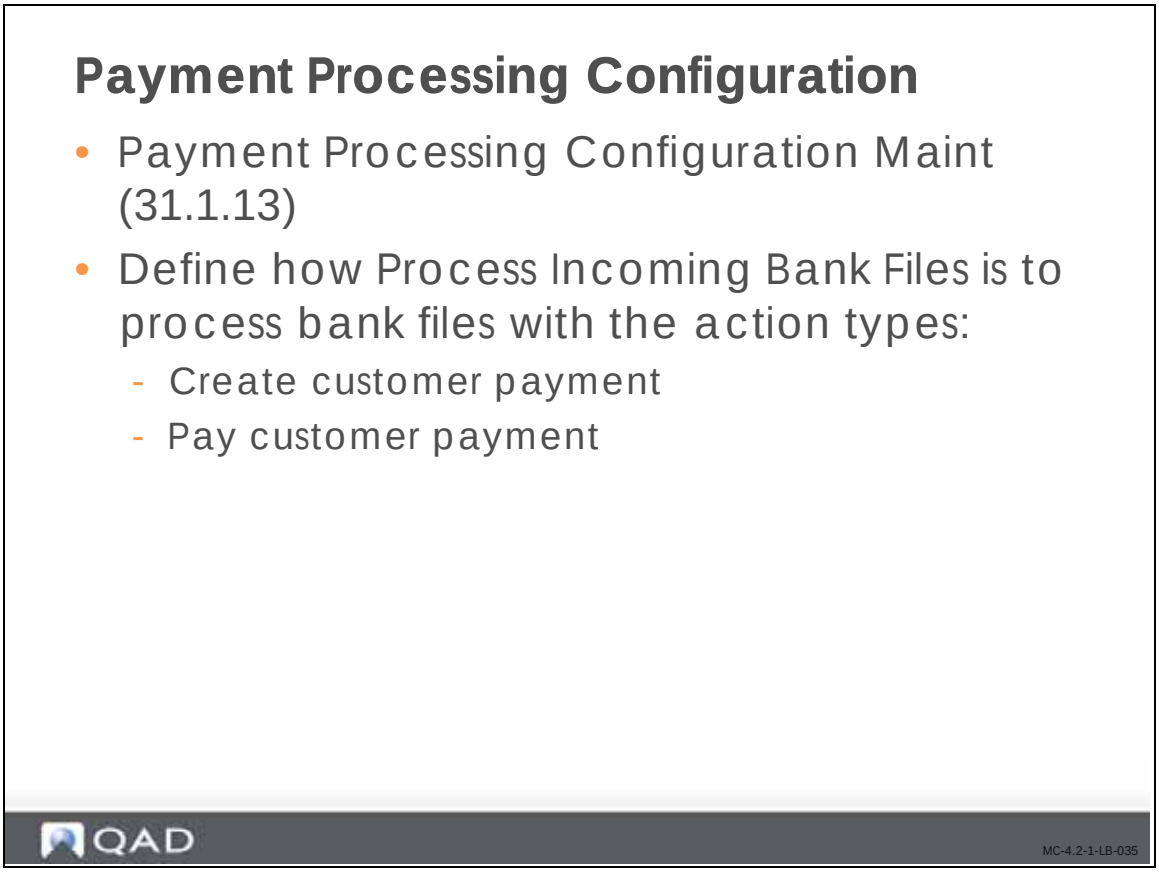
Payment file extensions are mapped to their correct EC (Electronic Commerce) subsystem in EC Subsystem Definition Maintenance (35.13.1). The subsystem in this case is the external banking system in which the file originated. Defining the file extension here ensures that the system associates the payment file with the correct external module. These mappings are preconfigured and do not require user input.

Electronic Processing



Note You can also use Incoming Bank File Excel Integration (31.1.12) to load bank files into the system.

Payment Processing Configuration



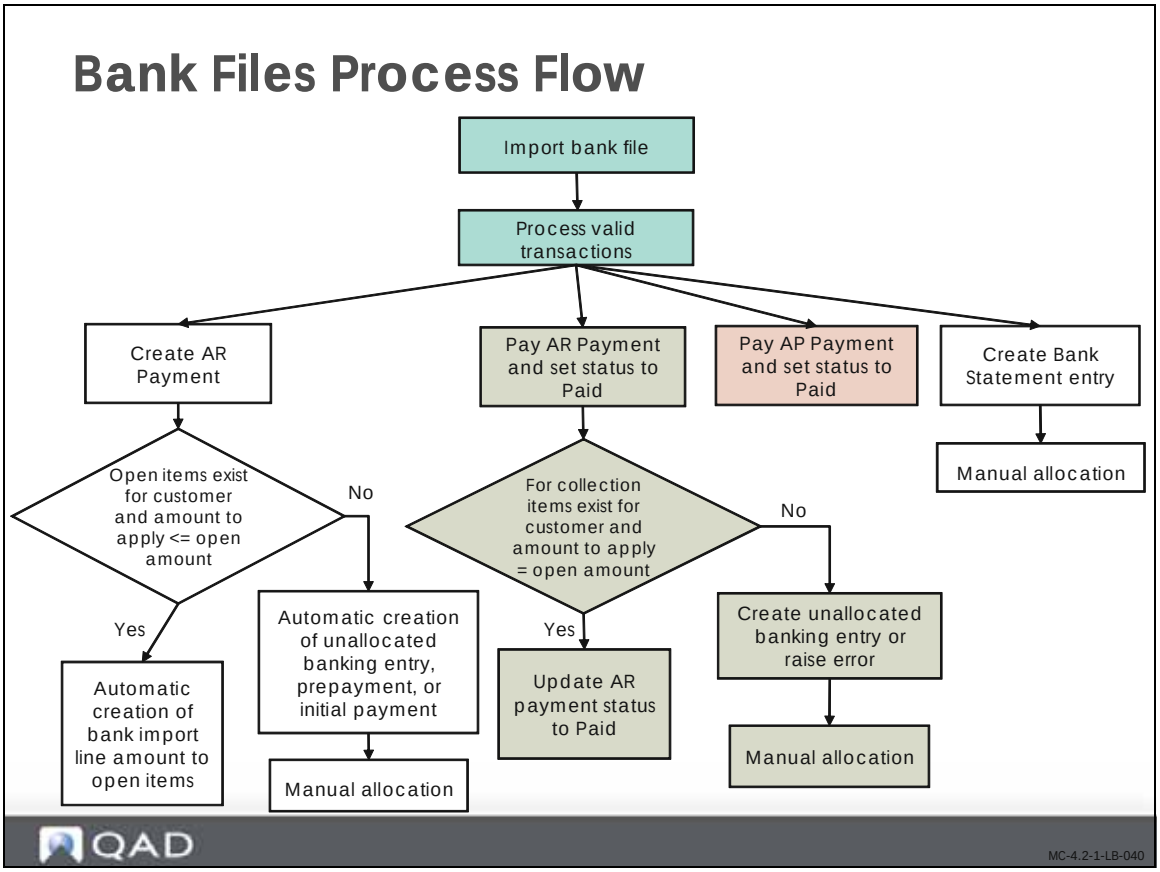
When the message type from the bank indicates that a customer payment has been received, the program that processes the bank file creates a customer payment. When payments are created, the system also tries to allocate the payment to open items. When no matching invoice is found, you can use Payment Processing Configuration Maint (31.1.13) to configure the system to create a prepayment, an unallocated banking entry, or an initial status payment, which you can then allocate manually later.

If the program cannot find a matching customer, an error message is raised or an unallocated banking entry is created, depending on the configuration in Payment Processing Configuration Maint.

When the message type from the bank indicates that a customer payment has been cleared—that is, the payment was cashed on the bank account—the program that processes the bank file searches for a customer payment with the status For Collection with a matching amount. When a payment cannot be found, the system raises an error message by default. However, using Payment Processing Configuration Maint, you can also configure the system to create an unallocated banking entry instead of raising an error message.

You can also use this program to specify tolerance values for assigning customer payments to outstanding invoices. The difference between the payment and the outstanding amount is then written off through an automatically created journal entry. You can specify tolerance for short payments and for over payments.

Bank Files Process Flow



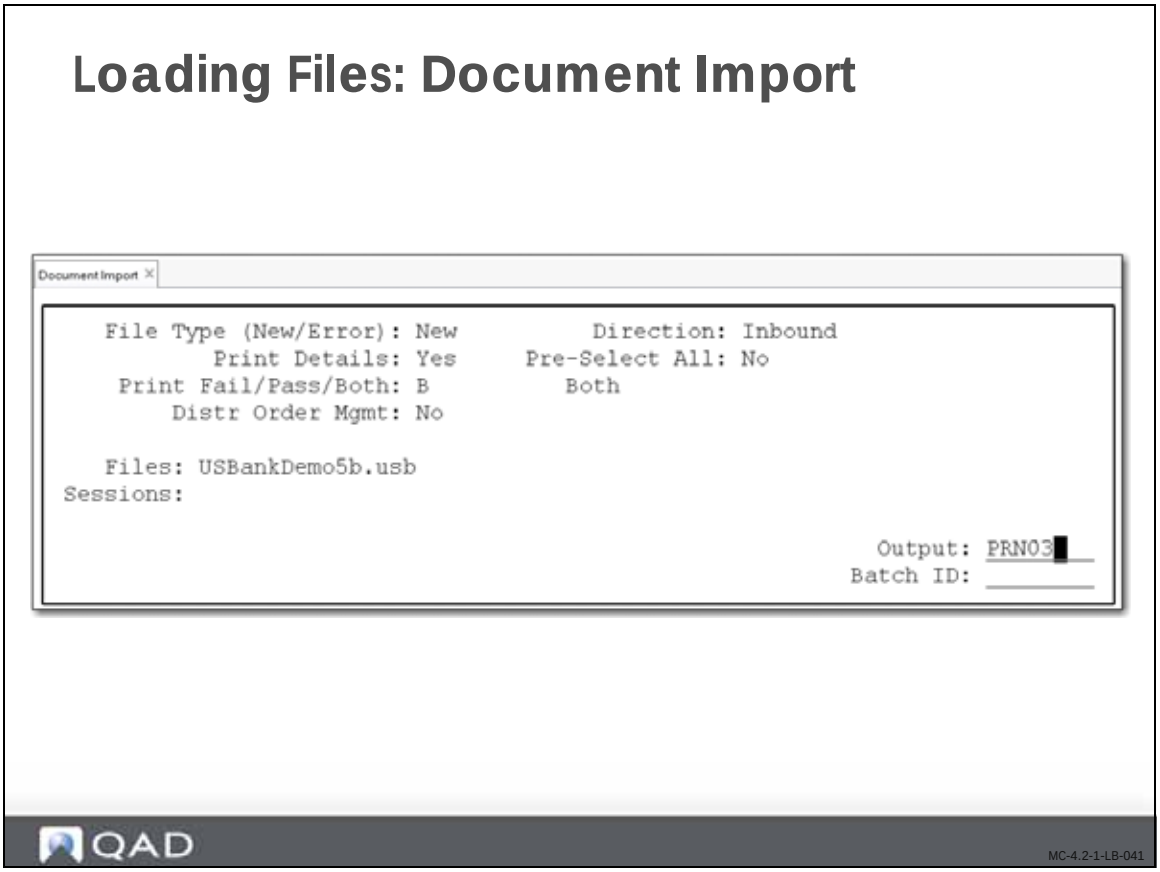
The process for importing bank files can be summarized by the following steps:

The system validates the transactions contained in the payment file by matching customer or supplier information in the transactions against customer or supplier records stored in the system. When these records match, the automatic payment is generated and the transaction can be allocated to an existing open item for the customer or supplier. If they do not match, you can manually select a customer or supplier, and create an open item to which you can then allocate the payment. For the transaction types create customer payment and pay customer payment, specific actions can be configured in Payment Processing Configuration Maint when no matching record can be found.

One payment file can contain multiple types of transaction messages, and you can filter the messages by type, date, bank account, or action. For example, you can choose to process only new customer payments, only existing supplier payments, or all payments within a range of dates.

Optionally, the system creates a bank statement line for each processed transaction message that results in a posting on the bank account (for example, when a payment is paid) or for message types that result in the creation of a bank statement line only. The system groups the lines by the bank statement numbers provided by the bank.

Loading Files: Document Import



Loading Bank Payment Files

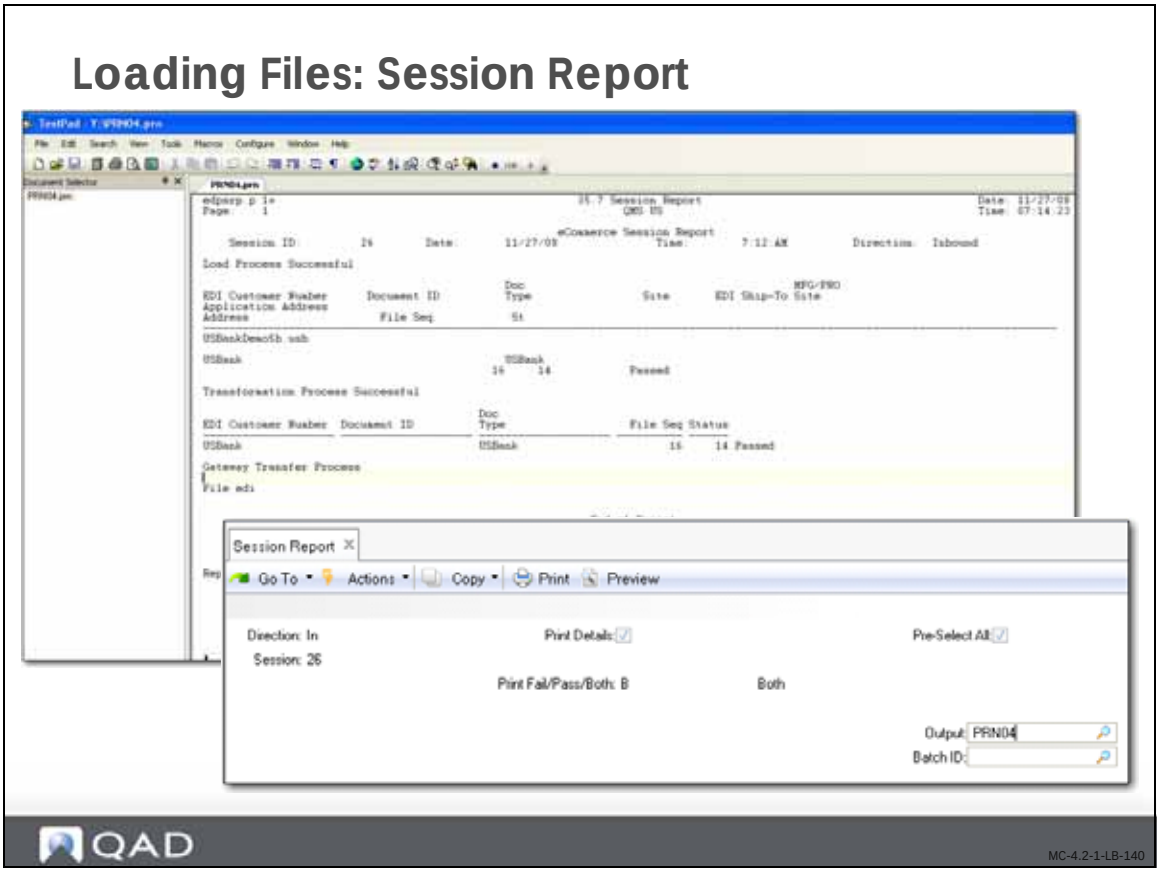
The system uses standard EDI eCommerce functions to select the external payment files from the location on your network where they are stored, and to save them as Financials payment files for processing.

The system uses two EDI functions to complete the first stage of the import process:

- Payment file extensions are mapped to their correct EC (Electronic Commerce) subsystem in EC Subsystem Definition Maintenance (35.13.1). The subsystem in this case is the external banking system in which the file originated. Defining the file extension here ensures that the system associates the payment file with the correct external module. These mappings are pre configured and do not require user input.
- Select the files to be imported using Document Import (35.1). Document Import loads the files into the Financials system, and stores the information in the database. An EDI transformation converts the file layout to the database tables.

For details on completing the EDI activities, see *QAD EDI eCommerce User Guide*.

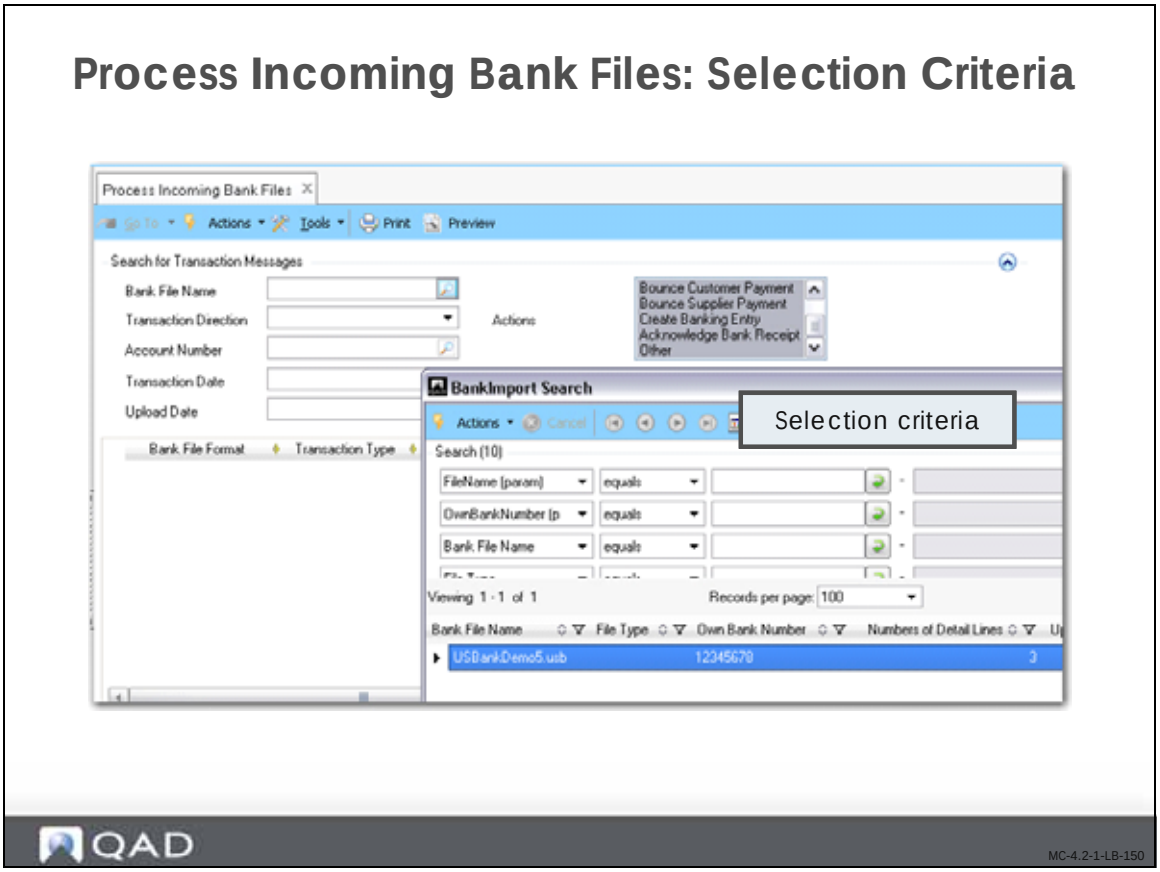
Loading Files: Session Report



The Session report (35.7) shows the status of document imports or exports at each processing step. Use the report to analyze where problems occurred, then resolve the problems at the source.

Use the Session report to verify that bank files have been properly loaded.

Process Incoming Bank Files: Selection Criteria



Use Process Incoming Bank Files (31.1.6) to select imported payment files, and to process the transactions contained in the files.

Use the search criteria in the Filter area to select the transactions contained in the file by transaction type, transaction date, upload date, or bank account number. The system loads these transactions into the transaction grid.

Each transaction displays the following information:

- Customer or supplier details, including name, business relation, address, and bank accounts
- Bank format in use
- Transaction code
- Value date
- Payment amount in transaction currency, and exchange rates if the original payment currency is different from the currency used by the bank
- Invoice details, if supplied by the bank
- Action to be performed on the processed transaction
- Processing status
- Batch

You then click Process to process these transactions and automatically generate the corresponding customer or supplier payment activity.

When the system cannot match the payment information in the transactions with payment records for the customer or supplier, an error message is displayed in the transaction line on the grid. You can then manually specify a customer, supplier, or payment in order to complete the processing.

The Process Incoming Bank Files function includes the following options:

Create Customer Payment

When the message type from the bank indicates that a customer payment has been received, the program that processes the bank file creates a customer payment.

Pay Customer Payment

When the message type from the bank indicates that a customer payment has been cleared—that is, the payment was cashed on the bank account—the program that processes the bank file searches for a customer payment with the status For Collection with a matching amount. If it finds the payment, the system sets the payment status to Paid, the bank GL account is debited, and the customer payment account is credited.

Bounce Customer Payment

When the message type from the bank indicates that a customer payment has been bounced (payment refused), the program that processes the bank file searches for a customer payment with the status For Collection and a matching amount. If it finds the payment, the system sets the payment status to Bounced, and the linked invoices are reopened. The customer control account is debited, and the customer payment account is credited.

Pay Supplier Payment

You issue payments to your supplier, which your supplier sends to their bank. The supplier’s bank arranges a money transfer from your bank. When the message type from the bank indicates that a supplier payment has been paid from your bank account, the program that processes the bank file searches for a supplier payment with the status For Collection and with a matching amount. If it finds the payment, the system sets the payment status to Paid and the bank GL account is credited.

Pay Supplier Payment Selection

You can pay a supplier payment selection in Process Incoming Bank Files. When the bank sends a file confirming payment of a supplier payment selection, select Pay supplier Payment Selection to pay the individual supplier payments within the supplier payment selection directly or to create a banking entry to allocate this supplier payment when the Create Banking Entry field is selected.

Bounce Supplier Payment

When the message type from the bank indicates that a supplier payment has been Bounced (payment refused), the program that processes the bank file searches for a supplier payment with the status For Collection and with a matching amount. If it finds the payment, the system sets the payment status to Bounced, and the linked invoices are reopened. The supplier control account is credited, and the supplier payment account is debited.

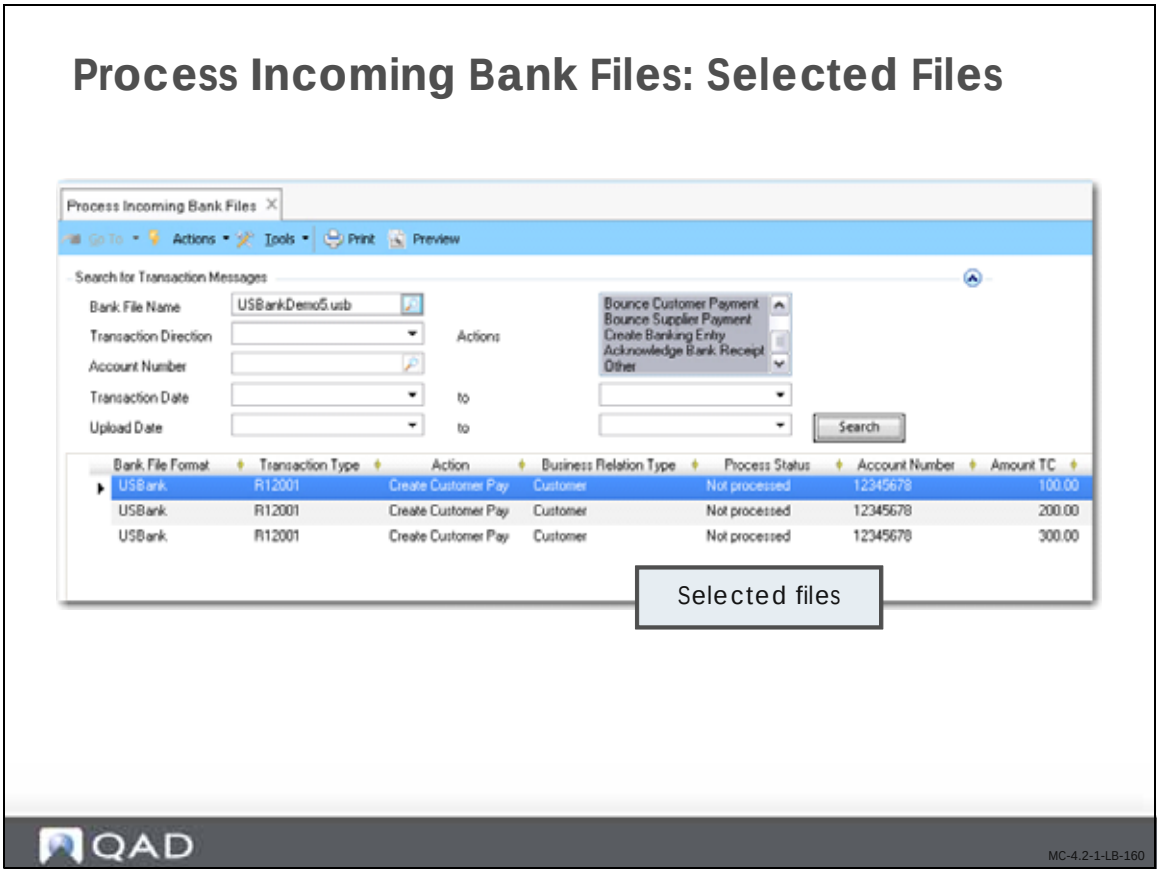
Create Banking Entry

This message type allows you to create unallocated bank statement lines in the system, but is not supported yet. In the current version of the software, there is an option to create allocated bank statement lines if the bank account is used in either of the previously listed actions.

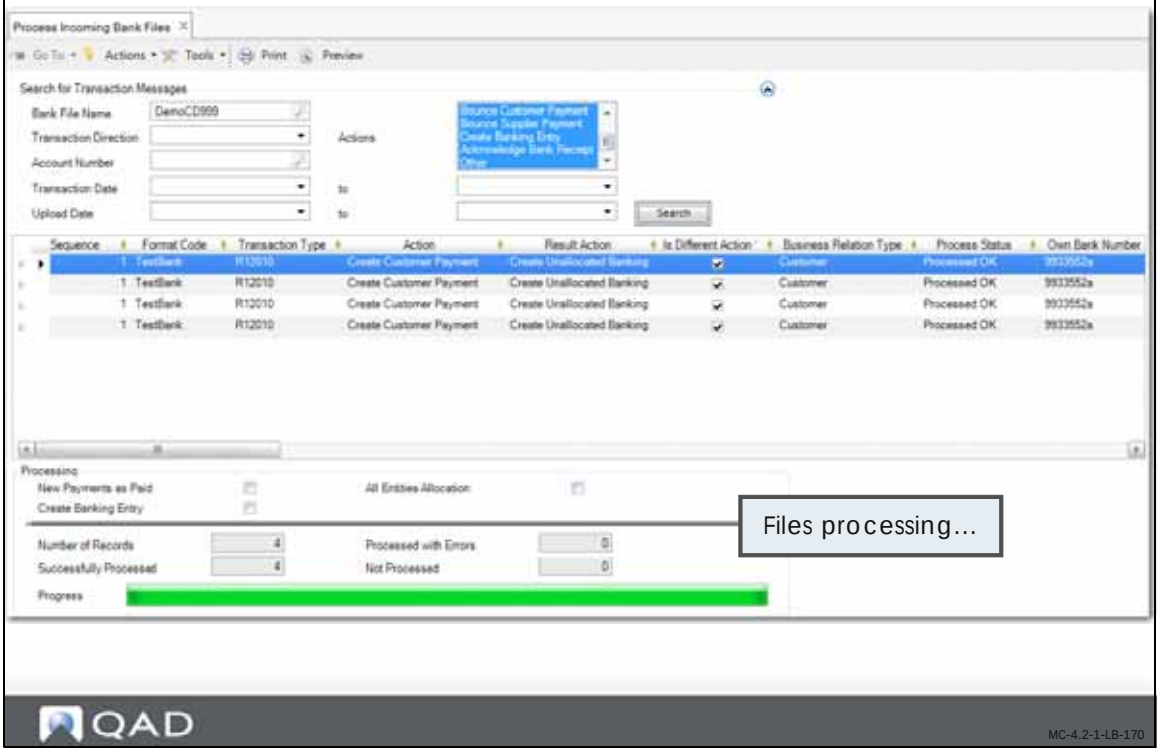
Other

The Other category refers to any other message type from the bank that has no equivalent transaction in Financials.

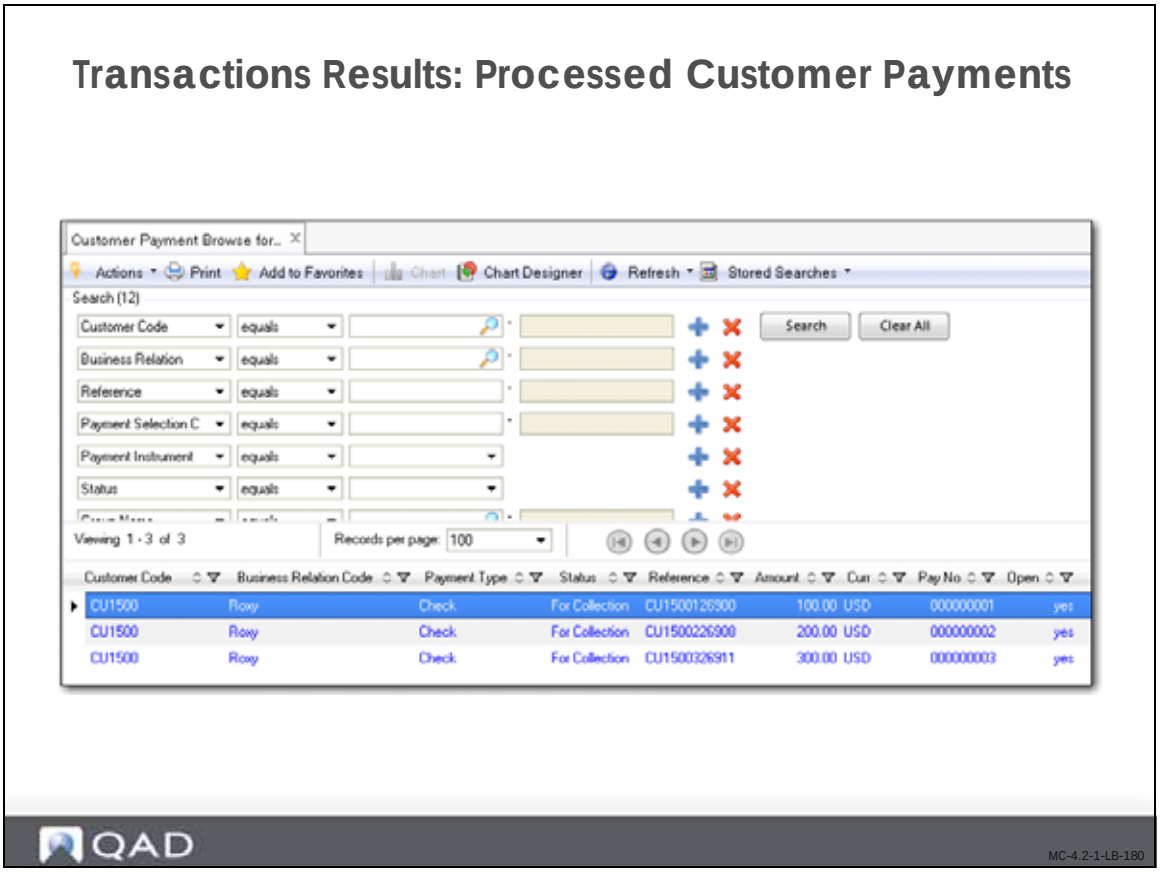
Process Incoming Bank Files: Selected Files



Process Incoming Bank Files: File Processing



Transaction Results: Processed Customer Payments



New AR Payments

You can create a new AR payment with either an Initial, For Collection, or Paid status for lockbox checks.

Bank payment files sometimes contain the original invoice reference for the check. In this case, when the transaction is validated and processed, the system retrieves the original invoice, allocates the check, and creates a customer payment with either a For Collection or Paid status.

Note For Collection and Paid statuses must exist in the system for this type of automatic payment.

When the customer is validated, but the payment file does not contain invoice references, the system compares the amounts in all open items for this customer, retrieving the oldest open item first. If one or a combination of open item amounts match the amount of the check, the system allocates the check and creates a customer payment. You can, optionally, assign a For Collection or Paid status to this payment.

When the customer is not validated and the payment file does not contain invoice references, you can manually select a customer to complete the transaction process. The system creates a customer payment with an Initial status, which you then process as normal.

Processing Existing AR Payments

The system uses the check number to retrieve the original customer payment and change its status to Paid. When the check number is not available in the bank file (for example, the bank has not included this value in the file), the system then identifies payments that have a status of For Collection and are of the same amount as the check that has been paid. Once these conditions are met, the For Collection payment is automatically updated to Paid.

Errors in Transaction Processing

The system processes transaction messages automatically when there is a complete match between the bank file and the system records for the following data:

- Customer or supplier name
- Customer or supplier code
- Invoice payment reference. This is the original customer or supplier invoice.
- Customer or supplier bank account number.
- Currency. The transaction message currency must match that of the original payment.

When one of these values does not match, the transaction line is displayed in red on the grid and the error is detailed.

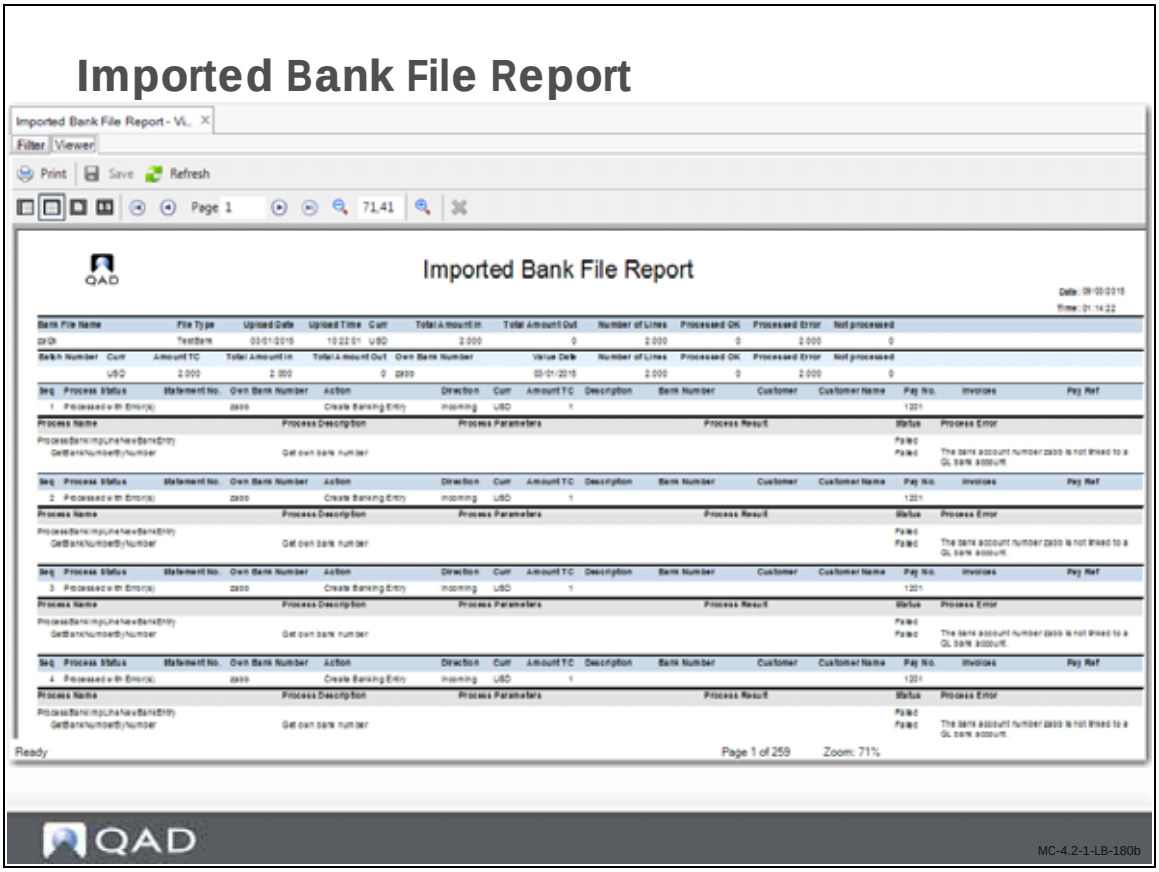
You can use the customer, supplier, bank number, invoice, or payment number lookups on the grid to manually select the correct value and so process the transaction message.

The system also displays errors for the following occurrences:

- The customer bank account number is not defined for this customer.
- Your bank account number has not been linked to this customer.
- Your bank account is not linked to the payment format that contains the mapping for this transaction code.
- The correct payment status has not been defined for this customer.

The system does not process a transaction for which there is an error. However, you can manually configure the missing or incorrect data, and load the file again for reprocessing.

Imported Bank File Report



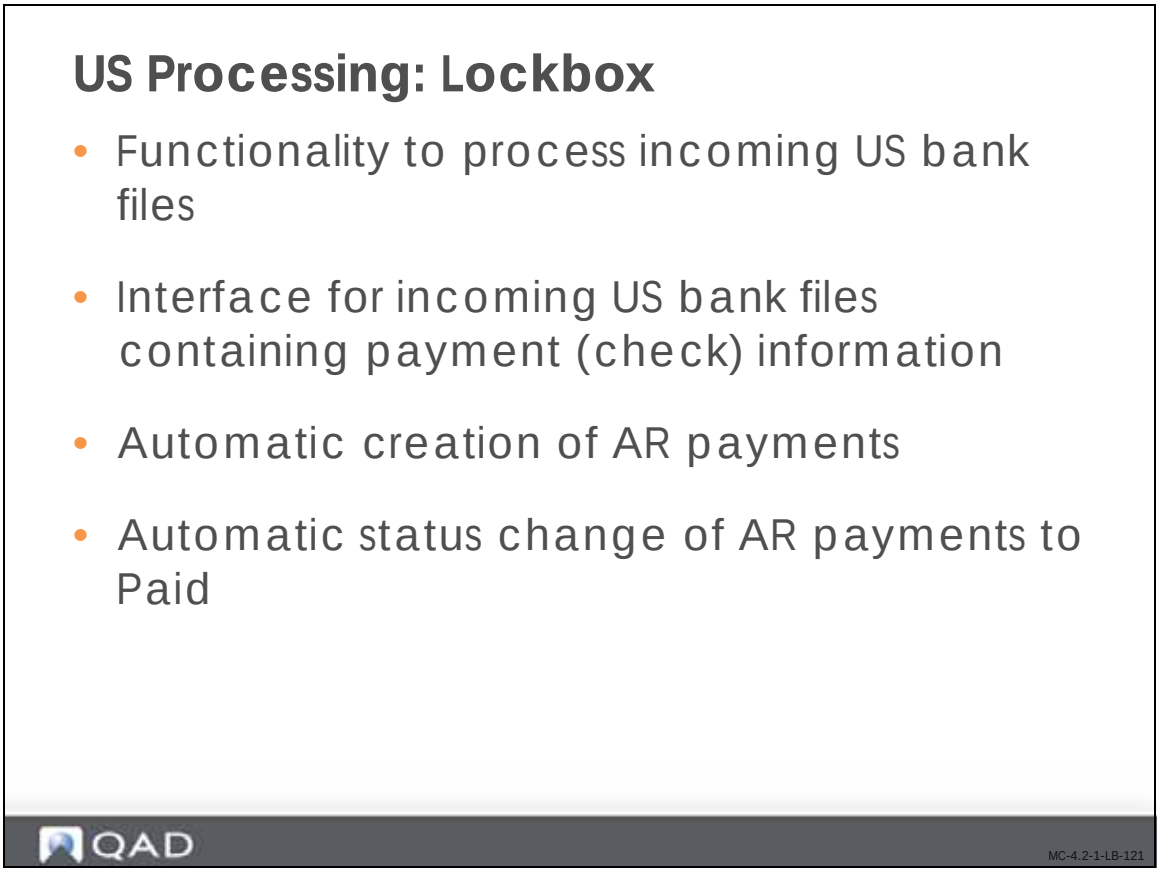
The Imported Bank File Report (31.1.11) displays details on the status and allocation of imported bank files or batches of files. The report displays different types of detail, depending on whether the record was a successfully processed customer payment, supplier payment, or banking entry, or if the record was unprocessed or processed with errors. The report contains up to five sections.

- The bank file name section displays details of the imported bank file, including an overview of the processing result.
- The batch number section of the report identifies the batch number of the bank file you have imported. This section also contains other details such as the currency, total amounts involved, and own bank account number.
- The sequence line section displays details of how each line in the bank file was processed. It indicates other details such as whether the line processed successfully, which bank account was involved, and the action type that was taken as a result of processing the line.
- The bank file processing result area contains two parts. The Format Name line contains header information, such as the business relation name, currency, amount, and payment reference. The second line contains the details of the payment.
- The bank file processing log section is only visible when logging is enabled for the domain in Domain Modify. It displays details of the processes that have run for this bank line, along with the result of the process.

Examples of Worldwide Bank File Processing

The following pages describe two worldwide examples of electronic bank file processing: Lockbox (US) and SWIFT MT940 (Europe).

US Processing: Lockbox



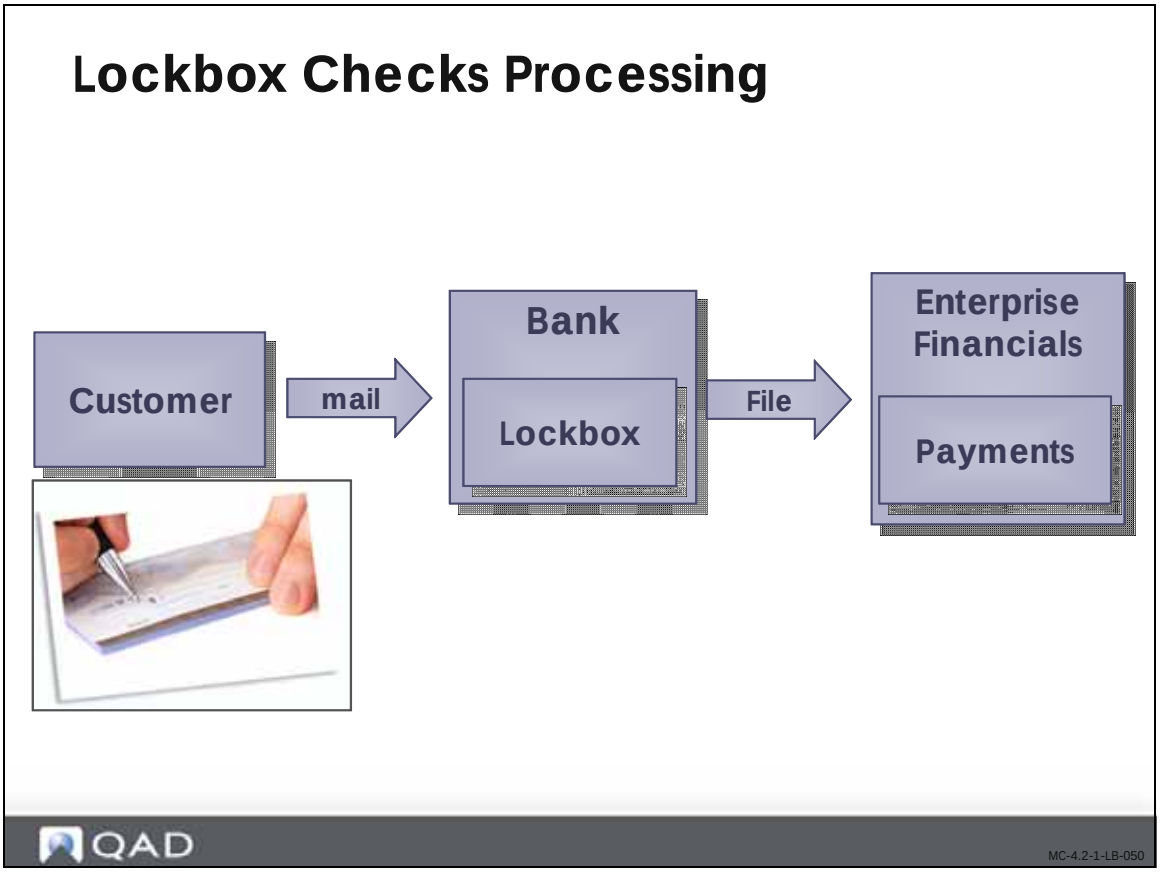
In the US, customer check payments are often sent to a lockbox (postal address) at the bank. The bank personnel empties the box daily, and registers the checks in the system. Then, the bank sends a file to the company owning the lock box. In that file, all received checks are listed.

The lockbox functionality processes incoming payment files, automatically creating AR payments and changing the payment status to Paid.

This functionality includes three business flows:

- Lock box for customer payments (checks)
- File from the bank that contains information on paid customer payments (checks)
- File from the bank that contains information on paid supplier payments (checks).

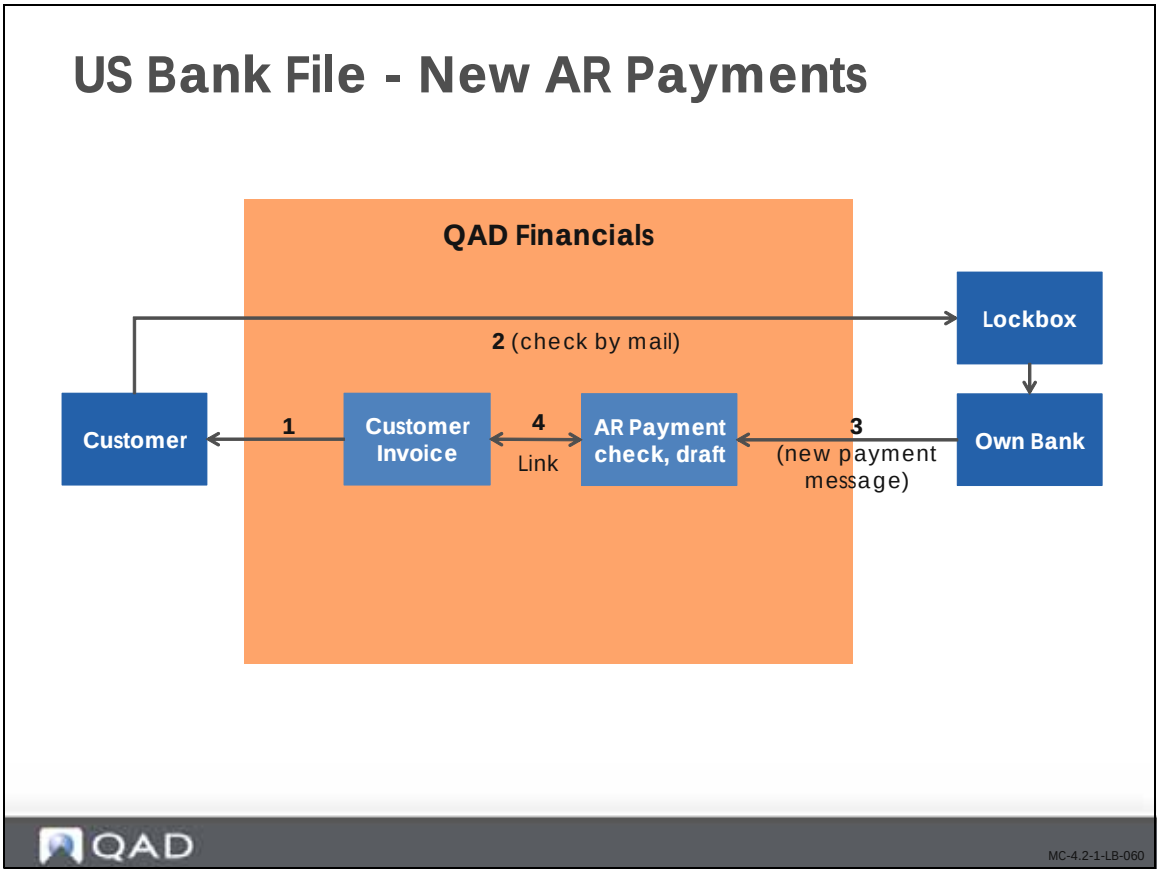
Lockbox Checks Processing



This section concentrates on the lockbox process.

Many banks use a lockbox address to handle incoming payments (check, drafts). The address is checked daily and the customer checks are registered in the bank's system before a payment file listing the checks received is sent to your company. The Bank File Process is used to create new customer payments in the system to correspond with the checks listed.

US Bank File: New AR Payments



1 A customer invoice is issued.

2 Customer payment:

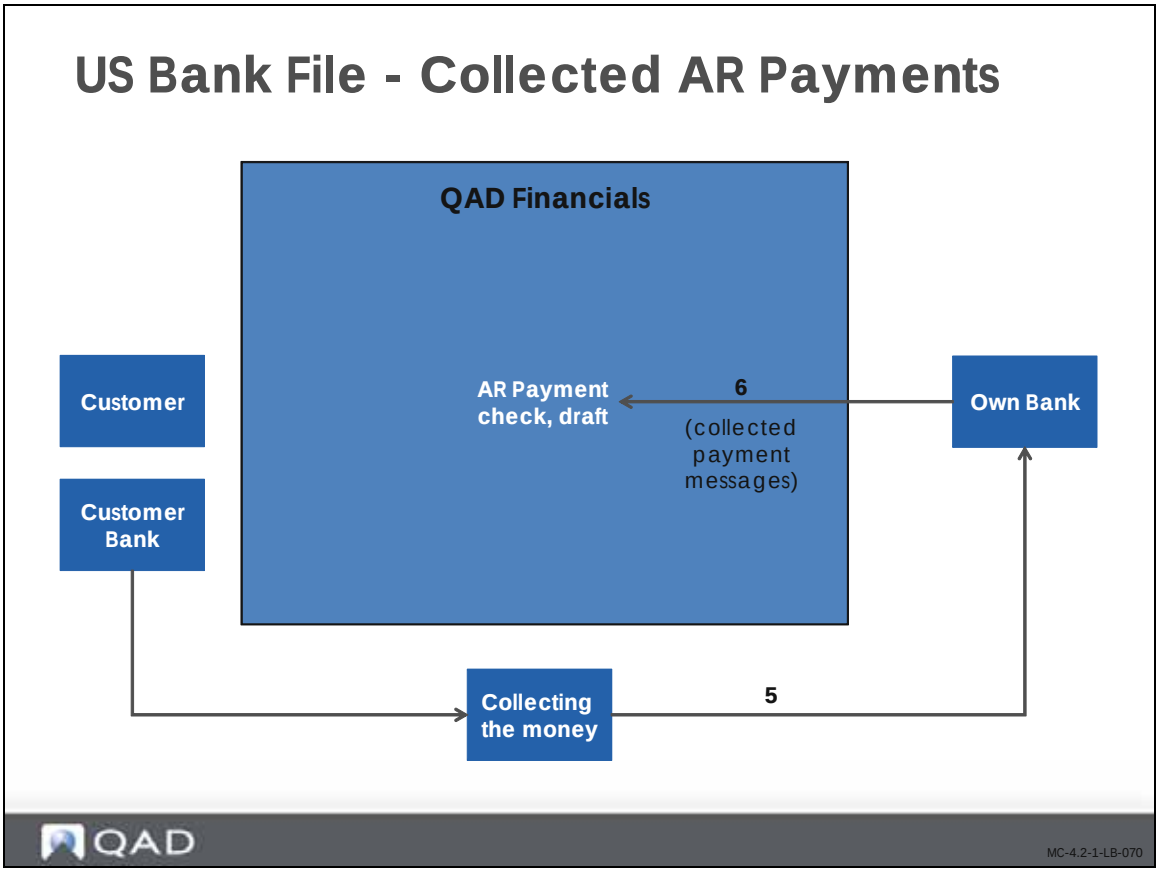
   a The customer pays by sending a check to the lockbox address.

   b The customer sends remittance advice.

3 The bank sends an electronic file with the new check received.

4 New payments are created in the system and linked to invoices.

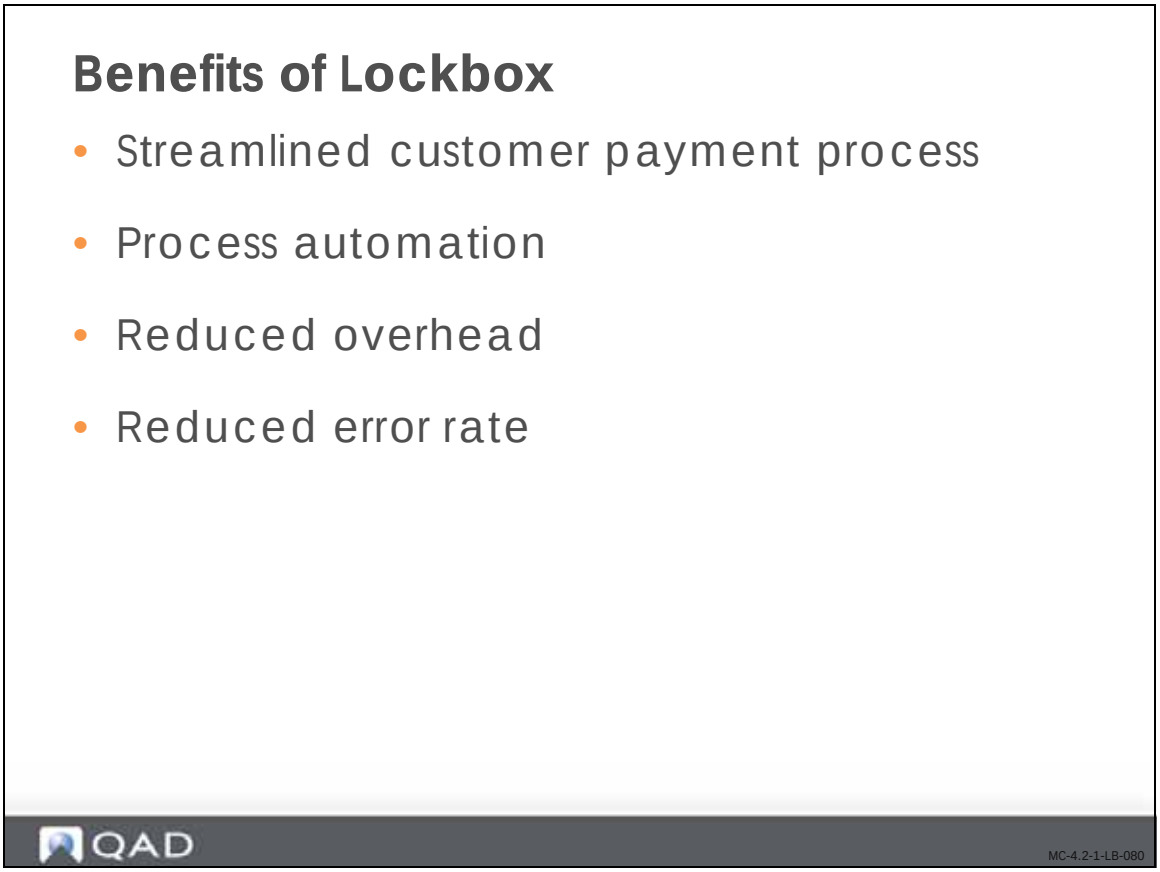
US Bank File: Collected AR Payments



The following steps are the logical continuation of the four steps on the previous page:

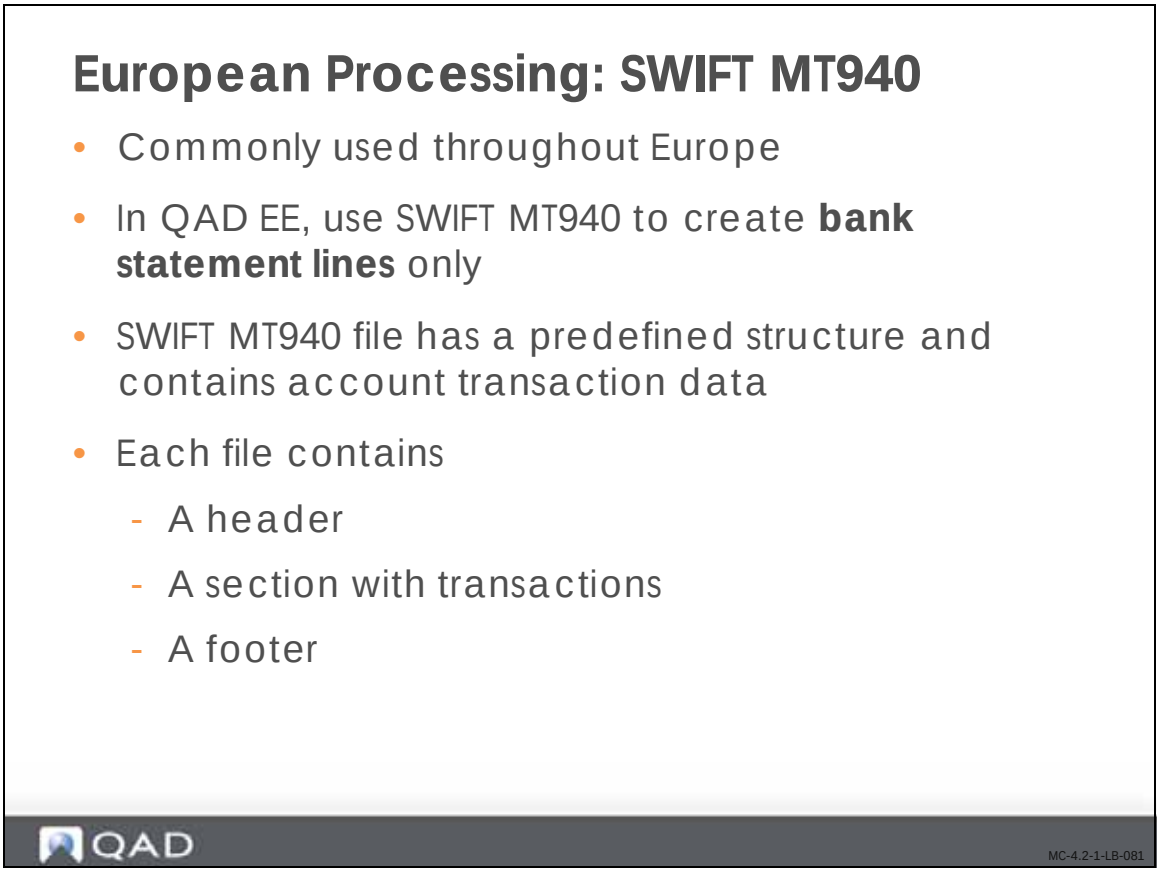
1. Customer payments are collected by the bank.
2. The bank sends a file containing collected check numbers. The payments can be set to Paid using this information.

Benefits of Lockbox



The obvious benefits of this functionality are a streamlined customer payment process, reduced overhead costs due to process automation, and a decreased error rate.

European Processing: SWIFT MT940



The majority of European interbank messaging transactions use the SWIFT network. The most common files types used to import bank transaction data to Financials are SWIFT MT940 files.

The MT940 (MT = Message Type) electronic account statement is an international standard that was developed by SWIFT in Brussels for the paperless transmission of account information. This standard is used by banks all over the world. In particular, MT940 is used to provide bank information to clients' cash management, treasury systems, and accounting applications.

The SWIFT MT940 files imported to Financials typically contain customer statement messages sent by banks at the end of the banking day. The file provides the account balance and detailed information about all transactions booked to the account during the reported date.

Demo Scenario

Your instructor will now demonstrate a bank file processing flow.

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 (www.qad.com/documentlibrary)
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)*
Visit QAD's one-stop destination for all courses and training materials.

*Log-in required