V300 Project Accounting for Construction (Part 1)

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Timing and Agenda

August 6, 2024 -10:00-12:00 PM PT

Day 1

Lesson 1: Reviewing the Project Settings and Lifecycle

Lesson 2: Capturing Project Costs

Lesson 3: Processing Subcontracts

Lesson 4: Correcting Bills for Subcontracts

August 7, 2024 -10:00-12:00 PM PT

Day 2

Lesson 5: Processing Negative Commitments

Lesson 6: Processing Purchases with a Sales Tax

Lesson 7: Tracking Project-Specific Inventory

Lesson 8: Processing AP Bills with Retainage

Lesson 9: Billing Projects for Progress with Retainage

Day 1

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Company Structure

The SweetLife Fruits & Jams company is a midsize company located in New York City.

The ToadGreen Building Group is a subsidiary of the SweetLife Fruits & Jams company. ToadGreen Building Group—which is located in New York—is a general contractor coordinating construction projects for governmental and commercial customers. The company has only one branch, ToadGreen Building Group, in which the corresponding projects are being managed and all construction-related tasks are recorded. This branch has a warehouse that holds the materials purchased for construction projects until they are transferred to project site.

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Operational Activity

The company has been operating starting in the 01-2023 financial period. In November 2023, the company started using Acumatica ERP as an ERP and CRM system and migrated all data of the main office and retail store to Acumatica ERP. The equipment center has begun its operations in 01-2024 in response to the company's growth.

In October 2023, the company received an investment and opened a subsidiary company for construction (ToadGreen). In February 2024, the company started its first construction project.

The base currency of the company and its subsidiaries is the US dollar (USD). All amounts in documents and reports are expressed in US dollars unless otherwise indicated.

Part 1: Project Commitments

Lesson 1: Reviewing the Project Settings and Lifecycle

Learning Objectives

In this lesson, you will learn how to do the following:

• Plan a project structure

• Create a project and specify its settings

• Plan the structure of the project budget

• Process a project during its lifecycle

Project in Acumatica

A project in Acumatica ERP is a one-time endeavor with its own budget, costs, and revenues; the funding and deliverables of a project are usually finite. In the system, a project contains various specifications that affect project completion, such as the date range, customer, and resources (including employees and equipment)

Project Creation and Processing: Plan a project structure

Depending on which activities you are going to track, you can configure projects of the following types:

• **Fixed-price project**, which is an external project in which services and products are provided to customers at a fixed price; the price of the project is defined at the beginning of the project and is not changed during its completion (unless any change orders are processed for the project).

• **Cost-plus project**, which is an external project in which the prices are calculated as a percentage of the costs. The final price of the cost-plus project depends on the overall cost of fulfilling the project, and the costs may be billed with or without a premium.

• **Internal project**, which is used to track activities completed within your company. The scope of these projects is limited to the physical and organizational boundaries of an organization; these projects serve the needs of the organization and never produce any revenue. Internal projects have budgets, do not include billing settings, and are not associated with any customer.

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Project Creation and Processing: Plan a project structure

• **General information**: This information includes the description, the start and end dates, the project manager, the project address settings, the project currency, and the branch to which the project belongs. You can also specify the billing rule to be assigned to project tasks by default.

• **Billing schedule**: You define whether you will use direct AR invoices when billing the project, or use the pro forma invoices. Then you determine when the project is billed: on the date of the customer statement, at the end of each month, at the end of each quarter, or at the end of each year.

• **Project tasks**: You define the project tasks of the project. A project task in a project is a separate work unit with its own lifecycle, budget, cost, revenue, and billing rule. Budgeted, revised, and actual amounts in the project are tracked by account group balances, each of which is the total of all the corresponding amounts in the project tasks. That is, the project does not have any balances beyond those in the project tasks of the project.

Project Creation and Processing: Plan a project structure

• **Budget**: You define the level of detail for the cost budget and for the revenue budget. The structure of the revenue budget of the project is determined independently from the cost budget structure. Then you specify the budget, which holds the estimated expenses and revenues for a project.

• **Default GL accounts**: You define the general ledger accounts to be used by default in project-related documents.

Project Creation and Processing: Create a project and specify its settings

Use **Projects (PM301000)** form to work with projects

Project Creation and Processing: Plan the structure of the project budget
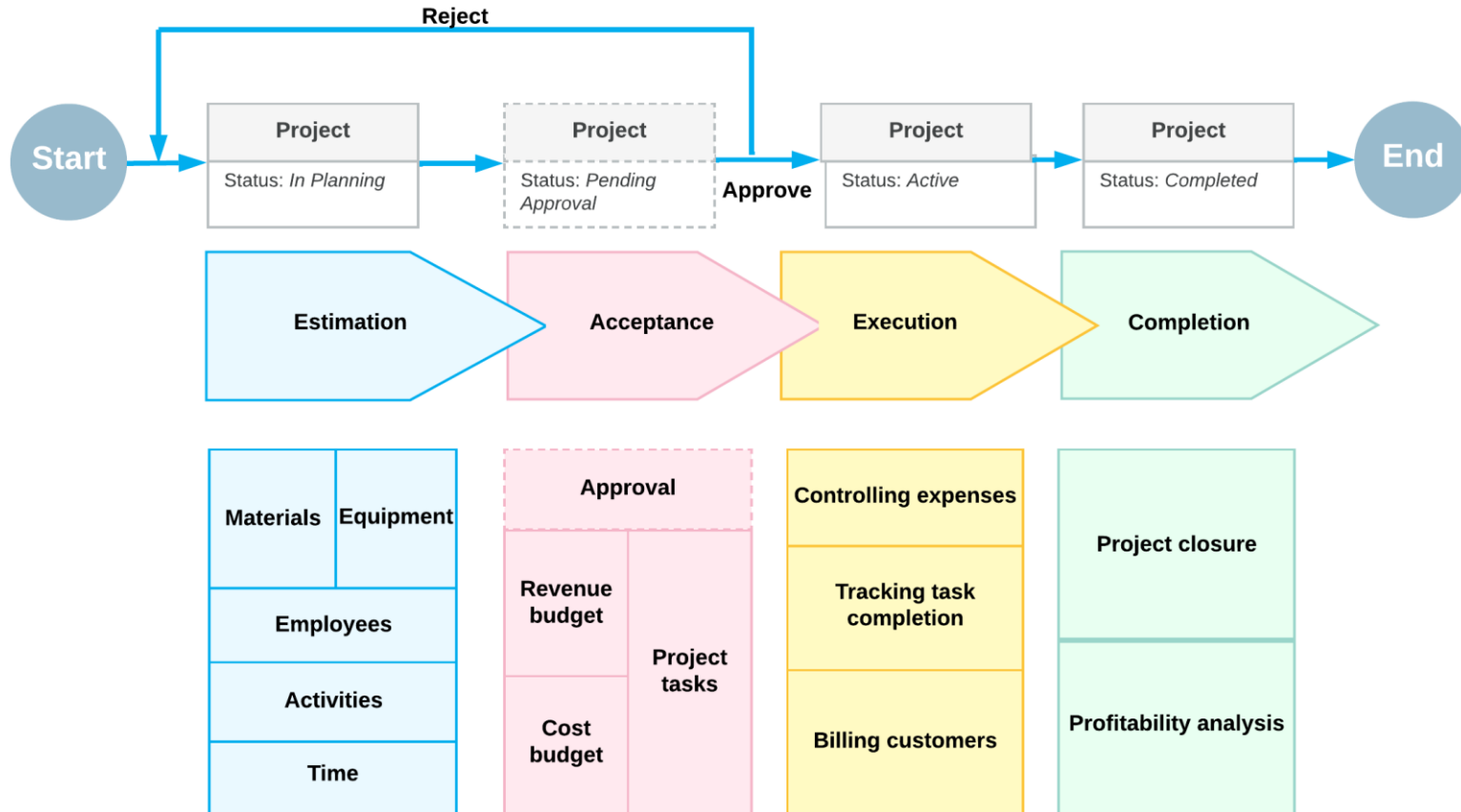
- Project has Cost Budget and Revenue Budget

- Structure of Cost Budget and Revenue Budget are setup independently

- The level of budget structure is defined by parameters **Revenue Budget Level** and **Cost Budget Level** on the **Summary** tab of the **Projects (PM301000)** form

Understanding the project lifecycle

Reject

Start

Project
Status: *In Planning*

Project
Status: *Pending Approval*

Approve

Project
Status: *Active*

Project
Status: *Completed*

End

Estimation   **Acceptance**   **Execution**   **Completion**

Materials	Equipment
Employees	
Activities	
Time	

Approval	
Revenue budget	Project tasks
Cost budget	

Controlling expenses
Tracking task completion
Billing customers

Project closure
Profitability analysis

Project Creation and Processing: Project Estimation

During the project estimation stage, you specify project settings on the Projects (PM301000) form, define activities, estimate the time required for the completion of each project task, and populate the project with employees, resources, and equipment. Each project is assigned the In Planning status once it has been created and saved in the system.

Projects and project tasks with the In Planning status cannot be selected in any documents, except for the following types of documents that are available for planning:

• Employee activities on the Activity (CR306010) form. For instance, you can add an employee activity for planning budgets for project tasks. However, the transactions generated for any of these activities cannot be released until the corresponding project and project task are assigned the Active status.

• Project commitments, that is, purchase orders on the Purchase Orders (PO301000) form and subcontracts on the Subcontracts (SC301000) form. Planned project commitments could be processed after the corresponding project and project task are assigned the Active status.

Project Creation and Processing: Project Acceptance

The acceptance stage includes reaching an agreement with all the stakeholders, including customers and employees, as well as estimating the budget for the project and the expenditures it will entail.

If the approval of projects is required in your system, the project is submitted for approval and is assigned the Pending Approval status once it is taken off hold.

The project has this status until it is approved or rejected on the Approvals (EP503010) form by an assigned employee.

If approved, the project is assigned the Active status.

If rejected, the project is assigned the In Planning status and requires additional changes before it can be submitted for approval again.

Project Creation and Processing: Project Execution

During the execution stage, the project is in progress and project transactions can be posted to it. In this stage, the project retains the Active status.

Active projects and their project tasks are available for selection on the forms of the functional areas in which the projects are visible.

When you create a project-related transaction or document, you need to specify the particular project and project task to indicate that this transaction or document must be tracked within the project;

If any budget changes occur during the course of the project, the system preserves the initial budget amounts, and tracks the revised figures for the project budget

Note: You can use project tasks with the Completed, Canceled, or In Planning status for data entry and document processing only if the Project Accountant role has been assigned to your user account on the User Roles (SM201005) form.

Project Creation and Processing: Project Completion

Once the project is finished, the project accountant completes it by manually assigning it the Completed status, and analyzes the project profitability. Project transactions can no longer be posted to a project with the Completed status.

The statuses of individual project tasks do not directly affect the status of the corresponding project. That is, the system does not automatically complete a project if all of its project tasks have been completed. However, to be able to complete the project, you first need to complete all project tasks included in this project.

Cost Codes: General Information

Learning Objectives

In this lesson, you will learn how to do the following:

• Plan the structure of cost codes to be used in construction projects

• Configure the structure of the cost code identifier and define cost codes

• Configure cost code tracking in the revenue budget lines of the project budget

• Configure cost code tracking in the cost budget lines of the project budget

• Deactivate a cost code that is no longer being used

Cost Code: Configuration

You create cost codes and configure a project to use these cost codes if you need to further classify revenues and expenses in a budget of a construction project.

To define the cost codes to be used in your projects, you need to perform the following tasks:
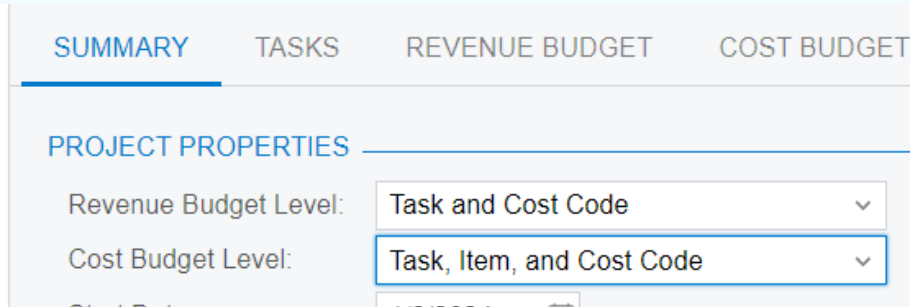
1. Plan the structure of cost code identifiers and the cost codes to be used based on the processes in your organization.

2. Modify the COSTCODE segmented key based on your planned structure, if necessary.

3. Add the planned cost codes to the table on the Cost Codes (PM209500) form.

4. Configure the use of cost codes in the cost budget and revenue budget of a particular project

Cost Code: Configuration

- Use **Segmented Key(CS202000)** form to set structure of **COSTCODE** segmented key in the system

- Use **Cost Codes(PM209500)** form to enter with cost codes.

Cost Code: Configure cost code tracking in the revenue budget lines of the project budget

- Make sure budget level configured with Cost Codes on the Summary tab of the Projects (PM301000) from

SUMMARY	TASKS	REVENUE BUDGET	COST BUDGET

PROJECT PROPERTIES

Revenue Budget Level:	Task and Cost Code
Cost Budget Level:	Task, Item, and Cost Code

- Enter cost codes on the Revenue Budget tab for revenue budget lines

- Enter cost codes on the Cost Budget tab for cost budget lines

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Cost Code: Deactivating cost code

If a user has the **Project Accountant role** assigned on the **User Roles (SM201005)** form, they can deactivate cost code on the **Cost Codes (PM209500).**

The following cost codes cannot be deactivated:

• The default cost code

• A cost code that is specified in a project budget line along with a project task that has the Active status

Construction Project Budget: To Review Project Balance

Story

Suppose that ToadGreen Building Group is a general contractor building an Italian restaurant for its customer, the Italian Company. A ToadGreen manager has created a project for the work to be performed, and the budget has been agreed on with the customer.

Acting as the construction project manager, you need to review the project balances to become familiar with the project and gather all the information about performed work.

Figure: Project tasks of the ITALIAN project

Figure: Cost budget information of the project

Lesson 2: Capturing Project Costs

Learning Objectives

In this lesson, you will learn how to do the following:

• Prepare the system for the creation of account groups

• Create an account group and map accounts to this group

• Review the chart of accounts and find the account group associated with a particular GL account

Account Groups: Types of Account Groups

An account group is an entity in Acumatica ERP that you map to a subset of general ledger accounts and then specify it in project-related documents.

Because they are mapped to general ledger accounts, account groups facilitate transfer of the project-related financial information between the general ledger transactions and project transactions.

Use the **Account Groups (PM201000)** form to create account groups.

Account Groups: Types of Account Groups

- **Asset or Liability** type may include asset or liability accounts. Transactions posted to these account groups are displayed on the Project Budget (PM309000) form and on the Balances tab of the Projects (PM301000) form, but are not displayed on the Revenue Budget and Cost Budget tabs of the Projects form.

- **Income or Expense** type may include accounts of any type (income, expense, asset, or liability). Transactions posted to these account groups are displayed on the Project Budget form, on the Balances tab of the Projects form, and on the Revenue Budget and Cost Budget tabs of the Projects form.

Account Groups: Types of Account Groups

- **Off-Balance** type are not mapped to any general ledger accounts. You can use account groups of the Off-Balance type to collect and track project statistical and other information that is unrelated to finance. The transactions posted to account groups of this type will not update the general ledger. For example, you might define an off-balance group for unrecognized revenue

Example 1: You may want to see the amount in your project reporting, but you do not want to post to the general ledger until the actual billing is done and thus the revenue is recognized.

Example 2: You can create an off-balance group for recording all work hours spent by employees on the project if you want to know the total amount associated with the number of work hours spent, but you do not want to post this amount to the general ledger. In addition, you can select the **Expense** check box to track the amounts in the off-balance account group as expenses. The system displays the transactions posted to this account group on the Project Budget form and on the Balances and Cost Budget tabs of the Projects form

Account Groups: Recommendations for Creating Account Groups

- Each general ledger account can be mapped to only one account group.

- The following accounts should not be included in account groups:

  • An asset account that you might want to use as a control account for the AR subledger. For such an account, AR is selected in the Control Account Module box on the Chart of Accounts (GL202500) form. This can be, for example, or an accounts receivable account that is debited by customer invoices.

  • A liability account that you might want to use as a control account for the AP subledger. For such an account, AP is selected in the Control Account Module box on the Chart of Accounts (GL202500) form). This can be an accounts payable account that is credited by vendor bills, or a retainage payable account.

  • An account that is linked to a cash account. On the Chart of Accounts (GL202500) form, this account has the Cash Account check box selected.

 • Allocation and billing rules select transactions by account groups. If transactions of two accounts should follow different allocation or billing rules or use different rates, these two accounts should be included in different account groups. If the transactions usually use the same rate, consider including their accounts in one group.

Account Groups: To Create an Off-Balance Group

Story

Suppose that you are a construction project manager who is configuring project accounting for the ToadGreen Building Group company. You want to know the total amount associated with the number of work hours spent by employees on construction projects (including an extra work beyond the budgeted number of work hours), but you do not want to post these amounts to the general ledger because these expenses are billed monthly under separate project budget lines related to labor.

You need to create an off-balance account group for tracking burden expenses in construction projects.

Project Transactions: General Information

Learning Objectives

In this lesson, you will learn how to do the following:

- Capture project costs using project transactions

- Make the system create a project transaction based on a GL transaction

- Create a project transaction without posting to the general ledger

- Review how the system has updated the project budget on release of the project transaction

Project Transactions: General Information

Project accounting is integrated with other functional areas of Acumatica ERP. Project-related information from other functional areas flows to projects by means of project transactions that are used for tracking budget costs and revenue. You can also create project transactions directly without involving other documents.

We use project transaction:

- To control the amount of money spent on the project against the budgeted values

- To bill the customer for the incurred expenses

- To control the project profitability

Project Transactions: Manual Creation of Project Transactions

Use the **Project Transactions (PM304000)** form to create a project transaction directly on the project.

When you specify the **Debit Account** and **Credit Account** for the project transaction and release the transaction, the system creates the following general ledger transactions on the **Journal Transactions (GL301000)** form, based on whether the amount of the project transaction is positive or negative:

• For a positive amount, the GL transaction debits the debit account of the project transaction and credits the credit account.

• For a negative amount, the GL transaction credits the debit account of the project transaction and debits the credit account.

Note: If either a debit account or a credit account is not specified in the project transaction, on the release of the transaction, the system does not generate the corresponding GL transaction.

If the **Subaccounts** feature is enabled on the **Enable/Disable Features** form then debit and credit subaccounts must be specified as well to have GL transaction created.

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Project Transactions: Update of the Project Budget with Project Transactions

The **project budget key** is the combination of the <u>project, project task, account group, inventory item, and cost code, if applicable</u>

For each line of a project transaction on the **Project Transactions (PM304000)** form, the system uses the following rules to update the budget of the corresponding project:

1. The system determines the number of lines to be updated as follows:
   - If an account group but no credit account group is specified in the project transaction line, the system will update one project budget line.
   - If the project transaction line has both an account group and a credit account specified, the system will update two project budget lines

2. The system updates the budget as follows, depending on the type of the account group specified in the Account Group or Credit Account Group column:
   - **Expense**: The system updates the cost budget line of the project on the Cost Budget tab of the Projects (PM301000) form.
   - **Income**: The system updates the revenue budget line of the project on the Revenue Budget tab of the Projects form.
   - **Asset, Liability, or Off-Balance**: The system updates only the project balance on the Balances tab of the Projects form; it does not update any revenue budget lines or cost budget lines of the project. The system also creates a line on the Project Budget (PM309000) form

Project Transactions: Update of the Project Budget with Project Transactions

3. The system updates the actual amount in the project budget lines as follows:

- If an account group of the Expense or Asset type was specified in the Account Group column, the system updates the actual amount by adding the amount in the project transaction line.

- if an account group of the Income or Liability type that was specified in the Account Group column, the system updates the actual amount by subtracting the amount in the project transaction line.

- If an account group of the Expense or Asset type was specified in the Credit Account Group column, the system updates the actual amount by subtracting the amount in the project transaction line.

- If account group of the Income or Liability type that was specified in the Credit Account Group column, the system updates the actual amount by adding the amount in the project transaction line

4. The system updates the actual quantities in the project budget lines as follows:

- for the account group that was specified in the Account Group column, the system updates the actual quantity by adding the quantity in the project transaction line.

- for the account group that was specified in the Credit Account Group column, the system updates the actual quantity by subtracting the quantity in the project transaction line.

Note: to have quantity correctly updated in the budget line, project transaction UOM should corresponds to project budget line UOM.

Project Transactions: Creation of GL Transactions Related to Projects

On the **Journal Transactions (GL301000)** form, you can directly create a general ledger transaction related to a specific project and project task. To associate the transaction line with a project, you specify this project in the **Project/Contract** column and the applicable project task in the **Project Task** column.

Note: If a general ledger transaction has a project and project task specified, in the **Account** column on the **Journal Transactions** form, you can select only an account that is mapped to an account group on the **Account Groups (PM201000)** form.

Project Transactions: Creation of GL Transactions Related to Projects

When the GL transactions is released, for each transaction line in the batch specified, the system creates the project transaction:

• Project: The project associated with the GL transaction

• Project Task: The project task associated with the GL transaction

• Inventory ID: The inventory item associated with the GL transaction If no item is associated with the GL transaction, the system uses the empty item code, which is by default and specified on the Projects Preferences (PM101000) form.

• Debit Account: The account of the GL transaction

• Account Group: The account group to which the account of the GL transaction is mapped on the Account Groups form

• Credit Account: Empty

• Amount: The debit amount of the GL transaction, if the account of the GL transaction is debited, or the credit amount of the GL transaction with the opposite sign, if the account of the GL transaction is credited

• GL Batch Nbr.: The batch number of the GL transaction

Note: If project is **non- project code** or **account is not mapped on the Account Groups** then project transaction is not created.

Construction Project Budget: To Capture Project Costs

Story

Suppose that ToadGreen Building Group is a general contractor building an Italian restaurant for its customer, the Italian Company. At the start of the project, the construction project manager made sure that the construction permit was promptly obtained for the construction site and that the design plans and specifications were prepared and agreed upon. The expenses related to the work must be reflected in the project budget and categorized in the general ledger because they will later be billed and reflected in financial statements.

Further suppose that the construction manager has spent some time on extra communication, which has not initially been budgeted. This time should not be billed because the project manager's salary is fixed and is billed monthly under a separate project budget line related to labor. However, these expenses must be reflected in the project budget for better estimation of the burden and overhead of the construction project.

Acting as the project accountant, you will enter the general ledger transactions to directly capture the costs and record the work related to gathering the requirements, getting all the necessary construction permits, and preparing the design plans and specifications. Then you will enter the project transaction to capture the additional expenses incurred by the construction project manager.

Figure: Project transaction prepared on release of the GL transaction

Project Transaction Details

Project: ITALIAN3 - Construction project (Italiar
Project Task:
Account Group:
Cost Code:
Inventory ID:

Start Date:
End Date:
Employee:
☐ Show Only Allocation Transactions
☑ Include Unreleased Transactions

Account:
AR Doc. Type:
AR Doc. Nbr.:
Ref. Number:

ALL RECORDS | COST TRANSACTIONS

			Branch	Module	Ref. Number	*Project	Project Task	Inventory ID	Cost Code	*Date	*Fin. Period	Description	UOM	Quantity	Billable Quantity	Unit Rate	Amount
>	𝖀	🗋	TBGROUP	GL	PM00000135	ITALIAN3	01		01-300	4/15/2024	04-2024	Construction permits		0.00	0.00	0.0000	15,400.00
	𝖀	🗋	TBGROUP	GL	PM00000135	ITALIAN3	01		01-330	4/15/2024	04-2024	Design plans and specifications		0.00	0.00	0.0000	37,500.00

Figure: Project transactions prepared on release of the GL transaction

Lesson 3: Processing Subcontracts

Learning Objectives

In this lesson, you will learn how to do the following:

• Create a subcontract

• Add lines related to a particular project to a subcontract

• Enter the accounts payable bill for the subcontract

• Review the generated general ledger transactions and project transactions

• Review how the processed subcontract affects the project budget

Subcontracts: General Information

In Acumatica ERP Construction Edition, subcontract is a document that represents a commitment with a third-party vendor (subcontractor) to provide services for a project.

You enter and process subcontracts for a project when your company hires another company to perform a part of the work for a project.

Use the **Subcontracts (SC301000)** form to enter subcontracts:

- Select vendor (subcontractor)

- Add lines of the subcontract with **project key**

- Leave **Inventory ID** box empty, or specify a non-stock item that does not require a receipt

Note: If the **Internal Cost Commitment Tracking** check box is selected on the **General** tab of the **Projects Preferences (PM101000)** form, the system tracks subcontracts as commitments to related projects.

Purchase of services for a project from subcontractor

Start

All actions on this diagram are performed by a user with the same job role

Project manager

1 Create the subcontract and remove from hold
Subcontracts (SC301000)

Project

Cost Budget Tab
Inventory ID: NSTOCK (or Empty)
Project: PROJECT
Project Task: TASK
Account Group: AGROUP

Subcontract
Subcontract Nbr.: Subcontract reference number
Vendor: SUBCON
Status: Open, Pending Printing or Pending Email

Details Tab
Inventory ID: NSTOCK (or Empty)
Order Qty.: Purchased quantity
Amount: Purchased amount
Project: PROJECT
Project Task: TASK
Account: Expense account mapped to AGROUP account group

Commitment
Original Commited Quantity: Purchased quantity
Original Commited Amount: Purchased amount
Commited Open Quantity: Purchased quantity
Commited Open Amount: Purchased amount

Original Committed		Commited Open	
Quantity	Amount	Quantity	Amount

Projects (PM301000) form, Project ID: PROJECT, Cost Budget tab

2 Print the subcontract
Subcontracts (SC641000)

Subcontract
Status: Open or Pending Email

Subcontract

3 Send the email with the subcontract
Subcontracts (SC641000)

Subcontract
Status: Open

Email

4 Create and release the AP bill
Bills and Adjustments (AP301000)

Subcontract
Status: Closed, once billed in full

Details Tab
Inventory ID: NSTOCK (or Empty)
Billed Qty.: Billed quantity
Billed Amount: Billed Amount

AP Bill
Status: Open

Details Tab
Inventory ID: NSTOCK (or Empty)
Quantity: Billed quantity
Amount: Billed Amount
Subcontract Nbr.: Subcontract reference number

GL batch

End

PM transaction

Commited Open		Commited Invoiced		Actual	
Quantity	Amount	Quantity	Amount	Quantity	Amount

Projects (PM301000) form, Project ID: PROJECT, Cost Budget tab

LEGEND

— Addition

— Deduction

— Required action

- - - - Optional action

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Subcontracts: Process Activity

Story

Suppose that on March 15, 2024, the ToadGreen company hires a subcontractor, Standard Hardware Company, to install windows and doors in the hotel that is being built by ToadGreen. Both parties agree that the Standard Hardware Company will perform the installation of windows, the installation of doors and frames, and the building an entrance. Normally, this subcontractor does not require the printing of documents, but for this subcontract, the construction project manager of the ToadGreen company has decided to create and print the subcontract.

On March 25, 2024, when the subcontractor finishes its part of the work and sends an invoice to ToadGreen, ToadGreen's project manager will create a bill and pay for the provided services.

Acting as the construction project manager, you will process all the needed documents in the system.

Figure: Cost budget updated with the subcontract amount

Figure: The closed subcontract

Lesson 4: Correcting Bills for Subcontracts

Learning Objectives

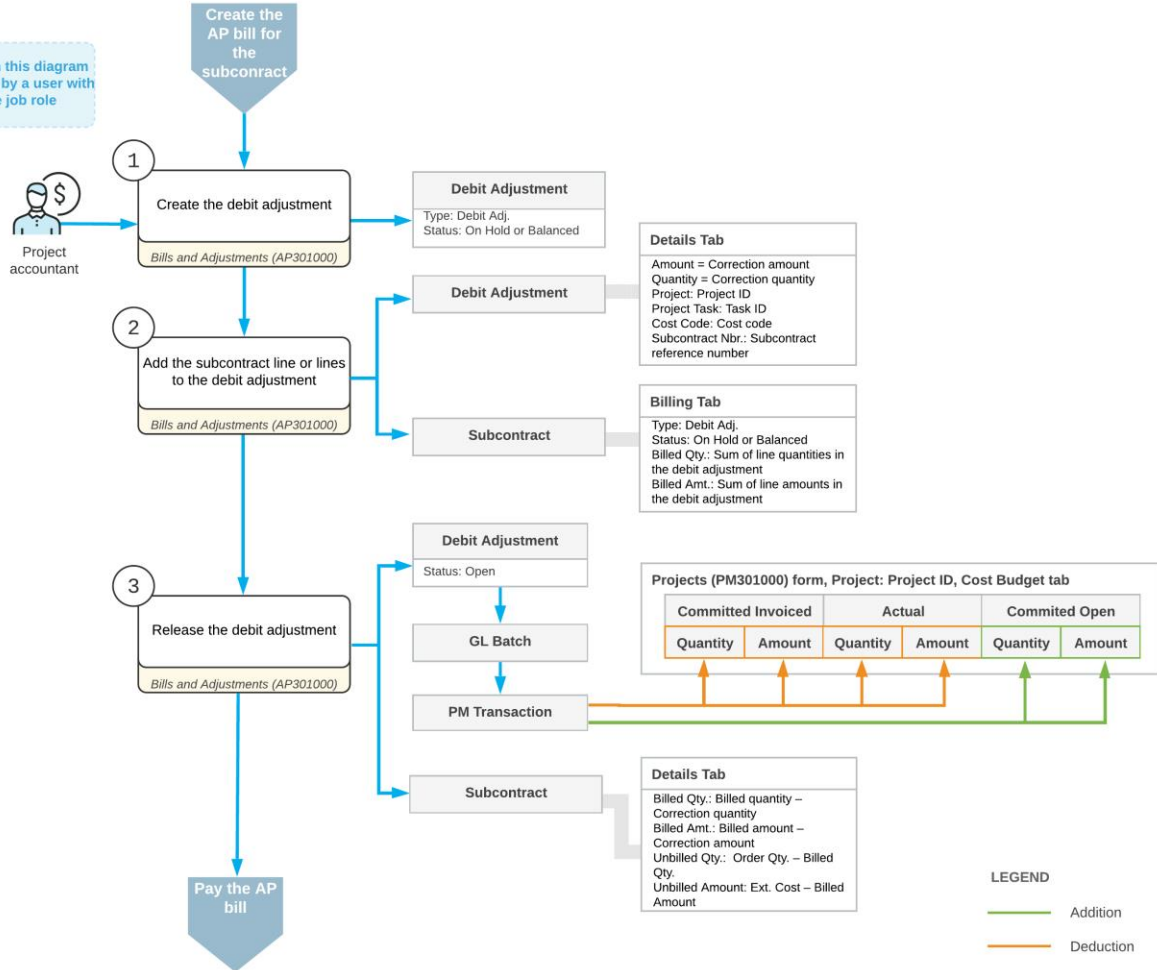In this lesson, you will learn how to do the following:

- Create a debit adjustment for an AP bill prepared for a subcontract

- Release the debit adjustment

- Review how the processed debit adjustment affects the vendor balance

- Review the GL and project transactions generated on release of a debit adjustment

- Review how the project budget is updated on release of the debit adjustment

Correcting Bills for Subcontracts : General Information

You create a debit adjustment for a bill prepared for a subcontract to decrease the amount you owe to a vendor according to this subcontract.

Correcting the billed amount and quantity for a subcontract

Create the AP bill for the subcontract

All actions on this diagram are performed by a user with the same job role

Project accountant

1 Create the debit adjustment
Bills and Adjustments (AP301000)

Debit Adjustment
Type: Debit Adj.
Status: On Hold or Balanced

2 Add the subcontract line or lines to the debit adjustment
Bills and Adjustments (AP301000)

Debit Adjustment

Details Tab
Amount = Correction amount
Quantity = Correction quantity
Project: Project ID
Project Task: Task ID
Cost Code: Cost code
Subcontract Nbr.: Subcontract reference number

Subcontract

Billing Tab
Type: Debit Adj.
Status: On Hold or Balanced
Billed Qty.: Sum of line quantities in the debit adjustment
Billed Amt.: Sum of line amounts in the debit adjustment

3 Release the debit adjustment
Bills and Adjustments (AP301000)

Debit Adjustment
Status: Open

GL Batch

PM Transaction

Projects (PM301000) form, Project: Project ID, Cost Budget tab

Committed Invoiced		Actual		Commited Open	
Quantity	Amount	Quantity	Amount	Quantity	Amount

Subcontract

Details Tab
Billed Qty.: Billed quantity – Correction quantity
Billed Amt.: Billed amount – Correction amount
Unbilled Qty.: Order Qty. – Billed Qty.
Unbilled Amount: Ext. Cost – Billed Amount

Pay the AP bill

LEGEND
— Addition
— Deduction

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Correction of a Bill for a Subcontract: Process Activity

Story

Suppose that on March 1, 2024, the ToadGreen company hired a subcontractor, Harmon Installation, to build an entrance in the hotel that ToadGreen is building. According to the terms of the subcontract, $10,000 will be paid to the subcontractor for this work, and 10% of each payment will be withheld by the company until the related work is finished.

On March 25, 2024, ToadGreen received the first bill for the completed work from the subcontractor. A ToadGreen project accountant entered and released a bill in the amount of $7,000, which includes the $700 retainage amount.

Then suppose that the project accountant realized that the bill was entered incorrectly, and the billed amount must be $6,000 for the subcontract. Acting as this project accountant, you will correct the billed amount and quantity in the subcontract by processing the debit adjustment.

Figure: The adjusted amount and quantity in the subcontract line

Day 2

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Timing and Agenda

August 6, 2024 -10:00-12:00 PM PT

Day 1

Lesson 1: Reviewing the Project Settings and Lifecycle

Lesson 2: Capturing Project Costs

Lesson 3: Processing Subcontracts

Lesson 4: Correcting Bills for Subcontracts

August 7, 2024 -10:00-12:00 PM PT

Day 2

Lesson 5: Processing Negative Commitments

Lesson 6: Processing Purchases with a Sales Tax

Lesson 7: Tracking Project-Specific Inventory

Lesson 8: Processing AP Bills with Retainage

Lesson 9: Billing Projects for Progress with Retainage

Lesson 5: Processing Negative Commitments

Learning Objectives

In this lesson, you will learn how to do the following:

• Create a change order class for tracking commitments

• Update cost commitments with a change order

• Review the changes to the project budget that have been made with change orders

• Make changes to closed commitments

Track changes to the project commitments

If you need to track changes to the project commitments and to control the profitability of every change initiated by a customer, you use the functionality of change orders

You turn on the change order workflow for a project and enable commitment tracking if you want to distinguish purchases within the cost budget of a project, control changes made to the committed values of the project budget and track these changes at the budget level.

Change Orders for Project Commitments

Use **Change Order Class (PM203000)** form to create change order class for commitments:

- select the **Commitments** check box to allow changes to committed values

Commitments:

- Subcontracts

- Purchase Orders of type *Normal* and *Project Drop-Ship*

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Change Orders for Project Commitments

On the **Change Orders (PM308000)** form you can:

- Create a new commitment for the project

- Adding a new line to an existing purchase order or subcontract

- Adjusting an existing purchase order or subcontract by adding a new negative line

- Making an addition to or deduction from an existing **purchase order** or **subcontract** with a positive or negative amount

- Making an addition to or deduction from an existing **purchase order line** or **subcontract line** with a positive or negative amount

- Reopening a purchase order or subcontract

Managing changes in commitments

All actions on this diagram are performed by a user with the same job role.

Create a project and a purchase order for the project

The diagram shows increasing of an existing commitment line with a change order.

Project manager

1 Create a change order

Projects (PM301000)
Change Orders (PM308000)

Change order

Reference Nbr.: Change order number
Status: On Hold

Commitments tab

Amount: Change order amount
Quantity: Change order quantity

Project

Change Orders tab

Reference Nbr.: Change order number
Commitment Change Total: Amount

Commitments tab

Reference Nbr.: Purchase order number
Order Qty.: Original quantity
Order Total: Original amount

2 Prepare the change order for release
(click Remove Hold)

Change Orders (PM308000)

Change order

Status: Open

3 Release the change order

Change Orders (PM308000)

Change order

Status: Closed

Commitments tab

Amount: Change order amount
Quantity: Change order quantity

Purchase order

Details tab

Order Qty.: Original quantity + Change order quantity
Ext. Cost: Original amount + Change order amount

End

Projects (PM301000) form, Cost Budget tab			
Committed CO		Revised Committed	
Quantity	Amount	Quantity	Amount

LEGEND

———— Addition

———— Deduction

60

Change Orders for Commitments: To Create a Change Order Class

Story

Suppose that you, as the system administrator of the SweetLife Fruits & Jams company, need to configure a change order class to be used by a purchase manager for creating change orders for project commitments. The change order class must prevent users from changing the revenue and cost budgets of a project.

Subcontracts: To Update a Negative Line in a Subcontract

Story

Suppose that on 3/22/2024, the ToadGreen company hires a subcontractor, Standard Hardware Company, to perform a part of work for the hotel that is being built by ToadGreen. According to contract, Standard Hardware Company will install the watering system for the hotel and the price of performed work will be $450,000. The subcontractor agrees to provide the discount for the subcontract in the amount of $1,500. Later, because of minor scheduling issues, Standard Hardware Company has agreed to increase the discount amount to $1,600. Acting as the construction project manager, you will process all the needed documents in the system.

Figure: Changes to project commitments

Lesson 6: Processing Purchases with a Sales Tax

Learning Objectives

In this lesson, you will learn how to do the following:

• Learn how to configure a sales tax

• Learn how to create an AP bill with a sales tax applied

• Release an AP bill and review the GL batch generated by the system

Purchases with a Sales Tax: To Configure a Sales Tax for Project Purchases

Story

Suppose that the ToadGreen company buys goods from its suppliers and pays sales tax on these purchases. The rate of the sales tax is 8.875%; the tax amount must be calculated on the sum of the line amounts to which this tax is applied. You need to configure a sales tax to be calculated for AP documents; the calculated tax amounts can then be claimed from a tax agency.

Purchases with a Sales Tax: Tax Calculation in Purchase Orders

On the **Taxes (TX205000)** form we need to setup:

- Tax Rate

- Tax Category

- Tax Zone

On the **Bills and Adjustments (AP301000)** form the system calculates taxes based on :

• The vendor

• The inventory IDs

• The total price of the inventory items

• The document date

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Purchases with a Sales Tax: To Configure a Sales Tax for Project Purchases

Story

Suppose that the ToadGreen company buys goods from its suppliers and pays sales tax on these purchases. The rate of the sales tax is 8.875%; the tax amount must be calculated on the sum of the line amounts to which this tax is applied. You need to configure a sales tax to be calculated for AP documents; the calculated tax amounts can then be claimed from a tax agency.

Purchases with a Sales Tax: To Process a Project-Related Bill with a Tax

Story

Suppose that on 1/30/2024, the ToadGreen company purchases 500 packages of a concrete mix from the Concrete Supply Co. vendor. The vendor is located in the state of New York, and the New York sales tax has to be applied to this purchase. Acting as the project manager, you need to enter the AP bill, release it, and review how the system calculates the sales tax.

Figure: Project transaction generated for the batch

Project Transactions
AP PM00000139 - Concrete mix for HOTEL project

Module:	AP	Total Quantity:	500.00
Ref. Number:	PM00000139	Total Billable Quantity:	500.00
Status:	Released	Total Amount:	46,271.88
Description:	Concrete mix for HOTEL project		

DETAILS   COMPLIANCE

			Branch	*Project	Project Task	Cost Code	Account Group	Employee	Customer/Vendor	Location	Inventory ID	Shift Code	Description	UOM	Quantity	Billable	Billable Quantity	Unit Rate	Amount	Debit Account
			TBGROUP	HOTEL	02	02-000	MATERIAL		CONCRESUP		CONCRMX		Concrete works	EA	500.00	☑	500.00	0.0000	42,500.00	54700
>			TBGROUP	HOTEL	02	02-000	MATERIAL		CONCRESUP		CONCRMX		NYSALESTAX		0.00	☑	0.00	0.0000	3,771.88	69000

Lesson 7: Tracking Project-Specific Inventory

Learning Objectives

In this lesson, you will learn how to do the following:

• Configure a project inventory

• Process documents with stock items related to projects

• Review project and GL transactions generated during the processing of sales and purchases of items

Project Inventory Tracking: General Information

In Acumatica ERP, you can configure the project inventory (that is, the inventory items to be used for a particular project) so that all items purchased and sold for the project will be separated from other inventory and reserved for the project in the warehouse.

This helps you to accurately capture inventory expenses and revenues related to the project inventory in a project budget.

Project Inventory Tracking: General Information

With project inventory you can:

• Manage the flow of stock items related to projects

• Reserve items for particular projects in one warehouse or multiple warehouses

• Track project-specific quantities for stock items, to prevent these items from being used for non-project purposes

• Use valuated costing for project-specific stock items to issue and receive project items at accurate costs that are not affected by the costs of non-project items

Project Inventory Tracking: Configuration of Inventory Tracking in Projects

Project inventory functionality is controlled by the **Project-Specific Inventory** feature.

For the project there are options:

• **Track by Project Quantity and Cost**: To track the **quantity** and **project-specific cost** of the stock items reserved for the project.

• **Track by Project Quantity**: To track the project-specific **quantity** of the purchased items that are reserved for the project. In this mode, the system tracks the item cost by general cost calculation rules (that is, the cost is not project-specific). One cost layer holds the item costs recorded for the same inventory item with the same project budget key but received to different locations of the same warehouse.

• **Track by Location**: To track the quantity and cost of the purchased materials at the warehouse location level (as was).

Project Inventory Tracking: Configuration of Inventory Tracking in Projects

Setup projects on **the Projects (PM301000)** form:

Projects
HOTELR - The Beach Hotel and Condominiums (Parkways Ea

↩ 🖫 🖫 ↺ + 🗑 |< < > >| COMPLE

* Project ID:	HOTELR - The Beach Hotel and Cond 🔍
Customer:	EQUGRP 🔍 ✎
Template:	✎
* Description:	The Beach Hotel and Condominiums (Parkways

SUMMARY   TASKS   REVENUE BUDGET   COST BUDGET   BALA

PROJECT PROPERTIES ───────────────────

Revenue Budget Level:	Task and Cost Code ⌄
Cost Budget Level:	Task and Cost Code ⌄
* Start Date:	2/15/2024 📅
End Date:	📅
Project Group:	🔍 ✎
Project Manager:	EP00000033 - Ellen Watson 🔍
Time Activity Approver:	EP00000033 - Ellen Watson 🔍
Last Revenue Change ...	
Inventory Tracking:	Track by Project Quantity and Cost ⌄
	☐ Change Order Workflow

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Project Inventory Tracking: To Track Project Inventory by Quantity and Cost

Story

Suppose that the ToadGreen Building Group company is building a hotel for the Equity Group Investors customer.

A ToadGreen project manager has created a project to track the progress of work, expenses, and revenues. The project work began in mid-February, 2024. To plan the purchases of items and be sure that there will be enough materials to proceed, the project manager needs to reserve stock items for this particular project. Also, because of regulatory requirements, the materials used for work must be issued at the exact cost at which they have been purchased.

On January 30, 2024, the project manager purchased 360 pallets of bricks and 480 concrete blocks and requested that the items be delivered to the company's warehouse. Later, a project architect revised the blueprints and found out that the initial estimation of materials was insufficient. As a result, the project manager decided to buy 120 pallets of bricks and 80 concrete blocks in addition to the previous purchase. To speed up the process, the construction project manager decided to purchase the materials from another vendor, who agreed to deliver the materials in two days but at a higher price. Then some of the purchased materials were shipped to the project site.

Acting as a construction project manager, you will process a purchase of items for the project. Then you will issue the quantity of the purchased items that were shipped to the project site, and review the cost of the project items.

Figure: Project inventory after purchase of items

Project Inventory by Quantity and Cost

Drag column header here to configure filter

Inventory ID	Warehouse	Qty. On Hand	Total Cost	Project	Project Task	Cost Site
CARPETPL	TGCONSTR	12.00	69,600.0000	ITALIAN	09	148
CARPETNL	TGCONSTR	150.00	1,125,000.0000	HOTEL	09	149
CARPETPL	TGCONSTR	150.00	870,000.0000	HOTEL	09	149
GRANITEB	TGCONSTR	250.00	17,250.0000	HOTELSM	04	150
STONECH	TGCONSTR	550.00	96,250.0000	HOTELSM	04	150
PAVEST	TGCONSTR	1,300.00	26,000.0000	HOTELSM	04	150
CONCRBK8	TGCONSTR	560.00	102,000.0000	HOTELR	04	145
REDBRICK	TGCONSTR	480.00	37,200.0000	HOTELR	04	145

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Figure: Project inventory after purchase of items

Project Inventory by Quantity and Cost

Drag column header here to configure filter

Inventory ID	Warehouse	Qty. On Hand	Total Cost	Project	Project Task	Cost Site
CARPETPL	TGCONSTR	12.00	69,600.0000	ITALIAN	09	148
CARPETNL	TGCONSTR	150.00	1,125,000.0000	HOTEL	09	149
CARPETPL	TGCONSTR	150.00	870,000.0000	HOTEL	09	149
GRANITEB	TGCONSTR	250.00	17,250.0000	HOTELSM	04	150
STONECH	TGCONSTR	550.00	96,250.0000	HOTELSM	04	150
PAVEST	TGCONSTR	1,300.00	26,000.0000	HOTELSM	04	150
CONCRBK8	TGCONSTR	360.00	65,571.4300	HOTELR	04	145
REDBRICK	TGCONSTR	320.00	24,800.0000	HOTELR	04	145

Part 2: Project Billing and Retainage

Lesson 8: Processing AP Bills with Retainage

Learning Objectives

In this lesson, you will learn how to do the following:

• Create and process a bill with retainage held at the line level

• Release retainage for the bill

• Enter a payment for the retainage bill

• Pay the outstanding balance of the original bill

AP Bills with Retainage: Process Activity

Story

Suppose that on March 15, 2024, the ToadGreen Building Group company hired a subcontractor to install air conditioning systems for the hotel being built. By the subcontract, $2,400,000 will be paid to the subcontractor for work and 10% of each payment will be withheld by the company until the related work is finished. Also, ToadGreen and the subcontractor have agreed that after 30% of the work is done, ToadGreen has to release 10% of the retained amount.

On March 25, 2024, ToadGreen receives the first bill for the completed work, which is 30% of the total work, in the amount of $720,000. A ToadGreen project accountant needs to enter a bill that includes the $72,000 retainage amount and then process a payment for the full bill amount. After the subcontractor reports about finishing a part of the work, the ToadGreen project accountant needs to release $7,200, which is a part of the retainage amount.

Acting as this project accountant, you will enter and process the related financial documents.

AP Bills with Retainage: General Information

AP Bills with Retainage: Information about retainage

Bills and Adjustments
Bill 000167 - Parker & Sons HVAC

PAY

Type:	Bill	Vendor:	PARKERS - Parker & Sons HVAC	Detail Total:	720,000.00
Reference Nbr.:	000167	Location:	MAIN - Primary Location	Line Discounts:	0.00
Status:	Open	Terms:	30D - 30 Days	Document Discou...	0.00
Date:	3/25/2024	* Due Date:	4/24/2024	☑ Apply Retainage	Retained Amount:	72,000.00
Post Period:	03-2024	* Cash Discount...	4/24/2024	☑ Pay by Line	Tax Total:	0.00
Vendor Ref.:			☐ Joint Payees	With. Tax:	0.00
Description:	30% of work for the subcontract			Amount:	648,000.00
				Balance:	0.00
				Cash Discount:	0.00

DETAILS   FINANCIAL   TAXES   **RETAINAGE**   APPLICATIONS   COMPLIANCE

Default Retainage Perc...	10.000000	Unreleased Retainage:	64,800.00	Tax on Retainage:	0.00
Total Amount:	720,000.00	Released Retainage:	7,200.00		
Original Retainage:	72,000.00	Unpaid Retainage:	64,800.00		
		Paid Retainage:	7,200.00		

			Type	Reference Nbr.	Date	Post Period	Status	Amount	Balance	Payment Method
>			Bill	000168	3/25/2024	03-2024	Closed	7,200.00	0.00	CHECK

AP Bills with Retainage: Payments

Entering payments for AP bills with retainage:

- **Enter full payment for the original bill**
    - **Original bill Balance = 0**
    - **Original bill Status = Open**

- **Enter full payment for the retainage bill**
    - **Retainage bill Balance = 0**
    - **Retainage bill Status = Closed**
    - **Original bill Status = Closed**

Note: Retainage is not supported for AP documents created in a foreign currency.

Figure: Open bill with partial payment and unreleased retainage

Lesson 9: Billing Projects for Progress with Retainage

Learning Objectives

In this lesson, you will learn how to do the following:

• Create a pro forma invoice and the related AR invoice with retainage

• Process the AR invoice with retainage

• Release the retainage from the AR invoice

• Apply payments to invoices with retainage

AR Invoices with Retainage: To Perform Progress Billing with Retainage

Story

Suppose that the ToadGreen Building Group company is building a hotel for the Equity Group Investors. A ToadGreen project manager bills the customer for the progress of the work being performed. According to the contract signed with the customer, the customer retains 5% of the amount of each progress billing line in an invoice. After a defined part of the work is done, the ToadGreen project accountant prepares an AR invoice for the customer to request the release of 20% of the retained amount.

Acting as the project manager, you need to prepare a pro forma invoice for the project. Then acting as the project accountant, you need to enter and process all the needed financial documents in the system.

AR Invoice with Retainage: Payments

Entering payments for AR Invoice with retainage:

- **Enter full payment for the original invoice**
    - Original invoice Balance = 0
    - Original invoice Status = <mark>Open</mark>

- **Enter full payment for the retainage invoice**
    - Retainage invoice Balance = 0
    - Retainage invoice Status = Closed
    - Original invoice Status = <mark>Closed</mark>

Note: Retainage is not supported for AR invoice documents created in a foreign currency.

Invoices and Memos(): Navigation between original invoice and retainage invoice

- **Original invoice** on the **Retainage** tab:
    - Contains the list of associated retainage invoices

- **Retainage invoice** on the **Financial** tab:
    - Has a link to the original invoices

Figure: The original invoice with the unreleased retainage amount

Thank you!

Irina Kateneva