



Projects for Construction

Candice Francis

Senior Product Manager

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Product Manager-construction

Timing and Agenda

June 14, 2022 -10 AM -11:30 AM

Day 1

Lesson 1: Reviewing the Project Settings and Life Cycle

Lesson 2: Processing Subcontracts

Lesson 3: Correcting Bills for Subcontracts

June 15, 2022 -10 AM -11:30 AM

Day 2

Lesson 4: Processing AP Bills with Retainage

Lesson 5: Tracking Project Budget Overruns

Lesson 6: Preparing Vendor Payments for a Project

Lesson 7: Tracking Cost and Revenue Changes to Projects

Timing and Agenda

June 16, 2022 -10 AM -11:30 AM

Day 3

Lesson 8: Billing Project for Progress with Retainage

Lesson 9: Preparing AIA Reports

Lesson 10: Preparing AIA Reports for Released Retainage

Lesson 11: Correcting Pro Forma Invoices

Lesson 12: Preparing WIP and Bonding Reports

June 17, 2022 -10 AM -11:30 AM

Day 4

Lesson 13: Processing Project Issues and Change Requests

Lesson 14: Processing Requests for Information

Lesson 15: Processing Daily Field Reports



Day 1

Devil's Peak Brewing Company
Acumatica Customer Since 2016

 **Acumatica**
The Cloud ERP

Lesson 1: Reviewing the Project Settings and Life Cycle

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

Cost Codes: General Information

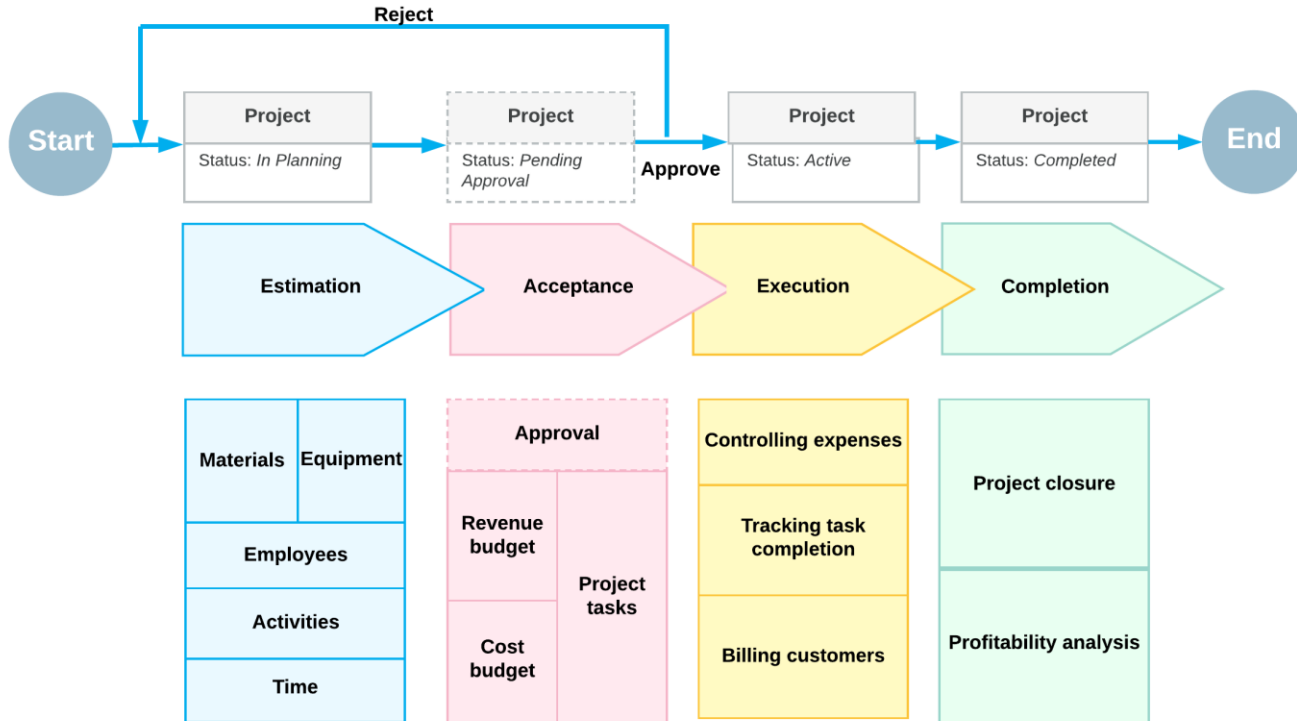
Learning Objectives

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

Project Creation and Processing: Project Lifecycle

Understanding the project life cycle



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

Projects

ITALIAN - Italian restaurant (Market Street)

← 📄 🗑️ ↺ + 🗑️ ⏪ < > ⏩ COMPLETE PROJECT **RUN PROJECT BILLING** ...

* Project ID: ITALIAN - Italian restaurant (Market Street) Status: Active Actual Income: 0.00
 Customer: ITACOM - Italian Company Actual Expenses: 0.00
 Template: CONTM - Construction project (time and material) Margin: 0.00 %: 0.00
 * Description: Italian restaurant (Market Street)

SUMMARY **TASKS** REVENUE BUDGET COST BUDGET BALANCES COMMITMENTS INVOICES CHANGE ORDERS UNION LOCALS ACTIVITIES EMPLOYEES

🔄 + ✕ ADD COMMON TASKS ACTIVATE TASKS COMPLETE TASKS |←| ☒ ⬆️ All

🗑️	🗑️	* Task ID	* Type	* Description	Rate Table	Allocation Rule	Billing Rule	* Status	Complete (%)	Start Date	End Date	Approver	* Billing Option
>	🗑️	01	Cost and Revenue Task	GENERAL REQUIREMENTS	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	02	Cost and Revenue Task	SITWORK	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	03	Cost and Revenue Task	CONCRETE	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	04	Cost and Revenue Task	MASONRY	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	05	Cost and Revenue Task	METALS	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	06	Cost and Revenue Task	WOOD, PLASTICS, COMPOSI...	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	07	Cost and Revenue Task	THERMAL AND MOISTURE PR...	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	08	Cost and Revenue Task	OPENINGS	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	09	Cost and Revenue Task	FINISHES	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	10	Cost and Revenue Task	SPECIALTIES	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	11	Cost and Revenue Task	EQUIPMENT	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	12	Cost and Revenue Task	FURNISHINGS	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	13	Cost and Revenue Task	SPECIAL CONSTRUCTION	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	14	Cost and Revenue Task	CONVEYING SYSTEMS	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period
	🗑️	15	Cost and Revenue Task	MECHANICAL PIPING	STANDARD		TM	Active	0.00	2/1/2022			By Billing Period

Figure: Cost budget information of the project

Projects NOTES FILES

ITALIAN - Construction project (time and material) COMPLETE PROJECT **RUN PROJECT BILLING** ...

* Project ID: ITALIAN - Construction project (time and material) Status: Active Actual Income: 0.00
 Customer: ITACOM - Italian Company Actual Expenses: 0.00
 Template: CONTM - Construction project (time and material) Margin: 0.00 %: 0.00
 * Description: Construction project (time and material)

SUMMARY TASKS REVENUE BUDGET **COST BUDGET** BALANCES COMMITMENTS INVOICES CHANGE ORDERS UNION LOCALS ACTIVITY HISTORY EMPLOYEES EQUIPMENT SETTINGS ATTRIBUTION

Project Task: Group by Task

VIEW COMMITMENT DETAILS VIEW TRANSACTIONS **1** **2** **3** **4** All Records

* Project Task	Description	UOM	Original Budgeted Amount	Budgeted CO Amount	Revised Budgeted Amount	Potential CO Amount	Original Committed Amount	Committed CO Amount	Revised Committed Amount	Committed Invoiced Amount	Committed Open Amount	Actual Amount	Actual + Open Committed Amount
01	GENERAL REQUIREMENTS		150,551.00	0.00	150,551.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
03	CONCRETE		113,990.00	0.00	113,990.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04	MASONRY		71,250.00	0.00	71,250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
06	WOOD, PLASTICS, COMPOSITES		121,025.00	0.00	121,025.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
07	THERMAL AND MOISTURE PROTECTION		128,195.00	0.00	128,195.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08	OPENINGS		73,200.00	0.00	73,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
09	FINISHES		416,725.00	0.00	416,725.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	SPECIALTIES		23,010.00	0.00	23,010.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	EQUIPMENT		108,000.00	0.00	108,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	MECHANICAL PIPING		344,850.00	0.00	344,850.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	ELECTRICAL		135,000.00	0.00	135,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total:			1,685,796.00	0.00	1,685,796.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Lesson 2: Processing Subcontracts

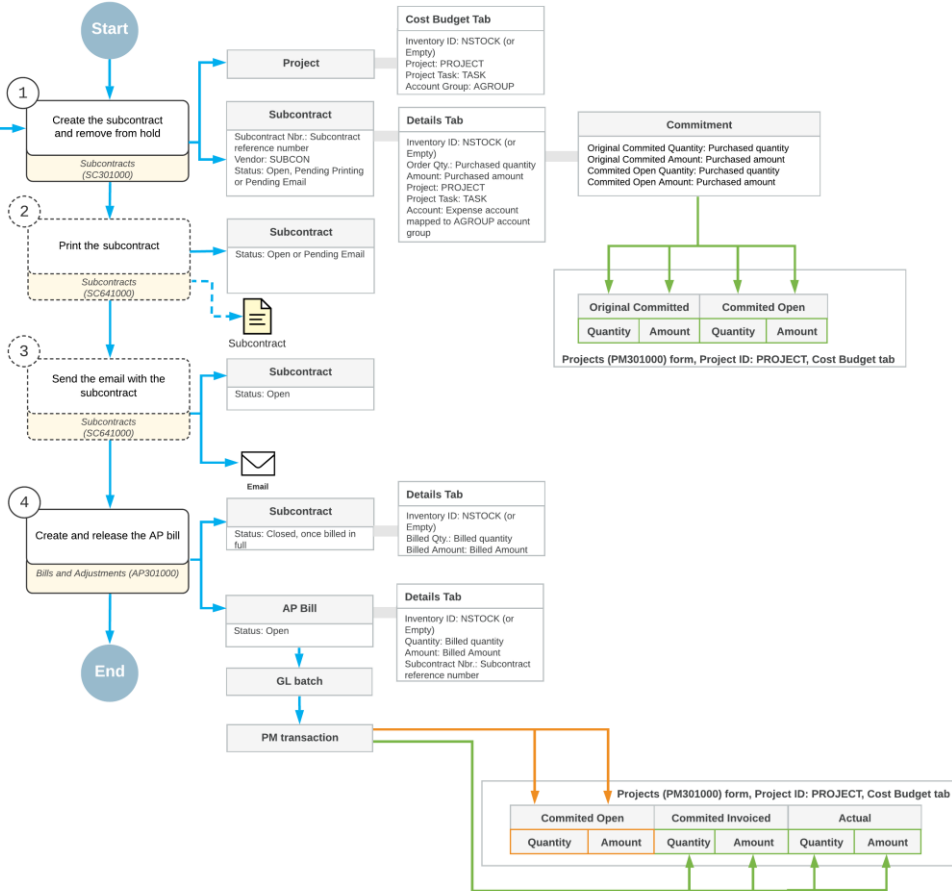
Learning Objectives

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

Purchase of services for a project from subcontractor

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



LEGEND

- Addition
- Deduction
- Required action
- - - - Optional action

Subcontracts: Process Activity

Story

Suppose that on February 1, 2022, 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 February 25, 2022, 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

Projects
HOTEL - The Beach Hotel and Condominiums (Warner Street)

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* Project ID: HOTEL - The Beach Hotel and Condo... Status: Active Actual Income: 22,667,202.71
 Customer: EQUGRP - The Equity Group Investor Actual Expenses: 89,200.00
 Template: Margin: 22,578,002.71 %: 99.61
 * Description: The Beach Hotel and Condominiums (Warner Street)

SUMMARY TASKS REVENUE BUDGET **COST BUDGET** BALANCES COMMITMENTS INVOICES CHANGE ORDERS CHANGE REQUESTS UNION LOCALS ACTIVITY HISTORY EMPLOYEES

Project Task: Group by Task

🔄 + ✕ VIEW COMMITMENT DETAILS VIEW TRANSACTIONS 📄 🗑️ ⬆️ All

		* Project Task	Cost Code	* Account Group	Description	Origin Budget Quant	UOM	Unit Rate	Original Budgeted Amount	Potential CO Quantity	Budgeted CO Quantity	Budgeted CO Amount	Revised Budgeted Quantity	Revised Budgeted Amount	Potential CO Amount	Original Committed Quantity	Original Committed Amount
		06	06-440	MATERIAL	Woodwork- Ornamental	0.00	HOUR	0.0000	7,000.00	0.00	0.00	0.00	0.00	7,000.00	0.00	0.00	0.00
		07	07-130	SUBCON	Waterproofing- Sheet	1.00	HOUR	980,000.0000	980,000.00	0.00	0.00	0.00	1.00	980,000.00	0.00	0.00	0.00
		08	08-200	SUBCON	Doors- Interior	1.00	HOUR	442,000.0000	442,000.00	0.00	0.00	0.00	1.00	442,000.00	0.00	0.00	442,000.00
>		08	08-510	SUBCON	Windows- Metal	1.00	HOUR	650,000.0000	650,000.00	0.00	0.00	0.00	1.00	650,000.00	0.00	0.00	650,000.00
		08	08-800	SUBCON	Entrances, Storefronts, C...	1.00	HOUR	2,005,000.00	2,005,000.00	0.00	0.00	0.00	1.00	2,005,000.00	0.00	0.00	2,000,000.00
		09	09-200	SUBCON	Finish- Drywall	1.00	HOUR	1,250,000.00	1,250,000.00	0.00	0.00	0.00	1.00	1,250,000.00	0.00	0.00	0.00
		09	09-300	SUBCON	Finish- Tile	1.00	HOUR	377,500.0000	377,500.00	0.00	0.00	0.00	1.00	377,500.00	0.00	0.00	0.00
		09	09-560	MATERIAL	Ceilings- Textured	1,500.00	EA	1.7500	2,625.00	0.00	0.00	0.00	1,500.00	2,625.00	0.00	0.00	0.00
		09	09-560	SUBCON	Ceilings- Textured	1.00	HOUR	340,500.0000	340,500.00	0.00	0.00	0.00	1.00	340,500.00	0.00	0.00	0.00

Figure: Closed subcontract

Subcontracts

SC-000006 - Standard Hardware Company



Subcontract Nbr.:	SC-000006	Vendor:	HARDCO - Standard Hardware Company	Line Total:	3,092,000.00
Status:	Closed	Location:	MAIN - Primary Location	Discount Total:	0.00
Date:	2/1/2022	Owner:	EP00000033 - Ellen Watson	VAT Exempt T...:	0.00
Start Date:	2/1/2022	Vendor Ref.:		VAT Taxable T...:	0.00
Description:	Installing of windows, doors, and building of an entrance			Tax Total:	0.00
				Retainage Total:	0.00
				Subcontract To...:	3,092,000.00

DETAILS TAXES VENDOR DISCOUNTS **BILLING** PREPAYMENTS CHANGE ORDERS OTHER ATTRIBUTES COMPLIANCE

Type	Reference Nbr.	Date	Status	Billed Qty.	Billed Amt.	PPV Amt	Currency
Bill	000065	2/25/2022	Closed	0.00	3,092,000.00	0.00	USD

Lesson 3: Correcting Bills for Subcontracts

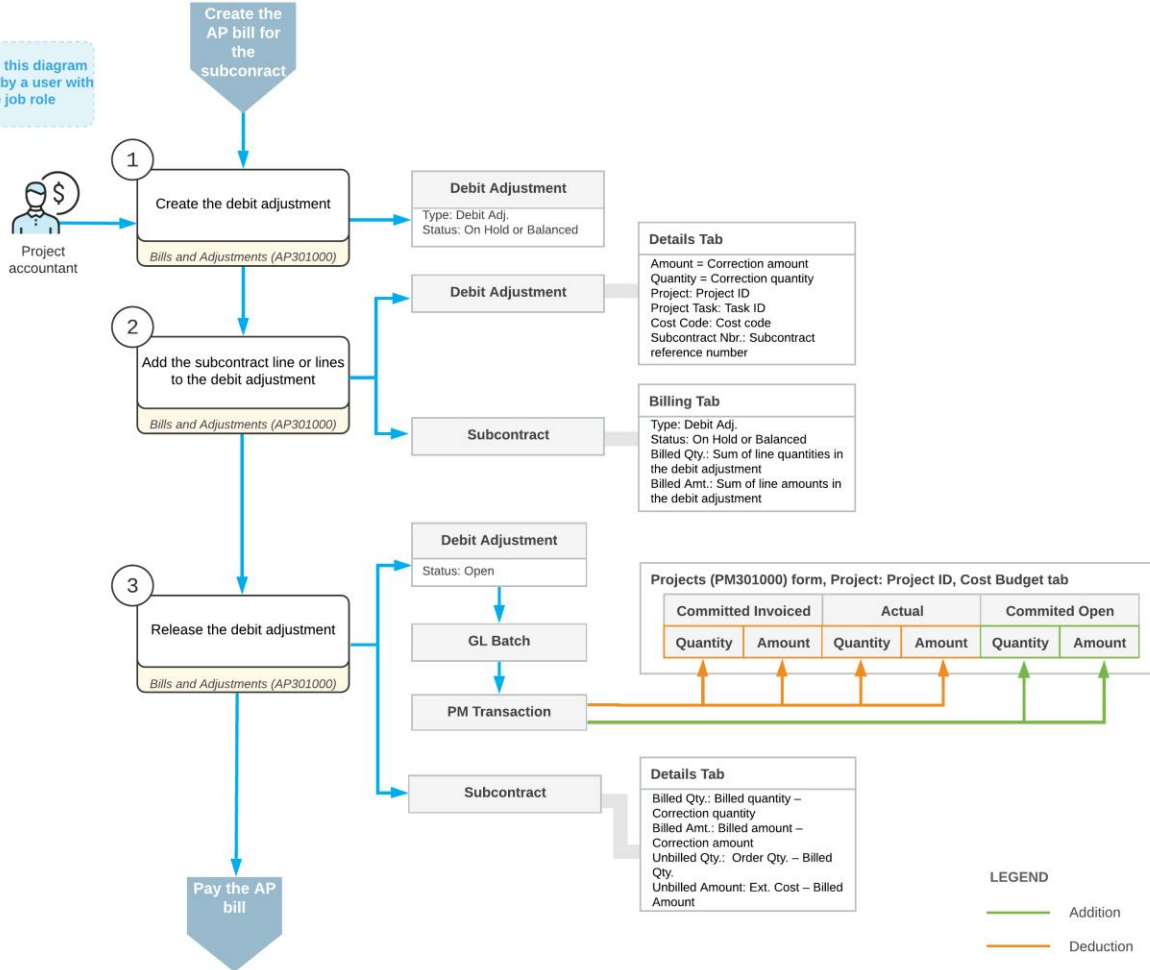
Learning Objectives

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 the billed amount and quantity for a subcontract

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



Correction of a Bill for a Subcontract: Process Activity

Story

Suppose that on March 1, 2022, 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, 2022, 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

Subcontracts
SC-000005 - Harmon Installation

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Subcontract Nbr.:	SC-000005 🔍	Vendor:	HARMINT - Harmon Installation ✎	Line Total:	9,000.00
Status:	Open	Location:	MAIN - Primary Location	Discount Total:	0.00
Date:	3/1/2022	Owner:	EP00000033 - Ellen Watson	VAT Exempt T...:	0.00
Start Date:	3/1/2022	Vendor Ref.:		VAT Taxable T...:	0.00
Description:	Building entrance			Tax Total:	0.00
				Retainage Total:	1,000.00
				Subcontract To...:	10,000.00

DETAILS TAXES VENDOR DISCOUNTS BILLING PREPAYMENTS CHANGE ORDERS OTHER ATTRIBUTES COMPLIANCE

🔄 + ✎ ✕ ADD PROJECT ITEM ⏪ 🗑️ ⏩

📄	🔗	📄	Inventory ID	Project	Projec Task	Cost Code	Line Description	UOM	Order Qty.	Unit Cost	Ext. Cost	Billed Qty.	Billed Amount
>	🔗	📄	LABOR	HOTEL	02	02-000	Building entrance	HOUR	80.00	125.0000	10,000.00	48.00	6,000.00



Day 2

Lesson 4: 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, 2022, 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, 2022, 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.

Figure: Open bill with partial payment and unreleased retainage

Bills and Adjustments

Bill 000067 - Parker & Sons HVAC

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Type:	<input type="text" value="Bill"/>	Vendor:	<input type="text" value="PARKERS - Parker & Sons HVAC"/>	Detail Total:	<input type="text" value="648,000.00"/>
Reference Nbr.:	<input type="text" value="000067"/>	Location:	<input type="text" value="MAIN - Primary Location"/>	Discount Total:	<input type="text" value="0.00"/>
Status:	<input type="text" value="Open"/>	Terms:	<input type="text" value="30D - 30 Days"/>	VAT Taxable Total:	<input type="text" value="0.00"/>
Date:	<input type="text" value="3/25/2022"/>	* Due Date:	<input type="text" value="4/24/2022"/> <input checked="" type="checkbox"/> Apply Retainage	VAT Exempt Total:	<input type="text" value="0.00"/>
Post Period:	<input type="text" value="03-2022"/>	* Cash Discount...:	<input type="text" value="4/24/2022"/> <input checked="" type="checkbox"/> Pay by Line	Tax Total:	<input type="text" value="0.00"/>
Vendor Ref.:	<input type="text"/>	<input type="checkbox"/> Joint Payees		With. Tax:	<input type="text" value="0.00"/>
Description:	<input type="text" value="30% of work for the subcontract"/>			Balance:	<input type="text" value="0.00"/>
				Amount:	<input type="text" value="648,000.00"/>
				Cash Discount:	<input type="text" value="0.00"/>

DETAILS FINANCIAL TAXES RETAINAGE APPLICATIONS COMPLIANCE

🔄 + ✎ ✕ VIEW DEFERRALS ADD PO RECEIPT ADD PO RECEIPT LINE ADD PO ADD SUBCONTRACT ADD PO LINE ADD SUBCONTRACT LINE

Line Nbr.	Inventory ID	Transaction Descr.	Quantity	UOM	Unit Cost	Ext. Cost	Disc. Am.	Retainagr. Percent	Retainage Amount	Unrelease Retainage	Retained Tax	Amount	Balance
1	HVAC	HVAC subcontract - Phase 1	0.00	EA	0.0000	480,000.00	0.00	10.000000	48,000.00	48,000.00	0.00	432,000.00	0.00
2	HVAC	HVAC subcontract - Phase 2	0.00	EA	0.0000	240,000.00	0.00	10.000000	24,000.00	24,000.00	0.00	216,000.00	0.00

Lesson 5: Tracking Project Budget Overruns

Learning Objectives

The following sections explain how you can control documents that are entered for the project.

Construction Project Budget: To Track Project Budget Overrun

Story

Suppose that ToadGreen Building Group is a general contractor building an Italian restaurant for its customer, The Italian Company. The ToadGreen project manager has created a project for the work to be performed, and the budget has been agreed on with the customer. On February 15, 2022, the purchasing agent has negotiated a subcontract for mechanical piping with the Harmon Installation subcontractor at a better price than was initially planned, thus reserving some budget. The subcontractor has started working, and on February 25, 2022, it notified the project manager that an extra 20 hours is necessary to complete the work.

Acting as a project manager, you need to enter all the related documents and review the budget overruns.

Figure: A warning indicating a budget overrun

Change Orders

Italian restaurant (Market Street)

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Reference Nbr.: <NEW> 🔍	* Class: DEFAULT - Default Change Order Cla 🔍 ✎	Revenue Budget Change Total: 0.00
Status: On Hold	Project: ITALIAN - Italian restaurant (Market Stree ✎	⚠️ Commitment Change Total: <u>2,900.00</u>
* Change Date: 2/25/2022 ▾	Customer: ITACOM - Italian Company ✎	Cost Budget Change Total: 0.00
* Approval Date: 2/25/2022 ▾	External Reference Nbr.: <input type="text"/>	Gross Margin Amount: 0.00
Contract Time ... 0	Revenue Change Nbr.: 0001	Gross Margin %: 0.00
* Description: Extra work on piping		

REVENUE BUDGET COST BUDGET **⚠️ COMMITMENTS** DETAILED DESCRIPTION ATTRIBUTES APPROVALS COMPLIANCE

🔄 + × SELECT COMMITMENTS |←| |→| 🗑️ ⬆️

📄	🔒	🗑️	Status	* Project Task	Cost Code	Inventory ID	* Description	Quantity	UOM	Unit Cost	Amount	Account
>	🔒	🗑️	Update	15	15-100	LABOR	Mechanical- Building Service Piping	20.00	HOUR	145.00	⚠️ 2,900.00	54100

Budgeted: 15000.00, Consumed: 14500.00,
Available: 500.00, Document: 2900.00,
Remaining: -2400.00

Figure: List of documents that exceed the budgeted amounts

Project Budget Overruns

🔄 ↶ CALCULATE |↔| ☒

Document Type: <input type="text" value="Purchase Order, Subcontract, AP Bil..."/>		ADDITIONAL FILTERS										
* Project:	<input type="text" value="ITALIAN - Italian restaurant (Market St)"/>	Account Group:		<input type="text"/>								
* From:	<input type="text" value="2/1/2022"/>	Project Task:		<input type="text"/>								
* To:	<input type="text" value="2/28/2022"/>	Cost Code:		<input type="text"/>								
		Inventory ID:		<input type="text"/>								
Type	Reference Nbr.	Project	Project Task	Cost Code	Inventory ID	Account Group	Budgeted	Consumed	Available	Document	Remaining	Project Currency
> AP document	000069	ITALIAN	15	15-100	<N/A>	LABOR	15,000.00	14,500.00	500.00	1,000.00	-500.00	USD
Change Order	000003	ITALIAN	15	15-100	<N/A>	LABOR	15,000.00	14,500.00	500.00	2,900.00	-2,400.00	USD

Construction Project Budget: To Add a New Cost Code to the Project Budget

Story

Suppose that ToadGreen is a general contractor building an Italian restaurant for its customer, The Italian Company. On February 15, 2022, the purchasing manager negotiated a subcontract for construction labor with the Harmon Installation subcontractor. This subcontract had not been budgeted initially in the project.

Acting as a ToadGreen project manager, you need to enter a subcontract, record these expenses to a new cost code in the project budget and make sure that the project cost budget is updated.

Entering a Subcontract

Projects

ITALIAN - Italian restaurant (Market Street)

NOTES FILES TOOLS

← ↻ 📄 ↶ + 🗑️ ⏪ < > ⏩ COMPLETE PROJECT **RUN PROJECT BILLING** ...

* Project ID: ITALIAN - Construction project (time and material) Status: Active Actual Income: 0.00
 * Customer: ITACOM - Italian Company Actual Expenses: 0.00
 * Template: CONTM - Construction project (time and material) Margin: 0.00 %: 0.00
 * Description: Construction project (time and material)

SUMMARY TASKS REVENUE BUDGET **COST BUDGET** BALANCES COMMITMENTS INVOICES CHANGE ORDERS UNION LOCALS ACTIVITIES EMPLOYEES EQUIPMENT DEFAULTS ATTRIBUTES

Project Task: Group by Task

		VIEW COMMITMENT DETAILS	VIEW TRANSACTIONS	All Records												
Project Task	Cost Code	Account Group	Description	Original Budgeted Quantity	UOM	Unit Rate	Original Budgeted Amount	Potential CO Quantity	Budgeted CO Quantity	Budgeted CO Amount	Revised Budgeted Quantity	Revised Budgeted Amount	Potential CO Amount	Original Committed Quantity	Original Committed Amount	
10	10-600	LABOR	Partitions	16.00	HOURL	55.0000	880.00	0.00	0.00	0.00	16.00	880.00	0.00	0.00	0.00	
10	10-600	MATERIAL	Partitions	50.00	EA	150.0000	7,500.00	0.00	0.00	0.00	50.00	7,500.00	0.00	0.00	0.00	
10	10-670	LABOR	Storage Shelving	40.00	HOURL	60.0000	2,400.00	0.00	0.00	0.00	40.00	2,400.00	0.00	0.00	0.00	
10	10-670	MATERIAL	Storage Shelving	75.00	EA	150.0000	11,250.00	0.00	0.00	0.00	75.00	11,250.00	0.00	0.00	0.00	
11	11-400	LABOR	Equipment- Food Service	80.00	HOURL	100.0000	8,000.00	0.00	0.00	0.00	80.00	8,000.00	0.00	0.00	0.00	
11	11-400	MATERIAL	Equipment- Food Service	1.00	EA	100,000.0000	100,000.00	0.00	0.00	0.00	1.00	100,000.00	0.00	0.00	0.00	
15	01-300	LABOR	Permits	0.00		0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,200.00	
15	15-100	LABOR	Mech- Building Service Piping	100.00	HOURL	150.0000	15,000.00	0.00	0.00	0.00	100.00	15,000.00	0.00	100.00	14,500.00	

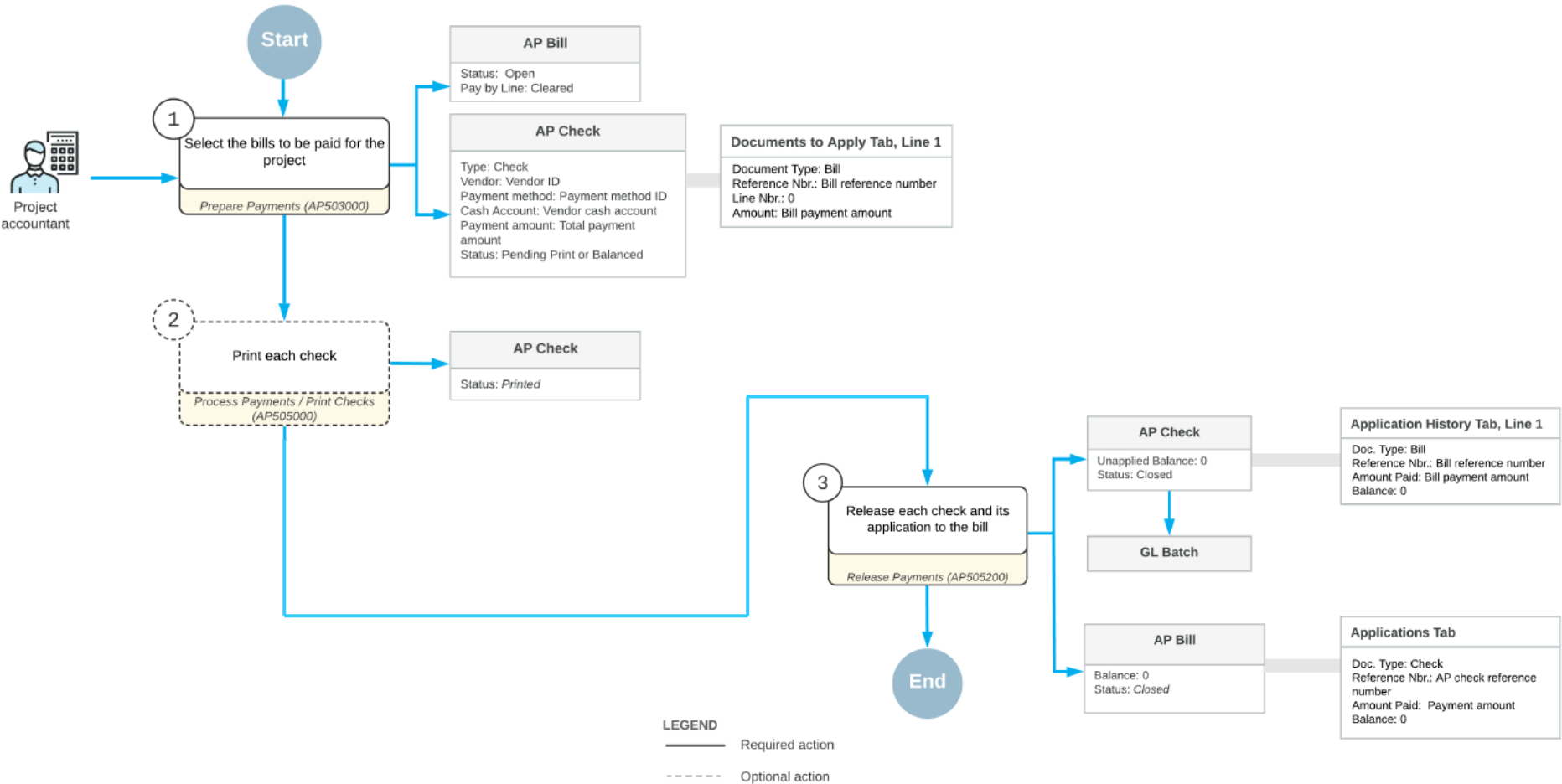
Lesson 6: Preparing Vendor Payments for a Project

Learning Objectives

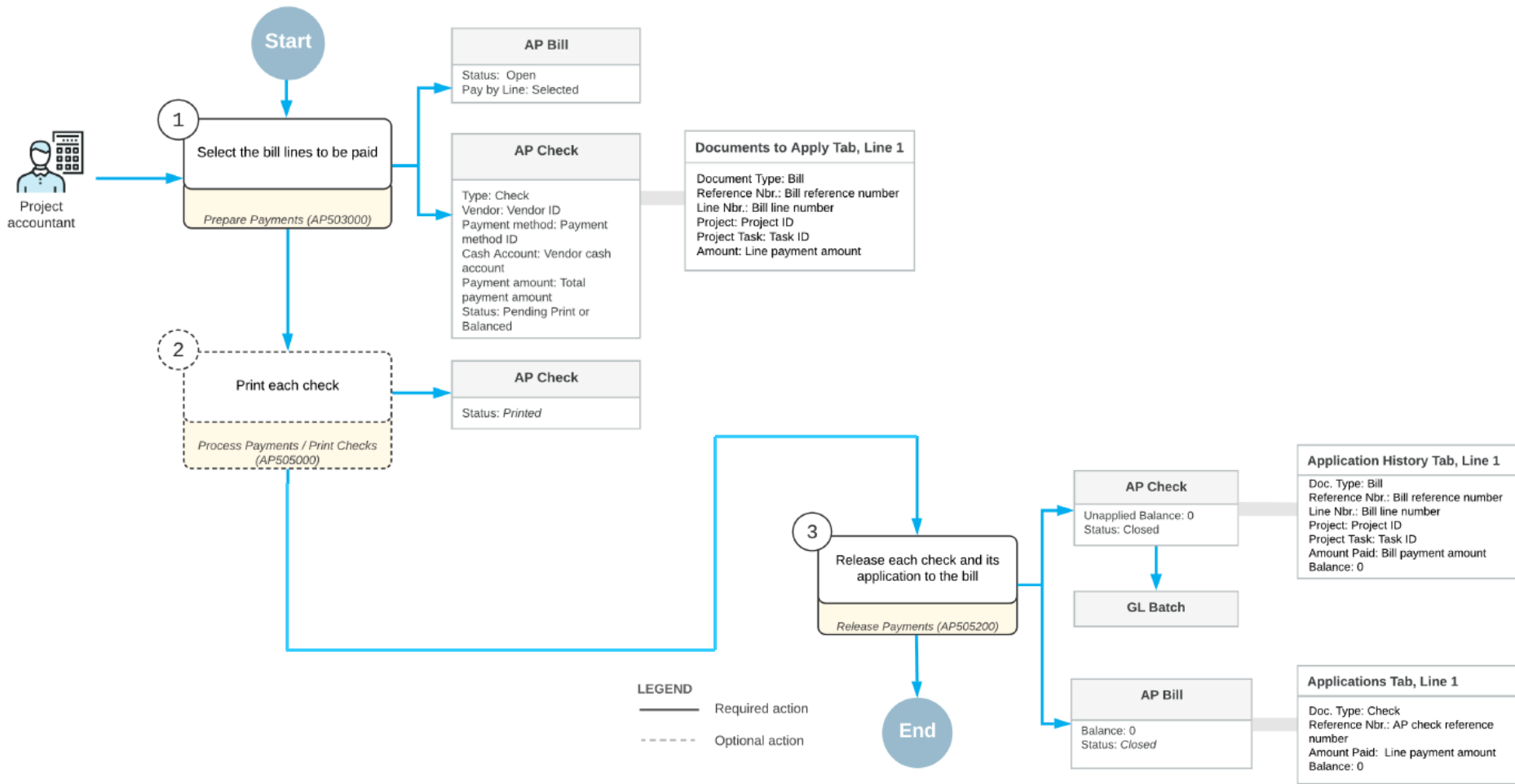
In this lesson, you will learn how to do the following:

- Select the bills or bill lines to be paid
- Prepare and release a payment for multiple bills for the same project

Paying bills for a project



Paying bill lines for a project



Vendor Payments for a Project: To Process a Payment of Bill Lines

Story

Suppose that the ToadGreen company is building a hotel for the Equity Group Investors customer; the ToadGreen project manager has created a project to handle the tracking and billing of the materials and services related to the hotel. On January 15, 2022, the ToadGreen company purchased 500 packages of concrete mix and 100 units of plastic pipes from the Standard Hardware Company vendor for the hotel being built. On January 17, 2022, the company also hired this vendor as a subcontractor to perform on-site work, which is broken into three phases.

On January 30, 2022, the concrete mix was delivered, and the first phase of the on-site work was performed. The ToadGreen project accountant entered into the system two bills received from the Standard Hardware Company: one (with a date of 1/15/2022) for all of the purchased materials, and another (with a date of 1/17/2022) for all three phases of the on-site work. Acting as the ToadGreen project manager, you need to prepare a payment for the materials and services that have been provided—that is, you will pay only particular lines of the bills.

Figure: Single payment applied to lines of two bills

Checks and Payments

Check 000029 - Standard Hardware Company

Type:	Check	Vendor:	HARDCO - Standard Hardware Company	Payment Amount:	50,000.00
Reference Nbr.:	000029	Location:	MAIN - Primary Location	Unapplied Balance:	0.00
Status:	Closed	Payment Meth.:	CHECK	Application Amount:	0.00
Application Date:	1/30/2022	Cash Account:	10200TG - ToadGreen Checking Account	Finance Charges:	0.00
Application Pe...:	01-2022	<input type="checkbox"/> Joint Check			
Payment Ref.:	0004	Description:	Materials for hotel (concrete and pipes)		

DOCUMENTS TO APPLY **APPLICATION HISTORY** FINANCIAL REMITTANCE CHARGES COMPLIANCE

REVERSE APPLICATION

	Branch	Batch Number	Doc. Type	Reference Nbr.	Line Nbr.	Inventory ID	Project	Project Task	Cost Code	Account	Amount Paid	Cash Discount Taken
>	TBGROUP	AP000086	Bill	000057	1	CONCRMX	HOTEL	03	03-000	54700	40,000.00	0.00
	TBGROUP	AP000086	Bill	000058	1	LABOR	HOTEL	02	02-000	54100	10,000.00	0.00

Lesson 7: Tracking Cost and Revenue Changes to Projects

Learning Objectives

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

- Configure a change order class that supports the two-tier change management
- Configure default markups
- Create a change request to update the project budget
- Process a change request with a cost change order
- Process a change request with a revenue change order

Change request workflow

Job titles may vary across companies.

Create a project with the change order workflow



1
Create a change request
Projects (PM301000)
Change Requests (PM308500)

Change request
Status: On Hold

Estimation tab
Project Task: Project task
Account Group: Account group
Inventory ID: Inventory item
Quantity: Change quantity
Ext. Cost: Change cost
Revenue Task: Revenue project task
Revenue Account Group: Revenue account group
Ext. Price: Change revenue
Create Commitment: Selected

Markups tab
Project Task: Markup project task
Account Group: Markup account group
Markup Amount: Markup amount



2
Prepare the change request for adding to a change order
Change Orders (PM308000)

Project
Change request
Status: Open

Revenue Budget tab
Line 1
Project Task: Revenue project task
Account Group: Revenue account group
Potential CO Quantity: Change quantity
Potential CO Amount: Change revenue
Line 2
Project Task: Markup project task
Account Group: Markup account group
Potential CO Quantity: 0
Potential CO Amount: Markup amount

Cost Budget tab
Project Task: Project task
Account Group: Account group
Inventory ID: Inventory item
Potential CO Quantity: Change quantity
Potential CO Amount: Change cost



3
Add the change request to a change order
Change Orders (PM308000)

Change order
Change request
Status: Closed

Process the change order

Revenue Budget tab
Line 1
Project Task: Revenue project task
Account Group: Revenue account group
Quantity: Change quantity
Amount: Change revenue
Line 2
Project Task: Markup project task
Account Group: Markup account group
Quantity: 0
Amount: Markup amount

Cost Budget tab
Project Task: Project task
Account Group: Account group
Inventory ID: Inventory item
Quantity: Change quantity
Amount: Change cost

Commitments tab
Project Task: Project task
Account Group: Account group
Inventory ID: Inventory item
Quantity: Change quantity
Amount: Change cost

Change Requests: Implementation Activity

Story

Suppose that you, as the system administrator, need to configure two-tier change management so that the change requests to projects can be processed in the system. Also, you need to configure the following price markups to be applied to the new projects:

- A default price markup of 25% to be applied to each individual change made with a change request
- 8% of the profit to be applied to an entire change request
- 4% of overhead to be applied to an entire change request
- 5% of all the previously charged markups to be applied to an entire change request
- A flat fee of \$100 per change request

You also need to specify price markups for the ITALIAN project, which has already been created in the system. Acting as the system administrator, you will perform these tasks.

Change Management: To Process Cost and Revenue Changes to a Project

Story

Suppose that ToadGreen Building Group is a general contractor building an Italian restaurant for the Italian Company customer. The ToadGreen project accountant has created a project for the work to be performed and the budget has been agreed upon with the customer. The construction work has been started.

Then suppose that on 7/15/2022, a worker of a subcontractor, Acme Doors & Glass, arrived at the construction site to perform cleaning work. The worker found out that the French-style window specified in the plans does not fit the framed opening and notified the ToadGreen project manager about this. The project manager has estimated that five days will be needed to fix this issue, and this will cost \$3,500. Also, the ToadGreen manager has decided to add an extra markup in the amount of \$1,450 for the work to be performed.

Acting as the project manager, you need to agree upon the cost budget with the engineer and the revenue budget with the customer. For this purpose, you will prepare a change request with the related project issue, and then process the cost change order along with the related commitments to make changes to the project cost budget. After the work is finished, you will process the revenue change order to record the revenue.

Figure: The updated potential amount and quantity in the project

Projects
 ITALIAN - Italian restaurant (Market Street)

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* Project ID: ITALIAN - Construction project (time and material) Status: Active Actual Income: 0.00
 Customer: ITACOM - Italian Company Actual Expenses: 5,000.00
 Template: CONTM - Construction project (time and material) Margin: -5,000.00 %: 0.00
 * Description: Construction project (time and material)

SUMMARY TASKS REVENUE BUDGET **COST BUDGET** BALANCES COMMITMENTS INVOICES CHANGE ORDERS CHANGE REQUESTS UNION LOCALS ACTIVE

Project Task: Group by Task

🔄 + × VIEW COMMITMENT DETAILS VIEW TRANSACTIONS |←| ☒ ⬆

🗑️	📄	📄	* Project Task	Cost Code	* Account Group	Description	Origin Budget Quant	UOM	Unit Rate	Original Budgeted Amount	Potential CO Quantity	Budgeted CO Quantity	Budgeted CO Amount	Revised Budgeted Quantity	Revised Budgeted Amount	Potential CO Amount
🗑️	📄	07	07-200	MATERIAL	Insulation	15,000.0	EA	1.0000	25,000.00	0.00	0.00	0.00	0.00	15,000.00	25,000.00	0.00
🗑️	📄	07	07-300	LABOR	Roofing- Steep Slope	80.00	HOUR	140.0000	11,200.00	0.00	0.00	0.00	0.00	80.00	11,200.00	0.00
🗑️	📄	07	07-300	MATERIAL	Roofing- Steep Slope	7,560.00	EA	12.0000	90,720.00	0.00	0.00	0.00	0.00	7,560.00	90,720.00	0.00
>	🗑️	📄	08	08-100	MATERIAL	Doors- Exterior	8.00	EA	1,000.0000	8,000.00	0.00	0.00	0.00	8.00	8,000.00	0.00
🗑️	📄	08	08-100	SUBCON	Doors- Exterior	28.00	EA	50.0000	1,400.00	20.00	0.00	0.00	0.00	28.00	1,400.00	1,040.00
🗑️	📄	08	08-200	MATERIAL	Doors- Interior	9.00	EA	750.0000	6,750.00	0.00	0.00	0.00	0.00	9.00	6,750.00	0.00
🗑️	📄	08	08-200	SUBCON	Doors- Interior	30.00	EA	50.0000	1,500.00	0.00	0.00	0.00	0.00	30.00	1,500.00	0.00
🗑️	📄	08	08-400	MATERIAL	Doors- Overhead	1.00	EA	2,000.0000	2,000.00	0.00	0.00	0.00	0.00	1.00	2,000.00	0.00
🗑️	📄	08	08-400	SUBCON	Doors- Overhead	16.00	EA	50.0000	800.00	0.00	0.00	0.00	0.00	16.00	800.00	0.00
🗑️	📄	08	08-520	MATERIAL	Windows- Wood	30.00	EA	525.0000	15,750.00	0.00	0.00	0.00	0.00	30.00	15,750.00	0.00
🗑️	📄	08	08-520	SUBCON	Windows- Wood	90.00	EA	50.0000	4,500.00	17.00	0.00	0.00	0.00	90.00	4,500.00	850.00
🗑️	📄	08	08-800	MATERIAL	Entrances, Storefronts, C...	1.00	EA	24,500.0000	24,500.00	0.00	0.00	0.00	0.00	1.00	24,500.00	0.00
🗑️	📄	08	08-800	SUBCON	Entrances, Storefronts, C...	80.00	EA	100.0000	8,000.00	0.00	0.00	0.00	0.00	80.00	8,000.00	0.00
🗑️	📄	09	09-200	LABOR	Finish- Drywall	80.00	HOUR	110.0000	8,800.00	0.00	0.00	0.00	0.00	80.00	8,800.00	0.00
🗑️	📄	09	09-200	MATERIAL	Finish- Drywall	20,000.0	EA	6.2500	125,000.00	0.00	0.00	0.00	0.00	20,000.00	125,000.00	0.00
🗑️	📄	09	09-300	LABOR	Finish- Tile	30.00	HOUR	120.0000	3,600.00	0.00	0.00	0.00	0.00	30.00	3,600.00	0.00



Day 3

Lesson 8: Billing Project 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.

Figure: The original invoice with the unreleased retainage amount

Invoices and Memos

Invoice 000101 - The Equity Group Investors

NOTES ACTIVITIES FILES TOOLS

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Type:	Invoice	Customer:	EQUGRP - The Equity Group Investors	Detail Total:	104,500.00
Reference Nbr.:	000112	Location:	MAIN - Primary Location	Discount Total:	0.00
Status:	Open	Terms:	30D - 30 Days	VAT Taxable T...:	0.00
Date:	4/1/2022	* Due Date:	5/1/2022 <input type="checkbox"/> Apply Retainage	VAT Exempt T...:	0.00
Post Period:	04-2022	* Cash Discount...:	5/1/2022 <input type="checkbox"/> Pay by Line	Tax Total:	0.00
Customer Ord...:	000018	Project/Contract:	HOTEL - The Beach Hotel and Condomin	Balance:	0.00
				Amount:	104,500.00
Description:	Invoice for HOTEL			Cash Discount:	0.00

DETAILS FINANCIAL ADDRESSES TAXES APPROVALS RETAINAGE APPLICATIONS COMPLIANCE

VIEW DEFERRALS

Line Nbr.	Inventory ID	Transaction Descr.	Quantity	UOM	Unit Price	Ext. Price	Discount Percent	Discount Amount	Retainage Percent	Retainage Amount	Unreleased Retainage	Retained Tax	Amount	Balance
1		GENERAL REQUIREMENTS	0.00	HOUR	0.0000	100,000.00	0.000000	0.00	5.000000	5,000.00	4,000.00	0.00	95,000.00	0.00
2		SITWORK	0.00	HOUR	0.0000	10,000.00	0.000000	0.00	5.000000	500.00	400.00	0.00	9,500.00	0.00

Lesson 9: Preparing AIA Reports

The following sections describe the structure of the American Institute of Architects (AIA) report in Acumatica ERP Construction Edition and the available report variations. Also, the sections provide information on how you can reflect historic retainage and the release of change orders for the project, and how you can print the AIA report for billing only the retainage.

Construction Reports: To Prepare AIA Report

Story

Suppose that the ToadGreen Building Group company is in the middle of building a hotel for the Equity Group Investors. As has been agreed with the customer, the customer is being billed once a month based on the progress of the performed work. The ToadGreen construction project manager is tracking the progress of work as a fixedprice project, billing the customer by the percent of project completion.

Acting as the construction project manager, you need to prepare the AIA report for the third payment application for the project.

APPLICATION AND CERTIFICATION FOR PAYMENT



TO OWNER:	The Equity Group Investors 956 51st Aven New York, NY, 08653	PROJECT:	The Beach Hotel and Condominiums (Golden Street) Primary Location 1690 Golden Street Miami, FL, 33135	INVOICE NO:	000011	Distribution to:	
				APPLICATION NO:	0003	<input type="checkbox"/>	OWNER
				PERIOD TO:	6/1/2022	<input type="checkbox"/>	ARCHITECT
FROM CONTRACTOR:	ToadGreen Building Group 2295 Oak Street New York, NY, 13420			PROJECT:	HOTELCP	<input type="checkbox"/>	CONTRACTOR
						<input type="checkbox"/>	
				CONTRACT DATE:	3/1/2022		

Figure: AIA Application for Payment

Contract For:

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet is attached.

1. ORIGINAL CONTRACT SUM	\$39,715,457.00
2. Net Change by Change Orders	\$0.00
3. CONTRACT SUM TO DATE (Line 1+2)	\$39,715,457.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)	\$19,167,859.49
5. RETAINAGE:	
a. 5 % of Completed Work & Stored Material (Column D + E + F on G703)	\$958,392.99
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total)	\$18,209,466.50
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)	\$7,253,313.88
8. CURRENT PAYMENT DUE	\$10,956,152.62
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 Less Line 8 Total)	\$21,505,990.50

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of: NY Country of: US

Subscribed and sworn to before me this _____ day of _____

Notary Public:

My Commission expires: _____

In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED.....\$ _____

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the prejudice to any rights of the Owner or Contractor under this Contract.

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$0.00	\$0.00
Total Approved this Month	\$0.00	\$0.00
TOTAL	\$0.00	\$0.00
NET CHANGES by Change Order	\$0.00	

CONTINUATION SHEET



Figure: AIA Continuation Sheet

APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.

INVOICE NO: 000011
 APPLICATION NO: 0003
 APPLICATION DATE: 6/1/2022
 PERIOD TO: 7/1/2022
 ARCHITECT'S PROJECT NO: HOTELCP

ITEM	DESCRIPTION OF WORK	ORIGINAL SCHEDULED VALUE	CHANGE ORDERS	REVISED SCHEDULED VALUE	WORK COMPLETED		STORED MATERIALS	TOTAL COMPLETED AND STORED TO DATE	% Comp	BALANCE TO FINISH	RETAINAGE HELD
					FROM PREVIOUS APPLICATION	THIS PERIOD					
01	GENERAL REQUIREMENTS	\$4,154,366.00	\$0.00	\$4,154,366.00	\$1,246,309.80	\$2,077,183.00	\$0.00	\$3,323,492.80	80.0 %	\$830,873.20	\$166,174.64
02	SITework	\$1,809,185.00	\$0.00	\$1,809,185.00	\$1,447,348.00	\$325,653.30	\$0.00	\$1,773,001.30	98.0 %	\$36,183.70	\$88,650.07
03	CONCRETE	\$8,319,840.00	\$0.00	\$8,319,840.00	\$3,494,332.80	\$665,587.20	\$0.00	\$4,159,920.00	50.0 %	\$4,159,920.00	\$207,996.00
04	MASONRY	\$1,210,648.00	\$0.00	\$1,210,648.00	\$944,305.44	\$24,212.96	\$0.00	\$968,518.40	80.0 %	\$242,129.60	\$48,425.92
05	METALS	\$1,901,356.00	\$0.00	\$1,901,356.00	\$380,271.20	\$418,298.32	\$0.00	\$798,569.52	42.0 %	\$1,102,786.48	\$39,928.48
06	WOODS, PLASTICS, COMPOSITES	\$1,225,000.00	\$0.00	\$1,225,000.00	\$122,500.00	\$563,500.00	\$0.00	\$686,000.00	56.0 %	\$539,000.00	\$34,300.00
07	THERMAL AND MOISTURE PROTECTION	\$989,355.00	\$0.00	\$989,355.00	\$0.00	\$395,742.00	\$0.00	\$395,742.00	40.0 %	\$593,613.00	\$19,787.10
08	OPENINGS	\$1,638,760.00	\$0.00	\$1,638,760.00	\$0.00	\$819,380.00	\$0.00	\$819,380.00	50.0 %	\$819,380.00	\$40,969.00
09	FINISHES	\$8,110,796.00	\$0.00	\$8,110,796.00	\$0.00	\$2,433,238.80	\$0.00	\$2,433,238.80	30.0 %	\$5,677,557.20	\$121,661.94
10	SPECIALTIES	\$1,449,500.00	\$0.00	\$1,449,500.00	\$0.00	\$637,780.00	\$0.00	\$637,780.00	44.0 %	\$811,720.00	\$31,889.00
11	EQUIPMENT	\$1,135,000.00	\$0.00	\$1,135,000.00	\$0.00	\$408,600.00	\$0.00	\$408,600.00	36.0 %	\$726,400.00	\$20,430.00
13	SPECIAL CONSTRUCTION	\$345,500.00	\$0.00	\$345,500.00	\$0.00	\$145,110.00	\$0.00	\$145,110.00	42.0 %	\$200,390.00	\$7,255.50
14	CONVEYING SYSTEMS	\$696,919.00	\$0.00	\$696,919.00	\$0.00	\$341,490.31	\$0.00	\$341,490.31	49.0 %	\$355,428.69	\$17,074.52
15	MECHANICAL	\$3,910,742.00	\$0.00	\$3,910,742.00	\$0.00	\$1,290,544.86	\$0.00	\$1,290,544.86	33.0 %	\$2,620,197.14	\$64,527.24
16	ELECTRICAL	\$2,818,490.00	\$0.00	\$2,818,490.00	\$0.00	\$986,471.50	\$0.00	\$986,471.50	35.0 %	\$1,832,018.50	\$49,323.58
Totals:		\$39,715,457.00	\$0.00	\$39,715,457.00	\$7,635,067.24	\$11,532,792.25	\$0.00	\$19,167,859.49	48.3 %	\$20,547,597.51	\$958,392.99

Lesson 10: Preparing AIA Reports for Released Retainage

Story

Suppose that the ToadGreen Building Group company is in the middle of building a hotel for the Equity Group Investors. As has been agreed with the customer, the customer is being billed once a month based on the progress of the performed work. The ToadGreen construction project manager is tracking the progress of work as a fixed-price project, billing the customer by the percent of project completion. The project has been billed three times, in April, May and June, 2022. According to the contract signed with the customer, the customer retains 5% of the amount of each progress billing line in an invoice.

Also suppose that on 6/10/2022, after a certain part of work is done, the ToadGreen project manager needs to prepare to request the release of 20% of the retained amount from customer. Acting as the project manager, you need to release a part of retainage and prepare an AIA report for the released part of retainage for the corresponding financial period.

APPLICATION AND CERTIFICATION FOR PAYMENT



TO OWNER: The Equity Group Investors
956 51st Aven
New York, NY, 06653

PROJECT: The Beach Hotel and Condominiums
(Tyler Avenue)
Primary Location
1435 Tyler Avenue
Miami, FL, 33128

INVOICE NO: 000019

APPLICATION NO: 0004

PERIOD TO: 7/1/2022

PROJECT: HOTELRT

CONTRACT DATE: 3/1/2022

Distribution to:
 OWNER
 ARCHITECT
 CONTRACTOR

Figure: AIA report with released retainage

Contract For:

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet is attached.

1. ORIGINAL CONTRACT SUM	\$39,715,457.00
2. Net Change by Change Orders	\$0.00
3. CONTRACT SUM TO DATE (Line 1+2)	\$39,715,457.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)	\$19,167,859.49
5. RETAINAGE:	
a. 4.4 % of Completed Work & Stored Material (Column D + E + F on G703)	\$843,065.07
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total)	\$18,324,794.42
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)	\$18,209,466.50
8. CURRENT PAYMENT DUE	\$115,327.92
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 Less Line 6 Total)	\$21,390,662.58

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of: NY Country of: US

Subscribed and sworn to before me this _____ day of _____

Notary Public:

My Commission expires: _____

In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED.....\$ _____

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the prejudice to any rights of the Owner or Contractor under this Contract.

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$0.00	\$0.00
Total Approved this Month	\$0.00	\$0.00
TOTAL	\$0.00	\$0.00
NET CHANGES by Change Order	\$0.00	

Lesson 11: Correcting Pro Forma Invoices

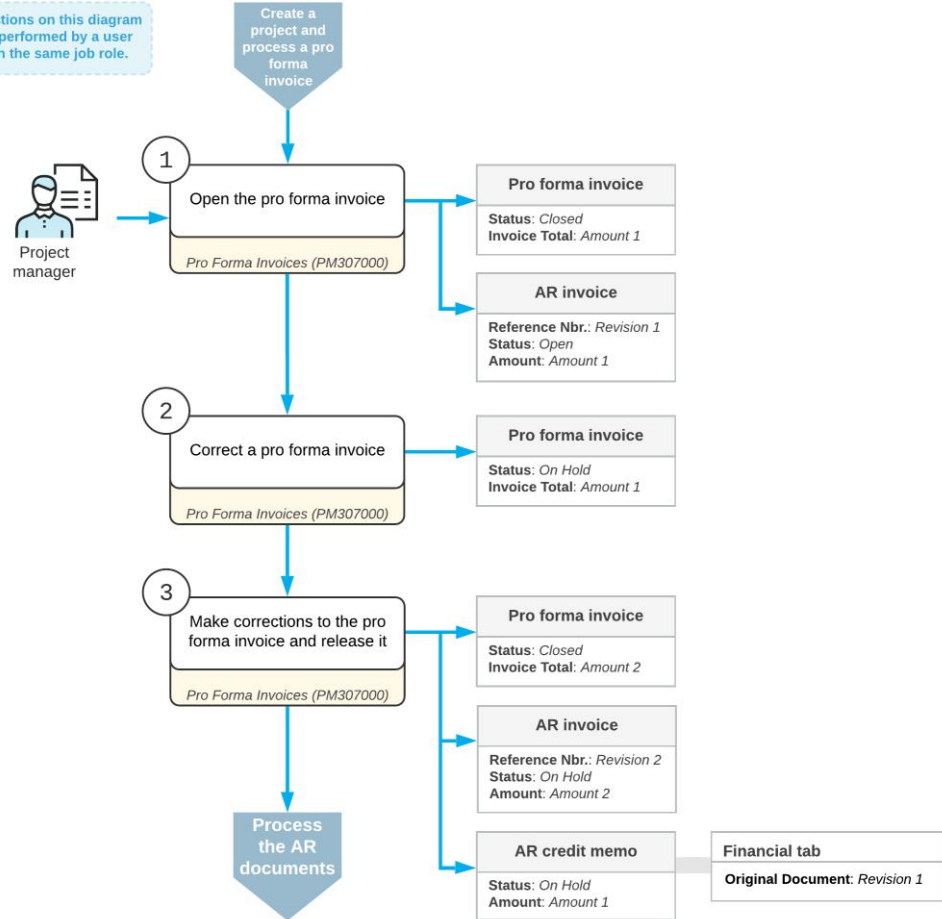
Learning Objectives

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

- Make corrections to a pro forma invoice that has the corresponding AR document released
- Review the previous revision of the pro forma invoice.

Correcting a pro forma invoice

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



Pro Forma Invoice Correction: To Correct Actual Amounts in AIA Reports

Story

Suppose that the ToadGreen Building Group company is building a hotel for the Equity Group Investors customer. The ToadGreen project manager has created a project to track the work progress and to control related revenues and expenses. In April and May 2022, the project accountant has prepared two pro forma invoices, each for part of the performed work; after the customer agreed to the amounts, the project accountant billed the customer.

Further suppose that at the end of May, the ToadGreen construction project manager noticed that a mistake had been made in two lines of the first pro forma invoice. The total of the pro forma invoice is 10,806,560.21, but it should be 10,601,350.41. The construction project manager has reviewed the invoice details and found out that the following corrections must be made:

Pro Forma Invoice Correction: To Correct Actual Amounts in AIA Reports

Story

- The Amount to Invoice in the line with the 03 project task and 03-000 cost code is 5,990,284.80, but it should be 5,783,075.00.
- The Amount to Invoice in the line with the 04 project task and 04-000 cost code is 145,277.76, but it should be 147,277.76.

The incorrect pro forma invoice was already used for generating the March AIA report. Because the amounts in the first AIA report were incorrect, the April report also needs to be corrected and the AIA report has to be generated again.

Acting as the construction project manager, you need to enter and process the related documents to adjust the actual amounts in AIA reports for March and for April. You then need to regenerate these AIA reports.

Figure: Corrected amounts in AIA report

CONTINUATION SHEET



Page: 2 of 2

APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.

INVOICE NO: 000013
 APPLICATION NO: 0001
 APPLICATION DATE: 4/1/2022
 PERIOD TO: 5/1/2022
 ARCHITECT'S PROJECT NO: HOTELSM

ITEM	DESCRIPTION OF WORK	ORIGINAL SCHEDULED VALUE	CHANGE ORDERS	REVISED SCHEDULED VALUE	WORK COMPLETED		STORED MATERIALS	TOTAL COMPLETED AND STORED TO DATE	% Comp	BALANCE TO FINISH	RETAINAGE HELD
					FROM PREVIOUS APPLICATION	THIS PERIOD					
01	GENERAL REQUIREMENTS	\$4,154,366.00	\$0.00	\$4,154,366.00	\$0.00	\$3,531,211.10	\$0.00	\$3,531,211.10	85.0 %	\$623,154.90	\$176,560.56
02	SITWORK	\$1,809,185.00	\$0.00	\$1,809,185.00	\$0.00	\$1,139,786.55	\$0.00	\$1,139,786.55	63.0 %	\$669,398.45	\$56,989.33
03	CONCRETE	\$8,319,840.00	\$0.00	\$8,319,840.00	\$0.00	\$5,783,075.00	\$0.00	\$5,783,075.00	69.5 %	\$2,536,765.00	\$289,153.75
04	MASONRY	\$1,210,648.00	\$0.00	\$1,210,648.00	\$0.00	\$147,277.76	\$0.00	\$147,277.76	12.2 %	\$1,063,370.24	\$7,363.89
Totals:		\$15,494,039.00	\$0.00	\$15,494,039.00	\$0.00	\$10,601,350.41	\$0.00	\$10,601,350.41	68.4 %	\$4,892,688.59	\$530,067.53

Lesson 12: Preparing WIP and Bonding Reports

Learning Objectives

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

- Print and send substantiated billing reports, and understand what information is included in them
- Print and send work-in-progress reports, and understand what information is included in them
- Print and send American Institute of Architects (AIA) reports, and understand what information is included in them
- Print and send bonding reports, and understand which information is included in them
- Review the project lifecycle and performance with the help of Acumatica ERP Construction Edition reports, which are described in this chapter

Construction Reports: To Prepare a Work-in-Progress Report

Story

Suppose that the ToadGreen company is building an Italian restaurant for the Italian Company, its customer, and is in the middle of the lifecycle of the construction project. The ToadGreen project estimator needs to track the progress of active project tasks, as well as their financial performance. The company uses the percentage-of-completion method for revenue recognition and includes the work-in-progress reports in the company's financial statements.

Acting as a project estimator, you will review the current percentage of completion for the project tasks and the cost to complete them, and you will determine whether each project task is overbilled or underbilled relative to its progress. When using the percentage-of-completion method for revenue recognition, companies include a WIP schedule with their financial statements.

Figure: Work-in-progress report for the ITALIAN2 project

PROJECT WIP REPORT

As Of Date 3/4/2022
 Status Active
 Company TOADGREEN
 Branch ToadGreen Building Group



ID	EST. GROSS PROFIT	EST. GROSS PROFIT %	ACTUAL				FORECASTED				
			PROJECT COSTS TO DATE	% COMPLETE	PROJECT BILLINGS TO DATE	REVENUE RECOGNIZED	GROSS PROFIT	UNDER (OVER) BILLINGS	REVENUE BACKLOG	GROSS PROFIT BACKLOG	REMAINING CONTRACT
00	\$501,188.80	22.92 %	\$50,555.00	3.00 %	\$0.00	\$65,585.05	\$15,030.05	\$65,585.05	\$2,121,399.75	\$486,158.75	\$2,186,984.80
00	\$501,188.80		\$50,555.00		\$0.00	\$65,585.05	\$15,030.05	\$65,585.05	\$2,121,399.75	\$486,158.75	\$2,186,984.80

Construction Reports: To Prepare a Bonding Report

Story

Suppose that to ensure profitability, a project estimator of the ToadGreen company wants to see how projects are progressing in March 2022 , and which of them may need special attention. Acting as a project estimator, you will prepare and review the construction bonding report for this purpose.

Figure: Construction bonding report for March

CONSTRUCTION BONDING REPORT

As Of Date 3/1/2022
 Status Active
 Company TOADGREEN
 Branch ToadGreen Building Group



PROJECT	DESCRIPTION	CONTRACT AMOUNT	% COMPLETE	EARNED REVENUE	BILLED TO DATE	% BILLED	OVER/UNDER BILLED	UNBILLED CONTRACT AMOUNT
HOTEL	The Beach Hotel and Condominiums (Warner Street)	\$39,715,457.00	0.30 %	\$119,918.33	\$0.00	0.00 %	\$(119,918.33)	\$39,715,457.00
HOTELCP	The Beach Hotel and Condominiums (Golden Street)	\$39,715,457.00	0.00 %	\$0.00	\$0.00	0.00 %	\$0.00	\$39,715,457.00
HOTELRT	The Beach Hotel and Condominiums (Tyler Avenue)	\$39,715,457.00	0.00 %	\$0.00	\$0.00	0.00 %	\$0.00	\$39,715,457.00
HOTELSM	The Beach Hotel and Condominiums	\$39,715,457.00	0.00 %	\$0.00	\$0.00	0.00 %	\$0.00	\$39,715,457.00
ITALIAN	Italian restaurant (Market Street)	\$2,190,759.24	0.00 %	\$0.00	\$0.00	0.00 %	\$0.00	\$2,190,759.24
ITALIAN2	Italian restaurant (Denver Avenue)	\$2,186,984.80	3.00 %	\$65,585.05	\$0.00	0.00 %	\$(65,585.05)	\$2,186,984.80
	Totals:	\$163,239,572.04	0.12 %	\$185,503.38	\$0.00	0.00 %	\$(185,503.38)	\$163,239,572.04



Day 4

Lesson 13: Processing Project Issues and Change Requests

Learning Objectives

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

- Configure project management classes that may be used to ease the creation of project issues
- Define project issue types
- Report project issues
- Convert project issues to change requests
- Convert project issues to requests for information
- Mass-assign project issues to owners

Project Issue: Implementation Activity

Story

Suppose that you, a system administrator of a construction company, ToadGreen Building Group, need to define the types of project issues for the company. You need to track design issues, violations of safety regulations, and problems with equipment, materials, or people. You also need to configure a project management class that is going to be used for creating project issues.

Project Issue: To Create a Change Request from a Project Issue

Story

Suppose that on 3/21/2022, a design issue has occurred on the construction site of the Beach Hotel and Condominiums project that the ToadGreen company is working on: A subcontractor put a hole in a wall when stacking materials. The project engineer has reported that one day is necessary to fix the issue, and it will cost \$200.

Acting as a ToadGreen construction project manager, you need to create the project issue in the system, and then convert it to a change request.

Figure: Project issue that has been converted to a change request

Project Issue

IS-000002 - The Beach Hotel and Condominiums (Warner Street)

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Summary:	Hole in the wall needs to be patched				
* Project Issue ID:	IS-000002 🔍	Priority:	Medium	Project Issue Type:	Accident
Project:	HOTEL - The Beach Hotel and C	Status:	Converted to CR		<input checked="" type="checkbox"/> Schedule Impact
Project Task:		Created On:	3/21/2022 9:00 AM	Schedule Impact (days):	1
Class ID:	FIELD - Field reports and project ✎	Created By:	Ellen Watson		<input checked="" type="checkbox"/> Cost Impact
Related Entity:	🔍 ✎	Owner:	Ricky Thompson	Cost Impact:	2,000.00
Converted To:	000002	Workgroup:			
Due Date:	3/28/2022	Resolved On:			

DETAILS ACTIVITIES ATTRIBUTES DRAWINGS

Subcontractor put a hole in the wall when stacking materials, and the hole needs to be patched and finished as soon as possible

Lesson 14: Processing Requests for Information

Learning Objectives

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

- Create and process a new request for information
- Create a new request for information that relates to another request for information
- Create a change request from a request for information
- Mass-assign owners to requests for information

Requests for Information: To Process an Outgoing Request for Information

Story

Suppose that the ToadGreen company is building a hotel for the Equity Group Investors customer. Then suppose that the customer has requested a specification for the hotel roofing. In order to provide this specification, the ToadGreen project engineer (Ricky Thompson) needs to request these specifications from Balaji Rajan, an engineer of the subcontractor company that performs this part of the work for the project.

Acting as the ToadGreen project engineer, you need to create an incoming request for information from the subcontractor, and then create the related outgoing request for information for an external engineer who can provide the requested specifications. After the specifications are received, you send them to a project engineer for review.

RF-000002 - The Beach Hotel and Condominiums (Warner Street)

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* Project:	HOTEL - The Beach Hotel an 🔍	* RFI ID:	RF-000002 🔍
Project Task:	🔍	* Creation Date:	2/15/2022 ▾
Business Account:	🔍	Created By:	Jerry Wagner
* Contact:	Balaji Rajan 🔍	Owner:	Ricky Thompson 🔍
* Class ID:	DOCRFI - Construction RFI d 🔍 ✎	Answer Due Date:	2/17/2022 ▾
* Summary:	Need specifications on hotel roofing		

<input type="checkbox"/> Incoming	Workgroup:	🔍
Link to Incoming RFI:	RF-000001	<input type="checkbox"/> Schedule Impact
Status:	New	<input type="checkbox"/> Cost Impact
Reason:	N/A	<input checked="" type="checkbox"/> Design Change
Priority:	High 🔍	
Documentation Link:	🔍	
Spec. section:	🔍	
Converted From:		Converted To:

DETAILS ATTRIBUTES ACTIVITIES RELATIONS DRAWINGS

Question

VISUAL ▾ ↺ ↻ Paragraph ▾ **B** *I* U ▾ A ▾ ✎ ▾ ☰ ▾ ☰ ▾ ☰ ▾ ☰ ▾

Please provide the hotel roofing specifications.

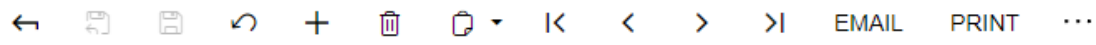
Figure: Outgoing request for information

Requests for Information: To Create a Request for Information from a Project Issue

Story

Suppose that a design issue has been discovered on the construction site of the Beach Hotel and Condominiums, a project that the ToadGreen company is working on: Because of the unstable terrain, the paving should be placed differently. The engineer has reported that the issue will take three days to be resolved and it will cost \$60,000.

Acting as a construction foreman, you need to enter the project issue in the system, and then you need to clarify which paving material needs to be used by processing a request for information for the project issue.



* Project:	HOTEL - The Beach Hotel an	* RFI ID:	RF-000003
Project Task:		* Creation Date:	2/15/2022
Business Account:	SUNTECH - Suntech Concret	Created By:	Ernest P. Smith
* Contact:	Ally Ralts	Owner:	Ricky Thompson
* Class ID:	DOCRFI - Construction RFI d	Answer Due Date:	2/17/2022
* Summary:	Paving should be replaced		
<input type="checkbox"/> Incoming	Workgroup:	<input type="checkbox"/> Schedule Impact	
Status: New	Schedule Impact (days):	<input checked="" type="checkbox"/> Cost Impact	3
Reason: N/A	Cost Impact:	<input type="checkbox"/> Design Change	60,000.00
Priority: Medium	Converted To:		
Documentation Link:			
Spec. section:			
Converted From: IS-000003			

DETAILS ATTRIBUTES ACTIVITIES RELATIONS DRAWINGS

Question

VISUAL Paragraph **B** *I* U A ↷

Due to unstable terrain, the paving needs to be laid differently. Refer to the updated site plan. What paving material should be used?

Figure: Request for information created based on the project issue

Lesson 15: Processing Daily Field Reports

Learning Objectives

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

- Create and assign an approval map for daily field reports
- Create a daily field report
- Add to the daily field report the following entities: labor time and activities, change requests, change orders, subcontractor activities, project issues, weather conditions, site visitors
- Email the daily field report

Daily Field Reports: To Configure Approval for Daily Field Reports

Story

Suppose that the ToadGreen company needs to keep daily field reports in the system. These reports need to be approved by managers. Acting as a system administrator, you need to create the approval map for the daily field reports and specify the daily field report settings in the system.

Daily Field Reports: Process Activity

Story

Suppose that on February 15, 2022, Ernest Smith, a construction foreman in the ToadGreen company, spent a day on the construction site of the Italian restaurant that the company is building for the Italian Company. During the day, he has submitted a change order and made notes about subcontractor activities, weather conditions, visitors, and other information. Also, he has taken photos to support his report about weather conditions. At the end of the day, Ernest creates a daily field report, adds notes, and sends the daily field report for approval to the project manager.

Acting as the construction foreman, you will create and process the daily field report and add all needed information to it.

Figure: Daily field report submitted for approval

Daily Field Report

DFR-000001 - Italian restaurant (Denver Avenue)

NOTES FILES

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* DFR ID:	<input type="text" value="DFR-000001"/>	Project:	<input type="text" value="ITALIAN2 - Italian restaurant (De"/>	Site Address:	<input type="text" value="1812 Denver Avenue"/>
Status:	<input type="text" value="Completed"/>	Project Manager:	<input type="text" value="Ellen Watson"/>	City:	<input type="text" value="San Francisco"/>
DFR Date:	<input type="text" value="2/15/2022"/>	Created By:	<input type="text" value="epsmith - Ernest P. Smith"/>	Country:	<input type="text" value="US - United States of America"/>
				State:	<input type="text" value="CA - CALIFORNIA"/>
				Postal Code:	<input type="text" value="94102"/> VIEW ON MAP
				Latitude:	<input type="text"/>
				Longitude:	<input type="text"/>

LABOR TIME AND ACTIVITIES CHANGE REQUESTS CHANGE ORDERS SUBCONTRACTORS PROJECT ISSUES PHOTO LOGS NOTES EQUIPMENT WEATHER VISITORS EMPLOYEE EXPENSES **APPROVALS**

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🗑️	🗑️	Assignee ID	Assigned To	Workgroup	Approved by (ID)	Approved By	Approval Date	Status	Reason
>	🗑️	EP00000033	Ellen Watson		EP00000033	Ellen Watson	11/26/2021	Approved	

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Thank you

**Candice Francis &
Thomas Martin**