# Acumatica

The Cloud ERP

# V310 Construction Project Management

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#### **Timing and Agenda**

May 7, 2024 -10 AM -12 PM

Day 1

Lesson 1: Preparing WIP and Bonding Reports

Lesson 2: Configuring Two-Tier Change Management

Lesson 3: Tracking Cost Changes to Projects

Lesson 4: Tracking Cost and Revenue Changes to Projects

**Lesson 5: Preparing Cost Projections** 

May 8, 2024 -10 AM -12 PM

Day 2

Lesson 6: Tracking Compliance and Lien Waivers

Lesson 7: Using Project Issues and Change Requests

Lesson 8: Working with Requests for Information



## **Timing and Agenda**

May 9, 2024 -10 AM -12 PM

Day 3

Lesson 9: Using Drawing Logs

Lesson 10: Working with Photo Logs

Lesson 11: Working with Daily Field Reports and Progress Worksheets

Lesson 12: Processing Submittals





#### Lesson 1.1: Create a Batch

#### **Learning Objectives**

- Print and send substantiated billing 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 work-in-progress and 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



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

#### Story

Suppose that the ToadGreen Building Group company is building a hotel for The Equity Group Investors, 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 determine whether the project is overbilled or underbilled relative to its progress



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

## ToadGreen

		_		Actual								
Projected Cost at Completion	Est. Gross Profit	Est. Gross Profit %	Period Costs	Costs to Period	% Budget Used	% Completed	Period Billings	Billings to Period	Revenue Recognized	Gross Profit	Billings in Excess of Cost	Cost in Excess of Billings
29,541,929.71	10,173,527.29	25.62 %	7,568,171.52	7,650,371.52	25.62 %	25.62 %	0.00	0.00	10,174,467.05	2,606,295.53	0.00	10,174,467.05
29,541,929.71	10,173,527.29	25.62 %	7,568,171.52	7,650,371.52	25.62 %	25.62 %	0.00	0.00	10,174,467.05	2,606,295.53	0.00	10,174,467.05



## **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 May 2024, and which projects 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 May**

CONSTRUCTION BONDING REPORT							1	TL To	adCroo					
Company/Branch Status Actuals to Period	TOADGREEN Active 05-2024	Exclude Projects ( Use Cost Projection	Completed Through Date	- No					adGree	n				
PROJECT	DESCRIPTION	PROJECT CURRENCY	CONTRACT AMOUNT	% COMPLETE	EARNED REVENUE	BILLED TO DATE	% BILLED	OVER/UNDER BILLED	UNBILLED CONTRACT AMOUNT	COST TO DATE	COST TO COMPLETE	COST AT COMPLETION	PERIOD BILLINGS	PERIOD COSTS
HOTEL	The Beach Hotel and Condominiums (Warner Street)	USD	39,715,457.00	43.05 %	17,099,417.42	22,667,202.71	57.07 %	5,567,785.29	17,048,254.29	12,719,223.84	0.00	12,719,223.84	16,205,604.62	5,068,852.32
HOTELCP	The Beach Hotel and Condominiums (Golden Street)	USD	39,715,457.00	42.60 %	16,920,180.44	7,635,067.24	19.22 %	(9,285,113.20)	32,080,389.76	12,580,574.84	0.00	12,580,574.84	7,219,630.64	3,073,852.32
HOTELR	The Beach Hotel and Condominiums (Parkways East)	USD	39,715,457.00	43.08 %	17,108,349.05	0.00	0.00 %	(17,108,349.05)	39,715,457.00	12,725,867.54	0.00	12,725,867.54	0.00	3,073,852.32
HOTELRT	The Beach Hotel and Condominiums (Tyler Avenue)	USD	39,715,457.00	42.22 %	16,768,646.64	7,635,067.24	19.22 %	(9,133,579.40)	32,080,389.76	12,467,905.69	0.00	12,467,905.69	7,219,630.64	1,785,852.32
HOTELSM	The Beach Hotel and Condominiums	USD	39,715,457.00	42.79 %	16,994,264.91	12,807,479.84	32.25 %	(4,186,785.07)	26,907,977.16	12,641,007.24	0.00	12,641,007.24	2,000,919.63	3,213,352.32
ITALIAN	Italian restaurant (Market Street)	USD	2,186,984.80	60.17 %	1,315,967.63	0.00	0.00 %	(1,315,967.63)	2,186,984.80	1,014,388.84	0.00	1,014,388.84	0.00	120,652.32
ITALIAN2	Italian restaurant (Denver Avenue)	USD	2,186,984.80	22.17 %	484,794.67	0.00	0.00 %	(484,794.67)	2,186,984.80	919,452.84	0.00	919,452.84	0.00	15,852.32
ITALIAN3	Construction project (Italian Restaurant)	USD Totals:	2,186,984.80 205,138,239.40	0.00 % 41.93 %	0.00 86,691,620.77	0.00 50,744,817.03	0.00 % 24.74 %	0.00 (35,946,803.74)	2,186,984.80 154,393,422.37	0.00 65,068,420.83	0.00 0.00	0.00 65,068,420.83	0.00 32,645,785.53	0.00 16,352,266.24



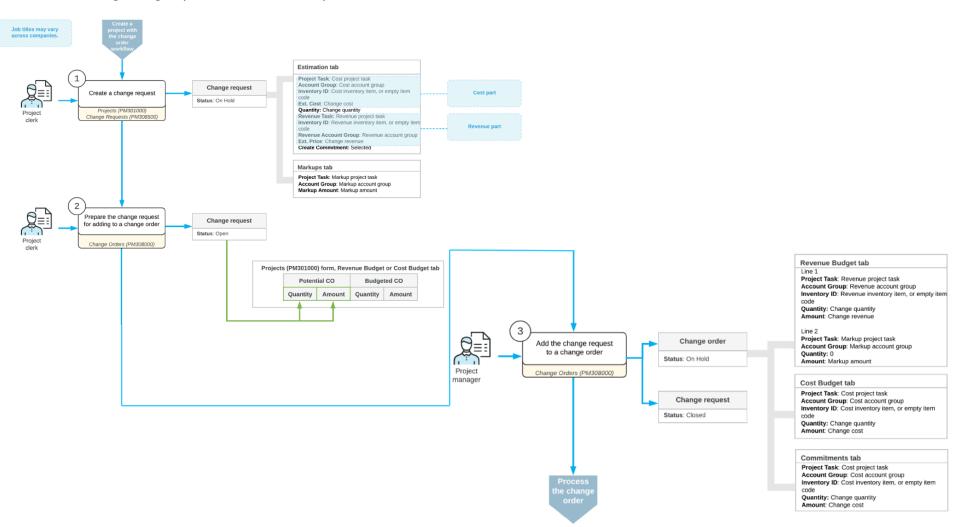
## Lesson 2: Configuring Two-Tier Change Management

#### **Learning Objectives**

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



#### Processing a change request with cost and revenue part



## **Two-Tier Change Management: 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
- A markup of 8% of the total costs to be applied to an entire change request
- A markup of 4% of overhead to be applied to an entire change request
- A markup of 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 configure an additional 10% markup to be automatically applied to the change request lines that relate to labor. Acting as the system administrator, you will perform these tasks.



## **Two-Tier Change Management: To Configure Project Markups**

#### Story

Suppose that you, as the project manager need to configure the following price markups to be applied to change requests created for the ITALIAN project:

- A markup of 9% of the total costs to be applied to an entire change request
- A markup of 6% of overhead to be applied to an entire change request
- A markup of 7% of all the previously charged markups to be applied to an entire change request
- A flat fee of \$1250 per change request

Also, you need to associate these markups with the particular project task, account group, and cost code to track

them in the revenue budget of the project. Acting as the project manager, you will perform these tasks.



## Lesson 3: Tracking Cost Changes to Projects

This lesson explains how you can process cost changes for construction projects.



#### Story

Suppose that ToadGreen is a general contractor building an Italian restaurant for the Italian Company, its customer.

The ToadGreen project manager 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. Further suppose that on March, 21, 2024, an on-site worker found out that the wet subfloor in the building needs to be dried, cleaned, and aired out, and this worker has notified the project manager about this.

After reviewing the damages, the project manager has decided to hire a subcontractor, Acme Doors & Glass, to perform this work. The subcontractor notifies the project manager that four working days are needed for completing the cleaning. The customer for which the project is being performed did not approved the changes because the damages were the workers' fault.

Acting as the project manager, you need to reflect the additional work in the cost project budget and cancel the changes in the revenue budget.



## Figure: Budgeted amounts updated after the release of the change order

Project ID: Customer:		LIAN - Italian restaur COM - Italian Compa		Actual Inco Actual Exp		0.00										
Template:	CO	NTM - Construction p	project (time and i 🧷	Margin:	-	1,030,241.16	%:	0.00								
Description:	Itali	an restaurant (Marke	et Street)													
SUMMARY TASKS	REVENU	E BUDGET CO	ST BUDGET BALANCES COMMITMENT	S INVOICES CHA	NGE ORDERS	CHANGE REQU	ESTS UNIO	N LOCALS	ACTIVITIES	EMPLOYEES	EQUIPMENT	ADDRESSES	DEFAULTS	ATTRIBUTES	S MAILING	& PRINTIN
	neveno			0 11101020 0111		on more near	2010 0110	11 200,120		201220	E GOT MENT	7.007.0020	DEMOETO		5 10/42/110	arran
Project Task:			P Group by Task													
じ + × VIE	W COMMITM	ENT DETAILS V	/IEW TRANSACTIONS ⊣ 🗵 1												All Records	
Project Task	Cost	*Account Group	Description	Original UOM	Unit Rate	<ul> <li>Original</li> </ul>	Revised	Revised	Original	Original	Actual	Actual	Potential CO	Potential CO	Budgeted	Budg
	Code			Budgeted Quantity		Budgeted Amount	Budgeted Quantity	Budgeted Amount	Committed Quantity	Committed Amount	Quantity	Amount	Quantity	Amount	CO Quantity	CO An
❶ □ 01	01-505	TRAVEL	Mobilization	1.00 EA	5,000.0000	5,000.00	1.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(
l D 01	01-510	MISC	Telephone	1.00 EA	950.0000	950.00	1.00	950.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0 🗋 01	01-600	MISC	Insurance	1.00 EA	7,500.0000	7,500.00	1.00	7,500.00	0.00	0.00	0.00	77,256.96	0.00	0.00	0.00	
	01-900	LABOR	Clean up	1.00 EA	10,000.0000	10,000.00	2.00	11,000.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1,00
0 🗋 02	02-200	SUBCON	Site- Preparation	0.00	0.0000	0.00	0.00	0.00	0.00	35,000.00	0.00	35,000.00	0.00	0.00	0.00	
0 🗋 02	02-310	SUBCON	Earthwork- Cut and Fill	0.00	0.0000	0.00	0.00	0.00	0.00	16,315.00	0.00	16,315.00	0.00	0.00	0.00	(
l D 03	03-100	MATERIAL	Concrete- Forming	1,500.00 EA	2.0000	3,000.00	1,500.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l D 03	03-100	SUBCON	Concrete- Forming	30.00 EA	40.0000	1,200.00	30.00	1,200.00	1.00	20,000.00	1.00	20,000.00	0.00	0.00	0.00	
0 🗋 03	03-200	MATERIAL	Concrete- Reinforcing	7,000.00 EA	2.5000	17,500.00	7,000.00	17,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(
0 🗋 03	03-200	SUBCON	Concrete- Reinforcing	50.00 EA	75.0000	3,750.00	50.00	3,750.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0 🗋 03	03-300	MATERIAL	Concrete- CIP Slab	775.00 EA	100.0000	77,500.00	775.00	77,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l D 03	03-300	SUBCON	Concrete- CIP Slab	40.00 EA	50.0000	2,000.00	40.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l D 03	03-304	SUBCON	Concrete- Column Footings and Pile Caps	0.00	0.0000	0.00	0.00	0.00	0.00	40,800.00	0.00	40,800.00	0.00	0.00	0.00	
l D 03	03-309	SUBCON	Concrete- Stairs	0.00	0.0000	0.00	0.00	0.00	0.00	19,000.00	0.00	19,000.00	0.00	0.00	0.00	
0 □ 03	03-350	MATERIAL	Concrete- Finishes	7,000.00 EA	1.2000	8,400.00	7,000.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	03-350	SUBCON	Concrete- Finishes	16.00 EA	40.0000	640.00						0.00	0.00	0.00	0.00	_



## Lesson 4: Tracking Cost and Revenue Changes to Projects

This lesson explains how you can process cost and revenue changes for construction projects.



#### 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 April, 15, 2024, 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 in June, you will process the revenue change order to record the revenue.



## Figure: The updated potential amount and quantity in the project

Projects ITALIAN - Italian restaurar ら こ ゆ +	nt (Market Street) ₪ I< < 2		PROJECT BILL	ING ····									
* Project ID: Customer: Template:	ITALIAN - Italian restaura ITACOM - Italian Compar CONTM - Construction pr	ny D D roject (time and I D		Actual Income: Actual Expenses: Margin:	0.00 1,030,241.16 -1,030,241.16	%:	0.00						
Description:     SUMMARY TASKS REV     Project Task:	Italian restaurant (Market	STREET BALANCES COMMITMENT	TS INVOICE	S CHANGE ORDERS	CHANGE REQUES	TS UNIO	N LOCALS	ACTIVITIES	EMPLOYEES	EQUIPMENT	ADDRESSES	DEFAULTS	ATTRIBUTES
C     +     X     VIEW COMI       ≅     □     * Project Task     Cost       Code     Code	* Account Group	EW TRANSACTIONS HI 🗹 1	Original Budgeted Quantity	UOM Unit Rate	Original Budgeted Amount	Revised Budgeted Quantity	Revised Budgeted Amount	Original Committed Quantity	Original Committed Amount	Actual Quantity	Actual Amount	Potential CO Quantity	Potential CO Amount (
0 08 08-1		Doors- Exterior	8.00		8,000.00	8.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
0 08 08-1		Doors- Exterior	28.00		1,400.00	28.00	1,400.00	0.00	0.00	0.00	0.00	20.00	1,040.00
0         □         08         08-2           0         □         08         08-2		Doors- Interior	9.00		6,750.00	9.00	6,750.00	0.00	0.00	0.00	0.00	0.00	0.00
0         0.8         08-2           0         0.8         0.8-4		Doors- Interior Doors- Overhead	30.00		1,500.00	30.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
© □ 08 08-4		Doors- Overhead	16.00		800.00	16.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
0 0 08 08-5		Windows- Wood	30.00		15,750.00	30.00	15,750.00	0.00	0.00	0.00	0.00	0.00	0.00
0 08 08-5		Windows- Wood	90.00	EA 50.0000	4,500.00	90.00	4,500.00	0.00	0.00	0.00	0.00	17.00	850.00
0 0 08 08-8	300 MATERIAL	Entrances, Storefronts, Curtain Walls	1.00	EA 24,500.0000	24,500.00	1.00	24,500.00	0.00	0.00	0.00	0.00	0.00	0.00
0 08 08-6	SUBCON	Entrances, Storefronts, Curtain Walls	80.00	EA 100.0000	8,000.00	80.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00



## **Lesson 5: Preparing Cost Projections**

#### Learning Objectives

- Configure a cost projection class
- Create a cost projection for a project
- Create a new revision of a cost projection
- Estimate the costs of a project at a different level of detail
- Review the projected costs in a project budget



### **Project Cost Projections: To Create a Cost Projection Class**

#### Story

Suppose that you are the construction project manager of the ToadGreen Building Group company, and you need to create a cost projection class to be used for estimating the costs of a project. The cost projection class must provide the ability to estimate the costs at the task, item, and account group level of detail.



## **Project Cost Projections: Process Activity**

#### 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 project manager analyzes the current project state and notices the following:

• For the purchases of concrete and on-site work for the project, \$6,200 has to be spent; after that, the work will be finished, and the corresponding project tasks will be considered as completed.

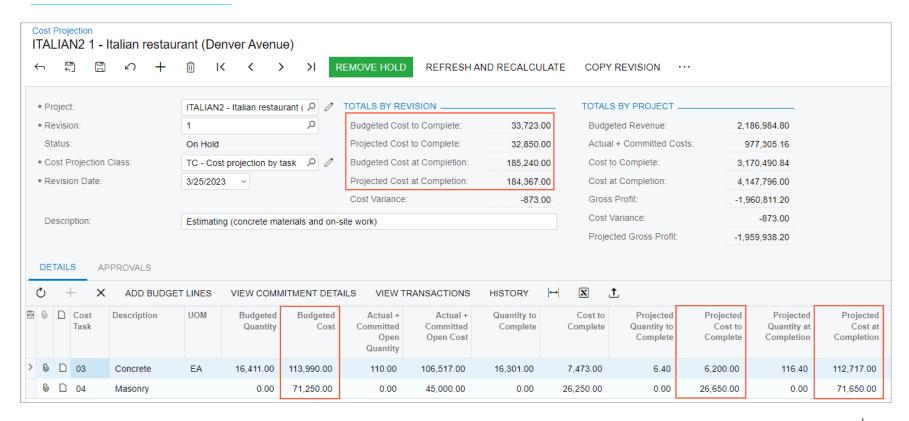
• For the masonry work, \$26,650 has to be spent to complete the on-site work. The project manager wants to know the exact details of the costs to be incurred for the completion of the task.

In response to the project manager's request the ToadGreen project estimator needs to analyze the current state of the project and estimate how the planned expenses will affect the project budget. Then the project estimator should prepare a construction bonding report with the projected amounts related to masonry work.

Acting as the project estimator, you will prepare a cost projection revision for the project.



## Figure: The prepared cost projection revision







## **Lesson 6: Tracking Compliance and Lien Waivers**

#### **Learning Objectives**

- Configure categories and statuses for compliance documents
- Enter compliance documents for a vendor
- Track expired compliance documents



#### **Compliance Documents: To Configure Attributes for Compliance Documents**

#### Story

Suppose that the ToadGreen company needs to keep track of the insurance documents and certificates in the system. Acting as a ToadGreen system administrator, you need to specify the values for the custom attributes of the Insurance, Certificate, and Status compliance type, so that users can specify their values for the compliance documents.



## **Compliance Documents: To Track Compliance Documents for a Vendor**

#### Story

Suppose that the Standard Hardware Company vendor has provided the ToadGreen company with its OSHA certificate and its general liability insurance. Acting as a construction project manager, you need to enter this information in the system.



#### **Lien Waivers: General Information**

#### **Learning Objectives**

- Configure the automatic generation of conditional lien waivers
- Configure the automatic generation of unconditional lien waivers
- Specify actions to be performed for outstanding lien waivers
- Manually add a lien waiver for a document
- Mark a lien waiver as the final one
- Print and email lien waivers



## Lien Waivers: To Configure Automatic Generation of Lien Waivers

#### Story

Suppose that the ToadGreen company requires conditional lien waivers to be automatically generated when payments of an amount greater than \$2000 are submitted. Acting as a system administrator, you need to configure the mailing and automatic generation of lien waivers. Then you need to configure the automatic generation of lien waivers for a particular vendor.



## Lien Waivers: To Process an AP Document with Lien Waivers

#### Story

Suppose that the ToadGreen company needs to pay a bill to a subcontractor, the Architectural Design Company.

Acting as a project manager, you need to enter a subcontract, create and pay the bill in the system, and make sure that the related lien waiver has been generated and sent to the subcontractor.



## Figure: The lien waiver generated for the payment

Checks and Payments Payment 000029 - Architectural Design Com	npany	
← □ □ · · K	✓ > > HOLD PRINT/PROCESS ····	
Type: Payment Vendor:	ARCHCO - Architectural Design Company 🧷 Payment Amount:	50,000.00
Reference Nbr.: 000029 , A * Location:	MAIN - Primary Location $\ensuremath{\mathcal{P}}$ Unapplied Balance:	0.00
Status: Pending Print Joint Payee N	Application Amount:	50,000.00
* Application Date: 2/15/2024 🗎 * Payment Meth	CHECK $\mathcal{P}$ Finance Charges:	0.00
* Application Pe 02-2024 , A * Cash Account:	10200TG - ToadGreen Checking Acco $~\mathcal{P}$	
Payment Ref.: Description:	Purchase of concrete for the Hotel project	
DOCUMENTS TO APPLY     APPLICATION HISTORY       C + X     LINE DETAILS     SET AS FINAL	FINANCIAL REMITTANCE CHARGES COMPLIANCE	
Image: State of the state o		eated Sent Project Cost Cost Customer matic Date Task Code
> 0 D Lien Waiver 2/15/2024		☑ <u>HOTEL</u> <u>02</u> <u>02-000</u> <u>EQUGRP</u>



## **Lesson 7: Using Project Issues and Change Requests**

#### Learning Objectives

- 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 Issues: 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 so that the due date for resolving a newly created project issue will be set to seven days by default.



## **Project Issues: To Create a Change Request from a Project Issue**

#### Story

Suppose that on 3/21/2024, 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 \$2000.

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

S S 4	û û ~ K <	>	>I REOF	PEN PRINT PRO	DJECT ISSUE		
Summary:	Hole in the wall needs to be patch	hed					
Project Issue ID:	IS-000002 ,0		Priority:	Medium		Project Issue Type:	Accident
Project:	HOTEL - The Beach Hotel and C		Status:	Converted to CR			Schedule Impact
Project Task:			Created On:	3/21/2024	9:00 AM	Schedule Impact (days):	1
Class ID:	FIELD - Field reports and project	0	Created By:	Ellen Watson			Cost Impact
Related Entity:	Q,	0	Owner:	Ellen Watson		Cost Impact:	2,000.00
Converted To:	000003		Workgroup:				
Due Date:	3/28/2024		Resolved On:				
DETAILS ACTIVITIE	ES ATTRIBUTES DRAWI	NGS					



## **Lesson 8: Working with Requests for Information**

#### Learning Objectives

- 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



### **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.



## **Figure: Outgoing request for information**

ς [] [] ν	+ 🔟	Ô∙ K	<	>	ы	EMAIL	PRINT			
Project:	HOTEL - The E	Beach Hotel an 🔎		* RFI ID			RF-000002	2	Q	
Project Task:		Q		* Creati	on Date:		2/15/2024	Ö		
Business Account:		Q		Create	ed By:		Jerry Wagi	ner		
Contact:	Balaji Rajan	Q		Owner	-		Ricky Thor	npson	Q	
Class ID:	DOCRFI - Con	struction RFI d 🔎	Ø	Answe	er Due D	ate:	2/17/2024		Ö	
Summary:	Need specifica	itions on hotel roofi	ng							
	Incoming			Workg	roup:				Q	
Link to Incoming RFI:	RF-000001						Schedule	e Impact		
Status:	New						Cost Imp	act		
Reason:	N/A						🗹 Design C	hange		
Priority:	High	Q								
Documentation Link:										
Specification Section:										
Converted From:				Conve	rted To:					
DETAILS ATTRIBUTES ACTIVITIES RELATIONS DRAWINGS Question VISUAL $\cdot \circ \circ$ $\circ$ Paragraph $\cdot B$ $I$ $U \cdot A \cdot \circ \cdot = \cdot = \cdot = \cdot = \cdot = \cdot \circ \circ \cdot \circ \circ \circ \circ$										



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.



## Figure: Request for information created based on the project issue

Request for Information RF-000003 - The Be	each Hotel and Condomir	niums	s <mark>(W</mark> arner Str	reet)				
< ⊂ □ □ ∽	+ 🗓 🗘 🗸 K	<	> >	EMAIL	PRINT ··			
* Project:	HOTEL - The Beach Hotel an $ \mathcal{P} $		* RFI ID:		RF-000003		Q	
Project Task:	Q		* Creation Date:		2/15/2024 📋			
Business Account:	SUNTECH - Suntech Concret $P$		Created By:		Ernest P. Smith			
* Contact:	Ally Ralts O		Owner:		Ricky Thompson	n	Q	
* Class ID:	DOCRFI - Construction RFI d $ \mathcal{P}$	0	Answer Due Da	ite:	2/17/2024		$\square$	
* Summary:	Paving should be replaced							
			Workgroup:				Q	
Status:	New				Schedule Imp	act		
Reason:	N/A		Schedule Impac	ct (days):	3			
Priority:	Medium ${\cal P}$				Cost Impact			
Documentation Link:			Cost Impact:		60,000.00			
Specification Section:					Design Chang	e		
Converted From:	<u>IS-000003</u>	1	Converted To:					
DETAILS ATTRIBUT	ES ACTIVITIES RELATIO	ONS	DRAWINGS					
Question VISUAL - M	▶ Paragraph ▼ <b>B</b> I	U	• <u>A</u> • <i>O</i>	• =	• <u>1</u> = :=	ē E	Q	INSERT
Due to unstable terrain, What paving material sh	the paving needs to be laid differen would be used?	itly. Re	efer to the updated	l site plan.				





## Lesson 9: Using Drawing Logs

#### Learning Objectives

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

- Configure drawing logs and set up disciplines and statuses
- Create drawing logs
- Upload and download images linked to drawing logs
- Link requests for information and project issues to existing drawing logs
- Email drawings and requests for information
- Create revisions of drawing logs



## **Drawing Logs: Implementation Activity**

#### Story

Suppose that the ToadGreen company needs to maintain drawing logs in the system and track their statuses.

Acting as a system administrator, you need to perform the necessary configuration in the system.



### **Drawing Logs: Process Activity**

#### Story

Suppose that the ToadGreen architect has prepared a floor plan blueprint for the Beach Hotel and Condominiums, the project that the ToadGreen company is working on. Then the architect has submitted a request for information about the plan of the first floor to make sure that the current location of the storage room (next to the service elevator) is correct. Based on the submitted request for information of the blueprint should be created and linked to the original drawing, and the original blueprint must be marked as obsolete.

Acting as the architect, you will process all required documents in the system with the assumption that these changes will not affect the schedule, cost, and design.



# Figure: The new revision of the drawing log

Drawing Log DL-000004 - The Beach Hotel and Condominiums (Warner Street)										
∽ ฺ □ ∽ + □ ĵ • K	X > > EXPORT DRAWING LOG EMAIL C	REATE REVISION								
* Drawing Log ID: DL-000004 ,P	Drawing Number: 1									
Project: HOTEL - The Beach Hotel and C	* Revision: 1									
Project Task:	* Drawing Date: 3/15/2024									
Discipline: Architectural	Received Date: 3/15/2024									
Owner: Ellen Watson ${\cal P}$	* Status: Active ,0									
	Current									
* Title: Floor plan										
Description: Revised floor plan blueprint										
Sketch:										
Original Drawing: <u>DL-000003</u>										
DRAWINGS ATTRIBUTES ACTIVITIES REVISIONS RELATIONS										
File Name	Comment	Current Created By								
Floor_Plan_Revision_2.jpg		Richard Smith								



## Lesson 10: Working with Photo Logs

#### Learning Objectives

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

- Create a photo log
- Upload photos to a photo log
- Update a photo that has been uploaded to a photo log
- Download a ZIP archive with all the photos and files of a photo log
- Send an email with all the photos and files of a photo log



## **Photo Logs: Implementation Activity**

#### Story

Suppose that the ToadGreen company needs to keep photo logs in the system. Acting as a system administrator, you need to define the statuses to be used for photo logs.



### **Photo Logs: Process Activity**

#### Story

Suppose that on February 15, 2024, the construction foreman has inspected the project site and taken progress photos. Acting as the construction foreman, you will create a photo log for the particular project and project task and upload the photos to this photo log. Then you will send the photos to the responsible person.



## Figure: Photo log with uploaded photos

	- The Beach Hotel and Cond		arner Street) > >I ····				
Photo Log ID:	PL-000001	* Status:	In Progress		Created By: epsm	nith - Ernest P. Smith	
* Date:	3/15/2024						
* Project:	HOTEL - The Beach Hotel an $\mathcal{P}$						
Project Task:	02 - SITEWORK D						
Description:	Problem with the drainage system						
PHOTOS	ACTIVITIES						
		Drag	files here or click t	o upload.			and with the second
С×	UPLOAD PHOTOS FROM ATTACHME	ENTS  ↔ 🕱	0		All Records	• 7	
🖹 🗋 * Photo ID	Name		Description	Uploaded On	Uploaded By	Main Photo	
	01 Photo Log Concrete Hea	dwall.ipg		3/15/2024	epsmith		the second second second
D <u>PH-0000</u>		11.0					
<ul> <li>PH-0000</li> <li>PH-0000</li> </ul>				3/15/2024	<u>epsmith</u>		
	02 Photo_Log_Culvert.jpg			3/15/2024 3/15/2024	<u>epsmith</u> <u>epsmith</u>		



#### 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: progress worksheets, labor time and activities, change orders, change requests, 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, 2024, 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 recorded the current progress of the work related to electricity installation and made notes about subcontractor activities, weather conditions, visitors, and other important information that relates to the day's work at the project site. 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 construction project manager.

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



## Figure: Daily field report submitted for approval

	FR-0		Italian res	staurant (Denver	Avenue)										
			の +	× © ₪ ب	Project:	ITALIAN2 - Italian resta	INT DAILY FIEL	D REPORT Site Address:	 1812 Denve	ar Avenue		Temperature:		0.00	
	Status:		Completed	Ĵ,	Project. Project Manager			City:	San Franciso			Humidity(%):		0.00	
	DFR Da	ate:	4/15/2024		Created By:	epsmith - Ernest P. Sm	nith	Country:	US - United S	States of Am	erica ${\cal P}$	Time Observed	t:	4:30 PM	
								State:	CA - CALIFO	RNIA	Q				
								Postal Code:	94102	VIEW	ON MAP				
								Latitude:							
								Longitude:							
	LABOF	R TIME AND	ACTIVITIES	PROGRESS WO	ORKSHEETS CHA	ANGE REQUESTS	CHANGE ORDER	RS SUBCO	NTRACTORS	PROJECT	ISSUES	PHOTO LOGS	NOTES	EQUIPMENT	WEATHER
(	$\circ$ + $\times$ $\mid$ $\mid$ $\mathbf{X}$														
8	0 🗅	Assignee	ID	Assigned To	Work	group	Approved by (ID	) Approv	ed By		Approval Date	Status	Reason		
>	0	EP00000	033	Ellen Watson			EP0000033	Ellen \	Vatson		11/7/2023	Approved			



### **Lesson 12: Processing Submittals**

#### Learning Objectives

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

- Configure submittal types
- Create a submittal in the system
- Define the people that will take part in processing a submittal and their submittal roles
- Process submittal-related activities
- Create a new revision of a submittal
- Close the completed submittal



## **Submittals: Implementation Activity**

#### Story

Suppose that the ToadGreen company needs to track submittals. Also, the construction project manager wants to be able to categorize the submittals for which photos have been provided, and those for which product samples have been provided. Thus, you need to create these types of submittals in the system. Acting as a system administrator, you need to configure the submittal types to be used for the categorization of submittals in the system.



### **Submittals: Process Activity**

#### Story

Suppose that the ToadGreen Building Group company is building an Italian restaurant for the Equity Group Investors customer. The company needs to confirm that the customer wants to use the carpet being proposed for the dining area of the restaurant.

Ellen Watson, as the construction project manager, is managing the submittal process. Jonathan Stone, the customer's designer, needs to approve a sample of the carpet. Teresa Willis—a new sales manager of Karn Design Inc., for which the construction project manager needs to add a contact in the system—needs to send the carpet sample to Jonathan Stone, who should approve the color and the material of the carpet. Also, the construction project manager needs to send the approved sample for an informational review to Larry Robinson, a purchase manager of the ToadGreen company.

Also suppose that after reviewing the sample, the designer rejects the submittal because a part of the carpet's pattern was cut off; the designer requests a larger sample.

Acting as the construction project manager, you need to create a new contact to be used in the submittal, enter the submittal in the system, open it, and add the necessary information during the processing of the submittal. Then you need to close the submittal and create a new revision for it.



## **Figure: Closed submittal revision**

Submittals SU-000001 - Italian restaurant (Market Street) ← 🖑 🖒 🕫 → I < < > >I PRINT EMAIL OPEN CREATE REVISION ···											
* Revision ID: 0 Project Task: 12			ITALIAN - Italian restaurant (Mari 12 - FURNISHINGS 12-460 - Furnishings– Misc Acce	Date Created: Due Date: Date Required on S Date Closed:	e Date: te Required on Site:						
Submittal Type:     Product Samples     Specification Section:       Summary:     Carpet for the dining area       DESCRIPTION     SUBMITTAL WORKFLOW     ACTIVITIES				Owner: Ball in Court: Days Overdue:	Ellen Wa						
ひ         +         ×             □         Email To	<ul> <li>(→) X (1)</li> <li>*Contact</li> </ul>	Account Name	Job Title		Role	Status	Start Date	Days for	Due Date	Completion Date	
	<u>Teresa Willis</u> Jonathan Stone	Karn Design Inc. The Equity Group Investors	Sales Manager Designer		Submitter Approver	Completed Rejected	11/7/2023 11/15/2023	Review 10 3	11/17/2023 11/18/2023	11/15/2023 11/18/2023	
> 0 D 🗆	Larry Robinson	ToadGreen Building Group		l.	Reviewer	Canceled		3		11/18/2023	





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