

Construction Edition

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# V300 Construction Edition

Training Guide

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# How To Use This Course

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This training course provides a set of lessons that illustrate the processes of construction project management in a midsize company. The course should be completed on an instance of Acumatica ERP 2019 R2 Construction Edition with a training data set preloaded; this data set provides the pre-configured settings and entities you will need as you complete the course.

Each lesson in this guide provides a story describing a particular user scenario and an overview of the relevant functionality. The lesson also provides a brief overview of the process that should be performed to complete the described scenario and instructions that guide you through the process in Acumatica ERP Construction Edition.

The lessons are independent and can be completed in any order. However, depending on the sequence in which you take the course lessons, the values in the screenshots may differ from the values in the system.

Follow these steps to complete the course:

1. Prepare an Acumatica ERP 2019 R2 instance with a tenant, as described in the *How to Create a Tenant with the U100 Dataset* section below.
2. You complete all the lessons of the guide.
3. Take the assessment test at Partner University.
4. Complete course survey at Partner University to finish the course and get the Partner University certificate of course completion.

## What Are the Documentation Resources?

The complete Acumatica ERP documentation is available on <https://help.acumatica.com/> and is included in the Acumatica ERP instance. While viewing any form used in the course, you can click the **Help** button on the top pane to bring up a form-specific help menu; you can use the links on this menu to quickly access form-related concepts and procedures and to open a reference topic with detailed descriptions of the form elements.

## How to Create a Tenant with the U100 Dataset

To add to an existing Acumatica ERP instance the tenant with the U100 dataset, which is required for the completion of this course, perform the following instructions:

1. Go to <https://portal.acumatica.com/construction-edition/acumatica-construction-edition-download/>.
2. In the **Software Downloads** section, download the *Construction Features* and *Construction Reporting* customization packages for your version of Acumatica ERP.
3. In the **Construction Edition Training Materials** section, download the *U100\_for\_Construction.zip* snapshot for your version of Acumatica ERP.
4. Open the Customization Projects (SM204505) form, click **Import**.

5. In the **Open Package** dialog box, select the *ConstructionFeatures* customization package for the Construction Edition, and click **Upload**.
6. Similarly, upload the *ConstructionReporting* customization package for the Construction Edition.
7. Select the Unlabeled check box for both packages.
8. On the form toolbar, click **Publish**.
9. In the **Compilation** window, when the validation is complete, click **Publish**.
10. Close the window when the publishing is complete.
11. On the Enable/Disable Features (CS100000) form, enable the *Construction* and *Construction Project Management* features of the *Project Management* group of features.
12. Open the Tenants (SM203520) form, and click Add New Record on the form toolbar.
13. In the **Login Name** box, type a name to be used for the tenant.
14. On the form toolbar, click **Save**.
15. On the **Snapshots** tab, click **Import Snapshot**.
16. In the **Upload Snapshot Package** dialog box, select the **U100\_for\_Construction.zip**, which you have downloaded, and click **Upload**. The system uploads the snapshot to the **Snapshots** tab of the **Tenants** form.
17. On the form toolbar, click **Restore Snapshot**.
18. If the **Warning** dialog box appears, click **Yes**.
19. In the **Restore Snapshot** dialog box, make sure that the correct snapshot package is being uploaded, and click **OK**.

### Licensing Info

For the educational purposes of this course, you will use Acumatica ERP under the trial license, which doesn't require activation and provides all available features. For production, you have to activate the purchased license; each particular feature may be a subject to additional licensing; please consult the Acumatica ERP sales policy for details.

# Lesson 1: Overview of Projects in Acumatica ERP 2019 R2

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This is a brief overview of the Projects functionality in Acumatica ERP Construction Edition 2019 R2. Detailed information and hands-on exercises on the basic project accounting functionality are provided in the P100 Project Accounting training course.

## Learning Objectives

In this lesson, you will do the following:

- Review the main settings of a project
- Review the project structure
- Review the budget record buckets

## System Preparation

Launch the Acumatica ERP website, and sign in as a project manager by using the *owen* login and *123* password.

## Project Settings

Review the main settings of a project and the project structure; do the following:

1. On the Projects (PM301000) form, select the *ITALIAN* project.
2. Notice that the project's status is *Active*.

With this status, transactions and documents can be recorded on this project.

3. On the **Tasks** tab, notice that all the project tasks have the *Active* status. With this status, transactions and documents can be recorded on those tasks.
4. Review the task type specified in the **Type** column.

A project task with the *Sub Job/Schedule of Values* task type can be selected in the budgets, documents, and transactions that are associated with either cost or revenue aspects of the project.

5. Review the billing settings of the project.
  - Notice that a *billing rule* that determines how progress billing amounts and/or project transactions are billed for the project is specified *at the project task level* providing a very high level of flexibility of project billing configuration. The **Billing Rule** setting on the **Summary** tab of the Projects form determines only the default value for project tasks.

Projects

← SAVE & CLOSE    ↶    +    ⊞    K    <    >    | RUN PROJECT BILLING    CREATE CHANGE REQUEST    CREATE CHANGE ORDER    ACTIONS    INQUIRIES    REPORTS

\* Project ID: ITALIAN    \* Status: Active    Assets: 0.00  
 Customer: ITALIAN01 - The Italian Company    Liabilities: 0.00  
 Template: CONTM - Construction T&M Project    Income: 200,896.25  
 \* Description: Italian Restaurant Project    Expenses: 202,717.00

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

| Task ID | Type                       | Description                     | Rate Table | Allocation Rate | Billing Rule | Status | Completed (%) | Start Date | End Date | Approver | Billing Option    | Tax Category |
|---------|----------------------------|---------------------------------|------------|-----------------|--------------|--------|---------------|------------|----------|----------|-------------------|--------------|
| 01      | Sub Job/Schedule of Values | GENERAL REQUIREMENTS            | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 02      | Sub Job/Schedule of Values | SITWORK                         | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 03      | Sub Job/Schedule of Values | CONCRETE                        | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 04      | Sub Job/Schedule of Values | MASONRY                         | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 05      | Sub Job/Schedule of Values | METALS                          | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 06      | Sub Job/Schedule of Values | WOOD, PLASTICS, COMPOSITES      | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 07      | Sub Job/Schedule of Values | THERMAL AND MOISTURE PROTECTION | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 08      | Sub Job/Schedule of Values | OPENINGS                        | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 09      | Sub Job/Schedule of Values | FINISHES                        | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 10      | Sub Job/Schedule of Values | SPECIALTIES                     | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 11      | Sub Job/Schedule of Values | EQUIPMENT                       | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 12      | Sub Job/Schedule of Values | FURNISHINGS                     | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 13      | Sub Job/Schedule of Values | SPECIAL CONSTRUCTION            | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 14      | Sub Job/Schedule of Values | CONVEYING SYSTEMS               | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 15      | Sub Job/Schedule of Values | MECHANICAL                      | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |
| 16      | Sub Job/Schedule of Values | ELECTRICAL                      | STANDARD   |                 | TM           | Active | 0.00          | 10/11/2019 |          |          | By Billing Period |              |

- The project is invoiced to the *ITALIAN01* customer that is specified in the Summary area of the Projects form.

- On the **Summary** tab, **Billing Period** is set to *Month*, which means that **Next Billing Date** is auto-incremented by a month after every run of the project billing process.

A billing period can be specified for a new project and cannot be changed afterwards.

With the *On Demand* billing period, **Next Billing Date** is not auto-incremented, and you can edit the value at any time.

- With the **Create Pro Forma on Billing** check box selected, the project billing process creates a pro forma invoice instead of directly creating an AR invoice and skipping the pro forma document. A pro forma invoice can be created only by the project billing process.

The screenshot shows the 'Projects' form in Acumatica ERP. The top navigation bar includes 'SAVE & CLOSE', 'RUN PROJECT BILLING', 'CREATE CHANGE REQUEST', 'CREATE CHANGE ORDER', 'ACTIONS', and 'INQUIRY'. The form header displays the Project ID as 'ITALIAN', Status as 'Active', Assets as 0.00, and Liabilities as 0.00. The Customer is 'ITALIAN01 - The Italian Company'. The 'SUMMARY' tab is selected, showing 'PROJECT PROPERTIES' and 'BILLING AND ALLOCATION SETTINGS'. Under 'PROJECT PROPERTIES', fields include Revenue Budget Level (Task and Cost Code), Cost Budget Level (Task and Cost Code), Start Date (2/1/2019), End Date, Project Manager (EP0000015 - Bill Owen), Site Address (2510 Market Street, SF), and Last Revenue Change (0002). There are also checkboxes for 'Allow the addition of Account Groups...', 'Change Order Workflow', 'Restrict Employees', 'Restrict Equipment', 'Track Production Data', and 'Certified Job'. Under 'BILLING AND ALLOCATION SETTINGS', fields include Billing Currency (USD), Billing Period (Month), Next Billing Date (5/1/2019), Last Billing Date (11/30/2019), Terms (30D - 30 Days), Allocation Rule, Billing Rule (CONTM - Construction Time and mate), Branch (HEADOFFICE - SweetLife Head Office), and Rate Table (STANDARD - Standard Rate Table). There are checkboxes for 'Run Allocation on Release of Project Transactions', 'Create Pro Forma on Billing', 'Use T&M Revenue Budget Limits', and 'Automatically Release AP Documents'. On the right side, the 'BILL-TO' section shows Company Name (The Italian Company), Attention, Phone 1 (415-965-5546), and Email (Dustin.Lindquist@italianco.com). The 'BILL-TO ADDRESS' section shows Address Line 1 (2510 Market Street), Address Line 2, City (San Francisco), Country (US - United States of America), State (CA - CALIFORNIA), and Postal Code (87556). The 'RETAINAGE' section shows Retainage Mode (Standard), Contract Total (2,186,984.80), Completed (%) (9.19), Total Retained Amount (0.00), and Retainage (%) (0.00). The 'VISIBILITY SETTINGS' section has checkboxes for GL, AP, AR, SO, PO, IN, CA, CRM, Time Entries, and Expenses. The 'QUOTE' section shows a Quote Ref. Nbr. field.

Note that a project can be created in any of the following ways:

- From scratch on the Projects (PM301000) form.
- Through a project template, which can populate all the default settings of the project, project tasks, and budgets.

On the Project Templates (PM208000) form, review the *CONTM* project template, which was used for the *ITALIAN* project. Review the **Tasks** and **Revenue Budget** tabs.

- From a project quote on the Project Quotes (PM304500) form, which can populate project tasks and budgets.

If a project is created from a project quote, the hyperlink to the project quote is displayed in the **Quote** section on the **Summary** tab of the Projects form. When a project is created from a project quote, the default settings of the project are populated from the project template specified in the project quote. Because the project is created from a quote and not from a template, the template reference is empty in the project, which helps users avoid confusion.

6. Review the task on the Common Tasks (PM208030) form.

A common task is a template task that you use if you don't want to copy such a task to each project that you create from a project template but want to be able to add it to certain projects when necessary.

A common task can be added to any project at any time.

### Project Budgets, Commitments, and Actuals

Project balances are tracked in a number of buckets:

1. On the Projects (PM301000) form, select the *ITALIAN* project.
2. On the **Cost Budget** tab, select the **Group by Task** check box.
3. Move the **Potential CO Amount** column by dragging it and dropping after **Revised Budgeted Amount** columns.

Review the following buckets:

- **Budgeted:** The planned costs (and revenues, if seen on the **Revenue Budget** tab) of the project. Original budgeted values are entered manually on the **Cost Budget** and **Revenue Budget** tabs of the project, or on the Project Budget (PM309000) form. Revised budgeted values can also be entered manually if change orders are not used.
- **Potential:** The total amount and total quantity of change requests that are not yet included in any change order. These totals are calculated automatically.
- **Committed:** The total amounts and total quantities of commitments (subcontracts and purchase orders) with a breakdown by stage of the process (such as open or invoiced). These totals are calculated automatically.
- **Actual:** The total amounts and total quantities of project transactions (PMTran) released. These totals are calculated automatically.

The screenshot shows the 'COST BUDGET' tab in Acumatica ERP. The 'Group by Task' checkbox is checked. The table below summarizes the data shown in the screenshot, with columns grouped into 'BUDGETED' and 'ACTUAL (TRANSACTIONS)'.

| Sub Job | Description                     | UOM | CRs                      |                    |                         |                     | COMMITTED (SC, PO)        |                     |                          |                           |                       | ACTUAL (TRANSACTIONS) |                                |              | Variance Amount | Performance (%) | Unit Price |
|---------|---------------------------------|-----|--------------------------|--------------------|-------------------------|---------------------|---------------------------|---------------------|--------------------------|---------------------------|-----------------------|-----------------------|--------------------------------|--------------|-----------------|-----------------|------------|
|         |                                 |     | 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               | 1,000.00           | 151,551.00              | 0.00                | 0.00                      | 0.00                | 0.00                     | 0.00                      | 0.00                  | 9,200.00              | 9,200.00                       | 142,351.00   | 5.07            |                 |            |
| 03      | CONCRETE                        |     | 113,990.00               | 380.00             | 114,370.00              | 0.00                | 106,517.00                | 380.00              | 106,897.00               | 106,517.00                | 380.00                | 106,517.00            | 106,897.00                     | 7,473.00     | 93.13           |                 |            |
| 04      | MASONRY                         |     | 71,250.00                | 0.00               | 71,250.00               | 0.00                | 59,755.00                 | 0.00                | 59,755.00                | 45,000.00                 | 14,755.00             | 45,000.00             | 59,755.00                      | 11,495.00    | 63.16           |                 |            |
| 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                           | 121,025.00   | 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                           | 128,195.00   | 0.00            |                 |            |
| 08      | OPENINGS                        |     | 73,200.00                | 1,890.00           | 75,090.00               | 1,890.00            | 0.00                      | 1,890.00            | 1,890.00                 | 0.00                      | 1,890.00              | 0.00                  | 1,890.00                       | 73,200.00    | 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                           | 416,725.00   | 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                           | 23,010.00    | 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                           | 108,000.00   | 0.00            |                 |            |
| 15      | MECHANICAL                      |     | 344,850.00               | 0.00               | 344,850.00              | 0.00                | 0.00                      | 0.00                | 0.00                     | 0.00                      | 0.00                  | 0.00                  | 0.00                           | 344,850.00   | 0.00            |                 |            |
| 16      | ELECTRICAL                      |     | 135,000.00               | 0.00               | 135,000.00              | 0.00                | 47,943.00                 | 0.00                | 47,943.00                | 42,000.00                 | 5,943.00              | 42,000.00             | 47,943.00                      | 87,957.00    | 31.11           |                 |            |
|         | Total:                          |     | 1,685,796.00             | 3,270.00           | 1,689,066.00            | 1,890.00            | 213,315.00                | 2,270.00            | 215,585.00               | 193,517.00                | 22,068.00             | 202,717.00            | 224,785.00                     | 1,464,281.00 | 12.00           |                 |            |

4. On the **Summary** tab of the Projects form, review the **Revenue Budget Level** setting, which is set to *Task and Cost Code*.

This setting defines the level of detail for the budget structure on the respective tab. The selected level of detail, *Task and Cost Code*, indicates that the budget figures and the auto-calculated values are determined for the *ITALIAN* project by project task, cost code, and account group (an account group should be always present). Columns with these settings are available for reviewing and editing on the **Revenue Budget** tab.

5. Note that each record on the **Revenue Budget** tab has a unique combination of values in the **Schedule of Values**, **Cost Code**, and **Account Group** columns (a so-called "project key"). When a revenue project transaction is released, if there is a budget record with the project task, cost code, and account group that match the transaction, the actual quantity and actual amount get updated in that budget record. If there is no matching budget record, the system creates a budget line with zero budgets and with actuals from the transaction, depending on the **Revenue Budget Update** setting on the Project Preferences (PM101000) form.

| Schedule of Values | Cost Code | Account Group | Description                | Original Budgeted Quantity | UOM | Unit Rate | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Budgeted CO Quantity | Budgeted CO Amount | Draft Invoice Amount | Actuals | Actuals  | Completed (%) |
|--------------------|-----------|---------------|----------------------------|----------------------------|-----|-----------|--------------------------|-----------------------|---------------------|---------------------------|-------------------------|----------------------|--------------------|----------------------|---------|----------|---------------|
| 01                 | 01-300    | REVENUE       | Permit                     | 0.00                       | LS  | 0.0000    | 20,281.30                | 0.00                  | 0.00                | 0.00                      | 20,281.30               | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |
| 01                 | 01-311    | REVENUE       | Operations- Project Mana.  | 0.00                       | LS  | 0.0000    | 19,500.00                | 0.00                  | 0.00                | 0.00                      | 19,500.00               | 0.00                 | 0.00               | 0.00                 | 0.00    | 11,500.0 | 0.00          |
| 01                 | 01-313    | REVENUE       | Operations- Superintendent | 0.00                       | LS  | 0.0000    | 50,700.00                | 0.00                  | 0.00                | 0.00                      | 50,700.00               | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |
| 01                 | 01-314    | REVENUE       | Operations- Crew Leader    | 0.00                       | LS  | 0.0000    | 26,000.00                | 0.00                  | 0.00                | 0.00                      | 26,000.00               | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |
| 01                 | 01-330    | REVENUE       | Design Fees                | 0.00                       | LS  | 0.0000    | 48,750.00                | 0.00                  | 0.00                | 0.00                      | 48,750.00               | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |
| 01                 | 01-505    | REVENUE       | Mobilization               | 0.00                       | LS  | 0.0000    | 6,500.00                 | 0.00                  | 0.00                | 0.00                      | 6,500.00                | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |
| 01                 | 01-510    | REVENUE       | Telephone                  | 0.00                       | LS  | 0.0000    | 1,235.00                 | 0.00                  | 0.00                | 0.00                      | 1,235.00                | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |
| 01                 | 01-600    | REVENUE       | Insurance                  | 0.00                       | LS  | 0.0000    | 9,750.00                 | 0.00                  | 0.00                | 0.00                      | 9,750.00                | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |
| 01                 | 01-900    | REVENUE       | Clean up                   | 0.00                       | LS  | 0.0000    | 13,000.00                | 0.00                  | 0.00                | 0.00                      | 13,000.00               | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |
| 02                 | 02-000    | REVENUE       | SITWORK                    | 0.00                       | LS  | 0.0000    | 0.00                     | 0.00                  | 0.00                | 0.00                      | 2,494.07                | 0.00                 | 2,494.07           | 0.00                 | 0.00    | 0.00     | 0.00          |
| 03                 | 03-000    | REVENUE       | CONCRETE                   | 0.00                       | LS  | 0.0000    | 0.00                     | 0.00                  | 0.00                | 10.00                     | 468.16                  | 10.00                | 468.16             | 0.00                 | 0.00    | 0.00     | 0.00          |
| 03                 | 03-100    | REVENUE       | Concrete- Forming          | 0.00                       | LS  | 0.0000    | 5,460.00                 | 0.00                  | 0.00                | 0.00                      | 5,460.00                | 0.00                 | 0.00               | 0.00                 | 0.00    | 1,973.75 | 0.00          |
| 03                 | 03-200    | REVENUE       | Concrete- Reinforcing      | 0.00                       | LS  | 0.0000    | 27,625.00                | 0.00                  | 0.00                | 0.00                      | 27,625.00               | 0.00                 | 0.00               | 0.00                 | 0.00    | 22,952.5 | 0.00          |
| 03                 | 03-300    | REVENUE       | Concrete- CIP Slab         | 0.00                       | LS  | 0.0000    | 103,350.00               | 0.00                  | 0.00                | 0.00                      | 103,350.00              | 0.00                 | 0.00               | 0.00                 | 0.00    | 96,817.5 | 0.00          |
| 03                 | 03-350    | REVENUE       | Concrete- Finishes         | 0.00                       | LS  | 0.0000    | 11,752.00                | 0.00                  | 0.00                | 0.00                      | 11,752.00               | 0.00                 | 0.00               | 0.00                 | 0.00    | 11,402.5 | 0.00          |
| 04                 | 04-000    | REVENUE       | MASONRY                    | 0.00                       | LS  | 0.0000    | 0.00                     | 0.00                  | 0.00                | 0.00                      | 0.00                    | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |
| 04                 | 04-220    | REVENUE       | Masonry- Block             | 0.00                       | LS  | 0.0000    | 73,125.00                | 0.00                  | 0.00                | 0.00                      | 73,125.00               | 0.00                 | 0.00               | 0.00                 | 0.00    | 43,750.0 | 0.00          |
| 04                 | 04-700    | REVENUE       | Masonry- Composite Wall    | 0.00                       | LS  | 0.0000    | 19,500.00                | 0.00                  | 0.00                | 0.00                      | 19,500.00               | 0.00                 | 0.00               | 0.00                 | 0.00    | 12,500.0 | 0.00          |
| 05                 | 05-000    | RFVFNIF       | MFTAL S                    | 0.00                       | LS  | 0.0000    | 0.00                     | 0.00                  | 0.00                | 0.00                      | 0.00                    | 0.00                 | 0.00               | 0.00                 | 0.00    | 0.00     | 0.00          |

6. Review the **Revenue Budget Update** setting on the **General Settings** tab of the Project Preferences (PM101000) form.
  - *Detailed*: The budget record is created with information from the project transaction at the budget level of detail. For the revenue budget of the *ITALIAN* project, this would be project task, cost code, and account group of the project transaction.
  - *Summary*: The budget record is created with information from the project transaction grouped by project task and account group, against the default cost code. This mode is useful if only certain articles are budgeted at the very detail level, but there could be many transactions processed with different cost codes and items and all those miscellaneous transactions are budgeted in a single line of a project.

Projects Preferences ☆

GENERAL SETTINGS MAILING SETTINGS

**NUMBERING SEQUENCE**

|                                      |   |   |   |
|--------------------------------------|---|---|---|
| * Transaction Numbering Sequence:    | PMTRAN - PM Transaction Numbering       | 🔍 | ✎ |
| * Batch Numbering Sequence:          | BATCH - GL Batch                        | 🔍 | ✎ |
| * Pro Forma Numbering Sequence:      | PROFORMA - PM Pro Forma Invoice Numberi | 🔍 | ✎ |
| * Change Order Numbering Sequence:   | CHANGEORD - PM Change Order Numbering   | 🔍 | ✎ |
| * Change Request Numbering Sequence: | CHANGERST - PM Change Request Numberir  | 🔍 | ✎ |
| * Quote Numbering Sequence:          | PMQUOTE - Quotes in Project             | 🔍 | ✎ |

**GENERAL SETTINGS**

|   |   |   |   |
|---|---|---|---|
| * Non-Project Code:                           | X                                       |   |   |
| * Empty Item Code:                            | <N/A>                                   |   |   |
| * Empty Item UOM:                             | EA                                      | 🔍 | ✎ |
| Default Change Order Class:                   | DEFAULT - Default Change Order Class    | 🔍 | ✎ |
| Default Quote Template:                       |   | 🔍 | ✎ |
| Project Approval Map:                         |   | 🔍 | ✎ |
| Pending Project Approval Notification:        |   | 🔍 | ✎ |
| Pro Forma Approval Map:                       | Pro Forma Invoice Approval              | 🔍 | ✎ |
| Pending Pro Forma Approval Notification:      | Pro Forma Invoice Approval Notification | 🔍 | ✎ |
| Change Request Approval Map:                  | CR Approval                             | 🔍 | ✎ |
| Pending Change Request Approval Notification: |   | 🔍 | ✎ |
| Change Order Approval Map:                    |   | 🔍 | ✎ |
| Pending Change Order Approval Notification:   |   | 🔍 | ✎ |
| Quote Approval Map:                           |   | 🔍 | ✎ |
| Quote Pending Approval Notification:          | CRMQuote Pending Approval Notification  | 🔍 | ✎ |
| * Billing Cut-off Date:                       | Include Trans. created on billing date  | ▼ |   |
| Validate T&M Revenue Budget Limits:           | Validate                                | ▼ |   |
| Revenue Budget Update:                        | Detailed                                | ▼ |   |
| Cost Budget Update:                           | Detailed                                | ▼ |   |

The logic that is described above for actuals also applies to updates of the following buckets in project budget records in the following cases:

- **Committed:** A new commitment gets opened.
- **Change order (CO)** buckets in budgets and commitments: A change order gets released.
- **Potential:** A change request is created.

The structure of cost budget is determined independently from the revenue budget structure. Similar rules apply to the cost budget structure of a project. Thus, there is the **Cost Budget Level** setting of a project on the **Summary** tab of the Projects (PM301000) form, and there is the respective **Cost Budget Update** setting (*Summary* or *Detailed*) on the **General Settings** tab of the Project Preferences (PM101000) form that determines the level of detail for the budget record that gets created if there is no matching record for a cost project transaction being released.

Note the following:

- The most possible detail level of revenue budget and/or cost budget is *Task, Item and Cost Code*, which is available if the *Construction* feature is enabled on the Enable/Disable Features (CS100000) form.
- There is no option for the budget update logic for an account group that has the *Asset* or *Liability* type. Budget records against such account groups are always updated in summary mode: if there is no matching record, the system creates a budget record with the project task and account group of the transaction, commitment line, change order, or change request, but always with the default cost code and the *N/A* inventory item.

### Original and Revised Values of a Project

As a project goes, changes to the budgets and commitments of the project can be tracked by means of change orders.

Do the following:

1. On the Projects (PM301000) form, select the *ITALIAN* project.
2. On the **Summary** tab, notice that the **Change Order Workflow** check box, which is available only if the **Internal Cost Commitment Tracking** check box is selected on the **General Settings** tab of the Project Preferences (PM101000) form, is selected for a project. This means that the revised (that is, current) values of budgets and commitments of the project can be modified only through the use of change orders.
  - If **Change Order Workflow** is selected:
    - On the **Revenue Budget** tab:
      - **Revised Budgeted Amount** (read-only) = Original Budgeted Amount + Budgeted CO Amount
      - **Revised Budgeted Quantity** (read-only) = Original Budgeted Quantity + Budgeted CO Quantity
    - On the **Cost Budget** tab:
      - **Revised Budgeted Amount** (read-only) = Original Budgeted Amount + Budgeted CO Amount
      - **Revised Budgeted Quantity** (read-only) = Original Budgeted Quantity + Budgeted CO Quantity
      - **Revised Committed Amount** = Original Committed Amount + Committed CO Amount
      - **Revised Committed Quantity** = Original Committed Quantity + Committed CO Quantity

Projects NOTES FILE

← SAVE & CLOSE + K < > | RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES REPORTS

\* Project ID: ITALIAN \* Status: Active Assets: 0.00  
 Customer: ITALIAN01 - The Italian Company Liabilities: 0.00  
 Template: CONTM - Construction T&M Project Income: 200,896.25  
 \* Description: Italian Restaurant Project Expenses: 202,717.00

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

Project Task:   Group by Task

VIEW COMMITMENT DETAILS VIEW TRANSACTIONS

| Original Budgeted Quantity | UOM   | Unit Rate   | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Original Committed Quantity | Original Committed Amount | Committed CO Quantity | Committed CO Amount | Revised Committed Quantity | Revised Committed Amount |
|----------------------------|-------|-------------|--------------------------|-----------------------|---------------------|----------------------|--------------------|---------------------------|-------------------------|-----------------------------|---------------------------|-----------------------|---------------------|----------------------------|--------------------------|
| 1.00                       | EA    | 15,601.0000 | 15,601.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 15,601.00               | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |
| 1.00                       | LS    | 15,000.0000 | 15,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 15,000.00               | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |
| 1.00                       | LS    | 39,000.0000 | 39,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 39,000.00               | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |
| 1.00                       | LS    | 20,000.0000 | 20,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 20,000.00               | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |
| 1.00                       | EA    | 37,500.0000 | 37,500.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 37,500.00               | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |
| 1.00                       | EA    | 5,000.0000  | 5,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 5,000.00                | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |
| 1.00                       | EA    | 950.0000    | 950.00                   | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 950.00                  | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |
| 1.00                       | LS    | 7,500.0000  | 7,500.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 7,500.00                | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |
| 1.00                       | LS    | 10,000.0000 | 10,000.00                | 0.00                  | 0.00                | 0.00                 | 1,000.00           | 1.00                      | 11,000.00               | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |
| 1,500.00                   | LF    | 2.0000      | 3,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1,500.00                  | 3,000.00                | 0.00                        | 1,579.00                  | 0.00                  | 0.00                | 0.00                       | 1,579.00                 |
| 30.00                      | HOURL | 40.0000     | 1,200.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 30.00                     | 1,200.00                | 0.00                        | 875.00                    | 0.00                  | 0.00                | 0.00                       | 875.00                   |
| 7,000.00                   | SF    | 2.5000      | 17,500.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 7,000.00                  | 17,500.00               | 0.00                        | 18,362.00                 | 0.00                  | 0.00                | 0.00                       | 18,362.00                |
| 50.00                      | HOURL | 75.0000     | 3,750.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 50.00                     | 3,750.00                | 0.00                        | 2,880.00                  | 0.00                  | 0.00                | 0.00                       | 2,880.00                 |
| 775.00                     | CY    | 100.0000    | 77,500.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 775.00                    | 77,500.00               | 0.00                        | 71,899.00                 | 0.00                  | 0.00                | 0.00                       | 71,899.00                |
| 40.00                      | HOURL | 50.0000     | 2,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 40.00                     | 2,000.00                | 0.00                        | 1,470.00                  | 0.00                  | 0.00                | 0.00                       | 1,470.00                 |
| 7,000.00                   | SF    | 1.2000      | 8,400.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 7,000.00                  | 8,400.00                | 0.00                        | 9,122.00                  | 0.00                  | 0.00                | 0.00                       | 9,122.00                 |
| 16.00                      | HOURL | 40.0000     | 640.00                   | 0.00                  | 0.00                | 10.00                | 380.00             | 26.00                     | 1,020.00                | 0.00                        | 330.00                    | 10.00                 | 380.00              | 10.00                      | 710.00                   |
| 150.00                     | HOURL | 75.0000     | 11,250.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 150.00                    | 11,250.00               | 0.00                        | 0.00                      | 0.00                  | 0.00                | 0.00                       | 0.00                     |

- If the **Change Order Workflow** check box is cleared
  - On the **Revenue Budget** tab, the **Revised Budgeted Amount** and **Revised Budgeted Quantity** values can be modified directly.
  - On the **Cost Budget** tab:
    - The **Revised Budgeted Amount** and **Revised Budgeted Quantity** values can be modified directly.
    - Commitment changes are not tracked. The **Revised Committed Amount** and **Revised Committed Quantity** values are non-editable and always equal to the original ones. Users can modify open commitments on the respective data entry forms, such as Subcontracts (SC301000) and Purchase Orders (PO301000), at any time directly by changing values in the lines of those documents.

For an example of this setup, review the *TOMYUM4* project.

## Lesson 2: Projects Integration with General Ledger

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This is a brief overview of the Projects functionality in Acumatica ERP Construction Edition 2019 R2. Detailed information and hands-on exercises on the basic project accounting functionality are provided in the P100 Project Accounting training course.

### Learning Objectives

- Review how a project's actual balances are calculated
- Review how Projects are integrated with General Ledger
- Review how an account group is identified if a project transaction is created from a GL transaction
- Review how Projects are integrated with other modules of the system

### System Preparation

Sign in to the system by using the *owen* login and *123* password.

### Project Transactions

Integration of Projects with General Ledger works in both directions—that is, a project transaction can produce GL transactions and a GL transaction can produce a project transaction.

Actuals in a project budget record are calculated based on project transactions:

- **Actual Amount** is the sum of project transactions' **Amount** values.
- **Actual Quantity** is the sum of project transactions' **Quantity** values.

Process project transactions as described below:

1. On the Projects (PM301000) form, select the *HMBAKERY2* project.

On the **Cost Budget** tab, notice that the line with the *PHASE1* project task (sub job), *INSTALL* inventory item, and *SUBCON* account group has zero **Actual Amount** and **Actual Quantity**.

2. On the Project Transactions (PM304000) form, click **Add New Record** and do the following:
  - a. In the **Description** box, type *Installation work*.
  - b. On the table toolbar of the **Document Details** tab, click **Load Records from File**.
  - c. In the **File Upload** dialog box, which appears, specify the path to the *ProjectTransactions\_HMBAKERY2\_PM.xlsx* file, which is provided with the training

materials. Click **Upload**. In the wizard, which opens, leave all the default settings and map the columns as the system suggests.

- d. On the form toolbar, click **Release**.

Note that this transaction has empty **Debit Account** and **Credit Account** and no GL transaction has been created.

The screenshot shows the 'Project Transactions' form. At the top, there are navigation buttons: 'SAVE & CLOSE', 'RELEASE', and 'REVERSE ALLOCATION'. Below these, there are summary statistics: Module: PM, Ref. Number: PM0000055, Status: Balanced, Description: Installation work. Total Quantity: 2.00, Total Billable Quantity: 2.00, Total Amount: 160.00. The 'DOCUMENT DETAILS' tab is active, showing a table with columns: Branch, Project, Sub Job Schedule of Values, Cost Code, Account Group, Inventory ID, Description, Quantity, UOM, Billable, Billable Quantity, Unit Rate, Amount, Debit Account, Credit Account, Date, Fin. Period, Employee. A single row is visible with the following data: HEADOFFICE, HMBAKERY2, PHASE1, 00-000, SUBCON, INSTALL, Installation of equipment at, 2.00, HOUR, 2.00, 80.0000, 160.00, (empty), (empty), 12/20/2019, 12-2019.

- 3. On the **Cost Budget** tab of the Projects form, for the *INSTALL* inventory item, review the updated **Actual Quantity** and **Actual Amount** values.
- 4. On the Project Transactions form, enter and release the transaction uploaded from the *ProjectTransactions\_HMBAKERY2\_PM\_to\_GL.xlsx* file, which is provided with the training materials, as described in Instruction 2.

The screenshot shows the 'Project Transactions' form after the transaction has been released. The status is now 'Released'. The description is updated to 'Installation works with GL update'. The table below shows a single row with the following data: HEADOFFICE, HMBAKERY2, PHASE1, 00-000, SUBCON, JUICER05, Installation of equipment at the customers' ..., PIECE, 2.00, 2.00, 80.0000, 160.00, 54200, 23015, 12/20/2019, 12-2019.

Because a different inventory item is used for that transaction, the system updates a different project budget record.

- 5. Open the *HMBAKERY2* project on the Projects form and review the **Cost Budget** tab.

The system has added a new budget record at the detail level of the cost budget of the project (which is *Task and Item*) with the specific inventory item ID specified instead of *N/A* in accordance with the *Detailed* cost budget update mode specified on the Project Preferences form.

Projects

← SAVE & CLOSE ↻ + ⌵ < > | RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS ▾ INQUIRIE

\* Project ID: HMBAKERY2 \* Status: Active Assets: 0.00  
 Customer: HMBAKERY - HM's Bakery & Cafe Liabilities: 0.00  
 Template: Expenses: 320.00  
 \* Description: Juicers with the installation

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

Project Task:   Group by Task

VIEW COMMITMENT DETAILS VIEW TRANSACTIONS

| Sub Job | Inventory ID | Account Group | Description                          | Original Budgeted Quantity | UOM   | Unit Rate  | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Actual Quantity | Actual Amount |
|---------|--------------|---------------|--------------------------------------|----------------------------|-------|------------|--------------------------|---------------------------|-------------------------|-----------------|---------------|
| PHASE1  | JUICER15     | MATERIAL      | Commercial juicer with a produc...   | 1.00                       | PIECE | 2,000.0000 | 2,200.00                 | 1.00                      | 2,200.00                | 0.00            | 0.00          |
| PHASE1  | INSTALL      | SUBCON        | Installation of equipment at the ... | 4.00                       | HOUR  | 80.0000    | 320.00                   | 4.00                      | 320.00                  | 2.00            | 160.00        |
| PHASE1  | JUICER05     | SUBCON        | Juicer with a production rate of ... | 0.00                       | PIECE | 0.0000     | 0.00                     | 0.00                      | 0.00                    | 2.00            | 160.00        |
| PHASE2  | JUICER15     | MATERIAL      | Commercial juicer with a produc...   | 1.00                       | PIECE | 2,000.0000 | 2,200.00                 | 1.00                      | 2,200.00                | 0.00            | 0.00          |
| PHASE2  | INSTALL      | SUBCON        | Installation of equipment at the ... | 4.00                       | HOUR  | 80.0000    | 320.00                   | 4.00                      | 320.00                  | 0.00            | 0.00          |

- Select the *JUICER05* cost budget record and click **View Transactions** on the table toolbar.

The second project transaction has **Debit Account** and **Credit Account** specified, and the GL transaction was created on release of the project transaction. Note that for this course, the *Subaccounts* feature is disabled on the Enable/Disable Features (CS100000) form.

Open the created GL transactions on the Journal Transactions (GL301000) form by using the hyperlink in the **Batch Nbr.** column.

Projects

← SAVE & CLOSE ↻ + ⌵ < > | RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

Project Transactions

Project Transactions

\* Project: HMBAKERY2 - Juicers with the install  
 Account Group: SUBCON - Project Subcontract  
 Sub Job/Schedule of V.: PHASE1 - Installation of the first juicer  
 Cost Code: 00-000 - DEFAULT  
 Inventory ID:

From:   
 To:   
 Employee:

Show only Allocation Transactions  
 Include Unreleased Transactions

| Cost Code | UOM   | Quantity | Billable                            | Billable Quantity | Unit Rate | Amount (Revised) | Amount (Normal) | Debit Account Group | Debit Account | Inventory ID | Credit Account Group | Credit Account | Batch Nbr. |
|-----------|-------|----------|-------------------------------------|-------------------|-----------|------------------|-----------------|---------------------|---------------|--------------|----------------------|----------------|------------|
| 00-000    | HOUR  | 2.00     | <input checked="" type="checkbox"/> | 2.00              | 80.0000   | 160.00           | 160.00          | SUBCON              | 54200         | INSTALL      |                      |                |            |
| 00-000    | PIECE | 2.00     | <input checked="" type="checkbox"/> | 2.00              | 80.0000   | 160.00           | 160.00          | SUBCON              | 54200         | JUICER05     | 23015                |                | GL0000021  |

The debit entry is posted to the general ledger with the project key.

Journal Transactions

SAVE & CLOSE [Icons] RELEASE ACTIONS REPORTS

Module: PM Branch: HEADOFFICE - SweetLife Head Office a Type: Normal  
 Batch Number: GL000021 Ledger: ACTUAL - Actual Ledger Orig. Batch Number:  
 Status: Posted  Auto Reversing  Reversing Entry Debit Total: 160.00  
 Hold Credit Total: 160.00  
 Transaction D.: 12/20/2019  
 Post Period: 12-2019  
 Description: Installation works with GL update

VIEW SOURCE DOCUMENT RECLASSIFICATION HISTORY [Icons]

|   | *Branch    | *Account | Description                 | Project/Contract | Project Task | Cost Code | Ref. Number | Transaction Date | Quantity | UOM   | Debit Amount | Credit Amount | Transaction  |
|---|------------|----------|-----------------------------|------------------|--------------|-----------|-------------|------------------|----------|-------|--------------|---------------|--------------|
| > | HEADOFFICE | 54200    | Project Subcontract Expense | HMBAKERY2        | PHASE1       | 00-000    |             | 12/20/2019       | 2.00     | PIECE | 160.00       | 0.00          | Installation |
|   | HEADOFFICE | 23015    | Accrued Expenses            | X                |              | 00-000    |             | 12/20/2019       | 2.00     | PIECE | 0.00         | 160.00        | Installation |

Note that **Actual Quantity** is updated in a project budget record if all of the following conditions are true:

- The project transaction has a non-empty UOM.
- In the project budget record that matches the transaction, a UOM is specified.
- The project transaction's UOM is convertible to the budget record's UOM by the global list that is defined on the Units of Measure (CS203100) form.

Otherwise, **Actual Quantity** is not updated in any budget record. A similar requirement for UOM conversion applies to a quantity update in the other buckets of a budget record, such as **Committed**, **Budgeted CO**, **Committed CO**, and **Potential**.

## General Ledger Transactions

Do the following:

1. On the Journal Transactions (GL301000) form, click **Add New Record** and do the following:
  - a. In the **Description** box, type *Installation work*.
  - b. On the table toolbar, click **Load Records from File**.
  - c. In the **File Upload** dialog box, which appears, specify the path to the *JournalTransactions\_HMBAKERY2\_GL\_to\_PM.xlsx* file, which is provided with the training materials. Click **Upload**. In the wizard, which opens, leave all the default settings and map the columns as the system suggests.
  - d. Clear the **Hold** check box.
  - e. On the form toolbar, click **Release**.

Journal Transactions

SAVE & CLOSE | RELEASE | ACTIONS | REPORTS

Module: GL | Branch: HEADOFFICE - SweetLife Head Office | Type: Normal  
 Batch Number: GL000022 | Ledger: ACTUAL - Actual Ledger | Orig. Batch Number:  
 Status: Balanced | Debit Total: 240.00  
 Credit Total: 240.00

Transaction D.: 12/20/2019 | Post Period: 12-2019 | Description: Installation works

| Project/Contract | Description                 | Project Task     | Cost Code | Quantity | UOM  | Debit Amount | Credit Amount | Transaction Description | Non Billable             |
|------------------|-----------------------------|------------------|-----------|----------|------|--------------|---------------|-------------------------|--------------------------|
| HEADOFFICE 54200 | Project Subcontract Expense | HMBAKERY2 PHASE1 | 00-000    | 3.00     | HOUR | 240.00       | 0.00          | Installation works      | <input type="checkbox"/> |
| HEADOFFICE 23015 | Accrued Expenses            | X                | 00-000    | 0.00     |      | 0.00         | 240.00        | Installation works      | <input type="checkbox"/> |

To create a corresponding project transaction, the system identifies the account group by the GL account that is specified in the journal entry with the project, project task, and cost code.

- On the Chart of Accounts (GL202500) form, find the 54200 account.

A GL account can be mapped to only one account group at a time, thus the 54200 - Project Subcontract Expense identifies the SUBCON account group.

Chart of Accounts

expen

| Account | Account Class | Type      | Active                              | Description                 | Control Account Module | Allow Manual Entry       | Post Option | Cash Account             | Account Group | Secured                  |
|---------|---------------|-----------|-------------------------------------|-----------------------------|------------------------|--------------------------|-------------|--------------------------|---------------|--------------------------|
| 23015   | OTHCURLIAB    | Liability | <input checked="" type="checkbox"/> | Accrued Expenses            |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 54100   | COGS          | Expense   | <input checked="" type="checkbox"/> | Project Labor Expense       |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> | LABOR         | <input type="checkbox"/> |
| 54200   | COGS          | Expense   | <input checked="" type="checkbox"/> | Project Subcontract Expense |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> | SUBCON        | <input type="checkbox"/> |
| 54300   | COGS          | Expense   | <input checked="" type="checkbox"/> | Project Other Expense       |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 54400   | COGS          | Expense   | <input checked="" type="checkbox"/> | Project Travel Expense      |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> | TRAVEL        | <input type="checkbox"/> |
| 54500   | COGS          | Expense   | <input checked="" type="checkbox"/> | Project Material Expense    |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> | MATERIAL      | <input type="checkbox"/> |
| 60000   | EXOTHER       | Expense   | <input checked="" type="checkbox"/> | Purchase Expense            |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 61000   | EXADVERT      | Expense   | <input checked="" type="checkbox"/> | Advertising Expense         |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> | OTHEREXP      | <input type="checkbox"/> |
| 61500   | EXOTHER       | Expense   | <input checked="" type="checkbox"/> | Freight Expense             |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> | OTHEREXP      | <input type="checkbox"/> |
| 62400   | EXOTHER       | Expense   | <input checked="" type="checkbox"/> | Office Expense              |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 62900   | EXOFFICE      | Expense   | <input checked="" type="checkbox"/> | Rent or Lease Expense       |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 64000   | EXDEPR        | Expense   | <input checked="" type="checkbox"/> | Depreciation Expense        |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 81000   | EXOTHER       | Expense   | <input checked="" type="checkbox"/> | Other Expense               |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |

Note the following:

- Any type of GL account can be used in an account group that has the *Income* or *Expense* type.
  - Budgets of account groups that have the *Asset* or *Liability* type can be maintained on the Project Budget (PM309000) form.
- Open the Project Transactions (PM304000) form and find the last project transaction (with the GL module). That project transaction has the reference to the batch of GL transactions from which it has been created.



**Bills and Adjustments**

SAVE & CLOSE | RELEASE | ACTIONS | INQUIRIES | REPORTS | 00:00:01

Type: **Bill** Vendor: ALLFRUITS - All Fruits Mall Detail Total: 160.00  
 Reference Nbr.: 000072 Terms: 30D - 30 Days Discount Total: 0.00  
 Status: **Open** \* Due Date: 1/19/2020 VAT Taxable Total: 0.00  
 Hold \* Cash Discount: 1/19/2020  Pay by Line  Joint Payees VAT Exempt Total: 0.00  
 Date: 12/20/2019 Tax Total: 0.00  
 Post Period: 12-2019 With. Tax: 0.00  
 Vendor Ref.: Balance: 160.00  
 Amount: 160.00  
 Description: **installatio works** Cash Discount: 0.00

DOCUMENT DETAILS | FINANCIAL DETAILS | TAX DETAILS | APPROVAL DETAILS | APPLICATIONS | COMPLIANCE

| ADD PO RECEIPT LINE | ADD PO | ADD PO LINE | ADD SUBCONTRACTS | ADD SUBCONTRACT LINE | ADD LC | LINK LINE | Account                            | Description   |
|---------------------|--------|-------------|------------------|----------------------|--------|-----------|------------------------------------|---|
|                     |        |             |                  |                      |        |           | HEADOFFICE HMBAKERY2 PHASE1 00-000 | INSTALL Installation of equipm... 2.00 HOUR 80.0000 160.00 0.00 160.00 0.00 54200 Project Subcontract Expense |

3. On the **Financial Details** tab, click the hyperlink in the **Batch Nbr.** box to open the batch of the GL transactions created from the bill.

Review the transactions.

Journal Transactions - Google Chrome

Journal Transactions

SAVE & CLOSE | RELEASE | ACTIONS | REPORTS

Module: **AP** Branch: HEADOFFICE - SweetLife Head Office a Type: Normal  
 Batch Number: **AP000091** Ledger: ACTUAL - Actual Ledger Orig. Batch Number:  
 Status: **Posted**  Auto Reversing  Reversing Entry Debit Total: 160.00  
 Hold Credit Total: 160.00  
 Transaction D.: 12/20/2019  
 Post Period: 12-2019  
 Description: **installatio works**

VIEW SOURCE DOCUMENT | RECLASSIFICATION HISTORY

| Branch     | Account | Description                 | Project/Contract | Project Task | Cost Code | Ref. Number | Transaction Date | Quantity | UOM  | Debit Amount | Credit Amount | Transaction Description             | Non Billable                        |
|------------|---------|-----------------------------|------------------|--------------|-----------|-------------|------------------|----------|------|--------------|---------------|-------------------------------------|-------------------------------------|
| HEADOFFICE | 20000   | Accounts Payable            | X                |              | 00-000    | 000072      | 12/20/2019       | 0.00     |      | 0.00         | 160.00        | Installatio works                   | <input checked="" type="checkbox"/> |
| HEADOFFICE | 54200   | Project Subcontract Expense | HMBAKERY2        | PHASE1       | 00-000    | 000072      | 12/20/2019       | 2.00     | HOUR | 160.00       | 0.00          | Installation of equipment at the... | <input type="checkbox"/>            |

4. On the Project Transactions (PM304000) form, review the project transaction that the system has created from the GL transaction with the **HMBAKERY2** project, **PHASE1** project task, and the **54200** GL account that is mapped to the **SUBCON** account group. This project transaction has updated the project's actual balances.

**Project Transactions** NOTES FILE

← SAVE & CLOSE ↶ ↷ ⌂ ⌕ K < > ⌕ RELEASE REVERSE ALLOCATION

|   |                               |
|---|-------------------------------|
| Module: <input type="text" value="AP"/>                     | Total Quantity: 2.00          |
| Ref. Number: <input type="text" value="PM00000090"/>        | Total Billable Quantity: 2.00 |
| Status: <input type="text" value="Released"/>               | Total Amount: 160.00          |
| Description: <input type="text" value="installatio works"/> |                               |

**DOCUMENT DETAILS** COMPLIANCE

VIEW ALLOCATION SOURCE ⌕ ⌕

| Branch                     | Project    | Sub Job/Schedule of Values | Cost Code | Account Group | Inventory ID | Description | UOM   | Quantity | Billable | Billable Quantity                   | Unit Rate | Amount | Debit Account | Batch Nbr. |          |
|----------------------------|------------|----------------------------|-----------|---------------|--------------|-------------|---|----------|----------|-------------------------------------|-----------|--------|---------------|------------|----------|
| > <input type="checkbox"/> | HEADOFFICE | HIMBAKERY2                 | PHASE1    | 00-000        | SUBCON       | INSTALL     | Installation of equipment at the customer's ... | HOUR     | 2.00     | <input checked="" type="checkbox"/> | 2.00      | 0.0000 | 160.00        | 54200      | AP000091 |

## Lesson 3: AR Invoices with Retainage

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### Learning Objectives

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

- Process invoices with retainage held in case of progress billing
- Process invoices with retainage held in case of time and material billing
- Release retainage from invoices
- Apply payments to invoices with retainage

Additionally, you will learn about:

- Importing of open AR invoices
- Configuring retained taxes
- Functionality restrictions in invoices with AR balance and retainage at the line level

### Story

Suppose that the SweetLife company builds a hotel for The Equity Group Investors. A project accountant bills the customer for the works that are going to be performed. In a project invoice, the accountant specifies that the customer retains 5% of the amount of each progress billing line, according to the contract signed with the customer. After a part of the work is done, the project accountant creates an invoice for the customer to release a part of the retained amount. Acting as the project accountant, you need to enter and process invoices and payments for those invoices in the system.

Also, the project accountant bills the customer for some extra time spent on the project, which wasn't a part of the original contract, with the agreement of 5% retainage that can be held on such invoices. Acting as the project accountant, you need to create a new project task, enter the project transaction that represents the extra work, and create an invoice for that work with the retained amount.

### System Preparation

Sign in to the system as a project manager by using the *owen* login and *123* password.

### Performing Progress Billing with Retainage

To verify the needed settings, do the following:

1. On the Enable/Disable Features (CS100000) form, make sure that the *Payment Application by Line* feature is enabled.
2. On the Customers (AR303000) form, for the *EQUGRP* customer, make sure the **Pay by Line** check box is selected on the **General Info** tab. This setting will be copied by

default to the AR invoices for this customer, and the open AR and unreleased retainage balances will be tracked at the line level for these invoices.

To perform progress billing with retainage, do the following:

1. Open the Projects (PM301000) form.
2. In the **Project ID** box, select *HOTEL3*.
3. On the **Summary** tab, review the following retainage settings for the *HOTEL3* project (shown on the screenshot below):
  - **Retainage Mode:** *Standard* (retainage % is defined at the revenue budget level, there is no cap)
  - **Retainage (%):** 5.00

The screenshot displays the 'Projects' form with the following details:

- Project Information:**
  - Company Name: The Equity Group Investors
  - Attention:
  - Phone 1: 555-121-7779
  - Email: JessicaD@equitygrp.com
- BILL-TO ADDRESS:**
  - Address Line 1: 956 51st Aven
  - Address Line 2:
  - City: New York
  - Country: US - United States of America
  - State: NY - NEW YORK
  - Postal Code: 06653
- RETAINAGE:**
  - Retainage Mode: Standard
  - Contract Total: 39,715,457.00
  - Completed (%): 0.00
  - Total Retained Amount: 0.00
  - Retainage (%): 5.00
- BILLING AND ALLOCATION SETTINGS:**
  - Billing Currency: USD
  - Billing Period: Month
  - Next Billing Date: 6/1/2019
  - Last Billing Date:
  - Terms: 30D - 30 Days
  - Allocation Rule:
  - Billing Rule: PROGRESS - Progress billing
  - Branch: HEADOFFICE - SweetLife Head Office
  - Rate Table:
- VISIBILITY SETTINGS:**
  - GL, AP, AR, SO, PO, IN, CA, CRM, Time Entries, Expenses

4. On the **Revenue Budget** tab, review the retainage percent that applies to each line, as shown in the following screenshot.

Projects

NOTES FILES NOTIFICATIONS TOOLS

SAVE & CLOSE RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES REPORTS

Project ID: HOTEL3 Status: Active Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor Liabilities: 0.00  
 Template: Income: 0.00  
 Description: The Beach Hotel and Condominiums Expenses: 0.00

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

Project Task: Pending Invoice Amount Total: 0.00

| Original Budgeted Quantity | UOM  | Unit Rate | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Budgeted CO Quantity | Budgeted CO Amount | Draft Invoices Amount | Actual Quantity | Actual Amount | Completed (%) | Pending Invoice Amount | Performance (%) | Retainage (%) | Tax Cg |
|----------------------------|------|-----------|--------------------------|-----------------------|---------------------|---------------------------|-------------------------|----------------------|--------------------|-----------------------|-----------------|---------------|---------------|------------------------|-----------------|---------------|--------|
| 0.00                       | HOUR | 0.0000    | 4,154,366.00             | 0.00                  | 0.00                | 0.00                      | 4,154,366.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 1,809,185.00             | 0.00                  | 0.00                | 0.00                      | 1,809,185.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 8,319,840.00             | 0.00                  | 0.00                | 0.00                      | 8,319,840.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 1,210,648.00             | 0.00                  | 0.00                | 0.00                      | 1,210,648.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 1,901,356.00             | 0.00                  | 0.00                | 0.00                      | 1,901,356.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 1,225,000.00             | 0.00                  | 0.00                | 0.00                      | 1,225,000.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 989,355.00               | 0.00                  | 0.00                | 0.00                      | 989,355.00              | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 1,638,760.00             | 0.00                  | 0.00                | 0.00                      | 1,638,760.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 8,110,796.00             | 0.00                  | 0.00                | 0.00                      | 8,110,796.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | EA   | 0.0000    | 0.00                     | 0.00                  | 0.00                | 0.00                      | 0.00                    | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 1,449,500.00             | 0.00                  | 0.00                | 0.00                      | 1,449,500.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |
| 0.00                       | HOUR | 0.0000    | 1,135,000.00             | 0.00                  | 0.00                | 0.00                      | 1,135,000.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 0.00          | 0.00          | 0.00                   | 0.00            | 0.00          | 5.00   |

5. In the first two lines on the **Revenue Budget** tab, enter the amounts in the **Pending Invoice Amount** column: 100,000.00 and 10,000.00, and then click **Run Project Billing** on the form toolbar.

The system creates a pro forma invoice. In each line on the **Progress Billing** tab, the following amounts are shown:

- **Amount: Pending Invoice Amount** from the respective revenue budget line
- **Amount to Invoice:** Amount + Stored Material of the line
- **Retainage Amount:** Amount to Invoice \* Retainage %

Pro forma totals (shown on the screenshot below) are calculated as follows:

- **Invoice Total** = Progress Billing Total + Time and Material Total + Tax Total (invoice total includes the retainage amount)
- **Tax Total** is the sum in the **Tax Amount** column on the **Tax Details** tab minus the **Retained Tax**
- **Retainage Total** is the sum of the following:
  - Retainage Amount on the **Progress Billing** tab
  - Retainage Amount on the **Time and Material** tab
  - Retained Tax on the **Tax Details** tab

**Amount Due** = Invoice Total - Retainage Total

Pro Forma Invoices

← SAVE & CLOSE    ↶    ↷    ↵    ↶    ↷    |    RELEASE    ACTIONS    REPORTS

Reference Nbr.: 000011    Project: HOTEL3 - The Beach Hotel and Condom    Progress Billing Total: 110,000.00  
 Status: On Hold    Customer: EQUGRP - The Equity Group Investors    Time and Material Total: 0.00  
 Hold    Tax Total: 0.00  
 Invoice Date: 6/1/2019    Invoice Total: 110,000.00  
 Post Period: 06-2019    Retainage Total: 5,500.00  
 Description: Invoice for HOTEL3    Amount Due: 104,500.00

PROGRESS BILLING    TIME AND MATERIAL    TAX DETAILS    FINANCIAL DETAILS    APPROVAL DETAILS    ADDRESS DETAILS

| Branch     | Billing Item | Cost Code | Description                     | Revised Budgeted Amount | Previously Invoiced | Total Completed (%) | Amount     | Stored Material | Amount to Invoice | Current Invoiced (%) | Retainage (%) | Retainage Amount | Tax Category | Sal |
|------------|--------------|-----------|---------------------------------|-------------------------|---------------------|---------------------|------------|-----------------|-------------------|----------------------|---------------|------------------|--------------|-----|
| HEADOFFICE | 01           | 01-000    | GENERAL REQUIREMENTS            | 4,154,366.00            | 0.00                | 2.41                | 100,000.00 | 0.00            | 100,000.00        | 2.41                 | 5.00          | 5,000.00         |              |     |
| HEADOFFICE | 02           | 02-000    | SITWORK                         | 1,809,185.00            | 0.00                | 0.55                | 10,000.00  | 0.00            | 10,000.00         | 0.55                 | 5.00          | 500.00           |              |     |
| HEADOFFICE | 03           | 03-000    | CONCRETE                        | 8,319,840.00            | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |
| HEADOFFICE | 04           | 04-000    | MASONRY                         | 1,210,648.00            | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |
| HEADOFFICE | 05           | 05-000    | METALS                          | 1,901,356.00            | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |
| HEADOFFICE | 06           | 06-000    | WOODS, PLASTICS, COMPOSITES     | 1,225,000.00            | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |
| HEADOFFICE | 07           | 07-000    | THERMAL AND MOISTURE PROTECTION | 989,355.00              | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |
| HEADOFFICE | 08           | 08-000    | OPENINGS                        | 1,638,760.00            | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |
| HEADOFFICE | 09           | 09-000    | FINISHES                        | 8,110,796.00            | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |
| HEADOFFICE | 10           | 00-000    | DEFAULT                         | 0.00                    | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |
| HEADOFFICE | 10           | 10-000    | SPECIALTIES                     | 1,449,500.00            | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |
| HEADOFFICE | 11           | 11-000    | EQUIPMENT                       | 1,135,000.00            | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 5.00          | 0.00             |              |     |

To release the document, do the following:

1. On the Pro Forma Invoices (PM307000) form, clear that the **Hold** check box.
2. On the form toolbar, click **Actions > Approve**.
3. Click **Release**.
4. On the **Financial Details** tab, click the link in the **AR Ref. Nbr.** box. The created AR invoice opens on the Invoices and Memos (AR301000) form.
5. Clear the **Hold** check box, and click **Release** on the form toolbar to release the invoice.

In the invoice summary, the selected **Pay by Line** check box designates that the balances of these invoices are tracked at the line level. The default value of this setting is copied from the customer record.

As shown in the screenshot below, in each line of the AR invoice:

- The **Balance** column shows the open AR balance of the invoice line, which gets closed by payment applications.
- The **Unreleased Retainage** column shows the amount of retainage held for this line of the invoice

Invoices and Memos

SAVE & CLOSE [Icons] RELEASE ACTIONS • INQUIRIES • REPORTS • 00:00:09

Type: Invoice Customer: EQUGRP - The Equity Group Investors Detail Total: 104,500.00  
 Reference Nbr: 000088 Terms: 30D - 30 Days Discount Total: 0.00  
 Status: Open Due Date: 7/1/2019 Apply Retainage VAT Taxable T.: 0.00  
 Hold Cash Discount: 7/1/2019 Pay by Line VAT Exempt T.: 0.00  
 Date: 6/1/2019 Project/Contract: HOTEL3 - The Beach Hotel and Condom Tax Total: 0.00  
 Post Period: 06-2019 Balance: 104,500.00  
 Customer Order: 000011 Amount: 104,500.00  
 Description: Invoice for HOTEL3 Cash Discount: 0.00

DOCUMENT DETAILS FINANCIAL DETAILS ADDRESS DETAILS TAX DETAILS APPROVAL DETAILS RETAINAGE APPLICATIONS COMPLIANCE

VIEW SCHEDULE [Icons]

| Branch     | Line Nbr | Account Group/Item | Transaction Descr.              | Quantity | UOM  | Unit Price | Ext. Price | Discount Percent | Discount Amount | Retainage Amount | Unreleased Retainage | Retained Tax | Amount    | Balance   | Retainage Percent | Tax Am |
|------------|----------|--------------------|---------------------------------|----------|------|------------|------------|------------------|-----------------|------------------|----------------------|--------------|-----------|-----------|-------------------|--------|
| HEADOFFICE | 1        |                    | GENERAL REQUIREMENTS            | 0.00     | HOUR | 0.0000     | 100,000.00 | 0.000000         | 0.00            | 5,000.00         | 5,000.00             | 0.00         | 95,000.00 | 95,000.00 | 5.000000          |        |
| HEADOFFICE | 2        |                    | SITWORK                         | 0.00     | HOUR | 0.0000     | 10,000.00  | 0.000000         | 0.00            | 500.00           | 500.00               | 0.00         | 9,500.00  | 9,500.00  | 5.000000          |        |
| HEADOFFICE | 3        |                    | CONCRETE                        | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 4        |                    | MASONRY                         | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 5        |                    | METALS                          | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 6        |                    | WOODS, PLASTICS, COMPOSITES     | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 7        |                    | THERMAL AND MOISTURE PROTECTION | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 8        |                    | OPENINGS                        | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 9        |                    | FINISHES                        | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 10       |                    | DEFAULT                         | 0.00     | EA   | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 11       |                    | SPECIALTIES                     | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 12       |                    | EQUIPMENT                       | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 13       |                    | SPECIAL CONSTRUCTION            | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 14       |                    | CONVEYING SYSTEMS               | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |
| HEADOFFICE | 15       |                    | MECHANICAL                      | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         | 0.00      | 0.00      | 5.000000          |        |

- On the **Financial Details** tab of the Invoices and Memos form, click the link in the **Batch Nbr.** box and review the GL transactions created on release of the AR invoice (shown on the screenshot below). Notice that the total retainage amount has been posted to the AR retainage account (non-current asset account).

Journal Transactions

SAVE & CLOSE [Icons] RELEASE ACTIONS • REPORTS •

Module: AR Branch: HEADOFFICE - SweetLife Head Office ar Type: Normal  
 Batch Number: AR000149 Ledger: ACTUAL - Actual Ledger Orig Batch Number:  
 Status: Posted Auto Reversing Reversing Entry Debit Total: 110,000.00  
 Hold Credit Total: 110,000.00  
 Transaction D.: 6/1/2019  
 Post Period: 06-2019  
 Description: Invoice for HOTEL3

VIEW SOURCE DOCUMENT RECLASSIFICATION HISTORY [Icons]

| Branch     | Account | Description         | Project/Contract | Project Task | Cost Code | Ref. Number | Transaction Date | Quantity | UOM  | Debit Amount | Credit Amount | Transaction Description | Non Billable             |
|------------|---------|---------------------|------------------|--------------|-----------|-------------|------------------|----------|------|--------------|---------------|-------------------------|--------------------------|
| HEADOFFICE | 11000   | Accounts Receivable | X                |              | 00-000    | 000088      | 6/1/2019         | 0.00     |      | 104,500.00   | 0.00          | Invoice for HOTEL3      | <input type="checkbox"/> |
| HEADOFFICE | 18000   | AR Retainage        | X                |              | 00-000    | 000088      | 6/1/2019         | 0.00     |      | 5,500.00     | 0.00          | Invoice for HOTEL3      | <input type="checkbox"/> |
| HEADOFFICE | 40000   | Project Revenue     | HOTEL3           | 01           | 01-000    | 000088      | 6/1/2019         | 0.00     | HOUR | 0.00         | 100,000.00    | GENERAL REQUIREMENTS    | <input type="checkbox"/> |
| HEADOFFICE | 40000   | Project Revenue     | HOTEL3           | 02           | 02-000    | 000088      | 6/1/2019         | 0.00     | HOUR | 0.00         | 10,000.00     | SITWORK                 | <input type="checkbox"/> |

### Releasing Retainage from AR Invoices and Payment Applications

Open AR and unreleased retainage (retainage held) balances can be tracked at the AR invoice summary level or at the line level. The option (whether the document balances are at the summary or line level) is determined for each document individually. The default option is inherited by a new document from the customer record: **Pay by Line** check box on the **General Info** tab of the Customers (AR303000) form.

If balances are tracked at the line level, payments are also applied to such AR invoices at the line level. This lesson demonstrates the workflow with invoices with open AR and retainage balances at the line level.

To release retainage and payment applications, do the following:

- On the Invoices and Memos (AR301000) form, open the earlier created AR invoice for the *HOTEL3* project.

- If the invoice balances are tracked at the line level, retainage is released at the line level too. Click **Actions > Release Retainage** on the form toolbar. The system opens the Release AR Retainage (AR510000) form.
- In the Summary area of the Release AR Retainage form, specify 20.00 in the **Retainage Percent** box. In the **Retainage to Release** column, the system calculates 20% of the retainage amount to release from each of the invoice lines.
- For the first line, change the amount in the **Retainage to Release** column to 2,000.00.
- Select both lines and click **Process**, as shown in the following screenshot.

Release AR Retainage

PROCESS PROCESS ALL

Branch: HEADOFFICE - SweetLife Hc  
 Date: 6/1/2019  
 Post Period: 06-2019  
 Customer: EQUGRP - The Equity Group  
 Project:  
 Project Task:  
 Account Group:

Cost Code:  
 Inventory ID:  
 Ref. Nbr.: 000088  
 Show Lines with Open Balance  
 Retainage Percent: 20.000000  
 Retainage to Release: 2,100.00

| Branch     | Type    | Reference Nbr. | Customer | Line Nbr. | Percent to Release | Retainage to Release | Unreleased Retainage | Date     | Total Amount | Project | Description        | Post Period | Customer |
|------------|---------|----------------|----------|-----------|--------------------|----------------------|----------------------|----------|--------------|---------|--------------------|-------------|----------|
| HEADOFFICE | Invoice | 000088         | EQUGRP   | 1         | 40.000000          | 2,000.00             | 3,000.00             | 6/1/2019 | 100,000.00   | HOTEL3  | Invoice for HOTEL3 | 06-2019     | 000011   |
| HEADOFFICE | Invoice | 000088         | EQUGRP   | 2         | 20.000000          | 100.00               | 400.00               | 6/1/2019 | 10,000.00    | HOTEL3  | Invoice for HOTEL3 | 06-2019     | 000011   |

The processing dialog box opens. When the process is complete, the system creates a retainage AR invoice. Close the dialog box.

- Open the Projects (PM301000) form and select the *HOTEL3* project.

On the **Invoices** tab, you can see all the AR invoices and credit memos (see the screenshot below). For a retainage invoice, the check box in the **Retainage Invoice** column is selected and the reference to the original invoice from which is has been created is specified in the **Original Document** column.

Projects

SAVE & CLOSE RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES REPORTS

Project ID: HOTEL3 Status: Active Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor Hold Liabilities: 0.00  
 Template: Income: 110,000.00  
 Description: The Beach Hotel and Condominiums Expenses: 0.00

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

RELEASE RETAINAGE All Records

| Currency | AR Doc. Type | AR Reference Nbr. | AR Doc. Date | AR Doc. Description | AR Doc. Orig. Amount | Original Retainage | AR Doc. Total Amount | Open AR Balance | Currency | AR Doc. Status | Unreleased Retainage | Retainage Invoice                   | Original Document |
|----------|--------------|-------------------|--------------|---------------------|----------------------|--------------------|----------------------|-----------------|----------|----------------|----------------------|-------------------------------------|-------------------|
| USD      | Invoice      | 000088            | 6/1/2019     | Invoice for HOTEL3  | 104,500.00           | 5,500.00           | 110,000.00           | 104,500.00      | USD      | Open           | 5,500.00             | <input type="checkbox"/>            |                   |
|          | Invoice      | 000089            | 6/1/2019     | Invoice for HOTEL3  | 2,100.00             | 0.00               | 2,100.00             | 2,100.00        | USD      | On Hold        | 0.00                 | <input checked="" type="checkbox"/> | 000088            |

- To open the retainage invoice on the Invoices and Memos form, click the link in the AR Reference Nbr. box.
- Make sure that the **Hold** check box is cleared, and click **Release** on the form toolbar to release the invoice. The retainage invoice now has the regular open AR balance (see the screenshot below) that can be closed by payment applications as the open AR balance of any other regular invoice.

Invoices and Memos

SAVE & CLOSE [Icons] RELEASE ACTIONS • INQUIRIES • REPORTS • 00.00.01

NOTES ACTIVITIES FILES NOTIFICATIONS TOOLS •

Type: Invoice Customer: EQUGRP - The Equity Group Investors Detail Total: 2,100.00  
 Reference Nbr.: 000089 Terms: 300 - 30 Days Discount Total: 0.00  
 Status: Open Due Date: 7/1/2019 Retainage Invoice VAT Taxable T...: 0.00  
 Hold Cash Discount: 7/1/2019 Pay by Line VAT Exempt T...: 0.00  
 Date: 6/1/2019 Project/Contract: HOTEL3 - The Beach Hotel and Condom Tax Total: 0.00  
 Post Period: 06-2019 Balance: 2,100.00  
 Customer Order: 000011 Amount: 2,100.00  
 Description: Invoice for HOTEL3 Cash Discount: 0.00

DOCUMENT DETAILS FINANCIAL DETAILS ADDRESS DETAILS TAX DETAILS APPROVAL DETAILS APPLICATIONS COMPLIANCE

VIEW SCHEDULE [Icons]

| Branch     | Line Nbr. | Account Group/Item | Transaction Descr.           | Quantity | UOM | Unit Price | Ext. Price | Discount Percent | Discount Amount | Amount   | Balance  | Tax Amount | *Account | Description  |
|------------|-----------|--------------------|------------------------------|----------|-----|------------|------------|------------------|-----------------|----------|----------|------------|----------|--------------|
| HEADOFFICE | 1         |                    | Retainage for Invoice 000088 | 0.00     |     | 0.0000     | 2,000.00   | 0.000000         | 0.00            | 2,000.00 | 2,000.00 | 0.00       | 18000    | AR Retainage |
| HEADOFFICE | 2         |                    | Retainage for Invoice 000088 | 0.00     |     | 0.0000     | 100.00     | 0.000000         | 0.00            | 100.00   | 100.00   | 0.00       | 18000    | AR Retainage |

Notice that the retainage AR invoice has the project key in each of the lines that match the project key of the original invoice line, including project (in the invoice header), project task, cost code, and inventory ID (item), except for GL account. GL account in a line of a retainage invoice is the AR retainage account, while the GL account of the original invoice line is a revenue account.

The project structure is carried on from the lines of an original invoice to retainage invoice lines in the **Pay by Line** mode only. Project structure classification in AR invoice lines could be useful for reporting purposes based on the ARTran table (this table stores lines of AR invoices and credit memos).

- On the **Financial Details** tab, click the link in the **Batch Nbr.** box and review the GL transactions created from the retainage invoice, shown on the screenshot below. Notice that the amount has been moved from the AR retainage account to the AR account (current asset).

Journal Transactions

SAVE & CLOSE [Icons] RELEASE ACTIONS • REPORTS •

NOTES ACTIVITIES FILES NOTIFICATIONS TOOLS •

Module: AR Branch: HEADOFFICE - SweetLife Head Office ar Type: Normal  
 Batch Number: AR000150 Ledger: ACTUAL - Actual Ledger Orig Batch Number:  
 Status: Posted Auto Reversing Reversing Entry Debit Total: 2,100.00  
 Hold Credit Total: 2,100.00  
 Transaction D.: 6/1/2019  
 Post Period: 06-2019  
 Description: Invoice for HOTEL3

VIEW SOURCE DOCUMENT RECLASSIFICATION HISTORY [Icons]

| Branch     | *Account | Description         | Project/Contract | Project Task | Cost Code | Ref. Number | Transaction Date | Quantity | UOM | Debit Amount | Credit Amount | Transaction Description      | Non Billable             |
|------------|----------|---------------------|------------------|--------------|-----------|-------------|------------------|----------|-----|--------------|---------------|------------------------------|--------------------------|
| HEADOFFICE | 11000    | Accounts Receivable | X                |              | 00-000    | 000089      | 6/1/2019         | 0.00     |     | 2,100.00     | 0.00          | Invoice for HOTEL3           | <input type="checkbox"/> |
| HEADOFFICE | 18000    | AR Retainage        | X                |              | 00-000    | 000089      | 6/1/2019         | 0.00     |     | 0.00         | 2,000.00      | Retainage for Invoice 000088 | <input type="checkbox"/> |
| HEADOFFICE | 18000    | AR Retainage        | X                |              | 00-000    | 000089      | 6/1/2019         | 0.00     |     | 0.00         | 100.00        | Retainage for Invoice 000088 | <input type="checkbox"/> |

- Return to the Invoices and Memos form and on the **Financial Details** tab, click the link in the **Original Document** box to open the original invoice. Notice the decreased **Unreleased Retainage** balances in the invoice lines. For example, for the first line, the originally retained amount was \$5,000.00, the amount of \$2,000.00 has been released, and the remaining unreleased retainage balance is \$3,000.00. **Open AR Balance** of the invoice line remains \$95,000.00 because no payments were applied to the invoice yet.

- Click **Actions > Enter Payment/Apply Memo** on the form toolbar.

- On the Payments and Applications (AR302000) form, which opens, for the two lines from the invoice, the system has automatically populated the **Amount Paid** column with the amount from the **Balance** column of each invoice line.

- 13.** On the table toolbar of the **Documents to Apply** tab, click the plus button and add the lines of the retainage invoice in the full amount of the open balance by performing the following instructions:
- In the **Reference Nbr.** column, select the reference number of the retainage invoice.
  - In the **Line Nbr.** column, select the first line (1) to be added.
  - In the **Amount Paid** column, specify the total amount of the line to be paid (\$2000).
  - Perform Instructions a-c for the second line with the 2 line number and \$100 total amount.

HINT: For convenient data entry, you can move the **Balance** column on the **Documents to Apply** tab closer to the **Amount Paid** column.

- 14.** In the Summary area, enter 106,600.00 in the **Payment Amount** box.
- 15.** Make sure the **Hold** check box is cleared, and click **Release** on the form toolbar to release the payment along with the payment applications to the invoice lines. The lines have been moved to the **Application History** tab, as shown in the following screenshot.

Payments and Applications

SAVE & CLOSE [Icons] RELEASE VOID ACTIONS • INQUIRIES • REPORTS • 00:00:08

NOTES ACTIVITIES FILES NOTIFICATIONS TOOLS

Type: Payment Customer: EQUGRP - The Equity Group Investors Payment Amo.: 106,600.00  
 Reference Nbr.: 000055 Payment Meth.: CHECK - Check Payment Applied to Doc.: 0.00  
 Status: Closed Card/Account: Applied to Ord.: 0.00  
 Hold  New Card Available Bala.: 0.00  
 Application Date: 2/20/2020 Cash Account: 10280WH - Wholesale Checking Write-Off Amo.: 0.00  
 Application Pa.: 02-2020 Finance Chrg.: 0.00  
 Payment Ref.: 0024 Deducted Cha.: 0.00  
 Description: Invoice for HOTEL3

DOCUMENTS TO APPLY APPLICATION HISTORY ORDERS TO APPLY FINANCIAL DETAILS APPROVAL DETAILS FINANCE CHARGES COMPLIANCE

REVERSE APPLICATION [Icons]

| Branch     | Batch Number | Doc. Type | Reference Nbr. | Line Nbr. | Inventory ID | Project | Project Task | Cost Code | Account | Customer  | Amount Paid | Cash Discount Taken | Write-Off Amount | Application Period | Date     | Due Date |
|------------|--------------|-----------|----------------|-----------|--------------|---------|--------------|-----------|---------|-----------|-------------|---------------------|------------------|--------------------|----------|----------|
| HEADOFFICE | AR000151     | Invoice   | 000088         | 1         | HOTEL3       | 01      | 01-000       | 40000     | EQUGRP  | 95,000.00 | 0.00        | 0.00                | 02-2020          | 6/1/2019           | 7/1/2019 |          |
| HEADOFFICE | AR000151     | Invoice   | 000088         | 2         | HOTEL3       | 02      | 02-000       | 40000     | EQUGRP  | 9,500.00  | 0.00        | 0.00                | 02-2020          | 6/1/2019           | 7/1/2019 |          |
| HEADOFFICE | AR000151     | Invoice   | 000089         | 1         | HOTEL3       | 01      | 01-000       | 18000     | EQUGRP  | 2,000.00  | 0.00        | 0.00                | 02-2020          | 6/1/2019           | 7/1/2019 |          |
| HEADOFFICE | AR000151     | Invoice   | 000089         | 2         | HOTEL3       | 02      | 02-000       | 18000     | EQUGRP  | 100.00    | 0.00        | 0.00                | 02-2020          | 6/1/2019           | 7/1/2019 |          |

- 16.** Open the original invoice on the Invoices and Memos form. Notice that the open AR balance of the invoice is zero, but the invoice retains the *Open* status. The original invoice becomes *Closed* only when all of the retainage AR invoices get closed, that is - the open AR balances of the retainage invoices are paid in full.

On the **Retainage** tab of the original AR invoice, you can find links to all of the retainage invoices and credit memos that were created from this original invoice.

### Performing T&M Billing with Retainage

In case of transaction-based billing (by means of a *Time and Material* step of the billing rule), the retainage % that is specified at the project level applies by default to each of the invoice lines that originate from the billed transactions.

Suppose the contract of the *HOTEL3* project dictates 5% retainage to be held from any amount that is subject to invoice for this project.

To process T&M billing with retainage, do the following:

1. Open the Projects (PM301000) form and select *HOTEL3* in the **Project ID** box.
2. On the **Summary** tab, make sure that the retainage percent in the **Retainage (%)** box is 5.00.
3. On the **Tasks** tab, click **Add Row** on the table toolbar, and add a new project task with the following settings (shown on the screenshot below):

- **Task ID:** 20
- **Type:** *Sub Job/Schedule of Values*
- **Description:** Ad-hoc miscellaneous expenses
- **Billing Rule:** *TM*
- **Status:** *Active*

| *Task ID | *Type                      | *Description                    | Rate Table | Allocation Rule | Billing Rule | *Status | Completed (%) | Start Date | End Date | Approver | *Billing Optio |
|----------|----------------------------|---------------------------------|------------|-----------------|--------------|---------|---------------|------------|----------|----------|----------------|
| 03       | Sub Job/Schedule of Values | CONCRETE                        |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 04       | Sub Job/Schedule of Values | MASONRY                         |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 05       | Sub Job/Schedule of Values | METALS                          |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 06       | Sub Job/Schedule of Values | WOOD, PLASTICS, COMPOSITES      |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 07       | Sub Job/Schedule of Values | THERMAL AND MOISTURE PROTECTION |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 08       | Sub Job/Schedule of Values | OPENINGS                        |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 09       | Sub Job/Schedule of Values | FINISHES                        |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 10       | Sub Job/Schedule of Values | SPECIALTIES                     |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 11       | Sub Job/Schedule of Values | EQUIPMENT                       |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 12       | Sub Job/Schedule of Values | FURNISHINGS                     |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 13       | Sub Job/Schedule of Values | SPECIAL CONSTRUCTION            |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 14       | Sub Job/Schedule of Values | CONVEYING SYSTEMS               |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 15       | Sub Job/Schedule of Values | MECHANICAL                      |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 16       | Sub Job/Schedule of Values | ELECTRICAL                      |            |                 | PROGRESS     | Active  | 0.00          | 3/1/2019   |          |          | By Billing     |
| 20       | Sub Job/Schedule of Values | Ad-hoc miscellaneous expenses   |            |                 | TM           | Active  | 0.00          | 2/20/2020  |          |          | By Billing     |

4. Click **Save** to save your changes.
5. Click the link in the **Billing Rule** column to review the *TM* billing rule on the Billing Rules (PM207000) form that opens. The rule has three steps for billing of transactions that are posted to *MATERIAL*, *LABOR*, or *SUBCON* account groups. The calculation formula is the following: the amount of expense multiplied by 1.25 = the billed amount for the transaction.  
  
In the *HOTEL3* project, the rule will apply to the transactions that are recorded to the project task 20 only, because the billing rule is specified for this project task only.
6. In the upper-right corner of the top pane of the Acumatica ERP screen, set the business date in your system to 7/1/2019.

7. Open the Project Transactions (PM304000) form, click **Add New Record** on the form toolbar and enter a project transaction with the following settings (shown on the screenshot below):

- **Module:** *PM*
- **Description:** Misc expenses
- **Document Details** tab: add the following transaction (no posting to GL):
  - **Branch:** *HEADOFFICE*
  - **Project:** *HOTEL3*
  - **Sub Job/Schedule of Values** (Project Task): *20*
  - **Cost Code:** *00-000*
  - **Account Group:** *LABOR*
  - **Inventory ID:** *LABOR*
  - **Description:** Construction Labor
  - **UOM:** *HOURL*
  - **Quantity:** 1.50
  - **Billable:** Selected
  - **Billable Quantity:** 1.00
  - **Unit Rate:** 30.00
  - **Amount:** 45.00 (calculated automatically)

The screenshot shows the 'Project Transactions' form with the following details:

- Module: PM
- Ref. Number: PM00000043
- Status: Released
- Description: Misc expenses
- Total Quantity: 1.50
- Total Billable Quantity: 1.00
- Total Amount: 45.00

The 'DOCUMENT DETAILS' tab is active, showing a table of allocation sources:

| Branch     | Project | Sub Job/Schedule of Values | Cost Code | Account Group | Employee | Customer/Id | Inventory ID | Description        | UOM   | Quantity | Billable                            | Billable Quantity | Unit Rate | Amount | Debit Account |
|------------|---------|----------------------------|-----------|---------------|----------|-------------|--------------|--------------------|-------|----------|-------------------------------------|-------------------|-----------|--------|---------------|
| HEADOFFICE | HOTEL3  | 20                         | 00-000    | MATERIAL      |          |             | LABOR        | Construction Labor | HOURL | 1.50     | <input checked="" type="checkbox"/> | 1.00              | 30.0000   | 45.00  |               |

8. On the form toolbar, click **Release** to release the project transaction.
9. Open the Projects form and select *HOTEL3* in the **Project ID** box. On the form toolbar, click **Run Project Billing**.

**10.** On the Pro Forma Invoices (PM307000) form, which opens, review the **Time and Material** tab of the created pro forma invoice. The Retainage % of the project applies to each of the TM lines of the pro forma invoice.

In the columns for each of the invoice lines on this tab, the following amounts are shown:

- **Billed Amount:** The amount calculated by the billing rule formula
- **Amount to Invoice:** Billed Amount, this is the amount of the invoice line that can be corrected, if necessary
- **Retainage Amount:** Amount to Invoice \* Retainage % of the line, can be corrected, if necessary

HINT: You can click **View Transaction Details** on the toolbar of the tab to view the source transactions that were billed to product the selected invoice line on this tab.

**11.** Make sure the **Hold** check box is cleared.

**12.** On the form toolbar, click **Release** to release the pro forma invoice and review the created AR invoice on the Invoices and Memos (AR301000) form, shown on the screenshot below. The amounts from the pro forma invoice have been copied to the AR invoice lines as follows:

- **Ext. Price:** Amount to Invoice from the pro forma invoice line
- **Retainage Amount:** Retainage Amount of the pro forma line

NOTE: Retainage percent in the AR invoice line may differ from the retainage percent of the pro forma line due to rounding difference. Retainage percent in the AR invoice line is calculated as Retainage Amount / Ext. Price.

Invoices and Memos

SAVE & CLOSE    RELEASE    ACTIONS • INQUIRIES • REPORTS •

Reference Nbr: 000950    Customer: EQUGRP - The Equity Group Investors    Detail Total: 53.44  
 Status: On Hold    \* Terms: 30D - 30 Days    \* Discount Total: 0.00  
 \* Date: 7/1/2019    \* Due Date: 7/31/2019    \* Apply Retainage    VAT Taxable T.: 0.00  
 \* Post Period: 07-2019    \* Cash Discount: 7/31/2019    \* Pay by Line    VAT Exempt T.: 0.00  
 Customer Order: 000012    Project/Contract: HOTEL3 - The Beach Hotel and Condom    Tax Total: 0.00  
 Description: Invoice for HOTEL3    Balance: 53.44  
 Cash Discount: 0.00

DOCUMENT DETAILS    FINANCIAL DETAILS    ADDRESS DETAILS    TAX DETAILS    APPROVAL DETAILS    RETAINAGE    APPLICATIONS    COMPLIANCE

| Branch     | Line Nbr | Account Group/Item | Transaction Descr.              | Quantity | UOM  | Unit Price | Ext. Price | Discount Percent | Discount Amount | Retainage Amount | Amount | Retainage Percent | * Account | Description     |
|------------|----------|--------------------|---------------------------------|----------|------|------------|------------|------------------|-----------------|------------------|--------|-------------------|-----------|-----------------|
| HEADOFFICE | 3        |                    | CONCRETE                        | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 4        |                    | MASONRY                         | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 5        |                    | METALS                          | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 6        |                    | WOODS, PLASTICS, COMPOSITES     | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 7        |                    | THERMAL AND MOISTURE PROTECTION | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 8        |                    | OPENINGS                        | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 9        |                    | FINISHES                        | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 10       |                    | DEFAULT                         | 0.00     | EA   | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 11       |                    | SPECIALTIES                     | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 12       |                    | EQUIPMENT                       | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 13       |                    | SPECIAL CONSTRUCTION            | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 14       |                    | CONVEYING SYSTEMS               | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 15       |                    | MECHANICAL                      | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 16       |                    | ELECTRICAL                      | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00   | 5.000000          | 40000     | Project Revenue |
| HEADOFFICE | 17       | LABOR              | Construction Labor              | 1.00     | HOUR | 56.2500    | 56.25      | 0.000000         | 0.00            | 2.81             | 53.44  | 4.995556          | 40000     | Project Revenue |

- 13.** On toolbar of the Invoices and Memos form, click **Inquiries > View Pro Forma** to go back to the pro forma invoice.

NOTE: If you have **Pending Invoice Amount** for billing on the **Revenue Budget** tab and transactions for TM billing, all of the lines can be included in a single pro forma invoice appearing on the respective tabs of the Pro Forma Invoices form, **Progress Billing** and **Time and Material**. You can also configure project billing to segregate TM billing to an invoice separate from progress billing invoices. For more information, refer to the *Project Accounting* training course.

The following sections are provided for reference and not required for completing this training.

### Importing Open AR Invoices

You can import open AR invoices to Acumatica ERP by doing the following:

1. On the Accounts Receivable Preferences (AR101000) form, make sure that the **Activate Migration Mode** check box is cleared.

NOTE: This mode does not support import of documents with open retainage balances.

2. On the Invoices and Memos (AR301000) form, create a new invoice for each open original invoice, specify AR **open balance** and **unreleased retainage** (instead of the original amounts) and release the invoices. After that the customer balances and retained balances will be correct in the AR subledger.

For example, an AR invoice exists in a legacy system with the original AR amount of \$1000 and the unreleased retainage of \$100. The invoice has been partially paid for the amount of \$100 and the retainage has been partially released for the amount of \$10 in the legacy system. The remaining balance of the invoice is \$900 (\$1000 - \$100) and the remaining unreleased retainage is \$90 (\$100 - \$10). In Acumatica ERP, you need to create an invoice with the AR amount of \$900 and the retainage amount of \$90. After you release this invoice, the AR amount becomes the AR balance.

3. On the Trial Balance (GL303010) form, upload trial balances in the GL subledger, no need to reverse batches posted by the AR subledger.

Note: To be able to complete further lessons, clear the **Activate Migration Mode** check box on the Accounts Receivable Preferences form.

### Enabling Retained Taxes

A tax amount calculated on the retainage amount can be posted to a separate GL account instead of the Tax Payable account if the tax amount has to be retained along with the respective retainage amount of the invoice.

To enable retained taxes, you do the following:

1. Open the Accounts Receivable Preferences (AR101000) form.
2. Select the **Retain Taxes** check box in the **Retainage Settings** section on the **General Settings** tab, and save the changes.

### Functionality Restrictions in Invoices with AR Balance and Retainage at the Line Level

- The migration mode option on the Accounts Receivable Preferences (AR101000) form. The feature is not compatible with the migration mode. If the **Activate Migration Mode** check box is selected, the **Pay by Line** check box on data entry forms is disabled for editing, and there is no way to specify line balances and unreleased retainage balances in AR documents.
- Group and document discounts are not supported in invoices with AR balances at the line level with or without retainage.
- VAT recalculated on cash discounts is not supported.
- Negative line amounts in invoices are not supported.
- Invoices in foreign currency are not supported if they are with retainage at the line level. Invoices with AR balance at the line level without retainage support foreign currencies.
- Calculation of taxes by using Avalara integration is not supported.
- The *Invoice Rounding* feature is not supported.
- It is not possible to apply existing open AR payments or credit memos on the **Applications** tab of the Invoices and Memos (AR301000) form to an invoice with AR balance and retainage at the line level.
- Multiple-installment credit terms are not supported if an invoice is with retainage.
- Editing of tax amount and retained tax amount for inclusive taxes - that is, VAT and sales taxes that use the *Extract from Item Amount* calculation method is not supported.
- Balance write offs cannot be performed at the line level.
- The **Reverse and Apply to Memo** action on the Invoices and Memos form is not supported for invoices with the **Pay by Line** check box selected in the Summary area of this form.

NOTE: Users can reverse invoices by clicking **Actions > Reverse** on the toolbar of the Invoices and Memos (AR301000) form. The system creates a credit memo for the amount of the invoice. After the credit memo is released, it must be manually applied to the invoice that has been reversed, so the open balances of both documents get closed.

## Lesson 4: Subcontracts

---

A subcontract is a document that represents a commitment with a vendor to provide goods and services for a project. Subcontract workflow is similar to the workflow of a purchase order that contains service lines and non-stock lines only. AP bills are entered directly for a subcontract once the work has been completed and the AP document has been received from the vendor.

Subcontractors are specialty vendors that are hired to complete a part of the project for which your company has no employees.

### Learning Objectives

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

- Create notification templates for subcontracts
- Set up subcontract mailings for particular vendors
- Create, edit, print, and email subcontracts
- Enter AP bills for subcontracts
- Track commitments and costs related to subcontracts

### Story

We hire a subcontractor, Standard Hardware Company, to help us install windows and doors in the hotel that we are building. After some consideration, we agree with the subcontractor that they will install only windows, and we will hire a different subcontractor to install doors later.

### System Preparation

Sign in to the system as a project manager by using the *owen* login and *123* password.

### Configuring Subcontract Mailings

To configure subcontract mailings for vendors, do the following:

1. Create a notification template for subcontracts by doing as follows:
  - a. Open the Notification Templates (SM204003) form, and click **Add New Record**.
  - b. In the **Screen Name** box, select the Subcontracts (SC301000) form.
  - c. In the **Description** box, type *Subcontracts*.
  - d. In the **From** box, select the *System* email account.

This is the default account from which emails with subcontracts will be sent to vendors.

- e. In the **Subject** box, type *Subcontract email*.
  - f. In the text editor area on the **Message** tab, specify the following text:

*Dear Vendor,*

*Here's your subcontract.*

*Sincerely yours,*

*SweetLife*
  - g. Save the changes.
2. On the Vendor Classes (AP201000) form, select the *SUBCON* vendor class, on the **Mailing Settings** tab, and do the following:
    - a. Make sure that the *SUBCONTRACT* mailing is listed in the **Mailings** table and marked as *Active*.
    - b. For the *SUBCONTRACT* mailing, select the *System* email account in the **Email Account** column and the *Subcontracts* notification template in the **Notification Template** column.
    - c. Make sure that *SC.64.10.00* is specified in the **Report** column. This is the identifier of the Subcontract printed form that will be used for generating a short form of a subcontract to be attached to an email.
    - d. In the **Recipients** table below, add a row with the *Remittance* contact type selected. (Leave the default values for the remaining settings.)
    - e. Save the changes.

Vendors

← SAVE & CLOSE [Print] [Refresh] + [New] [Delete] [Back] < > [Next] ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

\* Vendor ID:  \* Status:  Balance: 0.00  
 \* Vendor Name:  Prepayment Balance: 0.00  
 Retained Balance: 0.00

GENERAL INFO PAYMENT SETTINGS PURCHASE SETTINGS CONTACTS ATTRIBUTES ACTIVITIES GLACCOUNTS **MAILING SETTINGS**

**Mailings**

[Refresh] + [New] [Delete] [Print] [Print All]

| Mailings  | Branch | Email Account | Report      | Notification Template | Format | Active                              | Override                 |
|-----------|--------|---------------|-------------|-----------------------|--------|-------------------------------------|--------------------------|
| Condit... |        |               | CL.64.20.03 |                       | PDF    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Condit... |        |               | CL.64.20.01 |                       | PDF    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| PURC...   |        |               | PO.64.10.00 |                       | PDF    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| RQPR...   |        |               | RQ.61.10.00 |                       | PDF    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| > SUBC... |        | system...     | SC.64.10.00 | Subcontracts          | PDF    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Uncon...  |        |               | CL.64.20.04 |                       | PDF    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Recipients**

[Refresh] + [New] [Delete] [Print] [Print All]

| Contact Type | Contact ID | Email     | Format | Active                              | Bcc                      |
|--------------|------------|-----------|--------|-------------------------------------|--------------------------|
| > Remittance |            | contac... | PDF    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

3. On the Vendors (AP303000) form, select the *HARDCO* vendor and click the **Mailing Settings** tab.

Make sure that the settings of the *SUBCONTRACT* mailing have been copied from the *SUBCON* vendor class. These settings will be used for the *HARDCO* vendor, which belongs to that vendor class and which you will use in the exercise below.

Note that mailing settings may be overridden and set up as needed for any individual vendor.

**Working with Subcontracts**

Process a subcontract as follows:

1. On the Subcontract Preferences (SC101000) form, make sure that the *SUBCONTR* numbering sequence is specified in the **Subcontract Numbering Sequence** box. Save the settings if needed.
2. On the Subcontracts (SC301000) form, create a subcontract with the following settings:
  - **Vendor:** *HARDCO - Standard Hardware Company*
  - **Description:** Windows and Doors
  - On the **Document Details** tab, add lines with the following settings:

| Line # | Account Group/ Item | Project | Sub Job | Cost Code | Line De-<br>scription | Ext. Cost |
|--------|---------------------|---------|---------|-----------|-----------------------|-----------|
| 1      | SUBCON              | HOTEL   | 08      | 08-510    | Windows               | 650,000   |
| 2      | SUBCON              | HOTEL   | 08      | 08-200    | Doors and frames      | 442,000   |
| 3      | SUBCON              | HOTEL   | 08      | 08-800    | Entrance              | 2,000,000 |

**3.** Review the subcontract totals.

**4.** On the **Other Information** tab, clear the **Don't Print** and **Don't Email** check boxes.

If these check boxes are selected, the subcontract will get the *Open* status immediately after it is taken off hold.

**5.** Clear the **Hold** check box and save the changes.

The subcontract gets the *Pending Printing* status.

**6.** Click **Reports > Print Subcontract** on the form toolbar.

A short form of the subcontract opens on the Subcontract (SC641000) form.

Click **Print** on the form toolbar to print the short form of the subcontract. (You don't need to actually print the subcontract in this lesson—you can return to the Subcontracts form right away.)

After the subcontract has been printed, it gets the *Pending Email* status.

**7.** On the form toolbar of the Subcontracts form, click **Actions > Email Subcontract**.

The system processes the subcontract and creates an email activity associated with the subcontract. As a result, the **Activities** counter on the title bar of the form increases by one, as the following screenshot shows. Click that counter.

Subcontracts NOTES ACTIVITIES (1)

← SAVE & CLOSE + - K < > X ACTIONS ▾ REPORTS ▾ 00:00:04

|                                |  |                                 |
|--------------------------------|--|---------------------------------|
| Subcontract Nbr.: SC-000003    | Vendor: HARDCO - Standard Hardware Company | Line Total: 3,092,000.00        |
| <input type="checkbox"/> Hold  | Owner:                                     | Discount Total: 0.00            |
| Status: Open                   | Currency: USD 1.00                         | VAT Exempt T...: 0.00           |
| Date: 10/23/2019               | Vendor Ref.:                               | VAT Taxable T...: 0.00          |
| Start Date: 10/23/2019         |  | Tax Total: 0.00                 |
| Description: Windows and Doors |  | Retainage Total: 0.00           |
|                                |  | Subcontract To...: 3,092,000.00 |

DOCUMENT DETAILS TAX DETAILS VENDOR INFO DISCOUNT DETAILS SC HISTORY PREPAYMENTS CHANGE ORDERS OTHER INFORMATION COMPLIANCE

| Branch   | Account Group/Iter | Project | Sub Job | Cost Code | Line Description | UOM | Order Qty. | Unit Cost | Ext. Cost    | Discount Percent | Discount Amount | Manual Discount                     | Discount Code |
|----------|--------------------|---------|---------|-----------|------------------|-----|------------|-----------|--------------|------------------|-----------------|-------------------------------------|---------------|
| HEADO... | SUBCON             | HOTEL   | 08      | 08-510    | Windows          | EA  | 0.00       | 0.0000    | 650,000.00   | 0.000000         | 0.00            | <input checked="" type="checkbox"/> |               |
| HEADO... | SUBCON             | HOTEL   | 08      | 08-200    | Doors and Frames | EA  | 0.00       | 0.0000    | 442,000.00   | 0.000000         | 0.00            | <input checked="" type="checkbox"/> |               |
| HEADO... | SUBCON             | HOTEL   | 08      | 08-800    | Entrance         | EA  | 0.00       | 0.0000    | 2,000,000.00 | 0.000000         | 0.00            | <input checked="" type="checkbox"/> |               |

- In the **Tasks and Activities** dialog box that opens, click the *Subcontract email* link to review the generated email.

Tasks & Activities X

ADD TASK ADD EVENT ADD ACTIVITY ▾

24 Oct [Subcontract email](#)

- On the Email Activity form that opens, review the sender and recipient email addresses, the message of the email, and the summary information of the subcontract. Click **Files** on the title bar.

Email Activity NOTES FILES (1) CUSTOMIZATION TOOLS ▾

SAVE & CLOSE + - K < > X REPLY ACTIONS ▾

|   |   |
|---|---|
| <p>From: System</p> <p>To: ar@hardco.con</p> <p>CC:</p> <p>BCC:</p> <p>Subject: Subcontract email</p> | <p><b>Subcontract</b></p> <p>Order Nbr.: SC-000003</p> <p>Vendor: Standard Hardware Company</p> <p>Location: Primary Location</p> <p>Date: 10/23/2019 12:00:00 AM</p> <p>Status: Open</p> |
|---|---|

MESSAGE DETAILS

VISUAL ▾ + - Paragraph **B** *I* U A B B B B B B B INSERT LAYOUT »

Dear Vendor,

Here's your subcontract.

Sincerely yours,

SweetLife

- In the **Files** dialog box, click the link to the attached PDF file and review the short form of the subcontract that has been attached to the email generated for the vendor.



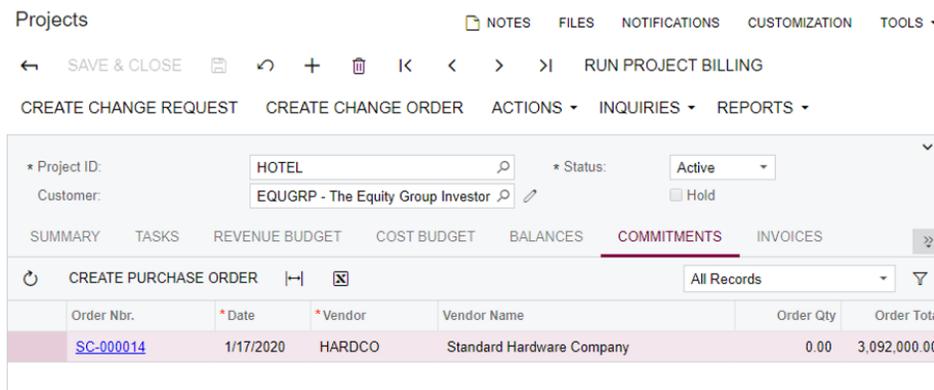
A short form of the subcontract has been generated because the Subcontracts (SC641000) printed form is specified in the mailing settings for the vendor.

- Return to the Subcontracts (SC301000) form, review the status of the subcontract—it has changed to *Open*.

Click the **Actions** menu on the form toolbar and note that the **Email Subcontracts** menu option is still available. You can email a subcontract that has the *Open* status as many times as needed. (For instance, you may need to resend the email after you have changed the text of the message or the email address of the recipient). The latest email will be added to the top of the list of the activities associated with the subcontract.

Note that by using the Subcontract Summary (SC610500) and Subcontract Details by Vendor (SC611000) forms, you can generate reports that show subcontract data at different levels of detail, sorted by vendor.

- Review the **Commitments** tab of the Projects (PM301000) form for the *HOTEL* project.



- Return to the Subcontracts (SC301000) form, on the **Document Details** tab, make sure that the *Windows and Doors* subcontract is selected, and then click **Actions > Enter AP Bill** on the form toolbar.
- On the **Document Details** tab of the Bills and Adjustments (AP301000) form that opens, remove the *Doors and Frames* and *Entrance* document lines because it was agreed that only windows will be installed at this point.
- Clear the **Hold** check box, and then click **Release** on the form toolbar.

Bills and Adjustments ☆ NOTES

← SAVE & CLOSE + - K < > | RELEASE ACTIONS ▾ INQUIRIES ▾ REPORTS ▾ 00:00:05

|   |   |                          |
|---|---|--------------------------|
| Type: <input type="text" value="Bill"/>                     | Vendor: <input type="text" value="HARDCO - Standard Hardware Company"/>                                 | Detail Total: 650,000.00 |
| Reference Nbr.: <input type="text" value="000051"/>         | Terms: 30D - 30 Days  | Discount Total: 0.00     |
| Status: <input type="text" value="Open"/>                   | * Due Date: <input type="text" value="11/24/2019"/> <input checked="" type="checkbox"/> Apply Retainage | VAT Taxable Total: 0.00  |
| <input type="checkbox"/> Hold                               | * Cash Discount: <input type="text" value="11/24/2019"/>  | VAT Exempt Total: 0.00   |
| Date: <input type="text" value="10/25/2019"/>               | <input type="checkbox"/> Joint Payees   | Tax Total: 0.00          |
| Post Period: <input type="text" value="10-2019"/>           |   | With. Tax: 0.00          |
| Vendor Ref.: <input type="text"/>                           |   | Balance: 650,000.00      |
|   |   | Amount: 650,000.00       |
| Description: <input type="text" value="Windows and Doors"/> |   | Cash Discount: 0.00      |

DOCUMENT DETAILS | FINANCIAL DETAILS | TAX DETAILS | RETAINAGE | APPLICATIONS | COMPLIANCE

VIEW SCHEDULE | ADD PO RECEIPT | ADD PO RECEIPT LINE | ADD PO | ADD SUBCONTRACTS | ADD PO LINE | ADD SUBCONTRACT LINE | ADD LC

| Branch     | Line Nbr. | Account Group/Item | Transaction Descr. | Quantity | UOM | Unit Cost | Ext. Cost  | Discount Amount | Retainage Percent |
|------------|-----------|--------------------|--------------------|----------|-----|-----------|------------|-----------------|-------------------|
| HEADOFFICE | 1         | SUBCON             | Windows            | 0.00     | EA  | 0.0000    | 650,000.00 | 0.00            | 0.000000          |

**16.** Click **Actions > Pay Bill/Apply Adjustment** on the form toolbar and then do the following on the Check and Payments (AP302000) form that opens:

**a.** In the **Payment Method** box, select **CASH**.

Note that normally you don't have to select a different payment method if you don't need to. In this lesson, we do so only to skip the printing of the check or specifying the payment reference number before the document can be released.

**b.** In the **Cash Account** box, select **10100ST**.

**c.** Clear the **Hold** check box.

**d.** Click **Release** on the form toolbar.

As a result, the check and the bill get the *Closed* status and transactions are posted to the GL.

**17.** On the **Cost Budget** tab of the Projects form, for the *HOTEL* project, review the updated costs for the cost budget line that includes the *08-510* cost code.

Projects

NOTES FILES NOTIFICATIONS CUSTOMIZATION TOOLS

SAVE & CLOSE RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES REPORTS

Project ID: HOTEL Status: Active Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor Liabilities: 0.00  
 Template: Income: 22,667,202.71  
 Description: The Beach Hotel and Condominiums Expenses: 650,000.00

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

Project Task: Group by Task

VIEW COMMITMENT DETAILS VIEW TRANSACTIONS All Records

| Sub Job | Cost Code | Account Group | Description                           | Original Budgeted Quantity | UOM  | Unit Rate      | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount |
|---------|-----------|---------------|---------------------------------------|----------------------------|------|----------------|--------------------------|-----------------------|---------------------|----------------------|--------------------|---------------------------|-------------------------|
| 06      | 06-100    | SUBCON        | Carpentry- Rough                      | 1.00                       | HOUR | 225,000.0000   | 225,000.00               | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 225,000.00              |
| 06      | 06-110    | MATERIAL      | Framing- Wood                         | 0.00                       | HOUR | 0.0000         | 25,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 0.00                      | 25,000.00               |
| 06      | 06-440    | MATERIAL      | Woodwork- Ornemental                  | 0.00                       | HOUR | 0.0000         | 7,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 0.00                      | 7,000.00                |
| 07      | 07-130    | SUBCON        | Waterproofing- Sheet                  | 1.00                       | HOUR | 980,000.0000   | 980,000.00               | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 980,000.00              |
| 08      | 08-100    | SUBCON        |                                       | 0.00                       |      | 0.0000         | 0.00                     | 0.00                  | 1,040.00            | 0.00                 | 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                 | 0.00               | 1.00                      | 442,000.00              |
| 08      | 08-510    | SUBCON        | Windows- Metal                        | 1.00                       | HOUR | 650,000.0000   | 650,000.00               | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 650,000.00              |
| 08      | 08-520    | SUBCON        |                                       | 0.00                       |      | 0.0000         | 0.00                     | 0.00                  | 850.00              | 0.00                 | 0.00               | 0.00                      | 0.00                    |
| 08      | 08-800    | SUBCON        | Entrances, Storefronts, Curtain Walls | 1.00                       | HOUR | 2,005,000.0000 | 2,005,000.00             | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 2,005,000.00            |
| 09      | 09-200    | SUBCON        | Finish- Drywall                       | 1.00                       | HOUR | 1,250,000.0000 | 1,250,000.00             | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 1,250,000.00            |
| 09      | 09-300    | SUBCON        | Finish- Tile                          | 1.00                       | HOUR | 377,500.0000   | 377,500.00               | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 377,500.00              |
| 09      | 09-560    | MATERIAL      | Ceilings- Textured                    | 1,500.00                   | EA   | 1,750.00       | 2,625.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1,500.00                  | 2,625.00                |
| 09      | 09-560    | SUBCON        | Ceilings- Textured                    | 1.00                       | HOUR | 340,500.0000   | 340,500.00               | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 340,500.00              |
| 09      | 09-680    | MATERIAL      | Flooring- Carpet                      | 0.00                       | HOUR | 0.0000         | 2,000,000.00             | 0.00                  | 0.00                | 0.00                 | 0.00               | 0.00                      | 2,000,000.00            |

**18.** On the Subcontracts form, open the subcontract that you have prepared earlier in this lesson, and click **Actions > Complete Subcontract**.

We completed the subcontract because it was agreed with the subcontractor that they will install only windows, and a different subcontractor will be hired to install doors later.

## Lesson 5: AP Bills with Retainage

---

Open AP and unreleased retainage (retainage held) balances can be tracked at the AP bill summary level or at the line level. The option (whether the document balances are at the summary or line level) is determined for each document individually. The default option is inherited by a new document from the vendor record: the **Pay by Line** check box on the **Payment Settings** tab of the Vendors (AP303000) form.

If balances are tracked at the line level, payments are also applied to such AP bills at the line level. This lesson demonstrates the workflow with AP bills with open AP and retainage balances at the line level.

### 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 an outstanding balance of the original bill

Additionally, you will learn about:

- Importing of open AP bills
- Configuring retained taxes
- Functionality restrictions in bills with AP balance and retainage at the line level

### Story

Suppose that the SweetLife company hired a subcontractor to install air conditioning systems. By subcontract, it has been agreed that \$2,400,00.00 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.

Then the company receives the first bill for 30% of the work. A project accountant enters a bill of \$720,000.00 that includes the retainage of 10% and enters a payment of \$680,000 for the bill. After some work has been finished by the subcontractor, the company pays the bill for 1% of retainage and the outstanding balance of the first bill.

### System Preparation

Sign in to the system as a project manager by using the *owen* login and *123* password. Make sure that the *HEADOFFICE* (SweetLife Head Office and Wholesale Center) branch of the *SWEETLIFE* company is selected on the Company and Branch selection menu.

## Reviewing the Retainage and Project Settings

To review the needed settings, do the following:

1. On the Enable/Disable Features (CS100000) form, make sure the *Payment Application by Line* feature is enabled.
2. Open the Vendors (AP303000) form and in the **Vendor ID** box, select *HVACCO*.
3. On the **Payment Settings** tab, make sure the **Pay by Line** check box is selected.
4. On the **General Info** tab, make sure the following settings are specified:
  - **Apply Retainage:** Selected
  - **Retainage Percent:** 10.00
5. Open the Projects (PM301000) form and in the **Project ID** box, select *HOTEL*.
6. Make sure the project is active (*Active* is selected in the **Status** box in the Summary area) and all project tasks are active (on the **Tasks** tab, *Active* is shown in the **Status** column for the tasks). This is a new project with the populated budget, but there are no transactions yet.

## Creating a Subcontract

To enter a subcontract for the vendor, do the following:

1. Open the Subcontracts (SC301000) form and click **Add New Record** on the form toolbar.
2. In the Summary area, specify the following settings:
  - **Vendor:** *HVACCO*
  - **Description:** HVAC sub
3. On the **Document Details** tab, click **Add Row** and populate the subcontract details shown in the following table and in the screenshot below:

| Account Group/Item | Project      | Sub Job   | Cost Code     | Line Description | UOM | Ext. Cost  | Account |
|--------------------|--------------|-----------|---------------|------------------|-----|------------|---------|
| <i>HVAC SUB</i>    | <i>HOTEL</i> | <i>15</i> | <i>15-700</i> | Draw 1 - 20%     | EA  | 480,000.00 | 54200   |
| <i>HVAC SUB</i>    | <i>HOTEL</i> | <i>15</i> | <i>15-700</i> | Draw 2 - 50%     | EA  | 720,000.00 | 54200   |
| <i>HVAC SUB</i>    | <i>HOTEL</i> | <i>15</i> | <i>15-700</i> | Draw 3 - 75%     | EA  | 600,000.00 | 54200   |

|          |       |    |        |                         |    |            |       |
|----------|-------|----|--------|-------------------------|----|------------|-------|
| HVAC SUB | HOTEL | 15 | 15-700 | Final Draw - Completion | EA | 600,000.00 | 54200 |
|----------|-------|----|--------|-------------------------|----|------------|-------|

Subcontracts

Subcontract Nbr.: SC-000019 • Vendor: HVACCO - Parker & Sons HVAC

Status:  Hold • Owner: ADMIN - Tamara M

\* Date: 12/20/2019 • Currency: USD 1.00 • Description: HVAC sub

Line Total: 2,160,000.00  
 Discount Total: 0.00  
 VAT Exempt T...: 0.00  
 VAT Taxable T...: 0.00  
 Tax Total: 0.00  
 Retainage Total: 240,000.00  
 Subcontract To...: 2,400,000.00

DOCUMENT DETAILS | TAX DETAILS | VENDOR INFO | DISCOUNT DETAILS | SC HISTORY | PREPAYMENTS | CHANGE ORDERS | OTHER INFORMATION | ATTRIBUTES | COMPLIANCE

| Branch     | Project | Sub Job | Account Group/Item | Cost Code | Line Description        | UOM | Order Qty. | Unit Cost | Ext. Cost  | Account | Description      | Discount Percent | Discount Amount | Manual Discount                     |
|------------|---------|---------|--------------------|-----------|-------------------------|-----|------------|-----------|------------|---------|------------------|------------------|-----------------|-------------------------------------|
| HEADOFFICE | HOTEL   | 15      | HVAC SUB           | 15-700    | Draw 1 - 20%            | EA  | 0.00       | 0.0000    | 480,000.00 | 54200   | Project Subco... | 0.000000         | 0.00            | <input checked="" type="checkbox"/> |
| HEADOFFICE | HOTEL   | 15      | HVAC SUB           | 15-700    | Draw 2 - 50%            | EA  | 0.00       | 0.0000    | 720,000.00 | 54200   | Project Subco... | 0.000000         | 0.00            | <input checked="" type="checkbox"/> |
| HEADOFFICE | HOTEL   | 15      | HVAC SUB           | 15-700    | Draw 3 - 75%            | EA  | 0.00       | 0.0000    | 600,000.00 | 54200   | Project Subco... | 0.000000         | 0.00            | <input checked="" type="checkbox"/> |
| HEADOFFICE | HOTEL   | 15      | HVAC SUB           | 15-700    | Final Draw - Completion | EA  | 0.00       | 0.0000    | 600,000.00 | 54200   | Project Subco... | 0.000000         | 0.00            | <input checked="" type="checkbox"/> |

- Review the amounts in the document details in the **Ext. Cost**, **Retainage Amount**, and **Amount** columns. Review the subcontract totals.
- Clear the **Hold** check box in the Summary area and save the document with the *Open* status.

### Processing an AP Bill

To create and pay an AP bill for the vendor, do the following:

- While you are still on the Subcontracts (SC301000) form, click **Actions > Enter AP Bill** on the form toolbar.
- On the Bills and Adjustments (AP301000) form that opens, on the **Document Details** tab, enter a bill for 30% of the subcontract, as follows (also shown on the screenshot below):
  - Remove lines #3 and #4 from the AP bill.
  - In the 2 line, in the **Ext. Cost** column, change the value to 240,000.
- Review the **Pay by Line** check box in the Summary area of the Bills and Adjustments form.

The check box in the document is inherited from the vendor settings. The check box state can be modified in a document before lines are added to it.

Bills and Adjustments

NOTES ACTIVITIES FILES NOTIFICATIONS CUSTOM

← SAVE & CLOSE ↻ + 🗑️ 📄 ⏪ ⏩ RELEASE ACTIONS INQUIRIES REPORTS

Type: Bill Vendor: HVACCO - Parker & Sons HVAC Detail Total: 648,000.00  
 Reference Nbr.: 000074 Terms: 30D - 30 Days Discount Total: 0.00  
 Status: On Hold Due Date: 1/19/2020 Apply Retainage VAT Taxable Total: 0.00  
 Hold Cash Discount: 1/19/2020 Pay by Line Joint Payees VAT Exempt Total: 0.00  
 Date: 12/20/2019 Tax Total: 0.00  
 Post Period: 12-2019 With Tax: 0.00  
 Vendor Ref.: Balance: 648,000.00  
 Description: HVAC sub Cash Discount: 0.00

DOCUMENT DETAILS FINANCIAL DETAILS TAX DETAILS APPROVAL DETAILS RETAINAGE APPLICATIONS COMPLIANCE

VIEW SCHEDULE ADD PO RECEIPT ADD PO RECEIPT LINE ADD PO ADD PO LINE ADD SUBCONTRACTS ADD SUBCONTRACT LINE ADD LC LINK LINE

| Branch     | Line Nbr. | Account Group/Item | Transaction Descr. | Quantity | UOM | Unit Cost | Ext. Cost  | Discount Amount | Retainage Percent | Retainage Amount | Amount     |
|------------|-----------|--------------------|--------------------|----------|-----|-----------|------------|-----------------|-------------------|------------------|------------|
| HEADOFFICE | 1         | HVAC SUB           | Draw 1 - 20%       | 0.00     | EA  | 0.0000    | 480,000.00 | 0.00            | 10.000000         | 48,000.00        | 432,000.00 |
| HEADOFFICE | 2         | HVAC SUB           | Draw 2 - 50%       | 0.00     | EA  | 0.0000    | 240,000.00 | 0.00            | 10.000000         | 24,000.00        | 216,000.00 |

4. Clear the **Hold** check box.
5. Click **Release** on the form toolbar to release the AP bill.
6. Review the open AP balances of the lines in the **Balance** column on the **Document Details** tab. (The **Balance** column gets populated after the release of the AP bill.)
7. Open the Prepare Payments (AP503000) form and specify the following settings in the Selection area:
  - **Payment Method:** CHECK
  - **Cash Account:** 10200WH
  - **Vendor:** HVACCO
  - **Pay Date Within:** Cleared
8. On the **Documents to Pay** tab, for the second line of the AP bill that you have just created, change the amount in the **Amount Paid** column from 216,000 to 200,000.
9. Select the unlabeled check boxes for both lines, and review the amount in the **Available Balance** box in the Selection area.
10. Click **Process** on the form toolbar.
11. On the Process Payments / Print Checks (AP505000) form, which opens, click **Process**.
12. After the check has been printed, on the Release Payments (AP505200) form, click **Process** on the form toolbar.
13. Open the Bills and Adjustments form, select the AP bill for the HVACCO vendor and review the line-level balances of the AP bill in the **Balance**, **Amount**, and **Unreleased Retainage** boxes.

The bill retains the *Open* status because the open AP balance in the amount of \$16,000 has not yet been paid for the second line, the full amount of the first line has not been paid, and the retainage has not been released and paid.

14. On the **Applications** tab, click the link in the **Reference Nbr.** column to view the payment on the Checks and Payments (AP302000) form.

The information on how much has been paid (the **Amount Paid** column) for each line of the AP bill is displayed for the AP payment on the **Application History** tab of the Checks and Payments form.

### Reviewing Retainage Details

To review the retainage details of the processed AP bill, do the following:

1. Open the the AP Aged Past Due (AP631000) form.
2. On the Report Parameters tab, specify the following settings:
  - **Report Format:** *Detailed with Retainage*
  - **Company/Branch:** *HEADOFFICE*
  - **Vendor:** *HVACCO*
3. On the form toolbar, click **Run Report**. In the displayed report, the **Unreleased Retainage** column shows the retainage that is currently held for each of the listed AP bills. Only the open balances of AP bills are aged. Retainage held (unreleased retainage) is never aged.

### Releasing the Retainage and Reviewing the Created Bill

To release the retainage at the line level, do the following:

1. Open the Release AP Retainage (AP510000) form.
2. In the Selection area, specify the following settings:
  - **Vendor:** *HVACCO*
  - **Show Lines with Open Balances:** Selected

With this check box selected, the system displays all lines of AP documents that have non-zero unreleased retainage balances on the form.

3. For the lines that are shown in the table, enter the following amounts in the **Retainage to Release** column, as shown on the screenshot below:
  - Line 1: 4,800.00
  - Line 2: 2,400.00

4. In the table, select both lines and click **Process** on the form toolbar to release the retainage bill.

Each line of the retainage bill has the project, project task, and cost code information copied from the original AP bill. After release, the retainage bill becomes open, and payments have to be applied to it to close its open AP balance as for a regular bill (see the screenshot below). If the original AP bill was created with the **Pay by Line** check box selected, the retainage AP bill is also processed at the line level.

5. On the Bills and Adjustments (AP301000) form, open the retainage bill.

### Paying the Retainage Bill

To pay the retainage bill, do the following:

1. While you are still on the Bills and Adjustments (AP301000) form with the retainage bill open, clear the **Hold** check box, and release the bill.

2. Click **Actions > Pay Bill/Apply Adjustment** on the form toolbar.
3. On the Checks and Payments (AP302000) form that opens, specify 4000 in the **Amount Paid** box (partial payment).
4. On the **Documents to Apply** tab, remove Line 2 of the bill.
5. In Line 1, in the **Amount Paid** box, enter 4000.
6. In the Summary area, clear the **Hold** check box.
7. On the form toolbar, click **Actions > Print Check** and on the Process Payments / Print Checks (AP505000) form that opens, click **Process**.
8. On the Release Payments (AP505200) form that opens, click **Process**.
9. On the Bills and Adjustments form, open the retainage bill and review the remaining \$800 open AP balance in the first line, as shown on the following screenshot.

The screenshot shows the 'Bills and Adjustments' form. The top section contains bill details: Type: Bill, Reference Nbr.: 000050, Status: Open, Date: 10/11/2019, Post Period: 10-2019, Vendor: HVACCO - Parker & Sons HVAC, Terms: 30D - 30 Days, Due Date: 11/10/2019, Cash Discount: 11/10/2019, and Description: HVAC sub. A summary table on the right shows: Detail Total: 7,200.00, Discount Total: 0.00, VAT Taxable Total: 0.00, VAT Exempt Total: 0.00, Tax Total: 0.00, With. Tax: 0.00, Balance: 3,200.00, Amount: 7,200.00, and Cash Discount: 0.00.

Below the details is a table with columns: Branch, Line Nbr., Account Group/Item, Transaction Descr., Quantity, UOM, Unit Cost, Ext. Cost, Discount Amount, Amount, Balance, and Tax. The table contains two lines:

| Branch     | Line Nbr. | Account Group/Item | Transaction Descr.        | Quantity | UOM | Unit Cost | Ext. Cost | Discount Amount | Amount   | Balance  | Tax |
|------------|-----------|--------------------|---------------------------|----------|-----|-----------|-----------|-----------------|----------|----------|-----|
| HEADOFFICE | 1         |                    | Retainage for Bill 000047 | 0.00     |     | 0.0000    | 4,800.00  | 0.00            | 4,800.00 | 800.00   |     |
| HEADOFFICE | 2         |                    | Retainage for Bill 000047 | 0.00     |     | 0.0000    | 2,400.00  | 0.00            | 2,400.00 | 2,400.00 |     |

On the **Financial Details** tab, you can find a reference to the original AP bill from which this retainage bill has been created. On the original AP bill, the amounts are presented at the line level. For the second line, the following settings shown on the screenshot below are specified:

- **Ext. Cost** is the original amount that includes retainage (\$240,000).
- **Retainage Amount** is the original retainage amount of the line (\$24,000).
- **Amount** is the original amount of the line less retainage: (Ext. Cost - Retainage Amount = \$240,000 - \$24,000 = \$216,000.) This amount becomes the open AP balance of the line.

- **Balance** is the current open AP balance of the line: (Balance = Amount - Payments (the total amount of payments applied to the line) = \$216,000 - \$200,000 = \$16,000.)
- **Unreleased Retainage** (balance) is the retainage currently held for the line: (Unreleased Retainage = Retainage Amount - Released Retainage = \$24,000 - \$2,400 = \$21,600.)

Bills and Adjustments NOTES ACTIVITIES FILES

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Reference Nbr.: 000047 Terms: 30D - 30 Days Discount Total: 0.00

Status: Open  Hold  Apply Retainage  Joint Payees

\* Due Date: 11/10/2019 \* Cash Discount: 11/10/2019

Date: 10/11/2019

Post Period: 10-2019

Vendor Ref.:

Description: HVAC sub

VAT Taxable Total: 0.00  
 VAT Exempt Total: 0.00  
 Tax Total: 0.00  
 With. Tax: 0.00  
 Balance: 16,000.00  
 Amount: 648,000.00  
 Cash Discount: 0.00

DOCUMENT DETAILS FINANCIAL DETAILS TAX DETAILS RETAINAGE APPLICATIONS COMPLIANCE

VIEW SCHEDULE ADD PO RECEIPT ADD PO RECEIPT LINE ADD PO ADD SUBCONTRACTS ADD PO LINE ADD S

| Qty | UOM | Unit Cost | Ext. Cost  | Discount Amount | Retainage Percent | Retainage Amount | Unreleased Retainage | Retained Tax | Amount     | Balance   |
|-----|-----|-----------|------------|-----------------|-------------------|------------------|----------------------|--------------|------------|-----------|
| 10  | EA  | 0.0000    | 480,000.00 | 0.00            | 10.000000         | 48,000.00        | 43,200.00            | 0.00         | 432,000.00 | 0.00      |
| 10  | EA  | 0.0000    | 240,000.00 | 0.00            | 10.000000         | 24,000.00        | 21,600.00            | 0.00         | 216,000.00 | 16,000.00 |

**Paying the Outstanding Balance of the AP Bill**

1. Open the Subcontracts (SC301000) form.
2. In the **Subcontract Nbr.** box, select the subcontract for the *HVACCO* vendor created earlier.
3. On the **SC History** tab, click the link in the **Reference Nbr.** column to open the AP bill associated with the subcontract.
4. On the Bills and Adjustments (AP301000) form that opens, click **Pay Bill/Apply Adjustment.**
5. On the Checks and Payments (AP302000) form that opens, pay the outstanding balance of the AP bill (\$16,000.00) and release the AP payment.

Notice that the AP bill retains the *Open* status until the full amount of retainage is released (that is, the amount is moved from the non-current retainage asset account to the AR account), and the retainage AP bill is paid. After that the original AP retainage bill gets the *Closed* status.

The following sections are provided for reference and not required for completing this training.

## Importing Open AP Bills

You can import open AP bills by doing the following:

1. On the Accounts Payable Preferences (AP101000) form, make sure that the **Activate Migration Mode** check box is cleared.

NOTE: This mode does not support the import of documents with open retainage balances.

2. On the Bills and Adjustments (AP301000) form, for each open original bill, specify AP **open balance** and **unreleased retainage** (instead of the original amounts) and release the bill.

After that vendor balances and retained balances will be correct in the AP subledger.

3. On the Trial Balance (GL303010) form, upload trial balances in the GL subledger, no need to reverse batches posted by the AP subledger.

## Enabling Retained Taxes

A tax amount calculated on the retainage amount can be posted to a separate GL account instead of the Tax Claimable account if the tax amount has to be retained along with the respective retainage amount of the bill.

To enable retained taxes, you do the following:

1. Open the Accounts Payable Preferences (AP101000) form.
2. In the **Retainage Settings** section on the **General Settings** tab, select the **Retain Taxes** check box.

## Functionality Restrictions in Bills with AP Balance and Retainage at the Line Level

- The migration mode option on the Accounts Payable Preferences (AP101000) form. The feature is not compatible with the migration mode. If the **Activate Migration Mode** check box is selected, the **Pay by Line** check box on data entry forms is disabled for editing, and there is no way to specify line balances and unreleased retainage balances in AP documents.
- Group and document discounts are not supported in bills with AP balances at the line level with or without retainage.
- Some types of taxes, in particular, *Withholding* and *VAT* recalculated on cash discounts are not supported.
- Negative line amounts in bills are not supported.
- Bills in foreign currency are not supported if they are with retainage. Bills with AP balance at the line level without retainage support foreign currencies.
- Calculation of taxes via Avalara integration is not supported.

- The *Invoice Rounding* feature is not supported.
- It is not possible to apply existing open debit adjustments on the **Applications** tab of the Bills and Adjustments (AP301000) form to a bill with AP balance and retainage at the line level.
- Multiple installment credit terms are not supported for bills with retainage.
- Editing of retained tax amount for inclusive taxes - that is, VAT and sales taxes that use the *Extract from Item Amount* calculation method is not supported.

## Lesson 6: Joint Payees

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A joint check is a check generated for an accounts payable bill that includes joint payees. This check is used for making a payment jointly to two or more parties. A joint check is used as a guarantee that the funds associated with the material or work provided to a contractor (subcontractor or general contractor) on a project are paid to a vendor that is not an active member of the project team.

### Learning Objectives

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

- Specify joint payees for an accounts payable bill
- Specify joint amounts for different lines of an accounts payable bill
- Create joint checks and process the payments

### Story

Suppose that a storm broke windows in the hotel that the SweetLife company is building. The company needs to replace the broken windows and clean the area. The Acme Doors & Glass vendor will do the job for the SweetLife company. Also, they subcontracted the OfficeUp Original and Conwaste company to dispose of any waste and clean the area.

At the end, SweetLife needs to issue and print a joint check that reflects the joint payment amounts.

### System Preparation

Sign in as a project manager by using the *owen* login and the *123* password.

### Reviewing the Configuration Settings

Review the configuration settings as follows:

1. On the Enable/Disable Features (CS100000) form, make sure that the *Payment Application by Line* feature is enabled.

## Enable/Disable Features ★

↶ MODIFY ENABLE

- Invoice Rounding
- Expense Management
- Advanced Financials
  - Subaccounts
  - General Ledger Allocation Templates
  - Inter-Branch Transactions
  - Multiple Calendar Support
  - General Ledger Consolidation
  - Translation of Financial Statements
  - Customer Discounts
  - Vendor Discounts
  - Commissions
  - Overdue Charges
  - Dunning Letter Management
  - Deferred Revenue Management
    - Revenue Recognition by IFRS 15/ASC 606
  - Parent-Child Customer Relationship
  - Retainage Support
  - Payment Application by Line
- Contract Management
- Fixed Asset Management
- Monitoring & Automation
- Time Reporting on Activity

2. On the **Payment Settings** tab of the Vendors (AP303000) form, make sure that the **Pay by Line** check box is selected for the *DOORSCO* vendor.

## Vendors

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\* Vendor ID:  \* Status:  Balance: 0.00  
 \* Vendor Name:  Prepayment Balance: 0.00  
 Retained Balance: 0.00

GENERAL INFO **PAYMENT SETTINGS** PURCHASE SETTINGS CONTACTS ATTRIBUTES ACTIVITIES GL ACCOUNTS

**REMITTANCE CONTACT**  Same as Main  
 Company Name:   
 Attention:   
 Phone 1:   
 Phone 2:   
 Fax:   
 Email:    
 Web:  

**REMITTANCE ADDRESS**  Same as Main  
 Address Line 1:   
 Address Line 2:   
 City:   
 Country:   
 State:   
 Postal Code:  [VIEW ON MAP](#)

**DEFAULT PAYMENT SETTINGS**  
 Payment Method:   
 Cash Account:   
 Payment By:   
 Payment Lead Time (D...):   
 Pay Separately  
 Pay by Line  
 Prepayment Percent:

**Payment Instructions**

| Description | Value |
|-------------|-------|
|             |       |

**Preparing and Processing Joint Payments**

Do the following:

1. Open the Bills and Adjustments (AP301000) form, click **Add New Record**.
2. In the **Vendor** box, select *DOORSCO - Acme Doors & Glass*.
3. Select the **Joint Payees** check box.
4. In the **Description** box, type Replacing broken windows after the storm.

Bills and Adjustments

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] [Undo] [Redo] [Home] [End] [Release] ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

|  |  |   |
|--|--|---|
| Type: <input type="text" value="Bill"/>  | * Vendor: <input type="text" value="DOORSCO - Acme Doors &amp; Glass"/>                          | Detail Total: 0.00                                |
| Reference Nbr.: <input type="text" value="&lt;NEW&gt;"/>                       | * Terms: <input type="text" value="30D - 30 Days"/>  | Discount Total: <input type="text" value="0.00"/> |
| Status: <input type="text" value="On Hold"/>                                   | * Due Date: <input type="text" value="1/4/2020"/>  | VAT Taxable Total: 0.00                           |
| <input checked="" type="checkbox"/> Hold                                       | <input checked="" type="checkbox"/> Apply Retainage  | VAT Exempt Total: 0.00                            |
| * Date: <input type="text" value="12/5/2019"/>                                 | * Cash Discount: <input type="text" value="1/4/2020"/>   | Tax Total: 0.00                                   |
| * Post Period: <input type="text" value="12-2019"/>                            | <input checked="" type="checkbox"/> Pay by Line <input checked="" type="checkbox"/> Joint Payees | With. Tax: <input type="text" value="0.00"/>      |
| Vendor Ref.: <input type="text"/>  |  | Balance: 0.00                                     |
|  |  | Cash Discount: <input type="text" value="0.00"/>  |
| Description: <input type="text" value="Replacing broken windows after storm"/> |  |   |

5. On the **Document Details** tab, add lines with the settings specified in the table below.

| Account Group/Item | Quantity | Unit Cost | Project | Sub Job | Cost Code |
|--------------------|----------|-----------|---------|---------|-----------|
| WINDISMNTL         | 8        | 500.00    | HOTEL   | 02      | 02-000    |
| WINDISPOSE         | 4        | 200.00    | HOTEL   | 02      | 02-000    |
| WINCLEAN           | 4        | 100.00    | HOTEL   | 02      | 02-000    |

| DOCUMENT DETAILS |           |                    |  |          |      |           |           |                 |                   |                  |          |         | FINANCIAL DETAILS |  | TAX DETAILS         |  | RETAINAGE |  | APPLICATIONS     |  | JOINT PAYEES |  | JOINT AMOUNT APPLICATION |  | COMPLIANCE |  |           |  |
|------------------|-----------|--------------------|--|----------|------|-----------|-----------|-----------------|-------------------|------------------|----------|---------|-------------------|--|---------------------|--|-----------|--|------------------|--|--------------|--|--------------------------|--|------------|--|-----------|--|
| VIEW SCHEDULE    |           |                    |  |          |      |           |           |                 |                   |                  |          |         | ADD PO RECEIPT    |  | ADD PO RECEIPT LINE |  | ADD PO    |  | ADD SUBCONTRACTS |  | ADD PO LINE  |  | ADD SUBCONTRACT LINE     |  | ADD LC     |  | LINK LINE |  |
| * Branch         | Line Nbr. | Account Group/Item | Transaction Descr.                               | Quantity | UOM  | Unit Cost | Ext. Cost | Discount Amount | Retainage Percent | Retainage Amount | Amount   | Balance | * Account         |  |                     |  |           |  |                  |  |              |  |                          |  |            |  |           |  |
| HEADOFFICE       | 1         | WINDISMNTL         | Dismantling, deinstallation, and removal of r... | 8.00     | HOUR | 500.0000  | 4,000.00  | 0.00            | 0.000000          | 0.00             | 4,000.00 | 0.00    | 50000             |  |                     |  |           |  |                  |  |              |  |                          |  |            |  |           |  |
| HEADOFFICE       | 2         | WINDISPOSE         | Disposal of refuse                               | 4.00     | HOUR | 200.0000  | 800.00    | 0.00            | 0.000000          | 0.00             | 800.00   | 0.00    | 50000             |  |                     |  |           |  |                  |  |              |  |                          |  |            |  |           |  |
| HEADOFFICE       | 3         | WINCLEAN           | Cleaning services                                | 4.00     | HOUR | 100.0000  | 400.00    | 0.00            | 0.000000          | 0.00             | 400.00   | 0.00    | 50000             |  |                     |  |           |  |                  |  |              |  |                          |  |            |  |           |  |

6. On the **Joint Payees** tab, add lines with the settings specified in the table below.

| Joint Payee (Vendor) | Joint Payee | Bill Line Nbr. | Joint Amount Owed |
|----------------------|-------------|----------------|-------------------|
|                      | Conwaste    | 2              | 400.00            |
| OFFICEUP             |             | 3              | 200.00            |

| DOCUMENT DETAILS             |             |                  |                  |                     |                   |               |  | FINANCIAL DETAILS |  | TAX DETAILS |  | RETAINAGE |  | APPLICATIONS |  | JOINT PAYEES |  | JOINT AMOUNT APPLICATION |  | COMPLIANCE |  |
|------------------------------|-------------|------------------|------------------|---------------------|-------------------|---------------|--|-------------------|--|-------------|--|-----------|--|--------------|--|--------------|--|--------------------------|--|------------|--|
| ADJUST JOINT AMOUNTS         |             |                  |                  |                     |                   |               |  |                   |  |             |  |           |  |              |  |              |  |                          |  |            |  |
| Joint Payee (Vendor)         | Joint Payee | * Bill Line Nbr. | Bill Line Amount | * Joint Amount Owed | Joint Amount Paid | Joint Balance |  |                   |  |             |  |           |  |              |  |              |  |                          |  |            |  |
|                              | Conwaste    | 2                | 800.00           | 400.00              | 0.00              | 400.00        |  |                   |  |             |  |           |  |              |  |              |  |                          |  |            |  |
| OFFICEUP - OfficeUp.Original |             | 3                | 400.00           | 200.00              | 0.00              | 200.00        |  |                   |  |             |  |           |  |              |  |              |  |                          |  |            |  |

In the **Bill Line Nbr.** column, you specify the number of the bill line that corresponds to the item for which the joint payee is to receive the payment. The **Balance** of the line, which you can review on the **Document Details** tab, will be reduced by the amount specified in the **Joint Amount Paid** column when the payment is released. If the

**Pay by Line** check box on the **Financial Details** tab is cleared for the bill, the **Joint Amount Paid** affects the balance of the entire bill.

On the **Joint Payees** tab, you can specify a joint payee in any of the following ways:

- If the joint payee is registered in your system as a vendor, you can select that vendor in the **Joint Payee (Vendor)** column.
- If there is no vendor record that corresponds to the joint payee, you can simply type the name in the text box in the **Joint Payee** column.

Note that the sum of the joint amounts must not be greater than or equal to the total amount of the bill. At first, the joint balance for each line equals the joint amount owed. Partial payments may be applied to the lines, and as a result, the joint balance would decrease until it is completely paid and thus reduced to zero.

7. Clear the **Hold** check box in the Summary area of the form.
8. Click **Release** on the form toolbar.
9. On the form toolbar, click **Actions > Pay Bill/Apply Adjustment**.

The **Indicate Amounts to Pay** dialog box opens.

10. In the dialog box, do the following:

- a. In the **Amount to Pay** box, enter 400.

This amount defines the part of the payment that the *Acme Doors & Glass* vendor is going to receive. This amount cannot be greater than the amount displayed in the **Max Available Amount** box.

- b. In the **Joint Amount to Pay** column of the table below, enter 200 for the *Conwaste* joint payee and 100 for the *OFFICEUP* joint payee.
- c. Click **Confirm**.

The screenshot shows the 'Indicate Amounts to Pay' dialog box. At the top, it displays 'Vendor: DOORSCO - Acme Doors & Glass' and 'Amount To Pay: 400.00'. Below this is a table with the following data:

| Joint Payee (Vendor)         | Joint Payee | Bill Line Nbr. | Joint Amount To Pay | Joint Balance |
|------------------------------|-------------|----------------|---------------------|---------------|
| Conwaste                     |             | 2              | 200.00              | 400.00        |
| OFFICEUP - OfficeUp Original |             | 3              | 100.00              | 200.00        |

At the bottom of the dialog box, there are 'CONFIRM' and 'CANCEL' buttons.

As a result, three joint checks are created:

- A check for 400 USD, which is the vendor payment amount

Checks and Payments

SAVE & CLOSE [Icons] RELEASE VOID ACTIONS INQUIRIES REPORTS

Type: **Check** Vendor: **DOORSCO - Acme Doors & Glass** Payment Amount: **400.00** Vendor Payment Amount: **400.00**

Reference Nbr.: **000037** \* Payment Meth...: **CHECK** Unapplied Balance: **0.00** Joint Payment Amount: **0.00**

Status: **On Hold** \* Cash Account: **10200WH - Wholesale Checking** Application Amount: **400.00**

Hold  Joint Check Finance Charges: **0.00**

\* Application Date: **12/5/2019** Description: **Replacing broken windows after storm**

\* Application Pe...: **12-2019**

Payment Ref.: \_\_\_\_\_

DOCUMENTS TO APPLY APPLICATION HISTORY FINANCIAL DETAILS REMITTANCE INFORMATION FINANCE CHARGES **JOINT PAYEES** COMPLIANCE

| Joint Payee (Vendor) | Joint Payee                  | *Joint Amount To Pay | Joint Balance | Joint Amount Paid | Joint Amount Owed | AP Bill Nbr. | AP Bill Line Nbr. |
|----------------------|------------------------------|----------------------|---------------|-------------------|-------------------|--------------|-------------------|
| >                    | Conwaste                     | 0.00                 | 400.00        | 0.00              | 400.00            | 000061       | 2                 |
|                      | OFFICEUP - OfficeUp Original | 0.00                 | 200.00        | 0.00              | 200.00            | 000061       | 3                 |

- A check for 200 USD, which is the joint payment amount for the *Conwaste* joint payee

Checks and Payments

SAVE & CLOSE [Icons] RELEASE VOID ACTIONS INQUIRIES REPORTS

Type: **Check** Vendor: **DOORSCO - Acme Doors & Glass** Payment Amount: **200.00** Vendor Payment Amount: **0.00**

Reference Nbr.: **000038** \* Payment Meth...: **CHECK** Unapplied Balance: **0.00** Joint Payment Amount: **200.00**

Status: **On Hold** \* Cash Account: **10200WH - Wholesale Checking** Application Amount: **200.00**

Hold  Joint Check Finance Charges: **0.00**

\* Application Date: **12/5/2019** Description: **Replacing broken windows after storm**

\* Application Pe...: **12-2019**

Payment Ref.: \_\_\_\_\_

DOCUMENTS TO APPLY APPLICATION HISTORY FINANCIAL DETAILS REMITTANCE INFORMATION FINANCE CHARGES **JOINT PAYEES** COMPLIANCE

| Joint Payee (Vendor) | Joint Payee | *Joint Amount To Pay | Joint Balance | Joint Amount Paid | Joint Amount Owed | AP Bill Nbr. | AP Bill Line Nbr. |
|----------------------|-------------|----------------------|---------------|-------------------|-------------------|--------------|-------------------|
| >                    | Conwaste    | 200.00               | 400.00        | 0.00              | 400.00            | 000061       | 2                 |

- And a check for 100 USD, which is the joint payment amount for the *OFFICEUP* joint payee

Checks and Payments

SAVE & CLOSE [Icons] RELEASE VOID ACTIONS INQUIRIES REPORTS

Type: **Check** Vendor: **DOORSCO - Acme Doors & Glass** Payment Amount: **100.00** Vendor Payment Amount: **0.00**

Reference Nbr.: **000039** \* Payment Meth...: **CHECK** Unapplied Balance: **0.00** Joint Payment Amount: **100.00**

Status: **On Hold** \* Cash Account: **10200WH - Wholesale Checking** Application Amount: **100.00**

Hold  Joint Check Finance Charges: **0.00**

\* Application Date: **12/5/2019** Description: **Replacing broken windows after storm**

\* Application Pe...: **12-2019**

Payment Ref.: \_\_\_\_\_

DOCUMENTS TO APPLY APPLICATION HISTORY FINANCIAL DETAILS REMITTANCE INFORMATION FINANCE CHARGES **JOINT PAYEES** COMPLIANCE

| Joint Payee (Vendor) | Joint Payee                  | *Joint Amount To Pay | Joint Balance | Joint Amount Paid | Joint Amount Owed | AP Bill Nbr. | AP Bill Line Nbr. |
|----------------------|------------------------------|----------------------|---------------|-------------------|-------------------|--------------|-------------------|
| >                    | OFFICEUP - OfficeUp Original | 100.00               | 200.00        | 0.00              | 200.00            | 000061       | 3                 |

**11.** On the Checks and Payments (AP302000) form, open each check and clear the **Hold** check box and save the changes.

**12.** On the Process Payments/Print Checks (AP505000) form, do the following:

**a.** In the **Payment Method** box, select *CHECK*.

**b.** Select the unlabeled check box for each of the joint checks and click **Process** on the form toolbar to print the checks.

Process Payments / Print Checks ☆

|                    |                           |                     |              |
|--------------------|---------------------------|---------------------|--------------|
| * Payment Method:  | CHECK                     | GL Balance:         | 9,562,176.67 |
| * Cash Account:    | 10200WH - Wholesale Check | Available Balance:  | 9,562,176.67 |
| Next Check Number: | 0026                      | Selection Total:    | 700.00       |
|                    |                           | Number of Payments: | 3            |

| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Payment Ref. | Payment Date | Type  | Reference Nbr.         | Vendor ID | Vendor Name        | Payment Amount |
|--------------------------|--------------------------|-------------------------------------|--------------|--------------|-------|------------------------|-----------|--------------------|----------------|
| >                        | <input type="checkbox"/> | <input checked="" type="checkbox"/> |              | 12/5/2019    | Check | <a href="#">000037</a> | DOORSCO   | Acme Doors & Glass | 400.00         |
|                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> |              | 12/5/2019    | Check | <a href="#">000038</a> | DOORSCO   | Acme Doors & Glass | 200.00         |
|                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> |              | 12/5/2019    | Check | <a href="#">000039</a> | DOORSCO   | Acme Doors & Glass | 100.00         |

The form that is used to print check is opened. For learning purposes, you do not need to print the checks so you can close the form.

**13.** On the Release Payments (AP505200) form, which opens, release the payments by clicking **Process** on the form toolbar.

Note that the unlabeled check boxes are selected automatically for the corresponding payments.

Release Payments ☆

|                   |                           |                    |              |
|-------------------|---------------------------|--------------------|--------------|
| * Payment Method: | CHECK                     | GL Balance:        | 9,511,926.67 |
| * Cash Account:   | 10200WH - Wholesale Check | Available Balance: | 9,511,926.67 |
| Action:           | Release                   |                    |              |

| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Payment Ref. | Payment Date | Type  | Reference Nbr.         | Vendor  | Vendor Name        | Payment Amount |
|--------------------------|--------------------------|-------------------------------------|--------------|--------------|-------|------------------------|---------|--------------------|----------------|
|                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 0026         | 12/5/2019    | Check | <a href="#">000037</a> | DOORSCO | Acme Doors & Glass | 400.00         |
|                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 0027         | 12/5/2019    | Check | <a href="#">000038</a> | DOORSCO | Acme Doors & Glass | 200.00         |
| >                        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 0028         | 12/5/2019    | Check | <a href="#">000039</a> | DOORSCO | Acme Doors & Glass | 100.00         |

# Lesson 7: Sales Taxes in Purchase Orders and Subcontracts

---

A sales tax is a tax paid by a company to its vendors as a part of an AP bill amount. When the company pays the accumulated tax amounts to the responsible tax agency, the tax amounts is reduced by the amount of sales tax paid to the vendors.

## Learning Objectives

In this lesson, you will do the following:

- Learn how to configure a sales tax
- Learn how to create an AP bill with a sales tax applied
- Release the AP bill and review the GL batch generated by the system

## Story

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

## System Preparation

Sign in to the system by using the *owen* login and *123* password.

## Creating and Configuring a Sales Tax

On the Taxes (TX205000) form, create and configure a sales tax for the New York state by doing the following:

1. On the **Tax Settings** tab, specify the following settings:
  - **Tax ID:** NYSALESTAX
  - **Description:** New York sales tax
  - **Tax Type:** *Sales*

Taxes

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Back] < > [Forward]

TAX SETTINGS    GL ACCOUNTS

\* Tax ID: NYSALESTAX

Description: New York sales tax

Tax Type: Sales

Calculate On: Calc. On Document Amount

Cash Discount: Does Not Affect Taxable Amount

Exclude from Tax-on-Tax Calculation

Tax Agency: [Search] [Edit]

Not Valid After: [Dropdown]

Partially Deductible VAT

Reverse VAT       Pending VAT

Statistical VAT       Enter from Tax Bill

Include in VAT Exempt Total

Include in VAT Taxable Total

TAX SCHEDULE    CATEGORIES    ZONES

[Refresh] + [Close] [Print] [Refresh] [Print]

| * Start Date | Tax Rate | Min. Taxable Amount | Max. Taxable Amount | Reportir Group | Group Type |
|--------------|----------|---------------------|---------------------|----------------|------------|
|--------------|----------|---------------------|---------------------|----------------|------------|

2. On the **GL Accounts** tab, specify the following settings:

- **Tax Payable Account:** 24100 - Tax Payable
- **Tax Expense Account:** 69000 - Tax Expenses

The *Tax Expenses* account (69000) is included in the *MATERIAL* account group so that tax expenses are posted to the project specified for the AP document lines.

Note that the **Use Tax Expense Account** check box is selected and non-editable because the *Sales* tax type has been selected on the **Tax Settings** tab.

Taxes

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Back] < > [Forward]

TAX SETTINGS    **GL ACCOUNTS**

\* Tax Payable Account: 24100 - Tax Payable

Tax Claimable Account: [Search]

Use Tax Expense Account

Tax Expense Account: 69000 - Tax Expenses

Pending Tax Payable Account: [Search]

Pending Tax Claimable Account: [Search]

Retainage Tax Payable Account: [Search]

Retainage Tax Claimable Account: [Search]

TAX SCHEDULE    CATEGORIES    ZONES

[Refresh] + [Close] [Print] [Refresh] [Print]

| * Start Date | Tax Rate | Min. Taxable Amount | Max. Taxable Amount | Reportir Group | Group Type |
|--------------|----------|---------------------|---------------------|----------------|------------|
|--------------|----------|---------------------|---------------------|----------------|------------|

3. On the **Tax Schedule** tab, specify the following settings:

- **Start Date:** 1/1/2019
- **Tax Rate:** 8.875
- **Reporting Group:** Default Input Group

Leave the default values in the remaining columns.

Note that reporting group can have one of the following types:

- An *Output* group is specified for a tax that must be paid to a tax agency.
- An *Input* group is specified for a tax that can be claimed from a tax agency.

Taxes

← SAVE & CLOSE [Print] [Refresh] + [Trash] |< < > >|

TAX SETTINGS    **GL ACCOUNTS**

\* Tax Payable Account: 24100 - Tax Payable [Search]    Pending Tax Payable Account: [Text Box]

Tax Claimable Account: [Text Box]    Pending Tax Claimable Account: [Text Box]

Use Tax Expense Account    Retainage Tax Payable Account: [Search]

\* Tax Expense Account: 69000 - Tax Expenses [Search]    Retainage Tax Claimable Account: [Search]

TAX SCHEDULE    CATEGORIES    ZONES

[Refresh] + × |<| [Print]

| * Start Date | Tax Rate | Min. Taxable Amount | Max. Taxable Amount | Reportir Group | Group Type |
|--------------|----------|---------------------|---------------------|----------------|------------|
| > 1/1/2019   | 8.875000 | 0.0000              | 0.0000              | Default Inp    | Input      |

4. On the **Categories** tab, include the tax in the *TAXABLE* tax category by adding this tax category to the table.

Taxes

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Back] < > [Forward]

TAX SETTINGS **GL ACCOUNTS**

|                        |   |                                  |  |
|------------------------|---|----------------------------------|--|
| * Tax Payable Account: | 24100 - Tax Payable   | Pending Tax Payable Account:     |  |
| Tax Claimable Account: |   | Pending Tax Claimable Account:   |  |
|                        | <input checked="" type="checkbox"/> Use Tax Expense Account | Retainage Tax Payable Account:   |  |
| * Tax Expense Account: | 69000 - Tax Expenses  | Retainage Tax Claimable Account: |  |

TAX SCHEDULE **CATEGORIES** ZONES

[Refresh] + [Close] [Print] [Refresh] [Delete]

| * Tax Category | Exclude Listed Taxes     | Description                |
|----------------|--------------------------|----------------------------|
| TAXABLE        | <input type="checkbox"/> | Taxable Goods and Services |

- On the **Zones** tab, include the tax in the *NYSTATE* tax zone by adding this tax zone to the table.

Taxes

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Back] < > [Forward]

TAX SETTINGS **GL ACCOUNTS**

|                        |   |                                  |  |
|------------------------|---|----------------------------------|--|
| * Tax Payable Account: | 24100 - Tax Payable   | Pending Tax Payable Account:     |  |
| Tax Claimable Account: |   | Pending Tax Claimable Account:   |  |
|                        | <input checked="" type="checkbox"/> Use Tax Expense Account | Retainage Tax Payable Account:   |  |
| * Tax Expense Account: | 69000 - Tax Expenses  | Retainage Tax Claimable Account: |  |

TAX SCHEDULE CATEGORIES **ZONES**

[Refresh] + [Close] [Print] [Refresh] [Delete]

| * Tax Zone ID | Default Tax Category | Description  |
|---------------|----------------------|--------------|
| NYSTATE       |                      | NY State Tax |

### Creating and Releasing an AP Bill with a Sales Tax

On the Bills and Adjustments (AP301000) form, start creating a new bill. Do the following:

- In the Summary area, specify the following settings:
  - Type:** *Bill*
  - Vendor:** *CONCRESUP*
  - Description:** Concrete mix
- On the **Document Details** tab, add a detail line with the following settings:

- **Branch:** HEADOFFICE
- **Account Group/Item:** MATERIAL
- **Transaction Descr.:** Concrete mix
- **Quantity:** 500
- **Unit Cost:** 85
- **Project:** HOTEL
- **Sub Job:** 02 - SITEWORK
- **Cost Code:** 02-000
- **Tax Category:** TAXABLE

Bills and Adjustments

SAVE & CLOSE | RELEASE | ACTIONS | INQUIRIES | REPORTS

|  |   |                         |
|--|---|-------------------------|
| Type: Bill                               | Vendor: CONGRESUP - Concrete Supply Co. | Detail Total: 42,500.00 |
| Reference Nbr.: <NEW>                    | * Terms: 30D - 30 Days                  | Discount Total: 0.00    |
| Status: On Hold                          | * Due Date: 1/19/2020                   | VAT Taxable Total: 0.00 |
| <input checked="" type="checkbox"/> Hold | * Cash Discount: 1/19/2020              | VAT Exempt Total: 0.00  |
| * Date: 12/20/2019                       |   | Tax Total: 3,771.88     |
| * Post Period: 12-2019                   |   | With. Tax: 0.00         |
| Vendor Ref.:                             |   | Balance: 46,271.88      |
|  |   | Cash Discount: 0.00     |

DOCUMENT DETAILS | FINANCIAL DETAILS | TAX DETAILS | APPLICATIONS | COMPLIANCE

| Branch     | Account Group/Item | Transaction Descr. | Quantity | UOM | Unit Cost | Ext. Cost | Discount Amount | Amount    | Balance | *Account | Description              | *Project | Sub Job | Cost Code |
|------------|--------------------|--------------------|----------|-----|-----------|-----------|-----------------|-----------|---------|----------|--------------------------|----------|---------|-----------|
| HEADOFFICE | MATERIAL           | Concrete mix       | 500.00   | EA  | 85.0000   | 42,500.00 | 0.00            | 42,500.00 | 0.00    | 54500    | Project Material Expense | HOTEL    | 02      | 02-000    |

**3. On the Tax Details tab, review the details of the applied sales tax.**

For the bill line, you selected the *TAXABLE* category that contains the *NYSALESTAX* tax that has been applied to the bill. The taxable amount is \$42500.00 and the calculated total tax is \$3771.88.

Bills and Adjustments

SAVE & CLOSE | RELEASE | ACTIONS | INQUIRIES | REPORTS

|  |   |                         |
|--|---|-------------------------|
| Type: Bill                               | Vendor: CONGRESUP - Concrete Supply Co. | Detail Total: 42,500.00 |
| Reference Nbr.: <NEW>                    | * Terms: 30D - 30 Days                  | Discount Total: 0.00    |
| Status: On Hold                          | * Due Date: 1/19/2020                   | VAT Taxable Total: 0.00 |
| <input checked="" type="checkbox"/> Hold | * Cash Discount: 1/19/2020              | VAT Exempt Total: 0.00  |
| * Date: 12/20/2019                       |   | Tax Total: 3,771.88     |
| * Post Period: 12-2019                   |   | With. Tax: 0.00         |
| Vendor Ref.:                             |   | Balance: 46,271.88      |
|  |   | Cash Discount: 0.00     |

DOCUMENT DETAILS | FINANCIAL DETAILS | TAX DETAILS | APPLICATIONS | COMPLIANCE

| * Tax ID   | Tax Rate | Taxable Amount | Tax Amount | Deductible Tax Rate | Expense Amount |
|------------|----------|----------------|------------|---------------------|----------------|
| NYSALESTAX | 8.875000 | 42,500.00      | 3,771.88   | 100.000000          | 0.00           |

4. Clear the **Hold** check box in the Summary area and click **Release** on the form toolbar to release the bill.

### Reviewing the GL Batch and Project Transactions Generated on Bill Release

1. While still on the Bills and Adjustments (AP301000) form, on the **Financial Details** tab, click the **Batch Nbr.** link.

Bills and Adjustments

← SAVE & CLOSE [Icons] RELEASE ACTIONS INQUIRIES REPORTS

|                               |  |                         |
|-------------------------------|--|-------------------------|
| Type: <b>Bill</b>             | Vendor: CONGRESUP - Concrete Supply Co.                                    | Detail Total: 42,500.00 |
| Reference Nbr.: 000066        | Terms: 30D - 30 Days   | Discount Total: 0.00    |
| Status: <b>Open</b>           | * Due Date: 1/19/2020  | VAT Taxable Total: 0.00 |
| <input type="checkbox"/> Hold | * Cash Discount: 1/19/2020   | VAT Exempt Total: 0.00  |
| Date: 12/20/2019              | <input type="checkbox"/> Pay by Line <input type="checkbox"/> Joint Payees | Tax Total: 3,771.88     |
| Post Period: 12-2019          |  | With. Tax: 0.00         |
| Vendor Ref:                   |  | Balance: 46,271.88      |
| Description:                  |  | Amount: 46,271.88       |
|                               |  | Cash Discount: 0.00     |

DOCUMENT DETAILS **FINANCIAL DETAILS** TAX DETAILS APPLICATIONS COMPLIANCE

**LINK TO GL**

Batch Nbr.: **AP000088**

Branch: HEADOFFICE - SweetLife Head Office ar

AP Account: 20000 - Accounts Payable

Original Document:

**TAX**

Vendor Tax Zone: NYSTATE - NY State Tax

**ASSIGNED TO**

Workgroup ID:

Owner: EP00000001 - Pam Brawner

**DEFAULT PAYMENT INFO**

Pay Separately

Approved for Payment

\* Pay Date: 1/19/2020

Payment Method: CHECK - Check Payment

Cash Account: 10200WH - Wholesale Checking

2. On the Journal Transactions (GL301000) form that opens, review the batch that was generated on release of the bill. Note the following:
  - The *Accounts Payable* account of the vendor (20000) is credited in the total amount of the bill (the total of the line plus the total of the calculated tax).
  - The *Project Material Expense* account (54500) is debited in the amount specified in the document line.
  - The *Tax Expenses* account specified for the tax (69000) is credited in the calculated tax amount.

The tax expenses have been recorded to the *HOTEL* project and to the *MATERIAL* account group to which the *Tax Expenses* account (69000) belongs.



## Lesson 8: Budget Control Warnings and Inquiry

---

In Acumatica ERP Construction Edition, you can enable budget control for construction projects. When this functionality is turned on, the system displays warnings if the project budget is getting overrun.

The overbudget warnings are displayed for the following types of documents:

- Subcontracts
- Purchase orders
- Commitment change orders
- AP bills

You can see the list of all document lines that exceed the budget of a selected project on the Project Budget Overruns (PM404000) form.

Acumatica ERP Construction Edition helps you to ensure that documents are entered against the existing project budget lines as follows:

- When a user clicks the magnifier icon in the **Cost Code** column for a document line, in the popup window, which opens, the system displays only the cost codes that exist in the project budget for the specified combination of a project task (subjob) and an account group.
- If a user enters in a document line a cost code that does not exist in the project budget for the specified combination of a project task (subjob) and an account group, a warning is displayed.

### Learning Objectives

In this lesson, you will learn the following:

- How to turn on budget control in Acumatica ERP
- What warnings the system displays on document entry if a document line starts exceeding the project budget
- What warning the system displays if a cost code entered in a document line does not exist in the project budget for the combination of a project task (subjob) and an account group selected in that document line.

### System Preparation

Sign in as an administrator by using the *owen* login and the *123* password.

### Enabling Budget Control

To enable the budget control functionality for Projects, do the following:

1. On the Projects Preferences (PM101000) form, in the **General Settings** section on the **General Settings** tab, select *Show a Warning* in the **Budget Control** box.
2. Save your changes.

### Reviewing Initial Cost Budget

Do the following:

1. On the Projects (PM301000) form, open the *ITALIAN* project.
2. On the **Cost Budget** tab, review the budget for the mechanical building service.

Notice that there are no budget changes, open commitments, or actuals recorded for this work yet (see the following screenshot).

| Sub Job | Cost Code | Account Group | Description                      | Original Budgeted Quantity | UOM   | Unit Rate   | Original Budgeted Amount | Budgeted CO Quantity | Budgeted CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount |
|---------|-----------|---------------|----------------------------------|----------------------------|-------|-------------|--------------------------|----------------------|--------------------|---------------------------|-------------------------|
| 15      | 15-100    | LABOR         | Mech- Building Service Piping    | 100.00                     | HOURL | 150.0000    | 15,000.00                | 0.00                 | 0.00               | 100.00                    | 15,000.00               |
| 15      | 15-100    | MATERIAL      | Mech- Building Service Piping    | 1.00                       | LS    | 20,000.0000 | 20,000.00                | 0.00                 | 0.00               | 1.00                      | 20,000.00               |
| 15      | 15-200    | LABOR         | Mech- Process Piping             | 100.00                     | HOURL | 150.0000    | 15,000.00                | 0.00                 | 0.00               | 100.00                    | 15,000.00               |
| 15      | 15-200    | MATERIAL      | Mech- Process Piping             | 1.00                       | LS    | 25,000.0000 | 25,000.00                | 0.00                 | 0.00               | 1.00                      | 25,000.00               |
| 15      | 15-300    | LABOR         | Mech- Fire Protection            | 100.00                     | HOURL | 150.0000    | 15,000.00                | 0.00                 | 0.00               | 100.00                    | 15,000.00               |
| 15      | 15-300    | MATERIAL      | Mech- Fire Protection            | 1.00                       | LS    | 35,000.0000 | 35,000.00                | 0.00                 | 0.00               | 1.00                      | 35,000.00               |
| 15      | 15-400    | LABOR         | Plumbing- Fixtures and Equipm... | 80.00                      | HOURL | 125.0000    | 10,000.00                | 0.00                 | 0.00               | 80.00                     | 10,000.00               |
| 15      | 15-400    | MATERIAL      | Plumbing- Fixtures and Equipm... | 1.00                       | LS    | 16,750.0000 | 16,750.00                | 0.00                 | 0.00               | 1.00                      | 16,750.00               |

### Recording a Commitment with a Vendor

Suppose that the purchasing agent managed to negotiate a better price with a piping vendor, reserving some budget.

To record this commitment, do the following:

1. On the Subcontracts (SC301000) form, create a new document with the following parameters (see the screenshot below):
  - **Vendor:** *INSTCO*
  - **Description:** Mechanical
2. On the **Document Details** tab, add to the table two lines as follows:
  - a. In the first line specify the following:

- **Branch:** *HEADOFFICE*
- **Account Group/Item:** *LABOR*
- **Project:** *ITALIAN*
- **Sub Job:** 15
- **Cost Code:** 15-100
- **Line Description:** Mech piping
- **UOM:** *HOUR*
- **Order Qty:** 100
- **Unit Cost:** 145

b. In the second line, specify the following:

- **Branch:** *HEADOFFICE*
- **Account Group/Item:** *MATERIAL*
- **Project:** *ITALIAN*
- **Sub Job:** 15
- **Cost Code:** 15-100
- **Line Description:** Mech piping
- **UOM:** *LS*
- **Order Qty:** 1
- **Unit Cost:** 17000

3. In the Summary area of the form, clear the **Hold** check box.

4. Save your changes.

Subcontracts

SAVE & CLOSE    ACTIONS    REPORTS

Subcontract Nbr.: SC-000014    Vendor: INSTCO - Harmon Installation    Line Total: 31,500.00

Status: Open    Owner: KATYA - Katya S    Discount Total: 0.00

Date: 12/2/2019    Currency: USD 1.00    VAT Exempt T...: 0.00

Start Date: 12/2/2019    Vendor Ref.:    VAT Taxable T...: 0.00

Description: Mechanical    Tax Total: 0.00

Retainage Total: 0.00

Subcontract To...: 31,500.00

DOCUMENT DETAILS    TAX DETAILS    VENDOR INFO    APPROVAL DETAILS    DISCOUNT DETAILS    SC HISTORY    PREPAYMENTS    CHANGE ORDERS    OTHER INFORMATION    COMPLIANCE

| Branch     | Account Group/Item | Project | Sub Job | Cost Code | Line Description | UOM  | Order Qty. | Unit Cost    | Ext. Cost | Retainage Percent | Retainage Amount | Amount    | Discount Percent |
|------------|--------------------|---------|---------|-----------|------------------|------|------------|--------------|-----------|-------------------|------------------|-----------|------------------|
| HEADOFFICE | LABOR              | ITALIAN | 15      | 15-100    | Mech piping      | HOUR | 100.00     | 145.00000    | 14,500.00 | 0.000000          | 0.00             | 14,500.00 | 0.000000         |
| HEADOFFICE | MATERIAL           | ITALIAN | 15      | 15-100    | Mech piping      | LS   | 1.00       | 17,000.00000 | 17,000.00 | 0.000000          | 0.00             | 17,000.00 | 0.000000         |

- On the Projects (PM301000) form, open the commitment and review the committed bucket.

### Changing the Commitment to Exceed the Budget

The subcontractor started working and it appeared that an extra 20 hours of work is necessary.

To change the commitment, on the Change Orders (PM308000) form, do the following:

- In the Summary area of the form, specify the following settings:
  - Class:** *EXT*
  - Project:** *ITALIAN*
  - Description:** Extra work on piping
- On the **Commitments** tab, click **Select Commitments** on the table toolbar, and in the **Select Commitments** dialog box, select the check box for the line with the following attributes:
  - Project Task:** *15*
  - Cost Code:** *15-100*
  - Inventory ID:** *LABOR*
- Click **Add Lines & Close** to add the selected line to the change order and close the dialog box.
- In the only row in the table on the **Commitments** tab, change **Quantity** to 20.
- Save the change order.

Change Orders

NOTES ACTIVITIES FILES NOTIFICATIONS CUSTOMIZATION

SAVE & CLOSE + - K < > >| RELEASE ACTIONS REPORTS

Contract:  Hold Customer: ITALIAN01 - The Italian Company Commitment Change Total: 2,900.00

Change Date: 12/2/2019 External Reference Nbr.: Gross Budget Change Total: 0.00

Approval Date: 12/2/2019 Revenue Change Nbr.: 0002 Gross Margin Amount: 0.00

Contract Time ... 0 Change Request Cost Total: 0.00

Description: Change Request Line Total: 0.00

Gross Margin %: 0.00

Change Request Markup Total: 0.00

Change Request Price Total: 0.00

CHANGE REQUESTS REVENUE BUDGET COST BUDGET **COMMITMENTS** DETAILED DESCRIPTION ATTRIBUTES APPROVAL DETAILS COMPLIANCE

SELECT COMMITMENTS All Records

| Sub Job | Cost Code | Account Group/Item | Description                   | Quantity | UOM  | Unit Cost | Amount   | Account | Vendor | Commitment Type |
|---------|-----------|--------------------|-------------------------------|----------|------|-----------|----------|---------|--------|-----------------|
|         | 15-100    | LABOR              | Mech- Building Service Piping | 20.00    | HOUR | 145.00    | 2,900.00 | 54100   | INSTCO | Subcontra       |

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

Because you have only \$500 of budget and the change exceeds the available budget by \$2400, the overbudget warning is displayed. *Consumed* shows the total of open commitments and already processed actuals.

### Creating Another Commitment

Make a copy of the previously created mechanical subcontract as follows:

1. On the Subcontracts (SC301000) form, open the subcontract that you created earlier in this lesson.
2. On the form toolbar, click **Clipboard > Copy**.
3. On the form toolbar, click **Add New Record**.
4. On the form toolbar, click **Clipboard > Paste**.
5. For the new subcontract, in the Summary area of the form, type Mechanical 2 in the **Description** box.

The warning messages are displayed for each of the lines of the subcontract because the budget overrun is now considering the open commitment (that is, the previous subcontract).

Subcontracts

NOTES ACTIVITIES FILES NOTIFICATIONS CUSTOMIZATION TOOL

SAVE & CLOSE

Subcontract Nbr.: SC-000015 Vendor: INSTCO - Harmon Installation Line Total: 31,500.00

Status:  Hold  On Hold  Approved Owner: KATYA - Katya S Currency: USD 1.00 VIEW BASE Discount Total: 0.00

Date: 12/2/2019 Start Date: 12/2/2019 Description: Mechanical 2 VAT Exempt T...: 0.00 VAT Taxable T...: 0.00 Tax Total: 0.00 Retainage Total: 0.00 Subcontract To...: 31,500.00

DOCUMENT DETAILS TAX DETAILS VENDOR INFO APPROVAL DETAILS DISCOUNT DETAILS SC HISTORY PREPAYMENTS CHANGE ORDERS OTHER INFORMATION

| Branch     | Account Group/Item | Project | Sub Job | Cost Code | Line Description | UOM  | Order Qty. | Unit Cost | Ext. Cost | Retainage Percent | Retainage Amount | Amount    |
|------------|--------------------|---------|---------|-----------|------------------|------|------------|-----------|-----------|-------------------|------------------|-----------|
| HEADOFFICE | LABOR              | ITALIAN | 15      | 15-100    | Mech piping      | HOUR | 100.00     | 145.0000  | 14,500.00 | 0.000000          | 0.00             | 14,500.00 |
| HEADOFFICE | MATERIAL           | ITALIAN | 15      | 15-100    | Mech piping      | LS   |            |           |           |                   | 0.00             | 17,000.00 |

Budgeted: 15000.00, Consumed: 14500.00, Available: 500.00, Document: 14500.00, Remaining: -14000.00

6. Save the subcontract.

### Creating a Vendor Bill

Enter an AP bill as follows:

- On the Bills and Adjustments (AP301000) form, create a new document and specify the following settings in the Summary area:
  - Type:** *Bill*
  - Vendor:** *INSTCO*
- On the **Document Details** tab, add a new row with the following details:
  - Account Group/Item:** *LABOR*
  - Quantity:** 10
  - Unit Cost:** 100
  - Project:** *ITALIAN*
  - Sub Job:** *15*
  - Cost Code:** *15-100*

The overbudget warning is displayed. The budget is verified for all documents, including documents with the *On Hold* status.

**Bills and Adjustments** NOTES ACTIVITIES FILES NOTIFICATIONS CUSTOMIZATION

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Type: **Bill** Vendor: **INSTCO - Harmon Installation** Detail Total: 1,000.00

Reference Nbr.: **<NEW>** Terms: **30D - 30 Days** Discount Total: 0.00

Status: **On Hold** Due Date: **1/1/2020**  Apply Retainage VAT Taxable Total: 0.00

Hold Cash Discount: **1/1/2020**  Pay by Line  Joint Payees VAT Exempt Total: 0.00

Date: **12/2/2019** Tax Total: 0.00

Post Period: **12-2019** With. Tax: 0.00

Vendor Ref.: Balance: 1,000.00

Cash Discount: 0.00

Description:

---

**DOCUMENT DETAILS** FINANCIAL DETAILS TAX DETAILS APPROVAL DETAILS RETAINAGE APPLICATIONS COMPLIANCE

VIEW SCHEDULE ADD PO RECEIPT ADD PO RECEIPT LINE ADD PO ADD SUBCONTRACTS ADD PO LINE ADD SUBCONTRACT LINE ADD LC

| Branch     | Line Nbr. | Account Group/Item | Transaction Descr. | Quantity | UOM  | Unit Cost | Ext. Cost | Discount Amount | Retainage Percent | Retainage Amount |
|------------|-----------|--------------------|--------------------|----------|------|-----------|-----------|-----------------|-------------------|------------------|
| HEADOFFICE | 1         | LABOR              | Piping             | 10.00    | HOUR | 100.0000  | 1,000.00  | 0.00            | 0.000000          | 0.00             |

Budgeted: 15000.00, Consumed: 14500.00,  
Available: 500.00, Document: 1000.00,  
Remaining: -500.00

3. Save the bill.

### Viewing Documents Exceeding the Project Budget

To view all documents that exceed the budget, do the following:

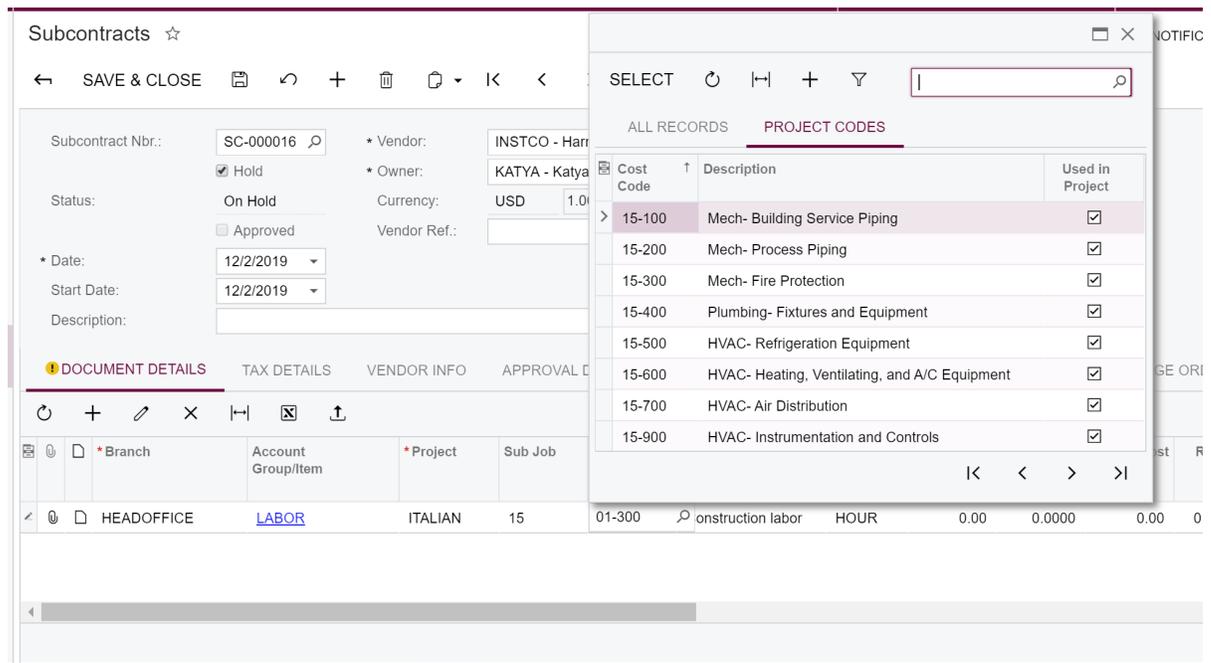
1. Open the Project Budget Overruns (PM404000) form.
2. In the Selection area, select the following values:
  - **Project:** ITALIAN
  - **From:** 2/1/2019
  - **To:** Current date
3. In the Selection area, click **Calculate**.

As the following screenshot shows, the system returns the list of document lines that exceed the budget. You can click the **Reference Nbr.** of a document line to open the document for review.



4. On the Subcontracts (SC301000) form, create a new subcontract.
5. In the Summary area of the form, in the **Vendor** box, select *INSTCO*.
6. On the **Document Details** tab, add a new line with the following parameters:
  - **Account Group/Item:** *LABOR*
  - **Project:** *ITALIAN*
  - **Sub Job:** *15*
7. In the **Cost Code** column, click the magnifier icon.

On the **Project Codes** tab of the lookup box, which opens, the system displays the list of cost codes that are used in the project budget lines with the specified account group and subjob.



8. In the only row of the table, in the **Cost Code** column, type 01-300.

Notice that the system now displays a warning that the entered cost code is missing from the project budget (see the following screenshot).

Subcontracts ☆ NOTES ACTIVITIES F

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Subcontract Nbr.: SC-000016  \* Vendor: INSTCO - Harmon Installation   Line Total: 0.00

Hold \* Owner: KATYA - Katya S  Discount Total:  0.00

Status: On Hold Currency: USD 1.00  VIEW BASE VAT Exempt T... 0.00

Approved Vendor Ref.:  VAT Taxable T... 0.00

\* Date: 12/2/2019  Tax Total: 0.00

Start Date: 12/2/2019  Retainage Total: 0.00

Description:  Subcontract To... 0.00

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DOCUMENT DETAILS TAX DETAILS VENDOR INFO APPROVAL DETAILS DISCOUNT DETAILS SC HISTORY PREPAYMENTS

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| 🗑️ | 📄 | * Branch   | Account Group/Item | * Project | Sub Job | Cost Code                                 | Line Description   | UOM  | Order Qty. | Unit Cost |
|----|---|------------|--------------------|-----------|---------|---|--------------------|------|------------|-----------|
| 🗑️ | 📄 | HEADOFFICE | LABOR              | ITALIAN   | 15      | 01-300 <span style="color: red;">!</span> | Construction labor | hour | 0.00       | 0.0000    |

Cost code is not present in the project budget.

9. In the **Cost Code** column, type 15-100, and clear the GL account in the **Account** column.

The GL account in the **Account** column determines the account group. The 15-100 cost code is present in the project budget with different account groups, so the system displays no warning at this point.

10. In the **Account Group/Item** column, change the value to *SUBCON*.

Notice that the system has now inserted in the **Account** column the *54200 - Project Subcontract Expense* account that is included in the SUBCON account group. The system now displays the warning message in the **Cost Code** column because this code is not used with the SUBCON account group in the project budget.

Subcontracts ☆ NOTES ACTIVITIES FILES N

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Subcontract Nbr.:  \*

Hold \* Owner: KATYA - Katya S

Status: **On Hold** Currency: USD 1.00 VIEW BASE

Approved Vendor Ref.:

\* Date:

Start Date:

Description:

Line Total: 0.00

Discount Total: 0.00

VAT Exempt T...: 0.00

VAT Taxable T...: 0.00

Tax Total: 0.00

Retainage Total: 0.00

Subcontract To...: 0.00

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! DOCUMENT DETAILS
TAX DETAILS
VENDOR INFO
APPROVAL DETAILS
DISCOUNT DETAILS
SC HISTORY
PREPAYMENTS
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| ☒ | ☒ | * Branch   | Account Group/Item     | * Project | Sub Job | Cost Code   | Line Description | UOM | Order Qty. | Unit Cost   | Ext. Cos |
|---|---|------------|------------------------|-----------|---------|---|------------------|-----|------------|---|----------|
| ☒ | ☒ | HEADOFFICE | <a href="#">SUBCON</a> | ITALIAN   | 15      | 15-100 <span style="font-size: x-small;">!</span> | Subcontract      | EA  | 0.00       | <span style="font-size: x-small;">!</span> 0.0000 | 0.00     |

Cost code is not present in the project budget.

## Lesson 9: Budget Forecast

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Users plan, approve, enter an entire budget for a project, and they also want to see reports with actual and budgeted monthly amounts and quantities to control the project. Users may also need to do manual corrections of the budget by month on a regular basis, which may lead to revisions of the original budgeted totals.

By using Acumatica ERP Construction Edition, a project manager can do any of the following:

- Compare project monthly budgets with actual project costs for each financial period
- Auto-distribute total cost and revenue budgets across financial periods to help populate monthly budgets in a forecast entry
- Have different project budget revisions, e.g., a positive forecast, a negative forecast, and a realistic one.

For users to be able to prepare project budget forecasts, the *Budget Forecast* feature (under the *Projects* group of features) has to be enabled on the Enable/Disable Features (CS100000) form.

### Learning Objectives

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

- Create a budget forecast for a project in the system
- Add financial periods to the forecast
- Distribute budget values across the periods of forecast
- Update the summarized project budget figures with the totals of monthly budgets
- Track changes in the amounts of the budget forecast

### System Preparation

Sign in to the system as a project manager by using the *owen* login and *123* password.

### Story

Suppose that the SweetLife company is building an Italian restaurant. A project manager of the company wants to prepare a budget forecast by periods to be able to compare and analyze monthly budgets versus actual costs within the project work breakdown structure. Because some works on interior lighting will be performed in August and September of 2019, the project manager wants to distribute the total lighting budget across the periods when this work is going to be performed for further review and analysis of budget performance.

Also, some additional works are needed on interior lighting in the restaurant. So the project manager processes the documents related to the changes and tracks the changes in the budget forecast.

## Creating a Project Budget Forecast and Generating Periods

Do the following:

1. Open the Projects (PM301000) form, and in the **Project ID** box, select *ITALIAN4*.
2. On the form toolbar, click **Inquiries > Project Budget Forecast**.

The system opens the Project Budget Forecast (PM209600) form.

3. In the **Revision** box, type *1*, and press Enter.

The system displays a list of project tasks in the table.

4. In the **Description** box, type *2019 Budget Forecast*.

5. Click **Save** on the form toolbar.

Project Budget Forecast

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Project: ITALIAN4 - Italian Restaurant Prc Project Task: Account Group: Inventory ID: Cost Code:   
 Revision: 1 - Italian Restaurant Budget For Type: Expense   
 Description: Italian Restaurant Budget Forecast

ADD PERIODS UPDATE PROJECT BUDGET LINE UPDATE FORECAST LINES

| Project Task | Account Group | Inventory ID | Cost Code | Description                 | Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity |
|--------------|---------------|--------------|-----------|-----------------------------|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|----------------------|
| > 01         | LABOR         | <N/A>        | 01-311    | Operations- Project Manager |                    |                  |                  | 1.00                       | 15,000.00                | 1.00                      | 15,000.00               | 0.00                  | 0.00                | 0.00                 |
| 01           | LABOR         | <N/A>        | 01-313    | Operations- Superintendent  |                    |                  |                  | 1.00                       | 39,000.00                | 1.00                      | 39,000.00               | 0.00                  | 0.00                | 0.00                 |
| 01           | LABOR         | <N/A>        | 01-314    | Operations- Crew Leader     |                    |                  |                  | 1.00                       | 20,000.00                | 1.00                      | 20,000.00               | 0.00                  | 0.00                | 0.00                 |
| 01           | LABOR         | <N/A>        | 01-900    | Clean up                    |                    |                  |                  | 1.00                       | 10,000.00                | 1.00                      | 10,000.00               | 0.00                  | 0.00                | 0.00                 |
| 01           | OTHEREXP      | <N/A>        | 01-300    | Permit                      |                    |                  |                  | 1.00                       | 15,601.00                | 1.00                      | 15,601.00               | 0.00                  | 0.00                | 0.00                 |
| 01           | OTHEREXP      | <N/A>        | 01-330    | Design Fees                 |                    |                  |                  | 1.00                       | 37,500.00                | 1.00                      | 37,500.00               | 0.00                  | 0.00                | 0.00                 |
| 01           | OTHEREXP      | <N/A>        | 01-510    | Telephone                   |                    |                  |                  | 1.00                       | 950.00                   | 1.00                      | 950.00                  | 0.00                  | 0.00                | 0.00                 |
| 01           | OTHEREXP      | <N/A>        | 01-600    | Insurance                   |                    |                  |                  | 1.00                       | 7,500.00                 | 1.00                      | 7,500.00                | 0.00                  | 0.00                | 0.00                 |
| 01           | TRAVEL        | <N/A>        | 01-505    | Mobilization                |                    |                  |                  | 1.00                       | 5,000.00                 | 1.00                      | 5,000.00                | 0.00                  | 0.00                | 0.00                 |
| 03           | MATERIAL      | <N/A>        | 03-100    | Concrete- Forming           |                    |                  |                  | 1,500.00                   | 3,000.00                 | 1,500.00                  | 3,000.00                | 0.00                  | 0.00                | 0.00                 |
| 03           | MATERIAL      | <N/A>        | 03-200    | Concrete- Reinforcing       |                    |                  |                  | 7,000.00                   | 17,500.00                | 7,000.00                  | 17,500.00               | 0.00                  | 0.00                | 0.00                 |
| 03           | MATERIAL      | <N/A>        | 03-300    | Concrete- CIP Slab          |                    |                  |                  | 775.00                     | 77,500.00                | 775.00                    | 77,500.00               | 0.00                  | 0.00                | 0.00                 |
| 03           | MATERIAL      | <N/A>        | 03-350    | Concrete- Finishes          |                    |                  |                  | 7,000.00                   | 8,400.00                 | 7,000.00                  | 8,400.00                | 0.00                  | 0.00                | 0.00                 |
| 03           | SUBCON        | <N/A>        | 03-100    | Concrete- Forming           |                    |                  |                  | 30.00                      | 1,200.00                 | 30.00                     | 1,200.00                | 0.00                  | 0.00                | 0.00                 |
| 03           | SUBCON        | <N/A>        | 03-200    | Concrete- Reinforcing       |                    |                  |                  | 50.00                      | 3,750.00                 | 50.00                     | 3,750.00                | 0.00                  | 0.00                | 0.00                 |
| 03           | SUBCON        | <N/A>        | 03-300    | Concrete- CIP Slab          |                    |                  |                  | 40.00                      | 2,000.00                 | 40.00                     | 2,000.00                | 0.00                  | 0.00                | 0.00                 |
| 03           | SUBCON        | <N/A>        | 03-350    | Concrete- Finishes          |                    |                  |                  | 16.00                      | 640.00                   | 16.00                     | 640.00                  | 0.00                  | 0.00                | 0.00                 |
| 04           | LABOR         | <N/A>        | 04-220    | Masonry- Block              |                    |                  |                  | 150.00                     | 11,250.00                | 150.00                    | 11,250.00               | 0.00                  | 0.00                | 0.00                 |

6. Click **Generate Periods**.

The system adds periods to each budget line. Also, the **Total** and **Delta** lines are added. Note that the system now displays periods in the table.

For each line, the system adds periods in the range of periods that it selects as follows:

- As the starting financial period of the range, the system selects the earliest of the following periods, subject to the additional conditions specified:
  - The financial period to which the **Planned Start Date** of the project task, which has been specified on the Project Tasks (PM302000) form, belongs.
  - The financial period to which the first actual or change order amount of the project budget lines related to the project task was posted.

- The financial period to which the **Start Date** of the project task, which has been specified on the **Tasks** tab of the Projects form, belongs. This option is applicable only if no planned start date is found for the project task and no actual or change order amount has been posted for the project budget lines related to the project task.
- The financial period to which the **Start Date** of the project, which has been specified on the **Summary** tab of the Projects form, belongs. This option is applicable only if no start date is found for the project task.
- As the ending financial period of the range, the system selects the latest of the following periods:
  - The financial period to which the **Planned End Date** of the project task, which has been specified on the Project Tasks form, belongs
  - The financial period to which the last actual or change order amount of the budget line was posted

Project Budget Forecast ☆ NOTES FILES CUSTOMIZATION TOOLS ▾

GENERATE PERIODS COPY REVISION DISTRIBUTE REPORTS ▾

\* Project: ITALIAN4 - Italian Restaurant Prc  Project Task:  Account Group:   
 \* Revision: 1 - 2019 Budget Forecast  Type: Expense  Inventory ID:   
 Description: 2019 Budget Forecast  Cost Code:

ADD PERIODS UPDATE PROJECT BUDGET LINE UPDATE FORECAST LINES

| Project Task | Account Group | Inventory ID | Cost Code | Description                 | Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount |
|--------------|---------------|--------------|-----------|-----------------------------|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|
| 01           | LABOR         | <N/A>        | 01-311    | Operations- Project Manager |                    |                  |                  | 1.00                       | 15,000.00                | 1.00                      | 15,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                             |                    |                  | 03-2019          | 0.00                       | 0.00                     | 0.00                      | 0.00                    | 0.00                  | 0.00                |
|              |               |              |           |                             |                    |                  | <b>Total:</b>    | <b>0.00</b>                | <b>0.00</b>              | <b>0.00</b>               | <b>0.00</b>             | <b>0.00</b>           | <b>0.00</b>         |
|              |               |              |           |                             |                    |                  | <b>Delta:</b>    | <b>1.00</b>                | <b>15,000.00</b>         | <b>1.00</b>               | <b>15,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         |
| 01           | LABOR         | <N/A>        | 01-313    | Operations- Superintendent  |                    |                  |                  | 1.00                       | 39,000.00                | 1.00                      | 39,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                             |                    |                  | 03-2019          | 0.00                       | 0.00                     | 0.00                      | 0.00                    | 0.00                  | 0.00                |
|              |               |              |           |                             |                    |                  | <b>Total:</b>    | <b>0.00</b>                | <b>0.00</b>              | <b>0.00</b>               | <b>0.00</b>             | <b>0.00</b>           | <b>0.00</b>         |
|              |               |              |           |                             |                    |                  | <b>Delta:</b>    | <b>1.00</b>                | <b>39,000.00</b>         | <b>1.00</b>               | <b>39,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         |
| 01           | LABOR         | <N/A>        | 01-314    | Operations- Crew Leader     |                    |                  |                  | 1.00                       | 20,000.00                | 1.00                      | 20,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                             |                    |                  | 03-2019          | 0.00                       | 0.00                     | 0.00                      | 0.00                    | 0.00                  | 0.00                |
|              |               |              |           |                             |                    |                  | <b>Total:</b>    | <b>0.00</b>                | <b>0.00</b>              | <b>0.00</b>               | <b>0.00</b>             | <b>0.00</b>           | <b>0.00</b>         |
|              |               |              |           |                             |                    |                  | <b>Delta:</b>    | <b>1.00</b>                | <b>20,000.00</b>         | <b>1.00</b>               | <b>20,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         |
| 01           | LABOR         | <N/A>        | 01-900    | Clean up                    |                    |                  |                  | 1.00                       | 10,000.00                | 1.00                      | 11,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                             |                    |                  | 03-2019          | 0.00                       | 0.00                     | 0.00                      | 0.00                    | 0.00                  | 1,000.00            |
|              |               |              |           |                             |                    |                  | <b>Total:</b>    | <b>0.00</b>                | <b>0.00</b>              | <b>0.00</b>               | <b>0.00</b>             | <b>0.00</b>           | <b>1,000.00</b>     |

7. Save the forecast.
8. In the **Account Group** box, select *SUBCON*.
9. In the **Cost Code** box, select *16-510*.
10. On the table toolbar, click **Add Periods**. The system opens the **Add Periods** dialog box.
11. In the **Period To** box, select *09-2019*.
12. Click **OK**.
13. Click **Save** on the form toolbar.

Project Budget Forecast ☆ NOTES FILES CUSTOMIZATION TOOLS ▾

GENERATE PERIODS COPY REVISION DISTRIBUTE REPORTS ▾

\* Project: ITALIAN4 - Italian Restaurant Prc ⌵ Project Task: ⌵ Account Group: SUBCON - Project Subcontract ⌵  
 \* Revision: 1 - 2019 Budget Forecast ⌵ Type: Expense ⌵ Inventory ID: ⌵  
 Description: 2019 Budget Forecast Cost Code: 18-510 - Lighting- Interior ⌵

ADD PERIODS UPDATE PROJECT BUDGET LINE UPDATE FORECAST LINES ⌵ ⌵ ⌵

| Project Task | Account Group | Inventory ID | Cost Code | Description        | Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount |
|--------------|---------------|--------------|-----------|--------------------|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|
| 18           | SUBCON        | <N/A>        | 18-510    | Lighting- Interior |                    |                  |                  | 1.00                       | 30,000.00                | 1.00                      | 30,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                    |                    |                  | 08-2019          | 0.00                       | 0.00                     | 0.00                      | 0.00                    | 0.00                  | 0.00                |
|              |               |              |           |                    |                    |                  | 09-2019          | 0.00                       | 0.00                     | 0.00                      | 0.00                    | 0.00                  | 0.00                |
|              |               |              |           |                    |                    |                  | <b>Total:</b>    | <b>0.00</b>                | <b>0.00</b>              | <b>0.00</b>               | <b>0.00</b>             | <b>0.00</b>           | <b>0.00</b>         |
|              |               |              |           |                    |                    |                  | <b>Delta:</b>    | <b>1.00</b>                | <b>30,000.00</b>         | <b>1.00</b>               | <b>30,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         |

### Distributing Amounts Across the Periods

Do the following:

1. While you are still viewing the project budget forecast on the Project Budget Forecast (PM209600) form, on the form toolbar, click **Distribute**.
2. In the **Distribute** dialog box, leave the default values, and click **OK**.
3. Save the forecast.

Project Budget Forecast ☆ NOTES FILES CUSTOMIZATION TOOLS ▾

GENERATE PERIODS COPY REVISION DISTRIBUTE REPORTS ▾

\* Project: ITALIAN4 - Italian Restaurant Prc ⌵ Project Task: ⌵ Account Group: SUBCON - Project Subcontract ⌵  
 \* Revision: 1 - 2019 Budget Forecast ⌵ Type: Expense ⌵ Inventory ID: ⌵  
 Description: 2019 Budget Forecast Cost Code: 18-510 - Lighting- Interior ⌵

ADD PERIODS UPDATE PROJECT BUDGET LINE UPDATE FORECAST LINES ⌵ ⌵ ⌵

| Project Task | Account Group | Inventory ID | Cost Code | Description        | Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount |
|--------------|---------------|--------------|-----------|--------------------|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|
| 18           | SUBCON        | <N/A>        | 18-510    | Lighting- Interior |                    |                  |                  | 1.00                       | 30,000.00                | 1.00                      | 30,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                    |                    |                  | 08-2019          | 0.50                       | 15,000.00                | 0.50                      | 15,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                    |                    |                  | 09-2019          | 0.50                       | 15,000.00                | 0.50                      | 15,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                    |                    |                  | <b>Total:</b>    | <b>1.00</b>                | <b>30,000.00</b>         | <b>1.00</b>               | <b>30,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         |

4. In the **Original Budgeted Amount** and **Revised Budgeted Amount** columns, for the 08-2019 period, specify 20000.00.

Notice that the **Delta** column has appeared; the total in the **Original Budgeted Amount** and **Revised Budgeted Amount** columns is 35000.00.

5. Save the forecast.

Project Budget Forecast ☆ NOTES FILES CUSTOMIZATION TOOLS ▾

GENERATE PERIODS COPY REVISION DISTRIBUTE REPORTS ▾

\* Project: ITALIAN4 - Italian Restaurant Prc  Project Task:  Account Group: SUBCON - Project Subcontract   
 \* Revision: 1 - 2019 Budget Forecast  Type: Expense  Inventory ID:   
 Description: 2019 Budget Forecast  Cost Code: 16-510 - Lighting- Interior

ADD PERIODS UPDATE PROJECT BUDGET LINE UPDATE FORECAST LINES

| Project Task | Account Group | Inventory ID | Cost Code | Description        | Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount |
|--------------|---------------|--------------|-----------|--------------------|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|
| 16           | SUBCON        | <N/A>        | 16-510    | Lighting- Interior |                    |                  |                  | 1.00                       | 30,000.00                | 1.00                      | 30,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                    |                    |                  | 08-2019          | 0.50                       | 15,000.00                | 0.50                      | 15,000.00               | 0.00                  | 0.00                |
|              |               |              |           |                    |                    |                  | 09-2019          | 0.50                       | 15,000.00                | 0.50                      | 20,000.00               |                       |                     |
|              |               |              |           |                    |                    |                  | <b>Total:</b>    | <b>1.00</b>                | <b>30,000.00</b>         | <b>1.00</b>               | <b>35,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         |
|              |               |              |           |                    |                    |                  | <b>Delta:</b>    | <b>0.00</b>                | <b>0.00</b>              | <b>0.00</b>               | <b>-5,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         |

- On the Projects (PM301000) form, open the *ITALIAN4* project.
- On the **Cost Budget** tab, note that for the *16-510* cost code and *SUBCON* account group, the value in the **Original Budgeted Amount** and **Revised Budgeted Amount** box is *30000.00*.

Projects NOTES FILES NOTIFICATIONS CUSTOMIZATION TOOLS ▾

SAVE & CLOSE  RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

\* Project ID: ITALIAN4  \* Status: Active  Assets: 0.00  
 Customer: ITALIAN01 - The Italian Company   Hold Liabilities: 0.00  
 Template: CONTM - Construction T&M Project  Income: 0.00  
 \* Description: Italian Restaurant Project  Expenses: 193,517.00

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 Records ▾

| Sub Job | Cost Code | Account Group | Description                             | Original Budgeted Quantity | UOM  | Unit Rate   | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount |
|---------|-----------|---------------|---|----------------------------|------|-------------|--------------------------|-----------------------|---------------------|----------------------|--------------------|---------------------------|-------------------------|
| 15      | 15-700    | MATERIAL      | HVAC- Air Distribution                  | 1.00                       | LS   | 25,000.0000 | 25,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 25,000.00               |
| 15      | 15-900    | LABOR         | HVAC- Instrumentation and Controls      | 40.00                      | HOUR | 120.0000    | 4,800.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 40.00                     | 4,800.00                |
| 15      | 15-900    | MATERIAL      | HVAC- Instrumentation and Controls      | 1.00                       | LS   | 5,000.0000  | 5,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 5,000.00                |
| 15      | 15-950    | LABOR         | HVAC- Testing, Adjusting, and Balancing | 40.00                      | HOUR | 75.0000     | 3,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 40.00                     | 3,000.00                |
| 15      | 15-950    | MATERIAL      | HVAC- Testing, Adjusting, and Balancing | 1.00                       | LS   | 3,700.0000  | 3,700.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 3,700.00                |
| 16      | 16-200    | LABOR         | Elec- Power                             | 120.00                     | HOUR | 125.0000    | 15,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 120.00                    | 15,000.00               |
| 16      | 16-200    | MATERIAL      | Elec- Power                             | 1.00                       | LS   | 50,000.0000 | 50,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 50,000.00               |
| 16      | 16-210    | LABOR         | Elec- Motors and Generator              | 40.00                      | HOUR | 125.0000    | 5,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 40.00                     | 5,000.00                |
| 16      | 16-210    | MATERIAL      | Elec- Motors and Generator              | 1.00                       | LS   | 20,000.0000 | 20,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 20,000.00               |
| 16      | 16-510    | SUBCON        | Lighting- Interior                      | 1.00                       | EA   | 30,000.0000 | 30,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 30,000.00               |
| 16      | 16-520    | SUBCON        | Lighting- Exterior                      | 1.00                       | EA   | 15,000.0000 | 15,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 15,000.00               |

- Go back to the Project Budget Forecast form.
- Open the *1* revision for the *ITALIAN4* project.
- In the Summary area, specify the following settings:
  - Account Group:** *SUBCON*
  - Cost Code:** *16-510*
- On the table toolbar, click **Update Project Budget Line**.

The system updated the project budget with the **Total** value (\$35000) for this line. The **Delta** line has disappeared.

- Save the forecast.

13. Go back to the Projects form, and open the *ITALIAN4* project.

14. On the **Cost Budget** tab, note that for the *16-510* cost code and *SUBCON* account group, the value in the **Original Budgeted Amount** and **Revised Budgeted Amount** box is *35000.00*.

Projects

NOTES FILES NOTIFICATIONS CUSTOMIZATION TOOLS

SAVE & CLOSE RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES REPORTS

\* Project ID: ITALIAN4 \* Status: Active Assets: 0.00  
 Customer: ITALIAN01 - The Italian Company Liabilities: 0.00  
 Template: CONTM - Construction T&M Project Income: 0.00  
 Description: Italian Restaurant Project Expenses: 193,517.00

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 Records

| Sub Job | Cost Code | Account Group | Description                             | Original Budgeted Quantity | UOM  | Unit Rate   | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount |
|---------|-----------|---------------|---|----------------------------|------|-------------|--------------------------|-----------------------|---------------------|----------------------|--------------------|---------------------------|-------------------------|
| 15      | 15-700    | MATERIAL      | HVAC- Air Distribution                  | 1.00                       | LS   | 25,000.0000 | 25,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 25,000.00               |
| 15      | 15-900    | LABOR         | HVAC- Instrumentation and Controls      | 40.00                      | HOUR | 120.0000    | 4,800.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 40.00                     | 4,800.00                |
| 15      | 15-900    | MATERIAL      | HVAC- Instrumentation and Controls      | 1.00                       | LS   | 5,000.0000  | 5,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 5,000.00                |
| 15      | 15-950    | LABOR         | HVAC- Testing, Adjusting, and Balancing | 40.00                      | HOUR | 75.0000     | 3,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 40.00                     | 3,000.00                |
| 15      | 15-950    | MATERIAL      | HVAC- Testing, Adjusting, and Balancing | 1.00                       | LS   | 3,700.0000  | 3,700.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 3,700.00                |
| 16      | 16-200    | LABOR         | Elec- Power                             | 120.00                     | HOUR | 125.0000    | 15,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 120.00                    | 15,000.00               |
| 16      | 16-200    | MATERIAL      | Elec- Power                             | 1.00                       | LS   | 50,000.0000 | 50,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 50,000.00               |
| 16      | 16-210    | LABOR         | Elec- Motors and Generator              | 40.00                      | HOUR | 125.0000    | 5,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 40.00                     | 5,000.00                |
| 16      | 16-210    | MATERIAL      | Elec- Motors and Generator              | 1.00                       | LS   | 20,000.0000 | 20,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 20,000.00               |
| 16      | 16-510    | SUBCON        | Lighting- Interior                      | 1.00                       | EA   | 30,000.0000 | 35,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 35,000.00               |
| 16      | 16-520    | SUBCON        | Lighting- Exterior                      | 1.00                       | EA   | 15,000.0000 | 15,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 15,000.00               |

NOTE: Budget quantities are distributed by similar rules as ones demonstrated for budget amounts above.

### Processing a Change Request

1. On the Change Requests (PM308500) form, open the *Additional lighting installation services* request of 9/19/2019.
2. In the Summary area, clear the **Hold** check box.
3. Click **Actions > Approve**.

Change Requests

NOTES ACTIVITIES FILES NOTIFICATIONS TOOLS

SAVE & CLOSE CREATE CHANGE ORDER ACTIONS REPORTS

Reference Nbr.: 000010 - Ad Project: ITALIAN4 - Italian Restaurant Project Cost Total: 5,000.00  
 Status: On Hold Customer: ITALIAN01 - The Italian Company Line Total: 5,092.00  
 Hold Project Issue: Markup Total: 1,754.99  
 \* Change Date: 9/19/2019 RFI: Gross Margin %: 35.46  
 Contract Time: 0 Change Order Nbr.: Price Total: 7,746.99  
 Ext. Ref. Nbr.:  
 Description: Additional lighting installation services

ESTIMATION DETAILED DESCRIPTION MARKUPS APPROVAL DETAILS

Project Task Account Group Cost Code Inventory ID Description Quantity UOM Unit Cost Ext. Cost Price Markup (%) Revenue Task Revenue Account Group Revenue Code

|    |        |        |        |                    |      |      |          |          |      |         |  |  |
|----|--------|--------|--------|--------------------|------|------|----------|----------|------|---------|--|--|
| 16 | SUBCON | 16-510 | SUBCON | Lighting- Interior | 1.00 | HOUR | 5,000.00 | 5,000.00 | 7.00 | REVENUE |  |  |
|----|--------|--------|--------|--------------------|------|------|----------|----------|------|---------|--|--|

4. On the Project Budget Forecast (PM209600) form, in the **Project** box, select *ITALIAN4*.
5. In the **Account Group** box, select *SUBCON*.

6. In the **Cost Code** box, select *16-510*.
7. In the **Potential CO Amount** box, for the *09-2019* period, note that the amount specified in the change request has appeared.

Project Budget Forecast ☆ NOTES FILES TOOLS ▾

GENERATE PERIODS COPY REVISION DISTRIBUTE REPORTS ▾

\* Project: ITALIAN4 - Italian Restaurant Prc ⌵ Project Task:   
 \* Revision: 1 - 2019 Budget Forecast ⌵ Type: Expense   
 Description: 2019 Budget Forecast   
 Account Group: SUBCON - Project Subcontract ⌵   
 Inventory ID:   
 Cost Code: 16-510 - Lighting- Interior ⌵

ADD PERIODS UPDATE PROJECT BUDGET LINE UPDATE FORECAST LINES

| Project Task | Account Group | Inventory ID | Cost Code | Description        | Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amou |
|--------------|---------------|--------------|-----------|--------------------|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|----------------------|------------------|
| > 16         | SUBCON        | <N/A>        | 16-510    | Lighting- Interior |                    |                  |                  | 1.00                       | 35,000.00                | 1.00                      | 35,000.00               | 0.00                  | 5,000.00            | 0.00                 | 0.00             |
|              |               |              |           |                    |                    |                  | 08-2019          | 0.50                       | 15,000.00                | 0.50                      | 15,000.00               | 0.00                  | 0.00                | 0.00                 | 0.00             |
|              |               |              |           |                    |                    |                  | 09-2019          | 0.50                       | 20,000.00                | 0.50                      | 20,000.00               | 0.00                  | 5,000.00            | 0.00                 | 0.00             |
|              |               |              |           |                    |                    |                  | <b>Total:</b>    | <b>1.00</b>                | <b>35,000.00</b>         | <b>1.00</b>               | <b>35,000.00</b>        | <b>0.00</b>           | <b>5,000.00</b>     | <b>0.00</b>          | <b>0.00</b>      |

### Processing a Change Order

1. Open the Change Orders (PM308000) form, and click **Add New Record**.
2. In the **Change Date** box, specify *9/19/2019*.
3. In the **Approval Date** box, specify *9/19/2019*.
4. In the **Class** box, specify *INT*.
5. In the **Project** box, select *ITALIAN4*.
6. In the **Description** box, type *Additional services are necessary*.
7. On the **Change Requests** tab, click **Select Change Requests**.
8. In the **Select Change Requests** dialog box, select the unlabeled check box next to the *Additional lighting installation services* request of *9/19/2019*.
9. Click **Add Change Requests & Close**.
10. On the **Commitments** tab, in the **UOM** column, specify *HOUR*.
11. In the **Vendor** column, select *CONHOMED*.
12. In the Summary area, clear the **Hold** check box.
13. Save the change order.

Change Orders

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] K < > >| RELEASE ACTIONS ▾ REPORTS ▾

|  |  |                                       |
|--|--|---------------------------------------|
| Reference Nbr.: 000009 - Ad                    | Class: INT - Internal cost-only affecting change c | Revenue Budget Change Total: 0.00     |
| Status: Open                                   | Project: ITALIAN4 - Italian Restaurant Project     | Commitments Change Total: 5,000.00    |
| <input type="checkbox"/> Hold                  | Customer: ITALIAN01 - The Italian Company          | Cost Budget Change Total: 5,000.00    |
| Change Date: 9/19/2019                         | External Reference Nbr.:                           | Gross Margin Amount: -5,000.00        |
| Approval Date: 9/19/2019                       | Revenue Change Nbr.: N/A                           | Gross Margin %: 0.00                  |
| Contract Time ... 0                            |  | Change Request Cost Total: 5,000.00   |
| Description: Additional services are necessary |  | Change Request Line Total: 0.00       |
|  |  | Change Request Markup Total: 1,000.00 |
|  |  | Change Request Price Total: 1,000.00  |

CHANGE REQUESTS COST BUDGET COMMITMENTS DETAILED DESCRIPTION ATTRIBUTES APPROVAL DETAILS COMPLIANCE

SELECT CHANGE REQUESTS

| Reference Nbr. | Status | Description                               | Cost Total | Line Total | Markup Total | Price Total | Contract Time Change, Days |
|----------------|--------|---|------------|------------|--------------|-------------|----------------------------|
| 000010         | Open   | Additional lighting installation services | 5,000.00   | 0.00       | 1,000.00     | 1,000.00    |                            |

14. Click **Release** on the form toolbar.

15. On the Project Budget Forecast (PM209600) form, in the **Project** box, select *ITALIAN4*.

16. In the **Account Group** box, select *SUBCON*.

17. In the **Cost Code** box, select *16-510*.

18. In the **Budgeted CO Amount** box, for this period, note that the amount specified in the change order has appeared.

Project Budget Forecast ☆ [NOTES] [FILES] [TOOLS]

GENERATE PERIODS COPY REVISION DISTRIBUTE REPORTS

\* Project: ITALIAN4 - Italian Restaurant Prc Project Task: Expense  
 \* Revision: 1 Type: Expense  
 Description: Account Group: SUBCON - Project Subcontract  
 Inventory ID: Cost Code: 16-510 - Lighting- Interior

|  | Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Actual Quantity | Actual Amount    | Revised Quantity - Actual Quantity | Revised Amount - Actual Amount |
|--|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|----------------------|--------------------|-----------------|------------------|------------------------------------|--------------------------------|
|  |                    |                  |                  | 1.00                       | 35,000.00                | 1.00                      | 40,000.00               | 0.00                  | 0.00                | 0.00                 | 5,000.00           | 0.00            | 30,000.00        | 1.00                               | 10,000.00                      |
|  |                    |                  | 08-2019          | 0.50                       | 15,000.00                | 0.50                      | 17,500.00               | 0.00                  | 0.00                | 0.00                 | 0.00               | 0.00            | 30,000.00        | 0.50                               | -12,500.00                     |
|  |                    |                  | 09-2019          | 0.50                       | 20,000.00                | 0.50                      | 22,500.00               | 0.00                  | 0.00                | 0.00                 | 5,000.00           | 0.00            | 0.00             | 0.50                               | 22,500.00                      |
|  |                    |                  | <b>Total:</b>    | <b>1.00</b>                | <b>35,000.00</b>         | <b>1.00</b>               | <b>40,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         | <b>0.00</b>          | <b>5,000.00</b>    | <b>0.00</b>     | <b>30,000.00</b> | <b>1.00</b>                        | <b>10,000.00</b>               |

**Paying a Commitment**

1. On the Projects (PM301000) form, open the *ITALIAN4* project.

2. On the **Commitments** tab, in the **Order Nbr.** box, click the link for the *SC-000013* commitment of *8/26/2019*.

3. On the form toolbar of the Subcontracts form, which opens, click **Actions > Enter AP Bill**.

The system opens the Bills and Adjustments (AP301000) form with the details of the subcontract.

4. In the **Date** box, select 10/1/2019.
5. In the Summary area, clear the **Hold** check box.
6. Save and release the bill.

Bills and Adjustments NOTES ACTIVITIES FILES NOTIFICATIONS

SAVE & CLOSE RELEASE ACTIONS INQUIRIES REPORTS 00:00:05

|   |  |                         |
|---|--|-------------------------|
| Type: <b>Bill</b>   | Vendor: KARND DESIGN - Karm Design Incorporate                             | Detail Total: 47,043.00 |
| Reference Nbr: 000003   | Terms: 30D - 30 Days   | Discount Total: 0.00    |
| Status: Open  | * Due Date: 10/31/2019   | VAT Taxable Total: 0.00 |
| <input type="checkbox"/> Hold   | * Cash Discount: 10/31/2019  | VAT Exempt Total: 0.00  |
| Date: 10/1/2019   | <input type="checkbox"/> Pay by Line <input type="checkbox"/> Joint Payees | Tax Total: 0.00         |
| Post Period: 10-2019  |  | With. Tax: 0.00         |
| Vendor Ref:   |  | Balance: 47,043.00      |
|   |  | Amount: 47,043.00       |
| Description: Lighting and installation for Italian Restaurant project |  | Cash Discount: 0.00     |

DOCUMENT DETAILS FINANCIAL DETAILS TAX DETAILS APPROVAL DETAILS APPLICATIONS COMPLIANCE

| Branch     | Account Group/Item | Transaction Descr.                 | Quantity | UOM  | Unit Cost | Ext. Cost | Discount Amount | Amount    | Balance | *Account | Description                 | *Project |
|------------|--------------------|------------------------------------|----------|------|-----------|-----------|-----------------|-----------|---------|----------|-----------------------------|----------|
| HEADOFFICE | SUBCON             | Interior lighting and installation | 0.00     | HOUR | 0.0000    | 32,144.00 | 0.00            | 32,144.00 | 0.00    | 54200    | Project Subcontract Expense | ITALIAN4 |
| HEADOFFICE | SUBCON             | Exterior lighting and installation | 0.00     | HOUR | 0.0000    | 14,899.00 | 0.00            | 14,899.00 | 0.00    | 54200    | Project Subcontract Expense | ITALIAN4 |

7. On the Project Budget Forecast (PM209600) form, in the **Project** box, select *ITALIAN4*.
8. In the **Account Group** box, select *SUBCON*.
9. In the **Cost Code** box, select *16-510*.

Note that the value in the **Delta** line for the actual amount is highlighted in red. This means that a period for which an actual amount exists is not displayed in the forecast.

Project Budget Forecast NOTES FILES TOOLS

SAVE & CLOSE GENERATE PERIODS COPY REVISION DISTRIBUTE REPORTS

|  |               |   |
|--|---------------|---|
| * Project: ITALIAN4 - Italian Restaurant Prc | Project Task: | Account Group: SUBCON - Project Subcontract |
| * Revision: 1 - 2019 Budget Forecast         | Type: Expense | Inventory ID:                               |
| Description: 2019 Budget Forecast            |               | Cost Code: 16-510 - Lighting- Interior      |

| Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Actual Quantity | Actual Amount    | Revised Quantity - Actual Quantity | Re Am / Ar    |
|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|----------------------|--------------------|-----------------|------------------|------------------------------------|---------------|
|                    |                  |                  | 1.00                       | 35,000.00                | 1.00                      | 40,000.00               | 0.00                  | 0.00                | 0.00                 | 5,000.00           | 0.00            | 62,144.00        | 1.00                               | -22.14        |
|                    |                  | 08-2019          | 0.50                       | 15,000.00                | 0.50                      | 17,500.00               | 0.00                  | 0.00                | 0.00                 | 0.00               | 0.00            | 30,000.00        | 0.50                               | -12.50        |
|                    |                  | 09-2019          | 0.50                       | 20,000.00                | 0.50                      | 22,500.00               | 0.00                  | 0.00                | 0.00                 | 5,000.00           | 0.00            | 0.00             | 0.50                               | 22.50         |
|                    |                  | <b>Total:</b>    | <b>1.00</b>                | <b>35,000.00</b>         | <b>1.00</b>               | <b>40,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         | <b>0.00</b>          | <b>5,000.00</b>    | <b>0.00</b>     | <b>30,000.00</b> | <b>1.00</b>                        | <b>10.00</b>  |
|                    |                  | <b>Delta:</b>    | <b>0.00</b>                | <b>0.00</b>              | <b>0.00</b>               | <b>0.00</b>             | <b>0.00</b>           | <b>0.00</b>         | <b>0.00</b>          | <b>0.00</b>        | <b>0.00</b>     | <b>32,144.00</b> | <b>0.00</b>                        | <b>-32.14</b> |

10. On the table toolbar, click **Update Forecast Lines**.

The system adds the *10-2019* period to the budget forecast line with the amount of the bill in the **Actual Amount** column.

11. Save the forecast.

Project Budget Forecast

NOTES FILES TOOLS

SAVE & CLOSE GENERATE PERIODS COPY REVISION DISTRIBUTE REPORTS

|              |                                   |  |               |         |                |                              |  |                             |
|--------------|-----------------------------------|--|---------------|---------|----------------|------------------------------|--|-----------------------------|
| * Project:   | ITALIAN4 - Italian Restaurant Prc |  | Project Task: |         | Account Group: | SUBCON - Project Subcontract |  |                             |
| * Revision:  | 1 - 2019 Budget Forecast          |  | Type:         | Expense | Inventory ID:  |                              |  |                             |
| Description: | 2019 Budget Forecast              |  | Cost Code:    |         |                |                              |  | 15-510 - Lighting- Interior |

|  | Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Actual Quantity | Actual Amount    | Revised Quantity - Actual Quantity | Ri Am , Ai   |
|--|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|----------------------|--------------------|-----------------|------------------|------------------------------------|--------------|
|  |                    |                  |                  | 1.00                       | 35,000.00                | 1.00                      | 40,000.00               | 0.00                  | 0.00                | 0.00                 | 5,000.00           | 0.00            | 62,144.00        | 1.00                               | -22.1        |
|  |                    |                  | 08-2019          | 0.50                       | 15,000.00                | 0.50                      | 17,500.00               | 0.00                  | 0.00                | 0.00                 | 0.00               | 0.00            | 30,000.00        | 0.50                               | -12.5        |
|  |                    |                  | 09-2019          | 0.50                       | 20,000.00                | 0.50                      | 22,500.00               | 0.00                  | 0.00                | 0.00                 | 5,000.00           | 0.00            | 0.00             | 0.50                               | 22.5         |
|  |                    |                  | 10-2019          | 0.00                       | 0.00                     | 0.00                      | 0.00                    | 0.00                  | 0.00                | 0.00                 | 0.00               | 0.00            | 32,144.00        | 0.00                               | -32.1        |
|  |                    |                  | <b>Total:</b>    | <b>1.00</b>                | <b>35,000.00</b>         | <b>1.00</b>               | <b>40,000.00</b>        | <b>0.00</b>           | <b>0.00</b>         | <b>0.00</b>          | <b>5,000.00</b>    | <b>0.00</b>     | <b>62,144.00</b> | <b>1.00</b>                        | <b>-22.1</b> |

## Lesson 10: Change Management

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In Acumatica ERP Construction Edition, users can control changes to the project budgeted and committed values and control the profitability of every change initiated by a customer.

The two-tier change management is supported in Acumatica ERP Construction Edition through smaller *change requests* that are comprised within a bigger *change order*, which requires the *Change Orders* and *Change Requests* features to be enabled on the Enable/Disable Features (CS100000) form.

Change requests (CRs) are detailed breakdowns of potential changes to the project budget and commitments, such as additions, deletions, or edits to the existing cost or revenue budget.

Users can create CRs (and approve them, if needed) on the Change Requests (PM308500) form both in the desktop version of Acumatica ERP Construction Edition and in the mobile application. By using the mobile app, a user can quickly enter a CR without having to specify all its attributes, but if needed, a user can attach to CRs various files, images, sketches, and photos from the field.

A CR does not directly affect the project revenue and cost budget before the related change order is released. Instead, open change requests are tracked in separate Potential CO Quantity and Potential CO Amount buckets.

A CR comprises estimation details and the following markups:

- Horizontal markup (applied to the CR estimation line)
  - **Price Markup (%)**: Copied from the settings of the specified item, if any. This markup can be specified for each CR line manually.
  - **Line Markup (%)**: Copied from the settings of the cost account group. This markup can be overridden for each CR line manually if the account group settings allow doing so.
- Vertical markup (applied to document total)
  - **%**: Copied from the project settings. This markup can be overridden manually if the settings allow doing so. **% Markup Amount = Line Total \* % Markup Value / 100**. There can be as many % type markups as necessary. **Markup Subtotal =  $\Sigma$  % Markup Amount**.
  - **Cumulative %**: Copied from the project settings. This markup can be overridden manually if the settings allow doing so. **Cumulative % markup amount = (all the previously applied % markups) \* Cumulative % Value / 100**.
  - **Flat fee**: Copied from the project settings. This markup can be overridden manually if the settings allow doing so. The amount is added to the total markup.

If the project cost budget and commitments need to be updated through a separate change order before the revenue part has been approved, a revenue change order and a cost change order may be used. A change request may be associated with both a revenue

change order and a cost change order, or with just a revenue change order. Most commonly, however, a change request relates to only one change order that contains all types of estimation lines—that is, revenue budget, cost budget, and commitment lines.

Users can create change orders on the Change Orders (PM308000) form.

A change order is a document for profitability analysis and audit trail of changes to the project revenue budget, commitments, and budgeted costs. Change orders do not alter the original figures of a project directly, they are tracked separately from the original figures for analysis. A change order provides the following capabilities:

- Ability to record changes to the project cost and revenue budget, and commitments. With the change order workflow enabled for a project, its revised values are calculated as original values affected by change orders:

Revised Amount = Original Amount + Released Change Order Amounts

- Ability to view the list of change orders related to the project, which is displayed on the **Change Orders** tab of the Projects (PM301000) form
- Ability to see changes per purchase order as well as the original and final committed values
- Ability to see the list of change orders that affect a particular subcontract or purchase order
- Ability to see the profitability of every project budget change initiated by a customer

A change order document has comprehensive reference numbers. There is a system-wide numbering sequence of change orders that can be defined on the Numbering Sequences (CS201010) form and specified on the Project Preferences (PM101000) form. Besides, each project has its own numbering sequence of change orders for printing to the customer, which can also be modified manually. Thus, a change order is assigned two independent numbers: a key reference number (**Reference Nbr.**) of the change order document in the system and a custom string number (**Revenue Change Nbr.**) of the change order in the scope of the project for printing it out on the Change Order (PM643000) form for the customer. In addition to this, a change order can have an external reference number (**External Reference Nbr.**) that can be populated with the number from an external system integrated with Acumatica ERP; or it can be used for manually entered identifiers required by the customer.

At the initial stage of a project, after the project budget has been agreed, you can lock the original figures from further editing by using the **Lock Budget** action on the Projects (PM301000) form. After the original values have been locked, the following options can be used:

- If the project does not utilize the change order workflow, the revised budget figures can be edited manually on the Projects form.
- With the change order workflow enabled for the project, revised budget figures become read-only because all changes can be made to the budget only via change orders. Revised budget figures become updated by the following logic: Revised Amount = Original Amount + Released Change Orders

The lock applies to both **Revenue Budget** and **Cost Budget** tabs of the Projects form. The **Unlock Budget** action makes the original budget figures editable regardless of whether the change order workflow is enabled.

If the **Change Order Workflow** check box is selected on the Projects form and the user applies the **Lock Budget** action, the following settings become non-editable: **Budgeted Quantity, Unit Rate, Budgeted Amount, Revised Quantity, and Revised Amount** on the **Revenue Budget** and **Cost Budget** tabs.

If the **Change Order Workflow** check box is cleared and the user applies the **Lock Budget** action, the following settings become non-editable: **Budgeted Quantity, Unit Rate, and Budgeted Amount** on the **Revenue Budget** and **Cost Budget** tabs.

Once the change order is released, the Potential values flow to the Budgeted CO values, thus altering the project Revised Budgeted values.

Revised = Original + Budgeted CO

What is more, proposed commitments are generated or the existing ones are reopened or updated on the release of the change order.

Revised Committed = Original Committed + Committed CO

If you are not pleased with the result of the changes, you can reverse your change orders.

## Lesson Objectives

In this lesson, you will do the following:

- Learn how to configure 1-tier and 2-tier change order workflow for a project
- Set up change request markups and approval
- Create a change request
- Partially process the cost & commitment part and the revenue part of a change request within two separate change orders
- Fully process a change request within a change order
- Release a change order affecting the project revenue budget, project cost budget, and project commitments
- Reverse a change order
- Review the changes reflected in the project in the Potential CO bucket and Budgeted CO bucket

## Story

We are a general contractor building an Italian restaurant. We have already set up the original project budget and now we are in the middle of construction. Suddenly an on-site worker notices that the wet subfloor needs drying, cleaning, and airing. They want to ask

for a subcontractors' help and need approval from the owner. What is more, ACME DOORS & Glass vendor arrives onsite. They find out that the French Style Window specified in the plans does not fit the framed opening. This needs to be addressed with the engineer, architect, and subs.

These things must be formalized somehow, approved with all the necessary parties, and reflected in the project budget in the form of increased costs and revenues. That is where change management comes to the fore.

## System Preparation

Sign in by using the *owen* login and *123* password.

## Configuring the Change Management Functionality

1. Review the markups set up on the Project Preferences (PM101000) form.

- **Default Price Markup, %**

This horizontal markup value will be automatically specified in the **Price Markup** column of a new estimation line of a change request on the Change Requests (PM308500) form. The value will be overridden with the value specified for the stock or non-stock item specified (if any) in the **Inventory ID** column if the item has any **item-specific markup** percent specified on the **Price/Cost Info** tab of the Stock Items (IN202500) or Non-Stock Items (IN202000) form, respectively. The value can be manually overridden in an estimation line.

- **Document Markups**

These vertical markup values are automatically copied into each newly created project on the Projects (PM301000) form where they can be edited or deleted to create project-specific document markups. When a CR is initiated for a project, it inherits the **project-specific markup** values.

The screenshot shows the 'MARKUPS' form. At the top, there is a field for 'Default Price Markup, %' with a value of 10.00. Below this is the 'Document Markups' section, which includes a toolbar with icons for refresh, search, print, add, delete, and save. A table below the toolbar lists the default markup values:

| Type         | Description          | Value    |
|--------------|----------------------|----------|
| > %          | Profit               | 8.00     |
| %            | Overhead             | 4.00     |
| Cumulative % | Default cumulative % | 5.00     |
| Flat Fee     | Additional charges   | 1,000.00 |

2. In the **Document Markups** table, create project-specific markups for the *ITALIAN2* project on the **Settings** tab of the Projects (PM301000) form.

Note that the project has inherited the default markup values specified on the Project Preferences form.

| Type         | Description          | Value    | Project Task | Account Group | Cost Code |
|--------------|----------------------|----------|--------------|---------------|-----------|
| %            | Profit               | 9.00     | 02           | REVENUE       | 02-000    |
| %            | Overhead             | 6.00     | 02           | REVENUE       | 02-000    |
| Cumulative % | Default Cumulative % | 7.00     | 02           | REVENUE       | 02-000    |
| Flat Fee     | Additional charges   | 1,250.00 | 02           | REVENUE       | 02-000    |

3. On the Project Preferences form, make sure that the *CR Approval* approval map is specified in the **Change Request Approval Map** box.
4. On the Change Order Classes (PM203000) form, configure the *INTERNAL* and *EXTERNAL* change order classes and make sure the *DEFAULT* change order class has been configured as described in the table and shown in the screenshots below.

| Class ID | Description                                | 2-tier Change Management | Cost Budget                         | Revenue Budget | Commitments                         | Attributes              |
|----------|--|--------------------------|-------------------------------------|----------------|-------------------------------------|-------------------------|
| INTERNAL | Internal cost-only affecting change orders | Selected                 | Selected (by default and read-only) | Cleared        | Selected (by default and read-only) | BURDEN = 1.25; FS-CAUSE |
| EXTERNAL | External change orders                     | Selected                 | Selected (by default and read-only) | Selected       | Selected (by default and read-only) |                         |
| DEFAULT  | Default Change Order Class                 | Cleared                  | Selected                            | Selected       | Selected                            |                         |

Note that the **Cost Budget**, **Revenue Budget**, and **Commitments** check boxes regulate what type of changes can be initiated with change orders that belong to the class. The **2-tier Change Management** check box indicates whether a change order that belongs to this class supports the two-tier change management—that is, whether it can have related change requests. When the check box is selected, the **Cost Budget** and **Commitments** check boxes on the **Details** tab become non-editable.

### Change Order Classes

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] [Home] [Left] [Right] [End]

\* Class ID:   Active

\* Description:

2-tier Change Management

DETAILS ATTRIBUTES

Cost Budget

Revenue Budget

Commitments

### Change Order Classes

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] [Home] [Left] [Right] [End]

\* Class ID:   Active

\* Description:

2-tier Change Management

DETAILS ATTRIBUTES

| Active                              | *Attribute ID | Description               | Sort Order | Required                 | Internal                 | Control Type | Default Value |
|-------------------------------------|---------------|---------------------------|------------|--------------------------|--------------------------|--------------|---------------|
| <input checked="" type="checkbox"/> | BURDEN        | Project Burden Percentage |            | <input type="checkbox"/> | <input type="checkbox"/> | Text         | 1.25          |
| <input checked="" type="checkbox"/> | ESCAUSE       | Cause Code                |            | <input type="checkbox"/> | <input type="checkbox"/> | Combo        |               |

### Change Order Classes

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] [Home] [Left] [Right] [End]

\* Class ID:   Active

\* Description:

2-tier Change Management

DETAILS ATTRIBUTES

Cost Budget

Revenue Budget

Commitments

Change Order Classes

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] [Home] [Left] [Right] [End]

\* Class ID:   Active

\* Description:

2-tier Change Management

**DETAILS** ATTRIBUTES

Cost Budget

Revenue Budget

Commitments

### Creating Change Requests

Create two change requests as follows:

1. On the Change Requests (PM308500) form, click **Add New Record** on the form toolbar and specify the following settings:
  - a. **Project:** *ITALIAN2*
  - b. **Description:** Wet subfloor needs drying, cleaning, and airing  
 Note that at this point, with the minimum info specified, you can save the change request.
  - c. **Change Date:** *3/21/2019*
  - d. **Contract Time Change, Days:** 4
  - e. **Project Issue:** *IS-000001*
  - f. **RFI:** *RF-000001*
2. On the **Detailed Description** tab, type: Wet subfloor needs drying, cleaning, and airing. Need approval.
3. On the **Estimation** tab, upload the detail lines from the *ITALIAN\_CR1.xlsx* file, which is provided with the training materials.
4. For the line with the *03-350* cost code, in the **Vendor** column, select CONCCO.
5. Save the change request.

Change Requests

SAVE & CLOSE    CREATE CHANGE ORDER    ACTIONS    REPORTS

Reference Nbr: 000001 - W    Project: ITALIAN2 - Italian Restaurant Project    Cost Total: 1,380.00  
 Status: On Hold    Customer: ITALIAN01 - The Italian Company    Line Total: 1,660.42  
 Hold    Project Issue: IS-000001    Markup Total: 2,984.27  
 Change Date: 3/21/2019    RFI: RF-000001    Gross Margin %: 70.29  
 Contract Time: 3    Change Order Nbr:    Price Total: 4,644.69  
 Ext. Ref. Nbr:    Description: Wet subfloor needs drying, cleaning and airing

ESTIMATION    DETAILED DESCRIPTION    MARKUPS    APPROVAL DETAILS

| Project Task | Account Group | Inventory ID | Cost Code | Description        | Quant | UOM | Unit Cost | Ext. Cost | Price Markup (%) | Revenue Task | Revenue Account Group | Revenue Code | Unit Price | Ext. Price | Line Markup (%) | Line Amount | Vendor | Create Commitm                      |
|--------------|---------------|--------------|-----------|--------------------|-------|-----|-----------|-----------|------------------|--------------|-----------------------|--------------|------------|------------|-----------------|-------------|--------|-------------------------------------|
| 01           | LABOR         |              | 01-900    | Clean up           | 1.00  | EA  | 1,000.00  | 1,000.00  | 10.00            | 01           | REVENUE               | 01-000       | 1,100.00   | 1,100.00   | 8.00            | 1,188.00    |        | <input type="checkbox"/>            |
| 03           | SUBCON        | SUBCON       | 03-350    | Concrete- Finishes | 10.00 | EA  | 38.00     | 380.00    | 11.00            | 03           | REVENUE               | 03-000       | 41.80      | 418.00     | 12.00           | 458.16      | CONCCO | <input checked="" type="checkbox"/> |

Make sure that the specified settings correspond to the Revenue Budget Level of the project—that is, the level of detail on each tab coincides with that on the project budget tabs. The change order Revenue Budget should have the level of the *ITALIAN2* project Revenue Budget Level (Task and Cost Code) and the change order Cost Budget should have the level of the project Cost Budget Level (Task and Cost Code).

6. On the **Markups** tab, project-specific markups should be listed, with respect to the Revenue Budget Level of the project. Do the following:

- a. Change the value of the *Profit* markup from 9 to 10.
- b. Add a new flat fee markup line by using the settings specified in the table:

| Type     | Description                               | Value    | Amount Subject to Markup | Markup Amount | Project Task | Account Group | Cost Code |
|----------|---|----------|--------------------------|---------------|--------------|---------------|-----------|
| Flat Fee | Additional charges for Italian Restaurant | 1 450,00 | 1 656,16                 | 1 450,00      | 02           | REVENUE       | 02-000    |

Change Requests

← SAVE & CLOSE + < > >> CREATE CHANGE ORDER ACTIONS ▾ REPORTS ▾

|  |  |                        |
|--|--|------------------------|
| Reference Nbr.: 000011 - Wt                                    | Project: ITALIAN2 - Italian Restaurant Project | Cost Total: 1,380.00   |
| Status: On Hold  | Customer: ITALIAN01 - The Italian Company      | Line Total: 1,656.16   |
| <input checked="" type="checkbox"/> Hold                       | Project Issue: IS-000001                       | Markup Total: 2,964.99 |
| * Change Date: 3/21/2019 ▾                                     | RFI: RF-000001                                 | Gross Margin %: 70.14  |
| Contract Time... 4   | Change Order Nbr.:                             | Price Total: 4,621.15  |
| Ext. Ref. Nbr.:  |  |                        |
| * Description: Wet subfloor needs drying, cleaning, and airing |  |                        |

● ESTIMATION   DETAILED DESCRIPTION   ● MARKUPS   APPROVAL DETAILS

| Type                                  | Description                               | Value    | Amount Subject To Markup | Markup Amount | Project Task | Account Group | Cost Code |
|---------------------------------------|---|----------|--------------------------|---------------|--------------|---------------|-----------|
| <input type="checkbox"/> %            | Profit                                    | 10.00    | 1,656.16                 | 165.62        | 02           | REVENUE       | 02-000    |
| <input type="checkbox"/> %            | Overhead                                  | 6.00     | 1,656.16                 | 99.37         | 02           | REVENUE       | 02-000    |
| <input type="checkbox"/> Cumulative % | Default Cumulative %                      | 7.00     | 0.00                     | 0.00          | 02           | REVENUE       | 02-000    |
| <input type="checkbox"/> Flat Fee     | Additional Charges                        | 1,250.00 | 1,656.16                 | 1,250.00      | 02           | REVENUE       | 02-000    |
| > <input type="checkbox"/> Flat Fee   | Additional charges for Italian Restaurant | 1,450.00 | 1,656.16                 | 1,450.00      | 02           | REVENUE       | 02-000    |

7. Save the change request.
8. Clear the **Hold** check box.
9. Click **Actions** > **Approve** on the form toolbar.
10. On the Projects (PM301000) form, select the *ITALIAN2* project and then click **Create Change Request** on the form toolbar.
11. On the Change Requests form that opens, specify the following settings:
  - a. **Description:** French Style Window
  - b. **Date:** 7/29/2019
  - c. **Contract Time Change, Days:** 4
12. Click the Edit button to the right of the **Project Issue** box.
13. On the Project Issue (PJ302000) form that opens, specify the following settings:
  - a. **Summary:** French Style Window doesn't fit in framed opening
  - b. **Project:** *ITALIAN2*
  - c. **Class ID:** *FIELD*
  - d. **Owner:** *Anna Johnson*
  - e. **Schedule Impact:** Selected
  - f. **Schedule Impact (days):** 5

**g. Cost Impact:** Selected

**h. Cost Impact (days):** 3,500.00

**j. Details (tab):** ACME DOORS & Glass is onsite. The French Style Window specified on the plans does not fit in framed opening. This needs to be addressed with engineer/architect and subs.

Project Issue NOTES ACTIVITIES FILES NOTIFICATIONS CUSTOMIZATION TOOLS

SAVE & CLOSE ↺ ↻ + 🗑️ 📄 ⏪ ⏩ CONVERT TO RFI CONVERT TO CHANGE REQUEST

PRINT/EMAIL

\* Summary: French Style Window doesn't fit in framed opening

\* Project Issue ID: IS-000002 Priority: Medium

\* Project: ITALIAN2 - Italian Restaurant \* Status: Open

Sub Job: Created On: 10/25/2019 9:00 AM

\* Class ID: FIELD - Field Report Created By: admin admin

Related Entity: \* Owner: Anna Johnson

Converted To: Workgroup:

Due Date: 8/6/2019 Resolved On:

Project Issue Type:   
 Schedule Impact   
 Schedule Impact (days): 5   
 Cost Impact   
 Cost Impact: 3,500.00

**DETAILS** RELATED ACTIVITIES ATTRIBUTES DRAWINGS

VISUAL ↺ ↻ Paragraph **B I U** A 🔗 ☰ ☰ ☰ ☰ ✂️ INSERT LAYOUT

ACME DOORS & Glass is onsite. The French Style Window specified on the plans does not fit the framed opening. This needs to be addressed with engineer/architect and subs.

**14.** Click **Save & Close** on the form toolbar.

As a result, you return to the editing of the new change request on the Change Requests form. Note that the project issue that you have just created is specified in the **Project Issue** box.

**15.** On the **Detailed Description** tab, type: ACME DOORS & Glass is onsite. The French Style Window specified on the plans does not fit the framed opening. This needs to be addressed with engineer/architect and subs. See the photo attached.

**16.** Save the changes.

**17.** Click **Files** on the form title bar. The **Files** dialog box opens.

**18.** Click **Browse**, navigate to the *Window-Rough-Openings.jpg* file, which is provided with the training materials, and select it.

**19.** Click **Upload**, and close the dialog box.

**20.** On the **Estimation** tab, enter detail lines by uploading the *ITALIAN\_CR2.x/sx* file, which is provided with the training materials.

The screenshot shows the 'Change Requests' interface. At the top, there are navigation buttons like 'SAVE & CLOSE', 'CREATE CHANGE ORDER', and 'ACTIONS'. Below this is a form with various fields: Reference Nbr (000002 - Fr), Status (On Hold), Project (ITALIAN2 - Italian Restaurant Project), Customer (ITALIAN01 - The Italian Company), Project Issue (IS-000002), Change Date (7/29/2019), Contract Time (4), Ext. Ref. Nbr, and Description (French Style Window). Summary statistics include Cost Total (1,890.00), Line Total (2,264.96), Markup Total (1,613.53), Gross Margin % (51.27), and Price Total (3,878.51). Below the form is a table with columns for Project Task, Account Group, Inventory ID, Cost Code, Description, Quantty, UOM, Unit Cost, Ext. Cost, Price Markup (%), Revenue Task, Revenue Account Group, Revenue Code, Unit Price, Ext. Price, Line Markup (%), Line Amount, Vendor, and Create Commitm.

| Project Task | Account Group | Inventory ID | Cost Code | Description    | Quantty | UOM | Unit Cost | Ext. Cost | Price Markup (%) | Revenue Task | Revenue Account Group | Revenue Code | Unit Price | Ext. Price | Line Markup (%) | Line Amount | Vendor  | Create Commitm                      |
|--------------|---------------|--------------|-----------|----------------|---------|-----|-----------|-----------|------------------|--------------|-----------------------|--------------|------------|------------|-----------------|-------------|---------|-------------------------------------|
| 08           | SUBCON        | SUBCON       | 08-100    | Doors-Exterior | 20.00   | EA  | 52.00     | 1,040.00  | 7.00             | 08           | REVENUE               | 08-000       | 55.64      | 1,112.80   | 12.00           | 1,246.34    | DOORSCO | <input checked="" type="checkbox"/> |
| 08           | SUBCON        | SUBCON       | 08-520    | Windows-Wood   | 17.00   | EA  | 50.00     | 850.00    | 7.00             | 08           | REVENUE               | 08-000       | 53.50      | 909.50     | 12.00           | 1,018.64    | DOORSCO | <input checked="" type="checkbox"/> |

Make sure the specified settings correspond to the Revenue Budget Level of the project.

**21.** Save the change request.

**22.** Clear the **Hold** check box.

**23.** Click **Actions > Approve** on the form toolbar.

As a result, the Potential CO Quantity and Potential CO Amount of the cost and revenue lines on the Projects form have been updated.

### Processing the Changes

- 1.** Open the *ITALIAN2* project on the Projects (PM301000) form.
- 2.** On the **Change Requests** tab, review the list of linked change requests.
- 3.** Review the project budget forecast as follows:
  - a.** On the Projects form, click **Inquiries > Project Budget Forecast** on the form toolbar.
  - b.** On the Project Budget Forecast (PM209600) form that opens, specify the following settings:
    - **Revision:** 1
    - **Description:** Initial forecast for Italian Restaurant
    - **Project Task:** 08
    - **Account Group:** SUBCON
    - **Cost Code:** 08-100
  - c.** Click **Generate Periods** on the form toolbar.
  - d.** Click **Add Periods** on the table toolbar.

- e. In the dialog box, in the **Period From** and **Period To** boxes, select *10-2019*, and click *OK*.
- f. Click **Save**.
- g. See how potential values are reflected in the financial period to which the change date of the change request belongs.

Project Budget Forecast NOTES FILES CUSTOMIZATION 1

← SAVE & CLOSE ↺ + 🗑️ ⏪ < > ⏩ GENERATE PERIODS COPY REVISION DISTRIBUTE REPORTS ▾

Project: ITALIAN2 - Italian Restaurant Prc Project Task: 08 - OPENINGS Account Group: SUBCON - Project Subcontract  
 Revision: 1 - Initial forecast for Italian Restu Type: Expense Inventory ID:  
 Description: Initial forecast for Italian Restaurant Cost Code: 08-100 - Doors- Exterior

ADD PERIODS UPDATE PROJECT BUDGET LINE UPDATE FORECAST LINES

| Project Task | Account Group | Inventory ID | Cost Code | Description    | Planned Start Date | Planned End Date | Financial Period | Original Budgeted Quantity | Original Budgeted Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity |
|--------------|---------------|--------------|-----------|----------------|--------------------|------------------|------------------|----------------------------|--------------------------|---------------------------|-------------------------|-----------------------|---------------------|----------------------|
| > 08         | SUBCON        | <N/A>        | 08-100    | Doors- Exte... |                    |                  |                  | 28.00                      | 1,400.00                 | 28.00                     | 1,400.00                | 20.00                 | 1,040.00            | 0.00                 |
|              |               |              |           |                |                    |                  | 07-2019          | 0.00                       | 0.00                     | 0.00                      | 0.00                    | 20.00                 | 1,040.00            | 0.00                 |
|              |               |              |           |                |                    |                  | 10-2019          | 0.00                       | 0.00                     | 0.00                      | 0.00                    | 0.00                  | 0.00                | 0.00                 |
|              |               |              |           |                |                    |                  | <b>Total:</b>    | <b>0.00</b>                | <b>0.00</b>              | <b>0.00</b>               | <b>0.00</b>             | <b>20.00</b>          | <b>1,040.00</b>     | <b>0.00</b>          |
|              |               |              |           |                |                    |                  | <b>Delta:</b>    | <b>28.00</b>               | <b>1,400.00</b>          | <b>28.00</b>              | <b>1,400.00</b>         | <b>0.00</b>           | <b>0.00</b>         | <b>0.00</b>          |

- 4. On the **General Settings** tab of the Project Preferences (PM101000) form, in the **Default Change Order Class** box, select *EXTERNAL*, and then save the changes.

You have changed the default class because the two-tier change management is not enabled for the *DEFAULT* class, so you would not be able to create a change order from a change request if the *DEFAULT* class was specified as the default class.

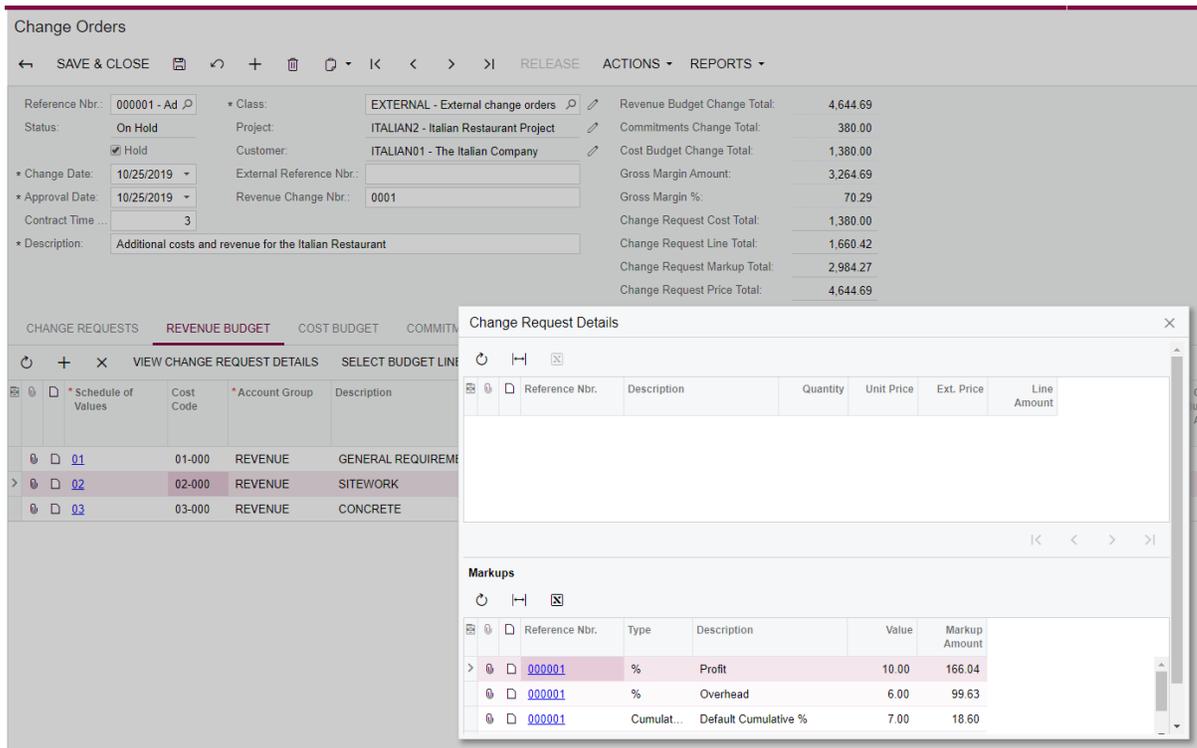
- 5. On the Change Requests (PM308500) form, select the first change request that you created in this lesson (*Wet subfloor needs drying, cleaning, and airing*) and then click **Create Change Order** on the form toolbar.
- 6. On the Change Orders (PM308000) form that opens, in the **Description** box, type: Additional costs and revenue for the Italian Restaurant.

7. Save the change order.

- 8. Check that the revenue and cost budget lines and commitments have been generated in the newly created change order.

Pay attention to how the lines are grouped within a change order and how a single estimation grid of a change request updates the three grids of a change order.

- 9. On the **Revenue Budget** tab, click the line for the *02-000* cost code and then click **View Change Request Details** on the table toolbar to make sure that the markups are also present.

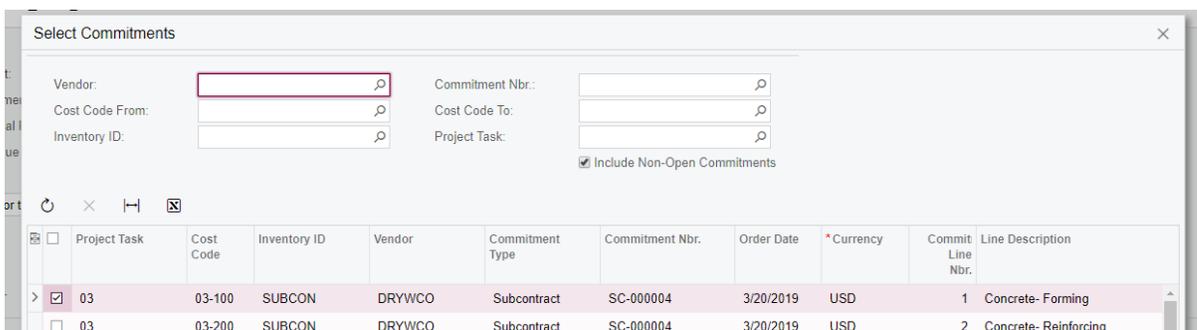


10. Notice the potential commitment added on the **Commitments** tab.

In the **Commitment Type** column of the only line on the **Commitments** tab, change the type to *Subcontract*.

11. Click **Select Commitments** on the table toolbar and in the **Select Commitments** dialog box that opens, do the following:

- a. Select the **Include Non-Open Commitments** check box.
- b. Select the line with the *03-100* cost code.
- c. Click **Add Lines & Close**.



12. Once the line is added to the **Commitments** tab of the Change Orders form, in the **Quantity** column for this line, specify 4.

13. Add a new line in this commitment and specify the following settings:

- **Sub Job:** 03
- **Cost Code:** 03-100
- **Account Group/Item:** SUBCON
- **Quantity:** 6
- **UOM:** HOUR
- **Unit Cost:** 30
- **Commitment Type:** *Subcontract*
- **Commitment Nbr.:** *SC-000004*

14. Select one more existing commitment (a materials purchase order) as follows:

- a. Click **Select Commitments** on the table toolbar.
- b. In the **Select Commitments** dialog box, which opens, make sure the unlabeled check box is cleared for the *03-100* cost code.
- c. Select the unlabeled check box for the line with the *04-700* cost code, and click **Add Lines & Close**.
- d. On the **Commitments** tab, in the **Amount** box, specify *1345.00* for the added line.

15. Save the change order.

16. In the **Status** column, review the statuses of the lines. The lines on this tab can have one of the following statuses: *New Document*, *New Line*, *Update*, and *Reopen*.

Change Orders NOTES ACTIVITIES FILES NOTIFICATIONS TOOLS

← SAVE & CLOSE ↻ + 🗑️ 📄 ⏪ ⏩ RELEASE ACTIONS - REPORTS -

|   |  |                                       |
|---|--|---------------------------------------|
| Reference Nbr.: 000009 - Ad   | * Class: EXT - External change orders          | Revenue Budget Change Total: 4,639.70 |
| Status: On Hold   | Project: ITALIAN2 - Italian Restaurant Project | Commitments Change Total: 2,045.00    |
| <input checked="" type="checkbox"/> Hold                                | Customer: ITALIAN01 - The Italian Company      | Cost Budget Change Total: 1,380.00    |
| * Change Date: 3/23/2020  | External Reference Nbr.:                       | Gross Margin Amount: 3,259.70         |
| * Approval Date: 3/23/2020  | Revenue Change Nbr.: 0001                      | Gross Margin %: 70.26                 |
| Contract Time: 4  |  | Change Request Cost Total: 1,380.00   |
| * Description: Additional costs and revenue for the Italian Restaurant. |  | Change Request Line Total: 1,656.16   |
|   |  | Change Request Markup Total: 2,983.54 |
|   |  | Change Request Price Total: 4,639.70  |

CHANGE REQUESTS REVENUE BUDGET COST BUDGET **COMMITMENTS** DETAILED DESCRIPTION ATTRIBUTES APPROVAL DETAILS COMPLIANCE

| SELECT COMMITMENTS                  |              |           |           |                    |                          |          |      |           |          |         |          |                 | All Records     |  |
|-------------------------------------|--------------|-----------|-----------|--------------------|--------------------------|----------|------|-----------|----------|---------|----------|-----------------|-----------------|--|
| Change Request Ref. Nbr.            | Status       | * Sub Job | Cost Code | Account Group/Item | * Description            | Quantity | UOM  | Unit Cost | Amount   | Account | * Vendor | Commitment Type | Commitment Nbr. |  |
| <input type="checkbox"/> 000011     | New Document | 03        | 03-350    | SUBCON             | Concrete- Finishes       | 10.00    | HOUR | 38.00     | 380.00   | 54200   | CONCCO   | Subcontract     |                 |  |
| <input type="checkbox"/>            | Update       | 03        | 03-100    | SUBCON             | Concrete- Forming        | 4.00     | HOUR | 35.00     | 140.00   | 54200   | DRYWCO   | Subcontract     | SC-000004       |  |
| <input checked="" type="checkbox"/> | New Line     | 03        | 03-100    | SUBCON             | Concrete- Forming        | 6.00     | HOUR | 30.00     | 180.00   | 54200   | DRYWCO   | Subcontract     | SC-000004       |  |
| <input type="checkbox"/>            | Update       | 04        | 04-700    | MATERIAL           | Masonry- Composite Walls | 0.00     | EA   | 0.00      | 1,345.00 | 54500   | SPEECO   | Purchase Order  | 000026          |  |

17. On the **Change Requests** tab, in the **Reference Nbr.** column, click the reference number of the related change request in the only row of the tab.

18. Note that the change request is now non-editable and its status is *Closed*. Also, it has a link to the change order.

Change Requests

SAVE & CLOSE CREATE CHANGE ORDER ACTIONS ▾ REPORTS ▾

|  |   |                        |
|--|---|------------------------|
| Reference Nbr.: 000011 - Wet subfloor                        | Project: ITALIAN2 - Italian Restaurant Project                      | Cost Total: 1,380.00   |
| Status: <b>Closed</b>  | Customer: ITALIAN01 - The Italian Company                           | Line Total: 1,656.16   |
| <input type="checkbox"/> Hold                                | Project Issue: IS-000001  | Markup Total: 2,983.54 |
| Change Date: 3/21/2019                                       | RFI: RF-000001  | Gross Margin %: 70.26  |
| Contract Time ... 4  | <b>Change Order Nbr.: 000009 - Additional costs and revenue for</b> | Price Total: 4,639.70  |
| Ext. Ref. Nbr.:  |   |                        |
| Description: Wet subfloor needs drying, cleaning, and airing |   |                        |

ESTIMATION DETAILED DESCRIPTION MARKUPS APPROVAL DETAILS

| Project Task | Account Group | Cost Code | Inventory ID           | Description        | Quantity | UOM   | Unit Cost |
|--------------|---------------|-----------|------------------------|--------------------|----------|-------|-----------|
| > 01         | LABOR         | 01-900    |                        | Clean up           | 1.00     | LS    | 1,000.00  |
| 03           | SUBCON        | 03-350    | <a href="#">SUBCON</a> | Concrete- Finishes | 10.00    | HOURL | 38.00     |

19. Close the window with the change request.

20. On the Change Orders (PM308000) form, create another change order and specify the following settings:

- **Class:** INTERNAL
- **Project:** ITALIAN2
- **Description:** Extra costs

21. On the **Change Requests** tab, click **Select Change Requests** on the table toolbar.

22. In the **Select Change Requests** dialog box that opens, select the unlabeled check box for the earlier created change request (*French Style Window*), and then click **Add Change Requests & Close**.

23. Save the change order.

24. On the **Change Requests** tab, in the **Reference Nbr.** column, click the reference number of the related change request in the only row of the tab.

25. On the Change Requests form, which opens, verify that the status of the change request is *Open* but its cost & commitment part is read-only, and still the revenue part can be modified.

In the **Cost Change Order Nbr.** box, a reference to the document is shown, while the **Change Order Nbr.** box is empty (because the revenue part has not been processed yet).

**26.** On the **Estimation** tab, in the **Line Markup (%)** column, change the revenue part of this change request by increasing the markup for the first line to **13%**.

Change Requests

SAVE & CLOSE    CREATE CHANGE ORDER    ACTIONS    REPORTS

Reference Nbr: 000012 - Fr    Project: ITALIAN2 - Italian Restaurant Project    Cost Total: 1,890.00  
 Status: Open    Customer: ITALIAN01 - The Italian Company    Line Total: 2,264.98  
 Change Date: 7/29/2019    Project Issue: IS-000004    Markup Total: 1,613.53  
 Contract Time: 4    RFI:    Gross Margin %: 51.27  
 Ext. Ref. Nbr.:    Change Order Nbr.:    Price Total: 3,878.51  
 Cost Change Order Nbr.: <NEW>

Description: French Style Window

ESTIMATION    DETAILED DESCRIPTION    MARKUPS    APPROVAL DETAILS

| Project Task | Account Group | Cost Code | Inventory ID | Description     | Quantity | UOM  | Unit Cost | Ext. Cost | Price Markup (%) | Revenue Task | Revenue Account Group | Revenue Code | Unit Price | Ext. Price | Line Markup (%) | Line Amount | Vendor |
|--------------|---------------|-----------|--------------|-----------------|----------|------|-----------|-----------|------------------|--------------|-----------------------|--------------|------------|------------|-----------------|-------------|--------|
| 08           | SUBCON        | 08-100    | SUBCON       | Doors- Exterior | 20.00    | HOUR | 52.00     | 1,040.00  | 7.00             | 08           | REVENUE               | 08-000       | 55.64      | 1,112.80   | 13.00           | 1,246.34    | DOORS  |
| 08           | SUBCON        | 08-520    | SUBCON       | Windows- Wood   | 17.00    | HOUR | 50.00     | 850.00    | 7.00             | 08           | REVENUE               | 08-000       | 53.50      | 909.50     | 12.00           | 1,018.64    | DOORS  |

**27.** Click **Save & Close**.

**28.** Open the first change order created in this lesson (*Additional costs and revenue for the Italian Restaurant*).

**29.** Add the remaining revenue part of the CR to the first of the previously created change orders as follows:

- On the **Change Requests** tab, click **Select Change Requests**.
- Select the unlabeled check box for the *French Style Window* change request.
- Click **Add Change Requests & Close**.

**30.** Save the change order.

Notice how the revenue part of the CO has increased while the settings on the **Cost Budget** and **Commitments** tabs haven't changed.

Also, notice that the **Contract Time Change, Days** setting of the change order is cumulative; it is a sum of the attributes of the change requests comprised.



Change Orders

← SAVE & CLOSE [Icons] + [Icons] - [Icons] < > >| RELEASE ACTIONS ▾ REPORTS ▾

|  |  |                                       |
|--|--|---------------------------------------|
| Reference Nbr.: 000009 - Ad  | Class: EXTERNAL - External change orders       | Revenue Budget Change Total: 9,977.34 |
| Status: Open   | Project: ITALIAN2 - Italian Restaurant Project | Commitments Change Total: 2,083.00    |
| <input type="checkbox"/> Hold  | Customer: ITALIAN01 - The Italian Company      | Cost Budget Change Total: 2,418.00    |
| Change Date: 3/23/2020   | External Reference Nbr.:                       | Gross Margin Amount: 7,559.34         |
| Approval Date: 3/23/2020   | Revenue Change Nbr.: 0001                      | Gross Margin %: 75.77                 |
| Contract Time ... 8  |  | Change Request Cost Total: 4,308.00   |
| Description: Additional costs and revenue for the Italian Restaurant |  | Change Request Line Total: 5,167.08   |
|  |  | Change Request Markup Total: 4,810.26 |
|  |  | Change Request Price Total: 9,977.34  |

CHANGE REQUESTS REVENUE BUDGET COST BUDGET COMMITMENTS DETAILED DESCRIPTION ATTRIBUTES APPROVAL DETAILS COMPLIANCE

SELECT CHANGE REQUESTS [Icons]

| Reference Nbr. | Status | Description                                    | Cost Total | Line Total | Markup Total | Price Total | Contract Time Change, Days |
|----------------|--------|--|------------|------------|--------------|-------------|----------------------------|
| 000011         | Closed | Wet subfloor needs drying, cleaning, and ai... | 2,418.00   | 2,890.98   | 3,194.94     | 6,085.92    | 4                          |
| 000012         | Closed | French Style Window                            | 1,890.00   | 2,276.10   | 1,615.32     | 3,891.42    | 4                          |

38. Review the lines on the **Change Orders** and **Change Requests** tabs on the Projects (PM301000) form.

39. On the form toolbar, click **Actions > Validate Project Balances**.

40. Review the project's **Potential CO Quantity** and **Potential CO Amount** values. Also, see **Last Revenue Change Nbr.** on the **Summary** tab—it has increased due to a revenue-affecting change order initiated for it.

Projects [Icons] NOTES FILES NOTIFICATIONS CUSTOMIZATION TOOLS ▾

← SAVE & CLOSE [Icons] + [Icons] - [Icons] < > >| RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

Project ID: ITALIAN2 Status: Active Assets: 0.00  
 Customer: ITALIAN01 - The Italian Company Liabilities: 0.00  
 Template: CONTM - Construction T&M Project Income: 0.00  
 Description: Italian Restaurant Project Expenses: 193,517.00

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

Project Task: 08 - OPENINGS  Group by Task

VIEW COMMITMENT DETAILS VIEW TRANSACTIONS [Icons]

| *Sub Job | Cost Code | *Account Group | Description                           | Original Budgeted Quantity | UOM  | Unit Rate   | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount |
|----------|-----------|----------------|---------------------------------------|----------------------------|------|-------------|--------------------------|-----------------------|---------------------|----------------------|--------------------|---------------------------|-------------------------|
| 08       | 08-100    | MATERIAL       | Doors- Exterior                       | 8.00                       | EA   | 1,000.0000  | 8,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 8.00                      | 8,000.00                |
| 08       | 08-100    | SUBCON         | Doors- Exterior                       | 28.00                      | EA   | 50.0000     | 1,400.00                 | 20.00                 | 1,040.00            | 0.00                 | 0.00               | 28.00                     | 1,400.00                |
| 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                |
| 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                |
| 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                |
| 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                  |
| 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               |
| 08       | 08-520    | SUBCON         | Windows- Wood                         | 90.00                      | EA   | 50.0000     | 4,500.00                 | 17.00                 | 850.00              | 0.00                 | 0.00               | 90.00                     | 4,500.00                |
| 08       | 08-800    | MATERIAL       | Entrances, Storefronts, Curtain Walls | 1.00                       | LS   | 24,500.0000 | 24,500.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 24,500.00               |
| 08       | 08-800    | SUBCON         | Entrances, Storefronts, Curtain Walls | 80.00                      | HOUR | 100.0000    | 8,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 80.00                     | 8,000.00                |

Project Task: 03 - CONCRETE  Group by Task

VIEW COMMITMENT DETAILS VIEW TRANSACTIONS

| Sub Job | Cost Code | Account Group | Description           | Original Budgeted Quantity | UOM | Unit Rate | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Amount |
|---------|-----------|---------------|-----------------------|----------------------------|-----|-----------|--------------------------|-----------------------|---------------------|--------------------|
| 03      | 03-100    | MATERIAL      | Concrete- Forming     | 1,500.00                   | LF  | 2.0000    | 3,000.00                 | 0.00                  | 0.00                | 0.00               |
| 03      | 03-100    | SUBCON        | Concrete- Forming     | 30.00                      | EA  | 40.0000   | 1,200.00                 | 0.00                  | 0.00                | 0.00               |
| 03      | 03-200    | MATERIAL      | Concrete- Reinforcing | 7,000.00                   | SF  | 2.5000    | 17,500.00                | 0.00                  | 0.00                | 0.00               |
| 03      | 03-200    | SUBCON        | Concrete- Reinforcing | 50.00                      | EA  | 75.0000   | 3,750.00                 | 0.00                  | 0.00                | 0.00               |
| 03      | 03-300    | MATERIAL      | Concrete- CIP Slab    | 775.00                     | CY  | 100.0000  | 77,500.00                | 0.00                  | 0.00                | 0.00               |
| 03      | 03-300    | SUBCON        | Concrete- CIP Slab    | 40.00                      | EA  | 50.0000   | 2,000.00                 | 0.00                  | 0.00                | 0.00               |
| 03      | 03-350    | MATERIAL      | Concrete- Finishes    | 7,000.00                   | SF  | 1.2000    | 8,400.00                 | 0.00                  | 0.00                | 0.00               |
| 03      | 03-350    | SUBCON        | Concrete- Finishes    | 16.00                      | EA  | 40.0000   | 640.00                   | 11.00                 | 418.00              | 0.00               |

Project Task: 01 - GENERAL REQUIREMENTS  Group by Task

VIEW COMMITMENT DETAILS VIEW TRANSACTIONS All Records

| Sub Job | Cost Code | Account Group | Description                 | Original Budgeted Quantity | UOM | Unit Rate   | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount |
|---------|-----------|---------------|-----------------------------|----------------------------|-----|-------------|--------------------------|-----------------------|---------------------|----------------------|--------------------|---------------------------|-------------------------|
| 01      | 01-300    | OTHEREXP      | Permit                      | 1.00                       | EA  | 15,601.0000 | 15,601.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 15,601.00               |
| 01      | 01-311    | LABOR         | Operations- Project Manager | 1.00                       | LS  | 15,000.0000 | 15,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 15,000.00               |
| 01      | 01-313    | LABOR         | Operations- Superintendent  | 1.00                       | LS  | 39,000.0000 | 39,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 39,000.00               |
| 01      | 01-314    | LABOR         | Operations- Crew Leader     | 1.00                       | LS  | 20,000.0000 | 20,000.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 20,000.00               |
| 01      | 01-330    | OTHEREXP      | Design Fees                 | 1.00                       | EA  | 37,500.0000 | 37,500.00                | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 37,500.00               |
| 01      | 01-505    | TRAVEL        | Mobilization                | 1.00                       | EA  | 5,000.0000  | 5,000.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 5,000.00                |
| 01      | 01-510    | OTHEREXP      | Telephone                   | 1.00                       | EA  | 950.0000    | 950.00                   | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 950.00                  |
| 01      | 01-600    | OTHEREXP      | Insurance                   | 1.00                       | LS  | 7,500.0000  | 7,500.00                 | 0.00                  | 0.00                | 0.00                 | 0.00               | 1.00                      | 7,500.00                |
| 01      | 01-900    | LABOR         | Clean up                    | 1.00                       | LS  | 10,000.0000 | 10,000.00                | 0.00                  | 2,000.00            | 0.00                 | 0.00               | 1.00                      | 10,000.00               |

Projects

← SAVE & CLOSE    ↻    +    🗑️    ⏪    <    >    ⏩    RUN PROJECT BILLING    CREATE CHANGE REQUEST    CREATE CHANGE ORDER    ACTIONS • INQUIRIES • REPORTS •

\* Project ID: ITALIAN2    \* Status: Active    Assets: 0.00  
 Customer: ITALIAN01 - The Italian Company    Liabilities: 0.00  
 Template: CONTM - Construction T&M Project    Income: 0.00  
 \* Description: Italian Restaurant Project    Expenses: 191,517.00

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

Project Task:    Group by Task    Pending Invoice Amount Total: 0.00

VIEW TRANSACTIONS    ⏪    ⏩

| Schedule of Values | Cost Code | * Account Group | Description                 | Original Budgeted Quantity | UOM | Unit Rate | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Budgeted CO Quantity | Budgeted CO Amount |
|--------------------|-----------|-----------------|-----------------------------|----------------------------|-----|-----------|--------------------------|-----------------------|---------------------|---------------------------|-------------------------|----------------------|--------------------|
| > 01               | 01-000    | REVENUE         |                             | 0.00                       |     | 0.0000    | 0.00                     | 0.00                  | 2,378.00            | 0.00                      | 0.00                    | 0.00                 | 0.00               |
| 01                 | 01-300    | REVENUE         | Permit                      | 0.00                       | EA  | 0.0000    | 20,281.30                | 0.00                  | 0.00                | 0.00                      | 20,281.30               | 0.00                 | 0.00               |
| 01                 | 01-311    | REVENUE         | Operations- Project Manager | 0.00                       | EA  | 0.0000    | 19,500.00                | 0.00                  | 0.00                | 0.00                      | 19,500.00               | 0.00                 | 0.00               |
| 01                 | 01-313    | REVENUE         | Operations- Superintendent  | 0.00                       | EA  | 0.0000    | 50,700.00                | 0.00                  | 0.00                | 0.00                      | 50,700.00               | 0.00                 | 0.00               |
| 01                 | 01-314    | REVENUE         | Operations- Crew Leader     | 0.00                       | EA  | 0.0000    | 28,000.00                | 0.00                  | 0.00                | 0.00                      | 28,000.00               | 0.00                 | 0.00               |
| 01                 | 01-330    | REVENUE         | Design Fees                 | 0.00                       | EA  | 0.0000    | 48,750.00                | 0.00                  | 0.00                | 0.00                      | 48,750.00               | 0.00                 | 0.00               |
| 01                 | 01-505    | REVENUE         | Mobilization                | 0.00                       | EA  | 0.0000    | 6,500.00                 | 0.00                  | 0.00                | 0.00                      | 6,500.00                | 0.00                 | 0.00               |
| 01                 | 01-510    | REVENUE         | Telephone                   | 0.00                       | EA  | 0.0000    | 1,235.00                 | 0.00                  | 0.00                | 0.00                      | 1,235.00                | 0.00                 | 0.00               |
| 01                 | 01-600    | REVENUE         | Insurance                   | 0.00                       | EA  | 0.0000    | 9,750.00                 | 0.00                  | 0.00                | 0.00                      | 9,750.00                | 0.00                 | 0.00               |
| 01                 | 01-900    | REVENUE         | Clean up                    | 0.00                       | EA  | 0.0000    | 13,000.00                | 0.00                  | 0.00                | 0.00                      | 13,000.00               | 0.00                 | 0.00               |
| 02                 | 02-000    | REVENUE         |                             | 0.00                       |     | 0.0000    | 0.00                     | 0.00                  | 4,810.26            | 0.00                      | 0.00                    | 0.00                 | 0.00               |
| 03                 | 03-000    | REVENUE         |                             | 0.00                       |     | 0.0000    | 0.00                     | 0.00                  | 514.98              | 0.00                      | 0.00                    | 0.00                 | 0.00               |
| 03                 | 03-100    | REVENUE         | Concrete- Forming           | 0.00                       | EA  | 0.0000    | 5,460.00                 | 0.00                  | 0.00                | 0.00                      | 5,460.00                | 0.00                 | 0.00               |
| 03                 | 03-200    | REVENUE         | Concrete- Reinforcing       | 0.00                       | EA  | 0.0000    | 27,825.00                | 0.00                  | 0.00                | 0.00                      | 27,825.00               | 0.00                 | 0.00               |
| 03                 | 03-300    | REVENUE         | Concrete- CIP Slab          | 0.00                       | EA  | 0.0000    | 103,350.00               | 0.00                  | 0.00                | 0.00                      | 103,350.00              | 0.00                 | 0.00               |
| 03                 | 03-390    | REVENUE         | Concrete- Finishes          | 0.00                       | EA  | 0.0000    | 11,752.00                | 0.00                  | 0.00                | 0.00                      | 11,752.00               | 0.00                 | 0.00               |
| 04                 | 04-220    | REVENUE         | Masonry- Block              | 0.00                       | EA  | 0.0000    | 73,125.00                | 0.00                  | 0.00                | 0.00                      | 73,125.00               | 0.00                 | 0.00               |
| 04                 | 04-700    | REVENUE         | Masonry- Composite Wall     | 0.00                       | EA  | 0.0000    | 19,500.00                | 0.00                  | 0.00                | 0.00                      | 19,500.00               | 0.00                 | 0.00               |
| 06                 | 06-100    | REVENUE         | Carpentry- Rough            | 0.00                       | EA  | 0.0000    | 10,367.50                | 0.00                  | 0.00                | 0.00                      | 10,367.50               | 0.00                 | 0.00               |
| 06                 | 06-110    | REVENUE         | Framing- Wood               | 0.00                       | EA  | 0.0000    | 64,480.00                | 0.00                  | 0.00                | 0.00                      | 64,480.00               | 0.00                 | 0.00               |
| 06                 | 06-190    | REVENUE         | Framing- Siding             | 0.00                       | EA  | 0.0000    | 8,207.50                 | 0.00                  | 0.00                | 0.00                      | 8,207.50                | 0.00                 | 0.00               |
| 06                 | 06-190    | REVENUE         | Fabricated- Wood Trusses    | 0.00                       | EA  | 0.0000    | 49,400.00                | 0.00                  | 0.00                | 0.00                      | 49,400.00               | 0.00                 | 0.00               |
| 06                 | 06-250    | REVENUE         | Finish- Paneling            | 0.00                       | EA  | 0.0000    | 9,360.00                 | 0.00                  | 0.00                | 0.00                      | 9,360.00                | 0.00                 | 0.00               |
| 06                 | 06-440    | REVENUE         | Woodwork- Ornamental        | 0.00                       | EA  | 0.0000    | 17,517.50                | 0.00                  | 0.00                | 0.00                      | 17,517.50               | 0.00                 | 0.00               |
| 07                 | 07-200    | REVENUE         | Insulation                  | 0.00                       | EA  | 0.0000    | 34,157.50                | 0.00                  | 0.00                | 0.00                      | 34,157.50               | 0.00                 | 0.00               |
| 07                 | 07-300    | REVENUE         | Roofing- Steep Slope        | 0.00                       | EA  | 0.0000    | 132,496.00               | 0.00                  | 0.00                | 0.00                      | 132,496.00              | 0.00                 | 0.00               |

Projects

← SAVE & CLOSE    ↻    +    🗑️    ⏪    <    >    ⏩

\* Project ID: ITALIAN2    \* Sta  
 Customer: ITALIAN01 - The Italian Company  
 Template: CONTM - Construction T&M Project  
 \* Description: Italian Restaurant Project

SUMMARY    TASKS    **REVENUE BUDGET**    COST BUDGET    BALANCES

**PROJECT PROPERTIES**

Revenue Budget Level: Task and Cost Code  
 Cost Budget Level: Task and Cost Code  
 \* Start Date: 10/25/2019  
 End Date:  
 Project Manager: EP0000015 - Bill Owen  
 Site Address: 2510 Market Street, SF  
 Last Revenue Change: 0001  
 Currency Rate Type:

Allow the addition of Account Groups not associated with the  
 Change Order Workflow  
 Restrict Employees

## Using Custom Attributes for Change Orders

If you want to add a constant attribute that will be available for all change orders, create a user-defined attribute as follows:

1. Sign in to the system as an administrator.
2. On the Change Orders (PM308000) form, open the second change order (*Extra costs*), which belongs to the *INTERNAL* class. On the **Attributes** tab, specify the necessary attribute values, as follows:
  - a. For the *Project Burden Percentage* attribute, in the **Value** column, specify 1.25.
  - b. For the *Cause Code* attribute, in the **Value** column, select *Misalignment*.

Change Orders

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] K < > >| RELEASE ACTIONS REPORTS

Reference Nbr.: 000002 - Ex [Edit] \* Class: INTERNAL - Internal cost-only affectin [Edit] Revenue Budget Change Total  
 Status: On Hold Project: ITALIAN2 - Italian Restaurant Project [Edit] Commitments Change Total:  
 Hold Customer: ITALIAN01 - The Italian Company [Edit] Cost Budget Change Total:  
 \* Change Date: 10/25/2019 External Reference Nbr.: Gross Margin Amount:  
 \* Approval Date: 10/25/2019 Revenue Change Nbr.: N/A Gross Margin %:  
 Contract Time ... 8 Change Request Cost Total:  
 \* Description: Extra costs Change Request Line Total:  
 Change Request Markup Total:  
 Change Request Price Total:

CHANGE REQUESTS COST BUDGET COMMITMENTS DETAILED DESCRIPTION ATTRIBUTES APPROVAL DETAILS

| Attribute          | Required                 | Value        |
|--------------------|--------------------------|--------------|
| Project Burden ... | <input type="checkbox"/> | 1.25         |
| Cause Code         | <input type="checkbox"/> | Misalignment |

Loose or Broken Connection or Wire  
 Air Leak  
 Calibration Problem  
 Dirt or Foreign Matter Problem  
 Equipment Adjustment Required  
 Bearing Problem  
 Equipment Cutting Out  
 Equipment Jammed  
 Equipment PC or Microprocessor Hung Up  
 Lack of Lubrication  
**Misalignment**  
 No Air  
 No Power

- c. Click **Save** on the form toolbar.
3. Create a user-defined attribute for the change order by doing the following:
  - a. Click **Customization > Manage User-Defined Fields** on the form title bar.
  - b. On the Edit User-Defined Fields: Change Orders (CS205020) form that opens, click **Add User-Defined Field** on the form toolbar.
  - c. In the **User-Defined Field Parameters** dialog box that opens, in the **Attribute ID** box, select *FSCAUSE*, and click **OK**.

- d. Go back to the Change Orders form and notice that the **User-Defined Fields** tab has appeared, which contains the **Cause Code** box.

The screenshot shows the 'Change Orders' form with the 'USER-DEFINED FIELDS' tab selected. A dropdown menu for 'Cause Code' is open, displaying the following options:

- Loose or Broken Connection or Wire
- Air Leak
- Calibration Problem
- Dirt or Foreign Matter Problem
- Equipment Adjustment Required
- Bearing Problem
- Equipment Cutting Out
- Equipment Jammed
- Equipment PC or Microprocessor Hung Up
- Lack of Lubrication
- Misalignment
- No Air
- No Power
- Oil Leak
- Part of Equipment is Physically Broken
- Other

The form also shows a 'CHANGE REQUESTS' tab and a 'COST BUDGE' tab. The 'COST BUDGE' tab is active, showing a table with columns for 'Sub Job' and 'Cost Code'.

### Releasing and Reversing a Change Request

1. On the Change Orders form, select the first of the previously created change orders (*Additional costs and revenue for the Italian Restaurant*) and click **Reports > Print Change Order** on the form toolbar.

Only revenue budget lines are reflected on the printed form.



SweetLife Head Office and Wholesale Center  
 69 Main St, Flushing  
 New York, NY, 11387  
 Phone: +1 917 341 8776

| CHANGE ORDER                |   |
|-----------------------------|---|
| Reference Nbr.:             | 000009  |
| Change Date:                | 23-Mar-2020   |
| Completion Date:            | 23-Mar-2020   |
| Customer ID:                | ITALIAN01   |
| Currency:                   | USD   |
| Project Reference Nbr:      | ITALIAN2  |
| Project CO Nbr:             | 0001  |
| Contract Time Change, Days: | 8   |
| Description:                | Additional costs and revenue for the Italian Restaurant |

| REVENUE BUDGET |                      |           |             |                 |                       |                |      |           |                   |                |
|----------------|----------------------|-----------|-------------|-----------------|-----------------------|----------------|------|-----------|-------------------|----------------|
| NO.            | PROJECT TASK         | COST CODE | DESCRIPTION | BUDGETED AMOUNT | PREV. APPROVED CO AMT | CURRENT CO QTY | UOM  | UNIT RATE | CURRENT CO AMOUNT | REVISED AMOUNT |
| 1              | GENERAL REQUIREMENTS | 01000     |             | 0.00            |                       | 2.00           | LS   | 0.00      | 2,376.00          | 2,376.00       |
| 2              | SITEWORK             | 02000     |             | 0.00            |                       | 0.00           |      | 0.00      | 4,810.28          | 4,810.28       |
| 3              | CONCRETE             | 03000     |             | 0.00            |                       | 11.00          | HOUR | 0.00      | 514.98            | 514.98         |
| 4              | OPENINGS             | 08000     |             | 0.00            |                       | 37.00          | HOUR | 0.00      | 2,276.10          | 2,276.10       |

|   |              |
|---|--------------|
| Reference Nbr.:                           | 000009       |
| Original Revenue Budget Total:            | 2,188,984.80 |
| Previously Approved Project CO Total:     | 0.00         |
| Prior Revised Revenue Budget Total (USD): | 2,188,984.80 |
| Change Order Total (USD):                 | 9,977.34     |
| Revised Revenue BudgetTotal (USD):        | 2,198,962.14 |

| CONTRACTOR  | OWNER   |
|---|---|
| SweetLife Head Office and Wholesale Center<br>69 Main St, Flushing<br>New York, NY, 11387<br>Phone: +1 917 341 8776 | The Italian Company<br>2510 Market Street<br>San Francisco, CA, 97558 |
| 23-Mar-2020   | 23-Mar-2020   |
| (signature)   | (signature)   |

2. Release the change order.
3. On the Projects (PM301000) form, for the *ITALIAN2* project, see how the **Potential CO** values became **Budgeted CO** values and altered the **Revised Budgeted** values.



Change Orders

NOTES

← SAVE & CLOSE ↻ + 🗑️ 📄 ⌂ ⏪ < > ⏩ RELEASE ACTIONS ▾ REPORTS ▾ 00:00:08

DOCUMENT USER-DEFINED FIELDS

|  |  |  |
|--|--|--|
| Reference Nbr.: 000011 - Ad  | Class: EXTERNAL - External change orders   | Revenue Budget Change Total: -9,977.34 |
| Status: Closed   | Project: ITALIAN2 - Italian Restaurant Project   | Commitments Change Total: -2,083.00    |
| <input type="checkbox"/> Hold  | Customer: ITALIAN01 - The Italian Company  | Cost Budget Change Total: -2,418.00    |
| Change Date: 3/23/2020   | External Reference Nbr.:   | Gross Margin Amount: -7,559.34         |
| Approval Date: 3/23/2020   | Revenue Change Nbr.: N/A   | Gross Margin %: 75.77                  |
| Contract Time ... 8  | Reverse Status: Reversing <span style="border: 1px solid red; padding: 2px;">Orig. CO Ref. Nbr.: 000009</span> | Change Request Cost Total: 4,308.00    |
| Description: Additional costs and revenue for the Italian Restaurant |  | Change Request Line Total: 5,167.08    |
|  |  | Change Request Markup Total: 4,810.26  |
|  |  | Change Request Price Total: 9,977.34   |

CHANGE REQUESTS REVENUE BUDGET **COST BUDGET** COMMITMENTS DETAILED DESCRIPTION ATTRIBUTES APPROVAL DETAILS COMPLIANCE

VIEW CHANGE REQUEST DETAILS SELECT BUDGET LINES

| Sub Job | Cost Code | Account Group | Description        | Change Request Total Quantity | Quantity | UOM   | Unit Rate   | Change Request Total Amount | Amount    |
|---------|-----------|---------------|--------------------|-------------------------------|----------|-------|-------------|-----------------------------|-----------|
| 01      | 01-900    | LABOR         | Clean up           | 2.00                          | -2.00    | LS    | 10,000.0000 | 2,000.00                    | -2,000.00 |
| 03      | 03-350    | SUBCON        | Concrete- Finishes | 11.00                         | -11.00   | HOURL | 40.0000     | 418.00                      | -418.00   |

9. Release the second of the previously created change orders (*Extra costs*).

10. On the Projects (PM301000) form, review the project balances.

Projects

← SAVE & CLOSE ↻ + 🗑️ 📄 ⌂ ⏪ < > ⏩ RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

|  |                               |                      |
|--|-------------------------------|----------------------|
| Project ID: ITALIAN2                       | Status: Active                | Assets: 0.00         |
| Customer: ITALIAN01 - The Italian Company  | <input type="checkbox"/> Hold | Liabilities: 0.00    |
| Template: CONTM - Construction T&M Project |                               | Income: 0.00         |
| Description: Italian Restaurant Project    |                               | Expenses: 193,517.00 |

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

| Sub Job | Cost Code | Account Group | Description     | Original Budgeted Quantity | UOM | Unit Rate | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Budgeted CO Quantity | Budgeted CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount |
|---------|-----------|---------------|-----------------|----------------------------|-----|-----------|--------------------------|-----------------------|---------------------|----------------------|--------------------|---------------------------|-------------------------|
| 08      | 08-100    | SUBCON        | Doors- Exterior | 28.00                      | EA  | 50,000.00 | 1,400.00                 | 0.00                  | 0.00                | 20.00                | 1,040.00           | 48.00                     | 2,440.00                |
| 08      | 08-520    | SUBCON        | Windows- Wood   | 90.00                      | EA  | 50,000.00 | 4,500.00                 | 0.00                  | 0.00                | 17.00                | 850.00             | 107.00                    | 5,350.00                |

# Lesson 11: Drawing Logs

---

A drawing log is a collection of drawings and designs available on a project. A member of the project team can create a drawing log, provide all relative information that describes or is associated with the document, and attach a drawing or a group of drawings to it. If any changes have been made to the initial drawing, the team member can update the drawing by uploading a new file version to the existing drawing log or creating a new revision of the drawing. If the attached drawing is an update of the previous drawing, the user should specify the revision number that indicates the up-to-date version of the drawing.

A drawing log can be linked to a request for information (RFI). When emailing an RFI, the user can attach drawings from the linked drawing log to the email. Also, the system allows users to attach drawing logs to project issues which help users to provide additional information or description for the issue.

## 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

## Story

An architect prepares a floor plan blueprint for the HOTEL project. An RFI is received to make sure that the storage room is next to the service elevator. Based on that RFI, a new revision of the blueprint should be created and linked to the original drawing, which should be marked as obsolete.

## System Preparation

Sign in to the system by using the *owen* login and *123* password.

## Configuring Drawing Logs

On the Drawing Log Preferences (PJ102000) form, do the following:

1. On the **General** tab, make sure that the *DRAWINGLOG* numbering sequence is specified in the **Drawing Log Numbering Sequence** box.
2. On the **Disciplines** tab, make sure that the predefined list of disciplines is available and the *Architectural* discipline is active.

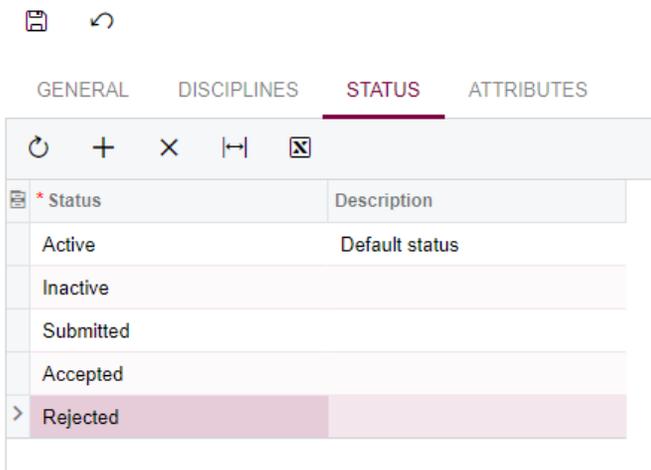
A discipline is a field or area in construction that may be used for categorizing drawing log documents.

**3.** On the **Status** tab, rename the default status from *N/A* to *Active* and add the following statuses:

- *Inactive*: The document is obsolete.
- *Submitted*: The document needs to be reviewed by the project manager.
- *Accepted*: The project manager has accepted the document.
- *Rejected*: The project manager has rejected the document.

The default status is a predefined status that cannot be deleted from the system but can be modified if needed. This status is assigned by default to a new document.

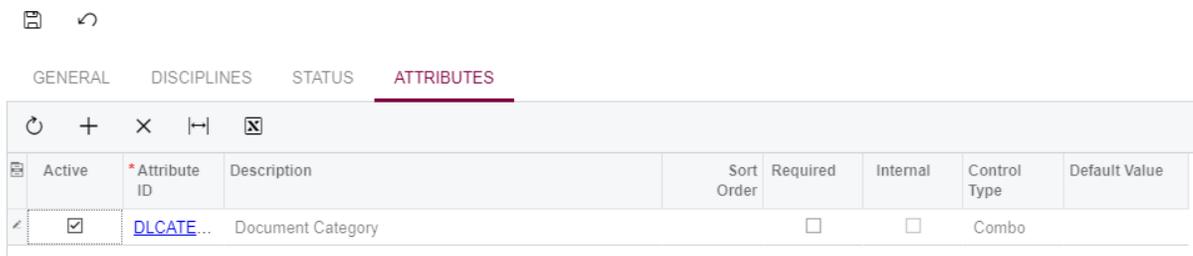
### Drawing Log Preferences ☆



**4.** On the **Attributes** tab, add the *DLCATEGORY* attribute.

This attribute will allow you to track documents that belong to a particular category, such as site plans, electrical plans, or plumbing plans.

### Drawing Log Preferences ☆



5. Click **Save** on the form toolbar to save the settings

### Creating a Drawing Log

On the Drawing Log (PJ303000) form, do the following:

1. Click **Add New Record** on the form toolbar, and create a drawing log with the following settings:

- **Project:** *HOTEL*
- **Discipline:** *Architectural*
- **Owner:** *Todd Bloom* (project manager)
- **Drawing Number:** 1
- **Title:** Floor plan
- **Description:** Floor plan blueprint

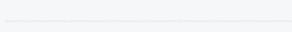
Note that if the created document is a draft, you can mark it as a sketch by entering the sketch label in the **Sketch** box.

2. On the **Attributes** tab, select the *Site plan* value for the *Document category* attribute.
3. Click **Save** on the form toolbar.

Note that the **Current** check box in the Summary area is automatically selected for the drawing log to mark it as up-to-date.

## Drawing Log

← SAVE & CLOSE   +   ▾ |< < > >| CREATE ▾ EMAIL DRAWING

|                   |  |                   |  |
|-------------------|--|-------------------|--|
| * Drawing Log ID: | DL-000003                   | * Drawing Number: | 1  |
| * Project:        | HOTEL - The Beach Hotel an  | Revision:         |  |
| Sub Job:          |                             | * Drawing Date:   | 12/26/2019 ▾   |
| * Discipline:     | Architectural               | Received Date:    | 12/26/2019 ▾   |
| * Owner:          | EP00000002 - Todd Bloom     | * Status:         | Active  |
|                   |  |                   | <input checked="" type="checkbox"/> Current  |
| * Title:          | Floor plan   |                   |  |
| Description:      | Floor plan blueprint   |                   |  |
| Sketch:           |                             |                   |  |
| Original Drawing: |                             |                   |  |

DRAWINGS **ATTRIBUTES** ACTIVITIES REVISIONS RELATIONS

| Attribute           | Required                 | Value     |
|---------------------|--------------------------|-----------|
| > Document Category | <input type="checkbox"/> | Site plan |

- On the table toolbar of the **Drawings** tab, click Files and attach the *Floor Plan Revision 1.jpg* image, which is provided with the training materials.

DRAWINGS **ATTRIBUTES** ACTIVITIES REVISIONS RELATIONS

| Attribute | Value | Comment |
|-----------|-------|---------|
| Files     |       |         |

Note that if there are multiple images attached to a drawing log document, you can download them all at once as a zip file by clicking **Download Zip** on the form toolbar of the Drawing Log (PJ303000) form or by selecting the unlabeled check box for the needed drawing log on the Drawing Logs (PJ403000) form and then clicking **Download Zip** on the form toolbar.

### Linking an RFI to a Drawing Log

To create an RFI directly from a drawing log, do the following.

- While you are still viewing the *Floor plan* record on the Drawing Log (PJ303000) form, click **Create** > **NEW RFI** on the form toolbar.

## Drawing Log

← SAVE & CLOSE   +   K < > >| CREATE EMAIL DRAWING

|                   |                            |                   |            |
|-------------------|----------------------------|-------------------|------------|
| * Drawing Log ID: | DL-000003                  | * Drawing Number: | 1          |
| * Project:        | HOTEL - The Beach Hotel an | Revision:         |            |
| Sub Job:          |                            | * Drawing Date:   | 12/26/2019 |
| * Discipline:     | Architectural              | Received Date:    | 12/26/2019 |
| * Owner:          | EP00000002 - Todd Bloom    | * Status:         | Active     |
| * Title:          | Floor plan                 |                   |            |
| Description:      | Floor plan blueprint       |                   |            |
| Sketch:           |                            |                   |            |
| Original Drawing: |                            |                   |            |

Current

NEW RFI  
NEW Project Issue

2. On the Request for Information (PJ301000) form that opens, specify the following settings:

- **Contact:** *Anna Johnson*
- **Class ID:** *CNSTDOCDEF*
- **Summary:** Storage room should be next to service elevator
- **Owner:** *Todd Bloom*

Note that the project is copied from the original drawing log.

Leave the **Schedule Impact**, **Cost Impact**, and **Design Change** check boxes cleared because the schedule, cost, and design won't be affected. (If the RFI had an impact on any of those, you'd need to convert the RFI to a change request.)

## Request for Information ☆

← SAVE & CLOSE   +   ▾ |< < > >| EMAIL RFI PRINT RFI

|                     |  |                  |  |
|---------------------|--|------------------|--|
| * Project:          | HOTEL - The Beach Hotel an    | * RFI ID:        | <NEW>       |
| Sub Job:            | <input type="text"/>   | * Creation Date: | 12/26/2019 ▾   |
| Business Account:   | <input type="text"/>   | Created By:      | admin admin  |
| * Contact:          | Anna Johnson    | * Owner:         | Todd Bloom  |
| * Class ID:         | CNSTDOCDEF - Constructio   | Answer Due Date: | 12/31/2019 ▾   |
| * Summary:          | Storage room should be next to service elevator  |                  |  |
|                     | <input type="checkbox"/> Incoming  | Workgroup:       | <input type="text"/>   |
| * Status:           | New ▾  |                  | <input type="checkbox"/> Schedule Impact   |
| Reason:             | N/A ▾  |                  | <input type="checkbox"/> Cost Impact   |
| Priority:           | Medium    |                  | <input type="checkbox"/> Design Change   |
| Documentation Link: | <input type="text"/>   |                  |  |
| Spec. section:      | <input type="text"/>   |                  |  |
| Converted From:     | Converted To:  |                  |  |

3. On the **Details** tab, specify the following:

- **Question** pane: Is the storage room close to the service elevator?
- **Answer** pane: No, the blueprint should be updated.

4. On the form toolbar, click **Save**.

Note that on the **Drawings** tab, a link to the original drawing log has appeared. Click that link.

Request for Information ☆

← SAVE & CLOSE 📄 ↶ + 🗑️ 📄 ▾ ⏪ < > ⏩ EMAIL RFI PRINT RFI CONVERT TO

|                     |   |  |              |
|---------------------|---|--|--------------|
| * Project:          | HOTEL - The Beach Hotel an 🔍                    | * RFI ID:                                | RF-000004 🔍  |
| Sub Job:            | 🔍   | * Creation Date:                         | 12/26/2019 ▾ |
| Business Account:   | 🔍   | Created By:                              | admin admin  |
| * Contact:          | Anna Johnson 🔍                                  | * Owner:                                 | Todd Bloom 🔍 |
| * Class ID:         | CNSTDOCDEF - Constructoi 🔍                      | Answer Due Date:                         | 12/31/2019 ▾ |
| * Summary:          | Storage room should be next to service elevator |  |              |
| * Status:           | New ▾   | Workgroup:                               | 🔍            |
| Reason:             | N/A ▾   | <input type="checkbox"/> Schedule Impact |              |
| Priority:           | Medium 🔍  | <input type="checkbox"/> Cost Impact     |              |
| Documentation Link: | 🔍   |  |              |
| Spec. section:      | 🔍   |  |              |
| Converted From:     | Converted To: 🔍                                 |  |              |

Incoming

Design Change

DETAILS ATTRIBUTES ACTIVITIES RELATIONS **DRAWINGS**

🔄 LINK DRAWING UNLINK DRAWING VIEW ATTACHMENTS |←| ☒

| <input type="checkbox"/>   | Drawing Log ID            | Project               | Sub Job | Discipline    | Drawing Number |
|----------------------------|---------------------------|-----------------------|---------|---------------|----------------|
| > <input type="checkbox"/> | <a href="#">DL-000003</a> | <a href="#">HOTEL</a> |         | Architectural | 1              |

5. On the Drawing Log (PJ303000) form that opens, click the **Relations** tab.

Note that a link to the related RFI has appeared in the table. Click that link.

(Note that if you have associated an RFI with a wrong drawing log, you can unlink the RFI from the drawing log by selecting the unlabeled check box for the RFI and clicking **Unlink** on the table toolbar.)

### Drawing Log

SAVE & CLOSE [Icons] CREATE ▾ EMAIL DRAWING DOWNLOAD ZIP NEW REVISION/SKETCH

\* Drawing Log ID: DL-000003 \* Drawing Number: 1  
 \* Project: HOTEL - The Beach Hotel an Revision:  
 Sub Job: \* Drawing Date: 12/26/2019  
 \* Discipline: Architectural Received Date: 12/26/2019  
 \* Owner: EP00000002 - Todd Bloom \* Status: Active  
 Current

\* Title: Floor plan  
 Description: Floor plan blueprint  
 Sketch:  
 Original Drawing:

DRAWINGS ATTRIBUTES ACTIVITIES REVISIONS **RELATIONS**

LINK UNLINK [Icons]

| Document ID      | Document Type        | Project | Sub Job | Status | Priority | Summary      | Created By |
|------------------|----------------------|---------|---------|--------|----------|--------------|------------|
| <b>RF-000004</b> | Request For Infor... | HOTEL   |         | New    | Medium   | Storage r... | admin      |

- On the form toolbar of the Request for Information (PJ301000) form that opens, click **Email RFI**.

The Email Activity form opens. You can click Attach on the form toolbar and attach image files from the drawing log to the email that will be associated with the RFI.

Email Activity [Icons] NOTES FILES CUSTOMIZATION TOOLS

SAVE & CLOSE [Icons] SEND REPLY ACTIONS ▾ ATTACH

\* From: System Request For Information

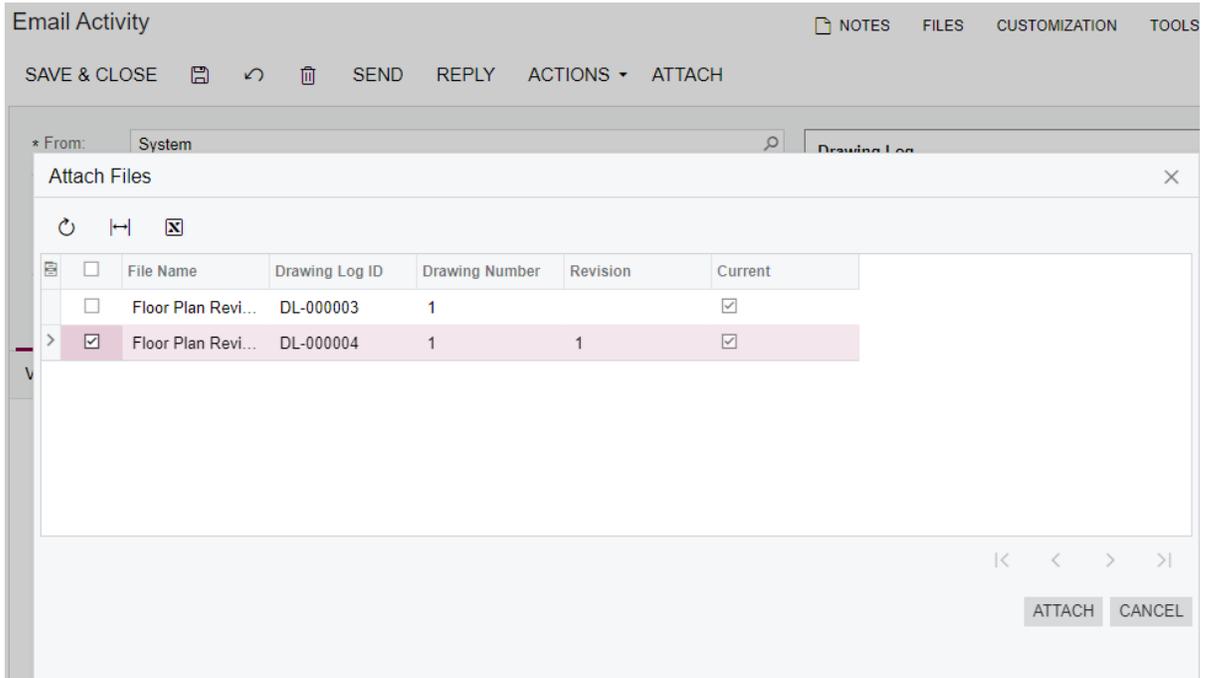
Attach Files [Icons]

| File Name  | File Source  | Drawing Log ID | Drawing Number | Revision | Current                             |
|--|--------------|----------------|----------------|----------|-------------------------------------|
| <input checked="" type="checkbox"/> Floor Plan Revi... | Drawing Logs | DL-000003      | 1              |          | <input checked="" type="checkbox"/> |

[Icons] ATTACH CANCEL

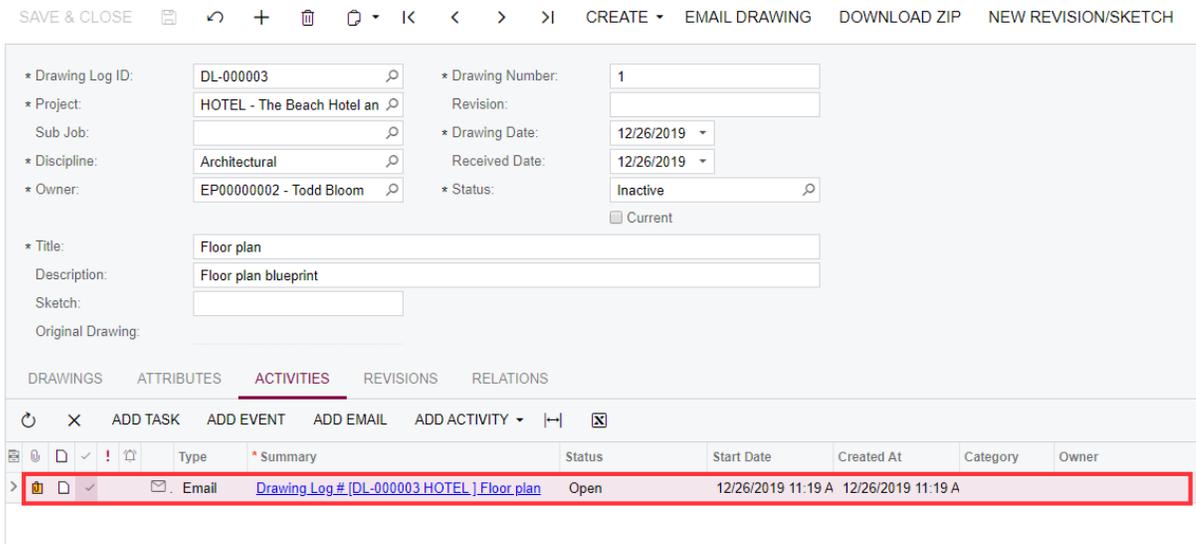
Note that an existing RFI or project issue may be linked to a drawing log, as well as an existing drawing log may be linked to an RFI or project issue.





Review the **Activities** tab where all emails associated with the drawing log are listed.

#### Drawing Log



### Running a Report

Run the Drawing Log Details (PJ653000) report for the *HOTEL* project.

**Drawing Log Details**Company: Company  
User: admin admin

Branch: HEADOFFICE

Page: 1 of 1  
Date: 12/26/2019 11:22Project Manager: [Bill Owen](#)

Project: HOTEL-The Beach Hotel and Condominiums

Discipline: Architectural

| Drawing #  | Title        | Received Date | Revision | Sketch | Original Drawing |
|--|--------------|---------------|----------|--------|------------------|
| <a href="#">DL-000001</a><br>construction-site-drawing.jpg | Site plan    | 3/1/2019      |          |        |                  |
| <a href="#">DL-000002</a><br>roofing.gif                   | Roofing spec | 3/1/2019      |          |        |                  |
| <a href="#">DL-000004</a><br>Floor Plan Revision 2.jpg     | Floor plan   | 12/26/2019    | 1        |        | DL-000003        |

# Lesson 12: Project Issues

Project issues are used for tracking and reporting on all activities related to various issues discovered on a job. Based on a project issue, a request for information or change request may be created.

## Learning Objectives

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

- Configure project management classes that may be used for project issues
- Define project issue types
- Report project issues and convert them to change requests or requests for information
- Mass-assign project issues to owners

## Story

On the project site, the subcontractor put a hole in the wall by accident. The accident should be recorded, and the hole should be patched as soon as possible. This leads to a new change request for the project.

Also, at some place, the paving should be replaced and laid differently due to unstable terrain. The site plan should be updated accordingly.

## System Preparation

Sign in to the system by using the *admin* login and *123* password.

## Configuring Project Issues

1. On the Project Management Classes (PJ201000) form, make sure that the *FIELD* class exists and the **Project Issues** check box is selected for it so that this class can be used for project issues.

Project Management Classes

← SAVE & CLOSE 📄 ↶ + 🗑️ 📄 ▾ ⏪ < > ⏩

|                                |                      |         |  |
|--------------------------------|----------------------|---------|--|
| * Project Management Class ID: | FIELD - Field Report | USE FOR | <input checked="" type="checkbox"/> Project Issues <input type="checkbox"/> Requests For Information |
| * Description:                 | Field Report         |         |  |

DETAILS ATTRIBUTES PRIORITIES

REQUEST FOR INFORMATION SETTINGS

Answer Days Default: 0

PROJECT ISSUE SETTINGS

Answer Days Default: 5

2. On the **General Settings** tab of the Project Management Preferences (PJ101000) form, do the following:
  - a. Make sure that the *PROISSUE* numbering sequence is specified in the **Project Issue Numbering Sequence** box.
  - b. In the table, add the following project issue types and save the changes:

| Project Issue Type | Description                                   |
|--------------------|---|
| Accident           | Accidents and emergencies                     |
| Safety Violation   | Violation of safety regulations               |
| Design Issue       | Design issues                                 |
| Resource           | Problems with equipment, materials, or people |

Project Management Preferences ☆

GENERAL SETTINGS

**DUE DATE CALCULATION**

\* Due Date Calculation Type: Sequential Days (incl. weekends)

Calendar:

**REQUEST FOR INFORMATION SETTINGS**

\* RFI Numbering Sequence: REQFORINFO - Request For Informat

Default Email Notification:

RFI Assignment Map:

**DAILY FIELD REPORT SETTINGS**

\* DFR Numbering Sequence: DFREPORT - Daily Field Report

**PROJECT ISSUE SETTINGS**

\* Project Issue Numbering Sequence: PROISSUE - Project Issue

Project Issue Assignment Map:

| Project Issue Type | Description                     |
|--------------------|---------------------------------|
| Accident           | Accidents and emergencies       |
| Safety Violation   | Violation of safety regulations |
| Design Issue       | Design issues                   |
| Resource           | Problems with equipment, ...    |

### Creating Project Issues

1. On the Project Issues (PJ302000) form, create a project Issue with the following settings:
  - **Summary:** Hole in wall needs patching
  - **Project:** HOTEL
  - **Class ID:** FIELD
  - **Due Date:** <7 days from today>
  - **Project Issue Type:** Accident
  - **Schedule Impact:** Selected
  - **Schedule Impact (days):** 1

- **Cost Impact:** Selected
  - **Cost Impact:** 2000
  - **Owner:** *Todd Bloom* (project manager)
2. On the **Details** tab, type the following information: Subcontractor put a hole in the wall when stacking materials, needs to be patched and finished ASAP.
  3. Review other settings that have been prefilled with default values and save the record.

Project Issue

← SAVE & CLOSE [Icons] CONVERT TO RFI CONVERT TO CHANGE REQUEST PRINT/EMAIL

|                     |                             |   |                           |
|---------------------|-----------------------------|---|---------------------------|
| * Summary:          | Hole in wall needs patching |   |                           |
| * Project Issue ID: | IS-000002                   | Priority:   | Medium                    |
| * Project:          | HOTEL - The Beach Hotel an  | * Status:   | Open                      |
| Sub Job:            |                             | Created On:   | 11/11/2019 9:00 AM        |
| * Class ID:         | FIELD - Field Report        | Created By:   | Pam Brawner               |
| Related Entity:     |                             | * Owner:  | Todd Bloom                |
| Converted To:       |                             | Workgroup:  |                           |
| Due Date:           | 11/18/2019                  | Resolved On:  |                           |
|                     |                             | Project Issue Type:                                 | Accident                  |
|                     |                             | <input checked="" type="checkbox"/> Schedule Impact | Schedule Impact (days): 1 |
|                     |                             | <input checked="" type="checkbox"/> Cost Impact     | Cost Impact: 2,000.00     |

DETAILS RELATED ACTIVITIES ATTRIBUTES DRAWINGS

VISUAL [Icons] Paragraph B I U A [Icons] INSERT LAYOUT TABLES

Subcontractor put a hole in the wall when stacking materials, needs to be patched and finished ASAP.

4. Create another project issue, with the following settings specified:
  - **Summary:** Paving should be replaced
  - **Project:** *HOTEL*
  - **Class ID:** *FIELD*
  - **Due Date:** <7 days from today>
  - **Project Issue Type:** *Design Issue*
  - **Schedule Impact:** Selected
  - **Schedule Impact (days):** 3
  - **Cost Impact:** Selected
  - **Cost Impact:** 60000
  - **Owner:** *Todd Bloom*
5. On the **Details** tab, type the following information: Due to unstable terrain, need to lay the paving differently. Refer to the updated site plan.

Project Issue

← SAVE & CLOSE [Icons] CONVERT TO RFI CONVERT TO CHANGE REQUEST PRINT/EMAIL

\* Summary: Paving should be replaced

\* Project Issue ID: IS-000003 Priority: Medium Project Issue Type: Design Issue

\* Project: HOTEL - The Beach Hotel an \* Status: Open Schedule Impact (days): 3

Sub Job: Created On: 11/11/2019 9:00 AM

\* Class ID: FIELD - Field Report Created By: Pam Brawner Cost Impact: 60,000.00

Related Entity: \* Owner: Regina Wiley

Converted To: Workgroup:

Due Date: 11/18/2019 Resolved On:

DETAILS RELATED ACTIVITIES ATTRIBUTES DRAWINGS

VISUAL Paragraph B I U A [Icons] INSERT LAYOUT TABLES

Due to unstable terrain, need to lay the paving differently. Refer to the updated site plan.

6. Save the changes.
7. On the **Drawings** tab, click **Link Drawing** on the table toolbar.
8. In the **Link Drawing** dialog box that opens, select the check box in the unlabeled column for the DL-000001 drawing log, which includes the site plan, and click Link & Close.

Link Drawing [Close]

[Refresh] [Home] [Close]

| <input type="checkbox"/>            | Drawing Log ID            | Project               | Sub Job | Discipline    | Drawing Num |
|-------------------------------------|---------------------------|-----------------------|---------|---------------|-------------|
| <input checked="" type="checkbox"/> | <a href="#">DL-000001</a> | <a href="#">HOTEL</a> |         | Architectural | 1           |
| <input type="checkbox"/>            | <a href="#">DL-000002</a> | <a href="#">HOTEL</a> |         | Architectural | 1           |
| <input type="checkbox"/>            | <a href="#">DL-000003</a> | <a href="#">HOTEL</a> |         | Architectural | 1           |
| <input type="checkbox"/>            | <a href="#">DL-000004</a> | <a href="#">HOTEL</a> |         | Architectural | 1           |

[Navigation] [LINK TO ISSUE] [LINK & CLOSE] [CANCEL]

The linked drawing log is now listed in the table on the **Drawings** tab.

9. Save the record.

- 10.** Select the unlabeled check box for the linked drawing log and click **View Attachments** on the table toolbar. Then, in the **Drawing Log Document Attachments** dialog box, download the file with the site plan by clicking its name in the table.

The screenshot shows the 'Project Issue' form with a 'Drawing Log Document Attachments' dialog box open. The dialog box contains a table with the following data:

| File Name                       | Drawing Log ID | Comment |
|---------------------------------|----------------|---------|
| construction-site-drawing-1.jpg | DL-000001      |         |

The background form shows the following details:

- Summary: Paving should be replaced
- Project Issue ID: IS-000003
- Project: HOTEL - The Beach Hotel an
- Class ID: FIELD - Field Report
- Priority: Medium
- Status: Open
- Project Issue Type: Design Issue
- Created On: 11/11/2019 9:00 AM
- Schedule Impact (days): 3
- Due Date: 11/18/2019

Alternatively, you can click the link in the **Drawing Log ID** column which will open the linked drawing log on the Drawing Log (PJ303000) form in a pop-up window; you can review the site plan from there.

- 11.** On the form toolbar of the Project Issue form, click **Print/Email** to open the printed form with the project issue details.

PROJECT ISSUE #IS-000003

|   |                         |
|---|-------------------------|
| Project: HOTEL-The Beach Hotel and Condominiums, New York | Date: 11/11/2019        |
| Sub Job:  | Created By: Pam Brawner |
| Priority: Medium  | Owner: Regina Wiley     |
| Project Issue Type: Design Issue                          | Converted To:           |
| Status: Open  |                         |

**Summary:**  
Paving should be replaced

**Due Date:** 11/18/2019

**Details:**  
Due to unstable terrain, need to lay the paving differently. Refer to the updated site plan.

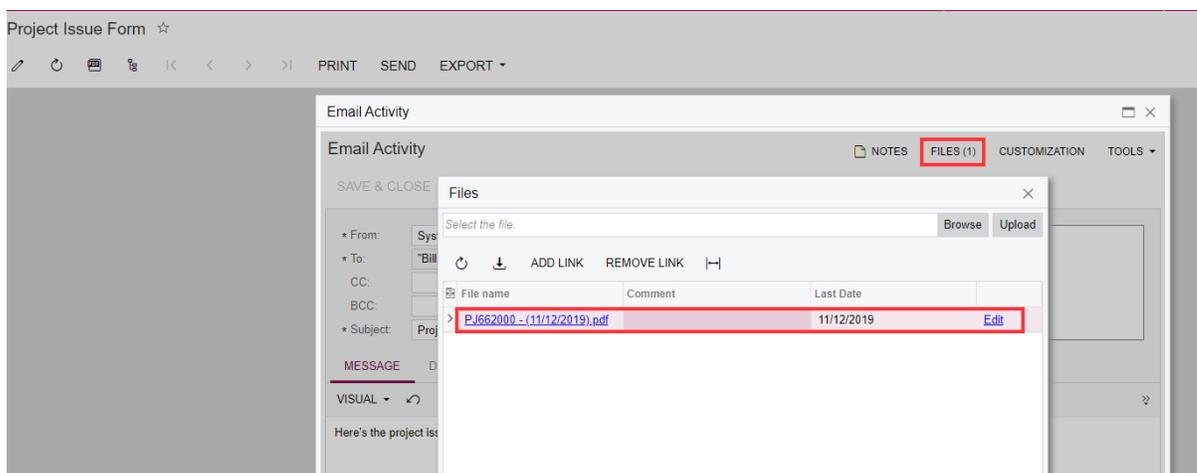
|  |  |
|--|--|
| <b>Schedule Impact, Days:</b><br>Yes - 3 | <b>Cost Impact (USD):</b><br>Yes - 60000 |
|--|--|

**Drawings:**

| Drawing Log | Revision | Sketch | Title      |
|-------------|----------|--------|------------|
| DL-000001   |          |        | Floor plan |

Alternatively, you can open the Project Issue Form (PJ662000) form, select the project issue in the **Project Issue ID** box on the **Report Parameters** tab, and click **Run Report** on the form toolbar.

12. Click **Print** to print the project issue details or click **Send** to create an email with the project issue details attached as a PDF file.



## Converting a Project Issue to an RFI

A project issue can be converted to a request for information as follows.

1. On the Project Issues (PJ302000) form, open the *Paving should be replaced* project issue.
2. Click **Convert to RFI** on the form toolbar.

The Request for Information (PJ301000) form opens with some data prefilled. Review the settings copied from the project issue:

- **Project**
- **Summary**
- Impact-related elements
- **Question** on the **Details** tab

Request for Information

← SAVE & CLOSE [Icons] EMAIL RFI PRINT RFI CONVERT TO CHANGE R

|                                   |                            |   |             |
|-----------------------------------|----------------------------|---|-------------|
| * Project:                        | HOTEL - The Beach Hotel an | * RFI ID:   | <NEW>       |
| Sub Job:                          |                            | * Creation Date:                                    | 11/12/2019  |
| Business Account:                 |                            | Created By:   | Pam Brawner |
| * Contact:                        |                            | * Owner:  | Pam Brawner |
| * Class ID:                       |                            | Answer Due Date:                                    |             |
| * Summary:                        | Paving should be replaced  | Workgroup:  |             |
| <input type="checkbox"/> Incoming |                            | <input checked="" type="checkbox"/> Schedule Impact |             |
| * Status:                         | New                        | Schedule Impact (days):                             | 3           |
| Reason:                           | N/A                        | <input checked="" type="checkbox"/> Cost Impact     |             |
| Priority:                         |                            | Cost Impact:  | 60,000.00   |
| Documentation Link:               |                            | <input type="checkbox"/> Design Change              |             |
| Spec. section:                    |                            | Converted From:                                     | IS-000003   |
| Converted To:                     |                            | Converted To:                                       |             |

DETAILS ATTRIBUTES ACTIVITIES RELATIONS DRAWINGS

Question Answer

VISUAL [Icons] Paragraph [Icons]

Due to unstable terrain, need to lay the paving differently. Refer to the updated site plan.

Note that in the **Converted From** box, the link to the original project issue is displayed.

3. Specify the following settings and save the changes:
  - **Business Account:** *CONCCO* (subcontractor to perform the work)
  - **Contact:** *Alphonse White*

- **Class ID:** *CNSTDOCDEF*
- **Owner:** *Todd Bloom* (project manager)
- In the **Question** pane on the **Details** tab, type: What paving material should be used?

4. Click the link in the **Converted From** box.

On the Project Issue form that opens in a pop-up window, see that the link to the related RFI is displayed in the **Converted From** box and the project issue has been closed with the status changed to *Converted to RFI*.

Project Issue

SAVE & CLOSE [Icons] CONVERT TO RFI CONVERT TO CHANGE REQUEST PRINT/EMAIL

|                   |                               |              |                    |                         |   |
|-------------------|-------------------------------|--------------|--------------------|-------------------------|---|
| Summary:          | Paving should be replaced     |              |                    | Project Issue Type:     | Design Issue  |
| Project Issue ID: | IS-000003                     | Priority:    | Medium             |                         |   |
| Project:          | HOTEL - The Beach Hotel and C | * Status:    | Converted to RFI   |                         | <input checked="" type="checkbox"/> Schedule Impact |
| Sub Job:          |                               | Created On:  | 11/11/2019 9:00 AM | Schedule Impact (days): | 3   |
| Class ID:         | FIELD - Field Report          | Created By:  | Pam Brawner        |                         | <input checked="" type="checkbox"/> Cost Impact     |
| Related Entity:   |                               | Owner:       | Regina Wiley       | Cost Impact:            | 60,000.00   |
| Converted To:     | <a href="#">RF-000010</a>     | Workgroup:   |                    |                         |   |
| Due Date:         | 11/18/2019                    | Resolved On: |                    |                         |   |

DETAILS RELATED ACTIVITIES ATTRIBUTES DRAWINGS

Due to unstable terrain, need to lay the paving differently. Refer to the updated site plan.

5. On the form toolbar of the Request for Information (PJ301000) form, click **Email RFI**.

The Email Activity form opens in a pop-up window. The contact specified for the RFI is the default recipient of the email. On the **Message** tab, you need to type your question and then click **Send** on the form toolbar.

Email Activity [Icons] NOTES FILES CUSTOMIZATION TOOLS

SAVE & CLOSE [Icons] SEND REPLY ACTIONS ATTACH

|            |   |  |
|------------|---|--|
| * From:    | System  |  |
| * To:      | "Alphonse White" X                                |  |
| CC:        |   |  |
| BCC:       |   |  |
| * Subject: | RFI #[RF-000010 HOTEL ] Paving should be replaced |  |

**Request For Information**  
 RFI ID: RF-000010  
 Summary: Paving should be replaced

MESSAGE DETAILS

VISUAL [Icons] Paragraph B I U A [Icons] INSERT LAYOUT

What paving material should be used?

The status of the RFI changes to *Open* and the **Convert to Change Request** button becomes available on the form toolbar.

- Click **Convert to Change Request** on the form toolbar.

Note that on the Change Requests (PM308500) form that opens, some settings are prefilled with values from the RFI, such as **Project**, **Description**, and **Detailed Description**.

In the **Project Issue** box, the original project issue is specified. In the **RFI** box, the RFI is specified, from which the change request has been created.

Change Requests

← SAVE & CLOSE   +   < > > > CREATE CHANGE ORDER ACTIONS ▾ REPORTS ▾

|   |   |                      |
|---|---|----------------------|
| Reference Nbr.: <NEW>  | Project: HOTEL - The Beach Hotel and Condomir  | Cost Total: 0.00     |
| Status: On Hold   | Customer:                                      | Line Total: 0.00     |
| <input checked="" type="checkbox"/> Hold  | Project Issue: IS-000003                       | Markup Total: 0.00   |
| * Change Date: 11/12/2019 ▾   | RFI: RF-000010                                 | Gross Margin %: 0.00 |
| Contract Time ... 0   | Change Order Nbr.:                             | Price Total: 0.00    |
| Ext. Ref. Nbr.: <input type="text"/>  |   |                      |
| * Description: Paving should be replaced  |   |                      |

ESTIMATION **DETAILED DESCRIPTION** MARKUPS APPROVAL DETAILS

VISUAL ▾   Paragraph ▾ **B** *I* U ▾                                 INSERT LAYOUT TABLES

What paving material should be used?]

- Save the record. It has the *On Hold* status as a newly created change request, and it can be further processed as a regular change request. For details, see Lesson 10: Change Management in this training course guide.
- Open the original RFI again.

Note that its status has changed to *Closed* with the *Converted to Change Request* reason. In the **Converted To** box, the link to the resulting change request is displayed.

Request for Information

← SAVE & CLOSE [Print] [Undo] + [Delete] [Copy] [Paste] [Home] [Left] [Right] [End] EMAIL RFI PRINT RFI CONVERT TO CHANGE REQUEST RE-OPEN

|                     |                                   |                         |   |
|---------------------|-----------------------------------|-------------------------|---|
| Project:            | HOTEL - The Beach Hotel and C     | * RFI ID:               | RF-000010   |
| Sub Job:            |                                   | Creation Date:          | 11/12/2019  |
| Business Account:   | CONCCO - Suntech Concrete         | Created By:             | Pam Brawner   |
| Contact:            | Alphonse White                    | Owner:                  | Todd Bloom  |
| Class ID:           | CNSTDOCDEF - Construction D       | Answer Due Date:        | 11/14/2019  |
| Summary:            | Paving should be replaced         |                         |   |
|                     | <input type="checkbox"/> Incoming | Workgroup:              |   |
| Status:             | Closed                            |                         | <input checked="" type="checkbox"/> Schedule Impact |
| Reason:             | Converted To Change Request       | Schedule Impact (days): | 3   |
| Priority:           | Medium                            |                         | <input checked="" type="checkbox"/> Cost Impact     |
| Documentation Link: |                                   | Cost Impact:            | 60,000.00   |
| Spec. section:      |                                   |                         | <input type="checkbox"/> Design Change              |
| Converted From:     | IS-000003                         | Converted To:           | 000004  |

DETAILS ATTRIBUTES ACTIVITIES RELATIONS DRAWINGS

Question Answer

What paving material should be used?

### Converting a Project Issue to a Change Request

1. On the Project Issues (PJ302000) form, open the *Hole in wall needs patching* project issue.
2. Click **Convert to Change Request** on the form toolbar.

On the Change Requests (PM308500) form that opens, review the prefilled settings. Note that in the **Project Issue** box, the ID of the original project issue is specified.

#### Change Requests

← SAVE & CLOSE [Print] [Undo] + [Delete] [Copy] [Paste] [Home] [Left] [Right] [End] CREATE CHANGE ORDER ACTIONS REPORTS

|                   |  |                    |                                      |                 |      |
|-------------------|--|--------------------|--------------------------------------|-----------------|------|
| Reference Nbr.:   | 000005 - Hc                              | Project:           | HOTEL - The Beach Hotel and Condomir | Cost Total:     | 0.00 |
| Status:           | On Hold                                  | Customer:          |                                      | Line Total:     | 0.00 |
|                   | <input checked="" type="checkbox"/> Hold | Project Issue:     | IS-000002                            | Markup Total:   | 0.00 |
| * Change Date:    | 11/12/2019                               | RFI:               |                                      | Gross Margin %: | 0.00 |
| Contract Time ... | 0  | Change Order Nbr.: |                                      | Price Total:    | 0.00 |
| Ext. Ref. Nbr.:   |  |                    |                                      |                 |      |
| * Description:    | Hole in wall needs patching              |                    |                                      |                 |      |

ESTIMATION DETAILED DESCRIPTION MARKUPS APPROVAL DETAILS

VISUAL [Undo] [Redo] Paragraph **B** *I* U ~~A~~ [Color] [Font] [Align] [List] [Table] INSERT LAYOUT TABLES

Subcontractor put a hole in the wall when stacking materials, needs to be patched and finished ASAP.

3. Take the change request off hold and save the record.

The change request can be further processed as a regular change request. For details, see Lesson 10: Change Management in this training course guide.

**4.** Open the original project issue again.

Note that the project issue has been closed with the status changed to *Converted to CR* and the link to the related change request is displayed in the **Converted To** box.

Project Issue

← SAVE & CLOSE 📄 ↶ + 🗑️ 📄 ⏪ < > ⏩ CONVERT TO RFI CONVERT TO CHANGE REQUEST PRINT/EMAIL

|                   |                               |              |                    |                         |   |
|-------------------|-------------------------------|--------------|--------------------|-------------------------|---|
| Summary:          | Hole in wall needs patching   |              |                    | Project Issue Type:     | Accident  |
| Project Issue ID: | IS-000002                     | Priority:    | Medium             |                         |   |
| Project:          | HOTEL - The Beach Hotel and C | * Status:    | Converted to CR    |                         | <input checked="" type="checkbox"/> Schedule Impact |
| Sub Job:          |                               | Created On:  | 11/11/2019 9:00 AM | Schedule Impact (days): | 1   |
| Class ID:         | FIELD - Field Report          | Created By:  | Pam Brawner        |                         | <input checked="" type="checkbox"/> Cost Impact     |
| Related Entity:   |                               | Owner:       | Todd Bloom         | Cost Impact:            | 2,000.00  |
| Converted To:     | 000005                        | Workgroup:   |                    |                         |   |
| Due Date:         | 11/18/2019                    | Resolved On: |                    |                         |   |

**DETAILS** RELATED ACTIVITIES ATTRIBUTES DRAWINGS

Subcontractor put a hole in the wall when stacking materials, needs to be patched and finished ASAP.

# Lesson 13: Requests for Information

---

Requests for information (RFIs) are used for obtaining information that is not present in (or cannot be inferred from) the contract documents. An RFI is usually submitted by a general contractor or subcontractor and a design or engineering professional is usually specified as a contact person who is expected to provide the needed information.

## Learning Objectives

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

- Configure project management classes that may be used for requests for information
- Enter an RFI
- Convert an incoming RFI to an outgoing RFI
- Link drawings to an RFI
- Email RFIs
- Convert an RFI to a change request

## Story

Our subcontractor requested a specification for the hotel roofing. One of your employees, an engineer, provides the specification, which should be linked to the initial request for information and sent to the subcontractor. Also, a change request should be created based on that RFI.

## System Preparation

Sign in to the system by using the *owen* login and *123* password.

## Configuring Requests for Information

On the Project Management Classes (PJ201000) form, make sure that the *CNSTDOCDEF* class exists and the **Requests for Information** check box is selected for it so that this class can be used for requests for information.

## Project Management Classes

← SAVE & CLOSE 📄 ↶ + 🗑️ 📄 ▾ K < > >|

\* Project Management Class ID: CNSTDOCDEF - Cor  USE FOR \_\_\_\_\_

\* Description: Construction Document Deficiency  Project Issues  Requests For Information

DETAILS ATTRIBUTES PRIORITIES

REQUEST FOR INFORMATION SETTINGS —

Answer Days Default:

PROJECT ISSUE SETTINGS —

Answer Days Default:

**Working with Requests for Information**

1. On the Request for Information (PJ301000) form, create a new RFI with the following settings and save the record:
  - a. **Project:** *HOTEL*
  - b. **Business Account:** *EQUGRP*
  - c. **Contact:** *Gayle Goh*
  - d. **Class ID:** *CNSTDOCDEF*
  - e. **Summary:** Need specs on hotel roofing
  - f. **Incoming:** Selected (the request has been received from outside the company)
  - g. **Priority:** *High*
  - h. **Owner:** *Regina Wiley* (the employee who will provide an answer)
  - j. **Design Change:** Selected
2. On the **Details** tab, type the following information: Please provide these specifications.

## Request for Information ☆

← SAVE & CLOSE   +    < > > | EMAIL RFI PRINT RFI

|                     |  |                  |  |
|---------------------|--|------------------|--|
| * Project:          | HOTEL - The Beach Hotel an    | * RFI ID:        | <NEW>         |
| Sub Job:            |   | * Creation Date: | 11/12/2019 ▾   |
| Business Account:   | EQUGRP - The Equity Group   | Created By:      | Pam Brawner  |
| * Contact:          | Gayle Goh   | * Owner:         | Regina Wiley  |
| * Class ID:         | CNSTDOCDEF - Constructio   | Answer Due Date: | 11/14/2019 ▾   |
| * Summary:          | Need specs on hotel roofing  |                  |  |
|                     | <input checked="" type="checkbox"/> Incoming   | Workgroup:       |               |
| * Status:           | New ▾  |                  | <input type="checkbox"/> Schedule Impact   |
| Reason:             | N/A ▾  |                  | <input type="checkbox"/> Cost Impact   |
| Priority:           | High    |                  | <input checked="" type="checkbox"/> Design Change  |
| Documentation Link: |   |                  |  |
| Spec. section:      |   |                  |  |
| Converted From:     |  | Converted To:    |  |

**DETAILS** ATTRIBUTES ACTIVITIES RELATIONS DRAWINGS

Question

VISUAL ▾   Paragraph ▾ **B** *I* U ▾ **A** ▾      

Please provide these specifications.

3. Change the status of the RFI to *Open* and save the changes.
4. Click **Convert to Outgoing RFI** on the form toolbar to create a new outgoing RFI that will be linked to the original incoming RFI.

Outgoing RFIs originate from inside the company and are addressed to external experts.

Note that the link to the original incoming RFI is displayed in the **Link to Incoming RFI** box.

Request for Information ☆

← SAVE & CLOSE [Icons] EMAIL RFI PRINT RFI CONVE

|                       |                                   |   |              |
|-----------------------|-----------------------------------|---|--------------|
| * Project:            | HOTEL - The Beach Hotel an        | * RFI ID:   | RF-000014    |
| Sub Job:              |                                   | * Creation Date:                                  | 11/12/2019   |
| Business Account:     |                                   | Created By:                                       | Pam Brawner  |
| * Contact:            | Balaji Rajan                      | * Owner:  | Regina Wiley |
| * Class ID:           | CNSTDOCDEF - Constructio          | Answer Due Date:                                  | 11/14/2019   |
| * Summary:            | Need specs on hotel roofing       |   |              |
|                       | <input type="checkbox"/> Incoming | Workgroup:  |              |
| Link to Incoming RFI: | RF-000013                         | <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

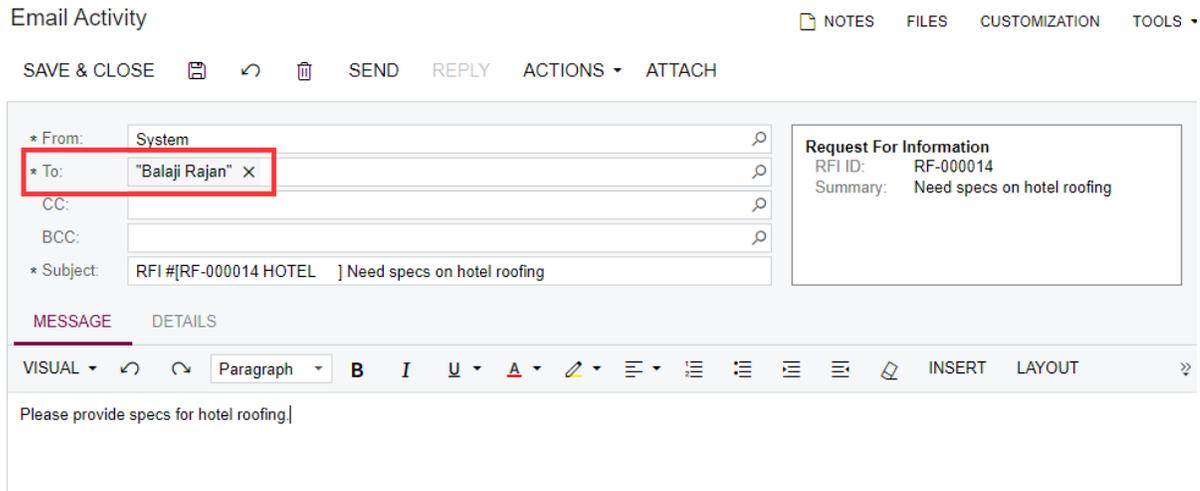
VISUAL [Icons] Paragraph **B** *I* U A [Icons]

Please provide these specifications.

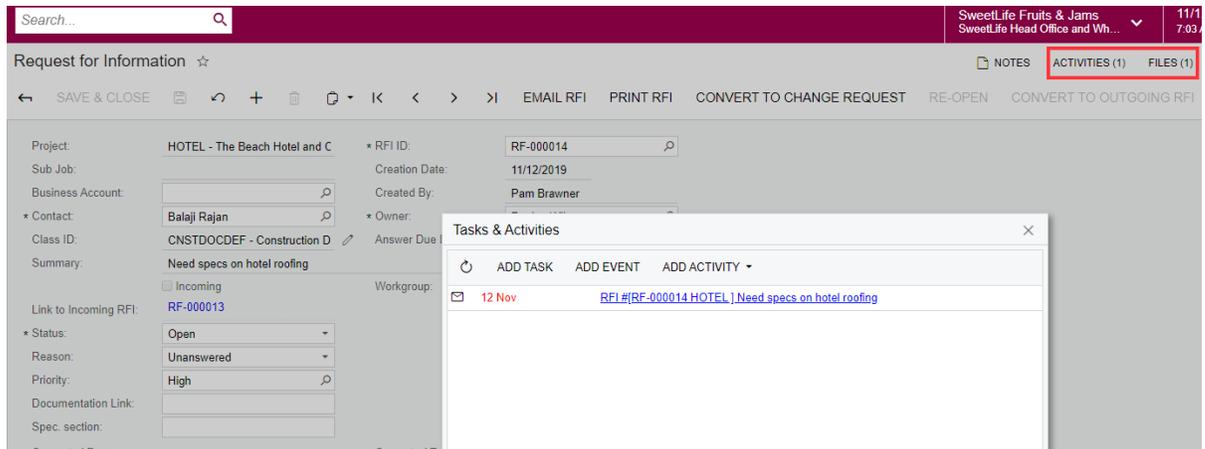
5. In the **Contact** box, specify *Balaji Rajan*—an engineer who can provide specs.
6. Save the changes.
7. Click **Email RFI** on the form toolbar.
8. On the Email Activity form that opens, note that the contact specified for the RFI is the recipient of the email.

Specify the following message on the **Message** tab, and then click **Send** on the form toolbar:

Please provide specs for hotel roofing.



As a result, the **Activities** counter on the title bar indicates that a related email activity has been created. The **Files** counter indicates that a PDF file with details of the RFI has been attached to the email. Review the email and the attached PDF file.

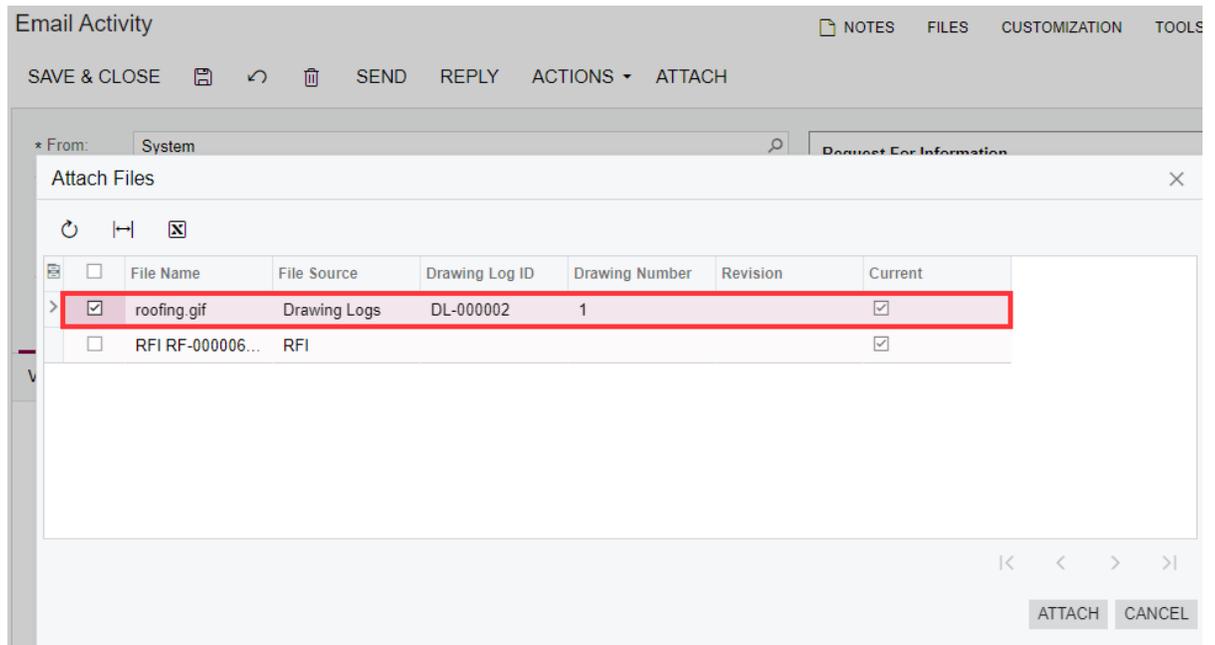


- Suppose that Balaji Rajan replied with a new drawing for the hotel roofing. A corresponding drawing log has been created (DL-000002) with the drawing of the roofing attached to it.

On the **Drawings** tab, click **Link Drawing** on the table toolbar.

| <input type="checkbox"/>            | Drawing Log ID            | Project               | Sub Job | Discipline    | Drawing Number |
|-------------------------------------|---------------------------|-----------------------|---------|---------------|----------------|
| <input type="checkbox"/>            | <a href="#">DL-000001</a> | <a href="#">HOTEL</a> |         | Architectural | 1              |
| <input checked="" type="checkbox"/> | <a href="#">DL-000002</a> | <a href="#">HOTEL</a> |         | Architectural | 1              |
| <input type="checkbox"/>            | <a href="#">DL-000003</a> | <a href="#">HOTEL</a> |         | Architectural | 1              |
| <input type="checkbox"/>            | <a href="#">DL-000004</a> | <a href="#">HOTEL</a> |         | Architectural | 1              |

- 10.** In the **Link Drawing** dialog box that opens, select the unlabeled check box for the *DL-000002* drawing log and then click **Link & Close**.
- 11.** On the **Details** tab, in the **Answer** pane, type: See the linked drawing.
- 12.** Save the changes.
- 13.** Click **Email RFI** on the form toolbar.
- 14.** On the Email Activity form that opens, do the following:
  - a.** in the **To** box, select *Todd Bloom*, who is the project manager and needs to review the spec.
  - b.** Click **Attach** on the form toolbar.
  - c.** In the **Attach Files** dialog box, select the unlabeled check box for the roofing drawing and click **Attach**.

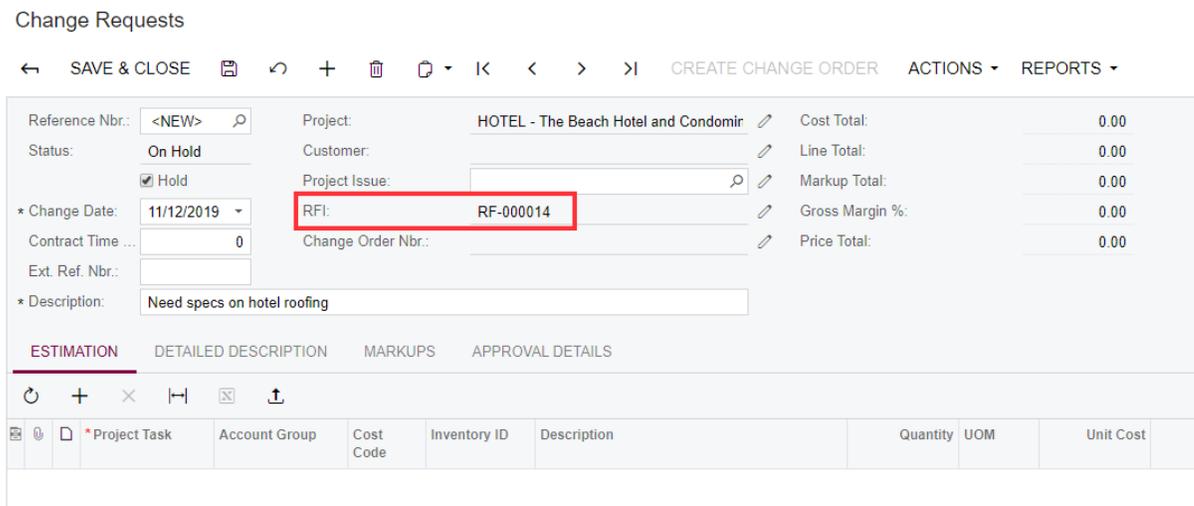


d. Click **Send** on the form toolbar.

15. Click **Convert to Change Request** on the form toolbar.

Note that on the Change Requests (PM308500) form that opens, some settings are prefilled with values from the RFI, such as **Project**, **Description**, and **Detailed Description**.

In the **RFI** box, the original RFI is specified, from which the change request has been created.



16. Save the record.

It has the *On Hold* status as a newly created change request, and it can be further processed as a regular change request.

**17.** Open the original RFI again.

Note that its status has changed to *Closed* with the *Converted to Change Request* reason. In the **Converted To** box, the link to the resulting change request is displayed.

Request for Information ☆

NOTES ACTIVITIES (1) FILES (1)

← SAVE & CLOSE ↻ + 🗑️ 📄 ⏪ ⏩ EMAIL RFI PRINT RFI CONVERT TO CHANGE REQUEST RE-OPEN CONVERT TO OUTGOING RF

|                       |                               |                  |   |
|-----------------------|-------------------------------|------------------|---|
| Project:              | HOTEL - The Beach Hotel and C | * RFI ID:        | RF-000014   |
| Sub Job:              |                               | Creation Date:   | 11/12/2019  |
| Business Account:     |                               | Created By:      | Pam Brawner   |
| Contact:              | Balaji Rajan                  | Owner:           | Regina Wiley  |
| Class ID:             | CNSTDOCDEF - Construction D   | Answer Due Date: | 11/14/2019  |
| Summary:              | Need specs on hotel roofing   |                  |   |
| Link to Incoming RFI: | RF-000013                     | Workgroup:       | <input type="checkbox"/> Schedule Impact<br><input type="checkbox"/> Cost Impact<br><input checked="" type="checkbox"/> Design Change |
| Status:               | Closed                        |                  |   |
| Reason:               | Converted To Change Request   |                  |   |
| Priority:             | High                          |                  |   |
| Documentation Link:   |                               |                  |   |
| Spec. section:        |                               |                  |   |
| Converted From:       |                               | Converted To:    | 000006  |

DETAILS ATTRIBUTES ACTIVITIES RELATIONS DRAWINGS

| Question                             | Answer                  |
|--------------------------------------|-------------------------|
| Please provide these specifications. | See the linked drawing. |

# Lesson 14: Photo Logs

---

In the construction industry, field superintendents and other employees may use mobile devices to take progress photos, and then they may need to store and share those photos by using a secure online service. In Acumatica ERP Construction Edition, users can create photo logs that may be associated with particular projects and project tasks.

## Learning Objectives

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

- Set up photo logs in the system
- Create photo logs and upload photos
- Download all photos from a photo log in a single .zip archive
- Email photo logs
- Use search to find particular photos

## Story

The field superintendent inspects the project site, takes progress photos, uploads them to the system, and associates them with the particular project and project task.

## System Preparation

Sign in to the system by using the *owen* login and *123* password.

## Setting Up Photo Logs

To set up the ability of maintaining photo logs in the system, do the following on the Photo Log Preferences (PJ103000) form:

1. On the **General Settings** tab, make sure that numbering sequences for photo logs and photos are specified.

Photo Log Preferences ☆

📄 ↺

GENERAL SETTINGS   STATUS   ATTRIBUTES

|                                 |                       |     |
|---------------------------------|-----------------------|-----|
| * Photo Log Numbering Sequence: | PHOTOLOG - Photo Logs | 🔍 ✎ |
| * Photo Numbering Sequence:     | PHOTO - Photo         | 🔍 ✎ |

2. On the **Status** tab, define custom statuses for photo logs by doing the following:

- a. Change the name of the *N/A* status to *In Progress* and update its description for *Work in progress*.

The *N/A* status is a predefined status specified by default for a new photo log. This status cannot be deleted, but you always can change its name and description.

- b. Add the following statuses:

| Status      | Description      |
|-------------|------------------|
| Not Started | Work not started |
| Completed   | Work completed   |

These statuses will be used for photo logs that indicate the state and progress of particular project tasks.

### Photo Log Preferences ☆



GENERAL SETTINGS    **STATUS**    ATTRIBUTES

| * Status    | Description      |
|-------------|------------------|
| In Progress | Work in progress |
| Not Started | Work not started |
| Completed   | Work completed   |

3. Save the changes.

Note that on the **Attributes** tab, you can specify a list of attributes that will be available for individual photos in a photo log. We will not use attributes in this lesson.

### Working with Photo Logs

1. On the Photo Logs (PJ405000) form, click Add New Record on the form toolbar.
2. On the Photo Log (PJ305000) form that opens, specify the following settings:
  - **Date:** Current date
  - **Project:** *HOTEL*
  - **Project Task:** *02 - SITEWORK*
  - **Description:** Problem with the drainage system

## Photo Log

← SAVE & CLOSE [Print] [Refresh] + [Delete] |< < > >| ACTIONS ▾

Photo Log ID:  \* Status:  Created By: admin - Pam Brawner

\* Date:

\* Project:  Project Task:  Description:

**PHOTOS**

[Refresh] + [Add] [Close] [Filter] [Print] [Filter] All Records ▾

| * Photo ID | Name | Description | Uploaded On | Uploaded By | Main Photo |
|------------|------|-------------|-------------|-------------|------------|
|            |      |             |             |             |            |

**3.** Save the changes.

Note that an identifier has been automatically generated for the photo log in accordance with the numbering sequence specified on the Photo Log Preferences (PJ103000) form.

**4.** You need to upload three photos provided with the training materials. For each photo, do the following:

- a.** On the **Photos** tab, click Add Row on the table toolbar.
- b.** On the Photo (PJ305010) form that opens, make sure that the correct photo log is selected in the **Photo Log ID** box.
- c.** Click **Upload Photo**.

## Photo

SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] |< < > >|

\* Photo Log ID:  **UPLOAD PHOTO**

\* Photo ID:

Name:

Description:

Uploaded On:

Uploaded By:

Main Photo

**ATTRIBUTES**

[Refresh] [Filter] [Print]

| Attribute | Required | Value |
|-----------|----------|-------|
|           |          |       |

**d.** By using the **Upload New Photo** dialog box that opens, upload a photo.

Upload New Photo
✕

Upload file
  Link to existing file

Choose File: Choose File culvert.jpg

Comment:

max 25000KB

e. Click **Save and Close** on the form toolbar.

As a result, the uploaded photos are listed in the table on the **Photos** tab of the Photo Log (PJ305000) form. In the preview area to the right of the table, a preview of the highlighted photo is displayed.

Photo Log
NOTES FILES CUSTOMIZATION T

← SAVE & CLOSE + K < > >| ACTIONS ▾

Photo Log ID: PL-000001 Status: In Progress Created By: admin - Pam Brawner

Date: 12/16/2019

Project: HOTEL - The Beach Hotel an

Project Task: 02 - SITEWORK

Description: Problem with the drainage system

**PHOTOS**

| Photo ID  | Name                                 | Description | Uploaded On | Uploaded By | Main Photo                          |
|-----------|--------------------------------------|-------------|-------------|-------------|-------------------------------------|
| PH-000001 | creek-crossing-concrete-headwall.jpg |             | 12/16/2019  | admin       | <input type="checkbox"/>            |
| PH-000002 | culvert.jpg                          |             | 12/16/2019  | admin       | <input checked="" type="checkbox"/> |
| PH-000003 | EROSION.jpg                          |             | 12/16/2019  | admin       | <input type="checkbox"/>            |



5. On the **Photos** tab, select the check box in the **Main Photo** column for the second uploaded photo (culvert.jpg) and save the changes.

Photo Log

← SAVE & CLOSE + |< < > >| ACTIONS ▾

Photo Log ID:  \* Status:  Created By:

\* Date:

\* Project:

Project Task:

Description:

**PHOTOS**

+  ▾

| Photo ID                                      | Name                                 | Description | Uploaded On | Uploaded By | Main Photo                          |
|---|--------------------------------------|-------------|-------------|-------------|-------------------------------------|
| <input type="checkbox"/> PH-000001            | creek-crossing-concrete-headwall.jpg |             | 12/16/2019  | admin       | <input type="checkbox"/>            |
| <input checked="" type="checkbox"/> PH-000002 | culvert.jpg                          |             | 12/16/2019  | admin       | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> PH-000003            | EROSION.jpg                          |             | 12/16/2019  | admin       | <input type="checkbox"/>            |



As a result, this photo will be displayed in the preview area on the Photo Logs (PJ405000) form as the main photo of the entire photo log. Note that only one photo can be marked as the main photo for a photo log. If no photo is marked as the main photo, the preview area will be empty.

Photo Logs ☆

+ ACTIONS ▾

Project:  Date From:

Project Task:  Date To:

▾

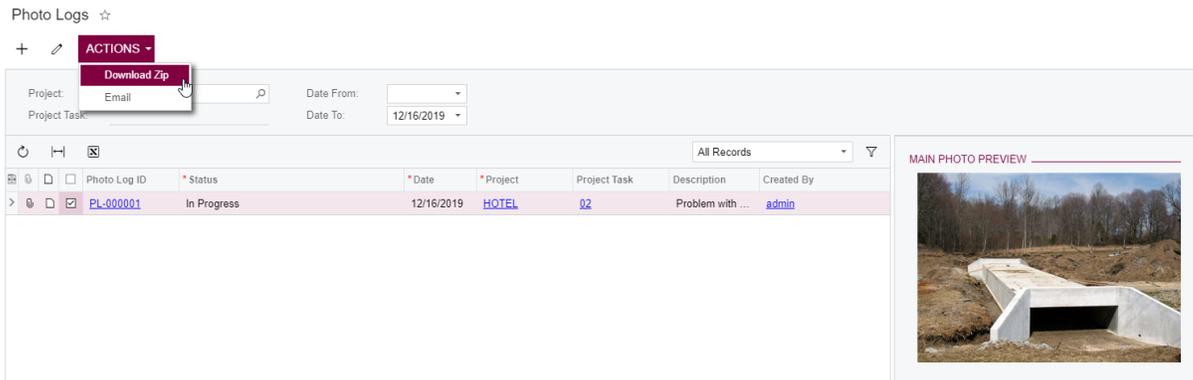
| Photo Log ID                                  | Status      | Date       | Project | Project Task | Description      | Created By |
|---|-------------|------------|---------|--------------|------------------|------------|
| <input checked="" type="checkbox"/> PL-000001 | In Progress | 12/16/2019 | HOTEL   | 02           | Problem with ... | admin      |

**MAIN PHOTO PREVIEW**



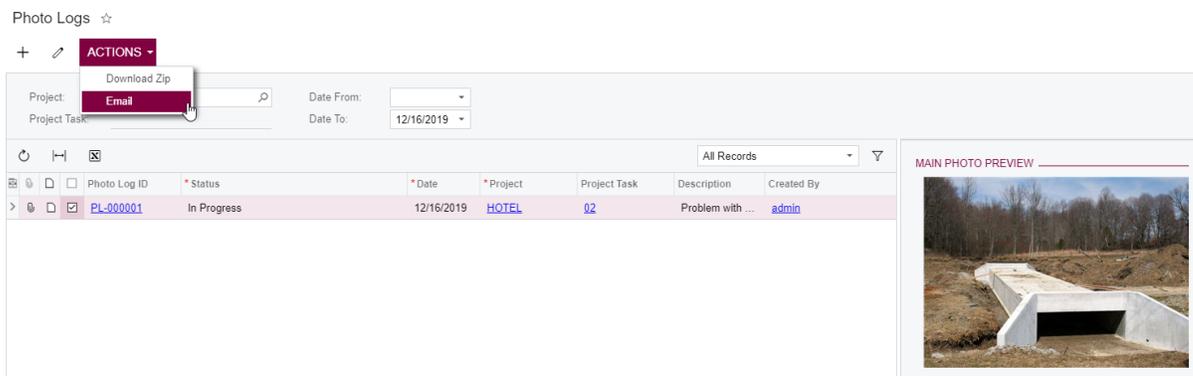
Note that on the Photo Logs (PJ405000) form, you can use the **Project** and **Project Task** boxes to filter photo logs associated with particular projects and project tasks. By using the **Date From** and **Date To** boxes, you can specify an interval for which you want to see a list of available photo logs.

- On the Photo Logs (PJ405000) form, select the unlabeled check box for the previously created photo log and then click **Actions** > **Download Zip** on the form toolbar.



As a result, a .zip file with all photos included in the selected photo log (and with all files attached to the photo log, if any) is created and downloaded. If you select multiple photo logs, all included photos and attachments will be included in a single .zip file.

7. On the Photo Logs (PJ405000) form, select the unlabeled check box for the photo log and then click **Actions** > **Email** on the form toolbar.



As a result, all the photos and files associated with the selected photo log(s) are included in a single .zip file and attached to the email on the Email Activity form that opens, which is indicated by the **Files** counter on the form title bar. The automatically generated subject of the email includes information about the photo log and the related project.

## Email Activity

NOTES **FILES (1)** CUSTOMIZATIONSAVE & CLOSE    SEND REPLY ACTIONS ▾

|            |                                       |   |
|------------|---------------------------------------|---|
| * From:    | System                                |  |
| * To:      |                                       |  |
| CC:        |                                       |  |
| BCC:       |                                       |  |
| * Subject: | Photo log #PL-000001 12-16-2019 HOTEL |   |

MESSAGE DETAILS

VISUAL ▾   Paragraph ▾ **B** *I* U ▾           INSERT LAYOUT

Note that you can move a photo from one photo log to another by simply selecting the destination photo log in the **Photo Log ID** box for the photo on the Photo (PJ305010) form and saving the changes. If you delete a photo log, all photos included in the photo log will be also deleted.

- In the Search box, start typing the ID of the photo log.

On the **Transactions and Profiles** tab of the search results, the found photo log will be listed.

PL-000 

MENU ITEMS (0) **TRANSACTIONS AND PROFILES** HELP TOPICS

**Photo Log: PL-000001**  
 Status: In Progress - Date: 12/16/2019 - Description: Problem with the drainage system - Created By: admin  
 Project: HOTEL - Project Task: 02

The system searches photo logs by photo log ID, description, and attribute.

Also, you can find a photo in a photo log by typing the name of the image file in the Search box; found files will be listed on the **Files** tab of the search results.

culvert 

SweetLife Fruits & Jams  
SweetLife Head Office and Wh... 12/16/2019 8:53 AM  

MENU ITEMS (0) TRANSACTIONS AND PROFILES HELP TOPICS **FILES** X

**culvert.jpg**  
 Created: 12/16/2019 6:12:05 AM - Size: 19.03 KB

e8207dc2-1411-411-9fcb-7c5cf8919e20 culvert.jpg  
 Created: 12/16/2019 6:12:05 AM - Size: 19.03 KB

## Lesson 15: Daily Field Reports

---

A daily field report (DFR), or a daily log, is used by project managers and site supervisors in construction to record observations, activities, and conditions that occur on a project site every day. This data can be valuable in analyzing why a project might have a problem, be delayed, or be unprofitable. They can also be used as records in litigation if there is a dispute with the owner, a staff member, insurance or bond issuer, or a subcontractor. DFRs help to make sure everyone is looking at the same data both in the field and in the office.

A DFR is often entered and submitted by one person (usually a supervisor, site leader, foreman, or project manager), but sometimes the responsibility can be shared amongst more than one of these personas. A new DFR is typically entered every day, for each construction project. The exact frequency may vary by company. A project may have one DFR submitted each day for each project, or possibly multiple DFR's submitted daily for larger or complex projects. Owners are often interested in reviewing daily logs.

### 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:
  - labor time and activities
  - change requests
  - change orders
  - subcontractor activities
  - project issues
  - weather conditions
  - site visitors
- Email the daily field report

### Story

Suppose that Bill Owens, a project manager in the SweetLife company, spent a day on the construction site of the Italian restaurant. During the day he made notes about employee and subcontractor activities, weather conditions, project issues, visitors, and the like. Also, Bill took a couple of photos to support his report about weather conditions. At the end of the day, Bill creates a daily field report in Acumatica ERP Construction Edition, adds all his notes, and sends it for review to the customer.

## System Preparation

Sign in as a project manager by using the *owen* login and the *123* password.

### Configuring an Approval Map for DRFs

Do the following to configure an approval map:

1. Open the Project Management Preferences (PJ101000) form and review the **Daily Field Report Settings** section (shown in the screenshot below).

By using settings in this section, you can specify a numbering sequence to be used by the system to assign a unique identifier to each created report. Also, you can configure how the daily field reports should go through an approval process. That is, you specify an approval map and a notification template for reports that are pending approval.

Project Management Preferences ☆

GENERAL SETTINGS

| <b>DUE DATE CALCULATION</b>  |                                   | <b>PROJECT ISSUE SETTINGS</b>   |                          |                      |             |  |  |
|--|-----------------------------------|---|--------------------------|----------------------|-------------|--|--|
| * Due Date Calculation Type:   | Sequential Days (incl. weekends)  | * Project Issue Numbering Sequence:   | PROISSUE - Project Issue |                      |             |  |  |
| Calendar:  |                                   | Project Issue Assignment Map:   |                          |                      |             |  |  |
| <b>REQUEST FOR INFORMATION SETTINGS</b>                                  |                                   | <table border="1"> <thead> <tr> <th>* Project Issue Type</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td colspan="2">No records found.<br/>Try to modify parameters above to see records here.</td> </tr> </tbody> </table> |                          | * Project Issue Type | Description | No records found.<br>Try to modify parameters above to see records here. |  |
| * Project Issue Type   | Description                       |   |                          |                      |             |  |  |
| No records found.<br>Try to modify parameters above to see records here. |                                   |   |                          |                      |             |  |  |
| * RFI Numbering Sequence:  | REQFORINFO - Request For Informat |   |                          |                      |             |  |  |
| Default Email Notification:  |                                   |   |                          |                      |             |  |  |
| RFI Assignment Map:  |                                   |   |                          |                      |             |  |  |
| <b>DAILY FIELD REPORT SETTINGS</b>                                       |                                   |   |                          |                      |             |  |  |
| * DFR Numbering Sequence:  | DFREPORT - Daily Field Report     |   |                          |                      |             |  |  |
| DFR Approval Map:  |                                   |   |                          |                      |             |  |  |
| Pending Approval Notification:   | Daily Field Report                |   |                          |                      |             |  |  |

2. Open the Assignment and Approval Maps (EP205500) form.
3. On the form toolbar, click **Add Approval Map**. The system opens the Approval Maps (EP205015) form.
4. In the Selection area of the form, do the following:
  - a. In the **Name** box, type *DFR Approval*.
  - b. In the **Entity Type** box, select *Daily Field Report*.
5. In the **Steps** pane, click **Add Step**. The system adds a step with a rule.
6. Click the rule and then, in the right pane on the **Conditions** tab, do the following:
  - a. In the **Description** box, type *PMApprvl*.
  - b. In the table, add a row with the following settings:
    1. **Entity:** *Daily Field Report*

**2. Field Name:** *Project Manager*

**3. Condition:** *Is Not Empty*

Approval Maps

← SAVE & CLOSE 📄 ↶ + 📄 ▾ 🗑️

Map:  Entity Type:   
 \* Name:

Steps  
 ADD STEP + ↑ ↓ ×

📁 Step  
 📄 PMAprvl

CONDITIONS RULE ACTIONS

\* Description:   
 Active

🔄 + × INSERT ↑ ↓ |←|

| Active                              | Bracket | * Entity           | * Field Name    | * Condit     | Value |
|-------------------------------------|---------|--------------------|-----------------|--------------|-------|
| <input checked="" type="checkbox"/> | -       | Daily Field Report | Project Manager | Is Not Empty |       |

**7.** In the right pane on the **Rule Actions** tab, specify settings as follows:

- a. Approver:** *Employee from Document*
- b. Employee:** *((DailyFieldReport.ProjectManagerId))*
- c. On Approval:** *Approve Document*

Approval Maps

← SAVE & CLOSE 📄 ↶ + 📄 ▾ 🗑️

Map:  Entity Type:   
 \* Name:

Steps  
 ADD STEP + ↑ ↓ ×

📁 Step  
 📄 PMAprvl

CONDITIONS **RULE ACTIONS**

APPROVAL SETTINGS

Approver:

Employee:

Workgroup:

\* Decision Wait Time:

On Approval:

**8.** Click **Save** on the form toolbar.

9. On the Project Management Preferences (PJ101000) form, in the **Daily Field Report Settings** section, in the **DFR Approval Map** box, select the approval map that you have just created (*DFR Approval*).

10. Save the changes.

### Creating a Daily Field Report

Create a daily field report as follows:

1. Open the Projects (PM301000) form.
2. In the **Project ID** box, select *ITALIAN3*.

Review the list of related documents: change requests, change orders, commitments.

3. Open the Daily Field Reports (PJ304000) form.
4. In the **Project** box, select *ITALIAN3*.
5. On the form toolbar, click **Save**.

### Adding Labor Time and Activities

Record labor time and activities as follows:

1. While you are still viewing the daily field report on the Daily Field Reports (PJ304000) form, on the **Labor Time and Activities** tab of the form, add records with the following settings:

| Employee   | Employee Name   | Earning Type | Sub Job | Cost Code | Time    | Time Spent | Billable | Billable Time | Description          |
|------------|-----------------|--------------|---------|-----------|---------|------------|----------|---------------|----------------------|
| EP00000017 | Archibald Knorr | RG           | 01      | 01-300    | 9:00 AM | 08:00      | True     | 08:00         | GENERAL REQUIREMENTS |
| EP00000016 | Jack Carrey     | RG           | 03      | 03-100    | 9:00 AM | 08:00      | True     | 08:00         | CONCRETE             |
| EP00000015 | Bill Owen       | RG           | 02      | 00-000    | 7:00 AM | 10:00      | True     | 10:00         | SITE-WORK            |

2. Save your changes.

### Adding Change Requests

Add change requests as follows:

1. While you are still viewing the daily field report on the Daily Field Reports (PJ304000) form, on to the **Change Requests** tab of the form, add a row.

- In the **Reference Nbr.** column, select an existing change request of the project (as shown on the screenshot below).

Daily Field Report

← SAVE & CLOSE ↻ + 🗑️ 📄 ⌂ K < > ⌂ PRINT/EMAIL ACTIONS ▾

\* DFR ID:  \* Project: ITALIAN3 - Italian Restaurant Created By: admin - Tamara M  
 Status: On Hold \* Project Manager: EP00000015 - Bill Owen  
 Hold  
 \* Date: 11/22/2019

LABOR TIME AND ACTIVITIES CHANGE REQUESTS SUBCONTRACTORS PROJECT ISSUES WEATHER VISITORS APPROVALS

🔄 + ✕ CREATE NEW CHANGE REQUEST |🔍

| * Reference Nbr. | Change Date | Ext. Ref. Nbr. | Description                                    | Status | Cost Total | Line Total | Markup Total | Price Total | Last Modified By | Last Modified On |
|------------------|-------------|----------------|--|--------|------------|------------|--------------|-------------|------------------|------------------|
| > 000004         | 3/21/2019   |                | Wet subfloor needs drying, cleaning and air... | Closed | 1,380.00   | 1,656.16   | 1,208.68     | 2,864.84    | admin - Tamara M | 11/22/2019 7:    |

- On the table toolbar, click **Create New Change Request** to add a change request on the fly.
- In the form that opens add a change request with the following settings:
  - Description:** *A hole in the wall*
  - Change Date:** *08/20/2019*
- On the **Estimation** tab, upload the estimation lines from the DFR\_CR1.xlsx file, which is provided with the training materials.
- Approve and save the change request.
- Close the form.
- On the **Change Requests** tab of the Daily Field Reports (PJ304000) form, verify that the created change request has been added to the table (as shown on the screenshot below).

Daily Field Report

← SAVE & CLOSE ↻ + 🗑️ 📄 ⌂ K < > ⌂ PRINT/EMAIL ACTIONS ▾

\* DFR ID:  \* Project: ITALIAN3 - Italian Restaurant Created By: admin - Tamara M  
 Status: On Hold \* Project Manager: EP00000015 - Bill Owen  
 Hold  
 \* Date: 11/22/2019

LABOR TIME AND ACTIVITIES CHANGE REQUESTS SUBCONTRACTORS PROJECT ISSUES WEATHER VISITORS APPROVALS

🔄 + ✕ CREATE NEW CHANGE REQUEST |🔍

| * Reference Nbr. | Change Date | Ext. Ref. Nbr. | Description                                    | Status | Cost Total | Line Total | Markup Total | Price Total | Last Modified By | Last Modified On |
|------------------|-------------|----------------|--|--------|------------|------------|--------------|-------------|------------------|------------------|
| > 000004         | 3/21/2019   |                | Wet subfloor needs drying, cleaning and air... | Closed | 1,380.00   | 1,656.16   | 1,208.68     | 2,864.84    | admin - Tamara M | 11/22/2019 7:    |
| > 000006         | 8/20/2019   |                | A hole in the wall                             | Open   | 1,000.00   | 0.00       | 0.00         | 0.00        | owen - Bill Owen | 11/22/2019 7:    |

### Adding Change Orders

You can add change orders as follows:

1. While you are still viewing the daily field report on the Daily Field Reports (PJ304000) form, open the **Change Orders** tab of the form.
2. On the tab, add a row and in the **Reference Nbr.** column, select an existing change order of the project.
3. On the table toolbar, click **Create New Change Order** to add a change order on the fly.

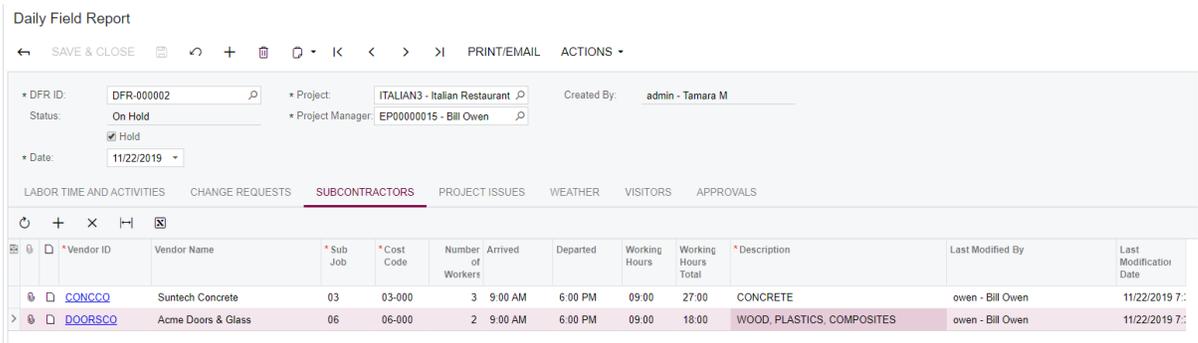
### Registering Subcontractor Activities

Register subcontractors activities as follows:

1. While you are still viewing the daily field report on the Daily Field Reports (PJ304000) form, switch to the **Subcontractors** tab of the form.
2. On the tab, add records of activities of the CONCCO and DOORSCO subcontractors with the following settings:

| Vendor ID | Vendor Name        | Sub Job | Cost Code | Number of Workers | Arrived  | Departed | Working Hours Total |
|-----------|--------------------|---------|-----------|-------------------|----------|----------|---------------------|
| CONCCO    | Suntech Concrete   | 03      | 03-000    | 3                 | 09:00 AM | 06:00 PM | 27:00               |
| DOORS-CO  | Acme Doors & Glass | 06      | 06-000    | 2                 | 09:00 AM | 06:00 PM | 18:00               |

3. In the table, review the added records (shown on the screenshot below).



### Reporting Project Issues

Report project issues as follows:

1. While you are still viewing the daily field report on the Daily Field Reports (PJ304000) form, switch to the **Project Issues** tab of the form.
2. On the tab, add new row and in the **Project Issue ID** column, select an existing project issue to associate it with the report (as shown in the screenshot below).

Daily Field Report

← SAVE & CLOSE [Print] [Refresh] + [Trash] [Dropdown] [Left Arrow] [Right Arrow] [Next Arrow] [Previous Arrow] PRINT/EMAIL ACTIONS ▾

\* DFR ID:  \* Project:  Created By: 
  
 Status:  \* Project Manager: 
  
 Hold
   
 \* Date:

LABOR TIME AND ACTIVITIES CHANGE REQUESTS SUBCONTRACTORS **PROJECT ISSUES** WEATHER VISITORS APPROV

🔄 + × CREATE NEW PROJECT ISSUE [Filter] [Close]

| * Project Issue ID        | Summary      | Status | Priority | Sub Job |
|---------------------------|--------------|--------|----------|---------|
| <a href="#">IS-000003</a> | Wet subfloor | Open   | High     | 01      |

Notice, that by clicking **Create New Project Issue** on the table toolbar, you can add a new project issue on the fly.

**Reporting Weather Conditions**

Add reports about weather conditions as follows:

1. While you are still viewing the daily field report on the Daily Field Reports (PJ304000) form, switch to the **Weather** tab.
2. On the tab, add rows with the weather conditions on the site with the following settings:

| Time Observed | Sky        | Temperature | Precipitation | Wind | Site Conditions | Delay   | Description              |
|---------------|------------|-------------|---------------|------|-----------------|---------|--------------------------|
| 07:37 AM      | Cloudy     | Warm        | None          | None | Dry             | Cleared | Normal weather, no delay |
| 4:30 PM       | Few Clouds | Mild        | None          | Calm | Dry             | Cleared | Warm, Dry day            |

3. In the table, attach the DFR\_weather1.jpg file, which is provided with the training materials, to the first record. Attach the DFR\_weather2.jpg file to the second record.
4. In the table, review the added records (shown in the screenshot below).

Daily Field Report

← SAVE & CLOSE [Print] [Refresh] [Add] [Delete] [Copy] [Paste] [Home] [Back] [Forward] [Print/Email] ACTIONS ▾

\* DFR ID: DFR-000002 \* Project: ITALIAN3 - Italian Restaurant Created By: admin - Tamara M  
 Status: On Hold \* Project Manager: EP00000015 - Bill Owen  
 Hold  
 \* Date: 8/20/2019

LABOR TIME AND ACTIVITIES CHANGE REQUESTS SUBCONTRACTORS PROJECT ISSUES **WEATHER** VISITORS APPROVALS

| Time Observed | * Sky      | * Temperature | * Precipitation | * Wind | * Site Conditions | Delay                    | Description              |
|---------------|------------|---------------|-----------------|--------|-------------------|--------------------------|--------------------------|
| 7:37 AM       | Cloudy     | Warm          | None            | None   | Dry               | <input type="checkbox"/> | Normal weather, no delay |
| 4:30 PM       | Few Clouds | Mild          | None            | Calm   | Dry               | <input type="checkbox"/> |                          |

### Registering Visitors

Add records about site visitor as follows:

1. While you are still viewing the daily field report on the Daily Field Reports (PJ304000) form, switch to the **Visitors** tab.
2. On the tab, add rows with details on site visitors with the following settings:

| Visitor Type | Name       | Business Account | Company   | Ar-rived | De-parted | Pur-<br>pose of<br>Visit                                    | Area Vis-<br>ited/In-<br>spected En-<br>tity   | De-<br>scrip-<br>tion         |
|--------------|------------|------------------|---|----------|-----------|---|--|-------------------------------|
| Customer     | Adam Smith | ITALIAN01        | Italian Restaurants Co  | 5:00 PM  | 6:00 PM   | Con-<br>struc-<br>tion<br>progress<br>control<br>site visit | Site - Base-<br>ment                           |                               |
| Owner        | Bill Owen  | EP00000015       | Sweet-<br>Life<br>Head<br>Office<br>and<br>Whole-<br>sale<br>Center | 9:00 AM  | 6:00 PM   | Review<br>pro-<br>posed<br>change<br>re-<br>quests          | Site - Wall<br>with the<br>hole, sub-<br>floor | Internal<br>CRs ap-<br>proved |

### Printing and Emailing the Daily Field Report

Print and email the daily field report as follows:

1. While you are still viewing the daily field report on the Daily Field Reports (PJ304000) form, click **Print/Email** on the form toolbar.

The following screenshots show the Daily Field Report Form (PJ644000) form.

> > | PRINT SEND EXPORT -

### Daily Field Report

Company: SweetLife Fruits & Jams

|  |                                      |  |
|--|--------------------------------------|--|
| Project: Italian Restaurant Project                  | Project ID: <a href="#">ITALIAN3</a> |  |
| Date of DFR: 8/20/2019                               | DFR ID: DFR-000002                   |  |
| Day: Tuesday   | Status: On Hold                      |  |
| Project Manager: <a href="#">EP0000015-Bill Owen</a> | Created By: admin-Tamara M           |  |

#### Weather

| Time Observed | Sky    | Temperature | Precipitation | Wind | Site Condition | Delay | Description              |
|---------------|--------|-------------|---------------|------|----------------|-------|--------------------------|
| 7:37 AM       | Cloudy | Warm        | None          | None | Dry            | No    | Normal weather, no delay |



|         |            |      |      |      |     |    |  |
|---------|------------|------|------|------|-----|----|--|
| 4:30 PM | Few Clouds | Mild | None | Calm | Dry | No |  |
|---------|------------|------|------|------|-----|----|--|

### Daily Field Report

Company: SweetLife Fruits & Jams



#### Labor Time & Activities

| Employee                                  | Earning Type | Sub Job | Cost Code | Time    | Time Spent | Billable Time | Description | Last |
|---|--------------|---------|-----------|---------|------------|---------------|-------------|------|
| <a href="#">EP0000017-Archibald Knorr</a> | RG           | 01      | 01-300    | 9:00 AM | 08:00      | 08:00         | GENERAL     | over |
| <a href="#">EP0000016-Jack Carrey</a>     | RG           | 03      | 03-100    | 9:00 AM | 08:00      | 08:00         | CONCRETE    | over |
| <a href="#">EP0000015-Bill Owen</a>       | RG           | 02      | 00-000    | 7:00 AM | 10:00      | 10:00         | SITWORK     | over |

#### Change Requests

| Reference Nbr.         | Change Date | Ext.Ref.Nbr | Description        | Status | Cost Total | Line Total | Markup Total | Price Total | L |
|------------------------|-------------|-------------|--------------------|--------|------------|------------|--------------|-------------|---|
| <a href="#">000004</a> | 3/21/2019   |             | Wet subfloor needs | Closed | 1,380.00   | 1,656.16   | 1,208.68     | 2,864.84    | a |
| <a href="#">000006</a> | 8/20/2019   |             | A hole in the wall | Open   | 1,000.00   | 0.00       | 0.00         | 0.00        | o |

#### Subcontractors

| Vendor                  | Vendor Name     | Sub Job | Cost Code | Number of Workers | Arrived | Departed | Working Hours | Working Hours Total | Description                |
|-------------------------|-----------------|---------|-----------|-------------------|---------|----------|---------------|---------------------|----------------------------|
| <a href="#">CONCCO</a>  | Suntech         | 03      | 03-000    | 3                 | 9:00 AM | 6:00 PM  | 09:00         | 27:00               | CONCRETE                   |
| <a href="#">DOORSCO</a> | Acme Doors & 06 |         | 06-000    | 2                 | 9:00 AM | 6:00 PM  | 09:00         | 18:00               | WOOD, PLASTICS, COMPOSITES |

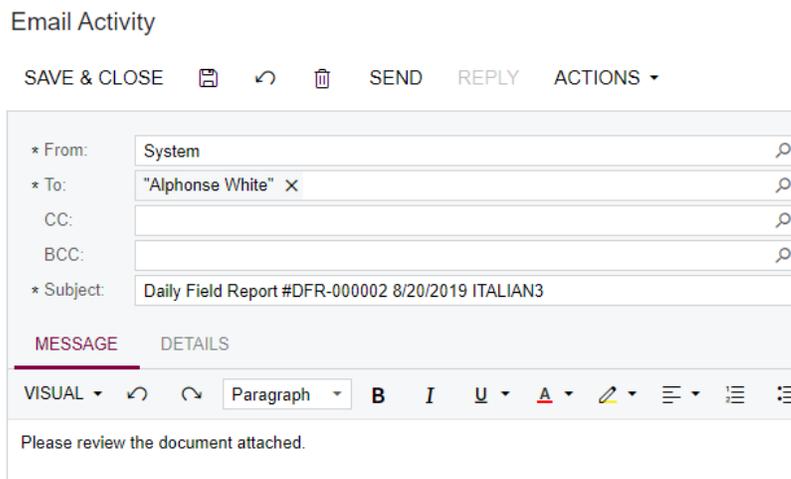
#### Project Issues

| Project Issue ID          | Summary      | Status | Priority | Sub Job | Project Issue Type |
|---------------------------|--------------|--------|----------|---------|--------------------|
| <a href="#">IS-000003</a> | Wet subfloor | Open   | High     | GENERAL |                    |

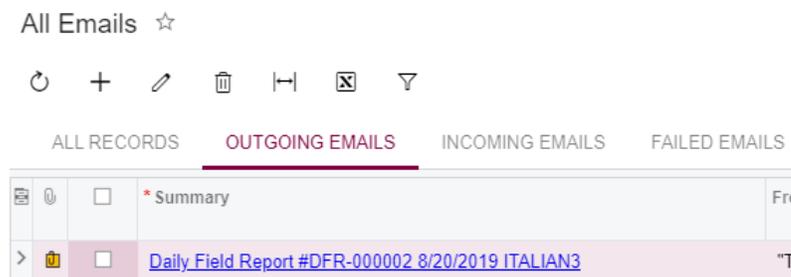
#### Visitors

| Visitor Type | Name | Company | Arrived | Departed | Purpose of Visit | Area Visited / Inspected Entity | Description |
|--------------|------|---------|---------|----------|------------------|---------------------------------|-------------|
|--------------|------|---------|---------|----------|------------------|---------------------------------|-------------|

2. Click **Send**.
3. In the **Email Activity** pop-up window, in the **To** box, select *Alphonse White*, and on the **Message** tab, type *Please review the document attached* (as shown in the screenshot below).



4. Open the **All Emails** (CR306015) form and verify that your email with the DFR attached has been successfully sent to the customer.



### Approving a Daily Field Report

Approve a daily field report as follows:

1. Open the Daily Field Report (PJ304000) form.
2. In the **DFR ID** box, select the report that you created earlier.
3. In the Summary area, clear the **Hold** check box. The system changes the report status to *Pending Approval*.
4. On the **Approvals** tab, review the record with the pending approval from Bill Owen (as shown on the screenshot below).

Daily Field Report

← SAVE & CLOSE [Icons] PRINT/EMAIL ACTIONS ▾

\* DFR ID:  Project: ITALIAN3 - Italian Restaurant Pri Created By: admin - Tamara M  
 Status: Pending Approval Project Manager: EP00000015 - Bill Owen  
 Hold  
 Date: 8/20/2019

LABOR TIME AND ACTIVITIES CHANGE REQUESTS SUBCONTRACTORS PROJECT ISSUES WEATHER VISITORS APPROVALS

| Assignee ID | Assigned To | Workgroup | Approved By (ID) | Approved By | Approval Date | Status  | Reason |
|-------------|-------------|-----------|------------------|-------------|---------------|---------|--------|
| EP00000015  | Bill Owen   |           |                  |             |               | Pending |        |

5. On the form toolbar, click **Actions > Approve**.

**Reviewing Added Entities of a Project**

Review the newly added entities for a project as follows:

1. Open the Projects (PM301000) form.
2. In the **Project ID** box, select *ITALIAN3*.
3. On the **Activity History** tab, verify that it contains records for labor activities added when you created the daily field report.

Projects [Icons] NOTES FILES NOTIFICATIONS TOOL

← SAVE & CLOSE [Icons] RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

\* Project ID: ITALIAN3 \* Status: Active Assets: 0.00  
 Customer: ITALIANO1 - The Italian Company Liabilities: 0.00  
 Template: CONTM - Construction T&M Project Income: 0.00  
 Description: Italian Restaurant Project Expenses: 184,517.00

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

| Type      | Summary              | Status    | Start Date    | Category | Billable                            | Time Spent | Overtim | Billable Time | Billable Overtim | Workgroup | Owner          |
|-----------|----------------------|-----------|---------------|----------|-------------------------------------|------------|---------|---------------|------------------|-----------|----------------|
| Time A... | SITEWORK             | Completed | 8/20/2019 7:0 |          | <input checked="" type="checkbox"/> | 10.00      | 00.00   | 10.00         | 00.00            |           | Bill Owen      |
| Time A... | CONCRETE             | Completed | 8/20/2019 9:0 |          | <input checked="" type="checkbox"/> | 08.00      | 00.00   | 08.00         | 00.00            |           | Jack Catney    |
| Time A... | GENERAL REQUIREMENTS | Completed | 8/20/2019 9:0 |          | <input checked="" type="checkbox"/> | 08.00      | 00.00   | 08.00         | 00.00            |           | Archibald Koop |

4. On the **Change Requests** tab of the form, verify that it contains the change request added when you created the daily field report.

Projects

← SAVE & CLOSE + |< < > >| RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE O

\* Project ID: ITALIAN3 \* Status: Active Assets: 0.00  
 Customer: ITALIAN01 - The Italian Company Liabilities: 0.00  
 Template: CONTM - Construction T&M Project Income: 0.00  
 \* Description: Italian Restaurant Project Expenses: 184,517.00

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

| Reference Nbr. | Status | * Change Date | * Description                                  | Cost Total | Line Total | Markup Total | Price Total |
|----------------|--------|---------------|--|------------|------------|--------------|-------------|
| 000004         | Closed | 3/21/2019     | Wet subfloor needs drying, cleaning and air... | 1,380.00   | 1,656.16   | 1,208.68     | 2,864.84    |
| 000005         | Closed | 7/29/2019     | French Style Window                            | 1,890.00   | 2,264.98   | 1,285.39     | 3,550.37    |
| 000006         | Open   | 8/20/2019     | A hole in the wall                             | 1,000.00   | 0.00       | 0.00         | 0.00        |

## Lesson 16: Lien Waiver Automation

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A lien waiver is a compliance document involved in the payment process for a project. The party that receives a payment (for instance, a contractor, subcontractor, or material supplier) signs a lien waiver to waive their rights against the property in exchange for the payment.

Basic types of lien waivers:

- *Conditional* waivers for *partial* (or progress) payment: Used when a progress payment on the project is expected. A signed lien waiver of this type becomes effective immediately after the payment has been received.
- *Conditional* waivers for *final* payment: Used when the entire contract value is to be paid at one time or when the payment in question is the final payment for a project. A signed lien waiver of this type also becomes effective only after the payment has been received.
- *Unconditional* waivers for *partial* (or progress payment): Used when a progress payment on the project is expected. A lien waiver of this type becomes effective after it has been signed, regardless of whether the payment has been actually received.
- *Unconditional* waivers for *final* payment: Used for a one-time payment or for the final payment for a project. A lien waiver of this type becomes unconditionally effective once it has been signed even if no payment has been actually received.

Users can manually create new lien waivers, or automatic generation of lien waivers can be set up in the system, separately for conditional and unconditional lien waivers.

### Learning Objectives

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

- Configure automatic generation of lien waivers
- Set up warnings on outstanding lien waivers
- Configure the mailing of lien waivers
- Process lien waivers

### Story

We want conditional lien waivers to be automatically generated when we submit payments linked to AP bills.

### System Preparation

Sign in to the system by using the *admin* login and the *123* password.

## Configuring the Mailing of Lien Waivers

The processing of lien waivers includes emailing the documents to vendors who should return them signed. So that the system can generate emails with lien waivers attached, mailing should be properly configured.

To configure the mailing, do the following:

1. Create a notification template for lien waivers as follows:
  - a. On the Notification Templates (SM2040PL) form, click **+** (New Record) on the form toolbar.

The Notification Templates (SM204003) form opens.

- b. In the **Screen Name** box, select the *Print/Email Lien Waivers (CL502000)* form.
- c. In the **Description** box, type: Lien Waivers.
- d. In the **Subject** box, type: Lien waiver email.
- e. In the text editor area on the **Message** tab, specify the following text:

*Dear Vendor,*

*Here's your lien waiver.*

*Sincerely yours,*

*SweetLife*

- f. Save the changes.

When generating emails with lien waivers, the system will use the subject and the message body from the notification template.

2. On the Vendor Classes (AP201000) form, select the *SUBCON* vendor class, click the **Mailing Settings** tab, and do the following:
  - a. Make sure that the *Conditional Final* and *Conditional Partial* mailings are included in the **Mailings** table and marked as **Active**.
  - b. For each of these mailings, select the *Lien Waivers* notification template in the **Notification Template** column and in the **Recipients** table below, add a row with *Remittance* selected in the **Contact Type** column and default settings specified in other columns.
  - c. Make sure that in the **Report** column, *CL642003* is specified for the *Conditional Final* mailing and *CL642001* for the *Conditional Partial* mailing. These are the identifiers of the printed forms that will be generated and attached to an email.
  - d. Save the changes.

## Vendor Classes

← SAVE & CLOSE   +   K < > >| ADD TO PROJECT

\* Class ID:  

Description:

GENERAL SETTINGS   GL ACCOUNTS   ATTRIBUTES   **MAILING SETTINGS**

**Mailings**

 + ×  

| Mailing ID          | Branch | Email Account | Report      | Notification Template | Format | Active                              |
|---------------------|--------|---------------|-------------|-----------------------|--------|-------------------------------------|
| Conditional Final   |        |               | CL.64.20.03 | Lien Waiver           | PDF    | <input checked="" type="checkbox"/> |
| Conditional Partial |        |               | CL.64.20.01 | Lien Waiver           | PDF    | <input checked="" type="checkbox"/> |
| PURCHASE ORDER      |        |               | PO.64.10.00 |                       | PDF    | <input checked="" type="checkbox"/> |
| RQPROPOSAL          |        |               | RQ.61.10.00 |                       | PDF    | <input checked="" type="checkbox"/> |
| SUBCONTRACT         |        | system...     | SC.64.10.00 | Subcontracts          | PDF    | <input checked="" type="checkbox"/> |
| Unconditional Final |        |               | CL.64.20.04 |                       | PDF    | <input checked="" type="checkbox"/> |

**Recipients**

 + ×  

| Contact Type | Contact ID | Format | Active                              | Bcc                      |
|--------------|------------|--------|-------------------------------------|--------------------------|
| Remittance   |            | PDF    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

These settings will be copied for any new vendor of the class. Note that mailing settings may be overridden and set up as needed for any individual vendor. When generating emails with lien waivers, the system will specify the email address of the remittance contact of the vendor (which you can review on the **Payment Settings** tab of the Vendors form) as the recipient address. Emails will be sent from the default system email account.

### Configuring Automatic Generation of Lien Waivers

1. On the **Lien Waiver Settings** tab of the Compliance Preferences (CL301000) form, do the following:
  - a. Select the **Automatically Generate Lien Waivers** check box in the **Conditional Lien Waivers** group of elements.
  - b. Review the default settings and click **Save** on the form toolbar.

Compliance Preferences ☆

📄 ↶

LIEN WAIVER SETTINGS   LIEN WAIVER REPORTING SETTINGS   CUSTOM ATTRIBUTES   COMMON ATTRIBUTES

---

**OUTSTANDING LIEN WAIVERS**

Warn of Outstanding Lien Waivers During AP Bill Entry

Warn of Outstanding Lien Waivers When Selecting AP Bill for Payment

Stop Payment of AP Bill When There Are Outstanding Lien Waivers

---

**CONDITIONAL LIEN WAIVERS**

Automatically Generate Lien Waivers

Generate Lien Waivers on:   Paying AP Bill

Through Date:   Posting Period End Date

Final Lien Waiver Amount:   AP Bill Amount

---

**UNCONDITIONAL LIEN WAIVERS**

Automatically Generate Lien Waivers

Generate Lien Waivers on:   Paying AP Bill

Through Date:   AP Check Date

Final Lien Waiver Amount:   Amount Paid

Because the **Hold Documents on Entry** check box is selected on the **General Settings** tab of the Accounts Payable Preferences (AP101000) form, a lien waiver will be generated when the status of the accounts payable check (or checks) changes from *On Hold* to *Pending Printing* or *Balanced*. (If the **Hold Documents on Entry** check box is cleared, a lien waiver is generated immediately when the accounts payable check is created with the *Pending Printing* or *Balanced* status.)

The through date is set to be the last day of the posting period of the accounts payable bill. This date defines by which date the party that signs a lien waiver agrees to waive their rights for the work completed since the previous lien waiver (if any).

The amount of an automatically generated final conditional lien waiver will equal the amount of the accounts payable bill.

2. On the **Lien Waiver Settings** tab of the Projects (PM301000) form, for the *HOTEL* project, review the **Through Date** setting and then, in the table below it, specify the following settings:
  - **Vendor Class:** *SUBCON* (this indicates that conditional lien waivers may be automatically generated only for vendors that belong to this vendor class)
  - **Minimum Commitment Amount:** *2000* (lien waivers will be automatically generated for commitments whose amount is larger than or equal to the specified minimum amount)

Projects NOTES FILES NOTIFICATIONS CUSTOMIZATI

← SAVE & CLOSE + K < > > > RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS • INQUIRIES • REPORTS •

|   |                               |                        |                   |              |
|---|-------------------------------|------------------------|-------------------|--------------|
| * Project ID: HOTEL   | * Status: Active              | Assets: 0.00           | Liabilities: 0.00 | Income: 0.00 |
| Customer: EQUGRP - The Equity Group Investor                                      | <input type="checkbox"/> Hold | Expenses: 1,386,750.00 |                   |              |
| Template: <input type="text" value="The Beach Hotel and Condominiums, New York"/> |                               |                        |                   |              |

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

CONDITIONAL LIEN WAIVERS UNCONDITIONAL LIEN WAIVERS

Through Date: Posting Period End Date Through Date: AP Check Date

ADD ALL VENDOR CLASSES

| Vendor Class | Minimum Commitment Amount |
|--------------|---------------------------|
| SUBCON       | 2,000.00                  |

3. Save the changes.

4. On the **General Settings** tab of the Vendor Classes (AP201000) form, for the *SUBCON* vendor class, select the **Generate Lien Waivers Automatically** check box to indicate that lien waivers will be automatically generated for vendors that belong to this vendor class. The lien waiver settings specified for the particular project will be used for generating the lien waivers. Save the changes.

### Vendor Classes

← SAVE & CLOSE + K < > > > ADD TO PROJECT

\* Class ID: SUBCON

Description: Subcontractors

**GENERAL SETTINGS** GL ACCOUNTS ATTRIBUTES MAILING SETTINGS

|  |   |
|--|---|
| <p><b>DEFAULT GENERAL SETTINGS</b></p> <p>Country: US - United States of America</p> <p>Tax Zone ID: <input type="text"/></p> <p><input type="checkbox"/> Require Tax Zone</p> | <p><b>DEFAULT FINANCIAL SETTINGS</b></p> <p>Terms: 30D - 30 Days</p> <p>Payment Method: CHECK - Check Payment</p> <p>Cash Account: <input type="text"/></p> <p>Payment By: Due Date</p> <p><input checked="" type="checkbox"/> Pay by Line</p> <p><input checked="" type="checkbox"/> Apply Retainage</p> |
| <p><b>DEFAULT PURCHASE SETTINGS</b></p> <p>Shipping Terms: <input type="text"/></p> <p>Receipt Action: Accept but Warn</p>   | <p><b>DEFAULT PRINT AND EMAIL SETTINGS</b></p> <p><input type="checkbox"/> Print Orders</p> <p><input type="checkbox"/> Send Orders by Email</p>  |
| <p><b>DEFAULT LIEN WAIVER SETTINGS</b></p> <p><input checked="" type="checkbox"/> Generate Lien Waivers Automatically</p>  |   |

5. On the **General Info** tab of the Vendors (AP303000) form, create a vendor with the following settings specified:

- **Vendor ID:** ARCHCO
- **Vendor Name:** Architectural Design Company
- **Email:** main@abc.con
- **Vendor Class:** SUBCON

Make sure that the **Generate Lien Waivers Based on Project Settings** check box is selected.

Vendors

← SAVE & CLOSE 📄 ↶ + 🗑️ ⏪ < > ⏩ ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

|                |                              |           |          |                     |      |
|----------------|------------------------------|-----------|----------|---------------------|------|
| * Vendor ID:   | ARCHCO 🔍                     | * Status: | Active ▾ | Balance:            | 0.00 |
| * Vendor Name: | Architectural Design Company |           |          | Prepayment Balance: | 0.00 |
|                |                              |           |          | Retained Balance:   | 0.00 |

GENERAL INFO | PAYMENT SETTINGS | PURCHASE SETTINGS | CONTACTS | ATTRIBUTES | ACTIVITIES | 🟡 GL ACCOUNTS

**MAIN CONTACT**

Company Name: Architectural Design Company

Attention:

Email: main@adc.con ✉️

Web: 🌐

Phone 1:

Phone 2:

Fax:

Account Ref. #:

Parent Account: 🔍 ✎

**MAIN ADDRESS**

Address Line 1:

Address Line 2:

City:

\* Country: US - United States of America 🔍

State: 🔍

Postal Code: VIEW ON MAP

County:

**VENDOR DEFAULTS**

Cost Code: 🔍

Account Group/Item: 🔍

**FINANCIAL SETTINGS**

\* Vendor Class: SUBCON - Subcontractors 🔍 ✎

Terms: 30D - 30 Days 🔍 ✎

**VENDOR PROPERTIES**

Landed Cost Vendor

Vendor is Tax Agency

**RETAINAGE SETTINGS**

Apply Retainage

Retainage Percent: 0.000000

**LIEN WAIVER SETTINGS**

Generate Lien Waivers based on Project settings

6. Save the vendor record.

**Working with Lien Waivers**

1. On the Subcontracts (SC301000) form, create a subcontract for the ARCHCO vendor with the following document line specified on the **Document Details** tab:

- **Account Group/Item:** MATERIAL
- **Project:** HOTEL
- **Sub Job:** 02 - SITEWORK
- **Cost Code:** 02-000
- **Order Qty.:** 100
- **Unit Cost:** 500

Subcontracts

← SAVE & CLOSE [Icons] ACTIONS ▾ REPORTS ▾

|  |  |                             |
|--|--|-----------------------------|
| Subcontract Nbr.: SC-000005              | * Vendor: ARCHCO - Architectural Design Comp | Line Total: 50,000.00       |
| <input checked="" type="checkbox"/> Hold | Owner: EP00000001 - Pam Brawner              | Discount Total: 0.00        |
| Status: On Hold                          | Currency: USD 1.00 VIEW BASE                 | VAT Exempt T... 0.00        |
| * Date: 11/29/2019                       | Vendor Ref.: [Empty]                         | VAT Taxable T... 0.00       |
| Start Date: 11/29/2019                   |  | Tax Total: 0.00             |
| Description: [Empty]                     |  | Retainage Total: 0.00       |
|  |  | Subcontract To... 50,000.00 |

DOCUMENT DETAILS TAX DETAILS VENDOR INFO DISCOUNT DETAILS SC HISTORY PREPAYMENTS CHANGE ORDERS OTHER INFORMATION

| Branch   | Account Group/Item | Project | Sub Job | Cost Code | Line Description  | UOM | Order Qty. | Unit Cost | Ext. Cost | Discount Percent |
|----------|--------------------|---------|---------|-----------|-------------------|-----|------------|-----------|-----------|------------------|
| HEADO... | MATERI...          | HOTEL   | 02      | 02-000    | Project materials | EA  | 100.00     | 500.0000  | 50,000.00 | 0.000000         |

The total amount of this commitment is 50000, which exceeds the minimum commitment amount specified for the vendor and project.

**2. Save the changes.**

(Now you can review the new commitment record on the **Commitments** tab of the Projects (PM301000) form for the HOTEL project.)

**3. Take the subcontract off hold—that is, clear the **Hold** check box.**

**4. On the form toolbar, click **Actions** > **Enter AP Bill**.**

The Bills and Adjustments (AP301000) form opens, with *Bill* selected in the **Type** box by default and with document details copied from the subcontract.

**5. Take the bill off hold—that is, clear the **Hold** check box.**

**6. Click **Release** on the form toolbar to release the bill.**

**7. On the form toolbar, click **Actions** > **Pay Bill/Apply Adjustment**.**

The Checks and Payments (AP302000) form opens, with details copied from the bill.

- Review the status of the document—the check should be on hold. Review the **Compliance** tab—it should be empty at this point.

Checks and Payments

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] [Back] [Forward] [Home] [End] RELEASE VOID ACTIONS INQUIRIES REPORTS

Type:  Vendor: ARCHCO - Architectural Design Compan Payment Amount: 50,000.00  
 Reference Nbr.: 000033 \* Payment Meth... CHECK Unapplied Balance: 0.00  
 Status: On Hold \* Cash Account: 10200WH - Wholesale Checking Application Amount: 50,000.00  
 Hold  Joint Check Finance Charges: 0.00  
 \* Application Date: 11/29/2019 Description:  
 \* Application Pe... 11-2019  
 Payment Ref.:

DOCUMENTS TO APPLY APPLICATION HISTORY FINANCIAL DETAILS REMITTANCE INFORMATION FINANCE CHARGES **COMPLIANCE**

| Expiration Date | * Document Type | Creation Date | Status | Requit | Receiv from Vendo | Received Date (Vendor) | Proce: | Voidec | Create Autom | Sent Date |
|-----------------|-----------------|---------------|--------|--------|-------------------|------------------------|--------|--------|--------------|-----------|
|-----------------|-----------------|---------------|--------|--------|-------------------|------------------------|--------|--------|--------------|-----------|

- While on the **Compliance** tab, clear the **Hold** check box in the Summary area and then save the changes.

Note that a lien waiver record appears in the table on the **Compliance** tab.

Checks and Payments [NOTES] [ACTIVITIES]

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] [Back] [Forward] [Home] [End] RELEASE VOID ACTIONS INQUIRIES REPORTS

Type:  Vendor: ARCHCO - Architectural Design Compan Payment Amount: 50,000.00  
 Reference Nbr.: 000033 \* Payment Meth... CHECK Unapplied Balance: 0.00  
 Status: **Pending Print** \* Cash Account: 10200WH - Wholesale Checking Application Amount: 50,000.00  
 Hold  Joint Check Finance Charges: 0.00  
 \* Application Date: 11/29/2019 Description:  
 \* Application Pe... 11-2019  
 Payment Ref.:

DOCUMENTS TO APPLY APPLICATION HISTORY FINANCIAL DETAILS REMITTANCE INFORMATION FINANCE CHARGES **COMPLIANCE**

| Expiration Date | * Document Type | Creation Date | Status | Requit                              | Receiv from Vendo        | Received Date (Vendor) | Proce:                   | Voidec                   | Create Autom                        | Sent Date | Project | Sub Job |
|-----------------|-----------------|---------------|--------|-------------------------------------|--------------------------|------------------------|--------------------------|--------------------------|-------------------------------------|-----------|---------|---------|
|                 | Lien Waiver     | 11/29/2019    |        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |           | HOTEL   | 02      |

Note that the same lien waiver record appears on the **Compliance** tab of the Projects (PM301000), Vendors (AP303000), Subcontracts (SC301000), and Bills and Adjustments (AP301000) forms for the involved documents.

Also, the record appears on the Compliance Management (CL401000) form.

- On the Print/Email Lien Waivers (CL502000) form, do the following:

- a. In the **Action** box, select *Email Lien Waivers*.
- b. Select the unlabeled check box for the lien waiver that you want to email to the vendor.
- c. Click **Process** on the form toolbar.

Print/Email Lien Waivers ☆

PROCESS PROCESS ALL

Action: **Email Lien Waivers** Start Date: End Date: 12/3/2019  
 Project: Vendor: Show Processed  
 Category:

| Creation Date | Document Category   | Status | Required                            | Received from Vendor     | Received from Joint Parties (Vendor) | Processed                           | Voided                   | Created Automatically               | Project | Customer | Customer Name  | Vendor | Vendor Name     | Subcontract |
|---------------|---------------------|--------|-------------------------------------|--------------------------|--------------------------------------|-------------------------------------|--------------------------|-------------------------------------|---------|----------|----------------|--------|-----------------|-------------|
| 11/29/2019    | Conditional Partial |        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | HOTEL   | EQUGRP   | The Equity ... | ARCHCO | Architectura... | SC-000005   |

If an email has been successfully created, the lien waiver is marked as processed (that is, the Processed check box becomes selected in the lien waiver details).

- 11. Review the list of outgoing emails on the **All Records** tab of the Outgoing (CO409020) form—the newly created email should be at the top of the list.

Click the link in the **Subject** column and review the email on the Email Activity form that opens. Click **Files** on the title bar to review the printed form of the lien waiver attached to the email.

Email Activity

NOTES **FILES (1)** CUSTOMIZATION TOOLS

SAVE & CLOSE REPLY ACTIONS

From: System  
 To: main@adc.con  
 CC:  
 BCC:  
 Subject: Lien waiver email

MESSAGE DETAILS

VISUAL Paragraph B I U A INSERT LAYOUT TABLES

Dear Vendor,  
 Here's the new lien waiver.  
 Sincerely yours,  
 SweetLife

- 12. On the **Lien Waivers** tab of the Compliance Management form, review the details of the processed lien waiver.

When you receive a signed copy of the lien waiver, you need to manually mark it as received by selecting the **Received from Vendor** check box. (Note that the check box should remain cleared for the next exercise).

Compliance Management ☆

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ALL RECORDS CERTIFICATES INSURANCE POLICIES NOTICES **LIEN WAIVERS** OTHER DOCUMENTS

| Document Type | Creation Date | Document Category   | Status | Required                            | Received from Vendor     | Received Date (Vendor) | Received from Joint Payee (Vendor) | Received Date (Joint Payee (Vendor)) | Processor                           | Voided                   | Created Automatic                   | Sent Date | Effective Date |
|---------------|---------------|---------------------|--------|-------------------------------------|--------------------------|------------------------|------------------------------------|--------------------------------------|-------------------------------------|--------------------------|-------------------------------------|-----------|----------------|
| Lien Waiver   | 11/29/2019    | Conditional Partial |        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                        |                                    |                                      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |           |                |

## Working with Outstanding Lien Waivers

An outstanding lien waiver is a lien waiver that has not been marked as received and whose **Through Date** is earlier than the current business date in the system.

- On the **Lien Waiver Settings** tab of the Compliance Preferences (CL301000) form, select the following check boxes:
  - Warn of Outstanding Lien Waivers During AP Bill Entry:** A warning will appear if the system finds an outstanding lien waiver when the user attempts to enter an accounts payable bill on the Bills and Adjustments (AP301000) form.
  - Warn of Outstanding Lien Waivers when Selecting AP Bill for Payment:** A warning will appear if the system finds an outstanding lien waiver when the user attempts to select an accounts payable bill for payment on the Checks and Payments (AP302000) form.

Note that these warnings may also appear on the Prepare Payments (AP503000) form during the processing.

- Stop Payment of AP Bill When There Are Outstanding Lien Waivers:** The system will show an error message and stop the payment in the following circumstances:
  - On the Bills and Adjustments form, when a user clicks **Actions > Pay Bill/Apply Adjustment** on the form toolbar for an accounts payable bill that has a linked outstanding lien waiver.
  - On the Checks and Payments form, when a user attempts to take off hold or release a check that has a linked outstanding lien waiver.
  - On the Prepare Payments (AP503000), Process Payments / Print Checks (AP505000), or Release Payments (AP505200) form, when the user initiates the processing of the document. Save the changes.

Compliance Preferences ☆



- LIEN WAIVER SETTINGS
- LIEN WAIVER REPORTING SETTINGS
- CUSTOM ATTRIBUTES
- COMMON ATTRIBUTES

**OUTSTANDING LIEN WAIVERS**

- Warn of Outstanding Lien Waivers During AP Bill Entry
- Warn of Outstanding Lien Waivers When Selecting AP Bill for Payment
- Stop Payment of AP Bill When There Are Outstanding Lien Waivers

---

**CONDITIONAL LIEN WAIVERS**

- Automatically Generate Lien Waivers

Generate Lien Waivers on:

Through Date:

Final Lien Waiver Amount:

---

**UNCONDITIONAL LIEN WAIVERS**

- Automatically Generate Lien Waivers

Generate Lien Waivers on:

Through Date:

Final Lien Waiver Amount:

2. Change the business date to the last day of the next month.

Thus, the lien waiver that was generated in the previous exercise will be considered as an outstanding lien waiver because it hasn't been marked as received and its **Through Date** is earlier than the current business date.

3. On the Bills and Adjustments (AP301000) form, do the following:
  - a. Start entering a new bill for the *ARCHCO* vendor.

When you start entering a document detail line and specify the *HOTEL* project, a warning appears next to the Vendor box in the Summary area of the form. This warning appears because the **Warn of Outstanding Lien Waivers During AP Bill Entry** check box is selected on the Compliance Preferences (CL301000) form.

Bills and Adjustments NOTES ACTIVITIES FILES NOTIFICA

← SAVE & CLOSE ↻ + 🗑️ 📄 ⏪ ⏩ RELEASE ACTIONS INQUIRIES REPORTS

Type:  Vendor:  Detail Total: 50,000.00

Reference Number:  Days:  Days  Discount Total: 0.00

Status:   Apply Retainage  VAT Taxable Total: 0.00

Hold \* Cash Discount:   Joint Payees  VAT Exempt Total: 0.00

\* Date:  \* Post Period:   Tax Total: 0.00

Vendor Ref.:  \* With. Tax: 0.00

Balance: 50,000.00

Cash Discount: 0.00

Description:

**DOCUMENT DETAILS** FINANCIAL DETAILS TAX DETAILS RETAINAGE APPLICATIONS COMPLIANCE

| Image | Retainage Amount | Amount    | Balance | * Account | Description              | * Project | Sub Job | Cost Code | Non Billable             | Tax Category | Expense Date | PO Number | Subc |
|-------|------------------|-----------|---------|-----------|--------------------------|-----------|---------|-----------|--------------------------|--------------|--------------|-----------|------|
| 0000  | 0.00             | 50,000.00 | 0.00    | 54500     | Project Material Expense | HOTEL     |         |           | <input type="checkbox"/> | EXEMPT       |              |           |      |

- b. Enter all necessary settings and save the changes to create the bill anyway.
- c. Clear the **Hold** check box in the Summary area and click **Release** on the form toolbar.

**d. Click **Actions** > **Pay Bill/Apply Adjustment**.**

An error message is displayed notifying you that no payment can be created for the bill because it is linked to at least one outstanding lien waiver. This message appears because the **Stop Payment of AP Bill When There Are Outstanding Lien Waivers** check box is selected on the Compliance Preferences (CL301000) form.

The screenshot shows the 'Bills and Adjustments' form with the following details:

- Type: Bill
- Vendor: ARCHCO - Architectural Design Compan
- Reference Nbr.: 000060
- Terms: 30D - 30 Days
- Status: Open
- Due Date: 1/2/2020
- Date: 12/3/2019
- Post Period: 12-2019
- Vendor Ref.:
- Description:
- Detail Total: 50,000.00
- Discount Total: 0.00
- VAT Taxable Total: 0.00
- VAT Exempt Total: 0.00
- Tax Total: 0.00
- With. Tax: 0.00
- Balance: 50,000.00
- Amount: 50,000.00
- Cash Discount: 0.00

The warning dialog box contains the following text:

Warning

The accounts payable bill has at least one outstanding lien waiver. Payment is not allowed because the Stop Payment of AP Bill When There Are Outstanding Lien Waivers check box is selected on the Compliance Preferences (CL301000) form.

OK

**e. Click **OK** to close the Warning dialog box.**

- On the Checks and Payments (AP302000) form, create a new check for the *ARCHCO* vendor, and on the **Documents to Apply** tab, select the bill created in the previous step and specify a line number in respective columns.

Immediately after that, the system displays a warning that the vendor has at least one outstanding lien waiver.

This warning appears because the **Warn of Outstanding Lien Waivers when Selecting AP Bill for Payment** check box is selected on the Compliance Preferences (CL301000) form.

Checks and Payments ☆

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] [Home] [Left] [Right] [End] RELEASE VOID ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

|   |  |   |
|---|--|---|
| Type: <input type="text" value="Check"/>                    | Vendor: ARCHCO - Architectural Design Compan | Payment Amount: <input type="text" value="0.00"/> |
| Reference Nbr.: <input type="text" value="000036"/>         | * Payment Meth...: CHECK                     | Unapplied Balance: -50,000.00                     |
| Status: On Hold<br><input checked="" type="checkbox"/> Hold | * Cash Account: 10200WH - Wholesale Checking | Application Amount: 50,000.00                     |
| * Application Date: 12/3/2019                               | <input type="checkbox"/> Joint Check         | Finance Charges: 0.00                             |
| * Application Pe...: 12-2019                                | Description: <input type="text"/>            |   |
| Payment Ref.: <input type="text"/>                          |  |   |

DOCUMENTS TO APPLY APPLICATION HISTORY FINANCIAL DETAILS REMITTANCE INFORMATION FINANCE CHARGES COMPLIANCE

LOAD DOCUMENTS [Refresh] [Close] [Print] [Search]

| Branch     | Document Type | *Reference Nbr.        | Line Nbr. | Inventory ID | Project | Project Task | Cost Code | Account |
|------------|---------------|------------------------|-----------|--------------|---------|--------------|-----------|---------|
| HEADOFFICE | Bill          | <a href="#">000060</a> | 1         | MATERIAL     | HOTEL   | 02           | 02-000    | 54500   |

The vendor has at least one outstanding lien waiver.  
HOTEL -The Beach Hotel and Condominiums,  
New York, SC-000005

Now, before you continue your work with this vendor, you may want to remind them that you need to receive the signed lien waiver first (and manually mark the corresponding lien waiver as received).

5. Change the business date back to the current date.

# Lesson 17: Compliance

---

If you work with a vendor that has no valid insurance policies, certificates, licenses, or other compliance documents, you expose your business to certain risks. In Acumatica ERP Construction Edition, you can track compliance items for different types of entities, such as vendors, projects, bills, checks, and subcontracts, so that this information can be used for in-place warnings to users.

## Learning Objectives

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

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

## Story

Our vendor, Standard Hardware Company, has provided us with their OSHA certificate and their General Liability insurance so we will enter this information in the system.

## System Preparation

Sign in to the system by using the *admin* login and *123* password.

## Configuring Document Categories and Statuses

On the **Custom Attributes** tab of the Compliance Preferences (CL301000) form, do the following:

1. Enter as follows the categories of insurance policies that you are going to track:
  - a. In the **Attribute** box, select *Insurance*.
  - b. In the table below, in the **Value** column, specify the following values:
    - General Liability Coverage
    - Worker's Compensation Insurance
    - Commercial Automotive Insurance
    - Surety Bonds
    - Asset Protection

## Compliance Preferences ☆



LIEN WAIVER SETTINGS   LIEN WAIVER REPORTING SETTINGS   **CUSTOM ATTRIBUTES**

\* Attribute:

⌂ + × |←| |⌂

|                            | * Value                         |
|----------------------------|---------------------------------|
| <input type="checkbox"/>   | General Liability Coverage      |
| <input type="checkbox"/>   | Worker's Compensation Insurance |
| <input type="checkbox"/>   | Commerical Automotive Insurance |
| <input type="checkbox"/>   | Surety Bonds                    |
| > <input type="checkbox"/> | Asset Protection                |

2. Enter as follows the categories of certificates:

- a. In the **Attribute** box, select *Certificate*.
- b. In the **Value** column, specify the following values:
  - Safety Certification
  - Hazardous Materials Certification
  - Occupational Safety and Health Administration (OHSA)
  - Project Management Institute (PMI)
  - Leadership in Energy & Environmental Design (LEED)

## Compliance Preferences ☆



LIEN WAIVER SETTINGS   LIEN WAIVER REPORTING SETTINGS   **CUSTOM ATTRIBUTES**

\* Attribute:

⌂ + × |←| |⌂

|                            | * Value                                      |
|----------------------------|--|
| <input type="checkbox"/>   | Safety Certification                         |
| <input type="checkbox"/>   | Hazardous Materials Certification            |
| <input type="checkbox"/>   | Occupational Safety and Health Administra... |
| <input type="checkbox"/>   | Project Managment Institute (PMI)            |
| > <input type="checkbox"/> | Leadership in Energy & Environmental Des...  |

3. Enter the statuses of compliance documents that you may use for informational purposes:
  - a. In the **Attribute** box, select *Status*.
  - b. In the table, specify the following statuses:
    - *Valid*
    - *Expired*

Compliance Preferences ☆

📄 ↶

LIEN WAIVER SETTINGS   LIEN WAIVER REPORTING SETTINGS   **CUSTOM ATTRIBUTES**   COMMON ATTRIBUTES

\* Attribute:  🔍

🔄 + × ⏪ ⏩

|   | * Value |
|---|---------|
|   | Valid   |
| > | Expired |

4. Save the changes.

### Working with Compliance Documents

1. On the **All Records** tab of the Compliance Management (CL401000) form, add a row to the table with the following settings specified:
  - a. **Document Type:** *Certificate*
  - b. **Creation Date:** Current date
  - c. **Document Category:** *Occupational Safety and Health Administration (OHSA)*
  - d. **Status:** *Valid*
  - e. **Required:** Selected
  - f. **Received from Vendor:** Selected
  - g. **Effective Date:** Start of the current year
  - h. **Expiration Date:** End of the current month
  - j. **Vendor:** *HARDCO*
  - k. **Certificate Number:** 123456
2. Save the changes.
3. On the same form, add another row with the following settings specified:

- a. **Document Type:** *Insurance*
  - b. **Creation Date:** Current date
  - c. **Document Category:** *General Liability Coverage*
  - d. **Status:** *Valid*
  - e. **Required:** Selected
  - f. **Received from Vendor:** Selected
  - g. **Effective Date:** Start of the current year
  - h. **Expiration Date:** End of the current month
  - j. **Limit:** 10,000,000
  - k. **Vendor:** *HARDCO*
  - l. **Insurance Company:** Insurance of NY
  - m. **Policy:** 654321
4. Save the changes.
  5. On the Vendors (AP303000) form, select the *HARDCO* vendor and review the information about compliance documents on the **Compliance** tab.

Vendors

SAVE & CLOSE ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

|                |                           |           |        |                     |      |
|----------------|---------------------------|-----------|--------|---------------------|------|
| * Vendor ID:   | HARDCO                    | * Status: | Active | Balance:            | 0.00 |
| * Vendor Name: | Standard Hardware Company |           |        | Prepayment Balance: | 0.00 |
|                |                           |           |        | Retained Balance:   | 0.00 |

GENERAL INFO   PAYMENT SETTINGS   PURCHASE SETTINGS   CONTACTS   ATTRIBUTES   ACTIVITIES   GL ACCOUNTS   MAILING SETTINGS   **COMPLIANCE**

|   |  |  |  |  | Expiration Date | Document Type | Creation Date | Status | Requi                               | Recei from Vendo                    | Received Date (Vendor) | Proce                    | Voidec                   | Create Autom             | Sent Date | Project |
|---|--|--|--|--|-----------------|---------------|---------------|--------|-------------------------------------|-------------------------------------|------------------------|--------------------------|--------------------------|--------------------------|-----------|---------|
| > |  |  |  |  | 12/31/2019      | Certificate   | 12/11/2019    | Valid  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 12/11/2019             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |           |         |
|   |  |  |  |  | 12/31/2019      | Insurance     | 12/11/2019    | Valid  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 12/11/2019             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |           |         |

6. Change the business date to the first day of the next month.  
 Because we have specified the expiration date of the compliance document as the last day of the current month, the system now regards those documents as expired.
7. Review the warnings for each line on the **Compliance** tab of the Vendors form.

Vendors

← SAVE & CLOSE [Icons] ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

\* Vendor ID:  \* Status:  Balance: 0.00  
 \* Vendor Name:  Prepayment Balance: 0.00  
 Retained Balance: 0.00

GENERAL INFO PAYMENT SETTINGS PURCHASE SETTINGS CONTACTS ATTRIBUTES ACTIVITIES GL ACCOUNTS MAILING SETTINGS **COMPLIANCE**

| Expiry Date | Document Type | Creation Date | Status | Require                             | Receiv from Vendo                   | Received Date (Vendor) | Process                  | Voided                   | Create Autom             | Sent Date | Project |
|-------------|---------------|---------------|--------|-------------------------------------|-------------------------------------|------------------------|--------------------------|--------------------------|--------------------------|-----------|---------|
| 12/31/2019  | Certificate   | 12/11/2019    | Valid  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 12/11/2019             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |           |         |
| 12/31/2019  | Certificate   | 12/11/2019    | Valid  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 12/11/2019             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |           |         |

Compliance document is expired.

- On the Bills and Adjustments (AP301000) form, start creating a bill for the *HARDCO* vendor.

As soon as you specify the *HARDCO* vendor, a warning about expired compliance appears next to it.

Bills and Adjustments

← SAVE & CLOSE [Icons] RELEASE ACTIONS ▾ INQUIRIES ▾ REPORTS ▾

Type:  Vendor:  Detail Total: 0.00  
 Reference Nbr.:  **Expired Compliance.**  Discount Total:   
 Status:  \* Due Date:   Apply Retainage VAT Taxable Total:   
 Hold \* Cash Discount...:  VAT Exempt Total:   
 \* Date:   Joint Payees Tax Total:   
 \* Post Period:  With. Tax:   
 Vendor Ref.:  Balance:   
 Description:  Cash Discount:

- Change the business date back to the current date.

## Lesson 18: Mobile App

---

The Acumatica mobile app, which is available for iOS and Android, offers you mobile access to CRM, sales orders, time cards, and much more—anytime, anywhere. This is especially convenient for construction projects when most of the work is done in the field instead of the office. Depending on the device you use, the Acumatica mobile app should be downloaded and installed from the Apple App Store (for iOS) or Google Play Store (for Android).

### Learning Objectives

In this lesson, you will learn how you can use the Acumatica mobile app to do the following:

- Create and submit a time card
- Create a change request
- Approve time cards and change requests

### Story

Suppose that Regina Wiley, an intern at SweetLife assigned to the HOTEL3 project, worked on a construction site on the week of March 3, 2019, and needs to report the time spent on the HOTEL3 project during the week. Regina usually works in the field so she uses the Acumatica mobile app to create a time card and submit it for approval.

Further suppose that an interior designer, who is also working on the HOTEL3 project, has an idea that is going to affect the project budget. Regina Wiley needs to create a change request detailing potential changes to the project budget and including a picture of a remodeled bathroom.

As a project manager of HOTEL3 and a direct supervisor of Regina Wiley, Bill Owens needs to review the work done by Regina and approve the documents prepared by her.

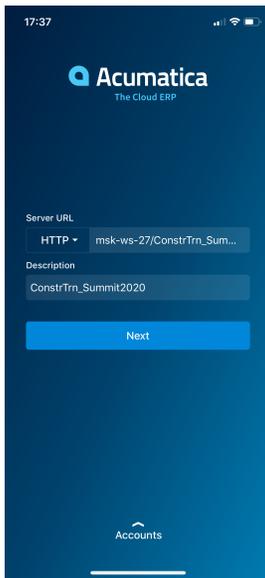
### System Preparation

Before you start using the Acumatica mobile app, do the following:

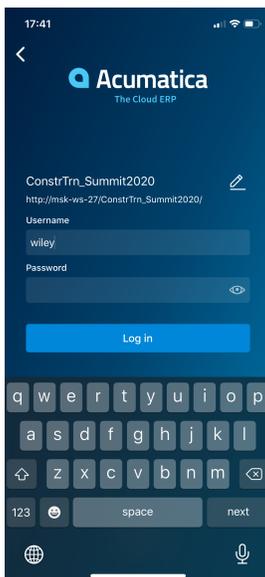
1. Make sure you have access to the domain where your Acumatica ERP instance is deployed. For instance, you might need to have a VPN configured.
2. Download the mobile app for your iOS or Android device.
3. Add an account to access your Acumatica ERP website on a mobile device.
4. In the web version of your Acumatica ERP website, on the Projects (PM301000) form, for the HOTEL3 project, on the **Tasks** tab, in the **Approver** column, specify *EP00000015 - Bill Owen* for the 01 task. Save your changes.

### Signing In for the First Time

1. On the server URL screen of your Acumatica mobile app, in the **Server URL** field, specify the web address of the server on which the instance was deployed.



2. On the user credentials screen, which opens, sign in by using the *wiley* login and the *123* password.



### Entering a Time Activity

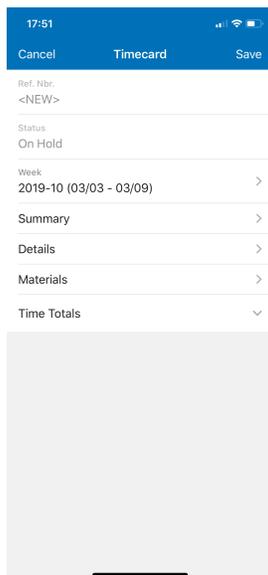
To enter a time activity for the time spent on site for the *HOTEL3* project, do the following:

1. On the main menu, tap on the **Employee Time Cards** icon.
2. Tap the plus sign to create a new time card.
3. Tap the **Week** group.

4. On the **Week** screen, search for the *2019-10* week and select it from the search results.



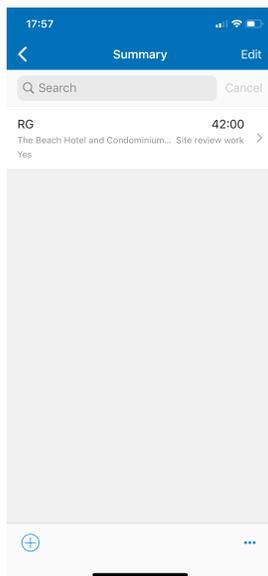
5. Tap the **Summary** group.



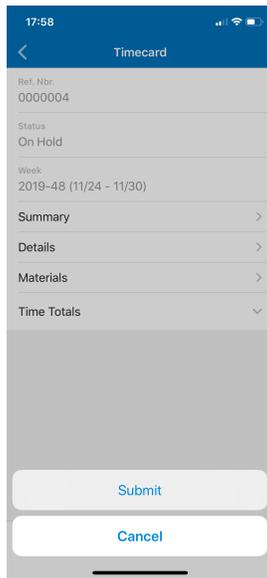
6. On the **Summary** screen, tap the plus sign, and specify the following details:

- **Earning Type:** *RG*
- **Project:** *HOTEL3*
- **Sub Job:** *01*
- **Labor Item:** *SITEREVIEW*

- **Cost Code:** 01-311
- **Description:** Site review work
- **Mon:** 08:00
- **Tue:** 10:00
- **Wed:** 12:00
- **Thu:** 08:00
- **Fri:** 07:00
- **Sat:** 02:00
- **Sun:** 03:00



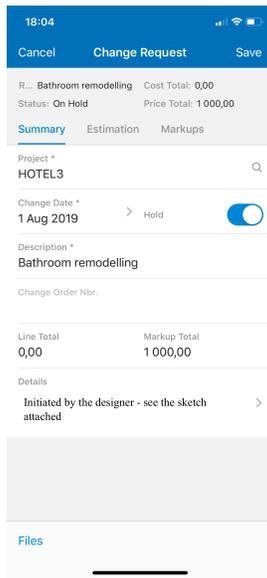
7. Return back to the **Time Card** screen, and save the time card.
8. On the **Time Card** screen, tap the More button to bring up the action menu, and tap **Submit** to send the time card for approval.



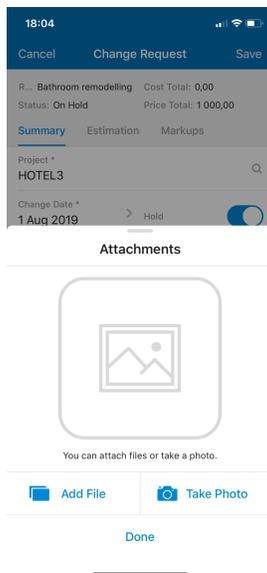
## Creating a Change Request

Create a new change request as follows.

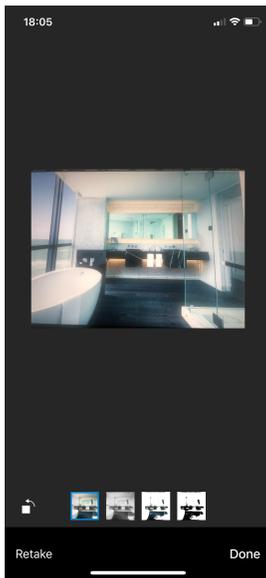
1. On the main menu, tap **Change Requests**.
2. On the **Change Requests** screen, tap the plus sign to add a new change request.
3. On the **Summary** tab of the **Change Request** screen, which opens, specify the following details:
  - **Project:** *HOTEL3*
  - **Description:** Bathroom remodeling



4. Save the change request.
5. Tap **Files** to add an attachment to the change request.
6. On the **Attachments** screen, tap **Add File** to select an existing file.

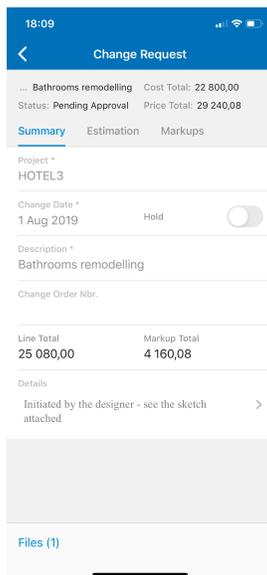


Alternatively, you can also tap **Take Photo** to take a new picture using the camera on your device.



7. After you have selected the files to attach to the change request, tap **Done**.

The number of attached files is indicated in the parentheses next to the **Files** button.



8. Tap **Details**.

9. On the **Details** screen, which opens, type *Initiated by designer - see sketch attached*, and return to the previous screen.

10. On the **Markups** tab, leave the default values.

11. On the **Estimations** tab, tap the plus sign to add a new estimation.

**12.** On the **Estimation** screen, specify the following values:

- **Project Task:** *02*
- **Account Group:** *LABOR*
- **Cost Code:** *01-330*
- **Inventory ID:** Empty
- **Quantity:** 20.00
- **UOM:** Empty
- **Unit Cost:** 1200.00
- **Price Markup (%):** 10.00 (selected by default based on project preferences)
- **Revenue Account Group:** *REVENUE* (specified by default based on the account group)
- **Revenue Code:** *02-000*
- **Unit Price:** 1320.00 (calculated automatically)

**13.** On the **Summary** tab, remove the change request from hold.

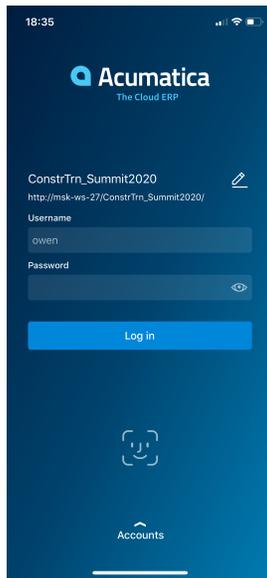
**14.** Notice that the status of the request is now *Pending Approval*.

**15.** Save the change request.

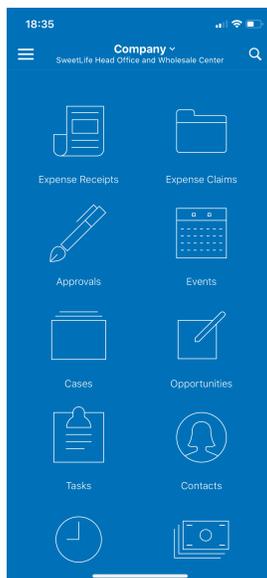
### **Approving a Time Card and Change Request**

To approve the time card and change request, do the following:

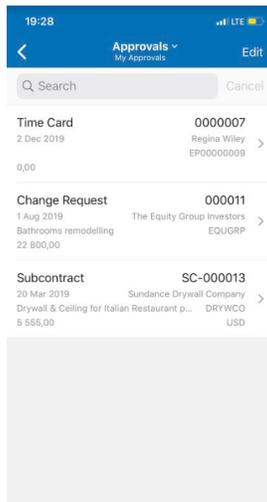
- 1.** Sign in to the Acumatica mobile app by using the *owen* login and the *123* password.



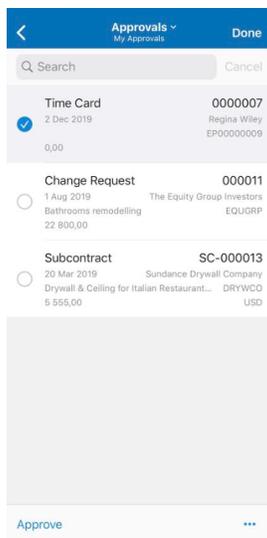
2. On the main menu, tap **Approvals**.



On the **Approvals** screen, which opens, documents pending your approval are displayed.



3. To approve the time card, tap **Edit**, select the time card that you want to approve, and then tap **Approve** at the bottom of the screen.



The approved time card has now disappeared from the **Approvals** screen.

4. Before you approve the change request, tap it to review its details.
5. On the **Change Request** screen, put the change request on hold so that you can edit its details.

Cancel Change Request Save

... Bathrooms remodelling Cost Total: 22 800,00  
 Status: On Hold Price Total: 29 240,08

Summary Estimation Markups

Project \*  
HOTEL3

Change Date \*  
1 Aug 2019 > Hold

Description \*  
Bathrooms remodelling

Change Order Nbr.

| Line Total | Markup Total |
|------------|--------------|
| 25 080,00  | 4 160,08     |

Details

Initiated by the designer - see the sketch attached >

Files (1)

**6.** Open the **Markups** tab.

Cancel Change Request Save

... Bathrooms remodelling Cost Total: 22 800,00  
 Status: On Hold Price Total: 29 240,08

Summary Estimation **Markups**

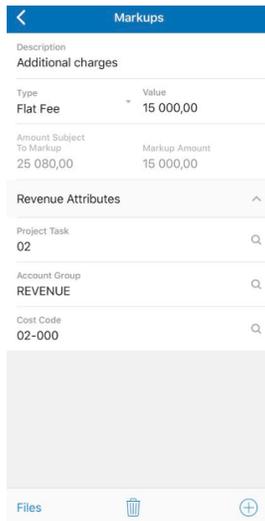
Q Search Cancel

Edit (+)

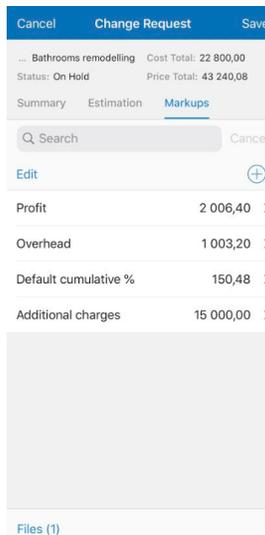
|                      |            |
|----------------------|------------|
| Profit               | 2 006,40 > |
| Overhead             | 1 003,20 > |
| Default cumulative % | 150,48 >   |
| Additional charges   | 1 000,00 > |

Files (1)

**7.** In the list of markups, select **Additional charges**, and on the **Markups** screen, which opens, change **Value** to 15,000.



8. Return to the **Markups** tab of the **Change Request** screen.



9. Open the **Summary** tab, remove the updated change request from hold and save it.

Cancel    **Change Request**    Save

... Bathrooms remodelling    Cost Total: 22 800,00  
 Status: Pending Approval    Price Total: 43 240,08

Summary    Estimation    Markups

Project \*  
HOTEL3

Change Date \*    1 Aug 2019    Hold

Description \*  
Bathrooms remodelling

Change Order Nbr.

|            |              |
|------------|--------------|
| Line Total | Markup Total |
| 25 080,00  | 18 160,08    |

Details

Initiated by the designer - see the sketch attached >

Files (1)

**10.** On the **Approvals** screen, tap **Edit**, select the change request and tap **Approve** to approve it.

<    Approvals \*  
My Approvals    Done

Q Search    Cancel

**Change Request**    000011  
 1 Aug 2019    The Equity Group Investors  
 Bathrooms remodelling    EQUGRP  
 22 800,00

**Subcontract**    SC-000013  
 20 Mar 2019    Sundance Drywall Company  
 Drywall & Ceiling for Italian Restaurant...    DRYWCO  
 5 555,00    USD

Approve    ...

Notice that there is nothing left to approve.

# Lesson 19: Expense Receipts with Corporate Cards

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## Learning Objectives

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

- Create a GL account, cash account, and payment method for a corporate credit card
- Create the corporate credit card in the system
- Create an expense receipt with the corporate credit card
- Process an expense claim for the expense receipt paid with the corporate credit card
- Reconcile a bank statement for the corporate credit card
- Create and release a bill for the bank

## Story

Suppose that engineers of the SweetLife company worked on a construction site on January 29, 2020, and it turned out that there were not enough screws. Jon Waite went to a construction store and bought a box of screws for \$27 for which he paid with a company corporate card. He also bought a cup of coffee in a cafe near the store and paid \$6 for it by the same corporate credit card. Then Jon took a taxi to return back for which he paid \$10 by cash. Jon entered all expenses into the system and filed a claim for the reimbursement of expenses.

The next day Bill Owen went to a meeting with the customer to discuss a project. He took a taxi and paid \$25 by the corporate card.

At the end of the month, the New York Bank sent a monthly statement and an accountant of the company reconciled this statement and processed a bill for the bank in the system.

## System Preparation

Sign in to the system as a project manager by using the *owen* login and *123* password.

## Creating a Payment Method and Accounts for a Corporate Credit Card

Create a GL account as follows:

1. Open the Chart of Accounts (GL202500) form, and on the form toolbar, click **Add Row**.
2. In the new line, create an account with the following settings:
  - **Account:** *29000*
  - **Account Class:** OTHCURLIAB
  - **Type:** *Liability*

- **Description:** Corporate Credit Card
- **Post Option:** *Detail*

3. Save the new account (see the following screenshot).

Chart of Accounts ☆

🔄 🗑️ ↶ + ✎ ✕ 📏 📄 ⬆️

| Account | Account Class | Type      | Active                              | Description             | Control Account Module | Allow Manual Entry       | Post Option | Cash Account             | Account Group | Secured                  |
|---------|---------------|-----------|-------------------------------------|-------------------------|------------------------|--------------------------|-------------|--------------------------|---------------|--------------------------|
| 23015   | OTHCURLIAB    | Liability | <input checked="" type="checkbox"/> | Accrued Expenses        | IN                     | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 24100   | OTHCURLIAB    | Liability | <input checked="" type="checkbox"/> | Tax Payable             | TX                     | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 26000   | RELCURLIAB    | Liability | <input checked="" type="checkbox"/> | Due to Related Entity   |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 27001   | OTHCURLIAB    | Liability | <input checked="" type="checkbox"/> | Translation Gain / Loss |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 28000   | OTHCLIABS     | Liability | <input checked="" type="checkbox"/> | AP Retainage            |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 29000   | OTHCURLIAB    | Liability | <input checked="" type="checkbox"/> | Corporate Credit Card   |                        | <input type="checkbox"/> | Detail      | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 30000   | CAPITAL       | Liability | <input checked="" type="checkbox"/> | Opening Bal Equity      |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 30100   | CAPITAL       | Liability | <input checked="" type="checkbox"/> | Capital Stock           |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |
| 32000   | RETEARN       | Liability | <input checked="" type="checkbox"/> | Retained Earnings       |                        | <input type="checkbox"/> | Summary     | <input type="checkbox"/> |               | <input type="checkbox"/> |

To create a payment method for corporate credit cards, do the following:

1. Open the Payment Methods (CA204000) form, and click **Add New Record**.
2. In the **Payment Method ID** box, type *CORPCC*.
3. In the **Description** box, type *Corporate card payment method*.
4. Make sure the **Use in AP** check box is selected.
5. Clear the following check boxes:

- **Use in AR**

Because this payment method will not be used for customer payments.

- **Require Remittance Information for Cash Account** Remittance information is not required by this payment method for the related cash accounts.

6. On the **Settings for Use in AP** tab, specify the following settings:

- **Additional Processing: Not Required**

Payment documents created with this payment method do not require additional processing such as printing checks.

- **Require Unique Payment Ref.** (under **Payment Settings**): Cleared

The unique payment reference number is not required for each payment document created with this payment method.

7. Save the payment method (see the following screenshot).

## Payment Methods

← SAVE & CLOSE   +     < > >|

\* Payment Method ID:   Use in AP  
 Active  Use in AR  
Means of Payment:   Require Remittance Information for Cash Account  
\* Description:

ALLOWED CASH ACCOUNTS    **SETTINGS FOR USE IN AP**

**ADDITIONAL PROCESSING**    **PAYMENT SETTINGS**

Print Checks  Require Unique Payment Ref.  
 Create Batch Payments  
 Not Required

**Payment Method Details**

 + ×  

|    * ID | Description | Required | Sort Order | Entry Mask | Validation Reg. Exp. |
|--|-------------|----------|------------|------------|----------------------|
|  |             |          |            |            |                      |

Create a cash account as follows:

1. Open the Cash Accounts (CA202000) form, and click **Add New Record**.
2. In the Summary area, specify the following settings:
  - **Cash Account:** 29000
  - **Account:** 29000 - Corporate Credit Card
  - **Requires Reconciliation:** Selected
  - **Restrict Visibility with Branch:** Cleared
  - **Use for Corporate Cards:** Selected
  - **Reconciliation Numbering Sequence:** CARECON - CA Reconciliation
3. On the **Payment Methods** tab, click **Add Row**, and in the **Payment Method** column, select *CORPCC*.
4. On the **Entry Types** tab, click **Add Row**, and in the **Entry Type ID** column, select *BANKFEE*.
5. Save the created cash account.

Cash Accounts

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Copy] [Paste] [Undo] [Redo] > ACTIONS ▾

\* Cash Account: 29000 - Corporate Credit Card [Dropdown]  Clearing Account

Active  Requires Reconciliation

\* Account: 29000 - Corporate Credit Card [Dropdown]  Restrict Visibility with Branch

\* Branch: HEADOFFICE - SweetLife He [Dropdown]  Match Bank Transactions to Batch Payments

Currency: USD  Use for Corporate Cards

External Ref. Number: [Text] Reconciliation Numbering Sequ... CARECON - CA Reconciliatic [Dropdown] [Edit]

Bank ID: [Text] [Edit]

Statement Import Service: [Text] [Edit]

Description: Corporate Credit Card [Text]

PAYMENT METHODS CLEARING ACCOUNTS ENTRY TYPES SIGNATURE

[Refresh] + [Add] [Delete] [Filter] [Print]

| * Payment Method | Use in AP                           | AP Default               | AP - Suggest Next Number | AP Last Reference Number | Batch Last Reference Number | Use in AR                | AR Default               | AR Default For Refund    | AR - Suggest Next Number | AR Last Reference Number |
|------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| > CORPCC         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          |                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          |

**Creating a Corporate Credit Card**

To create a corporate credit card, do the following:

1. Open the Corporate Cards (CA202500) form.
2. In the Name box, enter *USD Corporate Card*.
3. In the **Card Number** box, enter the following card number: *7890*.
4. In the **Cash Account box**, select *29000 - Corporate Credit Card*.
5. On the table toolbar, click **Add Row**, and select *EP00000015* in the **Employee ID** column.
6. Click **Add Row** again, and add *EP00000003 - Jon Waite*.
7. On the form toolbar, click **Save**.

Corporate Cards

← SAVE & CLOSE [Icons]

\* Corporate Card ID: 000001

\* Name: USD Corporate Card

\* Card Number: 7890

\* Cash Account: 29000 - Corporate Credit Card

Active

[Icons]

| Employee ID | Employee Name |
|-------------|---------------|
| EP00000003  | Jon Waite     |
| EP00000015  | Bill Owen     |

### Creating the First Expense Receipt

Do the following:

1. In the info area, in the upper-right corner of the top pane of the Acumatica ERP screen, make sure that the business date in your system is set to 1/29/2020. If a different date is displayed, click the Business Date menu button and select 1/29/2020.
2. Open the Expense Receipts (EP301010) form, and click **Add New Record**. The system opens the Expense Receipt (EP301020) form.
3. In the **Expense Item** box, select *SCREW*.
4. In the **Claimed by** box, select *EP00000003 - Jon Waite*.
5. In the **Branch** box, select *HEADOFFICE*.
6. On the **Receipt Details** tab, specify the following:
  - **Description:** *Box of screws*
  - **Unit Cost:** 27.00
  - **Paid With:** *Corporate Card, Company Expense*
  - **Corporate Card:** *000001 - USD Corporate Card*
7. Save the receipt.

## Expense Receipt

← SAVE & CLOSE 📄 ↺ + 🗑️ 📄 ⌵ ⏪ < > ⏩ ACTIONS ▾

|                 |                |               |                           |               |       |
|-----------------|----------------|---------------|---------------------------|---------------|-------|
| Receipt Number: | 000001         | * Claimed by: | EP00000003 - Jon Waite    | Claim Amount: | 27.00 |
| * Date:         | 1/29/2020      | * Branch:     | HEADOFFICE - SweetLife Hr | Tax Total:    | 0.00  |
| * Expense Item: | SCREW - Screws | Status:       | Open                      |               |       |

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RECEIPT DETAILS    TAX DETAILS

---

|                        |                                 |                          |      |
|------------------------|---------------------------------|--------------------------|------|
| <b>EXPENSE DETAILS</b> |                                 | <b>FINANCIAL DETAILS</b> |      |
| * Description:         | Box of screws                   |                          |      |
| Quantity:              | 1.00                            | * UOM:                   | EA   |
| Unit Cost:             | 27.0000                         | Employee Part:           | 0.00 |
| Amount:                | 27.00                           |                          |      |
| Currency:              | USD 1.00                        | VIEW BASE                |      |
| Ref. Nbr.:             |                                 |                          |      |
| * Project/Contract:    | X - Non-Project Code.           |                          |      |
| Sub Job:               |                                 |                          |      |
| Cost Code:             |                                 |                          |      |
| Expense Claim:         |                                 |                          |      |
| Expense Claim Status:  |                                 |                          |      |
| Paid With:             | Corporate Card, Company Expense |                          |      |
| Corporate Card:        | 000001 - USD Corporate Card     |                          |      |
| <b>TAX INFO</b>        |                                 |                          |      |
| Tax Zone:              |                                 |                          |      |
| Tax Category:          | EXEMPT - Exempt Tax Category    |                          |      |

FINANCIAL DETAILS

Billable

Customer: \_\_\_\_\_

\* Expense Account: 54300 - Project Other Expense

Sales Account: \_\_\_\_\_

**IMAGE**

Select an image to upload. Browse Upload



Drag and drop the image here to upload it.

**Processing an Expense Claim for the Expense Receipt**

1. While you are still on the Expense Receipts (EP303010) form, click **Actions > Claim**. The Expense Claim (EP301000) form opens.
2. On the **Expense Claim Details** tab, notice the line for the box of screws.
3. On the table toolbar, click **Add Row**, and specify the following settings in the new row:
  - **Expense Item:** *MEAL*
  - **Description:** *Coffee*
  - **Unit Cost:** 6
  - **Paid With:** *Corporate Card, Personal Expense*
  - **Corporate Card:** *000001 - USD Corporate Card*
4. Click **Add Row**, and specify the following settings in the new row:
  - **Expense Item:** *TAXI*

- **Description:** *Taxi*
- **Unit Cost:** 10
- **Paid With:** *Personal Account*

5. Save the expense claim.

Expense Claim

← SAVE & CLOSE [Icons] ACTIONS PRINT EXPENSE CLAIM

Reference Nbr.: 000001 Claimed By: EP00000003 - Jon Waite Claim Total: 43.00  
 Status: On Hold Department ID: AFTERSALES - After-sales departmer VAT Taxable Total: 0.00  
 Date: 1/29/2020 Customer: VAT Exempt Total: 0.00  
 Approval Date: Tax Total: 0.00  
 Description: Submitted Receipt(s)

EXPENSE CLAIM DETAILS TAX DETAILS FINANCIAL DETAILS APPROVAL DETAILS

| Ref. Nbr. | Date | Expense Item | Description   | Quantity | UOM | Unit Cost | Amount | Tax Amount | Employee Part | Claim Amount | Curren | Amount in Claim Curr. | Status | Custom | Billable                 | Prc | Sub Job | Cost | Paid With            |
|-----------|------|--------------|---------------|----------|-----|-----------|--------|------------|---------------|--------------|--------|-----------------------|--------|--------|--------------------------|-----|---------|------|----------------------|
| 1/29/2020 |      | SCREW        | Box of screws | 1.00     | EA  | 27.0000   | 27.00  | 0.00       | 0.00          | 27.00        | USD    | 27.00                 | Open   |        | <input type="checkbox"/> | X   |         |      | Corporate Card, Com  |
| 1/29/2020 |      | MEAL         | Coffee        | 1.00     | EA  | 6.0000    | 6.00   | 0.00       | 0.00          | 6.00         | USD    | 6.00                  | Open   |        | <input type="checkbox"/> | X   |         |      | Corporate Card, Pers |
| 1/29/2020 |      | TAXI         | Taxi          | 1.00     | EA  | 0.0000    | 10.00  | 0.00       | 0.00          | 10.00        | USD    | 10.00                 | Open   |        | <input type="checkbox"/> | X   |         |      | Personal Account     |

6. On the form toolbar, click **Actions > Submit**.

7. On the form toolbar, click **Actions > Release**.

8. On the **Financial Details** tab, review the list of documents generated for the claim.

Expense Claim

← SAVE & CLOSE [Icons] ACTIONS PRINT EXPENSE CLAIM 00:00:12

Reference Nbr.: 000001 Claimed By: EP00000003 - Jon Waite Claim Total: 43.00  
 Status: Released Department ID: AFTERSALES - After-sales departmer VAT Taxable Total: 0.00  
 Date: 1/29/2020 Customer: VAT Exempt Total: 0.00  
 Approval Date: Tax Total: 0.00  
 Description: Submitted Receipt(s)

EXPENSE CLAIM DETAILS TAX DETAILS **FINANCIAL DETAILS** APPROVAL DETAILS

DEFAULT TAX INFO

Tax Zone:

LINK TO AP

Branch: HEADOFFICE - SweetLife Head Office ar

Post to Period:

| Type        | Reference Nbr. | Amount | Status |
|-------------|----------------|--------|--------|
| Bill        | 000064         | 10.00  | Open   |
| Debit Adj.  | 000063         | 6.00   | Open   |
| Quick Check | 000025         | 27.00  | Closed |

**Creating the Second Expense Receipt**

Do the following:

1. In the info area, in the upper-right corner of the top pane of the Acumatica ERP screen, set the business date to 1/30/2020.
2. Open the Expense Receipts (EP301010) form, and click **Add New Record**. The system opens the Expense Receipt (EP301020) form.
3. In the **Expense Item** box, select *TAXI*.
4. In the **Claimed by** box, make sure *EP00000015 - Bill Owen* is selected.
5. In the **Branch** box, make sure *HEADOFFICE* is selected.
6. On the **Receipt Details** tab, specify the following:
  - **Description:** *Taxi to the customer meeting*
  - **Unit Cost:** 25.00
  - **Paid With:** *Corporate Card, Company Expense*
  - **Corporate Card:** *000001 - USD Corporate Card*
7. Save the receipt.

Expense Receipt

← SAVE & CLOSE 📄 ↶ + 🗑️ 📄 ▾ ⌂ < > ⌂ ACTIONS ▾

|                                     |                                      |                     |
|-------------------------------------|--------------------------------------|---------------------|
| Receipt Number: 000004              | * Claimed by: EP00000015 - Bill Owen | Claim Amount: 25.00 |
| * Date: 1/30/2020                   | * Branch: HEADOFFICE - SweetLife H   | Tax Total: 0.00     |
| * Expense Item: TAXI - Taxi Service | Status: Open                         |                     |

RECEIPT DETAILS TAX DETAILS

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|                        |                                 |   |      |
|------------------------|---------------------------------|---|------|
| <b>EXPENSE DETAILS</b> |                                 | <b>FINANCIAL DETAILS</b>  |      |
| * Description:         | Taxi to the customer meeting    |   |      |
| Quantity:              | 1.00                            | * UOM:  | EA   |
| Unit Cost:             | 25.0000                         | Employee Part:  | 0.00 |
| Amount:                | 25.00                           |   |      |
| Currency:              | USD                             | VIEW BASE   |      |
| Ref. Nbr.:             |                                 |   |      |
| * Project/Contract:    | X - Non-Project Code            |   |      |
| Sub Job:               |                                 |   |      |
| Cost Code:             |                                 |   |      |
| Expense Claim:         |                                 |   |      |
| Expense Claim Status:  |                                 |   |      |
| Paid With:             | Corporate Card, Company Expense |   |      |
| Corporate Card:        | 000001 - USD Corporate Card     |   |      |
| <b>TAX INFO</b>        |                                 | <b>IMAGE</b>  |      |
| Tax Zone:              |                                 |   |      |
| Tax Category:          | EXEMPT - Exempt Tax Category    |   |      |
|                        |                                 | <input type="checkbox"/> Billable<br>Customer: <input type="text"/><br>* Expense Account: 54300 - Project Other Expense<br>Sales Account: <input type="text"/><br>Select an image to upload. <input type="button" value="Browse"/> <input type="button" value="Upload"/><br><br>Drag and drop the image here to upload it. |      |

## Reconciling Bank Statements

1. Open the Import Bank Transactions (CA306500) form, and click **Add New Record**.
2. In the **Cash Account** box, select the *29000 - Corporate Credit Card* account.
3. In the **Statement Date** box, select *1/31/2020*.
4. In the **Start Balance Date** box, select *1/1/2020*.
5. In the **End Balance Date** box, select *1/31/2020*.
6. On the table toolbar, click **Load Records from File** and select the *January\_Bank\_Statement.csv* file provided with this course. Upload this file.
7. In the **Ending Balance** box, specify *-58.00*.
8. Click **Save** on the form toolbar.

Import Bank Transactions

← SAVE & CLOSE ↻ + 🗑️ 📄 ⌂ < > | UPLOAD FILE

\* Cash Account: 29000 - Corporate Credit Car ✎ \* Statement Date: 1/31/2020 \* Start Balance Date: 1/1/2020 Beginning Balance: 0.00  
 \* Reference Nbr.: 000001 \* End Balance Date: 1/31/2020 Ending Balance: -58.00  
 Calculated Balance: -58.00

🔄 + ✕ UNHIDE TRANSACTION UNMATCH VIEW MATCHED DOCUMENT 📄 🗑️ ⬆️

| 📄 | 🗑️ | ☑️ | Process                  | Hidden                   | Ext. Tran. ID | Ext. Ref. Nbr. | * Tran. Date | Tran. Desc   | Receipt | Disbursemen | Card Number |
|---|----|----|--------------------------|--------------------------|---------------|----------------|--------------|--------------|---------|-------------|-------------|
| > | 🗑️ | ☑️ | <input type="checkbox"/> | <input type="checkbox"/> |               |                | 1/30/2020    | taxi service | 0.00    | 25.00       | ****-7890   |
|   | 🗑️ | ☑️ | <input type="checkbox"/> | <input type="checkbox"/> |               |                | 1/29/2020    | coffee       | 0.00    | 6.00        | ****-7890   |
|   | 🗑️ | ☑️ | <input type="checkbox"/> | <input type="checkbox"/> |               |                | 1/29/2020    | spare parts  | 0.00    | 27.00       | ****-7890   |

9. Open the Process Bank Transactions (CA306000) form.
10. In the **Cash Account** box, select the *29000 - Corporate Credit Card* account.
11. On the form toolbar, click **Auto-Match**. Note that the system found documents with transactions that match the bank statement transactions.

Process Bank Transactions ☆

📄 ↻ AUTO-MATCH PROCESS MATCH SETTINGS UPLOAD FILE

\* Cash Account: 29000 - Corporate Credit Card ✎

🔄 UNMATCH UNMATCH ALL HIDE 📄 | All Records ▾

| 📄 | ☑️ | Ext. Ref. Nbr. | Tran. Date | Receipt | Disbursement | Card Number | Tran. Desc   | Matched | Match Relevanc | Receipt Number | Description                  | Doc. Date | Amount in Claim Curr. | Claim Curren | Amount Differenc | Card Number | Em |
|---|----|----------------|------------|---------|--------------|-------------|--------------|---------|----------------|----------------|------------------------------|-----------|-----------------------|--------------|------------------|-------------|----|
| > | ☑️ |                | 1/30/2020  | 0.00    | 25.00        | ****-7890   | taxi service |         |                |                |                              |           |                       |              |                  |             |    |
|   | ☑️ |                | 1/29/2020  | 0.00    | 6.00         | ****-7890   | coffee       |         |                |                |                              |           |                       |              |                  |             |    |
|   | ☑️ |                | 1/29/2020  | 0.00    | 27.00        | ****-7890   | spare parts  |         |                |                |                              |           |                       |              |                  |             |    |
|   | ☑️ |                |            |         |              |             |              | ☑️      | 0.300000       | 000004         | Taxi to the customer meeting | 1/30/2020 | 25.00                 | USD          | 0.00             | 7890        | EP |

12. Click **Process**.
13. On the Import Bank Transactions form, open the imported bank statement and note that the transactions have been processed and matched.

Import Bank Transactions

← SAVE & CLOSE [Print] [Refresh] + [Trash] [Dropdown] [Left Arrow] [Right Arrow] [Next Arrow] [Previous Arrow] UPLOAD FILE

\* Cash Account: 29000 - Corporate Credit Car [Dropdown] [Edit] Statement Date: 1/31/2020 Start Balance Date: 1/1/2020 Beginning Balance: 0.00  
 \* Reference Nbr.: 000001 [Dropdown] [Edit] \* End Balance Date: 1/31/2020 [Dropdown] Ending Balance: -58.00  
 Calculated Balance: -58.00

[Refresh] + [Close] UNHIDE TRANSACTION UNMATCH VIEW MATCHED DOCUMENT [Filter] [Print] [Sort]

| Reconciled                          | Hold                     | Proces                              | Holder                              | Ext. Tran. ID | Ext. Ref. Nbr. | Tran. Date | Tran. Desc   | Receipt | Disbursemen | Card Number |
|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|---------------|----------------|------------|--------------|---------|-------------|-------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |               |                | 1/30/2020  | taxi service | 0.00    | 25.00       | ****-7890   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |               |                | 1/29/2020  | coffee       | 0.00    | 6.00        | ****-7890   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |               |                | 1/29/2020  | spare parts  | 0.00    | 27.00       | ****-7890   |

14. Open the Reconciliation Statements (CA302000) form, click **Add New Record**.
15. In the **Cash Account** box, select the *29000 - Corporate Credit Card* account.
16. In the table, for both rows, select the **Reconciled** check box.
17. In the Summary area, in the **Statement Balance** box, specify -33.
18. Clear the **Hold** check box.
19. On the form toolbar, click **Release**.

Reconciliation Statements ☆ [Print] [Notes]

← SAVE & CLOSE [Print] [Refresh] + [Trash] [Left Arrow] [Right Arrow] [Next Arrow] [Previous Arrow] RELEASE VOID [Status] 00:00:00

\* Cash Account: 29000 - Corporate Credit Card [Dropdown] [Edit] Beginning Balance: 0.00 Document Count:  
 \* Ref. Number: 000001 [Dropdown] [Edit] Reconciled Receipts: 0.00 0  
 Status: Closed [Dropdown]  Hold Reconciled Disb.: 33.00 2  
 Last Reconciliation Date: Reconciled Balance: -33.00  
 Reconciliation Date: 1/30/2020 Statement Balance: -33.00  
 Load Documents Up To: Difference: 0.00

[Refresh] [Edit] TOGGLE RECONCILED TOGGLE CLEARED RECONCILE PROCESSED CREATE ADJUSTMENT [Filter] [Print]

| Reconcile                           | Cleared                             | Clear Date | Receipt | Disbursemen | Document Ref. | Module | Tran. Type  | * Orig. Doc. Number | Status | * Doc. Date | Business Account |
|-------------------------------------|-------------------------------------|------------|---------|-------------|---------------|--------|-------------|---------------------|--------|-------------|------------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1/29/2020  | 0.00    | 27.00       |               | AP     | Quick Check | 000025              | Posted | 1/29/2020   | EP00000003       |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1/29/2020  | 0.00    | 6.00        | 000063        | AP     | GL Entry    | AP000083            | Posted | 1/29/2020   | EP00000003       |

### Paying the Outstanding Balance to the Bank

Create a vendor that represents a bank as follows:

1. Open the Vendors (AP303000) form, and click **Add New Record**.
2. In the **Vendor** box, type *NYBANK*.
3. In the **Vendor Name** box, type *New York Bank*.
4. On the **General Info** tab, in the **Vendor Class** box, select *Default*.
5. On the **GL Accounts** tab, in the **Expense Account** box, select *29000 - Corporate Credit Card*.
6. Save the vendor.

**Vendors** NOTES FILES NOTIFICATIONS CUSTOMIZATION TOOLS

SAVE & CLOSE + - ↩ ⏪ ⏩ ▶ ▶▶ ACTIONS INQUIRIES REPORTS

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\* Vendor ID:  \* Status:  Balance: 0.00  
 \* Vendor Name:  Prepayment Balance: 0.00  
 Retained Balance: 0.00

GENERAL INFO PAYMENT SETTINGS PURCHASE SETTINGS CONTACTS ATTRIBUTES ACTIVITIES **GLACCOUNTS**

---

\* AP Account:   
 Expense Account:   
 Discount Account:   
 \* Cash Discount Account:   
 Prepayment Account:   
 PO Accrual Account:   
 Retainage Payable Acc...:

Create an AP bill for a bank:

1. Open the Bills and Adjustments (AP301000) form, and click **Add New Record**.
2. In the **Date** box, select *1/31/2020*.
3. In the **Vendor** box, select *NYBANK*.
4. In the **Description** box, type *Bank account settlement*.
5. On the **Document Details** tab, add a row with the following settings:
  - **Branch:** *HEADOFFICE*
  - **Ext. Cost:** *33.00*
  - **Account:** *29000* (selected by default based on vendor settings)
6. In the Summary area, clear the **Hold** check box.
7. On the form toolbar, click **Release**.

**Bills and Adjustments** NOTES ACTIVITIES FILES NOTIFICATIONS TOOLS

SAVE & CLOSE + - ↩ ⏪ ⏩ ▶ ▶▶ RELEASE ACTIONS INQUIRIES REPORTS 00.00.03

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Type:  Vendor: NYBANK - New York Bank Detail Total: 33.00  
 Reference Nbr.: 000064 Terms: 30D - 30 Days Discount Total: 0.00  
 Status:  \* Due Date: 3/1/2020 VAT Taxable Total: 0.00  
 Hold \* Cash Discount: 3/1/2020  Pay by Line  Joint Payees VAT Exempt Total: 0.00  
 Date: 1/31/2020 Tax Total: 0.00  
 Post Period: 01-2020 With. Tax: 0.00  
 Vendor Ref.: Balance: 33.00  
 Amount: 33.00  
 Description: Bank account settlement Cash Discount: 0.00

DOCUMENT DETAILS FINANCIAL DETAILS TAX DETAILS APPROVAL DETAILS APPLICATIONS COMPLIANCE

VIEW SCHEDULE ADD PO RECEIPT ADD PO RECEIPT LINE ADD PO ADD PO LINE ADD SUBCONTRACTS ADD SUBCONTRACT LINE ADD LC LINK LINE

| Branch     | Account Group/Item | Transaction Descr. | Quantity | UOM | Unit Cost | Ext. Cost | Discount Amount | Amount | Balance | *Account | Description           | *Project |
|------------|--------------------|--------------------|----------|-----|-----------|-----------|-----------------|--------|---------|----------|-----------------------|----------|
| HEADOFFICE |                    |                    | 0.00     |     | 0.0000    | 33.00     | 0.00            | 33.00  | 0.00    | 29000    | Corporate Credit Card | X        |

You can now pay the bill and process the related documents in the system.

# Lesson 20: Substantiated Billing, AIA, WIP, Bonding Reports

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## Learning Objectives

In this lesson, you will do the following:

- Learn how to print, read, and send the following project progress reports in Acumatica ERP 2019R2 Construction Edition:
  - Substantiated Billing report
  - Standard Pro Forma Invoice printed form
  - AIA report
  - WIP report
  - Bonding report
- Review the project lifecycle and performance with the help of those reports
- Study the approval and mailing notifications for the pro forma invoices

## Story

We are a general contractor and we have a list of construction projects in progress.

First, we are making a new building for an Italian restaurant. We have already incurred some costs purchasing materials for the project and hiring subcontractors. Notice the Expenses total on the summary of *ITALIAN* project on the Projects (PM301000) form. We have already billed the customer once, which can be seen from the actual Income total on the summary of the project and the invoices on the **Invoices** tab of the Projects form. It is time to bill our customer, and we are using the *Time and Material* billing rule for this project. **Next Billing Date** is set to 04/01/2019 and **Billing Period** is set to *Month*, which means that we can now generate an invoice for *The Italian Company* customer invoicing them for the costs incurred in the previous month (March 2019). When we prepare draft Pro Forma Invoices, very often we also need to provide other documentation with the invoice, such as substantiated billing reports that back up the actual costs associated with the Invoice Total.

Projects

← SAVE & CLOSE [Icons] RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CH

|                |                                  |                               |        |              |            |
|----------------|----------------------------------|-------------------------------|--------|--------------|------------|
| * Project ID:  | ITALIAN                          | * Status:                     | Active | Assets:      | 0.00       |
| Customer:      | ITALIAN01 - The Italian Company  | <input type="checkbox"/> Hold |        | Liabilities: | 0.00       |
| Template:      | CONTM - Construction T&M Project |                               |        | Income:      | 126,202.50 |
| * Description: | Italian Restaurant Project       |                               |        | Expenses:    | 202,717.00 |

SUMMARY TASKS REVENUE BUDGET COST BUDGET BALANCES COMMITMENTS INVOICES CHANGE ORDERS CHANGE REQUE

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**PROJECT PROPERTIES**

Revenue Budget Level: Task and Cost Code  
 Cost Budget Level: Task and Cost Code  
 \* Start Date: 2/1/2019  
 End Date:  
 Project Manager: EP00000015 - Bill Owen  
 Site Address: 2510 Market Street, SF  
 Last Revenue Change ...  
 Currency Rate Type:

Allow the addition of Account Groups not associated with the Project Cost Budget when creating ...  
 Change Order Workflow  
 Restrict Employees  
 Restrict Equipment  
 Track Production Data  
 Certified Job

**BILLING AND ALLOCATION SETTINGS**

\* Billing Currency: USD  
 Billing Period: Month  
 Next Billing Date: 4/1/2019

**BILL-TO**

Override  
 Company Name: The Italian  
 Attention:  
 Phone 1: 415-965-5E  
 Email: Dustin.Lind

**BILL-TO ADDRESS**

Override  
 Address Line 1: 2510 Marke  
 Address Line 2:  
 City: San Franci  
 Country: US - Unitec  
 State: CA - CALIF  
 Postal Code: 87556

**VISIBILITY SETTINGS**

GL   
 IN   
 Time Entr

**QUOTE**

Then, we are also in the middle of the progress billing of the *HOTEL* project. We are to create a new hotel building and we are running this as a fixed price project, billing the customer by the percent of project completion. For the progress billing of projects in the construction industry, you are very often required to file certain documents—for instance, AIA forms.

As a project manager you want to be sure of the performance and profitability of your projects. WIP and Bonding reports can be used to increase visibility into the project progress during its life-cycle.

**System Preparation**

Sign in to the system by using the *owen* login and the *123* password.

Note: Depending on the sequence in which you take the course lessons, the values in the screenshots in this lesson may differ from the values in the system.

**Working with the Substantiated Billing Report**

In the construction industry, when contractors bill their customers, the customers may want to see proof of the costs. In this case, contractors need to provide supporting documentation along with the customer statement or invoice.

Acumatica ERP Construction Edition allows emailing of a substantiated billing report for a specific billing period to retrieve costs and scanned or uploaded images associated with the costs. The substantiated billing report provides a list of costs from payable invoices, labor, and other project expenses, in addition to hyperlinks to the attached documents.

For example, if a payable invoice has a scanned image of the vendor invoice attached, a hyperlink to that image is included in the substantiated billing report. A user can see the image by selecting the hyperlink and entering guest credentials into the Acumatica ERP sign-in page. As a result, the user does not need to download, compress, and send large file attachments. A Substantiated Billing - Consolidated Report (CU000119) is also available, allowing the report to be sent with PDF files embedded. This does not require guest login credentials.

The report can also be run for the entire job for close-out purposes.

The report is grouped by cost code with all the related transactions for the period specified.

The functionality supports the following types of project billing:

- Progress billing
- Time and Material billing
- Cost Plus billing

Do the following:

1. Open the Projects (PM301000) form, and in the **Project ID** box, select *ITALIAN*.
2. Click **Run Project Billing** on the form toolbar to generate another pro forma invoice for the project.

On the **Time and Material** tab of the Pro Forma Invoices (PM307000) form that opens, see that March billing items have been collected to be invoiced to the customer.

Pro Forma Invoices

SAVE & CLOSE | HOLD | RELEASE | ACTIONS | REPORTS

Reference Nbr: 000011 | Project: ITALIAN - Italian Restaurant Project | Progress Billing Total: 0.00  
 Status: On Hold | Customer: ITALIAN01 - The Italian Company | Time and Material Total: 74,693.75  
 Invoice Date: 4/1/2019 | Tax Total: 0.00  
 Post Period: 04-2019 | Invoice Total: 74,693.75  
 Description: Invoice for ITALIAN | Retainage Total: 10,331.25  
 Amount Due: 64,362.50

PROGRESS BILLING | **TIME AND MATERIAL** | TAX DETAILS | FINANCIAL DETAILS | APPROVAL DETAILS | ADDRESS DETAILS

| Status | Branch     | Billing Item | Inventory ID | Cost Code | Description        | Employee   | Vendor | Date      | Billed Quantity | Billed Amount | Quantity to Invoice | UOM  | Unit Price |
|--------|------------|--------------|--------------|-----------|--------------------|------------|--------|-----------|-----------------|---------------|---------------------|------|------------|
| BIII   | HEADOFFICE | 01           | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/3/2019  | 3.00            | 375.00        | 3.00                | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/4/2019  | 8.00            | 1,000.00      | 8.00                | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/5/2019  | 10.00           | 1,250.00      | 10.00               | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/6/2019  | 12.00           | 1,500.00      | 12.00               | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/7/2019  | 8.00            | 1,000.00      | 8.00                | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/8/2019  | 7.00            | 875.00        | 7.00                | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/9/2019  | 2.00            | 250.00        | 2.00                | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/11/2019 | 8.00            | 1,000.00      | 8.00                | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/12/2019 | 8.00            | 1,000.00      | 8.00                | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/13/2019 | 8.00            | 1,000.00      | 8.00                | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/14/2019 | 8.00            | 1,000.00      | 8.00                | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 01           | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/15/2019 | 10.00           | 1,250.00      | 10.00               | HOUR | 125.0000   |
| BIII   | HEADOFFICE | 03           | SUBCON       | 03-300    | Concrete- CIP Slab |            | DRYVCO | 3/20/2019 | 110.00          | 6,943.75      | 110.00              | HOUR | 63.1250    |

3. Prior to sending this invoice to the customer, you might need to verify which costs are subject to invoicing for the billing period.

You can use this report as a verification of the invoice generated for the project.

On the Substantiated Billing (CU000071) form, specify the following settings:

- **Project:** *ITALIAN*
- **From Date:** *03/01/2019*
- **To Date:** *03/31/2019*

### Substantiated Billing ☆

  RUN REPORT    SAVE TEMPLATE    REMOVE TEM

Template  X ▾

Default  Shared

---

**REPORT PARAMETERS**    ADDITIONAL SORT AND FILTERS    PRINT

\* Project:  🔍

\* From Date:  ▾

\* To Date:  ▾

The specified dates define the billing period range from which costs should be listed. The generated Substantiated Billing report will be a backup of the actual costs associated with the **Invoice Total**.

4. Click **Run Report** on the form toolbar.

The report includes the cost transactions subject to billing in March 2019 for the *ITALIAN* project.

Company: Company Page: 1 of 2  
 User: Bill Owen Date: 3/3/2020 8:23 AM  
 Cost Transactions for 3/1/2019 to 3/31/2019

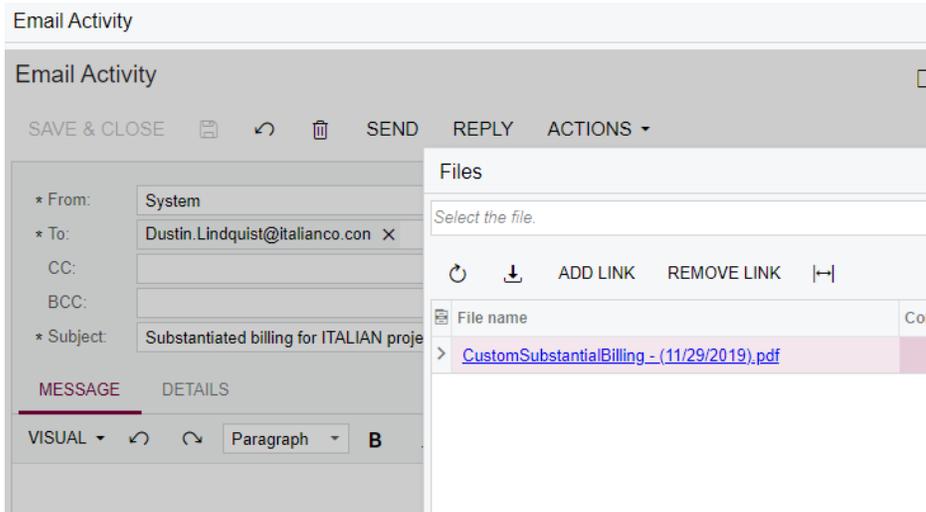
Billto: The Italian Company Project: ITALIAN Italian Restaurant Project  
 2510 Market Street  
 San Francisco, CA 97556 New York,

| CostCode: 03-100 Concrete- Forming     |                       |           |           |        |     |              |           |           |          |
|--|-----------------------|-----------|-----------|--------|-----|--------------|-----------|-----------|----------|
| Account Group: AP                      |                       |           |           |        |     |              |           |           |          |
| G/L Date                               | Description           | Date      | Reference | Vendor | UOM | Earning Type | Unit Rate | Qty/Hours | Amount   |
| 3/20/2019                              | Concrete- Forming     | 3/20/2019 | 000049    | DRYWCO |     |              |           |           | 875.00   |
| Subtotal for Account Group: AP         |                       |           |           |        |     |              |           |           | 875.00   |
| Subtotal for CostCode: 03100           |                       |           |           |        |     |              |           |           | 875.00   |
| CostCode: 03-200 Concrete- Reinforcing |                       |           |           |        |     |              |           |           |          |
| Account Group: AP                      |                       |           |           |        |     |              |           |           |          |
| G/L Date                               | Description           | Date      | Reference | Vendor | UOM | Earning Type | Unit Rate | Qty/Hours | Amount   |
| 3/20/2019                              | Concrete- Reinforcing | 3/20/2019 | 000049    | DRYWCO |     |              |           |           | 2,880.00 |
| Subtotal for Account Group: AP         |                       |           |           |        |     |              |           |           | 2,880.00 |
| Subtotal for CostCode: 03200           |                       |           |           |        |     |              |           |           | 2,880.00 |
| CostCode: 03-300 Concrete- CIP Slabs   |                       |           |           |        |     |              |           |           |          |
| Account Group: AP                      |                       |           |           |        |     |              |           |           |          |
| G/L Date                               | Description           | Date      | Reference | Vendor | UOM | Earning Type | Unit Rate | Qty/Hours | Amount   |
| 3/20/2019                              | Concrete- CIP Slab    | 3/20/2019 | 000049    | DRYWCO |     |              |           |           | 1,470.00 |
| Subtotal for Account Group: AP         |                       |           |           |        |     |              |           |           | 1,470.00 |
| Subtotal for CostCode: 03300           |                       |           |           |        |     |              |           |           | 1,470.00 |
| CostCode: 03-350 Concrete- Finishes    |                       |           |           |        |     |              |           |           |          |
| Account Group: AP                      |                       |           |           |        |     |              |           |           |          |
| G/L Date                               | Description           | Date      | Reference | Vendor | UOM | Earning Type | Unit Rate | Qty/Hours | Amount   |
| 3/20/2019                              | Concrete- Finishes    | 3/20/2019 | 000049    | DRYWCO |     |              |           |           | 330.00   |
| Subtotal for Account Group: AP         |                       |           |           |        |     |              |           |           | 330.00   |
| Subtotal for CostCode: 03350           |                       |           |           |        |     |              |           |           | 330.00   |
| CostCode: 04-220 Masonry- Block        |                       |           |           |        |     |              |           |           |          |

Company: Company Page: 2 of 2  
 User: Bill Owen Date: 3/31/2020 1:30 PM  
 Cost Transactions for 3/1/2019 to 3/31/2019

| CostCode: 04-220 Masonry- Block           |                |          |           |        |     |              |           |           |                  |
|---|----------------|----------|-----------|--------|-----|--------------|-----------|-----------|------------------|
| Account Group: AP                         |                |          |           |        |     |              |           |           |                  |
| G/L Date                                  | Description    | Date     | Reference | Vendor | UOM | Earning Type | Unit Rate | Qty/Hours | Amount           |
| 3/4/2019                                  | Masonry block  | 3/4/2019 | 000048    | SPEECO |     |              |           |           | 35,000.00        |
| Subtotal for Account Group: AP            |                |          |           |        |     |              |           |           | 35,000.00        |
| Subtotal for CostCode: 04220              |                |          |           |        |     |              |           |           | 35,000.00        |
| CostCode: 04-700 Masonry- Composite Walls |                |          |           |        |     |              |           |           |                  |
| Account Group: AP                         |                |          |           |        |     |              |           |           |                  |
| G/L Date                                  | Description    | Date     | Reference | Vendor | UOM | Earning Type | Unit Rate | Qty/Hours | Amount           |
| 3/4/2019                                  | Composite wall | 3/4/2019 | 000048    | SPEECO |     |              |           |           | 10,000.00        |
| Subtotal for Account Group: AP            |                |          |           |        |     |              |           |           | 10,000.00        |
| Subtotal for CostCode: 04700              |                |          |           |        |     |              |           |           | 10,000.00        |
| <b>Project Total:</b>                     |                |          |           |        |     |              |           |           | <b>50,555.00</b> |

5. You can now send the substantiated billing report to the customer. Click **Send**.
6. On the Email Activity form that opens, specify the following settings:
  - **To:** Dustin.Lindquist@italianco.com
  - **Subject:** Substantiated billing for ITALIAN project



Notice there is a file with the report attached to the email.

7. Save the email.
8. Click on the file link to view the PDF file with the generated report.

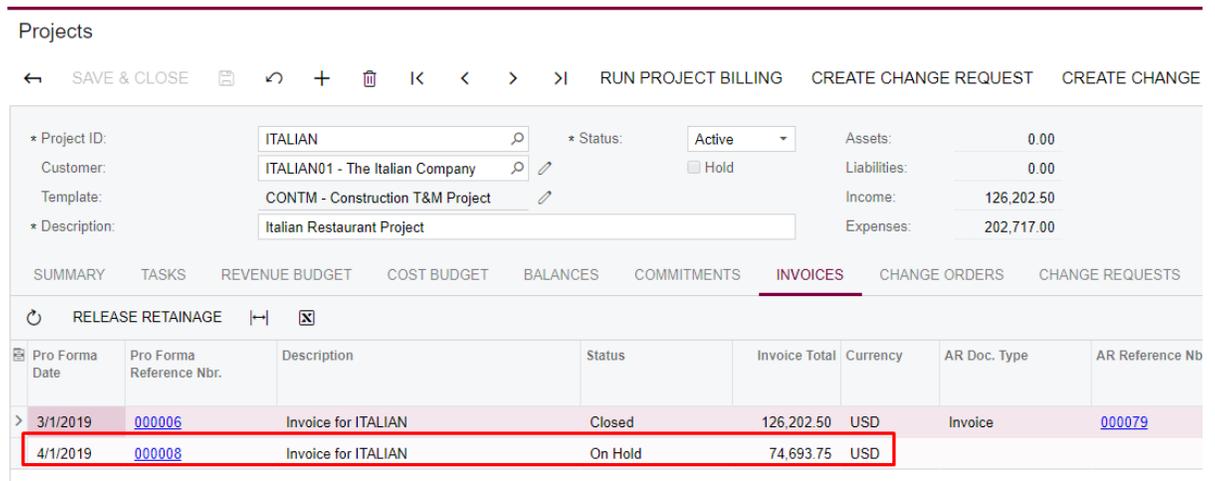
| GiL Date   | Description           | Date      | Reference | Vendor | UOM | Earning Type | Unit Rate | Qty/Hours | Amount   |
|--|-----------------------|-----------|-----------|--------|-----|--------------|-----------|-----------|----------|
| Company: Company<br>User: Bill Owen<br>Page: 1 of 2<br>Cost Transactions for 3/1/2019 to 3/31/2019<br>Date: 3/3/2020 8:30 AM<br>Billto: The Italian Company<br>2510 Market Street<br>San Francisco, CA 87556<br>Project: ITALIAN Italian Restaurant Project<br>New York, |                       |           |           |        |     |              |           |           |          |
| <b>CostCode:</b> 03-100 Concrete- Forming  |                       |           |           |        |     |              |           |           |          |
| Account Group: AP  |                       |           |           |        |     |              |           |           |          |
| 3/20/2019  | Concrete- Forming     | 3/20/2019 | 000049    | DRYWCO |     |              |           |           | 875.00   |
| Subtotal for Account Group: AP   |                       |           |           |        |     |              |           |           | 875.00   |
| Subtotal for CostCode: 03100   |                       |           |           |        |     |              |           |           | 875.00   |
| <b>CostCode:</b> 03-200 Concrete- Reinforcing  |                       |           |           |        |     |              |           |           |          |
| Account Group: AP  |                       |           |           |        |     |              |           |           |          |
| 3/20/2019  | Concrete- Reinforcing | 3/20/2019 | 000049    | DRYWCO |     |              |           |           | 2,880.00 |
| Subtotal for Account Group: AP   |                       |           |           |        |     |              |           |           | 2,880.00 |
| Subtotal for CostCode: 03200   |                       |           |           |        |     |              |           |           | 2,880.00 |
| <b>CostCode:</b> 03-300 Concrete- CIP Slabs  |                       |           |           |        |     |              |           |           |          |
| Account Group: AP  |                       |           |           |        |     |              |           |           |          |
| 3/20/2019  | Concrete- CIP Slab    | 3/20/2019 | 000049    | DRYWCO |     |              |           |           | 1,470.00 |
| Subtotal for Account Group: AP   |                       |           |           |        |     |              |           |           | 1,470.00 |
| Subtotal for CostCode: 03300   |                       |           |           |        |     |              |           |           | 1,470.00 |
| <b>CostCode:</b> 03-350 Concrete- Finishes   |                       |           |           |        |     |              |           |           |          |
| Account Group: AP  |                       |           |           |        |     |              |           |           |          |
| 3/20/2019  | Concrete- Finishes    | 3/20/2019 | 000049    | DRYWCO |     |              |           |           | 330.00   |
| Subtotal for Account Group: AP   |                       |           |           |        |     |              |           |           | 330.00   |
| Subtotal for CostCode: 03350   |                       |           |           |        |     |              |           |           | 330.00   |
| <b>CostCode:</b> 04-220 Masonry- Block   |                       |           |           |        |     |              |           |           |          |

9. Close the file management window and click **Send**.
10. On the All Emails (CO409070) form, make sure that your email has been successfully sent.



**11.** Together with the substantiated billing report (proof of the costs), you will send the Pro Forma invoice to the customer. To do this, you can use the standard built-in Pro Forma invoice form.

- a. On the Projects (PM301000) form, open the *ITALIAN* project.
- b. On the **Invoices** tab, select the second Pro Forma, which should be on hold and have **Invoice Total** = 74,693.75.



The Pro Forma invoice is opened on the Pro Forma Invoices (PM307000) form .

Pro Forma Invoices NOTES ACTIVITIES FILES NOTIFIC

SAVE & CLOSE RELEASE ACTIONS REPORTS

|  |   |                                    |
|--|---|------------------------------------|
| Reference Nbr: 000008                    | Project: ITALIAN - Italian Restaurant Project | Progress Billing Total: 0.00       |
| Status: On Hold                          | Customer: ITALIAN01 - The Italian Company     | Time and Material Total: 74,693.75 |
| <input checked="" type="checkbox"/> Hold |   | Tax Total: 0.00                    |
| Invoice Date: 4/1/2019                   |   | Invoice Total: 74,693.75           |
| Post Period: 04-2019                     |   | Retainage Total: 0.00              |
| Description: Invoice for ITALIAN         |   | Amount Due: 74,693.75              |

PROGRESS BILLING **TIME AND MATERIAL** TAX DETAILS FINANCIAL DETAILS APPROVAL DETAILS ADDRESS DETAILS

| +  | x      | UPLOAD UNBILLED TRANSACTIONS | VIEW TRANSACTION DETAILS |              |           |                    |            |        |           |                 |               |                     |       |            |                   |
|----|--------|------------------------------|--------------------------|--------------|-----------|--------------------|------------|--------|-----------|-----------------|---------------|---------------------|-------|------------|-------------------|
| ID | Status | Branch                       | Billing Item             | Inventory ID | Cost Code | Description        | Employee   | Vendor | Date      | Billed Quantity | Billed Amount | Quantity to Invoice | UOM   | Unit Price | Amount to Invoice |
| >  | B III  | HEADOFFICE                   | 01                       | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/3/2019  | 3.00            | 375.00        | 3.00                | HOURL | 125.0000   | 375.00            |
|    | B III  | HEADOFFICE                   | 01                       | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/4/2019  | 8.00            | 1,000.00      | 8.00                | HOURL | 125.0000   | 1,000.00          |
|    | B III  | HEADOFFICE                   | 01                       | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/5/2019  | 10.00           | 1,250.00      | 10.00               | HOURL | 125.0000   | 1,250.00          |
|    | B III  | HEADOFFICE                   | 01                       | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/6/2019  | 12.00           | 1,500.00      | 12.00               | HOURL | 125.0000   | 1,500.00          |
|    | B III  | HEADOFFICE                   | 01                       | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/7/2019  | 8.00            | 1,000.00      | 8.00                | HOURL | 125.0000   | 1,000.00          |
|    | B III  | HEADOFFICE                   | 01                       | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/8/2019  | 7.00            | 875.00        | 7.00                | HOURL | 125.0000   | 875.00            |
|    | B III  | HEADOFFICE                   | 01                       | SITEREVIEW   | 01-311    | Site review work   | EP00000015 |        | 3/9/2019  | 2.00            | 250.00        | 2.00                | HOURL | 125.0000   | 250.00            |
|    | B III  | HEADOFFICE                   | 01                       | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/11/2019 | 8.00            | 1,000.00      | 8.00                | HOURL | 125.0000   | 1,000.00          |
|    | B III  | HEADOFFICE                   | 01                       | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/12/2019 | 8.00            | 1,000.00      | 8.00                | HOURL | 125.0000   | 1,000.00          |
|    | B III  | HEADOFFICE                   | 01                       | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/13/2019 | 8.00            | 1,000.00      | 8.00                | HOURL | 125.0000   | 1,000.00          |
|    | B III  | HEADOFFICE                   | 01                       | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/14/2019 | 8.00            | 1,000.00      | 8.00                | HOURL | 125.0000   | 1,000.00          |
|    | B III  | HEADOFFICE                   | 01                       | CONSULTPM    | 01-311    | PM activities      | EP00000015 |        | 3/15/2019 | 10.00           | 1,250.00      | 10.00               | HOURL | 125.0000   | 1,250.00          |
|    | B III  | HEADOFFICE                   | 03                       | SUBCON       | 03-300    | Concrete- CIP Slab |            | DRYWCO | 3/20/2019 | 110.00          | 6,943.75      | 110.00              | EA    | 63.1250    | 6,943.75          |
|    | B III  | HEADOFFICE                   | 04                       | MATERIAL     | 04-220    | Masonry block      |            | SPEECO | 3/4/2019  | 0.00            | 43,750.00     | 0.00                | EA    | 0.0000     | 43,750.00         |
|    | B III  | HEADOFFICE                   | 04                       | MATERIAL     | 04-700    | Composite wall     |            | SPEECO | 3/4/2019  | 0.00            | 12,500.00     | 0.00                | EA    | 0.0000     | 12,500.00         |

c. Click **Reports** -> **Print Pro Forma Invoice** on the form toolbar.



# SweetLife

SweetLife Head Office and Wholesale Center  
69 Main St, Flushing  
New York, NY, 11367  
Phone: +1 917 341 8776

## PRO FORMA INVOICE

Pro Forma Ref. Nbr.: 000011  
Date: 01-Apr-2019  
Due Date: 01-May-2019  
Customer ID: ITALIAN01  
Currency: USD  
Project ID: ITALIAN  
Terms: 30 Days

| BILL TO   | SHIP TO   |
|---|---|
| The Italian Company<br>2510 Market Street<br>San Francisco CA 87556<br>United States of America | The Italian Company<br>2510 Market Street<br>San Francisco CA 87556<br>United States of America |

| TIME AND MATERIAL |                      |            |                    |        |      |            |           |               |                  |
|-------------------|----------------------|------------|--------------------|--------|------|------------|-----------|---------------|------------------|
| #                 | PROJECT TASK         | ITEM       | DESCRIPTION        | QTY.   | UOM  | UNIT PRICE | AMOUNT    | RETAINAGE (%) | RETAINAGE AMOUNT |
| 1                 | GENERAL REQUIREMENTS | SITEREVIEW | Site review work   | 3.00   | HOUR | 125.0000   | 375.00    | 5.00          | 18.75            |
| 2                 | GENERAL REQUIREMENTS | SITEREVIEW | Site review work   | 8.00   | HOUR | 125.0000   | 1,000.00  | 5.00          | 50.00            |
| 3                 | GENERAL REQUIREMENTS | SITEREVIEW | Site review work   | 10.00  | HOUR | 125.0000   | 1,250.00  | 5.00          | 62.50            |
| 4                 | GENERAL REQUIREMENTS | SITEREVIEW | Site review work   | 12.00  | HOUR | 125.0000   | 1,500.00  | 5.00          | 75.00            |
| 5                 | GENERAL REQUIREMENTS | SITEREVIEW | Site review work   | 8.00   | HOUR | 125.0000   | 1,000.00  | 5.00          | 50.00            |
| 6                 | GENERAL REQUIREMENTS | SITEREVIEW | Site review work   | 7.00   | HOUR | 125.0000   | 875.00    | 5.00          | 43.75            |
| 7                 | GENERAL REQUIREMENTS | SITEREVIEW | Site review work   | 2.00   | HOUR | 125.0000   | 250.00    | 5.00          | 12.50            |
| 8                 | GENERAL REQUIREMENTS | CONSULTPM  | PM activities      | 8.00   | HOUR | 125.0000   | 1,000.00  | 5.00          | 50.00            |
| 9                 | GENERAL REQUIREMENTS | CONSULTPM  | PM activities      | 8.00   | HOUR | 125.0000   | 1,000.00  | 5.00          | 50.00            |
| 10                | GENERAL REQUIREMENTS | CONSULTPM  | PM activities      | 8.00   | HOUR | 125.0000   | 1,000.00  | 5.00          | 50.00            |
| 11                | GENERAL REQUIREMENTS | CONSULTPM  | PM activities      | 8.00   | HOUR | 125.0000   | 1,000.00  | 5.00          | 50.00            |
| 12                | GENERAL REQUIREMENTS | CONSULTPM  | PM activities      | 10.00  | HOUR | 125.0000   | 1,250.00  | 5.00          | 62.50            |
| 13                | CONCRETE             | SUBCON     | Concrete- CIP Slab | 110.00 | HOUR | 63.1250    | 6,943.75  | 100.00        | 6,943.75         |
| 14                | MASONRY              | MATERIAL   | Masonry block      | 0.00   | EA   | 0.0000     | 43,750.00 | 5.00          | 2,187.50         |

The standard printed form is ready to be sent to the customer. Notice how only the time and material section is displayed on the report since there were no progress billing items in your invoice.

If you want to customize the printed form, you can easily do so by means of the Report Designer and then simply change the default report used for Pro Forma Invoices in any of the following ways:

- Specify the new printed form on the Mailing Settings tab of the Project Preferences (PM101000) form

Projects Preferences ☆



GENERAL SETTINGS **MAILING SETTINGS**

| Default Sources |                       |             |                                |        |                                     |  |
|-----------------|-----------------------|-------------|--------------------------------|--------|-------------------------------------|--|
| * Mailing ID    | Default Email Account | Report ID   | Notification Template          | Format | Active                              |  |
| > PMQUOTE       |                       | PM.60.45.00 | PMQuoteNotification            | PDF    | <input checked="" type="checkbox"/> |  |
| INVOICE         |                       | PM.64.10.00 |                                | PDF    | <input checked="" type="checkbox"/> |  |
| CHANGE ORDER    |                       | PM.64.30.00 | Change Order Notification      | PDF    | <input checked="" type="checkbox"/> |  |
| CHANGE REQUEST  |                       | PM.64.35.00 |                                | PDF    | <input checked="" type="checkbox"/> |  |
| PROFORMA        |                       | PM.64.20.00 | Pro Forma Invoice Notification | PDF    | <input checked="" type="checkbox"/> |  |

- For each project, in particular, utilize the Mailing Settings tab of the project on the Projects (PM301000) form

Projects NOTES FILES NOTIFICATIONS 1

← SAVE & CLOSE + K < > >| RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES

REPORTS -

|                |                                  |           |        |              |            |
|----------------|----------------------------------|-----------|--------|--------------|------------|
| * Project ID:  | ITALIAN                          | * Status: | Active | Assets:      | 0.00       |
| Customer:      | ITALIAN01 - The Italian Company  |           | Hold   | Liabilities: | 0.00       |
| Template:      | CONTM - Construction T&M Project |           |        | Income:      | 200,896.25 |
| * Description: | Italian Restaurant Project       |           |        | Expenses:    | 202,717.00 |

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

**Mailings**

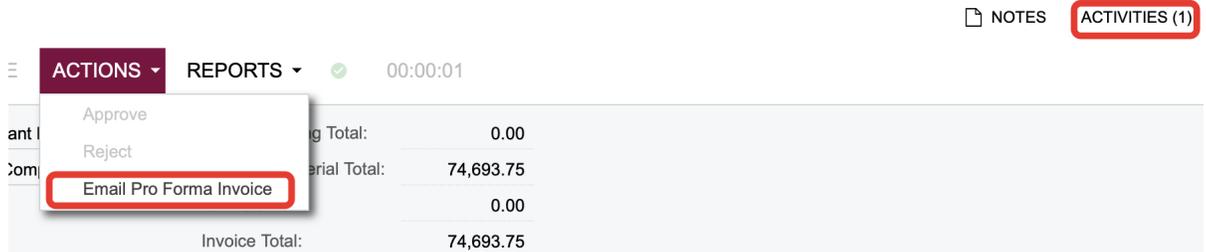
| Mailing ID     | Branch | Email Account | Report      | Notification Template          | Format | Active                              |
|----------------|--------|---------------|-------------|--------------------------------|--------|-------------------------------------|
| > PMQUOTE      |        |               | PM.60.45.00 | PMQuoteNotification            | PDF    | <input checked="" type="checkbox"/> |
| INVOICE        |        |               | PM.64.10.00 |                                | PDF    | <input checked="" type="checkbox"/> |
| CHANGE ORDER   |        |               | PM.64.30.00 | Change Order Notification      | PDF    | <input checked="" type="checkbox"/> |
| CHANGE REQUEST |        |               | PM.64.35.00 |                                | PDF    | <input checked="" type="checkbox"/> |
| PROFORMA       |        |               | PM.64.20.00 | Pro Forma Invoice Notification | PDF    | <input checked="" type="checkbox"/> |

With the project mailing settings, you can specify not only the default printed forms but also the default mailing notifications for the following project-related documents: project quotes, project AR invoices, change orders, change requests, and Pro Forma invoices.

Note that if no notification template is specified for the *INVOICE* mailing ID, the system will take the AR invoice notification template from the settings on the Reporting Settings tab of the Accounts Receivable Preferences (AR101000) form.

- d. Go back to the Pro Forma Invoices form and click **Actions > Email Pro Forma Invoice** on the form toolbar.

A new email with the default values corresponding to the Pro Forma invoice notification is generated and saved as a new invoice activity.



e. Click **Activities** to see the newly sent email.



Notice that the email has the pro forma invoice attached.



12. Now that you have provided the costs to the customer and got their approval for the pro forma invoice, you release the pro forma and the related AR invoice by doing as follows:

- a. On the Pro Forma Invoices (PM307000) form, clear the Hold check box. The document has acquired the *Pending Approval* status. The pro forma invoice approval map is configured in such a way that it requires the approval of the project manager when the invoice total exceeds 10,000.00.

Pro Forma Invoices NOTES ACTIVITIES FILES

← SAVE & CLOSE ↻ ↵ ⌂ < > >| RELEASE ACTIONS ▾ REPORTS ▾

|                                  |   |                                    |
|----------------------------------|---|------------------------------------|
| Reference Nbr.: 000010           | Project: ITALIAN - Italian Restaurant Project | Progress Billing Total: 0.00       |
| Status: Pending Approv           | Customer: ITALIAN01 - The Italian Company     | Time and Material Total: 74,693.75 |
| <input type="checkbox"/> Hold    |   | Tax Total: 0.00                    |
| Invoice Date: 4/1/2019           |   | Invoice Total: 74,693.75           |
| Post Period: 04-2019             |   | Retainage Total: 0.00              |
| Description: Invoice for ITALIAN |   | Amount Due: 74,693.75              |

PROGRESS BILLING TIME AND MATERIAL TAX DETAILS FINANCIAL DETAILS APPROVAL DETAILS ADDRESS DETAILS

| Assignee ID | Assigned To | Workgroup | Approved By (ID) | Approved By | Approval Date | Status  | Reason |
|-------------|-------------|-----------|------------------|-------------|---------------|---------|--------|
| EP00000015  | Bill Owen   |           |                  |             |               | Pending |        |

On the All Emails (CO409070) form, a new email has been generated with the pending approval notification. Open that email and navigate to the related Pro Forma Invoice via the link in the email body.

All Emails ☆

↻ + ✎ 🗑️ ⏪ ⏩ ⏴ ⏵

ALL RECORDS OUTGOING EMAILS INCOMING EMAILS FAILED EMAILS ARCHIVED EMAILS

| Summary   | From                            | Created At         | Mail Status        | To                 |
|---|---------------------------------|--------------------|--------------------|--------------------|
| Draft invoice # 000010 for project ITALIAN "Italian Restaurant Project" is... | "System" <system@sweetlife.com> | 11/30/2019 6:36 AM | Pending Processing | owen@sweetlife.com |

### Email Activity

← SAVE & CLOSE ↻ ↵ ⌂ < > >| REPLY ACTIONS ▾

From: System

To: owen@sweetlife.com

CC:

BCC:

Subject: Draft invoice # 000010 for project ITALIAN "Italian Restaurant Project" is pending your approval

MESSAGE DETAILS

VISUAL ▾ ↻ ↺ Paragraph ▾ **B** *I* U A ✎ ☰ ☷ ☸ ☹ INSERT LAYOUT

Dear

This is an automatic email to notify you that you have a new Pro Forma Invoice available for approval on your account. You will find a copy of Invoice # 000010 for project ITALIAN "Italian Restaurant Project" attached to this email.

[VIEW DOCUMENT](#)

The approval map for the Pro Forma Invoices is specified on the Project Preferences (PM101000) form. You can also set up an approval notification template there so that each time a Pro Forma invoice gets the *Pending Approval* status, the approvers of the document will receive an automatic email with the invoice attached.

## Projects Preferences ☆



GENERAL SETTINGS MAILING SETTINGS

| NUMBERING SEQUENCE                            |   |
|---|---|
| * Transaction Numbering Sequence:             | PMTRAN - PM Transaction Numbering         |
| * Batch Numbering Sequence:                   | BATCH - GL Batch                          |
| * Pro Forma Numbering Sequence:               | PROFORMA - PM Pro Forma Invoice Numbering |
| * Change Order Numbering Sequence:            | CHANGEORD - PM Change Order Numbering     |
| * Change Request Numbering Sequence:          | CHANGERST - PM Change Request Numbering   |
| * Quote Numbering Sequence:                   | PMQUOTE - Quotes in Project               |
| GENERAL SETTINGS                              |   |
| * Non-Project Code:                           | X   |
| * Empty Item Code:                            | <N/A>                                     |
| * Empty Item UOM:                             | EA  |
| Default Change Order Class:                   | EXT - External change orders              |
| Default Quote Template:                       |   |
| Project Approval Map:                         |   |
| Pending Project Approval Notification:        |   |
| Pro Forma Approval Map:                       | Pro Forma Invoice Approval                |
| Pending Pro Forma Approval Notification:      | Pro Forma Invoice Approval Notification   |
| Change Request Approval Map:                  | CR Approval                               |
| Pending Change Request Approval Notification: |   |

You can also specify approval maps and approval notifications for change orders, change requests, and project quotes on the Project Preferences (PM101000) form.

Approval maps are created on the Approval Maps (EP205015) form. Pending approval notifications (as well as mailing notifications) are created on the Notification Templates (SM204003) form.

- b. On the form toolbar of the Pro Forma Invoices form, click **Actions** -> **Approve** and then click **Release**.
- c. On the **Financial Details** tab, select the generated AR invoice, which opens on the Invoices and Memos (AR301000) form.

Pro Forma Invoices

SAVE & CLOSE RELEASE ACTIONS ▾ REPORTS ▾ 00:00:01

|                 |                               |           |                                      |                          |           |
|-----------------|-------------------------------|-----------|--------------------------------------|--------------------------|-----------|
| Reference Nbr.: | 000008                        | Project:  | ITALIAN - Italian Restaurant Project | Progress Billing Total:  | 0.00      |
| Status:         | Closed                        | Customer: | ITALIAN01 - The Italian Company      | Time and Material Total: | 74,693.75 |
|                 | <input type="checkbox"/> Hold |           |                                      | Tax Total:               | 0.00      |
| Invoice Date:   | 4/1/2019                      |           |                                      | Invoice Total:           | 74,693.75 |
| Post Period:    | 04-2019                       |           |                                      | Retainage Total:         | 0.00      |
| Description:    | Invoice for ITALIAN           |           |                                      | Amount Due:              | 74,693.75 |

PROGRESS BILLING   TIME AND MATERIAL   TAX DETAILS   **FINANCIAL DETAILS**   APPROVAL DETAILS   ADDRESS DETAILS

**INVOICE SETTINGS**

AR Doc. Type: Invoice

AR Ref. Nbr.: 000080

Branch: HEADOFFICE - SweetLife Head Office ar

Customer Tax Zone:

Terms: 30D - 30 Days

Due Date: 5/1/2019

Cash Discount Date: 5/1/2019

d. Clear the **Hold** check box.

e. Click **Actions** -> **Email Invoice/Memo** on the form toolbar. Notice that a new activity has appeared on the invoice.

NOTES   ACTIVITIES (1)

ACTIONS ▾   INQUIRIES ▾   REPORTS ▾     00:00:01

- Approve
- Reject
- Email Invoice/Memo**
- Send Email

f. Review the email sent. Make sure that the printed AR invoice is attached to the email.

**Tasks & Activities** ✕

  ADD TASK   ADD EVENT   ADD ACTIVITY ▾

**30 Nov**   [SweetLife Head Office and Wholesale Center: INVOICE #000080 \(Customer Ref. Nbr. 000008\) is now available](#)

**Email Activity** NOTES FILES (1) TOOLS ▾

SAVE & CLOSE **REPLY** **ACTIONS ▾**

From: System  
 To: Dustin.Lindquist@italianco.com  
 CC:  
 BCC:  
 Subject: SweetLife Head Office and Wholesale Center: INVOICE #000080 (Customer Ref. 000008) is now available

**AR Invoice/Memo**

Type: Invoice  
 Reference Nbr.: 000080  
 Customer: The Italian Company  
 Location: Primary Location  
 Source: AR  
 Date: 4/1/2019

**MESSAGE** DETAILS

**VISUAL** Paragraph **B** **I** U **INSERT** **LAYOUT** **TABLES**

Dear Customer,

This is an automatic email to notify you that you have a new Invoice available on your account. You will find a copy of INVOICE #000080 (Customer Ref. Nbr. 000008) attached to this email.

If you have any questions, please don't hesitate to contact us at email.

Thank you for choosing SweetLife Head Office and Wholesale Center!

**g.** Now you are ready to release the invoice and get the actual income for the *ITALIAN* project. Click **Release** on the form toolbar to release the AR invoice.

**Invoices and Memos** NOTES ACTIVITIES FILES NOTIFICATIONS

SAVE & CLOSE **RELEASE** **ACTIONS ▾** **INQUIRIES ▾** **REPORTS ▾** 00.00.01

Type: **Invoice** Customer: ITALIAN01 - The Italian Company Detail Total: 74,693.75  
 Reference Nbr.: 000080 Terms: 30D - 30 Days Discount Total: 0.00  
 Status: **Open** Due Date: 5/1/2019 VAT Taxable T.: 0.00  
 Hold Cash Discount: 5/1/2019  Pay by Line VAT Exempt T.: 0.00  
 Date: 4/1/2019 Project/Contract: ITALIAN - Italian Restaurant Project Tax Total: 0.00  
 Post Period: 04-2019 Balance: 74,693.75  
 Customer Order: 000008 Amount: 74,693.75  
 Description: Invoice for ITALIAN Cash Discount: 0.00

**DOCUMENT DETAILS** **FINANCIAL DETAILS** **ADDRESS DETAILS** **TAX DETAILS** **APPROVAL DETAILS** **APPLICATIONS** **COMPLIANCE**

| Branch     | Account Group/Item | Transaction Descr. | Quantity | UOM  | Unit Price | Ext. Price | Discount Percent | Discount Amount | Amount    | * Account | Description     | Schedule of Values | Cost Code | \$ |
|------------|--------------------|--------------------|----------|------|------------|------------|------------------|-----------------|-----------|-----------|-----------------|--------------------|-----------|----|
| HEADOFFICE | SITEREVIEW         | Site review work   | 3.00     | HOUR | 125.0000   | 375.00     | 0.000000         | 0.00            | 375.00    | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | SITEREVIEW         | Site review work   | 8.00     | HOUR | 125.0000   | 1,000.00   | 0.000000         | 0.00            | 1,000.00  | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | SITEREVIEW         | Site review work   | 10.00    | HOUR | 125.0000   | 1,250.00   | 0.000000         | 0.00            | 1,250.00  | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | SITEREVIEW         | Site review work   | 12.00    | HOUR | 125.0000   | 1,500.00   | 0.000000         | 0.00            | 1,500.00  | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | SITEREVIEW         | Site review work   | 8.00     | HOUR | 125.0000   | 1,000.00   | 0.000000         | 0.00            | 1,000.00  | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | SITEREVIEW         | Site review work   | 7.00     | HOUR | 125.0000   | 875.00     | 0.000000         | 0.00            | 875.00    | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | SITEREVIEW         | Site review work   | 2.00     | HOUR | 125.0000   | 250.00     | 0.000000         | 0.00            | 250.00    | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | CONSULTPM          | PM activities      | 8.00     | HOUR | 125.0000   | 1,000.00   | 0.000000         | 0.00            | 1,000.00  | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | CONSULTPM          | PM activities      | 8.00     | HOUR | 125.0000   | 1,000.00   | 0.000000         | 0.00            | 1,000.00  | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | CONSULTPM          | PM activities      | 8.00     | HOUR | 125.0000   | 1,000.00   | 0.000000         | 0.00            | 1,000.00  | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | CONSULTPM          | PM activities      | 8.00     | HOUR | 125.0000   | 1,000.00   | 0.000000         | 0.00            | 1,000.00  | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | CONSULTPM          | PM activities      | 10.00    | HOUR | 125.0000   | 1,250.00   | 0.000000         | 0.00            | 1,250.00  | 40000     | Project Revenue | 01                 | 01-311    |    |
| HEADOFFICE | SUBCON             | Concrete- CIP Slab | 110.00   | EA   | 63.1250    | 6,943.75   | 0.000000         | 0.00            | 6,943.75  | 40000     | Project Revenue | 03                 | 03-300    |    |
| HEADOFFICE | MATERIAL           | Masonry block      | 0.00     | EA   | 0.0000     | 43,750.00  | 0.000000         | 0.00            | 43,750.00 | 40000     | Project Revenue | 04                 | 04-220    |    |
| HEADOFFICE | MATERIAL           | Composite wall     | 0.00     | EA   | 0.0000     | 12,500.00  | 0.000000         | 0.00            | 12,500.00 | 40000     | Project Revenue | 04                 | 04-700    |    |

**h.** On the Projects form, note that there is more actual income on the project now.

Projects

← SAVE & CLOSE [Print] ↶ + [Trash] ⏪ < > ⏩ RUN PROJECT BILLING CREATE CHANGE REQUEST CREAT  
 REPORTS ▾

\* Project ID: ITALIAN \* Status: Active Assets: 0.00  
 Customer: ITALIAN01 - The Italian Company Liabilities: 0.00  
 Template: CONTM - Construction T&M Project Income: 200,896.25  
 \* Description: Italian Restaurant Project Expenses: 202,717.00

SUMMARY TASKS REVENUE BUDGET COST BUDGET BALANCES COMMITMENTS INVOICES CHANGE ORDERS CHANGE RE

PROJECT PROPERTIES BILL-TO

Revenue Budget Level: Task and Cost Code  
 Cost Budget Level: Task and Cost Code Company Name: The I

**Working with the WIP Report**

WIP (work-in-progress or work-in-process) is designed to track the progress of active jobs, as well as their financial performance. In addition to looking at the percentage of completion and the cost to complete, it also determines whether a job 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.

Acumatica ERP Construction Edition supports several versions of WIP reporting, providing necessary information, and with the recent inclusion of a Bonding report, surety companies have visibility into a business’s performance.

Now you are in the middle of your construction project life-cycle and you want to know how well you perform. Do the following:

1. Review the project balances for the *ITALIAN* project on the Projects (PM301000) form:

| Account Group  | Description            | Original Budgeted Amount | Potential CO Amount | Budgeted CO Amount | Revised Budgeted Amount | Original Committed Amount | Committed CO Amount | Revised Committed Amount | Committed Invoiced Amount | Actual Amount     | Committed Open Amount | Actual + Open Committed Amount | Variance Amount     | Performance (%) |
|----------------|------------------------|--------------------------|---------------------|--------------------|-------------------------|---------------------------|---------------------|--------------------------|---------------------------|-------------------|-----------------------|--------------------------------|---------------------|-----------------|
| <b>Income</b>  |                        |                          |                     |                    |                         |                           |                     |                          |                           |                   |                       |                                |                     |                 |
| REVENUE        | Project Revenue        | 2,186,984.80             | 0.00                | 6,415.21           | 2,193,400.01            | 0.00                      | 0.00                | 0.00                     | 0.00                      | 200,896.25        | 0.00                  | 200,896.25                     | 1,992,503.76        | 9.16            |
|                | <b>Income Totals</b>   | <b>2,186,984.80</b>      |                     |                    | <b>2,193,400.01</b>     | <b>0.00</b>               |                     | <b>0.00</b>              | <b>0.00</b>               | <b>200,896.25</b> | <b>0.00</b>           | <b>200,896.25</b>              | <b>1,992,503.76</b> | <b>9.16</b>     |
| <b>Expense</b> |                        |                          |                     |                    |                         |                           |                     |                          |                           |                   |                       |                                |                     |                 |
| LABOR          | Project Labor          | 325,585.00               | 0.00                | 1,000.00           | 326,585.00              | 0.00                      | 0.00                | 0.00                     | 0.00                      | 9,200.00          | 0.00                  | 9,200.00                       | 317,385.00          | 2.82            |
| MATERIAL       | Project Material       | 1,224,870.00             | 0.00                | 0.00               | 1,224,870.00            | 160,717.00                | 0.00                | 160,717.00               | 145,962.00                | 145,962.00        | 14,755.00             | 160,717.00                     | 1,064,153.00        | 11.92           |
| OTHER...       | Other project expenses | 61,551.00                | 0.00                | 0.00               | 61,551.00               | 0.00                      | 0.00                | 0.00                     | 0.00                      | 0.00              | 0.00                  | 0.00                           | 61,551.00           | 0.00            |
| SUBCON         | Project Subcontract    | 68,790.00                | 0.00                | 2,270.00           | 71,060.00               | 52,598.00                 | 2,270.00            | 54,868.00                | 47,555.00                 | 47,555.00         | 7,313.00              | 54,868.00                      | 16,192.00           | 66.92           |
| TRAVEL         | Project Travel         | 5,000.00                 | 0.00                | 0.00               | 5,000.00                | 0.00                      | 0.00                | 0.00                     | 0.00                      | 0.00              | 0.00                  | 0.00                           | 5,000.00            | 0.00            |
|                | <b>Expense Totals</b>  | <b>1,685,796.00</b>      |                     |                    | <b>1,689,066.00</b>     | <b>213,315.00</b>         |                     | <b>215,585.00</b>        | <b>193,517.00</b>         | <b>202,717.00</b> | <b>22,068.00</b>      | <b>224,785.00</b>              | <b>1,464,281.00</b> | <b>12.00</b>    |

2. On the Project WIP (CU000004) form, specify the following report input parameters:

- **As of Date:** 04/01/2019
- **Project:** ITALIAN

## Project WIP ☆

✎ ↺ RUN REPORT SAVE TEMPLATE REMOVE TEMPLATE

Template  X ▾  
 Default  Shared

**REPORT PARAMETERS**    ADDITIONAL SORT AND FILTERS    PRINT AND EMAIL

Organization: SWEETLIFE - SweetLife Fruits & Jam 🔍  
 Branch: HEADOFFICE - SweetLife Head Office 🔍  
 As of Date: 4/1/2019 ▾  
 Status: Active ▾  
 Exclude Projects Comp... ▾  
 Project: ITALIAN - Italian Restaurant Project 🔍

3. Click **Run Report** on the form toolbar to generate the WIP report.

**Project WIP Report**  
 As of Date: 4/1/2019  
 Status: Active  
 Company: SWEETLIFE  
 Branch: SweetLife Head Office and Wholesale Center



| Project | Description                | Status         | Contract Amount |               |                | Estimated Cost |               |                | Est. Gross Profit | Est. Gross Profit % | Project Cost to Date | % Complete | Actual                   |                  |
|---------|----------------------------|----------------|-----------------|---------------|----------------|----------------|---------------|----------------|-------------------|---------------------|----------------------|------------|--------------------------|------------------|
|         |                            |                | Original        | Assessed CO's | Revised        | Original       | Assessed CO's | Revised        |                   |                     |                      |            | Project Billings to Date | Revenue Realized |
| ITALIAN | Italian Restaurant Project | Active         | \$2,186,984.80  | \$6,412.21    | \$2,193,400.01 | \$1,685,796.00 | \$2,270.00    | \$1,688,066.00 | \$204,334.01      | 22.99 %             | \$160,717.00         | 9.52 %     | \$200,898.25             | \$208,702.09     |
|         |                            | Report Details | \$2,186,984.80  | \$6,412.21    | \$2,193,400.01 | \$1,685,796.00 | \$2,270.00    | \$1,688,066.00 | \$204,334.01      |                     | \$160,717.00         |            | \$200,898.25             | \$208,702.09     |

4. Click the **PDF** button on the form toolbar to generate a PDF with the report.
5. Review whether your project is under-billed or overbilled and what profit has been gained for it.

| <u>Gross Profit</u> | <u>Under (Over) Billings</u> |
|---------------------|------------------------------|
| \$47,988.09         | \$7,808.84                   |
| <b>\$47,988.09</b>  | <b>\$7,808.84</b>            |

Now you as a project manager understand the performance of your project and realize that you will have to bill the customer more to establish a stable project continuation.

6. Besides the Project WIP (CU000004) report, Acumatica ERP Construction Edition also provides a Project WIP Detail (CU000005) report that shows the same information at a project revenue budget line level.

Navigate to the Project WIP Detail form and run the report with the following input parameters:

- **As of Date:** 04/01/2019

● **Project:ITALIAN**

**Project WIP Detail Report**  
As Of Date: 4/1/2019  
Status: Active



| TaskID | Description                     | Cost Code                                    | Contract Amounts |               |              | Estimated Costs |               |              | Commitments  |               |              | Est. Gross Profit | Est. Gross Profit % | Percent Costs to Date |
|--------|---------------------------------|--|------------------|---------------|--------------|-----------------|---------------|--------------|--------------|---------------|--------------|-------------------|---------------------|-----------------------|
|        |                                 |  | Original         | Approved CO's | Revised      | Original        | Approved CO's | Revised      | Original     | Approved CO's | Revised      |                   |                     |                       |
| 01     | GENERAL REQUIREMENTS            | 01-000 GENERAL REQUIREMENTS                  | \$0.00           | \$1,188.00    | \$1,188.00   | \$0.00          | \$0.00        | \$0.00       | \$0.00       | \$0.00        | \$0.00       | \$1,188.00        | 100.00 %            | \$0.00                |
| 01     | GENERAL REQUIREMENTS            | 01-309 Permits                               | \$20,281.30      | \$0.00        | \$20,281.30  | \$15,001.00     | \$0.00        | \$15,001.00  | \$0.00       | \$0.00        | \$0.00       | \$4,680.30        | 23.08 %             | \$0.00                |
| 01     | GENERAL REQUIREMENTS            | 01-311 Operations- Project Manager           | \$18,800.00      | \$0.00        | \$18,800.00  | \$18,800.00     | \$0.00        | \$18,800.00  | \$0.00       | \$0.00        | \$0.00       | \$4,600.00        | 23.08 %             | \$9,200.00            |
| 01     | GENERAL REQUIREMENTS            | 01-313 Operations- Superintendent            | \$50,700.00      | \$0.00        | \$50,700.00  | \$30,000.00     | \$0.00        | \$30,000.00  | \$0.00       | \$0.00        | \$0.00       | \$11,700.00       | 23.08 %             | \$0.00                |
| 01     | GENERAL REQUIREMENTS            | 01-314 Operations- Crew Leader               | \$20,000.00      | \$0.00        | \$20,000.00  | \$20,000.00     | \$0.00        | \$20,000.00  | \$0.00       | \$0.00        | \$0.00       | \$0,000.00        | 23.08 %             | \$0.00                |
| 01     | GENERAL REQUIREMENTS            | 01-339 Design Fees                           | \$48,700.00      | \$0.00        | \$48,700.00  | \$37,000.00     | \$0.00        | \$37,000.00  | \$0.00       | \$0.00        | \$0.00       | \$11,200.00       | 23.08 %             | \$0.00                |
| 01     | GENERAL REQUIREMENTS            | 01-505 Mobilization                          | \$5,500.00       | \$0.00        | \$5,500.00   | \$5,000.00      | \$0.00        | \$5,000.00   | \$0.00       | \$0.00        | \$0.00       | \$1,500.00        | 23.08 %             | \$0.00                |
| 01     | GENERAL REQUIREMENTS            | 01-510 Temporary Utilities                   | \$1,238.00       | \$0.00        | \$1,238.00   | \$980.00        | \$0.00        | \$980.00     | \$0.00       | \$0.00        | \$0.00       | \$238.00          | 23.08 %             | \$0.00                |
| 01     | GENERAL REQUIREMENTS            | 01-600 Insurance                             | \$9,750.00       | \$0.00        | \$9,750.00   | \$7,500.00      | \$0.00        | \$7,500.00   | \$0.00       | \$0.00        | \$0.00       | \$2,250.00        | 23.08 %             | \$0.00                |
| 01     | GENERAL REQUIREMENTS            | 01-800 Clean Up                              | \$13,000.00      | \$0.00        | \$13,000.00  | \$10,000.00     | \$1,000.00    | \$11,000.00  | \$0.00       | \$0.00        | \$0.00       | \$2,000.00        | 15.38 %             | \$0.00                |
| 01     | GENERAL REQUIREMENTS            | 01-800 Clean Up                              | \$155,716.38     | \$1,188.00    | \$156,904.38 | \$150,551.00    | \$1,000.00    | \$151,551.00 | \$0.00       | \$0.00        | \$0.00       | \$45,353.38       | 23.08 %             | \$9,200.00            |
|        |                                 | Task 01 Sub Total:                           | \$0.00           | \$2,494.07    | \$2,494.07   | \$0.00          | \$0.00        | \$0.00       | \$0.00       | \$0.00        | \$0.00       | \$2,494.07        | 100.00 %            | \$0.00                |
| 02     | SITEWORK                        | 02-000 SITEWORK                              | \$0.00           | \$2,494.07    | \$2,494.07   | \$0.00          | \$0.00        | \$0.00       | \$0.00       | \$0.00        | \$0.00       | \$2,494.07        | 100.00 %            | \$0.00                |
| 02     | CONCRETE                        | 03-000 CONCRETE                              | \$0.00           | \$468.16      | \$468.16     | \$0.00          | \$0.00        | \$0.00       | \$0.00       | \$0.00        | \$0.00       | \$468.16          | 100.00 %            | \$0.00                |
| 02     | CONCRETE                        | 03-100 Concrete-Forming                      | \$5,480.00       | \$0.00        | \$5,480.00   | \$4,200.00      | \$0.00        | \$4,200.00   | \$2,494.07   | \$0.00        | \$0.00       | \$2,494.07        | 23.08 %             | \$2,494.07            |
| 02     | CONCRETE                        | 03-200 Concrete-Reinforcing                  | \$27,625.00      | \$0.00        | \$27,625.00  | \$21,250.00     | \$0.00        | \$21,250.00  | \$21,242.00  | \$0.00        | \$0.00       | \$6,375.00        | 23.08 %             | \$21,242.00           |
| 02     | CONCRETE                        | 03-300 Concrete- CIP Slabs                   | \$103,250.00     | \$0.00        | \$103,250.00 | \$79,500.00     | \$0.00        | \$79,500.00  | \$73,399.00  | \$0.00        | \$0.00       | \$23,800.00       | 23.08 %             | \$73,399.00           |
| 02     | CONCRETE                        | 03-350 Concrete-Finishes                     | \$11,750.00      | \$0.00        | \$11,750.00  | \$6,040.00      | \$300.00      | \$6,440.00   | \$3,000.00   | \$0.00        | \$0.00       | \$6,832.00        | 19.84 %             | \$6,440.00            |
|        |                                 | Task 02 Sub Total:                           | \$148,105.00     | \$468.16      | \$148,656.16 | \$113,990.00    | \$300.00      | \$114,370.00 | \$106,517.00 | \$300.00      | \$106,897.00 | \$34,285.16       | 23.08 %             | \$106,517.00          |
| 04     | MASONRY                         | 04-220 Masonry-Block                         | \$73,125.00      | \$0.00        | \$73,125.00  | \$55,250.00     | \$0.00        | \$55,250.00  | \$49,877.00  | \$0.00        | \$0.00       | \$19,375.00       | 23.08 %             | \$35,000.00           |
| 04     | MASONRY                         | 04-700 Masonry-Composite Walls               | \$19,800.00      | \$0.00        | \$19,800.00  | \$18,000.00     | \$0.00        | \$18,000.00  | \$12,878.00  | \$0.00        | \$0.00       | \$4,920.00        | 23.08 %             | \$18,000.00           |
|        |                                 | Task 04 Sub Total:                           | \$92,925.00      | \$0.00        | \$92,925.00  | \$73,250.00     | \$0.00        | \$73,250.00  | \$69,755.00  | \$0.00        | \$0.00       | \$24,295.00       | 23.08 %             | \$45,000.00           |
| 06     | WOOD PLASTICS                   | 06-100 Carpentry- Rough                      | \$10,387.50      | \$0.00        | \$10,387.50  | \$7,875.00      | \$0.00        | \$7,875.00   | \$0.00       | \$0.00        | \$0.00       | \$2,382.50        | 23.08 %             | \$0.00                |
| 06     | WOOD PLASTICS                   | 06-110 Framing-Wood                          | \$94,480.00      | \$0.00        | \$94,480.00  | \$49,600.00     | \$0.00        | \$49,600.00  | \$0.00       | \$0.00        | \$0.00       | \$14,880.00       | 23.08 %             | \$0.00                |
| 06     | WOOD PLASTICS                   | 06-160 Framing-Siding                        | \$6,207.50       | \$0.00        | \$6,207.50   | \$4,775.00      | \$0.00        | \$4,775.00   | \$0.00       | \$0.00        | \$0.00       | \$1,432.50        | 23.08 %             | \$0.00                |
| 06     | WOOD PLASTICS                   | 06-190 Fabricated-Wood Trusses               | \$49,400.00      | \$0.00        | \$49,400.00  | \$38,000.00     | \$0.00        | \$38,000.00  | \$0.00       | \$0.00        | \$0.00       | \$11,400.00       | 23.08 %             | \$0.00                |
| 06     | WOOD PLASTICS                   | 06-250 Finish-Planing                        | \$9,380.00       | \$0.00        | \$9,380.00   | \$7,200.00      | \$0.00        | \$7,200.00   | \$0.00       | \$0.00        | \$0.00       | \$2,180.00        | 23.08 %             | \$0.00                |
| 06     | WOOD PLASTICS                   | 06-440 Woodwork-Ornamental                   | \$17,517.50      | \$0.00        | \$17,517.50  | \$13,475.00     | \$0.00        | \$13,475.00  | \$0.00       | \$0.00        | \$0.00       | \$4,042.50        | 23.08 %             | \$0.00                |
|        |                                 | Task 06 Sub Total:                           | \$157,332.50     | \$0.00        | \$157,332.50 | \$121,025.00    | \$0.00        | \$121,025.00 | \$0.00       | \$0.00        | \$0.00       | \$38,307.50       | 23.08 %             | \$0.00                |
| 07     | THERMAL AND MOISTURE PROTECTION | 07-200 Insulation                            | \$34,167.50      | \$0.00        | \$34,167.50  | \$28,275.00     | \$0.00        | \$28,275.00  | \$0.00       | \$0.00        | \$0.00       | \$7,892.50        | 23.08 %             | \$0.00                |
| 07     | THERMAL AND MOISTURE PROTECTION | 07-300 Roofing-Steep Slope                   | \$132,498.00     | \$0.00        | \$132,498.00 | \$101,820.00    | \$0.00        | \$101,820.00 | \$0.00       | \$0.00        | \$0.00       | \$30,578.00       | 23.08 %             | \$0.00                |
|        |                                 | Task 07 Sub Total:                           | \$166,665.50     | \$0.00        | \$166,665.50 | \$128,195.00    | \$0.00        | \$128,195.00 | \$0.00       | \$0.00        | \$0.00       | \$38,465.50       | 23.08 %             | \$0.00                |
| 08     | OPENINGS                        | 08-000 OPENINGS                              | \$0.00           | \$2,254.98    | \$2,254.98   | \$0.00          | \$0.00        | \$0.00       | \$0.00       | \$0.00        | \$0.00       | \$2,254.98        | 100.00 %            | \$0.00                |
| 08     | OPENINGS                        | 08-100 Doors-Exterior                        | \$12,220.00      | \$0.00        | \$12,220.00  | \$9,400.00      | \$1,040.00    | \$10,440.00  | \$0.00       | \$1,040.00    | \$1,040.00   | \$1,760.00        | 14.87 %             | \$0.00                |
| 08     | OPENINGS                        | 08-200 Doors-Interior                        | \$10,125.00      | \$0.00        | \$10,125.00  | \$8,250.00      | \$0.00        | \$8,250.00   | \$0.00       | \$0.00        | \$0.00       | \$2,175.00        | 23.08 %             | \$0.00                |
| 08     | OPENINGS                        | 08-400 Doors-Overhead                        | \$3,840.00       | \$0.00        | \$3,840.00   | \$2,800.00      | \$0.00        | \$2,800.00   | \$0.00       | \$0.00        | \$0.00       | \$840.00          | 23.08 %             | \$0.00                |
| 08     | OPENINGS                        | 08-520 Windows-Wood                          | \$28,328.00      | \$0.00        | \$28,328.00  | \$20,250.00     | \$850.00      | \$21,100.00  | \$0.00       | \$850.00      | \$850.00     | \$8,228.00        | 19.85 %             | \$0.00                |
| 08     | OPENINGS                        | 08-800 Entrances, Storefronts, Curtain Walls | \$42,250.00      | \$0.00        | \$42,250.00  | \$32,500.00     | \$0.00        | \$32,500.00  | \$0.00       | \$0.00        | \$0.00       | \$9,750.00        | 23.08 %             | \$0.00                |

**Working with the AIA Printed Form**

One common construction billing format is known as AIA progress billing, named after the American Institute of Architects that produces its official forms. As a type of progress billing, AIA billing invoices the customer based on the percentage of work completed for that billing period. This invoice generally consists of a signed summary sheet [G702], followed by a schedule of values [G703] that details what's been completed and billed to date.

Together, these documents are considered an "application" for payment, because the recipient will have a chance to review the schedule of values and either accept or dispute the billed amount. If they disagree, they'll send back "redlines" so that the contractor can revise and resubmit the AIA billing application.

AIA Document G702™-1992, Application and Certificate for Payment, and G703™-1992, Continuation Sheet, provide convenient and complete forms on which the contractor can apply for payment and the architect can certify that payment is due. The forms require the contractor to show the status of the contract sum to date, including the total dollar amount of the work completed and stored to date, the amount of retainage (if any), the total of previous payments, a summary of change orders, and the amount of current payment requested. AIA Document G703-1992 breaks the contract sum into portions of the work in accordance with a schedule of values prepared by the contractor as required by the general conditions. NOTE: The AIA does not publish a standard schedule of values form. AIA Document G702-1992 serves as both the contractor's application and the architect's certification. Its use can expedite payment and reduce the possibility of error. If the application is properly completed and acceptable to the architect, the architect's signature certifies to the owner that a payment in the amount indicated is due to the contractor. The form also allows the architect to certify an amount different than the amount applied for, with explanation provided by the architect.

 **AIA Document G702™ – 1992**

**Application and Certificate for Payment**

|                  |                |                 |                                     |
|------------------|----------------|-----------------|-------------------------------------|
| TO OWNER:        | PROJECT:       | APPLICATION NO: | <b>Distribution to:</b>             |
|                  |                | PERIOD TO:      | OWNER <input type="checkbox"/>      |
| FROM CONTRACTOR: | VIA ARCHITECT: | CONTRACT FOR:   | ARCHITECT <input type="checkbox"/>  |
|                  |                | CONTRACT DATE:  | CONTRACTOR <input type="checkbox"/> |
|                  |                | PROJECT NOS:    | FIELD <input type="checkbox"/>      |
|                  |                |                 | OTHER <input type="checkbox"/>      |

**CONTRACTOR'S APPLICATION FOR PAYMENT**

Application is made for payment, as shown below, in connection with the Contract AIA Document G703™, Continuation Sheet, is attached.

1. ORIGINAL CONTRACT SUM ..... \$ \_\_\_\_\_

2. NET CHANGE BY CHANGE ORDERS ..... \$ \_\_\_\_\_

3. CONTRACT SUM TO DATE (Line 1 + 2) ..... \$ \_\_\_\_\_

4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) ..... \$ \_\_\_\_\_

5. RETAINAGE:

a. \_\_\_\_\_% of Completed Work  
(Columns D + E on G703) ..... \$ \_\_\_\_\_

b. \_\_\_\_\_% of Stored Material  
(Column F on G703) ..... \$ \_\_\_\_\_

Total Retainage (Lines 5a + 5b, or Total in Column I of G703) ..... \$ \_\_\_\_\_

6. TOTAL EARNED LESS RETAINAGE ..... \$ \_\_\_\_\_  
(Line 4 minus Line 5 Total)

7. LESS PREVIOUS CERTIFICATES FOR PAYMENT ..... \$ \_\_\_\_\_  
(Line 6 from prior Certificate)

8. CURRENT PAYMENT DUE ..... \$ \_\_\_\_\_

9. BALANCE TO FINISH, INCLUDING RETAINAGE ..... \$ \_\_\_\_\_  
(Line 3 minus Line 6)

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: \_\_\_\_\_

County of: \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_

Notary Public: \_\_\_\_\_

My commission expires: \_\_\_\_\_

**ARCHITECT'S CERTIFICATE FOR PAYMENT**

In accordance with the Contract Documents, based on on-site observations and the data comprising this 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 Contractor named herein. Issuance, payment and acceptance of payment are without 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 | \$ _____  | \$ _____   |
| Total approved this month                          | \$ _____  | \$ _____   |
| TOTAL  | \$ _____  | \$ _____   |
| NET CHANGES by Change Order                        | \$ _____  | \$ _____   |

**CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.**

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 **Document G703™ – 1992**

**Continuation Sheet**

AIA Document G702™-1992, Application and Certificate for Payment, or G732™-2009, Application and Certificate for Payment, Construction Manager as Adviser Edition, containing Contractor's signed certification is attached. In tabulations below, amounts are in US dollars. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO:  
APPLICATION DATE:  
PERIOD TO:  
ARCHITECT'S PROJECT NO:

| A<br>ITEM NO. | B<br>DESCRIPTION OF WORK | C<br>SCHEDULED VALUE | D<br>WORK COMPLETED                       |                  | F<br>MATERIALS PRESENTLY STORED<br>(Not in D or E) | G<br>TOTAL COMPLETED AND STORED TO DATE<br>(D+E+F) | H<br>BALANCE TO FINISH<br>(C-G) | I<br>RETAINAGE<br>(if variable rate) |
|---------------|--------------------------|----------------------|---|------------------|--|--|---------------------------------|--------------------------------------|
|               |                          |                      | D<br>FROM PREVIOUS APPLICATION<br>(D + E) | E<br>THIS PERIOD |  |  |                                 |                                      |
| GRAND TOTAL   |                          |                      |   |                  |  |  |                                 |                                      |

**CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.**

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Acumatica ERP Construction Edition provides the following similar reports:

- Standard AIA Report (PM000019)
- AIA with Quantity (PM000020)
- AIA with Retainage Released (CU000112)

Do the following:

1. On the Projects (PM301000) form, open the *HOTEL* project.

It is a progress billing project.

2. You can see that almost half of the project has already been finished and there are invoices on the **Invoices** tab.

Projects

← SAVE & CLOSE + |< < > >| RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS ▾

• Project ID: HOTEL  • Status: Active ▾ Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor   Hold Liabilities: 0.00  
 Template:  Income: 22,667,202.71  
 • Description: The Beach Hotel and Condominiums, New York Expenses: 720,020.00

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

Project Task:   Group by Task Pending Invoice Amount Total: 0.00

+ × VIEW TRANSACTIONS |<|

|   |  |  | • Schedule of Values | Cost Code | • Account Group | Description                     | UOM  | Original Budgeted Amount | Potential CO Amount | Revised Budgeted Amount | Budgeted CO Amount | Actual Amount |
|---|--|--|----------------------|-----------|-----------------|---------------------------------|------|--------------------------|---------------------|-------------------------|--------------------|---------------|
| > |  |  | 01                   | 01-000    | REVENUE         | GENERAL REQUIREMENTS            | HOUR | 4,154,366.00             | 0.00                | 4,154,366.00            | 0.00               | 4,154,366.00  |
|   |  |  | 02                   | 02-000    | REVENUE         | SITWORK                         | HOUR | 1,809,185.00             | 1,285.39            | 1,809,185.00            | 0.00               | 1,537,807.25  |
|   |  |  | 03                   | 03-000    | REVENUE         | CONCRETE                        | HOUR | 8,319,840.00             | 0.00                | 8,319,840.00            | 0.00               | 5,574,292.80  |
|   |  |  | 04                   | 04-000    | REVENUE         | MASONRY                         | HOUR | 1,210,648.00             | 0.00                | 1,210,648.00            | 0.00               | 544,791.60    |
|   |  |  | 05                   | 05-000    | REVENUE         | METALS                          | HOUR | 1,901,356.00             | 0.00                | 1,901,356.00            | 0.00               | 950,678.00    |
|   |  |  | 06                   | 06-000    | REVENUE         | WOODS, PLASTICS, COMPOSITES     | HOUR | 1,225,000.00             | 0.00                | 1,225,000.00            | 0.00               | 465,500.00    |
|   |  |  | 07                   | 07-000    | REVENUE         | THERMAL AND MOISTURE PROTECTION | HOUR | 989,355.00               | 0.00                | 989,355.00              | 0.00               | 652,974.30    |
|   |  |  | 08                   | 08-000    | REVENUE         | OPENINGS                        | HOUR | 1,638,760.00             | 2,264.98            | 1,638,760.00            | 0.00               | 786,604.80    |
|   |  |  | 09                   | 09-000    | REVENUE         | FINISHES                        | HOUR | 8,110,796.00             | 0.00                | 8,110,796.00            | 0.00               | 4,542,045.76  |
|   |  |  | 10                   | 00-000    | REVENUE         | DEFAULT                         | HOUR | 0.00                     | 0.00                | 0.00                    | 0.00               | 0.00          |
|   |  |  | 10                   | 10-000    | REVENUE         | SPECIALTIES                     | HOUR | 1,449,500.00             | 0.00                | 1,449,500.00            | 0.00               | 579,800.00    |
|   |  |  | 11                   | 11-000    | REVENUE         | EQUIPMENT                       | HOUR | 1,135,000.00             | 0.00                | 1,135,000.00            | 0.00               | 737,750.00    |
|   |  |  | 13                   | 13-000    | REVENUE         | SPECIAL CONSTRUCTION            | HOUR | 345,500.00               | 0.00                | 345,500.00              | 0.00               | 138,200.00    |
|   |  |  | 14                   | 14-000    | REVENUE         | CONVEYING SYSTEMS               | HOUR | 696,919.00               | 0.00                | 696,919.00              | 0.00               | 334,521.12    |
|   |  |  | 15                   | 15-000    | REVENUE         | MECHANICAL                      | HOUR | 3,910,742.00             | 0.00                | 3,910,742.00            | 0.00               | 1,329,652.28  |
|   |  |  | 16                   | 16-000    | REVENUE         | ELECTRICAL                      | HOUR | 2,818,490.00             | 0.00                | 2,818,490.00            | 0.00               | 338,218.80    |

Projects

← SAVE & CLOSE + |< < > >| RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS ▾ INQUIRIES ▾ REPORT

• Project ID: HOTEL  • Status: Active ▾ Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor   Hold Liabilities: 0.00  
 Template:  Income: 22,667,202.71  
 • Description: The Beach Hotel and Condominiums, New York Expenses: 720,020.00

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

RELEASE RETAINAGE |<| All Records

|   | Pro Forma Date | Pro Forma Reference Nbr. | Description       | Status | Invoice Total | Currency | AR Doc. Type | AR Reference Nbr. | AR Doc. Date | AR Doc. Description |
|---|----------------|--------------------------|-------------------|--------|---------------|----------|--------------|-------------------|--------------|---------------------|
| > | 11/30/2019     | 000011                   | Invoice for HOTEL | Closed | 6,461,598.09  | USD      | Invoice      | 000083            | 11/30/2019   | Invoice for HOTEL   |
|   | 11/30/2019     | 000012                   | Invoice for HOTEL | Closed | 16,205,604.62 | USD      | Invoice      | 000084            | 11/30/2019   | Invoice for HOTEL   |

3. Open the Pro Forma invoice with **Invoice Total = 16,205,604.62.**

Pro Forma Invoices

NOTES ACTIVITIES FILES NOTIFICATION

SAVE & CLOSE RELEASE ACTIONS REPORTS

|                                |   |                                       |
|--------------------------------|---|---------------------------------------|
| Reference Nbr.: 000012         | Project: HOTEL - The Beach Hotel and Condomin | Progress Billing Total: 16,205,604.62 |
| Status: Closed                 | Customer: EQUGRP - The Equity Group Investors | Time and Material Total: 0.00         |
| Invoice Date: 11/30/2019       |   | Tax Total: 0.00                       |
| Post Period: 11-2019           |   | Invoice Total: 16,205,604.62          |
| Description: Invoice for HOTEL |   | Retainage Total: 810,280.24           |
|                                |   | Amount Due: 15,395,324.38             |

PROGRESS BILLING TIME AND MATERIAL TAX DETAILS FINANCIAL DETAILS APPROVAL DETAILS ADDRESS DETAILS

| Branch     | Billing Item | Cost Code | Description                     | Revised Budgeted Amount | Previously Invoiced | Total Completed (%) | Amount       | Stored Material | Amount to Invoice | Current Invoiced (%) | Retainage (%) | Retainage Amount |
|------------|--------------|-----------|---------------------------------|-------------------------|---------------------|---------------------|--------------|-----------------|-------------------|----------------------|---------------|------------------|
| HEADOFFICE | 01           | 01-000    | GENERAL REQUIREMENTS            | 4,154,366.00            | 1,038,591.50        | 100.00              | 3,115,774.50 | 0.00            | 3,115,774.50      | 75.00                | 5.00          | 155,788.73       |
| HEADOFFICE | 02           | 02-000    | SITWORK                         | 1,809,185.00            | 180,918.50          | 85.00               | 1,356,888.75 | 0.00            | 1,356,888.75      | 75.00                | 5.00          | 67,844.44        |
| HEADOFFICE | 03           | 03-000    | CONCRETE                        | 8,319,840.00            | 1,081,579.20        | 67.00               | 4,492,713.60 | 0.00            | 4,492,713.60      | 54.00                | 5.00          | 224,635.68       |
| HEADOFFICE | 04           | 04-000    | MASONRY                         | 1,210,648.00            | 217,916.64          | 45.00               | 326,874.96   | 0.00            | 326,874.96        | 27.00                | 5.00          | 16,343.75        |
| HEADOFFICE | 05           | 05-000    | METALS                          | 1,901,356.00            | 380,271.20          | 50.00               | 570,406.80   | 0.00            | 570,406.80        | 30.00                | 5.00          | 28,520.34        |
| HEADOFFICE | 06           | 06-000    | WOODS, PLASTICS, COMPOSITES     | 1,225,000.00            | 306,250.00          | 38.00               | 159,250.00   | 0.00            | 159,250.00        | 13.00                | 5.00          | 7,962.50         |
| HEADOFFICE | 07           | 07-000    | THERMAL AND MOISTURE PROTECTION | 989,355.00              | 395,742.00          | 66.00               | 257,232.30   | 0.00            | 257,232.30        | 26.00                | 5.00          | 12,861.62        |
| HEADOFFICE | 08           | 08-000    | OPENINGS                        | 1,638,760.00            | 213,038.80          | 48.00               | 573,566.00   | 0.00            | 573,566.00        | 35.00                | 5.00          | 28,678.30        |
| HEADOFFICE | 09           | 09-000    | FINISHES                        | 8,110,796.00            | 1,216,619.40        | 56.00               | 3,325,426.36 | 0.00            | 3,325,426.36      | 41.00                | 5.00          | 166,271.32       |
| HEADOFFICE | 10           | 10-000    | SPECIALTIES                     | 1,449,500.00            | 362,375.00          | 40.00               | 217,425.00   | 0.00            | 217,425.00        | 15.00                | 5.00          | 10,871.25        |
| HEADOFFICE | 11           | 11-000    | EQUIPMENT                       | 1,135,000.00            | 295,100.00          | 65.00               | 442,650.00   | 0.00            | 442,650.00        | 39.00                | 5.00          | 22,132.50        |
| HEADOFFICE | 14           | 14-000    | CONVEYING SYSTEMS               | 696,919.00              | 243,921.65          | 48.00               | 90,599.47    | 0.00            | 90,599.47         | 13.00                | 5.00          | 4,529.97         |
| HEADOFFICE | 15           | 15-000    | MECHANICAL                      | 3,910,742.00            | 391,074.20          | 34.00               | 938,578.08   | 0.00            | 938,578.08        | 24.00                | 5.00          | 46,928.90        |
| HEADOFFICE | 16           | 16-000    | ELECTRICAL                      | 2,818,490.00            | 0.00                | 12.00               | 338,218.80   | 0.00            | 338,218.80        | 12.00                | 5.00          | 16,910.94        |

4. Review the invoice, and then go to the Standard AIA Report (PM000019) form and print it for the invoice you have just reviewed.

Standard AIA Report

PRINT SEND EXPORT

**APPLICATION AND CERTIFICATION FOR PAYMENT**

TO OWNER: The Equity Group Investors  
650 51st Aven

FROM CONTRACTOR: SweetLife Head Office and Wholesale Center

PROJECT: The Beach Hotel and Condominiums  
Primary Location

PROJECT: SweetLife Head Office and Wholesale Center

APPLICATION NO: 000007

PERIOD TO: 5/1/2019

PROJECT:

CONTRACT DATE: 3/1/2019

Distribution to:

OWNER

ARCHITECT

CONTRACTOR

---

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)                    | \$22,697,202.71 |
| 5. RETAINAGE:   |                 |
| a. 5% of Completed Work & Stored Material (Column D + E + F on G703)      | \$1,133,360.15  |
| 6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total)                 | \$21,533,842.56 |
| 7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate) | \$6,138,518.19  |
| 8. CURRENT PAYMENT DUE  | \$15,395,324.38 |
| 9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 Less Line 8 Total)      | \$18,181,014.44 |

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: \_\_\_\_\_ \$ \_\_\_\_\_

**CONTINUATION SHEET**

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

APPLICATION NO: 000012  
 APPLICATION DATE: 11/30/2019  
 PERIOD TO: 12/30/2019  
 ARCHITECT'S PROJECT NO: HOTEL

| 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          | \$1,038,591.50            | \$3,115,774.50         | \$0.00           | \$4,154,366.00                     | 100.0 %       | \$0.00                 | \$207,718.31          |
| 02             | SITework                        | \$1,809,185.00           | \$0.00        | \$1,809,185.00          | \$180,918.50              | \$1,356,888.75         | \$0.00           | \$1,537,807.25                     | 85.0 %        | \$271,377.75           | \$76,890.37           |
| 03             | CONCRETE                        | \$8,319,840.00           | \$0.00        | \$8,319,840.00          | \$1,081,579.20            | \$4,492,713.60         | \$0.00           | \$5,574,292.80                     | 67.0 %        | \$2,745,547.20         | \$278,714.64          |
| 04             | MASONRY                         | \$1,210,648.00           | \$0.00        | \$1,210,648.00          | \$217,916.64              | \$326,874.96           | \$0.00           | \$544,791.60                       | 45.0 %        | \$665,856.40           | \$27,239.58           |
| 05             | METALS                          | \$1,901,356.00           | \$0.00        | \$1,901,356.00          | \$380,271.20              | \$570,406.80           | \$0.00           | \$950,678.00                       | 50.0 %        | \$950,678.00           | \$47,533.90           |
| 06             | WOOD, PLASTICS, COMPOSITES      | \$1,225,000.00           | \$0.00        | \$1,225,000.00          | \$306,250.00              | \$159,250.00           | \$0.00           | \$465,500.00                       | 38.0 %        | \$759,500.00           | \$23,275.00           |
| 07             | THERMAL AND MOISTURE PROTECTION | \$989,355.00             | \$0.00        | \$989,355.00            | \$395,742.00              | \$257,232.30           | \$0.00           | \$652,974.30                       | 66.0 %        | \$336,380.70           | \$32,648.72           |
| 08             | OPENINGS                        | \$1,638,760.00           | \$0.00        | \$1,638,760.00          | \$213,038.80              | \$573,566.00           | \$0.00           | \$786,604.80                       | 48.0 %        | \$852,155.20           | \$39,330.24           |
| 09             | FINISHES                        | \$8,110,796.00           | \$0.00        | \$8,110,796.00          | \$1,216,619.40            | \$3,325,426.36         | \$0.00           | \$4,542,045.76                     | 56.0 %        | \$3,568,750.24         | \$227,102.29          |
| 10             | SPECIALTIES                     | \$1,449,500.00           | \$0.00        | \$1,449,500.00          | \$362,375.00              | \$217,425.00           | \$0.00           | \$579,800.00                       | 40.0 %        | \$869,700.00           | \$28,990.00           |
| 11             | EQUIPMENT                       | \$1,135,000.00           | \$0.00        | \$1,135,000.00          | \$295,100.00              | \$442,650.00           | \$0.00           | \$737,750.00                       | 65.0 %        | \$397,250.00           | \$36,887.50           |
| 14             | CONVEYING SYSTEMS               | \$696,919.00             | \$0.00        | \$696,919.00            | \$243,921.65              | \$90,599.47            | \$0.00           | \$334,521.12                       | 48.0 %        | \$362,397.88           | \$16,726.05           |
| 15             | MECHANICAL                      | \$3,910,742.00           | \$0.00        | \$3,910,742.00          | \$391,074.20              | \$938,578.08           | \$0.00           | \$1,329,652.28                     | 34.0 %        | \$2,581,089.72         | \$66,482.61           |
| 16             | ELECTRICAL                      | \$2,818,490.00           | \$0.00        | \$2,818,490.00          | \$0.00                    | \$338,218.80           | \$0.00           | \$338,218.80                       | 12.0 %        | \$2,480,271.20         | \$16,910.94           |
| <b>Totals:</b> |                                 | <b>\$39,369,957.00</b>   | <b>\$0.00</b> | <b>\$39,369,957.00</b>  | <b>\$6,323,398.09</b>     | <b>\$16,205,604.62</b> | <b>\$0.00</b>    | <b>\$22,529,002.71</b>             | <b>57.2 %</b> | <b>\$16,840,954.29</b> | <b>\$1,126,450.15</b> |

If you release the retainage for the project, you might find the AIA with Retainage Released (CU000112) report useful. The report searches for any retainage invoices (with the **Retainage Released** amount) and applies that "released" amount to the **Retainage Held**. Also, if you are operating with quantities, you can use the AIA with Quantity (PM000020) report.

**Working with the Bonding Report**

The Project Bonding (Profitability) report provides Earned Revenue, Billed to Date, Unbilled Contract Amounts, as well as Cost Incurred to Date, Calculated Cost at Completion, Current Period Costs/Billings, as well as the prior year's Billings and Costs.

By using the Bonding Report form, you can create a report of work in progress for projects for a selected date range. This report can be used by management as well as external entities, such as bonding companies, to determine the financial health of projects.

The report gives you a bigger snapshot of all the projects in the system and provides management confidence. You will learn how much is actually billed for the project compared to the percentage of the project completion.

To ensure profitability, you want to see how projects are performing and which of them need special attention. Do the following:

1. On the Construction Bonding Report (CU000115) form, specify the following input parameters:

- **As of Date:** 12/01/2019
- Leave the default values for all the other parameters.

2. Click Run Report on the form toolbar.

The report will show the state of all the active projects as of December, 2019.

**Construction Bonding Report**

**As Of Date:** 12/1/2019  
**State:** Active  
**Company:** SWEET LIFE  
**Branch:** SweetLife West Office and Wholesale Center



Page:  
Date:  
User:

| Print                    | Description                      | Contract Amount        | % Complete    | earned Revenue      | Billed to Date         | % Billed       | Over/Under Billed      | Substiated Contract amount | Cost to Date        | Cost To Complete | Cost At Complete    | Period Billed: | Period Cost   | Billed Through 12/31 |
|--------------------------|----------------------------------|------------------------|---------------|---------------------|------------------------|----------------|------------------------|----------------------------|---------------------|------------------|---------------------|----------------|---------------|----------------------|
| <a href="#">HOTEL1</a>   | The Beach Hotel and Condominiums | \$39,715,457.00        | 0.00 %        | \$0.00              | \$22,667,202.71        | 57.07 %        | \$22,667,202.71        | \$17,048,254.29            | \$0.00              | \$0.00           | \$0.00              | \$0.00         | \$0.00        | \$0.00               |
| <a href="#">HOTEL3</a>   | The Beach Hotel and Condominiums | \$39,715,457.00        | 0.00 %        | \$0.00              | \$0.00                 | 0.00 %         | \$0.00                 | \$39,715,457.00            | \$0.00              | \$0.00           | \$0.00              | \$0.00         | \$0.00        | \$0.00               |
| <a href="#">ITALIAN1</a> | Italian Restaurant Project       | \$2,193,400.01         | 12.00 %       | \$263,245.76        | \$200,896.25           | 9.16 %         | \$92,349.93            | \$1,992,250.76             | \$202,717.00        | \$0.00           | \$202,717.00        | \$0.00         | \$0.00        | \$0.00               |
| <a href="#">ITALIAN2</a> | Italian Restaurant Project       | \$2,186,984.80         | 11.36 %       | \$248,455.19        | \$0.00                 | 0.00 %         | \$248,455.19           | \$2,186,984.80             | \$191,517.00        | \$0.00           | \$191,517.00        | \$0.00         | \$0.00        | \$0.00               |
| <a href="#">ITALIAN3</a> | Italian Restaurant Project       | \$2,193,400.01         | 11.34 %       | \$248,701.58        | \$0.00                 | 0.00 %         | \$248,701.58           | \$2,193,400.01             | \$191,517.00        | \$0.00           | \$191,517.00        | \$0.00         | \$0.00        | \$0.00               |
| <b>Totals:</b>           |                                  | <b>\$86,004,696.82</b> | <b>0.91 %</b> | <b>\$760,402.54</b> | <b>\$22,868,098.96</b> | <b>26.29 %</b> | <b>\$22,107,696.42</b> | <b>\$63,136,899.86</b>     | <b>\$686,761.00</b> | <b>\$0.00</b>    | <b>\$686,761.00</b> | <b>\$0.00</b>  | <b>\$0.00</b> | <b>\$0.00</b>        |

## Lesson 21: Retainage with Cap and Steps

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Acumatica ERP Construction Edition supports the following retainage modes for a project:

- *Standard*
- *Standard with Steps*
- *Contract Cap*
- *Contract Item Cap*
- *Contract Cap with Steps*

In the framework of this lesson we will pay special attention to the scenario for *Contract Cap* retainage without steps.

With the *Contract Cap* retainage mode enabled, the selected contract cap retainage is applied to a project according to the following rules. As soon as the **Cap** is reached, the **Total Retained Amount** held per project is reallocated between the invoice lines based on their weight and retainage capacity. In other words, after the cap amount is reached, the following applies:

- The invoices have the same total **Allocated Retained Amount** but with different portions of it in the invoice lines.
- No new **Retainage Amount** is calculated.
- The total retainage amount held per project stays the same across all the project invoices, except for the following cases:
  - We start billing the customer and the total retainage amount is less than the cap amount (the contract completion percent is less than the cap percent)
  - We release retainage
  - We release a change order that affects the project revenue budget

Before you can utilize the *Contract Cap* retainage mode, the following should be done:

- On the Enable/Disable Features (CS100000) form, the *Retainage Support and Payment Application by Line* features must be enabled.
- On the **Summary** tab of the Projects (PM301000) form, in the **Retainage** section:
  - *Contract Cap* should be selected in the **Retainage Mode** box.
  - **Retainage (%)** should be specified at the contract level.
  - **Cap (%)** should be specified.
  - The **Include CO** check box should be cleared or selected, depending on whether you prefer to calculate **Contract Total** and contract **Completed (%)** based on the

original revenue budget values (without change orders taken into effect) or based on the revised ones (with change orders included in the calculation).

Based on these values, the system calculates the cap amount, which is the maximum retainage value that can be ever held for the project. If you decide to include change orders in the calculation, then **Contract Total, Completed (%)**, and the cap amount will change in accordance with the changes in the revenue budget due to the released change orders.

After that, to utilize the *Contract Cap* retainage, you should perform project progress billing with pro forma as usual.

Each progress billing pro forma invoice will validate the **Total Retained Amount** held per project and calculate **Retainage Amount** based on the rules specified in the diagram below.

After the cap has been reached and the **Total Retained Amount** held per project is at its maximum, no new retainage amount is calculated and the reallocation on the **Allocated Retained Amount** takes place based on the invoice lines' weight as shown in the diagram below.

You can gradually release the retainage held on the Release AR Retainage (AR510000) form to clear the **Unreleased Retainage** balance held on the AR invoice lines thus decreasing the **Total Retained Amount** held per project. Once such a situation happens, the progress billing procedure follows the same rules as described above so that the **Total Retained Amount** tended to the cap amount once again.

The *Contract Item Cap* retainage mode is almost the same as *Contract Cap* with the only difference that it is applied at the line level instead of the contract level and the cap and retainage are specified for each revenue budget line in particular. The mode is used not to exceed the certain retainage amount per revenue budget line—that is, the cap amount.

*Standard* retainage has been supported in Acumatica since version 2018 R1. It works both together and separately from the *Payment Application by Line* feature; it only requires that the *Retainage Support* feature is enabled. This mode is applicable to both progress and time and material billing.

The default **Retainage (%)** for a project is defined on the **Summary** tab of the Projects (PM301000) form, and it can be modified by the user at any time. It is used as the default value in the following cases:

- For revenue budget lines; from these lines, the Retainage (%) value is copied to the progress billing invoice lines
- For time and material invoice lines
- For AR invoice lines that originate from the Invoices and Memos (AR301000) form

In addition to this, steps can be applied to the *Standard* and *Contract Cap* retainage modes if necessary. The **Use Steps** check box, if selected, enables steps for the retainage and reveals the **Stepped Retainage** table which allows a user to specify thresholds for automatic alteration of the Retainage (%) value by using the following boxes:

- **Threshold (%)**: The contract completion percent on reaching which the value of the default Retainage (%) will change to the figure specified in the Retainage (%) column of that table.
- **Retainage (%)**: The new retainage percent to be applied to the project revenue budget lines in accordance with the selected retainage mode.

The *Contract Cap* retainage mode with steps is similar to the *Contract Cap* retainage mode without steps, except for the following:

- Same as *Contract Cap* Retainage w/o steps, except for the following:
  - On the **Summary** tab of the Projects (PM301000) form, in the **Retainage** section, instead of a single retainage percent, you should specify several **Threshold (%)** and **Retainage (%)** values at the contract level in the **Stepped Retainage** table so that the system will apply a certain retainage percent during each progress billing iteration depending on the contract's completion percent.
  - In addition to the cap validation, a step validation takes place on each progress billing iteration. If your contract completion hits the threshold (note that a new retainage step is reached with the current invoice being generated) and the retainage percent is changed, the system recalculates the cap amount, and this and further billing iterations will be validated against the newly calculated cap figures.

The *Standard* retainage mode with steps requires the following configuration:

- The *Retainage Support* and *Payment Application by Line* features should be enabled on the Enable/Disable Features (CS100000) form.
- On the **Summary** tab of the Projects (PM301000) form, in the Retainage section, the following settings should be specified:
  - **Retainage Mode**: *Standard*
  - **Stepped**: Selected

This retainage mode is similar to the standard retainage mode without steps, except for the following:

- You specify an applicable retainage percent until a certain completion percent is reached in the **Stepped Retainage** table which becomes available when the **Stepped** check box is selected.
- The retainage percent that corresponds to the specific project completion percent is by default populated in the revenue budget lines and in the AR invoice lines that originate from the Invoices and Memos (AR301000) form.
- The user cannot modify the **Retainage (%)** value in the revenue budget lines with this mode configured.
- The project completion threshold percent is the **Completed (%)** value of the contract total that can be seen in the **Retainage** section on the **Summary** tab of the Projects (PM301000) form.

- Progress billing is run as usual inheriting the retainage percent from the corresponding revenue budget lines. No effect on the time and material billing takes place (that is, it works as usual).

### Lesson Objectives

In this lesson, you will do the following:

- Learn how to configure contract cap and stepped retainage for a project
- Create pro forma invoices with retainage for the project until retainage cap is reached
- Release retainage for the project by several project budget lines
- Process retainage invoices in bulk

### Company Story

We are a general contractor building a hotel. We have already set up the original project budget and have agreed with the customer that until we reach the middle of the construction project, they will retain some percentage from the contract sum, which is the customer's guarantee that we will meet our obligations in building the hotel. However, not only the customer needs to protect themselves but also we as a general contractor need to make sure that we have enough resources to continue our daily operations, meaning we cannot afford to have more amount retained by the customer than a certain sum. Thus, we define the retainage cap which dictates the maximum retainage amount that can be held per the project. This means contract cap retainage is applied to our contract.

### System Preparation

Sign in to Acumatica ERP by using the *owen* login and the *123* password.

### Reviewing the Retainage Configuration

To review the retainage configuration, do the following:

1. Open the Enable/Disable Features (CS100000) form and make sure that the *Retainage Support* and *Payment Application by Line* features are enabled.
2. Open the Projects (PM301000) form and select *HOTEL2* in the **Project ID** box.
3. On the **Summary** tab of the form, review the following settings in the **Retainage** section, shown on the screenshot below:
  - **Retainage Mode:** *Contract Cap*
  - **Include CO:** Selected
  - **Retainage (%):** 5.00
  - **Cap (%):** 50.00

| RETAINAGE                                      |                                       |
|--|---------------------------------------|
| Retainage Mode:                                | Contract Cap                          |
| <input checked="" type="checkbox"/> Include CO |                                       |
| Contract Total:                                | 39,715,457.00                         |
| Completed (%):                                 | 48.26                                 |
| Total Retained Amount:                         | 958,392.99                            |
| Retainage (%):                                 | 5.00 <input type="checkbox"/> Stepped |
| Cap (%):                                       | 50.00 992,886.42                      |

4. Review the values in the following boxes:

- **Contract Total:** The sum of the revenue budget lines - **Original Budgeted Amount** or **Revised Budgeted Amount**, if the **Include CO** check box is selected
- **Completed (%):** Calculated as  $(\Sigma \text{ Draft Invoice Amount} + \Sigma \text{ Actual Amount} + \Sigma \text{ Pending Invoice Amount}) / \text{Contract Total}$
- **Total Retained Amount:** The total unreleased retainage held for the project (this amount is not included in the project completion calculation)
- **Cap Amount:** This is the the maximum retainage held per project, calculated as follows:
  - Cap Amount (max retainage for contract) = **Contract Total \* Cap (%) \* Retainage (%)**
  - Retainage per project never exceeds the value of the cap amount (maximum retainage held).

5. On the Customers (AR303000) form, make sure that for the *EQUGRP* customer, 18000 is specified in the **Retainage Receivable Account** box on the **GL Accounts** tab.

### Performing a Progress Billing of a Project with the Contract Cap Retainage Mode

The *HOTEL2* project is configured as a fixed price contract with a progress billing rule specified for its tasks. It has already been billed several times.

Projects ☆ NOTES FILES NOTIFICATIONS CUSTOMIZATION

← SAVE & CLOSE ↶ ↷ + - K < > >| RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS • INQUIRIES • REPORTS •

\* Project ID: HOTEL2 \* Status: Active Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor Liabilities: 0.00  
 Template: Income: 19,167,859.49  
 \* Description: The Beach Hotel and Condominiums Expenses: 0.00

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

RELEASE RETAINAGE All Records

| Pro Forma Date | Pro Forma Reference Nbr. | Description                                | Status | Invoice Total | Currency | AR Doc. Type | AR Reference Nbr. | AR Doc. Date | AR Doc. Description      | AR Doc. Orig. Amount | Original Retainage | AR Doc. Total Amount | Open AR Balance | Currency | AR Doc. Status | Unreleased Retainage |
|----------------|--------------------------|--|--------|---------------|----------|--------------|-------------------|--------------|--------------------------|----------------------|--------------------|----------------------|-----------------|----------|----------------|----------------------|
| > 6/1/2019     | 000008                   | Progress billing application #1 for HOTEL2 | Closed | 415,436.60    | USD      | Invoice      | 000085            | 6/1/2019     | Progress billing appl... | 394,664.77           | 20,771.83          | 415,436.60           | 394,664.77      | USD      | Open           | 20,771.83            |
| 7/1/2019       | 000009                   | Progress billing application #2 for HOTEL2 | Closed | 7,219,630.64  | USD      | Invoice      | 000086            | 7/1/2019     | Progress billing appl... | 6,858,649.11         | 360,981.53         | 7,219,630.64         | 6,858,649.11    | USD      | Open           | 360,981.53           |
| 8/1/2019       | 000010                   | Progress billing application #3 for HOTEL2 | Closed | 11,532,792.25 | USD      | Invoice      | 000087            | 8/1/2019     | Progress billing appl... | 10,956,152.62        | 576,639.63         | 11,532,792.25        | 10,956,152.62   | USD      | Open           | 576,639.63           |

1. On the Projects (PM301000) form, on the **Invoices** tab, click the link for pro forma invoice for application #1 in the **Pro Forma Reference Nbr.**

Notice the following values:

- On the **Summary** tab:
  - **Retainage (%)**: The default retainage percent applied to the invoice lines to calculate the retainage.
  - **Retainage Amount**: Retainage held in this pro forma invoice.
  - **Allocated Retained Total**: The amount of retainage that is held for project (not released, or "billed", yet), including this pro forma invoice. This total equals **Total Retained Amount** for the project.
- On the **Progress Billing** tab:
  - **Allocated Retained Amount**: The amount of retainage that is considered to be held for the related revenue budget line in this pro forma invoice. This is an informational field that shows how total retainage held for the project is split among the project revenue budget lines.
  - **Retainage Amount**: The amount of retainage calculated for the invoice line as follows:
    - As standard retainage until we reach the cap and the retainage capacity of the related revenue budget line
    - As standard retainage with correction once we reach the cap or the related revenue budget line capacity is empty
    - As zero not to exceed the cap

In the pro forma invoice for application #1, as you can see on the Pro Forma Invoices (PM307000) form, we do not hit the cap, and retainage amount is calculated in the standard way: **Retainage Amount = Retainage (%) \* Amount to Invoice = 5% \* 415436.6 = 20771.83.**

Thus, we allocate this sum on the related revenue budget line.

Pro Forma Invoices NOTES ACTIVI

SAVE & CLOSE RELEASE ACTIONS REPORTS

|   |   |                                    |                                     |
|---|---|------------------------------------|-------------------------------------|
| Reference Nbr.: 000008                                  | Project: HOTEL2 - The Beach Hotel and Condom  | Progress Billing Total: 415,436.60 | Retainage (%): 5.00                 |
| Status: Closed  | Customer: EQUGRP - The Equity Group Investors | Time and Material Total: 0.00      | Allocated Retained Total: 20,771.83 |
| Invoice Date: 6/1/2019                                  |   | Invoice Total: 415,436.60          |                                     |
| Post Period: 06-2019                                    |   | Retainage Total: 20,771.83         |                                     |
| Description: Progress billing application #1 for HOTEL2 |   | Amount Due: 394,664.77             |                                     |

PROGRESS BILLING | TIME AND MATERIAL | TAX DETAILS | FINANCIAL DETAILS | APPROVAL DETAILS | ADDRESS DETAILS

| Branch     | Billing Item | Description          | Revised Budgeted Amount | Previously Invoiced | Total Completed (%) | Amount     | Stored Material | Amount to Invoice | Current Invoiced (%) | Allocated Retained Amount | Retainage Amount |
|------------|--------------|----------------------|-------------------------|---------------------|---------------------|------------|-----------------|-------------------|----------------------|---------------------------|------------------|
| HEADOFFICE | 01           | GENERAL REQUIREMENTS | 4,154,366.00            | 0.00                | 10.00               | 415,436.60 | 0.00            | 415,436.60        | 10.00                | 20,771.83                 | 20,771.83        |
| HEADOFFICE | 02           | SITWORK              | 1,809,185.00            | 0.00                | 0.00                | 0.00       | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |

- Open the related AR invoice by clicking the link in the **AR Ref. Nbr.** box on the **Financial Details** tab of the Pro Forma Invoices form.

Notice the **Unreleased Retainage** column on the **Document Details** tab of the Invoices and Memos (AR301000) form—it displays the retainage balance value that will be cleared when the retainage is gradually or fully released for the corresponding invoice line.

Invoices and Memos NOTES ACTIVITIES

SAVE & CLOSE RELEASE ACTIONS INQUIRIES REPORTS

|   |   |                          |
|---|---|--------------------------|
| Type: Invoice   | Customer: EQUGRP - The Equity Group Investors                             | Detail Total: 394,664.77 |
| Reference Nbr.: 000005                                  | Terms: 30D - 30 Days  | Discount Total: 0.00     |
| Status: Open  | * Due Date: 7/1/2019 <input checked="" type="checkbox"/> Apply Retainage  | VAT Taxable T...: 0.00   |
|   | * Cash Discount: 7/1/2019 <input checked="" type="checkbox"/> Pay by Line | VAT Exempt T...: 0.00    |
| Date: 6/1/2019  | Project/Contract: HOTEL2 - The Beach Hotel and Condom                     | Tax Total: 0.00          |
| Post Period: 06-2019                                    |   | Balance: 394,664.77      |
| Customer Order: 000008                                  |   | Amount: 394,664.77       |
| Description: Progress billing application #1 for HOTEL2 |   | Cash Discount: 0.00      |

DOCUMENT DETAILS | FINANCIAL DETAILS | ADDRESS DETAILS | TAX DETAILS | APPROVAL DETAILS | RETAINAGE | APPLICATIONS | COMPLIANCE

| Branch     | Line Nbr. | Account Group/Item | Transaction Descr.   | Quantity | UOM  | Unit Price | Ext. Price | Discount Percent | Discount Amount | Retainage Amount | Unreleased Retainage | Retained Tax |
|------------|-----------|--------------------|----------------------|----------|------|------------|------------|------------------|-----------------|------------------|----------------------|--------------|
| HEADOFFICE | 1         |                    | GENERAL REQUIREMENTS | 0.00     | HOUR | 0.0000     | 415,436.60 | 0.000000         | 0.00            | 20,771.83        | 20,771.83            | 0.00         |
| HEADOFFICE | 2         |                    | SITWORK              | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 | 0.00         |

- Navigate back to the **Revenue Budget** tab of the Projects (PM301000) form and notice the following columns:
  - Draft Retained Amount:** The unreleased retainage amount held on all the related pro forma invoices and unreleased AR invoices that originate from the project billing.
  - Retained Amount:** The unreleased retainage amount held on all the released related AR invoices that originate from the project billing.
  - Total Retained Amount:** The sum of the **Draft Retained** and **Retained Amount** values.

| * Description: <span style="border: 1px solid black; padding: 2px;">The Beach Hotel and Condominiums</span> Expenses: <span style="border: 1px solid black; padding: 2px;">0.00</span>                            |    |          |               |      |              |      |      |              |       |      |      |              |      |                       |                 |                       |
|---|----|----------|---------------|------|--------------|------|------|--------------|-------|------|------|--------------|------|-----------------------|-----------------|-----------------------|
| SUMMARY BALANCES COST BUDGET COMMITMENTS CHANGE ORDERS <u>REVENUE BUDGET</u> INVOICES APPROVAL DETAILS TASKS EMPLOYEES CHANGE REQUESTS UNION LOCALS   |    |          |               |      |              |      |      |              |       |      |      |              |      |                       |                 |                       |
| Project Task: <span style="border: 1px solid black; padding: 2px;"> </span> <input type="checkbox"/> Group by Task Pending Invoice Amount Total: <span style="border: 1px solid black; padding: 2px;">0.00</span> |    |          |               |      |              |      |      |              |       |      |      |              |      |                       |                 |                       |
| VIEW TRANSACTIONS <span style="font-size: small;"> &lt;  &gt;  &lt;&gt;  &lt;&gt;&lt;  &lt;&gt;&gt;</span>  |    |          |               |      |              |      |      |              |       |      |      |              |      |                       |                 |                       |
|   |    |          |               |      |              |      |      |              |       |      |      |              |      | Draft Retained Amount | Retained Amount | Total Retained Amount |
| >   | 01 | REVEN... | GENERAL RE... | HOUR | 4,154,366.00 | 0.00 | 0.00 | 4,154,366.00 | 80.00 | 0.00 | 0.00 | 3,323,492.80 | 0.00 | 166,174.64            | 166,174.64      |                       |
| 0   | 02 | REVEN... | SITWORK       | HOUR | 1,809,185.00 | 0.00 | 0.00 | 1,809,185.00 | 98.00 | 0.00 | 0.00 | 1,773,001.30 | 0.00 | 88,650.07             | 88,650.07       |                       |
| 0   | 03 | REVEN... | CONCRETE      | HOUR | 8,319,840.00 | 0.00 | 0.00 | 8,319,840.00 | 50.00 | 0.00 | 0.00 | 4,159,920.00 | 0.00 | 207,996.00            | 207,996.00      |                       |
| 0   | 04 | REVEN... | MASONRY       | HOUR | 1,210,648.00 | 0.00 | 0.00 | 1,210,648.00 | 80.00 | 0.00 | 0.00 | 968,518.40   | 0.00 | 48,425.92             | 48,425.92       |                       |
| 0   | 05 | REVEN... | METALS        | HOUR | 1,901,356.00 | 0.00 | 0.00 | 1,901,356.00 | 42.00 | 0.00 | 0.00 | 798,569.52   | 0.00 | 39,928.48             | 39,928.48       |                       |
| 0   | 06 | REVEN... | WOODS, PLA... | HOUR | 1,225,000.00 | 0.00 | 0.00 | 1,225,000.00 | 56.00 | 0.00 | 0.00 | 686,000.00   | 0.00 | 34,300.00             | 34,300.00       |                       |
| 0   | 07 | REVEN... | THERMAL AN... | HOUR | 989,355.00   | 0.00 | 0.00 | 989,355.00   | 40.00 | 0.00 | 0.00 | 395,742.00   | 0.00 | 19,787.10             | 19,787.10       |                       |
| 0   | 08 | REVEN... | OPENINGS      | HOUR | 1,638,760.00 | 0.00 | 0.00 | 1,638,760.00 | 50.00 | 0.00 | 0.00 | 819,380.00   | 0.00 | 40,969.00             | 40,969.00       |                       |
| 0   | 09 | REVEN... | FINISHES      | HOUR | 8,110,796.00 | 0.00 | 0.00 | 8,110,796.00 | 30.00 | 0.00 | 0.00 | 2,433,238.80 | 0.00 | 121,661.94            | 121,661.94      |                       |
| 0   | 10 | REVEN... | SPECIALTIES   | HOUR | 1,449,500.00 | 0.00 | 0.00 | 1,449,500.00 | 44.00 | 0.00 | 0.00 | 637,780.00   | 0.00 | 31,889.00             | 31,889.00       |                       |
| 0   | 11 | REVEN... | EQUIPMENT     | HOUR | 1,135,000.00 | 0.00 | 0.00 | 1,135,000.00 | 36.00 | 0.00 | 0.00 | 408,600.00   | 0.00 | 20,430.00             | 20,430.00       |                       |
| 0   | 13 | REVEN... | SPECIAL CO... | HOUR | 345,500.00   | 0.00 | 0.00 | 345,500.00   | 42.00 | 0.00 | 0.00 | 145,110.00   | 0.00 | 7,255.50              | 7,255.50        |                       |
| 0   | 14 | REVEN... | CONVEYING ... | HOUR | 696,919.00   | 0.00 | 0.00 | 696,919.00   | 49.00 | 0.00 | 0.00 | 341,490.31   | 0.00 | 17,074.52             | 17,074.52       |                       |
| 0   | 15 | REVEN... | MECHANICAL    | HOUR | 3,910,742.00 | 0.00 | 0.00 | 3,910,742.00 | 33.00 | 0.00 | 0.00 | 1,290,544.86 | 0.00 | 64,527.24             | 64,527.24       |                       |
| 0   | 16 | REVEN... | ELECTRICAL    | HOUR | 2,818,490.00 | 0.00 | 0.00 | 2,818,490.00 | 35.00 | 0.00 | 0.00 | 986,471.50   | 0.00 | 49,323.58             | 49,323.58       |                       |

You need to be careful not to confuse the allocated retained values in pro forma lines with the actual retained values displayed in the revenue budget. Right now, there is no **Draft Retained Amount** for the project because all of its AR invoices have been released so that retainage is contained in the actually **Retained Amount**.

- Review the second pro forma invoice. In application #2, we still do not hit the cap yet and the retainage amount is calculated in the standard way: **Retainage Amount = Retainage (%) \* Amount to Invoice**. Thus, we allocate this sum on the related revenue budget lines.

Review the **Allocated Retained Amount** of the first line which includes the allocated retainage from this and the previous invoice. **Allocated Retained Total** includes both progress billing iterations.

Pro Forma Invoices NOTES ACTIVITIES

SAVE & CLOSE RELEASE ACTIONS - REPORTS -

|   |   |                                      |                                      |
|---|---|--------------------------------------|--------------------------------------|
| Reference Nbr.: 000009                                  | Project: HOTEL2 - The Beach Hotel and Condom  | Progress Billing Total: 7,219,630.64 | Retainage (%): 5.00                  |
| Status: Closed  | Customer: EQUGRP - The Equity Group Investors | Time and Material Total: 0.00        | Allocated Retained Total: 381,753.36 |
| Invoice Date: 7/1/2019                                  |   | Tax Total: 0.00                      |                                      |
| Post Period: 07-2019                                    |   | Invoice Total: 7,219,630.64          |                                      |
| Description: Progress billing application #2 for HOTEL2 |   | Retainage Total: 360,981.53          |                                      |
|   |   | Amount Due: 6,858,649.11             |                                      |

PROGRESS BILLING | TIME AND MATERIAL | TAX DETAILS | FINANCIAL DETAILS | APPROVAL DETAILS | ADDRESS DETAILS

| Branch     | Billing Item | Description                     | Revised Budgeted Amount | Previously Invoiced | Total Completed (%) | Amount       | Stored Material | Amount to Invoice | Current Invoiced (%) | Allocated Retained Amount | Retainage Amount |
|------------|--------------|---------------------------------|-------------------------|---------------------|---------------------|--------------|-----------------|-------------------|----------------------|---------------------------|------------------|
| HEADOFFICE | 01           | GENERAL REQUIREMENTS            | 4,154,366.00            | 415,436.60          | 30.00               | 830,873.20   | 0.00            | 830,873.20        | 20.00                | 62,315.49                 | 41,543.66        |
| HEADOFFICE | 02           | SITEWORK                        | 1,809,185.00            | 0.00                | 80.00               | 1,447,348.00 | 0.00            | 1,447,348.00      | 80.00                | 72,367.40                 | 72,367.40        |
| HEADOFFICE | 03           | CONCRETE                        | 8,319,840.00            | 0.00                | 42.00               | 3,494,332.80 | 0.00            | 3,494,332.80      | 42.00                | 174,716.64                | 174,716.64       |
| HEADOFFICE | 04           | MASONRY                         | 1,210,648.00            | 0.00                | 78.00               | 944,305.44   | 0.00            | 944,305.44        | 78.00                | 47,215.27                 | 47,215.27        |
| HEADOFFICE | 05           | METALS                          | 1,901,356.00            | 0.00                | 20.00               | 380,271.20   | 0.00            | 380,271.20        | 20.00                | 19,013.56                 | 19,013.56        |
| HEADOFFICE | 06           | WOODS, PLASTICS, COMPOSITES     | 1,225,000.00            | 0.00                | 10.00               | 122,500.00   | 0.00            | 122,500.00        | 10.00                | 6,125.00                  | 6,125.00         |
| HEADOFFICE | 07           | THERMAL AND MOISTURE PROTECTION | 989,355.00              | 0.00                | 0.00                | 0.00         | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |
| HEADOFFICE | 08           | OPENINGS                        | 1,638,760.00            | 0.00                | 0.00                | 0.00         | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |
| HEADOFFICE | 09           | FINISHES                        | 8,110,796.00            | 0.00                | 0.00                | 0.00         | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |
| HEADOFFICE | 10           | SPECIALTIES                     | 1,449,500.00            | 0.00                | 0.00                | 0.00         | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |
| HEADOFFICE | 11           | EQUIPMENT                       | 1,135,000.00            | 0.00                | 0.00                | 0.00         | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |
| HEADOFFICE | 13           | SPECIAL CONSTRUCTION            | 345,500.00              | 0.00                | 0.00                | 0.00         | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |
| HEADOFFICE | 14           | CONVEYING SYSTEMS               | 696,919.00              | 0.00                | 0.00                | 0.00         | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |
| HEADOFFICE | 15           | MECHANICAL                      | 3,910,742.00            | 0.00                | 0.00                | 0.00         | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |
| HEADOFFICE | 16           | ELECTRICAL                      | 2,818,490.00            | 0.00                | 0.00                | 0.00         | 0.00            | 0.00              | 0.00                 | 0.00                      | 0.00             |

The **Retainage Amount** is calculated in the standard way there since we do not reach the cap yet. Pay special attention to **Allocated Retained Amount**. Notice how it grows for the lines from invoice to invoice.

- In application #3, review the totals. **Retainage Amount** in the header of the invoice is the sum of the **Retainage Amount** column values of this invoice, whereas **Allocated Retained Total** is the total retainage held throughout all the project applications including this one.

Pro Forma Invoices NOTES ACTIVITIES

SAVE & CLOSE RELEASE ACTIONS REPORTS

|   |   |                                       |                                      |
|---|---|---------------------------------------|--------------------------------------|
| Reference Nbr.: 000010                                  | Project: HOTEL2 - The Beach Hotel and Condom  | Progress Billing Total: 11,532,792.25 | Retainage (%): 5.00                  |
| Status: Closed  | Customer: EQUGRP - The Equity Group Investors | Time and Material Total: 0.00         | Allocated Retained Total: 958,392.97 |
| <input type="checkbox"/> Hold                           |   | Tax Total: 0.00                       |                                      |
| Invoice Date: 8/1/2019                                  |   | Invoice Total: 11,532,792.25          |                                      |
| Post Period: 08-2019                                    |   | Retainage Total: 576,639.63           |                                      |
| Description: Progress billing application #3 for HOTEL2 |   | Amount Due: 10,956,152.62             |                                      |

PROGRESS BILLING | TIME AND MATERIAL | TAX DETAILS | FINANCIAL DETAILS | APPROVAL DETAILS | ADDRESS DETAILS

| Branch     | Billing Item | Description                     | Revised Budgeted Amount | Previously Invoiced | Total Completed (%) | Amount       | Stored Material | Amount to Invoice | Current Invoiced (%) | Allocated Retained Amount | Retainage Amount |
|------------|--------------|---------------------------------|-------------------------|---------------------|---------------------|--------------|-----------------|-------------------|----------------------|---------------------------|------------------|
| HEADOFFICE | 01           | GENERAL REQUIREMENTS            | 4,154,366.00            | 1,246,309.00        | 80.00               | 2,077,183.00 | 0.00            | 2,077,183.00      | 50.00                | 166,174.64                | 103,859.15       |
| HEADOFFICE | 02           | SITEWORK                        | 1,809,185.00            | 1,447,348.00        | 98.00               | 325,653.30   | 0.00            | 325,653.30        | 18.00                | 88,650.06                 | 16,282.67        |
| HEADOFFICE | 03           | CONCRETE                        | 8,319,840.00            | 3,494,332.80        | 50.00               | 665,587.20   | 0.00            | 665,587.20        | 8.00                 | 207,996.00                | 33,279.36        |
| HEADOFFICE | 04           | MASONRY                         | 1,210,648.00            | 944,305.44          | 80.00               | 24,212.96    | 0.00            | 24,212.96         | 2.00                 | 48,425.92                 | 1,210.65         |
| HEADOFFICE | 05           | METALS                          | 1,901,356.00            | 380,271.20          | 42.00               | 418,298.32   | 0.00            | 418,298.32        | 22.00                | 39,928.48                 | 20,914.92        |
| HEADOFFICE | 06           | WOODS, PLASTICS, COMPOSITES     | 1,225,000.00            | 122,500.00          | 56.00               | 563,500.00   | 0.00            | 563,500.00        | 46.00                | 34,300.00                 | 28,175.00        |
| HEADOFFICE | 07           | THERMAL AND MOISTURE PROTECTION | 989,355.00              | 0.00                | 40.00               | 395,742.00   | 0.00            | 395,742.00        | 40.00                | 19,787.10                 | 19,787.10        |
| HEADOFFICE | 08           | OPENINGS                        | 1,638,760.00            | 0.00                | 50.00               | 819,380.00   | 0.00            | 819,380.00        | 50.00                | 40,969.00                 | 40,969.00        |
| HEADOFFICE | 09           | FINISHES                        | 8,110,796.00            | 0.00                | 30.00               | 2,433,238.80 | 0.00            | 2,433,238.80      | 30.00                | 121,661.94                | 121,661.94       |
| HEADOFFICE | 10           | SPECIALTIES                     | 1,449,500.00            | 0.00                | 44.00               | 637,780.00   | 0.00            | 637,780.00        | 44.00                | 31,889.00                 | 31,889.00        |
| HEADOFFICE | 11           | EQUIPMENT                       | 1,135,000.00            | 0.00                | 36.00               | 408,600.00   | 0.00            | 408,600.00        | 36.00                | 20,430.00                 | 20,430.00        |
| HEADOFFICE | 13           | SPECIAL CONSTRUCTION            | 345,500.00              | 0.00                | 42.00               | 145,110.00   | 0.00            | 145,110.00        | 42.00                | 7,255.50                  | 7,255.50         |
| HEADOFFICE | 14           | CONVEYING SYSTEMS               | 696,919.00              | 0.00                | 49.00               | 341,490.31   | 0.00            | 341,490.31        | 49.00                | 17,074.52                 | 17,074.52        |
| HEADOFFICE | 15           | MECHANICAL                      | 3,910,742.00            | 0.00                | 33.00               | 1,290,544.86 | 0.00            | 1,290,544.86      | 33.00                | 64,527.24                 | 64,527.24        |
| HEADOFFICE | 16           | ELECTRICAL                      | 2,818,490.00            | 0.00                | 35.00               | 986,471.50   | 0.00            | 986,471.50        | 35.00                | 49,323.57                 | 49,323.58        |

6. Review the settings on the **Summary** tab of the Projects (PM301000) form for the *HOTEL2* project. Notice the following:

- The contract **Completed (%)** is 48.26 %. However, we have not reached the cap yet, we can still hold more retainage for the project.
- **Total Retained Amount** shows how much retainage we currently hold for the project.

**RETAINAGE**

Retainage Mode: Contract Cap

Include CO

Contract Total: 39,715,457.00

Completed (%): 48.26

Total Retained Amount: 958,392.99

Retainage (%): 5.00  Stepped

Cap (%): 50.00 992,886.42

7. Run one more progress billing iteration by doing the following:

- Manually increase the values in the **Completed (%)** or **Pending Invoice Amount** column on the **Revenue Budget** tab of the Projects (PM301000) form as indicated in the table below.

| Schedule of Values | Account Group | Description                                     | Revised Budgeted Amount | Completed (%) | Pending Invoice Amount | Actual Amount | Draft Retained Amount | Retained Amount | Total Retained Amount |
|--------------------|---------------|---|-------------------------|---------------|------------------------|---------------|-----------------------|-----------------|-----------------------|
| 05                 | REVENUE       | METALS  | 1 901<br>356,00         | <b>66,00</b>  | 456<br>325,44          | 798<br>569,52 | 0,00                  | 39<br>928,48    | 39<br>928,48          |
| 06                 | REVENUE       | WOODS,<br>PLASTICS,<br>COM-<br>POSITES          | 1 225<br>000,00         | <b>75,00</b>  | 232<br>750,00          | 686<br>000,00 | 0,00                  | 34<br>300,00    | 34<br>300,00          |
| 07                 | REVENUE       | THER-<br>MAL AND<br>MOISTURE<br>PROTEC-<br>TION | 989<br>355,00           | <b>80,00</b>  | 395<br>742,00          | 395<br>742,00 | 0,00                  | 19<br>787,10    | 19<br>787,10          |
| 08                 | REVENUE       | OPENINGS  | 1 638<br>760,00         | <b>75,00</b>  | 409<br>690,00          | 819<br>380,00 | 0,00                  | 40<br>969,00    | 40<br>969,00          |

- b.** Click **Run Project Billing** on the form toolbar of the Projects (PM301000) form to generate a new pro forma invoice that you can review on the Pro Forma Invoices (PM307000) form.
- 8.** Review the generated pro forma invoice and notice how the **Retainage Amount** is calculated this time.

The retainage amount is no longer equal to the standard retainage amount, which is calculated as Amount to Invoice \* Retainage (%). If you also take a look at the project completion percent, you will see that we have already reached 50% of contract completion and in order not to exceed the retainage cap amount, the system has performed a special retainage calculation with a correction subtracted from the standard retainage amount (Retainage Amount = Amount to Invoice \* Retainage (%) - Correction). As for **Allocated Retained Amount**, the reallocation formula is used so that this value is based on the weight of each invoice line and on the line capacity to have retainage.

Pro Forma Invoices ☆ NOTES ACTIVITIES FILES

← SAVE & CLOSE ↻ ↵ ⌂ < > >| RELEASE ACTIONS - REPORTS -

|  |   |                                      |                                      |
|--|---|--------------------------------------|--------------------------------------|
| Reference Nbr.: 000013                   | Project: HOTEL2 - The Beach Hotel and Condom  | Progress Billing Total: 1,494,507.44 | Retainage (%): 5.00                  |
| Status: On Hold                          | Customer: EQUGRP - The Equity Group Investors | Time and Material Total: 0.00        | Allocated Retained Total: 992,886.42 |
| <input checked="" type="checkbox"/> Hold |   | Tax Total: 0.00                      |                                      |
| * Invoice Date: 9/1/2019                 |   | Invoice Total: 1,494,507.44          |                                      |
| * Post Period: 09-2019                   |   | Retainage Total: 34,493.43           |                                      |
| Description: Invoice for HOTEL2          |   | Amount Due: 1,460,014.01             |                                      |

PROGRESS BILLING TIME AND MATERIAL TAX DETAILS FINANCIAL DETAILS APPROVAL DETAILS ADDRESS DETAILS

| Branch     | Billing Item | Description                     | Revised Budgeted Amount | Previously Invoiced | Total Completed (%) | Amount     | Stored Material | Amount to Invoice | Current Invoiced (%) | Allocated Retained Amount | Retainage Amount |
|------------|--------------|---------------------------------|-------------------------|---------------------|---------------------|------------|-----------------|-------------------|----------------------|---------------------------|------------------|
| HEADOFFICE | 01           | GENERAL REQUIREMENTS            | 4,154,366.00            | 3,323,492.80        | 80.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 166,174.64                | 0.00             |
| HEADOFFICE | 02           | SITEWORK                        | 1,809,185.00            | 1,773,001.30        | 98.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 88,650.07                 | 0.00             |
| HEADOFFICE | 03           | CONCRETE                        | 8,319,840.00            | 4,159,920.00        | 50.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 207,996.00                | 0.00             |
| HEADOFFICE | 04           | MASONRY                         | 1,210,648.00            | 968,518.40          | 80.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 48,425.92                 | 0.00             |
| HEADOFFICE | 05           | METALS                          | 1,901,356.00            | 798,569.52          | 66.00               | 456,325.44 | 0.00            | 456,325.44        | 24.00                | 50,460.53                 | 10,532.05        |
| HEADOFFICE | 06           | WOODS, PLASTICS, COMPOSITES     | 1,225,000.00            | 686,000.00          | 75.00               | 232,750.00 | 0.00            | 232,750.00        | 19.00                | 39,671.90                 | 5,371.90         |
| HEADOFFICE | 07           | THERMAL AND MOISTURE PROTECTION | 989,355.00              | 395,742.00          | 80.00               | 395,742.00 | 0.00            | 395,742.00        | 40.00                | 28,920.88                 | 9,133.78         |
| HEADOFFICE | 08           | OPENINGS                        | 1,638,760.00            | 819,380.00          | 75.00               | 409,690.00 | 0.00            | 409,690.00        | 25.00                | 50,424.70                 | 9,455.70         |
| HEADOFFICE | 09           | FINISHES                        | 8,110,796.00            | 2,433,238.80        | 30.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 121,661.94                | 0.00             |
| HEADOFFICE | 10           | SPECIALTIES                     | 1,449,500.00            | 637,780.00          | 44.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 31,889.00                 | 0.00             |
| HEADOFFICE | 11           | EQUIPMENT                       | 1,135,000.00            | 408,600.00          | 36.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 20,430.00                 | 0.00             |
| HEADOFFICE | 13           | SPECIAL CONSTRUCTION            | 345,500.00              | 145,110.00          | 42.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 7,255.50                  | 0.00             |
| HEADOFFICE | 14           | CONVEYING SYSTEMS               | 696,919.00              | 341,490.31          | 49.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 17,074.52                 | 0.00             |
| HEADOFFICE | 15           | MECHANICAL                      | 3,910,742.00            | 1,290,544.86        | 33.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 64,527.24                 | 0.00             |
| HEADOFFICE | 16           | ELECTRICAL                      | 2,818,490.00            | 986,471.50          | 35.00               | 0.00       | 0.00            | 0.00              | 0.00                 | 49,323.58                 | 0.00             |

On the Projects form, **Total Retained Amount** for the *HOTEL2* project is now equal to the cap amount, which is the maximum retainage amount that can be held for the project at the moment of time.

**RETAINAGE**

Retainage Mode: Contract Cap

Include CO

Contract Total: 39,715,457.00

Completed (%): 52.03

Total Retained Amount: 992,886.42

Retainage (%): 5.00  Stepped

Cap (%): 50.00 992,886.42

- On the Projects form, review the settings on the **Revenue Budget** tab and see that we have **Draft Retained Amount** in it now gathered from the latest pro forma.

Projects NOTES FILES NOT

SAVE & CLOSE + K < > >| RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES REPORTS

Project ID: HOTEL2 Status: Active Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor Liabilities: 0.00  
 Template: Income: 19,167,859.49  
 Description: The Beach Hotel and Condominiums Expenses: 0.00

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

Project Task: Pending Invoice Amount Total: 0.00

| Schedule of Values | Account Group | Description             | Original Budgeted Quantity | UCM  | Unit Rate | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Budgeted CO Quantity | Budgeted CO Amount | Draft Invoices Amount | Actual Quantity | Actual Amount |
|--------------------|---------------|-------------------------|----------------------------|------|-----------|--------------------------|-----------------------|---------------------|---------------------------|-------------------------|----------------------|--------------------|-----------------------|-----------------|---------------|
| 01                 | REVENUE       | GENERAL REQUIREMENTS    | 0.00                       | HOUR | 0.0000    | 4,154,366.00             | 0.00                  | 25,000,000.00       | 0.00                      | 4,154,366.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 3,323,492.80  |
| 02                 | REVENUE       | SITEWORK                | 0.00                       | HOUR | 0.0000    | 1,809,185.00             | 0.00                  | 0.00                | 0.00                      | 1,809,185.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,773,001.30  |
| 03                 | REVENUE       | CONCRETE                | 0.00                       | HOUR | 0.0000    | 8,319,840.00             | 0.00                  | 0.00                | 0.00                      | 8,319,840.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 4,159,920.00  |
| 04                 | REVENUE       | MASONRY                 | 0.00                       | HOUR | 0.0000    | 1,210,648.00             | 0.00                  | 0.00                | 0.00                      | 1,210,648.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 968,518.40    |
| 05                 | REVENUE       | METALS                  | 0.00                       | HOUR | 0.0000    | 1,901,356.00             | 0.00                  | 0.00                | 0.00                      | 1,901,356.00            | 0.00                 | 0.00               | 456,325.44            | 0.00            | 798,569.52    |
| 06                 | REVENUE       | WOODS, PLASTICS, COM... | 0.00                       | HOUR | 0.0000    | 1,225,000.00             | 0.00                  | 0.00                | 0.00                      | 1,225,000.00            | 0.00                 | 0.00               | 232,750.00            | 0.00            | 686,000.00    |
| 07                 | REVENUE       | THERMAL AND MOISTURE... | 0.00                       | HOUR | 0.0000    | 989,355.00               | 0.00                  | 0.00                | 0.00                      | 989,355.00              | 0.00                 | 0.00               | 395,742.00            | 0.00            | 395,742.00    |
| 08                 | REVENUE       | OPENINGS                | 0.00                       | HOUR | 0.0000    | 1,638,760.00             | 0.00                  | 0.00                | 0.00                      | 1,638,760.00            | 0.00                 | 0.00               | 409,690.00            | 0.00            | 819,380.00    |
| 09                 | REVENUE       | FINISHES                | 0.00                       | HOUR | 0.0000    | 8,110,796.00             | 0.00                  | 0.00                | 0.00                      | 8,110,796.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 2,433,238.80  |
| 10                 | REVENUE       | SPECIALTIES             | 0.00                       | HOUR | 0.0000    | 1,449,500.00             | 0.00                  | 0.00                | 0.00                      | 1,449,500.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 637,780.00    |
| 11                 | REVENUE       | EQUIPMENT               | 0.00                       | HOUR | 0.0000    | 1,135,000.00             | 0.00                  | 0.00                | 0.00                      | 1,135,000.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 408,600.00    |
| 13                 | REVENUE       | SPECIAL CONSTRUCTION    | 0.00                       | HOUR | 0.0000    | 345,500.00               | 0.00                  | 0.00                | 0.00                      | 345,500.00              | 0.00                 | 0.00               | 0.00                  | 0.00            | 145,110.00    |
| 14                 | REVENUE       | CONVEYING SYSTEMS       | 0.00                       | HOUR | 0.0000    | 696,919.00               | 0.00                  | 0.00                | 0.00                      | 696,919.00              | 0.00                 | 0.00               | 0.00                  | 0.00            | 341,490.31    |
| 15                 | REVENUE       | MECHANICAL              | 0.00                       | HOUR | 0.0000    | 3,910,742.00             | 0.00                  | 0.00                | 0.00                      | 3,910,742.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,290,544.86  |
| 16                 | REVENUE       | ELECTRICAL              | 0.00                       | HOUR | 0.0000    | 2,818,490.00             | 0.00                  | 0.00                | 0.00                      | 2,818,490.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 986,471.50    |

10. On the Pro Forma Invoice form, clear the **Hold** check box for the created pro forma invoice. Approve and release the pro forma invoice and the related AR invoice (the link to which you can find on the **Financial Details** tab of the Pro Forma Invoices form, as shown in the following screenshot) to make the drafts flow into actuals.

Pro Forma Invoices

← SAVE & CLOSE + K < > >| RELEASE ACTIONS REPORTS 00:00:03

Reference Nbr.: 000013 Project: HOTEL2 - The Beach Hotel and Condominiums Progress Billing Total: 1,494,507.44  
 Status: Closed Customer: EQUGRP - The Equity Group Investors Time and Material Total: 0.00  
 Hold Tax Total: 0.00  
 Invoice Date: 9/1/2019 Invoice Total: 1,494,507.44  
 Post Period: 09-2019 Retainage Total: 34,493.43  
 Description: Invoice for HOTEL2 Amount Due: 1,460,014.01

PROGRESS BILLING TIME AND MATERIAL TAX DETAILS **FINANCIAL DETAILS** APPROVAL DETAILS ADDRESS DETAILS

INVOICE SETTINGS

AR Doc. Type: Invoice  
 AR Ref. Nbr.: 000090  
 Branch: HEADOFFICE - SweetLife Head Office at  
 Customer Tax Zone:  
 Terms: 30D - 30 Days  
 Due Date: 10/1/2019  
 Cash Discount Date: 10/1/2019

**11.** Notice the **Unreleased Retainage** column on the **Document Details** tab of the Invoices and Memos form. The values in this column are originally equal to the exact **Retainage Amount** values of the corresponding invoice lines (which in our configuration are inherited from the pro forma invoice).

Invoices and Memos

SAVE & CLOSE [Icons] RELEASE ACTIONS INQUIRIES REPORTS 00:00:04

Type: Invoice Customer: EQUGRP - The Equity Group Investors Detail Total: 1,460,014.01  
 Reference Nbr.: 000090 Terms: 30D - 30 Days Discount Total: 0.00  
 Status: Open \* Due Date: 10/1/2019 \* Apply Retainage VAT Taxable T...: 0.00  
 \* Cash Discount...: 10/1/2019 \* Pay by Line VAT Exempt T...: 0.00  
 Date: 9/1/2019 Project/Contract: HOTEL2 - The Beach Hotel and Condom Tax Total: 0.00  
 Post Period: 09-2019 Balance: 1,460,014.01  
 Customer Order: 000013 Amount: 1,460,014.01  
 Description: Invoice for HOTEL2 Cash Discount: 0.00

DOCUMENT DETAILS FINANCIAL DETAILS ADDRESS DETAILS TAX DETAILS APPROVAL DETAILS RETAINAGE APPLICATIONS COMPLIANCE

| Branch     | Line Nbr. | Account Group/Item | Transaction Descr.              | Quantity | UOM  | Unit Price | Ext. Price | Discount Percent | Discount Amount | Retainage Amount | Unreleased Retainage |
|------------|-----------|--------------------|---------------------------------|----------|------|------------|------------|------------------|-----------------|------------------|----------------------|
| HEADOFFICE | 1         |                    | GENERAL REQUIREMENTS            | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 2         |                    | SITWORK                         | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 3         |                    | CONCRETE                        | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 4         |                    | MASONRY                         | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 5         |                    | METALS                          | 0.00     | HOUR | 0.0000     | 456,325.44 | 0.000000         | 0.00            | 10,532.05        | 10,532.05            |
| HEADOFFICE | 6         |                    | WOODS, PLASTICS, COMPOSITES     | 0.00     | HOUR | 0.0000     | 232,750.00 | 0.000000         | 0.00            | 5,371.90         | 5,371.90             |
| HEADOFFICE | 7         |                    | THERMAL AND MOISTURE PROTECTION | 0.00     | HOUR | 0.0000     | 395,742.00 | 0.000000         | 0.00            | 9,133.78         | 9,133.78             |
| HEADOFFICE | 8         |                    | OPENINGS                        | 0.00     | HOUR | 0.0000     | 409,690.00 | 0.000000         | 0.00            | 9,455.70         | 9,455.70             |
| HEADOFFICE | 9         |                    | FINISHES                        | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 10        |                    | SPECIALTIES                     | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 11        |                    | EQUIPMENT                       | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 12        |                    | SPECIAL CONSTRUCTION            | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 13        |                    | CONVEYING SYSTEMS               | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 14        |                    | MECHANICAL                      | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |
| HEADOFFICE | 15        |                    | ELECTRICAL                      | 0.00     | HOUR | 0.0000     | 0.00       | 0.000000         | 0.00            | 0.00             | 0.00                 |

**12.** Verify the settings on the **Revenue Budget** tab of the Projects form, and see how **Draft Retained Amount** has flown into **Retained Amount**.

Projects NOTES FILES NOTIFICATIONS TOOLS

SAVE & CLOSE [Icons] RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES REPORTS

Project ID: HOTEL2 Status: Active Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor Liabilities: 0.00  
 Template: Income: 20,662,366.93  
 Description: The Beach Hotel and Condominiums Expenses: 0.00

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

Project Task: [ ] Group by Task: Pending Invoice Amount Total: 0.00

| Unit Rate | Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Budgeted CO Quantity | Budgeted CO Amount | Draft Invoices Amount | Actual Quantity | Actual Amount | Completed (%) | Pending Invoice Amount | Performance (%) | Tax Category | Draft Retained Amount | Retained Amount | Total Retained Amount |
|-----------|--------------------------|-----------------------|---------------------|---------------------------|-------------------------|----------------------|--------------------|-----------------------|-----------------|---------------|---------------|------------------------|-----------------|--------------|-----------------------|-----------------|-----------------------|
| 0.0000    | 4,154,366.00             | 0.00                  | 25,000,000.00       | 0.00                      | 4,154,366.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 3,323,492.80  | 80.00         | 0.00                   | 80.00           | 0.00         | 166,174.64            | 166,174.64      |                       |
| 0.0000    | 1,809,185.00             | 0.00                  | 0.00                | 0.00                      | 1,809,185.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,773,001.30  | 98.00         | 0.00                   | 98.00           | 0.00         | 88,650.07             | 88,650.07       |                       |
| 0.0000    | 8,319,840.00             | 0.00                  | 0.00                | 0.00                      | 8,319,840.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 4,159,920.00  | 50.00         | 0.00                   | 50.00           | 0.00         | 207,996.00            | 207,996.00      |                       |
| 0.0000    | 1,210,648.00             | 0.00                  | 0.00                | 0.00                      | 1,210,648.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 966,518.40    | 80.00         | 0.00                   | 80.00           | 0.00         | 48,425.92             | 48,425.92       |                       |
| 0.0000    | 1,901,356.00             | 0.00                  | 0.00                | 0.00                      | 1,901,356.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,254,894.96  | 66.00         | 0.00                   | 66.00           | 0.00         | 50,460.53             | 50,460.53       |                       |
| 0.0000    | 1,225,000.00             | 0.00                  | 0.00                | 0.00                      | 1,225,000.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 910,750.00    | 75.00         | 0.00                   | 75.00           | 0.00         | 39,671.90             | 39,671.90       |                       |
| 0.0000    | 989,355.00               | 0.00                  | 0.00                | 0.00                      | 989,355.00              | 0.00                 | 0.00               | 0.00                  | 0.00            | 791,484.00    | 80.00         | 0.00                   | 80.00           | 0.00         | 28,920.88             | 28,920.88       |                       |
| 0.0000    | 1,638,760.00             | 0.00                  | 0.00                | 0.00                      | 1,638,760.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,229,070.00  | 75.00         | 0.00                   | 75.00           | 0.00         | 50,424.70             | 50,424.70       |                       |
| 0.0000    | 8,110,796.00             | 0.00                  | 0.00                | 0.00                      | 8,110,796.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 2,433,238.80  | 30.00         | 0.00                   | 30.00           | 0.00         | 121,661.94            | 121,661.94      |                       |
| 0.0000    | 1,449,500.00             | 0.00                  | 0.00                | 0.00                      | 1,449,500.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 637,670.00    | 44.00         | 0.00                   | 44.00           | 0.00         | 31,889.00             | 31,889.00       |                       |
| 0.0000    | 1,135,000.00             | 0.00                  | 0.00                | 0.00                      | 1,135,000.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 408,600.00    | 36.00         | 0.00                   | 36.00           | 0.00         | 20,430.00             | 20,430.00       |                       |
| 0.0000    | 345,500.00               | 0.00                  | 0.00                | 0.00                      | 345,500.00              | 0.00                 | 0.00               | 0.00                  | 0.00            | 145,110.00    | 42.00         | 0.00                   | 42.00           | 0.00         | 7,255.50              | 7,255.50        |                       |
| 0.0000    | 696,919.00               | 0.00                  | 0.00                | 0.00                      | 696,919.00              | 0.00                 | 0.00               | 0.00                  | 0.00            | 341,490.31    | 49.00         | 0.00                   | 49.00           | 0.00         | 17,074.52             | 17,074.52       |                       |
| 0.0000    | 3,910,742.00             | 0.00                  | 0.00                | 0.00                      | 3,910,742.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,290,544.86  | 33.00         | 0.00                   | 33.00           | 0.00         | 64,527.24             | 64,527.24       |                       |
| 0.0000    | 2,818,490.00             | 0.00                  | 0.00                | 0.00                      | 2,818,490.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 986,471.50    | 35.00         | 0.00                   | 35.00           | 0.00         | 49,323.58             | 49,323.58       |                       |

- 13.** We have reached the cap, and this means that we will calculate no more retainage for the project.

For the revenue budget lines, change the values in the **Completed (%)** column as indicated in the table below (to create provisioning for yet another progress billing iteration):

| Schedule of Values | Account Group | Description          | Revised Budgeted Amount | Completed (%) | Pending Invoice Amount | Actual Amount | Draft Retained Amount | Retained Amount | Total Retained Amount |
|--------------------|---------------|----------------------|-------------------------|---------------|------------------------|---------------|-----------------------|-----------------|-----------------------|
| 11                 | REV-ENUE      | EQUIPMENT            | 1 135 000,00            | <b>48,00</b>  | 136 200,00             | 408 600,00    | 0,00                  | 20 430,00       | 20 430,00             |
| 13                 | REV-ENUE      | SPECIAL CONSTRUCTION | 345 500,00              | <b>55,00</b>  | 44 915,00              | 145 110,00    | 0,00                  | 7 255,50        | 7 255,50              |
| 14                 | REV-ENUE      | CONVEYING SYSTEMS    | 696 919,00              | <b>60,00</b>  | 76 661,09              | 341 490,31    | 0,00                  | 17 074,52       | 17 074,52             |
| 15                 | REV-ENUE      | MECHANICAL           | 3 910 742,00            | <b>88,00</b>  | 2 150 908,10           | 1 290 544,86  | 0,00                  | 64 527,24       | 64 527,24             |
| 16                 | REV-ENUE      | ELECTRICAL           | 2 818 490,00            | <b>90,00</b>  | 1 550 169,50           | 986 471,50    | 0,00                  | 49 323,58       | 49 323,58             |

- 14.** Click **Run Project Billing** on the form toolbar, and then review the resulting pro forma invoice.

Make sure that no retainage is calculated because we have already reached the cap.

**Allocated Retained Total** = Cap Amount. We can hold retainage for a project in amount not more than Cap Amount. However, reallocation of Allocated Retained Amount still takes place based on the lines' weights in a pro forma.

Pro Forma Invoices NOTES

← SAVE & CLOSE ↻ ↵ ⌂ ⏪ ⏩ ⏴ ⏵ RELEASE ACTIONS - REPORTS -

|  |   |                                      |                                      |
|--|---|--------------------------------------|--------------------------------------|
| Reference Nbr.: 000014                   | Project: HOTEL2 - The Beach Hotel and Condom  | Progress Billing Total: 3,958,853.69 | Retainage (%): 5.00                  |
| Status: On Hold                          | Customer: EQUGRP - The Equity Group Investors | Time and Material Total: 0.00        | Allocated Retained Total: 992,886.42 |
| <input checked="" type="checkbox"/> Hold |   | Tax Total: 0.00                      |                                      |
| * Invoice Date: 10/1/2019                |   | Invoice Total: 3,958,853.69          |                                      |
| * Post Period: 10-2019                   |   | Retainage Total: 0.00                |                                      |
| Description: Invoice for HOTEL2          |   | Amount Due: 3,958,853.69             |                                      |

PROGRESS BILLING TIME AND MATERIAL TAX DETAILS FINANCIAL DETAILS APPROVAL DETAILS ADDRESS DETAILS

| Branch     | Billing Item | Description                     | Revised Budgeted Amount | Previously Invoiced | Total Completed (%) | Amount       | Stored Material | Amount to Invoice | Current Invoiced (%) | Allocated Retained Amount | Retainage Amount |
|------------|--------------|---------------------------------|-------------------------|---------------------|---------------------|--------------|-----------------|-------------------|----------------------|---------------------------|------------------|
| HEADOFFICE | 01           | GENERAL REQUIREMENTS            | 4,154,366.00            | 3,323,492.80        | 80.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 166,174.65                | 0.00             |
| HEADOFFICE | 02           | SITWORK                         | 1,809,185.00            | 1,773,001.30        | 98.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 88,650.07                 | 0.00             |
| HEADOFFICE | 03           | CONCRETE                        | 8,319,840.00            | 4,159,920.00        | 50.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 207,996.00                | 0.00             |
| HEADOFFICE | 04           | MASONRY                         | 1,210,648.00            | 968,518.40          | 80.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 48,425.92                 | 0.00             |
| HEADOFFICE | 05           | METALS                          | 1,901,356.00            | 1,254,894.96        | 66.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 50,460.53                 | 0.00             |
| HEADOFFICE | 06           | WOODS, PLASTICS, COMPOSITES     | 1,225,000.00            | 918,750.00          | 75.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 39,671.90                 | 0.00             |
| HEADOFFICE | 07           | THERMAL AND MOISTURE PROTECTION | 989,355.00              | 791,484.00          | 80.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 28,920.88                 | 0.00             |
| HEADOFFICE | 08           | OPENINGS                        | 1,638,760.00            | 1,229,070.00        | 75.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 50,424.70                 | 0.00             |
| HEADOFFICE | 09           | FINISHES                        | 8,110,796.00            | 2,433,238.80        | 30.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 121,661.94                | 0.00             |
| HEADOFFICE | 10           | SPECIALTIES                     | 1,449,500.00            | 637,780.00          | 44.00               | 0.00         | 0.00            | 0.00              | 0.00                 | 31,889.00                 | 0.00             |
| HEADOFFICE | 11           | EQUIPMENT                       | 1,135,000.00            | 408,600.00          | 48.00               | 136,200.00   | 0.00            | 136,200.00        | 12.00                | 20,430.00                 | 0.00             |
| HEADOFFICE | 13           | SPECIAL CONSTRUCTION            | 345,500.00              | 145,110.00          | 55.00               | 44,915.00    | 0.00            | 44,915.00         | 13.00                | 7,255.50                  | 0.00             |
| HEADOFFICE | 14           | CONVEYING SYSTEMS               | 696,919.00              | 341,490.31          | 60.00               | 76,661.09    | 0.00            | 76,661.09         | 11.00                | 17,074.52                 | 0.00             |
| HEADOFFICE | 15           | MECHANICAL                      | 3,910,742.00            | 1,290,544.86        | 88.00               | 2,150,908.10 | 0.00            | 2,150,908.10      | 55.00                | 64,527.24                 | 0.00             |
| HEADOFFICE | 16           | ELECTRICAL                      | 2,818,490.00            | 986,471.50          | 90.00               | 1,550,169.50 | 0.00            | 1,550,169.50      | 55.00                | 49,323.58                 | 0.00             |

**15.** Clear the **Hold** check box, then approve and release the pro forma and the related AR invoice. Notice that no retainage is included in the AR invoice.

Invoices and Memos

SAVE & CLOSE [Icons] RELEASE ACTIONS INQUIRIES REPORTS

|                                 |  |                            |
|---------------------------------|--|----------------------------|
| Type: Invoice                   | Customer: EQUGRP - The Equity Group Investors                                  | Detail Total: 3,958,853.69 |
| Reference Nbr.: 000091          | Terms: 30D - 30 Days   | Discount Total: 0.00       |
| Status: Open                    | * Due Date: 10/31/2019   | VAT Taxable T...: 0.00     |
| <input type="checkbox"/> Hold   | * Cash Discount...: 10/31/2019 <input checked="" type="checkbox"/> Pay by Line | VAT Exempt T...: 0.00      |
| Date: 10/1/2019                 | Project/Contract: HOTEL2 - The Beach Hotel and Condom                          | Tax Total: 0.00            |
| Post Period: 10-2019            |  | Balance: 3,958,853.69      |
| Customer Order: 000014          |  | Amount: 3,958,853.69       |
| Description: Invoice for HOTEL2 |  | Cash Discount: 0.00        |

DOCUMENT DETAILS FINANCIAL DETAILS ADDRESS DETAILS TAX DETAILS APPROVAL DETAILS APPLICATIONS COMPLIAN

VIEW SCHEDULE [Icons]

| Transaction Descr.              | Quantity | UOM  | Unit Price | Ext. Price   | Discount Percent | Discount Amount | Retainag Amount | Amount       |
|---------------------------------|----------|------|------------|--------------|------------------|-----------------|-----------------|--------------|
| GENERAL REQUIREMENTS            | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| SITWORK                         | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| CONCRETE                        | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| MASONRY                         | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| METALS                          | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| WOODS, PLASTICS, COMPOSITES     | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| THERMAL AND MOISTURE PROTECTION | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| OPENINGS                        | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| FINISHES                        | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| SPECIALTIES                     | 0.00     | HOUR | 0.0000     | 0.00         | 0.000000         | 0.00            | 0.00            | 0.00         |
| EQUIPMENT                       | 0.00     | HOUR | 0.0000     | 136,200.00   | 0.000000         | 0.00            | 0.00            | 136,200.00   |
| SPECIAL CONSTRUCTION            | 0.00     | HOUR | 0.0000     | 44,915.00    | 0.000000         | 0.00            | 0.00            | 44,915.00    |
| CONVEYING SYSTEMS               | 0.00     | HOUR | 0.0000     | 76,661.09    | 0.000000         | 0.00            | 0.00            | 76,661.09    |
| MECHANICAL                      | 0.00     | HOUR | 0.0000     | 2,150,908.10 | 0.000000         | 0.00            | 0.00            | 2,150,908.10 |
| ELECTRICAL                      | 0.00     | HOUR | 0.0000     | 1,550,169.50 | 0.000000         | 0.00            | 0.00            | 1,550,169.50 |

16. Take a look at the project completion and total retained values. **Total Retained Amount** = Cap Amount, which means that we can hold no more retainage for the project.

**RETAINAGE**

Retainage Mode: Contract Cap

Include CO

Contract Total: 39,715,457.00

Completed (%): 61.99

Total Retained Amount: 992,886.42

Retainage (%): 5.00  Stepped

Cap (%): 50.00 992,886.42

- 17.** Release an existing change order for the *HOTEL2* project on the Change Orders (PM308000) form to increase the **Contract Total** since we have the **Include CO** check box selected in the **Retainage** section on the **Summary** tab of the Projects form for the project, and thus increase our Cap Amount and decrease our contract **Completed (%)**.

Change Orders ☆

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| Status: All | Class ID: All | Customer ID: All | Project ID: All | Reference Nbr. | Status | Class ID | Customer ID | Project ID | Description                                      | Revenue Change Nbr. | Change Date |
|-------------|---------------|------------------|-----------------|----------------|--------|----------|-------------|------------|--|---------------------|-------------|
|             |               |                  |                 | 000008         | Closed | EXT      | ITALIAN01   | ITALIAN4   | Additional costs and revenue for the Italian ... | 0001                | 12/25/2019  |
|             |               |                  |                 | 000007         | Closed | INT      | ITALIAN01   | ITALIAN4   | Extra costs                                      | N/A                 | 12/24/2019  |
|             |               |                  |                 | 000006         | Closed | EXT      | ITALIAN01   | ITALIAN3   | Additional costs and revenue for the Italian ... | 0001                | 12/19/2019  |
|             |               |                  |                 | 000005         | Closed | INT      | ITALIAN01   | ITALIAN3   | Extra costs                                      | N/A                 | 12/19/2019  |
|             |               |                  |                 | 000004         | Open   | EXT      | EQUGRP      | HOTEL2     | Additional income expected                       | 0001                | 3/1/2019    |
|             |               |                  |                 | 000003         | Open   | EXT      | EQUGRP      | HOTEL      | Additional costs and revenue for the Hotel ...   | 0001                | 3/1/2019    |
|             |               |                  |                 | 000002         | Closed | EXT      | ITALIAN01   | ITALIAN    | Additional costs and revenue for the Italian ... | 0001                | 3/1/2019    |
|             |               |                  |                 | 000001         | Closed | INT      | ITALIAN01   | ITALIAN    | Extra costs                                      | N/A                 | 3/1/2019    |

We are now below the cap and new retainage will be generated in the next invoice.

**RETAINAGE**

Retainage Mode: Contract Cap

Include CO

Contract Total: 64,715,457.00

Completed (%): 38.05

Total Retained Amount: 992,886.42

Retainage (%):   Stepped

Cap (%):  1,617,886.42

- 18.** On the **Revenue Budget** tab of the Projects form, change the **Completed (%)** values for the revenue budget lines as follows (to create provisioning for a yet another progress billing iteration):

| Schedule of Values | Account Group | Description          | Revised Budgeted Amount | Completed (%) |
|--------------------|---------------|----------------------|-------------------------|---------------|
| 11                 | REVENUE       | EQUIPMENT            | 1 135 000,00            | <b>89,00</b>  |
| 13                 | REVENUE       | SPECIAL CONSTRUCTION | 345 500,00              | <b>70,00</b>  |
| 14                 | REVENUE       | CONVEYING SYSTEMS    | 696 919,00              | <b>90,00</b>  |
| 15                 | REVENUE       | MECHANICAL           | 3 910 742,00            | <b>95,00</b>  |

| Schedule of Values | Account Group | Description | Revised Budgeted Amount | Completed (%) |
|--------------------|---------------|-------------|-------------------------|---------------|
| 16                 | REVENUE       | ELECTRICAL  | 2 818 490,00            | <b>100,00</b> |

- 19.** Click **Run Project Billing** on the form toolbar, and then review the generated pro forma invoice.

Notice how the new retainage amount is calculated in the pro forma invoice. However, with this pro forma invoice, we reach the new cap (affected by the change order release) and the next pro forma invoice will not have any more retainage amount.

**RETAINAGE**

Retainage Mode: Contract Cap

Include CO

Contract Total: 64,715,457.00

Completed (%): 70.93

Total Retained Amount: 1,617,886.42

Retainage (%): 5.00  Stepped

Cap (%): 50.00 1,617,886.42

- 20.** Clear the **Hold** check box, and then approve (if needed) and release the generated pro forma invoice and its related AR invoice.
- 21.** Complete the project billing by specifying 100% of completion for all the revenue budget lines and running project billing to generate the final pro forma invoice. No new retainage is calculated.
- 22.** Clear the **Hold** check box, then approve and release the generated pro forma invoice and its related AR invoice.

Now that the job is finished, you are ready to bill the retainage amount to the customer.

- 23.** Click **Release Retainage** on the **Invoices** tab of the Projects (PM301000) form.

Projects

← SAVE & CLOSE [Print] [Refresh] + [Delete] [Back] < > [Next] RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE

\* Project ID: HOTEL2 \* Status: Active Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor Liabilities: 0.00  
 Template: Income: 64,715,457.00  
 \* Description: The Beach Hotel and Condominiums Expenses: 0.00

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

RELEASE RETAINAGE [Print] [Refresh]

| Pro Forma Date | Pro Forma Reference Nbr. | Description                                | Status | Invoice Total | Currency | AR Doc. Type | AR Reference Nbr |
|----------------|--------------------------|--|--------|---------------|----------|--------------|------------------|
| 6/1/2019       | 000008                   | Progress billing application #1 for HOTEL2 | Closed | 415,436.60    | USD      | Invoice      | 000085           |
| 7/1/2019       | 000009                   | Progress billing application #2 for HOTEL2 | Closed | 7,219,630.64  | USD      | Invoice      | 000086           |
| 8/1/2019       | 000010                   | Progress billing application #3 for HOTEL2 | Closed | 11,532,792.25 | USD      | Invoice      | 000087           |

24. Release retainage for Task 01.

For convenience, you can use the filters on the **Release AR Retainage** (AR510000) form that opens. See the screenshot below for details.

Release AR Retainage

PROCESS **PROCESS ALL** CLOSE [Print] [Refresh] [Filter]

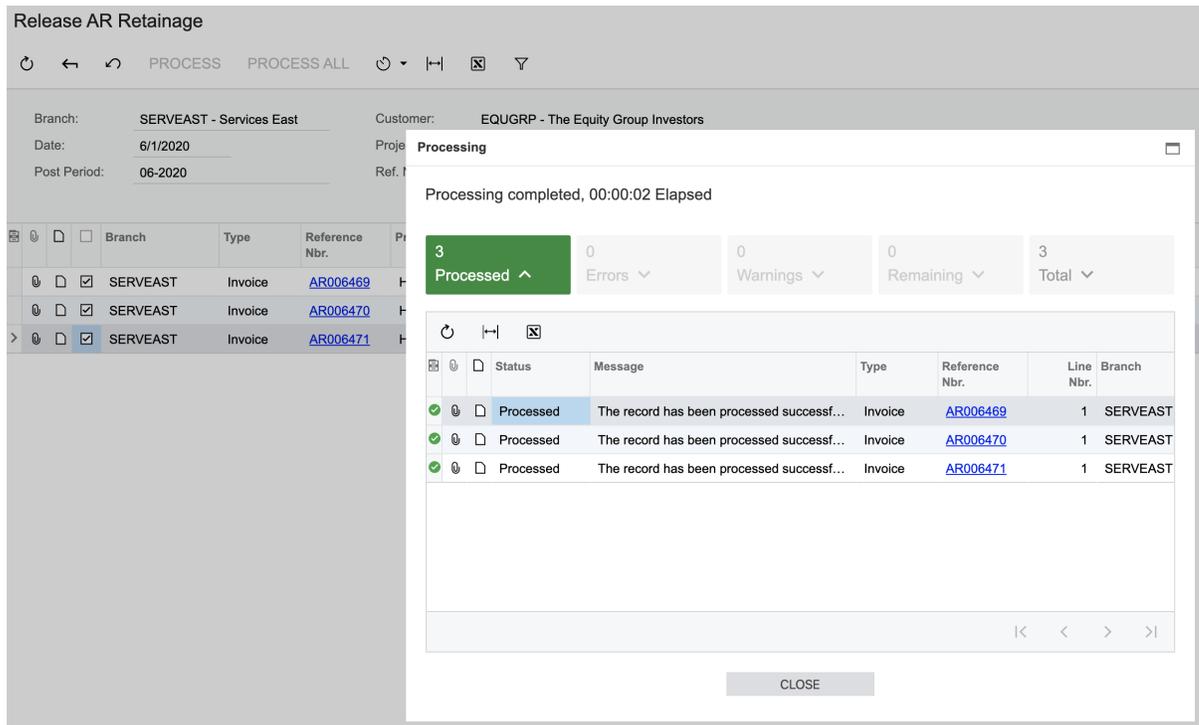
Branch: HEADOFFICE - SweetLife Ht Cost Code: [ ]  
 \* Date: 1/13/2020 Inventory ID: [ ]  
 \* Post Period: 01-2020 Ref. Nbr.: [ ]  
 Customer: EQUGRP - The Equity Group [ ]  
 Project: HOTEL2 - The Beach Hotel a [ ]  
**Project Task: 01 - GENERAL REQUIREME** [ ]  
 Account Group: [ ]

Retainage Percent: 100.000000  
 Retainage to Release: 0.00

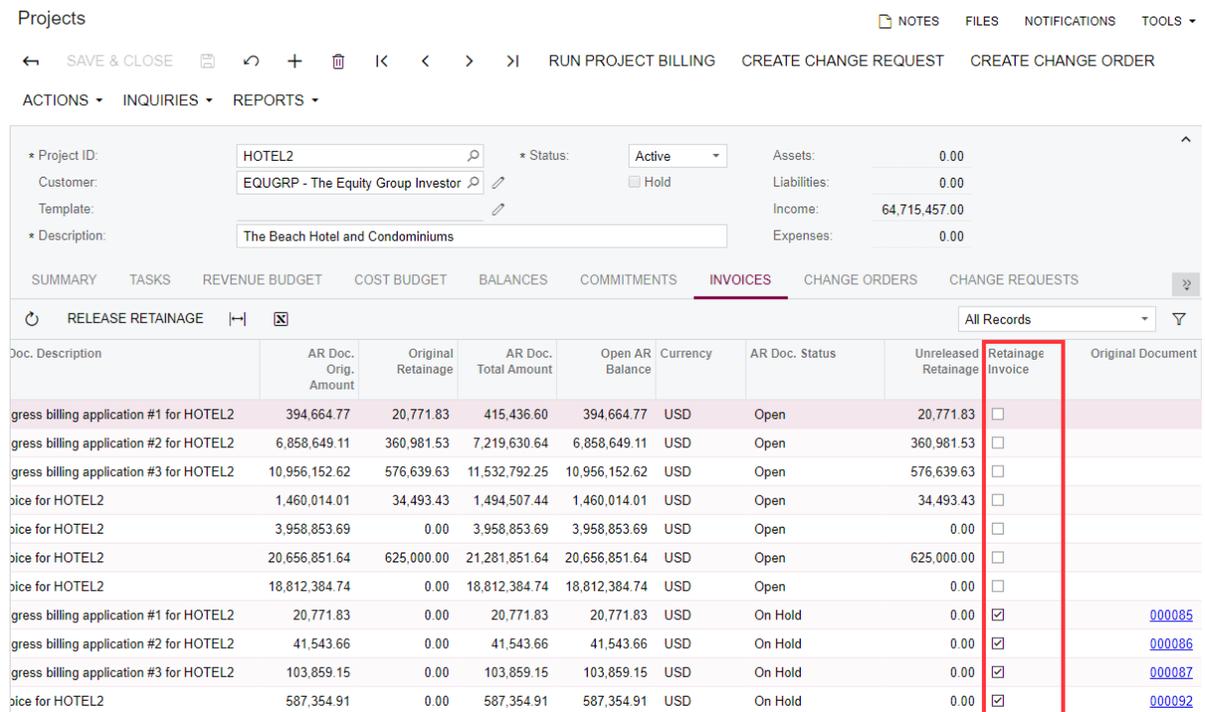
Show Lines with Open Balance

| Branch     | Type    | Reference Nbr. | Customer | Line Nbr. | Percent to Release | Retainage to Release | Unreleased Retainage | Date      | Total Amount  | Project | Description                                |
|------------|---------|----------------|----------|-----------|--------------------|----------------------|----------------------|-----------|---------------|---------|--|
| HEADOFFICE | Invoice | 000085         | EQUGRP   | 1         | 100.000000         | 20,771.83            | 0.00                 | 6/1/2019  | 415,436.60    | HOTEL2  | Progress billing application #1 for HOTEL2 |
| HEADOFFICE | Invoice | 000086         | EQUGRP   | 1         | 100.000000         | 41,543.66            | 0.00                 | 7/1/2019  | 830,873.20    | HOTEL2  | Progress billing application #2 for HOTEL2 |
| HEADOFFICE | Invoice | 000087         | EQUGRP   | 1         | 100.000000         | 103,859.15           | 0.00                 | 8/1/2019  | 2,077,183.00  | HOTEL2  | Progress billing application #3 for HOTEL2 |
| HEADOFFICE | Invoice | 000092         | EQUGRP   | 1         | 100.000000         | 587,354.91           | 0.00                 | 11/1/2019 | 20,000,000.00 | HOTEL2  | Invoice for HOTEL2                         |

25. Click **Process All** on the form toolbar. As a result, four retainage invoices are generated.



26. See how retainage invoices are marked on the **Invoices** tab of the Projects (PM301000) form.



27. Also, see how retainage invoices are marked on the Invoices and Memos form.

Invoices and Memos

SAVE & CLOSE [Icons] RELEASE ACTIONS INQUIRIES REPORTS

|   |   |                         |
|---|---|-------------------------|
| Type: Invoice   | Customer: EQUGRP - The Equity Group Investors         | Detail Total: 20,771.83 |
| Reference Nbr.: 000094                                  | * Terms: 30D - 30 Days                                | Discount Total: 0.00    |
| Status: On Hold   | * Due Date: 2/12/2020                                 | VAT Taxable T... 0.00   |
| <input checked="" type="checkbox"/> Hold                | * Cash Discoun... 2/12/2020                           | VAT Exempt T... 0.00    |
| * Date: 1/13/2020                                       | Project/Contract: HOTEL2 - The Beach Hotel and Condom | Tax Total: 0.00         |
| * Post Period: 01-2020                                  | <input checked="" type="checkbox"/> Retainage Invoice | Balance: 20,771.83      |
| Customer Order: 000008                                  | <input checked="" type="checkbox"/> Pay by Line       | Cash Discount: 0.00     |
| Description: Progress billing application #1 for HOTEL2 |   |                         |

DOCUMENT DETAILS FINANCIAL DETAILS ADDRESS DETAILS TAX DETAILS APPROVAL DETAILS APPLICATIONS COMPLIANCE

VIEW SCHEDULE [Icons]

| Branch     | Line Nbr. | Account Group/Item | Transaction Descr.           | Quantity | UOM | Unit Price | Ext. Price |
|------------|-----------|--------------------|------------------------------|----------|-----|------------|------------|
| HEADOFFICE | 1         |                    | Retainage for Invoice 000085 | 0.00     |     | 0.0000     | 20,771.83  |

28. For each generated retainage invoice, clear the **Hold** check box, and release the generated retainage invoice. Notice that **Total Retained Amount** for the project has decreased.

**RETAINAGE**

Retainage Mode: Contract Cap

Include CO

Contract Total: 64,715,457.00

Completed (%): 100.00

Total Retained Amount: 864,356.87

Retainage (%): 5.00  Stepped

Cap (%): 50.00 1,617,886.42

29. Retainage amount held for task 01 is now zero.

Projects NOTES FILES NOTIFICATIONS TOOLS

← SAVE & CLOSE ↻ + 🗑️ ⌂ ⏪ ⏩ ▶️ RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES REPORTS

Project ID: HOTEL2 Status: Active Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor Liabilities: 0.00  
 Template: Income: 64,715,457.00  
 Description: The Beach Hotel and Condominiums Expenses: 0.00

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

Project Task: Pending Invoice Amount Total: 0.00

VIEW TRANSACTIONS All Records

| Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Budgeted CO Quantity | Budgeted CO Amount | Draft Invoices Amount | Actual Quantity | Actual Amount | Completed (%) | Pending Invoice Amount | Performance (%) | Tax Category | Draft Retained Amount | Retained Amount | Total Retained Amount |
|--------------------------|-----------------------|---------------------|---------------------------|-------------------------|----------------------|--------------------|-----------------------|-----------------|---------------|---------------|------------------------|-----------------|--------------|-----------------------|-----------------|-----------------------|
| 154,366.00               | 0.00                  | 0.00                | 0.00                      | 29,154,366.00           | 0.00                 | 25,000,000.00      | 0.00                  | 0.00            | 29,154,366.00 | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 809,185.00               | 0.00                  | 0.00                | 0.00                      | 1,809,185.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,809,185.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 88,650.07       | 88,650.07             |
| 319,840.00               | 0.00                  | 0.00                | 0.00                      | 8,319,840.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 8,319,840.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 207,996.00      | 207,996.00            |
| 210,648.00               | 0.00                  | 0.00                | 0.00                      | 1,210,648.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,210,648.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 48,425.92       | 48,425.92             |
| 901,356.00               | 0.00                  | 0.00                | 0.00                      | 1,901,356.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,901,356.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 50,460.53       | 50,460.53             |

You can review the values in the **Unreleased Retainage** column for the related AR invoice lines on the Invoices and Memos form (application #1, #2, and #3 have zero **Unreleased Retainage** for task 01).

30. Fully release the retainage left by doing the following:

- a. Navigate to the Release AR Retainage (AR510000) form and filter the data by the HOTEL2 project.
- b. Select the date of the latest project invoice in the **Date** filter to see all the project invoice lines with unreleased retainage.
- c. Click **Process All** on the form toolbar and wait until all the retainage invoices are generated.

31. Release the generated retainage invoices.

32. Review the project's revenue budget on the **Revenue Budget** tab of the Projects form.

Projects NOTES FILES NOTIFICATIONS TOOLS

← SAVE & CLOSE ↻ + 🗑️ ⌂ ⏪ ⏩ ▶️ RUN PROJECT BILLING CREATE CHANGE REQUEST CREATE CHANGE ORDER ACTIONS INQUIRIES REPORTS

Project ID: HOTEL2 Status: Active Assets: 0.00  
 Customer: EQUGRP - The Equity Group Investor Liabilities: 0.00  
 Template: Income: 64,715,457.00  
 Description: The Beach Hotel and Condominiums Expenses: 0.00

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

Project Task: Pending Invoice Amount Total: 0.00

VIEW TRANSACTIONS All Records

| Original Budgeted Amount | Potential CO Quantity | Potential CO Amount | Revised Budgeted Quantity | Revised Budgeted Amount | Budgeted CO Quantity | Budgeted CO Amount | Draft Invoices Amount | Actual Quantity | Actual Amount | Completed (%) | Pending Invoice Amount | Performance (%) | Tax Category | Draft Retained Amount | Retained Amount | Total Retained Amount |
|--------------------------|-----------------------|---------------------|---------------------------|-------------------------|----------------------|--------------------|-----------------------|-----------------|---------------|---------------|------------------------|-----------------|--------------|-----------------------|-----------------|-----------------------|
| 154,366.00               | 0.00                  | 0.00                | 0.00                      | 29,154,366.00           | 0.00                 | 25,000,000.00      | 0.00                  | 0.00            | 29,154,366.00 | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 809,185.00               | 0.00                  | 0.00                | 0.00                      | 1,809,185.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,809,185.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 319,840.00               | 0.00                  | 0.00                | 0.00                      | 8,319,840.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 8,319,840.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 210,648.00               | 0.00                  | 0.00                | 0.00                      | 1,210,648.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,210,648.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 901,356.00               | 0.00                  | 0.00                | 0.00                      | 1,901,356.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,901,356.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 225,000.00               | 0.00                  | 0.00                | 0.00                      | 1,225,000.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,225,000.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 989,355.00               | 0.00                  | 0.00                | 0.00                      | 989,355.00              | 0.00                 | 0.00               | 0.00                  | 0.00            | 989,355.00    | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 638,760.00               | 0.00                  | 0.00                | 0.00                      | 1,638,760.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,638,760.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 110,796.00               | 0.00                  | 0.00                | 0.00                      | 8,110,796.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 8,110,796.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 449,500.00               | 0.00                  | 0.00                | 0.00                      | 1,449,500.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,449,500.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 135,000.00               | 0.00                  | 0.00                | 0.00                      | 1,135,000.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 1,135,000.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 345,500.00               | 0.00                  | 0.00                | 0.00                      | 345,500.00              | 0.00                 | 0.00               | 0.00                  | 0.00            | 345,500.00    | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 696,919.00               | 0.00                  | 0.00                | 0.00                      | 696,919.00              | 0.00                 | 0.00               | 0.00                  | 0.00            | 696,919.00    | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 910,742.00               | 0.00                  | 0.00                | 0.00                      | 3,910,742.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 3,910,742.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |
| 818,490.00               | 0.00                  | 0.00                | 0.00                      | 2,818,490.00            | 0.00                 | 0.00               | 0.00                  | 0.00            | 2,818,490.00  | 100.00        | 0.00                   | 100.00          |              | 0.00                  | 0.00            | 0.00                  |

33. On the **Summary** tab, see that **Total Retained Amount** is now zero.

**RETAINAGE**

|  |  |
|--|--|
| Retainage Mode:                                | <input type="text" value="Contract Cap"/>                          |
| <input checked="" type="checkbox"/> Include CO |  |
| Contract Total:                                | <u>64,715,457.00</u>   |
| Completed (%):                                 | <u>100.00</u>  |
| Total Retained Amount:                         | <u>0.00</u>  |
| Retainage (%):                                 | <input type="text" value="5.00"/> <input type="checkbox"/> Stepped |
| Cap (%):                                       | <input type="text" value="50.00"/> <u>1,617,886.42</u>             |