Project Accounting

P200 Project Accounting Extended Scenarios 2025 R1

Revision: 5/12/2025

Acumatica
The Cloud **ERP**

Contents

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How to Use This Course

This course provides a set of lessons that illustrate project accounting processes in a midsize company. The course consists of lessons that guide you step by step through the examples and explanations of the configuration and business process flow in Acumatica ERP.

What Is in This Guide

The guide includes the *Company Story* topic and process activities. The *Company Story* topic explains the organizational structure of the company that has been preconfigured in the *U100* dataset, as well as the company's business processes and requirements. Each of the process activities of the course is dedicated to a particular user scenario and consists of processing steps that you complete.

Which Training Environment You Should Use

All lessons of the course should be completed in an instance of Acumatica ERP 2025 R1 with the *U100* training dataset preloaded; this dataset provides the predefined settings and entities you will need as you complete the activities of this course.

You or your system administrator should prepare an instance of Acumatica ERP 2025 R1, as described in the *How to Create a Tenant with the U100 Dataset* section below.

What Is in a Lesson

Each lesson provides a story describing a particular user scenario and an overview of the relevant features that have been enabled in the system; configuration settings that are related to the described scenario are also listed. The lesson 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.

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

What Is in Additional Materials

In the *Additional Materials* part of the guide, you can find the following information related to the processes and scenarios covered in the corresponding parts of the guide:

- Additional information related to the processes
- Transactions generated as a result of the processes
- Details about the reports, inquires, and forms you can use to review and gather information related to the processes
- Explanations on how to perform mass-processing operations related to the processes

What the Documentation Resources Are

Acumatica ERP provides a wide variety of documentation resources, which you can access from this course, from the system, or from the *Help portal*. Links to related information are provided at relevant places throughout the course. 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 (or any other Acumatica ERP form), you can click the **Open Help** button in 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 activities and to open a reference topic with detailed descriptions of the form elements.

How to Create a Tenant with the U100 Dataset

Before you complete this course, you need to add a tenant with the *U100* dataset to an existing Acumatica ERP instance. You will then prepare the tenant for completing the activities. To complete this preparation, perform the following instructions:

1. Go to *Amazon Storage*.

2. Open the folder that corresponds to the version of your Acumatica ERP instance.

3. In this folder, open the `Snapshots` folder and download the `u100.zip` file.

4. Launch the Acumatica ERP instance and sign in.

5. Open the *Tenants* (SM203520) form and click **Add New Record** on the form toolbar.

6. In the **Login Name** box, type the name to be used for the tenant.

7. On the form toolbar, click **Save**.

> (i) When you create a system tenant, you may be signed out after its creation, depending on how many non-System tenants your Acumatica ERP instance already had:
>
> *   If you started with one non-System tenant (to which you are signed in) and you create a new one, the system signs you out to switch from single-tenant mode to multitenant mode.
> *   If the instance had multiple non-System tenants and you create another, it is already in multitenant mode. Instead of being signed out, you wait until the system completes the operation and then proceed.

8. On the **Snapshots** tab, click **Import Snapshot**.

9. In the **Upload Snapshot Package** dialog box, select the `u100.zip` file, which you have downloaded, and click **Upload**.

    The system uploads the snapshot and lists it on the **Snapshots** tab of the *Tenants* form.

10. Open the *Apply Updates* (SM203510) form and click **Schedule Lockout**.

11. In the **Schedule Lockout** dialog box, click **OK**.

12. Open the *Tenants* form again.

13. On the form toolbar, click **Restore Snapshot**.

14. If the **Warning** dialog box appears, click **Yes**.

15. In the **Restore Snapshot** dialog box, make sure that the correct snapshot package is being uploaded and click **OK**. The system will restore the snapshot and sign you out.

16. Sign in to the tenant that you have just created.

17. Open the *Apply Updates* form again.

18. On the form toolbar, click **Stop Lockout.**

Which Credentials You Should Use

To complete the lessons, sign in as the following users:

1. Lesson 1: *gibbs*, *brawner*

2. Lesson 2: *gibbs*, *brawner*

3. Lesson 3: *brawner*
4. Lesson 4: *brawner*
5. Lesson 5: *brawner*
6. Lesson 6: *brawner*
7. Lesson 7: *gibbs*, *brawner*
8. Lesson 8: *brawner*
9. Lesson 9: *brawner*
10. Lesson 10: *gibbs*, *waite*
11. Lesson 11: *gibbs*, *brawner*
12. Lesson 12: *waite*, *brawner*

The password for each user is *123*.

Which License You Should Use

For the educational purposes of this course, you use Acumatica ERP under the trial license, which does not require activation and provides all available features. For the production use of this functionality, you have to activate the license your organization has purchased. Each particular feature may be subject to additional licensing; please consult the Acumatica ERP licensing policy for details.

Company Story

This topic explains the organizational structure and operational activity of the company you will work with during this training.

Company Structure

The SweetLife Fruits & Jams company is a midsize company located in New York City. The company consists of the following branches:

- SweetLife Head Office and Wholesale Center: This branch of the company consists of a jam factory and a large warehouse where the company stores fruit (purchased from wholesale vendors) and the jam it produces. Warehouse workers perform warehouse operations by using barcode scanners or mobile devices with barcode scanning support.
- SweetLife Store: This branch has a retail shop with a small warehouse to which the goods to be sold are distributed from the company's main warehouse. This branch is also planning on selling goods via a website created on an e-commerce platform to accept orders online. The e-commerce integration project is underway.
- SweetLife Service and Equipment Sales Center: This branch is a service center with a small warehouse where juicers are stored. This branch assembles, sells, installs, and services juicers, in addition to training customers' employees to operate juicers.

Operational Activity

The company has been operating starting in the *01-2024* financial period. In November 2024, the company started using Acumatica ERP as an ERP and CRM system and migrated all data of the main office and retail store to Acumatica ERP. The equipment center began its operations in *01-2025* in response to the company's growth.

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

SweetLife Company Sales and Services

Each SweetLife company's branch has its own business processes, as follows:

- SweetLife Head Office and Wholesale Center: In this branch, jams and fruit are sold to wholesale customers, such as restaurants and cafes. The company also conducts home canning training at the customer's location and webinars on the company's website.
- SweetLife Store: In the store, retail customers purchase fresh fruit, berries, and jams, or pick up the goods they have ordered on the website. Some of the goods listed in the website catalog are not stored in the retail warehouse, such as tropical fruits (which are purchased on demand) and tea (which is drop-shipped from a third-party vendor).
- SweetLife Service and Equipment Sales Center: This branch assembles juicers, sells juicers, provides training on equipment use, and offers equipment installation, including site review and maintenance services. The branch performs short-term service provision.

The company has local and international customers. The ordered items are delivered by drivers using the company's own vehicle. Customers can pay for orders by using various payment methods (cash, checks, or credit cards).

Part 1: Two-Tier Change Management

This part describes how you can use the functionality of change orders and change requests to track changes to the project revenue budget, commitments, and budgeted costs. You will also learn about how you can control the profitability of every change initiated by a customer.

Lesson 1: Implementing Two-Tier Change Management

This lesson explains how you can set up two-tier change management for projects. In the first tier, you create change requests; the second tier involves you grouping multiple change requests into a single change order.

Two-Tier Change Management: General Information

Acumatica ERP provides a two-tier change management capability for projects, which is used to create change requests in addition to change orders. Change requests 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. In the first tier, you create change requests. The second tier involves you grouping multiple change requests into a single change order to be approved.

With the two-tier change management, you can also set up price markups that can be applied to an individual line of a change request and to the total amount of the document to charge the customer for the changes.

Learning Objectives

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

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

Applicable Scenarios

You turn on the change order workflow for a project to be able to track changes to the budgeted and committed values of the project. You create change requests if the workflow of your project supposes a lot of small changes to the budget but you do not want to create a lot of change orders, for example, because of the approval required for each change order. With change requests, you can collect a lot of small changes into a single or several change orders.

You can also need to create change requests for a project if you want to charge the customer for the changes made to the project budget.

Configuration of Change Order Classes

A change order class defines which project data—the revenue budget, the cost budget, or commitments—can be adjusted with a change order of this class. The two-tier change management is controlled at the level of a change order class. If the **Two-Tier Change Management** check box is selected for a particular class on the *Change Order*

Classes (PM203000) form, change orders of the selected class support two-tier change management and can include change requests.

If a change order class has the **Revenue Budget** check box cleared and the **Cost Budget** and **Commitments** check boxes selected on the *Change Order Classes* form, change orders of this class are classified as *cost change orders* for change requests.

If a change order class has the **Revenue Budget**, **Cost Budget**, and **Commitments** check boxes selected on the *Change Order Classes* form, change orders of this class are treated as *revenue change orders*.

Creation of Change Requests

To make it possible for users to track changes for a particular project by using change requests along with change orders, you select the **Change Order Workflow** check box on the **Summary** tab of the *Projects* (PM301000) form for the project. Then you can create a change request for the project on the *Projects* form by clicking **Create Change Request** on the form toolbar. The system creates a change request with the *On Hold* status and the project selected and opens it on the *Change Requests* (PM308500) form.

⚠️ In addition to creating a change request from the *Projects* form for the selected project, you can create a new change request directly on the *Change Requests* form and select the needed project.

In a change request with the *On Hold* status, on the **Estimation** tab of the *Change Requests* form, you add rows with potential changes that will affect the revenue budget and the cost budget of the selected project when the related change orders are released. For each estimation line, you specify the following settings:

- The **Project Task**, **Account Group**, and **Inventory ID** that represent the cost budget line to be updated or created if this combination of settings does not exist in the project budget
- The **Revenue Task** and **Revenue Account Group** that represent the revenue budget line to be updated or created if this combination of settings does not exist in the project budget
- The **Quantity**, **Unit Cost**, **Unit Price**, and **UOM** that estimate the change to the budget
- Optionally, the **Create Commitment** and **Vendor** if you want to create a commitment line based on this estimation line

The amount in the **Ext. Cost** column estimates the change of the cost and is calculated as follows:

```
Ext. Cost = Quantity * Unit Cost
```

The amount in the **Line Amount** column estimates the change of the revenue and is calculated as follows:

```
Line Amount = Ext. Price + Ext. Price * Line Markup (%) / 100, where

Ext. Price = Quantity * Unit Price

Unit Price = Unit Cost + Unit Cost * Price Markup (%) / 100
```

Once you have saved a change request with the *Open* status, the **Quantity** and **Ext. Cost** values of each estimation line increase the **Potential CO Quantity** and **Potential CO Amount** of the corresponding cost budget line of the project on the *Projects* form. The **Quantity** and **Line Amount** values of each estimation line increase the **Potential CO Quantity** and **Potential CO Amount** of the corresponding revenue budget line of the project.

Adding of a Change Request to a Change Order

On the *Change Requests* (PM308500) form, you can create a change order for the selected change request by clicking the **Create Change Order** button on the form toolbar. On the *Change Orders* (PM308000) form, you can also add one or several change requests to the selected change order by clicking **Add Change Requests** on the table toolbar of the **Change Requests** tab.

Based on each estimation line of the change request added to a change order and on the selected change order class, the system creates the following lines for the change order on the *Change Orders* form:

- A cost budget line on the **Cost Budget** tab with **Quantity** and **Amount** values equal to the quantity and extended cost of the estimation line
- A revenue budget line on the **Revenue Budget** tab with **Quantity** and **Amount** values equal to the quantity and line amount of the estimation line
- A commitment line on the **Commitments** tab with **Quantity** and **Amount** values equal to the quantity and extended cost of the estimation line if the estimation line has **Create Commitment** check box selected on the *Change Requests* form
- A markup revenue budget line on the **Revenue Budget** tab with the **Amount** equal to the markup amount of this markup line. The system creates a separate line for the markup amount if the change request has a markup line with the project task and account group on the **Markups** tab of the *Change Requests* form but has no estimation line with the same revenue task and revenue account group on the **Estimation** tab. Otherwise, the markup amount is added to the existing revenue budget line created based on the estimation line.

Most commonly, a change request relates to a change order that contains both cost estimation lines and revenue estimation lines. Once you have added the change request to the change order, the change request is assigned the *Closed* status. However, in some cases, you may need to process and release the cost change order as early as necessary to create commitments and change the project cost budget accordingly, while the revenue change order may require customer approval and needs to be processed separately.

If the project cost budget and commitments affected by a change request need to be updated through a separate change order before the revenue part has been approved, for this change request, you process a *cost change order* and a *revenue change order*.

A cost change order is a change order that contains only the cost and commitment parts of the change request based on the settings of the selected change order class. This change order created for a change request is shown in the **Cost Change Order Nbr.** box in the Summary area of the *Change Requests* form.

A revenue change order is a change order that contains the revenue part of the change request as well as all types of estimation lines—that is, revenue budget lines, cost budget lines, and commitment lines. This change order created for a change request is shown in the **Change Order Nbr.** box in the Summary area of the *Change Requests* form.

When both the cost part and the revenue part of a change request have been linked to change orders, the system assigns the *Closed* status to the change request. If the customer has not approved the revenue part of the change request, you do not need to create a revenue change order and can manually close the change request for which the cost change order has been created. To do this, you click **Close** on the form toolbar of the *Change Requests* form to assign the change request the *Closed* status.
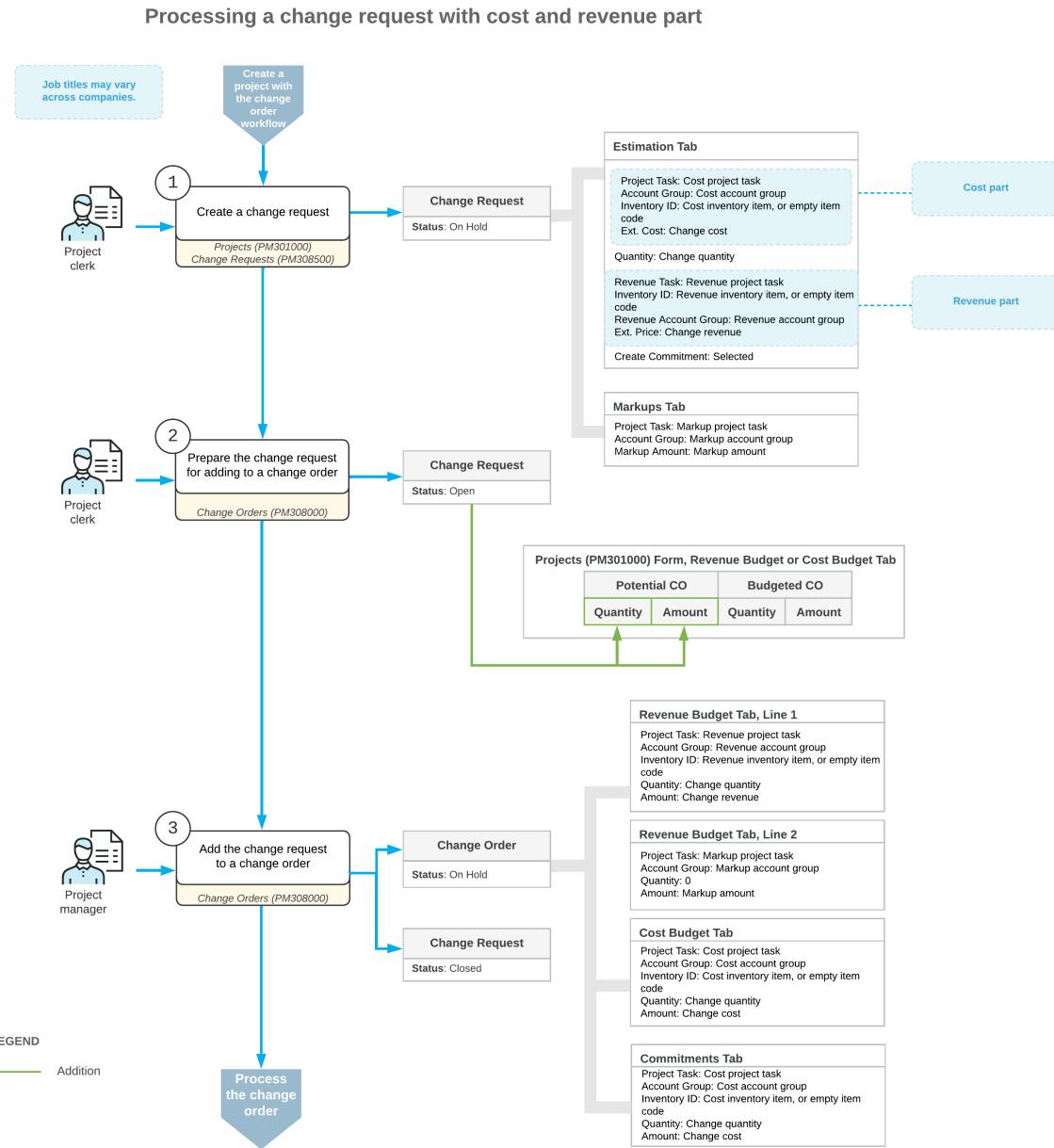
> (i) You can also cancel a change request by clicking **Cancel** on the form toolbar of the *Change Requests* form to indicate that the changes will not be processed further. This will assign the change request the *Canceled* status and decrease the potential CO values in the project budget.

For information on further processing of change orders, see *Single-Tier Change Management: General Information*.

Workflow of Processing a Change Request

The following diagram illustrates the workflow of processing a change request.

Processing a change request with cost and revenue part

Two-Tier Change Management: Configuration of Markups

You can configure markups to charge the customer with each created change request.

The following types of markup can be applied to a change request on the *Change Requests* (PM308500) form:

- Line-level markups: These markups apply to an individual estimation line on the **Estimation** tab and affects the **Line Amount** value. This type includes the **Price Markup (%)** and **Line Markup (%)**.
- Document-level markups: These markups apply to the total line amount of the change request on the **Markups** tab.

You can override all markups and delete document-level markups at the change request level.

Line-Level Markups

A price markup is an item-specific markup. When you select an inventory item in an estimation line on the **Estimation** tab of the *Change Requests* (PM308500) form, the markup percent specified for the item is retrieved as the **Price Markup (%)** value. You can specify the price markup for the item on the **Price/Cost** tab of the *Stock Items* (IN202500) form or on the **Price/Cost** tab of the *Non-Stock Items* (IN202000) form. If no price markup is specified for the item, the system uses the default price markup specified in the **Default Price Markup (%)** box (**Markup** section) on the **General** tab of the *Projects Preferences* (PM101000) form. If no default price markup is specified in the project accounting preferences, the price markup of the estimation line is zero.

A line markup is defined at the account group level. For an account group of the *Expense* type, you specify the default line markup percentage in the **Default Line Markup (%)** box on the **Change Request Settings** tab of the *Account Groups* (PM201000) form. When you select an account group in an estimation line on the **Estimation** tab of the *Change Requests* form, the system specifies the default markup specified for the account group as the **Line Markup (%)** value in this line. If no default markup is specified in the account group, the line markup of the estimation line is zero.

The line amount of an estimation line considers the line-level markups and is calculated as follows:

```
Unit Price = Unit Price + Unit Price * Price Markup (%) / 100

Ext. Price = Quantity * Unit Price

Line Amount = Ext. Price + Ext. Price * Line Markup (%) / 100
```

Document-Level Markups

On the **Markups** tab of the *Change Requests* (PM308500) form, for a change request, you can define any number of document-level markups of the following types as well as define no markups:

- *%*: A markup whose amount is calculated as follows:

  ```
  Markup Amount = Line Total * % Markup Value / 100
  ```

  You can define as many markups of this type as necessary.
- *Cumulative (%)*: A markup whose amount is calculated as follows:

  ```
  Markup Amount = (all the previously applied % markups) * Cumulative (%) Value / 100
  ```

  A markup of this type requires at least one markup of the % type.
- *Flat Fee*: A markup whose amount is specified manually to be added to the total markup.

  You can define as many markups of this type as necessary.

For each applicable markup shown on the **Markups** tab, the **Amount Subject to Markup** is calculated based on the **Line Amount** values in the estimation lines of the change request. A document-level markup applies to the total line amount of a change request if all the project budget key attributes in this line—project task, account group, and optionally, inventory item and cost code—are defined for the markup on the **Markups** tab of the *Change Requests* form.

A change request inherits the default document-level markup specified for the project on the **Defaults** tab (**Document Markups** table) of the *Projects* (PM301000) form. The project inherits the default document markups from the **General** tab (**Markup** section) of the *Projects Preferences* (PM101000) form. You can override any of the default markups.

Two-Tier Change Management: Implementation Activity

The following implementation activity will walk you through the process of configuring two-tier change management for projects.

Story

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

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

You also need to configure an additional 10% markup to be automatically applied to the change request lines that relate to labor. Acting as the system administrator, you will perform these tasks.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Construction* and *Change Orders* features have been enabled.
- On the *Account Groups* (PM201000) form, the *LABOR, SUBCON*, and *REVENUE* account group have been configured.

Process Overview

You will configure the default price markups on the *Projects Preferences* (PM101000) form and the *Account Groups* (PM201000) form. You will also create change order classes that support two-tier change management on the *Change Order Classes* (PM203000) form and specify the change order class to be used by default on the *Projects Preferences* form.

System Preparation

To sign in to the system and prepare to perform the instructions of the activity, do the following:

1. Launch the Acumatica ERP website, and sign in to a company with the *U100* dataset preloaded. You should sign in as a system administrator by using the *gibbs* username and the *123* password.
2. Open the *Enable/Disable Features* (CS100000) form, and on the form toolbar, click **Modify**.
3. In the *Projects* group of features, select the **Change Requests** check box.
4. On the form toolbar, click **Enable**.

Step 1: Specifying the Default Markups

To specify the default markups that the system will assign to change requests, on the *Projects Preferences* (PM101000) form, do the following:

1. On the **General** tab (**General Settings** section), select the **Internal Cost Commitment Tracking** check box, and save your changes to the project accounting preferences. This exposes the committed values of the budget.

2. On the **General** tab, in the **Change Request Markups** section, enter `25` in the **Default Price Markup (%)** box.

3. In the **Document Markups** table, add rows with the following settings.

Type	Description	Value
%	`Profit markup on cost`	8
%	`Overhead cost markup`	4
Cumulative (%)	`Default cumulative %`	5
Flat Fee	`Additional charges`	100

The system will apply these document-level markups to the total amount of change requests by default. Also, these markups will be specified by default in the newly created projects.

4. Save your changes.

Step 2: Creating a Change Order Class for Cost Change Orders

To create a change order class for the change orders that affect only the project cost budget, do the following:

1. On the *Change Order Classes* (PM203000) form, add a new record.

2. In the Summary area, specify the following settings:

   - **Class ID**: `INTERNAL`
   - **Description**: `Cost change orders`
   - **Two-Tier Change Management**: Selected

     Because you have selected the **Two-Tier Change Management** check box, the **Cost Budget** and **Commitments** check boxes are selected by default and cannot be cleared.

   - **Revenue Budget**: Cleared

3. Save the change order class.

Step 3: Creating a Change Order Class for Revenue Change Orders

To create a change order class for the change orders that affect the project revenue budget, while you are still viewing the *Change Order Classes* (PM203000) form, do the following:

1. Click **Add New Record** on the form toolbar, and specify the following settings in the Summary area:

   - **Class ID**: `EXTERNAL`
   - **Description**: `Cost and revenue change orders`
   - **Two-Tier Change Management**: Selected
   - **Cost Budget**: Selected
   - **Revenue Budget**: Selected
   - **Commitments**: Selected

2. Save the change order class.

3. On the **General** tab of the *Projects Preferences* (PM101000) form, in the **Default Change Order Class** box, select *EXTERNAL*, and then save your changes.

4. On the *Account Groups* (PM201000) form, open the *LABOR* account group.

5. In the Summary area, specify *REVENUE* in the **Default Revenue Account Group** box.

6. In the **Default Line Markup (%)** box on the **Change Request Settings** tab, enter `10`.

7. Save your changes.

8. Open the *SUBCON* account group.

9. In the Summary area, specify *REVENUE* in the **Default Revenue Account Group** box.

10. Save your changes.

You have configured two-tier change management for projects and specified default project markups.

Two-Tier Change Management: Process Activity

In this activity, you will learn how you can turn on the change order workflow for a project and manage changes to the project's budgeted values by creating change requests and including these change requests to change orders.

Story

Suppose that the West BBQ Restaurant customer has ordered a juicer, along with the following services from the SweetLife Fruits & Jams company: two hours of site review, four hours of installation, and eight hours of employee training on operating the juicers. The SweetLife company has contracted the Squeezo Inc. vendor to provide the juicer and perform the installation, while SweetLife will perform the services of site review and training.

Acting as SweetLife's project accountant, you will create a project. SweetLife's consultant will provide the service of site review, and you will then realize that adjustments to the project should be agreed upon with the customer: The site review, which has taken an additional hour beyond what was planned, has shown that the installation of the juicer will take two hours beyond the planned time frame. The customer will then ask you for an additional staff person to be trained, and the training will take two additional hours. For all these adjustments, you have decided to include an additional 10% markup amount in addition to charging for the services.

You will make the needed corrections to the project budget by using change requests.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the following features have been enabled:
  - *Project Accounting*, which provides support for the project accounting functionality
  - *Change Orders*, which gives you the ability to manage changes to the project's budgeted and committed values
- On the *Non-Stock Items* (IN202000) form, the *SITEREVIEW*, *INSTALL*, and *TRAINING* non-stock items have been defined.
- On the *Stock Items* (IN202500) form, the *JUICER15* stock item has been defined.
- On the *Vendors* (AP303000) form, the *SQUEEZO* vendor has been created.

Process Overview

In this activity, you will create the project on the *Projects* (PM301000) form and configure the document-level markups for it. To make changes to the project budget, you will create change requests on the *Change Requests* (PM308500) form. When an agreement with the customer about the changes is reached, you will add open change requests to two change orders on the *Change Orders* (PM308000) form; you will then release the change orders.

System Preparation

To sign in to the system and prepare to perform the instructions of the activity, do the following:

1. Sign in to the system as the project accountant by using the *brawner* username and the *123* password.

2. 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 *1/30/2025*. If a different date is displayed, click the Business Date menu button and select *1/30/2025* on the calendar. For simplicity, in this activity, you will create and process all documents in the system on this business date.

Step 1: Creating a Project

To create a project and define the project-specific document markups, do the following:

1. On the *Projects* (PM301000) form, add a new record.

2. In the Summary area, specify the following settings:
   - **Project ID**: WESTBBQ3
   - **Customer**: *WESTBBQ*
   - **Description**: A juicer with the installation and training for employees

3. On the **Summary** tab (**Project Properties** section), make sure that the **Change Order Workflow** check box is selected, which means you can make changes to the project budget with change orders, including the creation of change requests.

4. In the **Cost Budget Level** box, select *Task and Item*.

5. On the **Tasks** tab, click **Add Row** on the table toolbar and specify the following settings in the row:
   - **Task ID**: INSTALL
   - **Type**: *Cost and Revenue Task*
   - **Description**: A juicer with the installation and training
   - **Status**: *Active*
   - **Default**: Selected

6. On the **Revenue Budget** tab, click **Add Row** on the table toolbar. In the added line, select the *REVENUE* account group, and enter 3,400 in the **Original Budgeted Amount** column. (The system has automatically inserted the *INSTALL* project task in the row because it is the default project task.)

7. On the **Cost Budget** tab, add four budget lines (by clicking **Add Row** on the table toolbar) with the settings shown in the following table.

Project Task	Inventory ID	Original Budgeted Quantity	Unit Rate
INSTALL	SITEREVIEW	2.00	40.00
INSTALL	TRAINING	8.00	40.00
INSTALL	JUICER15	1.00	2,000.00
INSTALL	INSTALL	4.00	80.00

8. On the **Defaults** tab, in the **Document Markups** table, configure the default document markups that the system has populated from the project accounting preferences as follows: for each markup in the table, select *INSTALL* in the **Project Task** column and *REVENUE* in the **Account Group** column.

9. Save the project.

10. On the form toolbar, click **Activate**. The system assigns the project the *Active* status.

Step 2: Creating a Change Request

To make changes to the project budget with a change request, do the following:

1. While remaining on the *Projects* (PM301000) form with the *WESTBBQ3* project opened, on the More menu, click **Create Change Request**.

    The system creates a change request for the project and opens it on the *Change Requests* (PM308500) form.

2. In the **Description** box in the Summary area, type `Additional time for site review and installation`.

    On the **Markups** tab, notice that the system has copied the document markups from the project to the change request with all the settings you have specified at the project level.

3. On the **Estimation** tab, to represent an additional hour of site review, click **Add Row** on the table toolbar, and specify the following settings in the row:

    - **Project Task**: *INSTALL* (specified by default)
    - **Account Group**: *LABOR*
    - **Cost Code**: *00-000*
    - **Inventory ID**: *SITEREVIEW*
    - **Description**: `Additional time for site review`
    - **Quantity**: `1.00`
    - **Unit Cost**: *40* (inserted automatically)
    - **Price Markup (%)**: *25.00* (inserted automatically)

      The system has copied this value from the **Default Price Markup (%)** box on the **General** tab of the *Projects Preferences* (PM101000) form.
    - **Unit Price**: *50* (inserted automatically)

      The system calculates this value based on the **Unit Cost** value and the **Price Markup (%)** by the following formula: `Unit Price = Unit Cost + Unit Cost * Price Markup (%) / 100`
    - **Line Markup (%)**: `10.00` (inserted automatically)

      The system has copied this value from the settings of the *LABOR* account group—that is, from the **Default Line Markup (%)** box on the **Change Request Settings** tab of the *Account Groups* (PM201000) form.
    - **Line Amount**: *55* (inserted automatically)

      The system calculates this value based on the **Ext. Price** value and the **Line Markup (%)** by the following formula: `Line Amount = Ext. Price + Ext. Price * Line Markup (%) / 100`

4. Add one more line to represent the two additional hours needed for the installation by clicking **Add Row** on the table toolbar and specifying the following settings in the row:

    - **Project Task**: *INSTALL* (specified by default)
    - **Account Group**: *SUBCON*
    - **Cost Code**: *00-000*
    - **Inventory ID**: *INSTALL*
    - **Description**: `Additional time for installation`
    - **Quantity**: `2.00`
    - **Price Markup (%)**: *25.00* (inserted automatically)
    - **Line Markup (%)**: `10.00`

      You enter this markup manually because it is not defined in the settings of the *SUBCON* account group.
    - **Vendor**: *SQUEEZO*

- **Create Commitment**: Selected

  You are selecting this check box because you have contracted Squeezo Inc. to perform the installation, so you need to create a purchase order for this change.

  The calculated line amount of the added row should be $220.

5. On the **Markups** tab, review the markup amounts that the system has calculated based on the document totals.

   The system calculated the *Profit markup on cost* and *Overhead cost* markups ($22 and $11, respectively) based on the line total of the change request, which is shown in the **Amount Subject to Markup** column and is $275.

   The *Default cumulative (%)* markup is calculated based on the markups of the *%* type calculated above the markup line ($22 + $11) and is equal to $1.65. The *Additional charges* markup amount is a flat fee in the amount of $100, which does not depend on any document amounts.

6. Make sure that **Price Total** in the Summary area is *409.65* and save the change request.

7. On the form toolbar, click **Remove Hold** to assign the change request the *Open* status.

Step 3: Creating the Second Change Request

To create one more change request for additional two hours of training, do the following:

1. While you are still viewing the *Change Requests* (PM308500) form, click **Add New Record** on the form toolbar, and specify the following settings in the Summary area of the form:

   - **Project**: *WESTBBQ3*
   - **Description**: `Additional time for training`

2. On the **Estimation** tab, to represent two additional hours of training, click **Add Row** on the table toolbar, and specify the following settings in the row:

   - **Project Task**: *INSTALL* (specified by default)
   - **Account Group**: *LABOR*
   - **Cost Code**: *00-000*
   - **Inventory ID**: *TRAINING*
   - **Description**: `Additional time for training`
   - **Quantity**: `2.00`
   - **Price Markup (%)**: *25.00* (inserted automatically)
   - **Line Markup (%)**: *10.00* (inserted automatically)

   The line amount of the added row should be equal to $110.

3. Make sure that **Price Total** in the Summary area is *223.86* and save the change request.

4. On the form toolbar, click **Remove Hold** to assign the change request the *Open* status.

5. On the *Projects* (PM301000) form, open the *WESTBBQ3* project, and review the updated amounts in the project budget as follows:

   - On the **Change Requests** tab, make sure that both of the related change requests have the *Open* status (see the screenshot below).
   - On the **Cost Budget** tab, review the values in the **Potential CO Quantity** and **Potential CO Amount** columns, which the system has filled in based on the estimation lines of the open change requests for the rows with the *SITEREVIEW*, *TRAINING*, and *INSTALL* inventory items.
   - On the **Revenue Budget** tab, review the values in the **Potential CO Amount** column, which is $633.51. This amount equals the total price of both change requests ($409.65 + $223.86) and includes markup totals calculated at the document level.

Figure: Change requests related to the project

Step 4: Processing the Cost Part of the Change Request

To create a cost change order based on the first change request you created, do the following:

1. On the *Change Orders* (PM308000) form, add a new record. By default, in a newly created change order, the system inserts the *EXTERNAL* class, which is specified as the default change order class on the *Projects Preferences* (PM101000) form.

2. In the **Class** box, select *INTERNAL*. Notice that the **Revenue Budget** tab has been hidden because the specified class is defined to make it impossible to add or modify revenue budget lines for change orders of this class.

3. Specify the following settings in the Summary area:

   • **Project**: *WESTBBQ3*

   • **Description**: An adjustment to the WESTBBQ3 project

4. On the table toolbar of the **Change Requests** tab, click **Add Change Requests** to add a change request to the change order.

5. In the **Add Change Requests** dialog box, which opens, select the change request with the *Additional time for site review and installation* description by selecting the check box in the unlabeled column, and click **Add & Close**.

6. Review the details of the change order, and make sure that the change order has been modified as follows:

   • On the **Cost Budget** tab, the system has added two lines based on the estimation lines of the change request.

   • On the **Commitments** tab, the system has added a line with the *New Document* status for the installation service based on the estimation line of the change request with the **Create Commitment** check box selected.

   • In the Summary area, the **Cost Budget Change Total** is *200* and the **Commitment Change Total** is *160*.

   • In the Summary area, the **Revenue Budget Change Total** is *0* because the change order makes no changes to the revenue budget of the project.

   • In the only line on the **Change Requests** tab, the change request still has the *Open* status because the revenue part of the change request has not been processed yet.

7. Save the change order.

8. On the form toolbar, click **Remove Hold** to assign the change order the *Open* status.

Step 5: Processing the Revenue Part of the Change Requests

Suppose that the agreement with the customer has been reached. To create a revenue change order based on both change requests, do the following:

1. While you are still viewing the *Change Orders* (PM308000) form, click **Add New Record** on the form toolbar, and specify the following settings in the Summary area:

   - **Class**: *EXTERNAL* (inserted by default)
   - **Project**: *WESTBBQ3*
   - **Description**: `The second adjustment to the WESTBBQ3 project`

2. On the table toolbar of the **Change Requests** tab, click **Add Change Requests** to add change requests to the change order.

3. In the **Add Change Requests** dialog box, which opens, select both change requests you have created by selecting the check boxes in the unlabeled column; click **Add & Close**.

   In the added lines, notice that both change requests have been assigned the *Closed* status because the change requests have been fully processed with this change order. On the **Cost Budget** tab, notice that the system has added a line with 2 hours of training based on the estimation line of the second change request.

4. In the Summary area, make sure that the system has assigned a **Revenue Change Nbr.** to the change order because the change order makes changes to the revenue budget of the project.

5. Save the change order.

6. On the **Revenue Budget** tab, make sure that the only line has a **Change Request Total Amount** of *633.51*.

7. On the table toolbar, click **View Change Request Details**.

8. In the **Change Request Details** dialog box, which opens, review the change request lines and the markups that correspond to the selected change order line, as shown in the following screenshot. There are three estimation lines and eight markup lines that affect the same revenue budget line.

Figure: Lines of the change request and corresponding markups

9. Close the dialog box.

10. On the form toolbar, click **Remove Hold** to assign the change order the *Open* status.

Step 6: Reviewing the Project Budget

To review the project and the related change requests you have processed, do the following:

1. On the *Projects* (PM301000) form, open the *WESTBBQ3* project.

    On the **Cost Budget** and **Revenue Budget** tabs, notice that the potential change order quantities and amounts remain the same after you have created open change orders based on the change requests because you have not released the change orders yet.

2. On the **Change Requests** tab, make sure that both change requests have been assigned the *Closed* status. In the line with the *Additional time for site review and installation* description, click the link in the **Reference Nbr.** column to open the first change request.

    On the *Change Requests* (PM308500) form, which opens, review the details of the change request. In the Summary area, make sure that change request has both the **Change Order Nbr.** box and the **Cost Change Order Nbr.** box filled in because the revenue part of the change request has been processed with a separate change order, whose reference number is shown in the **Change Order Nbr.** box.

3. Click Back in the browser tab to return to the *Projects* form with the *WESTBBQ3* project opened.

4. On the **Change Requests** tab, click the link in the **Reference Nbr.** column in the row with the *Additional time for training* description to open the second change request. On the *Change Requests* form, which opens, review the change request. In the Summary area, notice that change request has only the **Change Order Nbr.** box filled in (the **Cost Change Order Nbr.** box is hidden) because both the revenue part and the cost part of the change request have been processed with a single change order.

5. Click Back in the browser tab to return to the *WESTBBQ3* project on the *Projects* form.

Step 7: Releasing the Change Orders

To release the change orders, do the following:

1. While still reviewing the project on the *Projects* (PM301000) form, on the **Change Orders** tab, open and release each created order by doing the following:

    a. Click the link in the **Reference Nbr.** column to open the change order.

    b. On the form toolbar of the *Change Orders* (PM308000) form that opens, click **Release**.

    c. Close the form.

2. On the *Projects* form (to which you return), press Esc to refresh the form.

    On the **Change Orders** tab, notice that both change orders have been assigned the *Closed* status.

    On the **Cost Budget** and **Revenue Budget** tabs, notice that potential change order quantities and amounts now 0. These quantities and amounts have been moved to the budgeted CO quantities and amounts, which also have resulted in an increase of the revised budgeted quantities and amounts.

3. On the *Projects Preferences* (PM101000) form, on the **General** tab (**General Settings** section), clear the **Internal Cost Commitment Tracking** check box, and save your changes to the project accounting preferences.

Part 2: Budgets

This part describes how to effectively manage project budgets and control project performance by preparing budget forecasts, estimating project overhead, and tracking the documents that users enter for projects.

Lesson 2: Capturing Project Overhead

A project can have indirect costs, such as administrative expenses, that are not presented in the project budget. This lesson explains how you can capture these expenses as the project overhead.

Overhead in the Project Budget: General Information

Your company can have such expenses as office rent or administrative expenses that are posted to the general ledger but not classified against projects and not presented in the project budget. For a more accurate estimation of the project profitability, you can capture such expenses as the project overhead.

Learning Objectives

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

- Configure an allocation rule to capture project overhead as a percentage of incurred costs
- Capture the overhead on the project

Applicable Scenarios

If you need to more accurately estimate the profitability of a project—for example, for making management decisions or for project management—but the project has some indirect costs that are posted to the general ledger but not classified against the project, you capture these expenses as project overhead.

Creation of an Allocation Rule

To calculate the overhead for projects, you create an allocation rule on the *Allocation Rules* (PM207500) form. Using this allocation rule, the system creates allocation transactions based on the project transactions posted to a particular account group or specific groups. These allocation transactions post the calculated overhead amount to the specified account group.

For this allocation rule, you specify the following settings on the **Calculation Rules** tab:

- **Allocation Method**: *Allocate Transactions*

  With this setting, the system calculates the amount to allocate by using the underlying transactions and their amounts.
- **Create Allocation Transaction**: Selected

  With this check box selected, the system creates the allocation transactions resulting from the step.
- **Selected Transactions** (**Selection Criteria** section): *Non-Allocated Transactions*

  The step is applied to project transactions that have not been allocated yet.
- **Account Group From** (**Selection Criteria** section): The account group that starts the range of account groups whose transactions are involved in the allocation step

  The account groups are ordered alphabetically.

- **Account Group To** (**Selection Criteria** section): The account group that ends the range of account groups whose transactions are involved in this allocation step.

  If you want to allocate the transactions posted to a single account group, specify this account group in the **Account Group From** box, and leave the **Account Group To** box empty.

- **Quantity Formula** (**Calculation Settings** section): =0
- **Billable Qty. Formula** (**Calculation Settings** section): =0

  You usually do not need to calculate the overhead quantity.

- **Amount Formula** (**Calculation Settings** section): The overhead amount that you can calculate as a percentage of the amount of the original transaction. In this case, you use the following formula: =[PMTran.Amount]*multiplier. You can use a percentage as a multiplier (for example, *0.2* as 20%), a project attribute to define the percentage at the project level, or a rate. For more information on rates, see *Billing Rates: General Information*.

- **Description Formula** (**Calculation Settings** section): The description of the created allocation transaction.

You specify the following settings for the allocation rule on the **Allocation Settings** tab:

- **Post Transaction to GL** (**Transaction Options** section): Cleared

  With this check box cleared, allocation transactions and reversing allocation transactions will not be posted to the general ledger.

- **Reverse Allocation** (**Transaction Reversal** section): *Never*

  With this setting, the system does not create a reversing transaction for the allocation transactions. The allocation transactions that you create with this allocation rule do not affect the general ledger and are not posted to any account, so you do not need to reverse them.

- **Account Group** (**Debit Transaction** section): *Replace* with an account group for capturing the overhead

  With this setting, the system generates an allocation transaction that debits the specified account group.

- **Account Group** (**Credit Transaction** section): *None*

  You create an additional cost with the allocation transaction and do not need to credit any account group.

Configuration of Projects for Allocation

On the *Projects* (PM301000) form, for a project to be allocated, you assign the created allocation rule to the project tasks on the **Tasks** tab.

Allocation of Projects

You run the allocation process for a project by clicking **Run Allocation** on the More menu of the *Projects* (PM301000) form while reviewing the project. As a result, the system creates allocation transactions based on the project transactions selected by using the allocation rules specified for project tasks on the **Tasks** tab. To make it possible to identify a batch of created allocation transactions, the system assigns the *Allocation for <Project ID>* description to such a batch. For the project transactions that have been used as a source of the allocation, the system selects the **Allocated** check box on the *Project Transaction Details* (PM401000) form.

Overhead in the Project Budget: Implementation Activity

The following implementation activity will walk you through the process of configuring an allocation rule for capturing the overhead for projects.

Story

Suppose that the project manager of the SweetLife Fruits & Jams company wants to estimate the project costs considering the administrative overhead of the project management to be able to estimate the project profitability

more accurately. The company estimates the project overhead as 20% of labor costs, such as a worker's time spent on performing the project.

Acting as SweetLife's implementation manager, you need to configure an allocation rule to capture the project overhead as 20% of labor costs to reflect the overhead in the project budget. Because the administrative overhead is already presented in the general ledger in the form of transactions that are not classified against projects, you do not need to post to the general ledger allocation transactions that are created.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to support the project accounting functionality.
- On the *Account Groups* (PM201000) form, the *OVERHEAD* and *LABOR* account groups have been created.

Process Overview

You will configure an allocation rule for capturing the labor overhead on the *Allocation Rules* (PM207500) form.

System Preparation

To prepare to perform the instructions of the activity, sign in to a company with the *U100* dataset preloaded; you should sign in as system administrator by using the *gibbs* username and the *123* password.

Step: Configuring an Allocation Rule

To configure an allocation rule used for capturing the project overhead as a percentage of labor costs, perform the following instructions:

1. On the *Allocation Rules* (PM207500) form, add a new record.
2. In the Summary area, specify the following settings:
   - **Allocation Rule**: `LABOVERHEAD`
   - **Description**: `Labor overhead`
3. In the **Allocation Steps** table, add a row for the allocation rule step with the following settings:
   - **Step ID**: `10`
   - **Description**: `Labor`
4. In the right pane, on the **Calculation Rules** tab, specify the following settings of the allocation step:
   - **Allocation Method**: *Allocate Transactions*
   - **Create Allocation Transaction**: Selected
   - **Select Transactions** (**Selection Criteria** section): *Non-Allocated Transactions*
   - **Account Group From** (**Selection Criteria** section): *LABOR*
   - **Account Group To** (**Selection Criteria** section): Empty

     Based on this setting and the previous setting, with this step, the allocation rule processes only transactions of the *LABOR* account group.
   - **If @Rate Is Not Defined** (**Calculation Settings** section): *Set @Rate to 0*

     You will not use rates to calculate the amount of the allocation transaction.
   - **Quantity Formula** (**Calculation Settings** section): `=0`
   - **Billable Qty. Formula** (**Calculation Settings** section): `=0`
   - **Amount Formula** (**Calculation Settings** section): `=[PMTran.Amount]*0.2`

You calculate the overhead amount as 20% of the transaction amount.

- **Description Formula** (**Calculation Settings** section): `='Project overhead for labor'`

5. In the right pane, on the **Allocation Settings** tab, specify the following settings of the allocation step:

- **Post Transaction to GL** (**Transaction Options** section): Cleared
- **Reverse Allocation** (**Transaction Reversal** section): *Never*

  The project overhead is not considered in billing and you do not need to create reversing allocation transactions.

- **Account Group** (**Debit Transaction** section): *Replace* with *OVERHEAD*

  With this setting, the system generates an allocation transaction that debits the specified account group —that is, the *OVERHEAD* account group.

- **Account Group** (**Credit Transaction** section): *None*

6. Save the created allocation rule.

You have configured the allocation rule that can be used for capturing the project overhead as 20% of labor costs. To allocate the labor expenses of a project by using this rule, you need to assign the rule to the project tasks.

Overhead in the Project Budget: Process Activity

In this activity, you will learn how to estimate the project overhead calculated based on the project costs.

Story

Suppose that the West BBQ Restaurant customer ordered 40 hours of new-employee training on operating juicers from the SweetLife Fruits & Jams company. The parties agreed that the project should be billed in the amount of $2,000 when the services were provided.

SweetLife's project manager created a project to account for the provided services. Then suppose that starting from 1/27/2025, a consultant of SweetLife provided three days of training (24 hours) and SweetLife's project accountant entered the corresponding project transaction.

Acting as the project accountant, while preparing monthly reports for the project manager, you need to estimate the project costs that have been already incurred considering the administrative overhead, which is 20% of labor costs.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- For the purposes of this activity, on the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to support the project accounting functionality.
- On the *Projects* (PM301000) form, the *WESTBBQ8* project has been created an the *TRAINING* task has been created for the project.
- On the *Account Groups* (PM201000) form, the *OVERHEAD* account group has been created.
- On the *Allocation Rules* (PM207500) form, the *OVERHEAD* allocation rule has been created. This allocation rule is configured to process project transactions that represent labor expenses and post the overhead that is calculated as 20% of the transaction amount to the *OVERHEAD* account group. (For an example of allocation rule configuration, see *Overhead in the Project Budget: Implementation Activity*.)
- On the *Project Transactions* (PM304000) form, the *PM00000023* batch of project transactions related to the project has been created and released.

Process Overview

In this activity, you will first specify the allocation rule for the project task on the *Projects* (PM301000) form. On the same form, you will then perform allocation for the project.

System Preparation

To prepare to perform the instructions of the activity, do the following:

1. Sign in to the system as project accountant by using the *brawner* username and the *123* password.

2. 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 *1/30/2025*. If a different date is displayed, click the Business Date menu button and select *1/30/2025* on the calendar. For simplicity, in this activity, you will create and process all documents in the system on this business date.
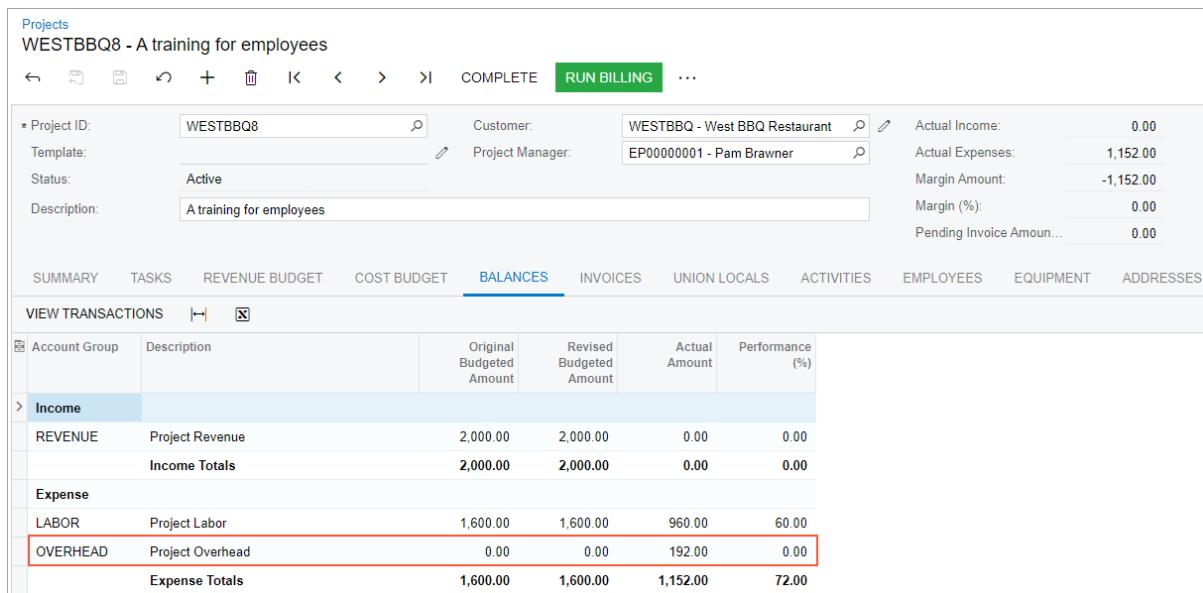
Step: Capturing Project Overhead

To configure the project for allocation and capture the project overhead, do the following:

1. On the *Projects* (PM301000) form, open the *WESTBBQ8* project.

2. On the **Tasks** tab, in the line with the *TRAINING* task, select the *OVERHEAD* allocation rule in the **Allocation Rule** column.

3. Save your changes to the project.

   On the **Balances** tab, notice that there is only one expense line with the *LABOR* account group, and the actual amount is $960.

4. On the More menu, under **Billing and Allocations**, click **Run Allocation**.

   The system performs the allocation using the allocation rule you have specified for the project task.

   When the allocation is completed, on the **Balances** tab, review the project balance again, as shown in the following screenshot. Notice that one more expense line with the *OVERHEAD* account group has appeared in the table. The actual amount of the line is $192, which is 20% of $960.

Figure: The captured overhead in the project expenses

5. In the table, click the line with the *OVERHEAD* account group, and on the tab toolbar, click **View Transactions**.

   On the *Project Transaction Details* (PM401000) form, which opens, review the created allocation transaction in the amount of $192.00 that corresponds to the account group. The original document type of the transaction is *Allocation* and the debit account group is *OVERHEAD*.

You have estimated the project overhead.

Lesson 3: Forecasting the Budget by Period

This lesson explains how to create a budget forecast for a project and how to break down the project budget in the budget forecast by financial period.

Project Budget Forecasts: General Information

You prepare a budget forecast for a long-term project if you need to break down the structure of the project budget by financial period. This gives you the ability to compare and analyze monthly budgets versus actual revenue and expenditures.

Learning Objectives

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

- Create a budget forecast for a project
- Add financial periods to the budget forecast
- Distribute budgeted values among the financial periods
- Update the project budget based on the forecast
- Update the financial periods in the forecast based on the updated actual values

Applicable Scenarios

You create a budget forecast for a project if you need to break down the budget structure by financial periods to be able to control the budget performance by periods.

Creation of the Project Budget Forecast

Each project can have multiple revisions of the budget forecast. For a new project budget forecast, in the Summary area of the *Project Budget Forecast* (PM209600) form, you select the project and enter an alphanumeric revision identifier of the budget forecast, which must be unique within the project. When you enter the revision, the system automatically fills in the table with the revenue and cost budget lines of the selected project.

In a forecast revision, you distribute the original and revised budget amounts of existing revenue and cost budget lines among the financial periods in the selected range to estimate planned project revenue and expenses by these periods.

You can manually add financial periods for a selected budget line of the forecast revision by clicking **Add Periods** on the table toolbar and selecting the range of financial periods in the **Add Periods** dialog box.

You can also make the system automatically add financial periods for all the project budget lines of the forecast revision listed in the table according to the selection criteria specified in the Summary area. When you click **Generate Periods** on the form toolbar, for each line that is currently listed in the table, the system adds financial

periods based on the settings of the project task and related project transactions. For more information on how the system determines the range of periods to be added, see *Project Budget Forecasts: Generation of Periods*.

Each financial period added for a project budget line of the forecast revision has quantities and amounts of zero. You can manually specify the **Original Budgeted Quantity**, **Original Budgeted Amount**, **Revised Budgeted Quantity**, and **Revised Budgeted Amount** values for each period of the project budget line.

You can also distribute the original and revised quantities and amounts of project budget lines among period lines automatically by clicking **Generate Forecast** on the form toolbar. In the **Generate Forecast** dialog box, you specify which values the system should distribute, in which columns, and for which budget lines. The distribution function rounds equally distributed values by using the logarithmic rounding algorithm. For an example of rounding, see *Project Budget Forecasts: Example of Rounding*.

For each project budget line with added period lines, the system calculates the following totals in the **Original Budgeted Quantity**, **Original Budgeted Amount**, **Revised Budgeted Quantity**, and **Revised Budgeted Amount** columns:

- **Total**: The total of the period lines
- **Delta**: The difference between the value of the project budget line and the total of the period lines

Processing Project Budget Forecasts

When the actual values of a project are updated, the system automatically updates the actual values of the budget forecasts of the project. The system calculates the differences between the revised budgeted values and the actual values in the **Revised Quantity - Actual Quantity** and **Revised Amount - Actual Amount** columns on the *Project Budget Forecast* (PM209600) form, so that you can compare the performance of each budget line by period.

If you need to update financial periods of a project budget line of the forecast revision, you click this line in the table on the *Project Budget Forecast* form, and on the table toolbar, click **Update Forecast Lines**. For the selected line, the system adds the financial periods to which actual values or change order values have been posted for the corresponding project budget line and that have been missed in the forecast revision.

If you need to update the original and revised budgeted values of the corresponding project budget line on the *Projects* (PM301000) form with the delta values of a project budget line of the forecast revision, you click this line of the forecast revision in the table on the *Project Budget Forecast* form, and on the table toolbar, click **Update Project Budget Line**.

You can restructure the budget of the project and delete the project budget lines for which the corresponding forecast lines have been created. The changes in the project budget structure affect the project budget forecast as follows:

- If you delete a project budget line, the corresponding budget forecast lines are not deleted. The system will keep the forecast, and if you restore this project budget line, the forecast for this line will be also restored.
- If you delete a project task along with all the cost budget lines that include this project task, the corresponding budget forecast lines are deleted.

Project Budget Forecasts: Process Activity

This activity will walk you through the process of creating and processing a project budget forecast.

Story

Suppose that the HM's Bakery and Cafe customer has ordered 80 hours of new-employee training on operating juicers from the SweetLife Fruits & Jams company. SweetLife's project manager has created a project to account for the provided training.

The project accountant of SweetLife has been asked 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 the training will take place in January and February, the project accountant wants to distribute the total budget across the periods when this work is going to be performed for further review and analysis of budget performance.

Acting as the project accountant, you will create a project budget forecast. Distributing the budget across periods, you will realize that the budget requires an update. You will update the project budget based on the budget forecast. When the training takes place, you will update the progress of the project and review the budget forecast.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to support the project accounting functionality.
- On the *Projects* (PM301000) form, the *HMBAKERY13* project has been created and the *TRAINING* project task has been created for the project. Also, the revenue budget and the cost budget are defined for the project with a line with the *TRAINING* inventory item and the *LABOR* account group.
- On the *Project Transactions* (PM304000) form, the *PM00000020* batch of project transactions related to the project has been created.

Process Overview

In this activity, you will create the first revision of the budget forecast and generate periods for the revision on the *Project Budget Forecast* (PM209600) form. On this form, you will then distribute budgeted amounts by period and update the project budget based on the distributed values. You will update actual values of the project by releasing transactions on the *Project Transactions* (PM304000) form. You will finally update the budget forecast on the *Project Budget Forecast* form based on the updated actual values.

System Preparation

Before you begin performing the steps of this activity, perform the following instructions to prepare the system:

1. Download the `HMBAKERY13_Project_Transactions.xlsx` file to your computer.

2. Open the *Enable/Disable Features* (CS100000) form, and on the form toolbar, click **Modify**.

3. In the **Projects** group of features, select the **Budget Forecast** check box to enable the *Budget Forecast* feature, which gives you the ability to create budget forecasts for projects.

4. On the form toolbar, click **Enable**.

Step 1: Creating a Project Budget Forecast and Generating Periods

To create a forecast revision for the project, do the following:

1. On the *Projects* (PM301000) form, open the *HMBAKERY13* project.

   On the **Revenue Budget** and **Cost Budget** tabs, notice that the project has a single revenue budget line and a single cost budget line.

2. On the More menu, under **Budget Operations**, click **Project Budget Forecast**.

   The system opens the *Project Budget Forecast* (PM209600) form with the *HMBAKERY13* project selected in the Summary area. The project has no budget forecast revision yet, so you need to create a new one.

3. In the Summary area, specify the following settings for the revision:

   - **Revision**: 1
   - **Description**: 2025 budget forecast

When you specify the revision number, the system adds to the revision all the project budget lines. In the table, the system displays all the cost and budget lines of the forecast revision because *All* is selected in the **Type** box of the Summary area.

4. In the Summary area, select *Expense* as the **Type**, and on the form toolbar, click **Generate Periods** to make the system add period lines for the cost budget line only.

   Notice that the system has added a line with the 01-2025 period. Also, the **Total** and **Delta** lines are now shown.

5. In the table, click the budget line with the *LABOR* account group, and on the table toolbar, click **Add Periods** to add period lines to the selected budget line.

6. In the **Add Periods** dialog box, which opens, select 02-2025 in the **Period To** box, and click **OK**.

   The system closes the dialog box and adds one more period line to the budget line.

7. In the Summary area, select *All* in the **Type** box. The system displays in the table all the budget lines of the forecast revision. As a result, the revenue budget line with the *REVENUE* account group has again appeared in the table. Notice that no period lines have been added to the revenue budget line.

8. Save your changes to the forecast revision.

Step 2: Distributing Amounts Across the Periods

To distribute budgeted amounts across periods of the forecast revision, 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 **Generate Forecast**.

2. In the **Generate Forecast** dialog box, which opens, leave the default settings and click **OK**.

   For the budget line with the *LABOR* account group, which have period lines, the system equally distributes original and revised budgeted quantities (40) and amounts ($1,600) among period lines.

3. For the 01-2025 period line, adjust the automatically distributed values as follows:

   - **Original Budgeted Quantity**: 30.00
   - **Original Budgeted Amount**: 1200.00
   - **Revised Budgeted Quantity**: 30.00
   - **Revised Budgeted Amount**: 1200.00

   Notice the system has calculated values in the **Total** and **Delta** lines based on the changes you made. The total budgeted quantity of the period lines is 70, the total budgeted amount is $2,800, the delta of the budgeted quantity is 10, and the delta of the budgeted amount is $400.

4. Save your changes to the forecast revision. The original and revised values in the cost budget of the project have not yet been updated.

5. In the table, click the budget line with the *LABOR* account group, and on the table toolbar, click **Update Project Budget Line**.

   The system updates the corresponding budget line of the project with the values from the **Total** line of the selected line of the forecast revision. The values in the **Delta** line become zero, and the **Delta** line disappears from the forecast.

6. Save your changes to the forecast revision.

7. On the *Projects* form, open the *HMBAKERY13* project.

8. On the **Cost Budget** tab, notice that the **Original Budgeted Quantity** and **Revised Budgeted Quantity** of the cost budget line are 70 and the **Original Budgeted Amount** and **Revised Budgeted Amount** are $2,800.

Step 3: Updating Actual Values of the Project

To upload and process the transactions that represent the training provided within the project, do the following:

1. On the *Project Transactions* (PM304000) form, add a new record.

2. In the Summary area, specify the following settings:

   - **Module**: *PM*

   - **Description**: `A training for employees of HM's Bakery and Cafe`

3. On the table toolbar, click **Load Records from File**, and upload the transactions from the `HMBAKERY13_Project_Transactions.xlsx` file, which you have downloaded. While you are uploading the transactions, leave the default column mapping.

4. Make sure that the **Total Amount** in the Summary area is *2,800.00*.

   Notice that 20 hours of the training were provided in the 01-2025 period, 40 hours were provided in the 02-2025 period, and 10 hours were provided in the 03-2025 period.

5. On the form toolbar, click **Save** to save the project transaction, and then click **Release** to release it.

6. On the *Project Budget Forecast* (PM209600) form, select *HMBAKERY13* in the **Project** box and *1* as the **Revision**.

   In the table, find the **Actual Quantity** and **Actual Amount** columns, and notice that for the project budget line with the *LABOR* account group, the values in the **Delta** line in these columns (*10* and *400*, respectively) are highlighted in red. This means that at least one period for which actual values exist is not displayed in the forecast revision.

7. In the table, click the budget line with the *LABOR* account group, and on the table toolbar, click **Update Forecast Lines**.

   The system updates budget line of the forecast revision selected in the table and adds the 03-2025 period with the actual quantity of 10 and the actual amount of $400.

8. To analyze monthly cost budget versus actual expenses and control the cost budget performance by periods, for the budget line with the *LABOR* account group, review the value in the **Revised Quantity - Actual Quantity** and **Revised Amount - Actual Amount** columns for the following financial periods (see the screenshot below):

   - 01-2025: The company provided 10 hours of training less than it was planned.

   - 02-2025: The training was performed as it was planned.

   - 03-2025: The company provided 10 hours of training more than it was planned.

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
	70.00	2,800.00	70.00	2,800.00	0.00	0.00	0.00	0.00	70.00	2,800.00	0.00	0.00
01-2025	30.00	1,200.00	30.00	1,200.00	0.00	0.00	0.00	0.00	20.00	800.00	10.00	400.00
02-2025	40.00	1,600.00	40.00	1,600.00	0.00	0.00	0.00	0.00	40.00	1,600.00	0.00	0.00
03-2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	400.00	-10.00	-400.00
Total:	70.00	2,800.00	70.00	2,800.00	0.00	0.00	0.00	0.00	70.00	2,800.00	0.00	0.00
	80.00	4,000.00	80.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	80.00	4,000.00

Figure: Tracking budget performance by periods

9. Save your changes to the forecast revision.

You have finished creating a forecasting budget for the project for the specified periods.

Lesson 4: Controlling the Budget on Document Entry

This lesson explains how to control that the created documents do not exceed the project budget.

Project Budget Control: General Information

The project budget is used to provide both a financial plan and cost constraints for a project. If you define the amount of money and resources to be spent on the project, you can control whether the actual project costs exceed the budgeted values as users enter documents for the projects. This helps users control the created documents and can be useful for the person who approves these documents.

Learning Objectives

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

- Control whether AP bills, purchase orders, subcontracts, and change orders created for a project exceed the project budget
- Control the cost code usage in documents
- Lock the budgeted values

Applicable Scenarios

You configure project budget control if your company needs to ensure project budget consistency and adherence—specifically, if you need to be able to do the following:

- Verify that the budgeted values would not be exceeded if a document is processed
- Control the consistent usage of cost codes in project-related documents
- Lock the project budget to prevent the agreed-on values from being changed

Control of Document Consistency for the Project

If the *Cost Codes* feature is enabled on the *Enable/Disable Features* (CS100000) form, to ensure that document lines are entered for the appropriate budget lines, the system controls the cost code entry in the lines of documents created for projects. When a user interacts with the **Cost Code** column of the document entry form, the system helps the user enter the appropriate cost code as follows:

- When the user clicks the magnifier button in this column, in the lookup table that opens, the system displays only the cost codes that exist in the project budget for the specified combination of the project task and the account group.
- If the user manually enters an existing cost code that is not included in the project budget for the specified combination of the project task and the account group, the system displays a warning.

Control of the Budgeted Costs

To avoid the project budget being exceeded as users enter documents for a project, you can configure the system to check whether the entered purchase order, change order, accounts payable bill, or subcontract is within the

cost budget of the specified project, taking into consideration the portion of the budget that has already been consumed.

To set up this validation, you select *Show a Warning* in the **Budget Control** box on the **General** tab (**General Settings** section) of the *Projects Preferences* (PM101000) form. For more information, see *Project Budget Control: Overrun Notifications During Document Entry*.

Locking of the Budgeted Values

Once a project budget has been agreed on, you can lock the original figures to prevent further editing of them. After the original budgeted values are locked, you can still update the revised budgeted values. By maintaining the original values, you can assess how accurately the budget was estimated. Because you can also make adjustments to the revised budget as additional information becomes known, budget revisions provide the most accurate and up-to-date estimation of the budget. For more information, see *Project Budget Control: Budget Locking*.

Project Budget Control: Overrun Notifications During Document Entry

You can configure the system to notify a user if the amount in a line of the document they are entering would exceed the budget of the corresponding project budget line.

To do this, you select *Show a Warning* in the **Budget Control** box on the **General** tab of the *Projects Preferences* (PM101000) form. When a user enters a project-related document, the system will generate a warning if a line amount exceeds the cost budget of the corresponding project budget line. These warnings can be generated when a user is entering any of the following documents:

- A purchase order of the *Normal* or *Project Drop-Ship* type and the *On Hold* or *Pending Approval* status on the *Purchase Orders* (PO301000) form.
- An AP bill with the *On Hold*, *Pending Approval*, or *Balanced* status on the *Bills and Adjustments* (AP301000) form.
- A change order with the *On Hold* or *Pending Approval* status on the *Change Orders* (PM308000) form.
- A subcontract with the *On Hold* or *Pending Approval* status on the *Subcontracts* (PO301000) form.

> ⚠️ Subcontracts are available in the system if the *Construction* feature is enabled on the *Enable/Disable Features* form. For more information about the processing of subcontracts, see *Subcontracts: General Information*.

The warning message in a document line shows you how much the line amount exceeds the budget. The system compares the document line with the corresponding cost budget line of the project and shows you the following amounts in the warning:

- *Budgeted*: The revised budgeted amount of the budget line.

> ⚠️ If the project budget has no corresponding budget line with the same project budget key, the revised budgeted value of the line used in overrun calculation is *0*.

- *Consumed*: The amount that has been spent already—that is, the sum of the actual amount and the committed open amount of the budget line.
- *Document*: The total amount (the **Ext. Cost** minus the **Discount Amount**) of all the document lines that impact the same budget line, including the current document.
- *Available*: The amount of the budget that is available for the document. The available amount is calculated as the difference between the *Budgeted* amount and the *Consumed* amount.
- *Remaining*: The amount that exceeds the budget. The remaining amount is calculated as the difference between the *Available* and *Document* amounts.

For example, suppose that you have budgeted a cost of $400 for the project (the budgeted amount). You have already spent $150 (the consumed amount). When you create an AP bill for the project in the amount of $300 (the document amount) and specify the project budget key in the document line, the system will display the following warning:

Budgeted: 400.00, Consumed: 150.00, Available: 250.00, Document: 300.00, Remaining: –50.00

The warning does not prevent you from processing the document; it just informs you that by processing the document, you will exceed the budgeted values.

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

Project Budget Control: To Review the Budget Overruns

This activity will walk you through the process of receiving notifications that indicate whether a newly entered document fits the existing project budget.

Story

Suppose that the West BBQ Restaurant customer has ordered a juicer from the SweetLife Fruits & Jams company, along with the following services: juicer installation, and employee training on operating the juicer. The SweetLife company has contracted the Squeezo Inc. vendor to perform all the services. SweetLife's project accountant has created the project. The vendor has delivered and installed the juicer, and Squeezo's consultant has provided the training. Then suppose that the project accountant noticed that the juicer has cost an extra $200 beyond the budgeted amount, and that the installation and the training have taken two hours more than the budgeted number of hours.

Acting as SweetLife's project accountant, you will enter a change order to adjust the cost of the juicer, an accounts payable bill for the provided training, and a purchase order for the installation service. As you enter these project-related documents, you will check whether the costs are within the project budget.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the following features have been enabled:
  - *Project Accounting*, which provides the project accounting functionality
  - *Inventory and Order Management*, which provides the ability to maintain stock items and to create and process purchasing documents that include stock items
- On the *Change Order Classes* (PM203000) form, the *DEFAULT* change order class has been created.
- On the *Projects Preferences* (PM101000) form, the *DEFAULT* change order class has been selected in the **Default Change Order Class** box on the **General** tab (**General Settings** section).
- On the *Projects* (PM301000) form, the *WESTBBQ2* project has been created, the *PHASE1* and *PHASE2* project tasks have been created for the project, and three cost budget lines have been added. The change order workflow has been enabled for the project.
- On the *Non-Stock Items* (IN202000) form, the *INSTALL* and *TRAINING* non-stock item have been defined.
- On the *Stock Items* (IN202500) form, the *JUICER15* stock item has been defined.
- On the *Vendors* (AP303000) form, the *SQUEEZO* vendor has been created.

Process Overview

In this activity, you will capture project costs by processing a change order on the *Change Orders* (PM308000) form, an accounts payable bill on the *Bills and Adjustments* (AP301000) form, and a purchase order on the *Purchase*

Orders (PO301000) form. While you process these documents, you will review potential budget overruns on the entry forms. You will then review all the project budget overruns at once on the *Potential Project Budget Overruns* (PM404000) form.

System Preparation

To prepare to perform the instructions of the activity, do the following:

1. On the *Projects Preferences* (PM101000) form, go to the **General** tab (**General Settings** section) and set **Budget Control** to *Show a Warning*.

   With this setting, the system shows warnings if documents of the following types exceed the project budget: commitments within change orders, purchase orders, accounts payable bills, and subcontracts.

2. Select the **Internal Cost Commitment Tracking** check box.

3. Save your changes to the project accounting preferences.

Step 1: Creating a Change Order for the Project

To review the project and create a change order for the project, do the following:

1. On the *Projects* (PM301000) form, open the *WESTBBQ2* project. On the **Cost Budget** tab, review the cost budget of the project, which has the following lines:

   - The *JUICER15* line, with a budgeted amount of *2,000*
   - The *TRAINING* line, with a budgeted amount of *320*
   - The *INSTALL* line, with a budgeted amount of *320*

   The actual values of the budget lines are *0*, and the budget lines have no changes or related commitments.

2. On the More menu, under **Change Management**, click **Create Change Order**. The system creates a change order and opens it on the *Change Orders* (PM308000) form. Make sure that *EXTERNAL* is specified in the **Class** box of the Summary area.

3. In the Summary area, enter `Adjustment to the WESTBBQ2 project` as the **Description**.

4. On the **Commitments** tab, click **Add Row** and add a commitment line with the following settings:

   - **Project Task**: *PHASE1*
   - **Cost Code**: *00-000*
   - **Inventory ID**: *JUICER15*
   - **Quantity**: `1.00`
   - **Unit Cost**: `2,200.00`
   - **Vendor**: *SQUEEZO*
   - **Commitment Type**: *Normal Purchase Order*

5. Save your changes to the change order.

   Notice that a notification has appeared in the **Amount** column (see the following screenshot) indicating the following:

   - The budget for the juicer (*Budgeted*) is *2,000*.
   - The amount of the commitment line (*Document*) with the *New Document* status is *2,200*. This line will result in a purchase order line.
   - The amount by which the change exceeds the available budget (*Remaining*) is *200*.

   A warning is also shown in the Summary area of the form.

Figure: Warnings indicating a budget overrun for a change order

Step 2: Creating a Bill for the Project

To create a bill for the project, do the following:

1. On the *Bills and Adjustments* (AP301000) form, add a new record.
2. In the Summary area, specify the following settings:
   - **Type**: *Bill*
   - **Date**: *1/30/2025* (inserted by default)
   - **Vendor**: *SQUEEZO*
3. On the **Details** tab, click **Add Row** on the table toolbar and specify the following settings in the added row:
   - **Inventory ID**: *TRAINING*
   - **Quantity**: 10
   - **Project**: *WESTBBQ2*
   - **Project Task**: *PHASE2*
   - **Cost Code**: *00-000*
4. Save your changes to the bill.

   Notice that a notification has appeared in the **Ext. Cost** column indicating the following:
   - The budget for the training (*Budgeted*) is *320*.
   - The amount of the bill line (*Document*) is *400*.
   - The amount by which the bill line exceeds the available budget (*Remaining*) is *80*.

   A warning has also appeared in the Summary area of the form.

Step 3: Creating a Purchase Order for the Project

To create a purchase order for the project, do the following:

1. On the *Purchase Orders* (PO301000) form, add a new record.
2. In the Summary area, specify the following settings:
   - **Type**: *Normal*
   - **Date**: *1/30/2025* (inserted by default)

- **Vendor**: *SQUEEZO*

3. On the **Details** tab, click **Add Row** on the table toolbar and specify the following settings in the added row:

- **Inventory ID**: *INSTALL*
- **Order Qty.**: `6.00`
- **Project**: *WESTBBQ2*
- **Project Task**: *PHASE1*
- **Cost Code**: *00-000*

4. Save your changes to the purchase order.

Notice that a warning has appeared in the **Ext. Cost** column indicating the following:

- The budget for the installation (*Budgeted*) is *320*.
- The amount of the purchase order line (*Document*) is *480*.
- The amount by which the purchase order line exceeds the available budget (*Remaining*) is *160*.

A warning has also appeared in the Summary area of the form.

Step 4: Reviewing Potential Budget Overruns

To review all the budget overruns for the project in a single place, do the following:

1. Open the *Potential Project Budget Overruns* (PM404000) form.

2. In the **Project** box, select *WESTBBQ2*.

3. On the form toolbar, click **Calculate** to review all project-related documents that exceed the budget, as the following screenshot shows.

Type	Reference Nbr.	Project	Project Description	Project Task	Account Group	Cost Code	Inventory ID	Transaction Description	Budgeted	Consumed	Available	Document	Remaining
Purchase Order	000055	WESTBBQ2	A juicer with t...	PHASE1	SUBCON	00-000	INSTALL	Installation of ...	320.00	0.00	320.00	480.00	-160.00
AP document	000166	WESTBBQ2	A juicer with t...	PHASE2	LABOR	00-000	TRAINING	Training on jui...	320.00	0.00	320.00	400.00	-80.00
Change Order	000005	WESTBBQ2	A juicer with t...	PHASE1	MATERIAL	00-000	JUICER15	Commercial j...	2,000.00	0.00	2,000.00	2,200.00	-200.00

Figure: Budget overruns of the project

You have configured the tracking of budget overruns and found the documents that exceed the project budget. In the next step of the process in a production environment, which is beyond the scope of this activity, a project manager would approve or reject these changes to the budgeted amounts.

Part 3: Corrections and Adjustments

This part covers the corrections and adjustments that you may need to make to project financial documents.

Lesson 5: Billing for Remainder and Writing Off Amounts

Acumatica ERP provides pro forma invoice capabilities for project billing. A pro forma invoice, which you can view on the *Pro Forma Invoices* (PM307000) form, is a draft document that you can edit and correct without affecting the accounts receivable. Once all the necessary changes have been applied to the pro forma invoice, you release it and the system creates an accounts receivable invoice with all the information copied from the pro forma invoice. With this process, you minimize corrections that directly affect the accounts receivable subledger.

Learning Objectives

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

- Add to the pro forma invoice an extra adjustment line that does not originate from project transactions
- Postpone the billing of a pro forma invoice line
- Write off a pro forma invoice line partially or fully

Applicable Scenarios

You modify a pro forma invoice if the customer has requested any adjustments. When you reach an agreement with the customer, you release the pro forma invoice to prepare the accounts receivable invoice.

Time and Material Billing: Adjustments, Remainders, and Write-Offs

You may need to modify a pro forma invoice if you send this invoice to the customer for acceptance and if the customer requests some adjustments.

On the *Pro Forma Invoices* (PM307000) form, you can edit the lines of a pro forma invoice if it is assigned the *On Hold* status. If a pro forma invoice has the *Closed* status but you have not released the created accounts receivable document yet, you can delete the AR document to be able to edit the pro forma invoice.

> (i) You can also rearrange the time and material lines of the pro forma invoice by dragging them to the appropriate positions.

Increasing the Billed Amounts

On the **Time and Material** tab of the *Pro Forma Invoices* (PM307000) form, you can increase the billed amounts by doing any of the following:

- Increasing the **Amount to Invoice** of the pro forma invoice line to bill the customer in a greater amount.
- Adding a new line to the pro forma invoice based on an unbilled transaction. To do this, you click **Upload Unbilled Transactions** on the table toolbar. In the **Upload Unbilled Transactions** dialog box, which opens, you select the lines with the project transactions that have not been billed yet, and click **Upload & Close**. The system creates new lines for these project transactions.

- Manually adding to a pro forma invoice an adjustment line that does not originate from the project transactions.

Postponing the Billed Amounts

To postpone the full amount of any pro forma invoice line, delete this line from the pro forma invoice on the **Time and Material** tab of the *Pro Forma Invoices* (PM307000) form. This line will appear in the next pro forma invoice prepared for the project.

To postpone a partial amount of the pro forma invoice line, decrease the **Amount to Invoice** and select *Hold Remainder* in the **Status** column. The unbilled remainder (that is, the difference between the original amount and the edited amount) will be postponed until the next billing for the project. For an unbilled remainder to be billed, the corresponding AR invoice that contains the line from which this remainder originates must be released.

You cannot postpone the partial amount of the pro forma invoice lines that have no link to a project transaction.

> ⓘ   A pro forma invoice line with no link to a project transaction may be added manually by the user or generated by a billing rule that includes multiple time and material steps that have been configured for the same account group.

Writing Off the Billed Amounts

To write off the full amount of the pro forma invoice line, you select *Write Off* in the **Status** column for the line on the **Time and Material** tab of the *Pro Forma Invoices* (PM307000) form. This line will no longer appear in pro forma invoices prepared for the project.

To write off a partial amount of the pro forma invoice line, decrease the **Amount to Invoice** and select *Write Off Remainder* in the **Status** column. The unbilled remainder (that is, the difference between the original amount and edited amount) will be written off and will no longer appear in pro forma invoices prepared for the project.

You cannot fully or partially write off the amount of the pro forma invoice lines that have no link to a project transaction.

Decreasing the Billed Amounts
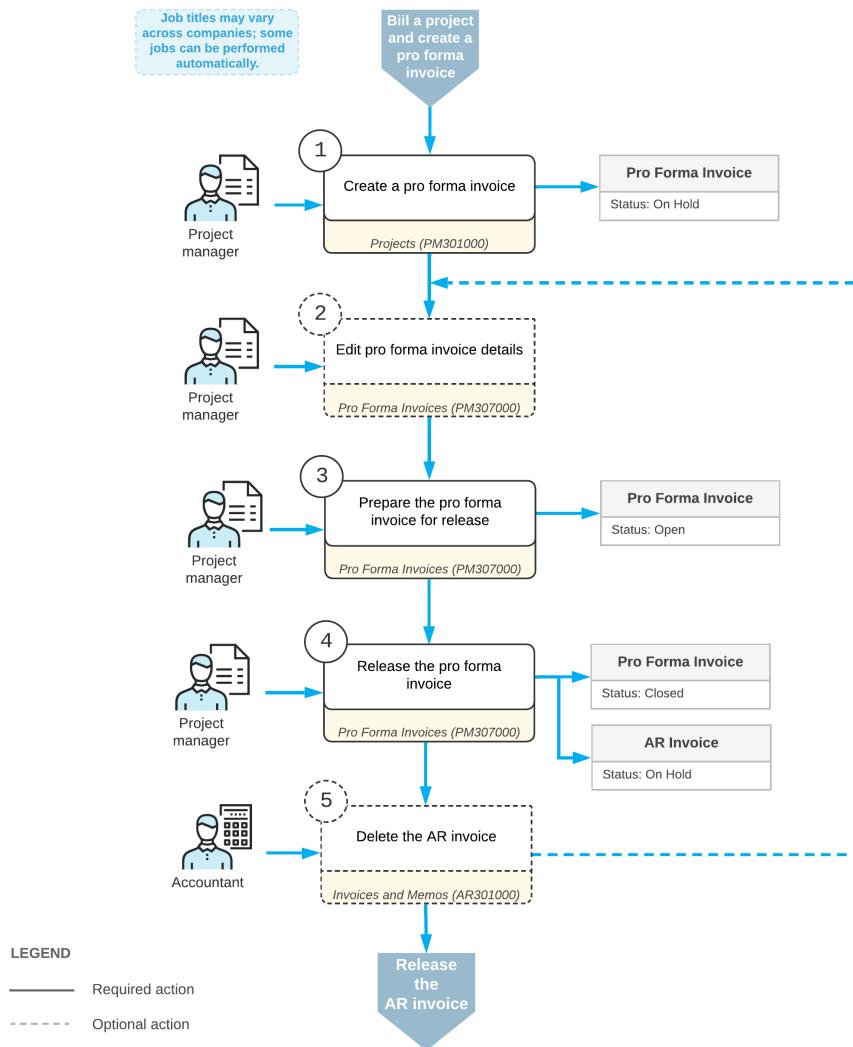
On the **Time and Material** tab of the *Pro Forma Invoices* (PM307000) form, you can click a pro forma invoice line and click **View Transaction Details** on the table toolbar. The system opens the **Transaction Details** dialog box, which shows the list of project transactions that correspond to this line. The **Billed Quantity** and **Billed Amount** values for each project transaction in the list were calculated by using the formula of the billing rule. These values are totaled to populate the **Billed Quantity** and **Billed Amount** of the pro forma invoice line.

To reduce the billed quantity and amount of the pro forma invoice lines, you delete the particular transaction from the list. The deleted project transaction is unlinked from the pro forma invoice line and will appear in the next pro forma invoice prepared for the project.

Workflow of Changing Pro Forma Invoices

The following diagram illustrates the workflow of making changes to a pro forma invoice.

Editing pro forma invoice before release

Time and Material Billing: To Postpone and Write Off Amounts

This activity will walk you through the process of postponing and writing off amounts in a pro forma invoice.

Story

Suppose that the Thai Food Restaurant customer has ordered a juicer, along with the services of installation and employee training on operating the juicer from the SweetLife Fruits & Jams company. SweetLife's project accountant has created a project. The juicer has been delivered and installed, and a consultant has provided the training. The project accountant has billed the customer and sent the created pro forma invoice for approval.

SweetLife and the customer have agreed on the following adjustments to the pro forma invoice:

- The customer will pay $2,000 of the cost of the juicer with the first invoice (the accounts receivable invoice corresponding to this pro forma invoice) and the rest of the juicer's cost with the second invoice next month.

- The cost of the site review should be written off of the invoice, because the project manager agreed to provide the customer a free site review.
- A 50% discount will be applied to the cost of the training.
- The customer will pay $100 for an additional training session in Phase 1 of the project.

Acting as the project accountant, you will make the needed corrections to the pro forma invoice and bill the customer. You will then bill the customer for the second time with the amount postponed in the first invoice.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to provide support for the project accounting functionality.
- On the *Projects* (PM301000) form, the *TOMYUM4* project has been created and the *PHASE1* and *PHASE2* project tasks have been created for the project.
- On the *Project Transactions* (PM304000) form, the *PM00000001* batch of project transactions related to the project has been created and released.
- On the *Pro Forma Invoices* (PM307000) form, the *000003* pro forma invoice has been created for the *TOMYUM4* project and saved with the *On Hold* status.
- On the *Stock Items* (IN202500) form, the *JUICER15* stock item has been created.
- On the *Non-Stock Items* (IN202000) form, the *SITEREVIEW*, *INSTALL*, and *TRAINING* non-stock items have been created.

Process Overview

In this activity, you will make corrections to the pro forma invoice and release the invoice on the *Pro Forma Invoices* (PM307000) form. On the *Invoices and Memos* (AR301000) form, you will review the accounts receivable invoice that was created based on the pro forma invoice; you will then release the accounts receivable invoice. You will then create one more pro forma invoice for the customer with the amount postponed in the first pro forma invoice.

Step 1: Adjusting the Pro Forma Invoice

To adjust the pro forma invoice according to the agreements that have been reached with the customer, do the following:

1. On the *Projects* (PM301000) form, open the *TOMYUM4* project.

2. On the **Invoices** tab, click the link in the **Pro Forma Reference Nbr.** column of the only row to open the pro forma invoice that you need to adjust.

3. On the **Time and Material** tab of the *Pro Forma Invoices* (PM307000) form, which opens, adjust the invoice lines as follows (see the adjustments in the screenshot below):

   a. In the line with the *PHASE1* project task and the *JUICER15* inventory item, change **Amount to Invoice** to `2000`. When you enter an **Amount to Invoice** that is less than the **Billed Amount**, the system specifies *Hold Remainder* as the **Status** in this line; the difference between the **Billed Amount** and the **Amount to Invoice** will be billed later.

   b. In the line with the *PHASE1* project task and the *SITEREVIEW* inventory item, select *Write Off* as the **Status** to write off the full amount of the line and exclude it from billing. The system specifies *0* in the **Amount to Invoice** column for this line.

   c. In the line with the *PHASE2* project task and the *TRAINING* inventory item, do the following:

      a. Change **Amount to Invoice** to `200.00`.

      b. Select *Write Off Remainder* as the **Status** to write off the difference between the **Billed Amount** and the **Amount to Invoice** and exclude this difference from billing.

4. Add a new line with the following settings (also shown in the following screenshot):

   - **Project Task**: *PHASE1*
   - **Inventory ID**: *TRAINING*
   - **Cost Code**: `00-000`
   - **Description**: `An additional training session within phase 1`
   - **Amount to Invoice**: `100.00`

   After all the adjustments you have made, the invoice total in the Summary area should be $2,700.

Figure: The adjustments to the pro forma invoice

5. Save your changes to the pro forma invoice.

6. On the form toolbar, click **Remove Hold** to assign the pro forma invoice the *Open* status, and then click **Release** to release the pro forma invoice.

   The system creates the accounts receivable invoice based on the pro forma invoice and assigns the *Closed* status to the pro forma invoice.

7. On the **Financial** tab, click the **AR Ref. Nbr.** link to open the accounts receivable invoice that has been created.

8. On the form toolbar of the *Invoices and Memos* (AR301000) form, which opens, click **Remove Hold** to assign the invoice the *Balanced* status, and then click **Release** to release the accounts receivable invoice.

Step 2: Billing the Project for the Remainder

To bill the customer the postponed amount (which is $500 of the juicer cost), do the following:

1. On the *Projects* (PM301000) form, open the *TOMYUM4* project, and on the **Cost Budget** tab, review the updated cost budget of the project. Click the cost budget line with the *PHASE1* project task and the *JUICER15* inventory item, and on the table toolbar, click **View Transactions**.

2. On the *Project Transaction Details* (PM401000) form, which opens, review the list of project transactions that correspond to the selected line.

   The transaction with an original document type of *Unbilled Remainder* has been created on release of the AR invoice that corresponds to the pro forma invoice from which the unbilled remainder originates. The identifier of the AR invoice is shown in the **Orig. Doc. Nbr.** column of the line. The transaction has the **Billable** check box selected and the **Billed** check box cleared, which means the transaction can be billed.

3. Close the form to return to the *Projects* form with the *TOMYUM4* project selected, and on the form toolbar, click **Run Billing** to bill the project for remainder.

   The system creates a pro forma invoice and opens it on the *Pro Forma Invoices* (PM307000) form.

4. On the **Time and Material** tab, review the pro forma invoice line that the system has created based on the unbilled remainder transaction. Only one line with the *PHASE1* project task and *JUICER15* inventory item has been added to the pro forma invoice. The amount of the line is $500.

> ⓘ The line with the *PHASE1* project task and the *SITEREVIEW* inventory item has not been added because you have written it off in the full amount. The line with the *PHASE2* project task and the *TRAINING* inventory item has been written off partially, and thus also has not been added to the pro forma invoice.

You have corrected the pro forma invoice and billed the project for the unbilled remainder.

Lesson 6: Correcting Actual Income of Projects

In Acumatica ERP, you can create a credit memo for a project during the project billing.

Learning Objectives

In this lesson, you will learn how to create a credit memo for a project.

Applicable Scenarios

You create a credit memo for a project if you need to correct the actual amounts of the revenue budget that have been exceeded.

Project Invoice Correction: Credit Memos for Projects

To correct the actual amounts of a project that has been overcharged during the previous billing, you can create a credit memo for a project, either manually or during the project billing procedure.

Project Billing with Credit Memo

If on the **Summary** tab of the *Projects* (PM301000) form, the **Create Pro Forma Invoice on Billing** check box is selected for the project, the system creates a credit memo on release of the pro forma invoice if the total amount of the pro forma invoice is negative.

During the billing of each processed project, the system creates a credit memo on the *Invoices and Memos* (AR301000) form if both of the following conditions are met for the project on the *Projects* form:

*   On the **Summary** tab, the **Create Pro Forma Invoice on Billing** check box is cleared.
*   The project has a negative **Pending Invoice Amount Total** on the **Revenue Budget** tab.

Credit Terms in Credit Memos

The system fills in the credit terms for the credit memo as follows:

*   If the project has credit terms specified in the **Terms** box on the **Summary** tab of the *Projects* (PM301000) form and the **Use Credit Terms in Credit Memos** check box is selected on the *Accounts Receivable Preferences* (AR101000) form, the terms are copied from the project to the credit memo.
*   If the **Terms** box is empty for the project and the **Use Credit Terms in Credit Memos** check box is selected on the *Accounts Receivable Preferences* form, the terms are copied from the customer's settings to the credit memo.

- If the **Use Credit Terms in Credit Memos** check box is cleared on the *Accounts Receivable Preferences* form, the **Terms** box of the *Invoices and Memos* (AR301000) form is empty for the credit memo.

For details on the calculation of cash discounts in the generated documents, see *Setup and Calculation of Cash Discounts*.

Project Invoice Correction: To Prepare a Credit Memo for a Project

In this activity, you will correct the actual amounts of a project that has been overcharged during the billing. To do this, you will create a credit memo for the project.

Story

Suppose that the Thai Food Restaurant customer recently ordered eight hours of training on how to use a juicer it had previously bought from the SweetLife Fruits & Jams company. SweetLife's project accountant created a project for this training, a consultant of SweetLife provided the training, and the project accountant billed the customer.

Further suppose that the project accountant has realized that the consultant provided six hours of training instead of eight, so the company overcharged the customer by $100. Acting as the project accountant, you need to correct the actual amount of the project and create a credit memo for the project.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to provide support for the project accounting functionality.
- On the *Projects* (PM301000) form, the *TOMYUM11* project has been created and the *TRAINING* project task has been created for the project. On the **Summary** tab (**Billing and Allocation Settings** section), the **Create Pro Forma Invoice on Billing** check box has been selected for the project.
- For the project, the *000004* pro forma invoice and the corresponding *000075* accounts receivable invoice have been created and released on the *Pro Forma Invoices* (PM307000) and *Invoices and Memos* (AR301000) forms, respectively.

Process Overview

In this activity, on the *Projects* (PM301000) form, you will update the pending invoice amount of the project with a negative amount and run project billing to prepare a pro forma invoice. On the *Pro Forma Invoices* (PM307000) form, you will review the pro forma invoice and release it. You will then review the credit memo that was created based on the pro forma invoice and release the credit memo on the *Invoices and Memos* (AR301000) form.

Step: Creating a Credit Memo for the Project

To create a credit memo for the extra $100 that was billed for the project, do the following:

1. On the *Projects* (PM301000) form, open the *TOMYUM11* project. In the Summary area, notice that the actual income of the project is $400.
2. On the **Revenue Budget** tab, enter −100 as the **Pending Invoice Amount** of the only revenue budget line that you are going to correct.
3. Save your changes to the project.
4. On the form toolbar, click **Run Billing**.

The system creates a pro forma invoice and opens it on the *Pro Forma Invoices* (PM307000) form. In the Summary area, notice that the **Invoice Total** is negative and equals the amount you have specified for the revenue budget line of the project (*–100.00*).

5. On the form toolbar, click **Remove Hold** to assign the pro forma invoice the *Open* status, and then click **Release** to release the pro forma invoice. The system assigns the *Closed* status to the pro forma invoice.

   The **Invoice Total** of a pro forma invoice on the *Pro Forma Invoices* form was negative, so the system creates an accounts receivable credit memo when the pro forma invoice was released.

6. On the **Financial** tab, click the **AR Ref. Nbr.** link to open the credit memo that has been created for the pro forma invoice.

7. On the form toolbar of the *Invoices and Memos* (AR301000) form, which opens, click **Remove Hold** to assign the credit memo the *Balanced* status, and then click **Release** to release the credit memo.

8. On the *Projects* form, open the *TOMYUM11* project and press Esc to refresh the form. In the Summary area, notice that the actual income of the project, which has been updated as a result of the billing, is $300.

   On the **Invoices** tab, notice that the credit memo with the corresponding pro forma invoice has appeared in the table, as shown in the following screenshot.

Figure: The credit memo created for the project

You have adjusted the overcharged actual income in the project.

Part 4: Billing Rates and WIP Costs

This part describes how to account for project expenses in accordance with generally accepted accounting principles (GAAP), and how to perform project billing by using complex billing rules.

Lesson 7: Accounting for WIP Costs in Cost-Plus Projects

Your organization may have long-term cost-plus projects with expenses posted to multiple financial periods. In accordance with generally accepted accounting principles (GAAP), you may want to record these expenses to the same financial period as the income generated by the invoice. In this case, you can move the expenses to the needed period by allocating the projects.

This lesson explains how in Acumatica ERP, you can move the expenses to the needed period by configuring and running allocations for these projects.

WIP Labor Costs in Cost-Plus Projects: General Information

According to the matching principle of generally accepted accounting principles (GAAP), the expenses related to the revenue have to be recorded to the same financial period as the revenue is. Expenses may happen in multiple financial periods before an invoice is created for the customer for those costs and the generated revenue can be recognized.

To set up the accounting for work-in-progress (WIP) costs for a project so that it corresponds to the matching principle of GAAP, you can temporarily allocate the project costs to a WIP account group. You then reverse the allocation back to the initial labor account group in the financial period in which an accounts receivable invoice is generated for the project and the revenue is recognized.

Learning Objectives

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

- Configure an allocation rule to move project costs to a WIP account group
- Configure a cost-plus project for allocating costs to the WIP account group
- Temporarily allocate costs of the project to the WIP account group

Applicable Scenarios

If you have a long-term cost-plus project with expenses that have been posted to multiple financial periods but the project has not been billed yet, you may need to move the expenses to the same financial period as the income generated by the project invoice.

Creating the Allocation Rule

To temporarily allocate the costs of a cost-plus project to a WIP account, you create an allocation rule on the *Allocation Rules* (PM207500) form. By using this allocation rule, the system creates allocation transactions based on the project transactions posted to a particular account group or specific groups, which moves costs from the original accounts to a WIP account.

For this allocation rule, you specify the following settings on the **Calculation Rules** tab:

- **Allocation Method**: *Allocate Transactions*

With this setting, the system calculates the amount to allocate by using the underlying transactions and their amounts.

- **Create Allocation Transaction**: Selected

  With this check box selected, the system creates the allocation transactions resulting from the step.

- **Select Transactions** (**Selection Criteria** section): *Non-Allocated Transactions*

  The step is applied to project transactions that have not been allocated yet.

- **Branch** (**Selection Criteria** section): The branch to be used as the filtering criteria for project transactions to be allocated.

- **Account Group From** (**Selection Criteria** section): The account group that starts the range of account groups whose transactions are involved in the allocation step.

- **Account Group To** (**Selection Criteria** section): The account group that ends the range of account groups whose transactions are involved in this allocation step.

  If you want to allocate the transactions posted to a single account group, specify this account group in the **Account Group From** box, and leave the **Account Group To** box empty.

- **If @Rate Is Not Defined** (**Calculation Settings** section): *Set @Rate to 0*

  You do not need to adjust the quantity and amount of the allocation transaction, so you will not use rates in the formulas of the allocation rule.

- **Quantity Formula** (**Calculation Settings** section): `=[PMTran.Qty]`

- **Billable Qty. Formula** (**Calculation Settings** section): `=[PMTran.BillableQty]`

- **Amount Formula** (**Calculation Settings** section): `=[PMTran.Amount]`

  As the quantity, billable quantity, and amount of the allocation transaction, the system uses the corresponding values of the original transaction. You do not modify the quantity and amount of the original transactions and just move them to a temporary WIP account as is.

- **Description Formula** (**Calculation Settings** section): The description of the created allocation transaction.

You specify the following settings for the allocation rule on the **Allocation Settings** tab:

- **Post Transaction to GL** (**Transaction Options** section): Selected

  With this check box selected, allocation transactions and reversing allocation transactions are posted to the general ledger.

- **Reverse Allocation** (**Transaction Reversal** section): *On AR Invoice Generation* or *On AR Invoice Release*

  With this setting, the allocation transaction is reversed automatically when an AR invoice is generated based on the allocation transactions or when this AR invoice is released, respectively.

- **Account Origin** (**Debit Transaction** section): *Replace* with a WIP account

  With this setting, the system generates an allocation transaction that debits the specified WIP account. The account must be mapped to a dedicated WIP account group that reflects the allocated amount and that you will later use in the billing rule.

- **Account Origin** (**Credit Transaction** section): *Debit Source*

  With this setting, the system generates an allocation transaction that credits the debit account of the source transaction.

Configuring Cost-Plus Projects for Allocation

On the *Projects* (PM301000) form, for a cost-plus project to be allocated, you assign the created allocation rule to the project tasks on the **Tasks** tab.

To be able to use the created allocation transactions in project billing, you need to modify the existing billing rule that is used for the project or create a new one on the *Billing Rules* (PM207000) form. For that billing rule, you create a *Time and Material* step that processes allocated transactions posted to the WIP account group. Except for the account group, the settings of this step are the same as the settings of the billing rule step that is used to process

the original transactions, which are the source of the allocation transactions. On the **Tasks** tab of the *Projects* form, the modified or created billing rule must be assigned to project tasks.

Allocating and Billing Projects

You run the allocation process for a project by clicking **Run Allocation** on the More menu of the *Projects* (PM301000) form while reviewing the project. As a result, the system creates allocation transactions based on the project transactions selected by using the allocation rules specified for project tasks on the **Tasks** tab. To make it possible to identify a batch of created allocation transactions, the system assigns the *Allocation for <Project ID>* description to such a batch. For the project transactions that have been used as a source of the allocation, the system selects the **Allocated** check box on the *Project Transaction Details* (PM401000) form.

When you bill a cost-plus project, the system automatically reverses the allocation transactions on creation or release of the accounts receivable document, depending on the settings of the corresponding allocation rule. Reversing allocation transactions copy original allocation transactions and reverse the sign of the amount. Allocation transactions are always reversed in the full amount. The reversing clears the WIP account group and moves the allocated costs back to the original accounts in the financial period the AR document created in.

WIP Labor Costs in Cost-Plus Projects: Implementation Activity

The following implementation activity will walk you through the process of configuring an allocation rule for work-in-progress labor.

Story

Suppose that the SweetLife Fruits & Jams company needs to process projects in accordance with the GAAP matching principle—that is, the expenses related to the revenue have to be recorded to the same financial period as the revenue is, even if the expenses have been already posted to the system. Acting as an administrative user of SweetLife, you will configure an allocation rule that can temporarily allocate the project labor costs to a work-in-progress account group and then reverse the costs back to the initial labor account group in the financial period in which the revenue is recognized—that is, an AR invoice is released.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to support the project accounting functionality.
- On the *Account Groups* (PM201000) form, the *WIP* account group has been created; the *12400 - Work in Progress* account has been mapped to the account group.

Process Overview

You will configure an allocation rule for work-in-progress labor on the *Allocation Rules* (PM207500) form.

System Preparation

To prepare to perform the instructions of the activity, sign in to the system as system administrator by using the *gibbs* username and the *123* password.

Step: Configuring an Allocation Rule

To configure an allocation rule used for allocating work-in-progress labor costs, perform the following instructions:

1. On the *Allocation Rules* (PM207500) form, add a new record.

2. In the Summary area, specify the following settings:

   - **Allocation Rule**: `WIPCP`
   - **Description**: `WIP allocation`

3. In the **Allocation Steps** table, add a row for the allocation rule step with the following settings:

   - **Step ID**: `10`
   - **Description**: `Labor`

4. In the right pane, on the **Calculation Rules** tab, specify the following settings for the step selected in the left pane:

   - **Allocation Method**: *Allocate Transactions*
   - **Create Allocation Transaction**: Selected
   - **Select Transactions** (**Selection Criteria** section): *Non-Allocated Transactions*
   - **Account Group From** (**Selection Criteria** section): *LABOR*
   - **Account Group To** (**Selection Criteria** section): Empty

     Based on this setting and the previous setting, with this step, the allocation rule processes only transactions of the *LABOR* account group.

   - **If @Rate Is Not Defined** (**Calculation Settings** section): *Set @Rate to 0*
   - **Quantity Formula** (**Calculation Settings** section): `=[PMTran.Qty]`
   - **Billable Qty. Formula** (**Calculation Settings** section): `=[PMTran.BillableQty]`
   - **Amount Formula** (**Calculation Settings** section): `=[PMTran.Amount]`
   - **Description Formula** (**Calculation Settings** section): `='WIP allocation transaction'`

5. In the right pane, on the **Allocation Settings** tab, specify the following settings for the step selected in the left pane:

   - **Post Transaction to GL** (**Transaction Options** section): Selected
   - **Reverse Allocation** (**Transaction Reversal** section): *On AR Invoice Release*

     With this setting, the allocation transaction is reversed automatically when an AR invoice generated based on this allocation transaction is released.

   - **Account Origin** (**Debit Transaction** section): *Replace* with *12400 (Work in Progress)*

     With this setting, the system generates an allocation transaction that debits the specified account—that is, the *12400 (Work in Progress)* account, which is mapped to the *WIP* account group.

   - **Account Origin** (**Credit Transaction** section): *Debit Source*

6. Save the created allocation rule.

You have configured the allocation rule that can be used for allocating work-in-progress labor expenses of a cost-plus project. To allocate the expenses of a project by using this rule, you need to assign the rule to the project tasks.

WIP Labor Costs in Cost-Plus Projects: Process Activity

In this activity, you will learn how to temporarily allocate project expenses to a work-in-progress account group and then use the allocation transactions for billing.

Story

Suppose that in January, the West BBQ Restaurant customer ordered training for new employees on the operation of juicers from the SweetLife Fruits & Jams company. The customer did not know the exact number of employees or the number of training sessions that would be needed. The SweetLife company agreed with the customer to

provide as many training sessions as the customer needed in January and February. Further, both parties agreed that on *2/25/2025*, the customer would pay for all the hours of training sessions that took place.

The project manager of SweetLife created a project for this work. Then suppose that on *1/21/2025*, a consultant of SweetLife provided eight hours of training and logged the time spent by creating and releasing a time card in Acumatica ERP. In February, no additional training sessions were needed.

Acting as SweetLife's project accountant, you need to bill the customer, and you want the project expense incurred in January to be recorded in the same financial period as the project revenue—that is, in February. You will allocate the project expenses and bill the project.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to support the project accounting functionality.
- On the *Projects* (PM301000) form, the *WESTBBQ6A* project has been created and the *TRAINING* task has been created for the project.
- On the *Account Groups* (PM201000) form, the *WIP* and *LABOR* account groups have been created; the *12400 - Work in Progress* account has been mapped to the *WIP* account group.
- On the *Allocation Rules* (PM207500) form, the *WIPTM* allocation rule has been created. This allocation rule will be used to allocate project transactions that represent a particular type of expenses to the *12400 - Work in Progress* account.
- On the *Billing Rules* (PM207000) form, the *WIP* billing rule has been created, which processes the allocated transactions from the *WIP* account group during the project billing.
- On the *Employee Time Cards* (EP305000) form, the *0000001* time card, reflecting the work of Pam Brawner on the *WESTBBQ6A* project, has been created. The time card has also been released, and the *PM00000019* batch of project transactions that corresponds to the time card has been created.

Process Overview

In this activity, you will first specify the allocation rule and billing rule for the project task on the *Project Tasks* (PM302000) form. You will review existing project transactions to be allocated on the *Project Transaction Details* (PM401000) form and then perform allocation for the project on the *Projects* (PM301000) form. On the same form, you will bill the project and release the AR invoice created as a result of the billing on the *Invoices and Memos* (AR301000) form. The system will create the reversing allocation transactions that you review on the *Project Transaction Details* form.

System Preparation

To prepare to perform the instructions of this activity, do the following:

1. Sign in to the system as the project accountant by using the *brawner* username and the password provided in the class.
2. In the info area, in the upper-right corner of the top pane of the Acumatica ERP screen, click the Business Date menu button, and select *2/25/2025* on the calendar.

Step 1: Configuring the Project for Allocation and Allocating the Project

To configure the project for allocation and allocate project transactions, do the following:

1. On the *Projects* (PM301000) form, open the *WESTBBQ6A* project, and do the following:

   a. In the table on the **Tasks** tab, click the *TRAINING* link in the **Task ID** column.

The system opens the task on the *Project Tasks* (PM302000) form.

b. In the **Billing and Allocation Settings** section on the **Summary** tab, specify the following settings:

- **Allocation Rule**: *WIPTM*
- **Billing Rule**: *WIP*
- **Non-Billable WIP Account Group**: Empty

c. Save your changes, close the form, and return to the *WESTBBQ6A* project on the *Projects* form.

2. On the **Cost Budget** tab, click the only line in the table, and on the table toolbar, click **View Transactions**.

On the *Project Transaction Details* (PM401000) form, which opens, review the only project transaction, and notice the values in the following columns:

- **Orig. Doc. Type**: The value in this column is *Time Card* because the transaction has been created based on the release of the time card created for Pam Brawner for the *WESTBBQ6A* project.
- **Fin. Period**: The transaction has been posted to the *01-2025* financial period.
- **Debit Account Group**: The transaction has debited the *LABOR* account group.
- **Billed**: This check box is cleared, indicating that the transaction has not been billed yet.
- **Allocated**: This check box is cleared, indicating that the transaction has not been allocated yet.

3. Close the form and return to the *WESTBBQ6A* project on the *Projects* form.

4. On the **Balances** tab, review the project balance. Notice that the actual amount of the project expenses ($360) is currently posted to the *LABOR* account group.

5. On the More menu, under **Billing and Allocations**, click **Run Allocation** to perform the allocation for the selected project.

When the allocation is completed, on the **Balances** tab, review the project balance again. Notice that the actual amount of the project expenses has been moved from the *LABOR* account group to the *WIP* account group.

6. On the **Cost Budget** tab, click the only line in the table, and on the table toolbar, click **View Transactions**.

On the *Project Transaction Details* (PM401000) form, which opens, notice that the second transaction has appeared. Review the transactions, noticing the values in the following columns:

- **Orig. Doc. Type**: The value in this column is *Allocation* for the new transaction, which means the transaction is an allocation transaction.
- **Date**: The date of the allocation transaction is the same as the date of the original transaction. Thus, the allocation transaction has been posted to *01-2025*, which is the same financial period to which the original transaction was posted.
- **Debit Account Group**: The allocation transaction has debited the *WIP* account group.
- **Credit Account Group**: The allocation transaction has credited the *LABOR* account group, which is the debit account group of the original transaction.
- **Billed**: This check box is cleared, indicating that the allocation transaction has not been billed yet (as is the case with the original transaction).
- **Allocated**: This check box is selected for the original transaction with the *Time Card* original document type, indicating that the transaction has been used as the source for allocation.

7. Close the form and return to the *WESTBBQ6A* project on the *Projects* form.

Step 2: Billing the Project

To bill the project, do the following:

1. While you are still reviewing the *WESTBBQ6A* project on the *Projects* (PM301000) form, click **Run Billing** on the form toolbar.

The system creates an AR invoice and opens it on the *Invoices and Memos* (AR301000) form.

2. In the Summary area of the form, make sure that the **Date** of the invoice is *2/25/2025*, which is the current business date, and that the **Post Period** is *02-2025*.

3. On the form toolbar, click **Remove Hold** to assign the invoice the *Balanced* status, and then click **Release** to release the AR invoice.

4. Open the *Project Transaction Details* (PM401000) form; in the Selection area, select *WESTBBQ6A* in the **Project** box, and make sure the other boxes are cleared.

   In the table, notice that two new transactions have been created (see the following screenshot).

Figure: Project transactions of the WESTBBQ6A project

Review the transactions, noticing the values in the following columns:

- **Orig. Doc. Type**: The values in this column are *Allocation Reversal* and *Invoice* for the new transactions, which means that the first one is a reversing transaction for the allocation transaction, and the second one originates from the released invoice.

- **Date**: The date of the new transactions is the invoice date. Thus, the transactions have been posted to the *02-2025* financial period.

- **Debit Account Group**: The transaction with the *Allocation Reversal* original document type has cleared the *WIP* account group (debited the account group with an opposite amount) and debited the *LABOR* account group. This reversing allocation transaction, which moved the expenses back to the original account group, was created on release of the AR invoice, based on the **Reverse Allocation** setting of the allocation rule on the **Allocation Settings** tab of the *Allocation Rules* (PM207500) form.

   The transaction with the *Invoice* original document type has debited the *REVENUE* account group with the amount calculated with the billing rule of the project task.

- **Released**: This check box is selected for all the transactions, including the transaction with the *Allocation Reversal* original document type, indicating that all the transactions have been released.

- **Billed**: This check box is selected for the transaction with the *Allocation* original document type, indicating that the allocation transaction has been used in billing.

5. On the *Projects* form, open the *WESTBBQ6A* project, and on the **Balances** tab, review the project balance. Notice that the actual amount of project expenses ($360) has been moved back from the *WIP* account group to the *LABOR* account group. The actual amount of the *REVENUE* account group has been updated and is now $450.

You have allocated project expenses to a work-in-progress account group and then performed billing based on the allocation transactions.

Lesson 8: Configuring Employee-Specific Billing Rates

This lesson explains how you can configure a billing rule to be used for billing with labor rates that depend on the employee who performs the work.

Billing Rates: General Information

You must establish an adequate pricing model in the project that you are managing to ensure that business outcomes are met, the project budget is used effectively, and project revenues and costs are properly balanced. In Acumatica ERP, you can implement virtually any pricing model by using billing rates for configuring complex billing rules.

Learning Objectives

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

- Create a rate table code and rate type
- Define a rate sequence
- Define a rate table with particular rates
- Use billing rates for billing projects with different billing rates

Applicable Scenarios

You configure and use billing rates if you need to perform project billing so that the system applies the appropriate rate based on the dates when the work has been performed, as well as any of the following factors:

- Particular projects and project tasks
- Specific account groups
- Certain inventory items
- Specific employees

Billing Rate Configuration

A billing rate is an exact value used for calculating the amount and quantity of the invoice lines that are created by the billing rule steps of the *Time and Material* type. The process of defining a billing rate includes the configuration of rate table codes, rate types, rate codes, and rate sequences.

A rate table is a set of billing rates that the system uses in the formulas of the billing rules during the billing of a project. A billing rate is defined for a particular date range; a rate table may include multiple rates with different effective dates. You can create a single rate table with multiple rate sequences and rate codes to be used for all projects, or define multiple rate tables to maintain different pricing models for the projects based on different factors. For example, you can create different rate tables and select the rate table to be used for the project depending on whether a customer of a project is a local one or international one.

In a rate table, for each rate type, you can define any number of rate sequences that include multiple factors that may affect the rates. These factors can include specific projects, project tasks, employees, account groups, and inventory items. You narrow the applicability of the rate based on the combination of factors you select. For example, you can configure a separate billing rate for particular tasks of specific projects if particular employees work on these project tasks.

Also, in each rate table, you can add rate codes, which represent an additional dimension in a rate table that you use to simplify the configuration of the rate table. By using multiple rate codes with one sequence, you can reduce the number of sequences that need to be configured for each pair of a rate table and a rate type. For example, instead of creating multiple sequences, each including the applicable rates for a particular employee, you can create only one rate sequence with the **Employee** check box selected on the *Rate Lookup Rules* (PM205000) form and create separate rate codes for each employee. As another example, suppose that you want to use different rates for three projects. Instead of creating multiple sequences with the **Project** check box selected in the table

on the *Rate Lookup Rules* form and specifying a rate for each sequence under one rate code, you can use only one sequence and three rate codes to define different rates for these three projects.

Workflow of Rate Table Configuration

You configure a rate table with rates by performing the following general steps:

1. You create a rate table code on the *Rate Table Codes* (PM204200) form.

2. You create a new rate type on the *Rate Types* (PM204100) form. Before creating the rate type, you need to plan how many and which rate types you will need in billing and allocation rules. (Typically, different rates are used for the billing of labor costs, revenues, and expenses.) When you configure billing or allocation rules, you will assign different rate types to different steps of these rules.

3. On the *Rate Lookup Rules* (PM205000) form, you create rate sequences for each combination of rate table code and rate type. Each sequence defines a group of options based on which the system will select the billing rate. You can select any combination of the *Project*, *Project task*, *Account group*, *Inventory item*, and *Employee* options. The sequence number specified in the **Sequence** column in the table defines the order in which the system will search for the rate in that row (starting from the sequence with the lowest number in the table).

4. On the *Rate Tables* (PM206000) form, for each combination of rate table code, rate type, and rate code, you select a rate sequence in the **Sequence** box. You select an existing rate code, or you create a new rate code by entering a new identifier in the **Rate Code** box.

   For the selected rate sequence, in the table on the **Rate** tab, you enter the exact values of billing rates with the date range during which the rates are effective. Also, on the tabs that appear for the types of factors that were defined in the rate sequence, you specify the specific factors that will define the applicability of the rates that you enter for the current rate sequence. These factors may include particular projects, project tasks, account groups, inventory items, and employees. Also, you specify the exact values of the billing rates with their date ranges in the **Rate** column on the **Rate** tab; the system will use these rates as the value of the *@Rate* parameter.

5. On the *Billing Rules* (PM207000) form, you create a billing rule and assign particular rate types to billing steps.

   In the billing rule steps, you use the *@Rate* parameter to refer to a particular billing rate in the billing rule formulas. In each billing rule step, you can specify this parameter as a multiplier, addend, or constant in the **Invoice Description Formula**, **Line Quantity Formula**, **Line Amount Formula**, and **Line Description Formula** boxes on the *Billing Rules* form.

   ⚠️ You can also assign rate types to allocation rules steps on the *Allocation Rules* (PM207500) form. Then you specify the *@Rate* parameter in the formulas of the allocation rule so that the system will use its value during transaction allocation. You can specify the parameter in the **Quantity Formula**, **Billable Qty. Formula**, **Amount Formula**, and **Description Formula** boxes on the *Allocation Rules* form.

6. On the *Projects* (PM301000) form, you assign a particular rate table to each of the project tasks of the project.

Billing Rates: To Configure Employee-Specific Rates

In this activity, you will learn how you can define item-specific billing rates by using rate tables, and how to bill a project by using these billing rates.

Story

Suppose that the West BBQ Restaurant customer has ordered from the SweetLife Fruits & Jams company a training session for its employees on how to use juicers that were previously purchased. Alberto Jimenez, a SweetLife junior consultant, has provided six hours of training, and Todd Bloom, a SweetLife senior consultant, has provided two hours of training. The standard rate of the training service, which applies to junior consultants, is $50 per hour, while the rate for the training provided by the senior consultants is $60 per hour.

Acting as the SweetLife project accountant, Pam Brawner, you need to configure the rate table that will provide billing rates based on the employee who performed the work and configure the appropriate billing rule that will establish the complex pricing model.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to provide the project accounting functionality.
- On the *Account Groups* (PM201000) form, the *LABOR* account group has been defined.
- On the *Non-Stock Items* (IN202000) form, the *CONSULTJR* and *CONSULTSR* non-stock items have been created.

Process Overview

In this activity, you will create a rate a rate table code on the *Rate Table Codes* (PM204200). Then on the *Rate Lookup Rules* (PM205000) form, you will define a rate sequence and the combination of settings that will be used for searching for the appropriate billing rate. Then you will configure the rate table on the *Rate Tables* (PM206000) form, and specify employee-specific rate values. Finally, on the *Billing Rules* (PM207000) form, you will configure a billing rule that uses the rate table with the applicable billing rates.

System Preparation

To prepare to perform the instructions of this activity, do the following:

1. Sign in to the system as the project accountant by using the *brawner* username and the *123* password.
2. In the info area, in the upper-right corner of the top pane of the Acumatica ERP screen, click the Business Date menu button, and select *1/1/2025* on the calendar.

Step 1: Creating Rate Table Codes and Rate Sequences

To create a rate table and specify rate sequences with employee-specific billing rates, do the following:

1. To add a new rate table code, do the following on the *Rate Table Codes* (PM204200) form:
   a. Click **Add Row** on the form toolbar, and specify the following settings in the added row:
      - **Rate Table**: LABOR
      - **Description**: Employee Labor
   b. Save the rate table code.
2. To create a rate sequence, on the *Rate Lookup Rules* (PM205000) form, do the following:
   a. In the Summary area, specify the following settings:
      - **Rate Table**: *LABOR*
      - **Rate Type**: *LABOR*

b. Click **Add Row** on the table toolbar, and specify the following settings in the row:

- **Sequence**: 1
- **Description**: `Labor rate sequence`
- **Inventory**: Selected

c. Save the rate sequence.

Step 2: Specifying Billing Rates

To specify billing rates for different sets of settings, do the following:

1. On the *Rate Tables* (PM206000) form, to configure a rate table for the senior consultant, do the following:

   a. In the Summary area, specify the following settings:

   - **Rate Table Code**: *LABOR*
   - **Rate Type**: *LABOR*

     When you select the rate type, the system automatically selects *1* as the **Sequence**.
   - **Rate Code**: `CONSULTSR`
   - **Description**: `A labor cost rate for a senior consultant`

   b. On the **Inventory** tab, click **Add Row** on the table toolbar, and in the row, select *CONSULTSR* as the **Inventory ID**.

   c. On the **Rate** tab, click **Add Row** on the table toolbar, and specify the following settings in the row:

   - **Start Date**: *1/1/2025*
   - **Rate**: `60.00`

   d. Save the rate table.

2. To configure a rate table for the junior consultant, do the following:

   a. On the form toolbar, click **Add New Record**, and in the Summary area, specify the following settings:

   - **Rate Code**: `CONSULTJR`
   - **Description**: `A labor cost rate for a junior consultant`

   b. On the **Inventory** tab, on the table toolbar, click **Add Row**, and in the row, select *CONSULTJR* as the **Inventory ID**.

   c. On the **Rate** tab, click **Add Row** on the table toolbar, and specify the following settings in the row:

   - **Start Date**: *1/1/2025*
   - **Rate**: `50.00`

   d. Save the rate table.

Step 3: Creating a Billing Rule

To create a billing rule that uses employee-specific billing rates, do the following:

1. On the *Billing Rules* (PM207000) form, add a new record, and enter the following settings in the Summary area:

- **Billing Rule ID**: `TMLABOR`
- **Description**: `Time and material with @Rate`

2. In the **Billing Steps** table, click **Add Row** on the table toolbar, and enter the following settings in the row:

- **Step ID**: `10`
- **Description**: `Consulting`

3. In the right pane, specify the following settings for the step selected in the left pane (which is the step you just added):

- **Billing Type**: *Time and Material*
- **Account Group**: *LABOR*
- **Rate Type**: *LABOR*
- **If @Rate Is Not Defined**: *Raise Error*

    If no rate has been found, the corresponding project transaction will not be presented in the invoice. With the *Raise Error* option selected, the error is raised during billing. This prevents project costs from being omitted.

- **Invoice Description Formula**: =`'Invoice for '+[PMProject.ContractCD]`
- **Line Quantity Formula**: =`[PMTran.BillableQty]`

    The invoice line quantity will be equal to the project transaction line quantity.

- **Line Amount Formula**: =`[PMTran.BillableQty]*@Rate`

    The amount of the invoice line is calculated as the billable quantity of the project transaction line multiplied by the corresponding rate value.

- **Line Description Formula**: =`[PMTran.Description]`
- **Use Sales Account From**: *Inventory Item*
- **Create Lines with Zero Amount and Quantity**: Cleared

4. Save the billing rule.

You have configured billing rates that are based on various settings and a billing rule that will use these rates for billing.

Billing Rates: To Bill a Project with Employee-Specific Rates

In this activity, you will learn how you can define employee-specific billing rates by using rate tables and how to bill a project by using these billing rates.

Story

Suppose that the West BBQ Restaurant customer has ordered from the SweetLife Fruits & Jams company a training session for its employees on how to use juicers that were previously purchased from SweetLife. Alberto Jimenez, a junior consultant of SweetLife, has provided six hours of training, and Todd Bloom, a senior consultant of SweetLife, has provided two hours of training. Alberto's rate is $50 per hour, and Todd's is $60.

Acting as the SweetLife project accountant, Pam Brawner, you need to create a project to account for the provided services, enter the project transaction to record the provided work, bill the customer, and verify that all services have been billed at the appropriate rates.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to provide the project accounting functionality.
- On the *Customers* (AR303000) form, the *WESTBBQ* customer has been created.
- On the *Non-Stock Items* (IN202000) form, the *CONSULTJR* and *CONSULTSR* non-stock items have been created.
- On the *Account Groups* (PM201000) form, the *LABOR* account group has been created.

Process Overview

In this activity, on the *Projects* (PM301000) form, you will create a new project, specify a billing rule and rate table for it, and define the project tasks. Then you will bill the project and review the billed amount and quantities in the prepared pro forma invoice on the *Pro Forma Invoices* (PM307000) form.

System Preparation

Before you begin performing the steps of this activity, 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 *1/30/2025*. If a different date is displayed, click the Business Date menu button, and select *1/30/2025* on the calendar. For simplicity, in this activity, you will create and process all documents in the system on this business date.

Step 1: Creating a Project

To create a project, do the following:

1. On the *Projects* (PM301000) form, add a new record.
2. In the Summary area, specify the following settings:
   - **Project ID**: WESTBBQ7A
   - **Customer**: *WESTBBQ*
   - **Description**: Training for employees
3. On the **Summary** tab (**Project Properties** section), specify *Task and Item* in the **Cost Budget Level** box.
4. On the **Summary** tab (**Billing and Allocation Settings** section), specify the following settings:
   - **Billing Period**: *On Demand*
   - **Billing Rule**: *TMLABOR*
   - **Rate Table**: *LABOR*

     You defined the *LABOR* rate table on the *Rate Tables* (PM206000) form when you performed the *Billing Rates: To Configure Employee-Specific Rates* activity.
5. On the **Tasks** tab, add a row with the following settings to define the project task:
   - **Task ID**: TRAINING
   - **Type**: *Cost and Revenue Task*
   - **Description**: Training for employees
   - **Status**: *Active*
   - **Default**: Selected

     Notice that the billing rule and the rate table have been copied to the task settings from the project settings.
6. Save the project.
7. On the form toolbar, click **Activate**. The system assigns the project the *Active* status.

Step 2: Creating Project Transactions

To enter the project transactions for the provided services, perform the following steps:

1. On the *Project Transactions* (PM304000) form, add a new record.
2. In the Summary area, specify the following description: Training for WESTBBQ7A.
3. On the **Details** tab, click **Add Row**.
4. Specify the following settings in the row:

- **Project**: *WESTBBQ7A*
- **Project Task**: *TRAINING* (specified automatically)
- **Cost Code**: *00-000*
- **Account Group**: *LABOR*
- **Inventory ID**: *CONSULTJR*
- **Quantity**: 6
- **Unit Rate**: 40.00

This transaction represents six hours of training provided by Alberto Jimenez.

5. Add one more transaction to the batch by clicking **Add Row** and specifying the following settings in the row:

- **Project**: *WESTBBQ7A*
- **Project Task**: *TRAINING*
- **Cost Code**: *00-000*
- **Account Group**: *LABOR*
- **Inventory ID**: *CONSULTSR*
- **Quantity**: 2
- **Unit Rate**: 45.00

This transaction represents two hours of training provided by Todd Bloom.

6. In the Summary area, make sure that the total billable quantity is 8 and the total amount is $330.

7. Save your changes, and on the form toolbar, click **Release** to release the project transaction.

Step 3: Billing the Project and Reviewing the Rates

To bill the project and review the rates at which the provided services have been billed, do the following:

1. On the *Projects* (PM301000) form, open the *WESTBBQ7A* project, which you have created earlier in this activity.

2. On the **Cost Budget** tab, make sure that the system has updated the cost budget with two new lines from the project transaction that you have released.

3. On the form toolbar, click **Run Billing**.

   The system creates a pro forma invoice and opens it on the *Pro Forma Invoices* (PM307000) form.

4. On the **Time and Material** tab, review the invoice lines that the system has created based on the transactions prepared for billing (see the screenshot below). These transactions have been processed by using the *TMLABOR* billing rule, and the rates have been taken from the rate table assigned to the project task. The pro forma invoice includes the following lines:

- The line with the *CONSULTJR* inventory item has a billed amount of $300, which has been calculated as 6 hours multiplied by $50.
- The line with the *CONSULTSR* inventory item has a billed amount of $120, which has been calculated as 2 hours multiplied by $60.

Figure: Lines for employee labor billed by rates

You have created a pro forma invoice for the customer and verified that the appropriate rates have been selected for the provided services.

Lesson 9: Configuring Complex Billing Rates

This lesson explains how you can configure a billing rule to be used for billing customers for the different services provided for the project. These services may have different billing rates that depend on the employee who performs the work.

Billing Rates: To Configure Employee- and Item-Specific Rates

In this activity, you will learn how you can define complex billing rates with rate tables that define different rates for different services, and for the same services provided by different employees.

Story

Suppose that the West BBQ Restaurant customer has ordered the service of juicer installation from the SweetLife Fruits & Jams company, along with the service of employee training on operating the juicer. The juicer has been installed. Also, Alberto Jimenez, a junior consultant, has provided two hours of training, and Todd Bloom, a senior consultant, has provided six hours of training. All of the project tasks must be billed at different rates:

- The installation work is provided at a price of $110 per hour.
- The accompanying installation work is provided at a price of $90 per hour.
- The standard rate of training, which applies to junior consultants, is $50 per hour.
- The rate for the training provided by senior consultants is $60 per hour.

Acting as the project accountant, Pam Brawner, you need to configure the rate table that will provide billing rates based on a combination of various settings.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to provide the project accounting functionality.
- On the *Project Tasks* (PM302000) form, the *INSTALL* and *TRAINING* project tasks have been defined.
- On the *Non-Stock Items* (IN202000) form, the *INSTALL* and *TRAINING* non-stock items have been created.
- On the *Employees* (EP203000) form, the *EP00000002 – Todd Bloom* employee record has been created.

Process Overview

In this activity, you will create a rate type on the *Rate Types* (PM204100) form. Then on the *Rate Lookup Rules* (PM205000) form, you will define a rate sequence and the combination of settings that will be used for searching for the applicable billing rate. Then you will configure the rate table on the *Rate Tables* (PM206000) form and specify rate values for the different combinations of parameters. Finally, on the *Billing Rules* (PM207000) form, you will configure a billing rule that uses the rate table with the applicable billing rates.

System Preparation

Before you start configuring billing rates, in the info area, in the upper-right corner of the top pane of the Acumatica ERP screen, click the Business Date menu button, and select *1/1/2025* on the calendar.

Step 1: Creating Rate Type and Rate Sequences

To create a rate type and specify rate sequences with item-specific and employee-specific billing rates, do the following:

1. On the *Rate Types* (PM204100) form, click **Add Row** on the form toolbar, and specify the following settings in the row:

   - **Rate Table**: `TASKLABOR`
   - **Description**: `Billing rate for installation and training`

2. Save the added rate type.

3. On the *Rate Lookup Rules* (PM205000) form, add a new rate sequence with the following settings:

   - **Rate Table**: *STANDARD*
   - **Rate Type**: *TASKLABOR*

4. Click **Add Row** on the table toolbar, and specify the following settings in the added row:

   - **Sequence**: `1`
   - **Description**: `Installation of juicers`
   - **Project Task**: Selected
   - **Inventory**: Selected

5. Again click **Add Row** on the table toolbar, and specify the following settings in the row:

   - **Sequence**: `2`
   - **Description**: `Billing rates for other installation work`
   - **Project Task**: Selected

6. Again click **Add Row** on the table toolbar, and specify the following settings in the row:

   - **Sequence**: `3`
   - **Description**: `Training for employees`
   - **Project Task**: Selected
   - **Inventory**: Selected
   - **Employee**: Selected

7. Again click **Add Row** on the table toolbar, and specify the following settings in the row:

- **Sequence**: 4
- **Description**: `Other work on training`
- **Project Task**: Selected

The rate sequences should look as shown in the following screenshot.

Figure: The rate lookup rule

8. Save the rate sequences you have created.

Step 2: Specifying Billing Rates

To specify billing rates for different groups of settings, do the following:

1. On the *Rate Tables* (PM206000) form, to configure the labor rates for installation work, do the following:

   a. In the Summary area, specify the following settings:

      - **Rate Table Code**: *STANDARD*
      - **Rate Type**: *TASKLABOR*

        When you select the rate type, the system automatically inserts *1* as the **Sequence**.
      - **Rate Code**: `TASKLABOR`
      - **Description**: `Labor rates for installation`

   b. On the **Rate** tab, click **Add Row** on the table toolbar, and specify the following settings in the row:

      - **Start Date**: *1/1/2025*
      - **Rate**: `110.00`

   c. On the **Tasks** tab, on the table toolbar, click **Add Row**, and in the row, select *INSTALL* as the **Project Task**.

   d. On the **Inventory** tab, on the table toolbar, click **Add Row**, and in the row, select *INSTALL* as the **Inventory ID**.

   e. Save the rate table.

2. To configure the rates for the other installation work, do the following:

   a. On the form toolbar, click **Add New Record**, and in the Summary area, specify the following settings:

      - **Sequence**: *2*
      - **Rate Code**: `TASKLABOR`
      - **Description**: `Labor rates for other installation work`

b. On the **Rate** tab, click **Add Row** on the table toolbar, and specify the following settings in the added row:
- **Start Date**: *1/1/2025*
- **Rate**: `90.00`

c. On the **Tasks** tab, on the table toolbar, click **Add Row**, and in the row, select *INSTALL* as the **Project Task**.

d. Save the rate table.

3. To configure the billing rates for training, do the following:

a. On the form toolbar, click **Add New Record**, and in the Summary area, specify the following settings in the Summary area:
- **Sequence**: *3*
- **Rate Code**: `TASKLABOR`
- **Description**: `Labor rates for training`

b. On the **Rate** tab, click **Add Row** on the table toolbar, and specify the following settings in the row:
- **Start Date**: *1/1/2025*
- **Rate**: `60.00`

c. On the **Tasks** tab, on the table toolbar, click **Add Row**, and in the row, select *TRAINING* as the **Project Task**.

d. On the **Inventory** tab, on the table toolbar, click **Add Row**, and in the row, select *TRAINING* as the **Inventory ID**.

e. On the **Employee** tab, on the table toolbar, click **Add Row**, and in the row, select *EP00000002 (Todd Bloom)* as the **Employee ID**.

f. Save the rate table.

4. To configure rates for other training work, do the following:

a. On the form toolbar, click **Add New Record**, and in the Summary area, specify the following settings:
- **Sequence**: *4*
- **Rate Code**: `TASKLABOR`
- **Description**: `Labor rates for other training work`

b. On the **Rate** tab, click **Add Row** on the table toolbar, and specify the following settings in the row:
- **Start Date**: *1/1/2025*
- **Rate**: `50.00`

c. On the **Tasks** tab, on the table toolbar, click **Add Row**, and in the row, select *TRAINING* as the **Project Task**.

d. Save the rates.

Step 3: Creating a Billing Rule

To create a billing rule that uses the employee- and item-specific billing rates that you have configured, do the following:

1. On the *Billing Rules* (PM207000) form, add a new record, and enter the following settings in the Summary area:
- **Billing Rule ID**: `TASKLABOR`
- **Description**: `Time and material with @Rate`

2. In the **Billing Steps** table, click **Add Row** on the table toolbar, and specify the following settings in the row:
- **Step ID**: `10`
- **Description**: `Installation and training`

3. In the right pane, specify the following settings for the step selected in the left pane:
   - **Billing Type**: *Time and Material*
   - **Account Group**: *LABOR*
   - **Rate Type**: *TASKLABOR*
   - **If @Rate Is Not Defined**: *Raise Error*

     If no rate has been found, the corresponding project transaction will not be presented in the invoice. With the *Raise Error* option selected, the error is raised during billing. This prevents project costs from being omitted.
   - **Invoice Description Formula**: `='Invoice for '+[PMProject.ContractCD]`
   - **Line Quantity Formula**: `=[PMTran.BillableQty]`

     The invoice line quantity will be equal to the project transaction line quantity.
   - **Line Amount Formula**: `=[PMTran.BillableQty]*@Rate`

     The amount of the invoice line is calculated as the billable quantity of the project transaction line multiplied by the corresponding rate value.
   - **Line Description Formula**: `=[PMTran.Description]`
   - **Use Sales Account From**: *Billing Rule*
   - **Sales Account**: *40000 - Sales Revenue*
   - **Create Lines with Zero Amount and Quantity**: Cleared
4. Save the billing rule.

You have configured billing rates that are based on various settings and a billing rule that will use these rates for billing.

Billing Rates: To Bill a Project with Employee- and Item-Specific Rates

In this activity, you will learn how you can bill a project whose billing rule uses employee- and item-specific billing rates.

Story

Suppose that the West BBQ Restaurant customer has ordered from the SweetLife Fruits & Jams company the services of juicer installation and employee training on operating the juicer. The juicer has been installed. Also, Alberto Jimenez, a junior consultant of SweetLife, has provided two hours of training, and Todd Bloom, a senior consultant of SweetLife, has provided six hours of training. The provided services should be billed at different rates.

Acting as the SweetLife project accountant, Pam Brawner, you need to create a project to account for the provided services, and specify the applicable billing rules. Then you need to enter the project transaction to record the provided work, bill the customer, and verify that all services have been invoiced at the appropriate rates.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to provide the project accounting functionality.
- On the *Customers* (AR303000) form, the *WESTBBQ* customer has been created.
- On the *Account Groups* (PM201000) form, the *LABOR* account group has been configured.
- On the *Non-Stock Items* (IN202000) form, the *TRAINING* and *INSTALL* non-stock item have been created.
- On the *Employees* (EP203000) form, the *EP00000002 – Todd Bloom* employee record has been created.

Process Overview

In this activity, on the *Projects* (PM301000) form, you will create a new project, specify a billing rule and rate table for it, and define the project tasks. Then you will bill the project and review the billed amount and quantities in the prepared pro forma invoice on the *Pro Forma Invoices* (PM307000) form.

System Preparation

Before you begin performing the steps of this activity, 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 *1/30/2025*. If a different date is displayed, click the Business Date menu button, and select *1/30/2025* on the calendar. For simplicity, in this activity, you will create and process all documents in the system on this business date.

Step 1: Creating a Project

To create a project, do the following:

1. On the *Projects* (PM301000) form, add a new project with the following settings:
   - **Project ID**: WESTBBQ7B
   - **Customer**: *WESTBBQ*
   - **Description**: Installation of a juicer and training for employees
2. On the **Summary** tab (**Project Properties** section), specify *Task and Item* in the **Cost Budget Level** box.
3. On the **Summary** tab (**Billing and Allocation Settings** section), specify the following settings:
   - **Billing Period**: *On Demand*
   - **Billing Rule**: *TASKLABOR*
   - **Rate Table**: *STANDARD*
4. On the **Tasks** tab, add two project tasks with the following settings.

Task ID	Type	Description	Status
INSTALL	*Cost and Revenue Task*	Juicer installation	*Active*
TRAINING	*Cost and Revenue Task*	Training for employees	*Active*

Notice that the *TASKLABOR* billing rule and the *STANDARD* rate table have been specified automatically for both project tasks.

5. Save the project.
6. On the form toolbar, click **Activate**. The system assigns the *Active* status to the project.

Step 2: Processing Project Transactions

To enter the project transactions for the provided services, perform the following steps:

1. On the *Project Transactions* (PM304000) form, add a new record.
2. In the Summary area of the form, make sure *PM* as specified as the **Module**, and specify Installation of a juicer and training for WESTBBQ7B as the **Description**.

3. In the table, add a transaction to the batch by clicking **Add Row** and specifying the following settings in the row:

   - **Project**: *WESTBBQ7B*
   - **Project Task**: *INSTALL*
   - **Cost Code**: `00-000`
   - **Account Group**: *LABOR*
   - **Inventory ID**: *INSTALL*
   - **Quantity**: `4`
   - **Unit Rate**: `80.00`

   This transaction represents four hours of juicer installation.

4. Add one more transaction to the batch by clicking **Add Row** and specifying the following settings:

   - **Project**: *WESTBBQ7B*
   - **Project Task**: *INSTALL*
   - **Cost Code**: `00-000`
   - **Account Group**: *LABOR*
   - **Description**: `Other work on the installation`
   - **Quantity**: `2`
   - **Unit Rate**: `70.00`

   This transaction represents two hours of other work on the installation.

5. Add the third transaction to the batch by clicking **Add Row** and specifying the following settings:

   - **Project**: *WESTBBQ7B*
   - **Project Task**: *TRAINING*
   - **Cost Code**: `00-000`
   - **Account Group**: *LABOR*
   - **Employee**: *EP00000002 - Todd Bloom*
   - **Inventory ID**: *TRAINING*
   - **Quantity**: `6`
   - **Unit Rate**: `45.00`

   This transaction represents six hours of training provided by Todd Bloom.

6. Add the last transaction to the batch by clicking **Add Row** and specifying the following settings:

   - **Project**: *WESTBBQ7B*
   - **Project Task**: *TRAINING*
   - **Cost Code**: `00-000`
   - **Account Group**: *LABOR*
   - **Description**: `Other work on training`
   - **Quantity**: `2`
   - **Unit Rate**: `40.00`

   This transaction represents two hours of other work on training. The entered batch of project transactions should look as shown in the following screenshot.

Figure: Batch of project transactions

7. In the Summary area, make sure that the total billable quantity is 14 and the total amount is $810.

8. Save your changes to the project transaction.

9. On the form toolbar, click **Release** to release the batch of project transactions.

Step 3: Billing the Project and Reviewing the Rates

To bill the project, do the following:

1. On the *Projects* (PM301000) form, open the *WESTBBQ7B* project.

2. On the form toolbar, click **Run Billing**.

   The system creates a pro forma invoice and opens it on the *Pro Forma Invoices* (PM307000) form.

3. On the **Time and Material** tab, review the invoice lines that the system has created based on the transactions prepared for billing. These transactions have been processed by using the billing rule, and the rates have been taken from the rate table assigned to the project tasks. The pro forma invoice includes the following lines:

   - The line with the *INSTALL* project task and *INSTALL* inventory item has a billed amount of $440, which has been calculated as 4 hours of installation multiplied by $110.
   - The line with the *INSTALL* project task and with no inventory item selected has a billed amount of $180, which has been calculated as 2 hours of other work on the installation multiplied by $90.
   - The line with the *TRAINING* project task, the *TRAINING* inventory item, and the *EP00000002* employee has a billed amount of $360, which has been calculated as 6 hours of training multiplied by $60.
   - The line with the *TRAINING* project task and empty inventory item has a billed amount of $100, which has been calculated as 2 hours of other work on training multiplied by $50.

You have created a pro forma invoice for the customer and verified that the appropriate rates have been selected for the provided services.

Part 5: Time and Expenses

This part describes how to bill a customer based on the work time that employees have reported by using time activities. You will also learn how to process expense receipts that have been paid with corporate cards.

Lesson 10: Processing Employee Expenses Paid with Corporate Cards

In this lesson, you will learn how to configure the system for processing expense receipts with corporate cards.

Corporate Cards: General Information

By using Acumatica ERP, you can track payments to vendors, which your company or employees of your company have made by using a corporate credit card.

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 card
- Create a vendor that represents the card issuer in the system
- Create a corporate credit card in the system
- Assign the corporate card to employees

Applicable Scenarios

If the *Expense Management* feature is not included in your license, you configure a card issuer as a vendor; then you can track the corporate credit card payments and reconcile the credit card balance in the system with the card statement balance.

If the *Expense Management* feature is included in your license, you configure a corporate credit card to provide your employees with ability to pay work-related expenses from a corporate account.

Configuration of Accounts and Payment Methods

To track payments that have been made by using a corporate credit card, you need to create a cash account that represents the corporate credit card in the system, link the cash account to an accrued liability account, and create a payment method.

The cash account that is used for corporate cards should be configured as follows:

- A separate GL account should be configured for each bank (card issuer) and currency.

  For each corporate credit card, you define one accrued liability account in the chart of accounts. The accrued liability account must be in the same currency as the corporate credit card.

- Each GL account has a separate cash account with the following settings specified on the *Cash Accounts* (CA202000) form:
  - The cash account must be associated with the same branch as the corporate card is.
  - The **Clearing Account** check box is cleared.
  - The **Restrict Visibility with Branch** check box is cleared.
  - The **Use for Corporate Cards** check box is selected.

- Only one payment method can be associated with the cash account—that is, only one payment method can be listed on the **Payment Methods** tab of the *Cash Accounts* form.

- Optionally, the **Requires Reconciliation** check box is selected; if it is, a numbering sequence must be specified in the **Reconciliation Numbering Sequence** box. The predefined *CARECON* numbering sequence can be selected.

Although the cash account that is used for a corporate card must have only one associated payment method, this payment method can be selected for multiple cash accounts. If a payment method is selected for a cash account that is used for a corporate card, in the Summary area of the *Payment Methods* (CA204000) form, the **Use in AP** check box is selected. Also, on the **Settings for Use in AP** tab of the form, this payment method should have the following settings:

- **Not Required** (**Additional Processing** section): Selected
- **Require Unique Payment Ref.** (**Payment Settings** section): Cleared

Configuration of Corporate Cards

To finish the configuration, you need to create an entity that represents the corporate card in the system and associate this entity with the liability account. You can do this in either of the following ways:

- If the *Expense Management* feature is disabled on the *Enable/Disable Features* (CS100000) form, on the *Vendors* (AP303000) form, you create a vendor that represents the bank that issued the corporate credit card. For this vendor, you specify the accrued liability account as the **Expense Account**.

  For more information about processing AP bills for expenses paid with a corporate card, see *Payments with a Corporate Card: General Information*.

- If the *Expense Management* feature is enabled on the *Enable/Disable Features* (CS100000) form, on the *Corporate Cards* (CA202500) form, you create a corporate card that company employees will use to process expenses. You enter the card number for matching transactions on a bank statement. In the table on the form, you add the employees that are allowed to use the corporate card; multiple employees can use a single corporate card.

  If the card currency differs from the currency of an employee who uses the corporate card, for this employee, the **Enable Currency Override** and **Enable Rate Override** check boxes must be selected on the **General** tab (**Employee Settings** section) of the *Employees* (EP203000) form. (This section of the form also contains the **Currency ID** box, where the employee currency is specified.)

> ⚠ If the *Multiple Base Currency* feature is enabled on the *Enable/Disable Features* form, the base currency of the cash account that corresponds to corporate card must be the same as base currency of the employee. For more information on configuring multiple base currencies, see *Multiple Base Currencies: General Information*.

  For more information about processing expense receipts and expense claims paid with a corporate card, see *Expense Receipts with Corporate Cards: General Information*. For information about processing refunds to corporate cards, see *Expense Returns to Corporate Cards: General Information*.

Corporate Cards: To Configure a Corporate Card

This activity will walk you through the process of creating the necessary entities for processing of expense receipts with corporate credit cards.

Story

Suppose that Jon Waite and Alberto Jimenez—employees of the SweetLife Fruits & Jams company—can use a corporate credit card for charging their business expenses. Acting as an implementation manager of SweetLife, you

need to create an account, payment method, and cash account for company corporate cards, as well as to create the corporate card itself in the system.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- The *Expense Management* feature has been enabled on the *Enable/Disable Features* (CS100000) form.
- On the *Entry Types* (CA203000) form, the *BANKFEE* entry type has been added.
- On the *Employees* (EP203000) form, the accounts for Jon Waite and Alberto Jimenez have been created.

Process Overview

To create a corporate card, you will first create a GL account on the *Chart of Accounts* (GL202500) form. You will create a payment method for the card on the *Payment Methods* (CA204000) form. You will specify the GL account and payment method for a cash account, which you will create on the *Cash Accounts* (CA202000) form. Finally, you will create a corporate credit card on the *Corporate Cards* (CA202500) form.

System Preparation

To prepare to perform the instructions of the activity, sign in as an implementation manager by using the *gibbs* username and the *123* password.

Step 1: Creating a GL Account for a Corporate 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 your changes.

Step 2: Creating a Payment Method

To create a payment method for the corporate credit card, do the following:

1. On the *Payment Methods* (CA204000) form, add a new record.
2. In the **Payment Method ID** box of the Summary area, type `CORPCC`.
3. In the Summary area, specify the following settings:
   - **Means of Payment**: *Credit Card*
   - **Description**: `Corporate card payment method`
   - **Use in AP**: Selected
   - **Use in AR**: Cleared

     This payment method is not going to be used for customer payments.
   - **Require Remittance Information for Cash Account**: Cleared

     Remittance information is not required by this payment method for the related cash accounts.

4. On the **Settings for Use in AP** tab, clear the **Require Unique Payment Ref.** check box in the **Payment Settings** section so that a unique payment reference number is not required for each payment document created with this payment method.

   Make sure that **Not Required** is selected in the **Additional Processing** section. Payment documents created with this payment method do not require additional processing, such as printing checks.

5. Save the payment method.

Step 3: Creating a Cash Account

Create a cash account as follows:

1. On the *Cash Accounts* (CA202000) form, add a new record.

2. In the **Cash Account** box of the Summary area, type `29000`, and specify the following settings:

   - **Account**: *29000 - Corporate Credit Card*
   - **Branch**: *SWEETEQUIP*
   - **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, on the table toolbar, click **Add Row**, and in the **Payment Method** column, select *CORPCC*.

4. On the **Entry Types** tab, on the table toolbar, click **Add Row**, and in the **Entry Type ID** column, select *BANKFEE*.

5. Save the created cash account.

Step 4: Creating the Corporate Credit Card

To create the corporate credit card, do the following:

1. On the *Corporate Cards* (CA202500) form, add a new record.

2. In the Summary area, specify the following settings:

   - **Branch**: *SWEETEQUIP*
   - **Name**: `USD Corporate Card`
   - **Card Number**: `7890`
   - **Cash Account**: *29000 - Corporate Credit Card*

3. On the table toolbar, click **Add Row**, and in the **Employee ID** column, select *EP00000003 - Jon Waite*.

4. Add one more row and select *EP00000004 - Alberto Jimenez* in the **Employee ID** column.

5. Save the created credit card.

You have configured a corporate credit card.

Expense Receipts with Corporate Cards: General Information

Acumatica ERP supports the use of corporate credit cards in expense receipts and expense claims. This helps employees to categorize and track expenses, including the expenses related to a project. For example, while in the field, employees can buy something that they want to charge on a project and pay for it with a corporate card. Employees can also have out-of-pocket expenses that are then reimbursed to these employees.

Learning Objectives

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

- Create an expense receipt for company expenses paid by the corporate credit card
- Process an expense claim for the expense receipt paid with the corporate credit card
- Process personal expenses paid with the corporate credit card
- Process company expenses paid with a personal account
- Review the documents and transactions that are generated on release of the expense claim

Applicable Scenarios

You process an expense receipt with a corporate credit card if you are an employee who incurs expenses for the company and wants to record expenses paid by a company credit card.

You process an expense claim for expense receipts, including receipts paid with corporate credit cards, if you are an accountant who wants to process the recorded expenses.

Payment of Expense Receipts with Corporate Cards

On the *Expense Receipt* (EP301020) form, you create expense receipts for the employee account that is associated with your user account. You can also create expense receipts for any subordinates. In each expense receipt, you specify the key settings as follows:

- In the **Amount** box, you specify the amount paid with a corporate card. You can specify the amount in the card currency or in a foreign currency.

  > ⚠️ If the *Multiple Base Currency* feature is enabled on the *Enable/Disable Features* (CS100000) form, the base currency of the cash account that corresponds to the corporate card must be the same as base currency of the employee. For more information on configuring multiple base currencies, see *Multiple Base Currencies: General Information*.

  In each line with corporate card expenses, you can specify a positive amount to claim expenses, or a negative amount, which means that you should refund these expenses to the corporate card. For more information about processing a refund of company expenses paid with a corporate card, see *Expense Returns to Corporate Cards: General Information*.

- In the **Paid With** box (in the **Expense Details** section of the **Details** tab), you select how the expense receipt has been paid. The following options are available:
  - *Personal Account*: The company expenses that you (the employee) paid with your own funds; the company will need to reimburse this amount to you. This is the default option if your employee account has no active corporate card assigned.
  - *Corporate Card, Company Expense*: The company's expenses that are paid with a corporate card. This is the default option if your employee account has an active corporate card assigned.

    Corporate card expenses cannot be split. That is, on the *Expense Receipt* form, in the **Expense Details** section of the **Details** tab, the **Employee Part** of an expense receipt paid with a corporate card must be *0*.
  - *Corporate Card, Personal Expense*: Your personal expenses that are paid with a corporate card.

- For the lines with the *Corporate Card, Company Expense* or *Corporate Card, Personal Expense* method in the **Paid With** column, you select the corporate card from which the expenses have been paid in the **Corporate Card** box. By default, the system specifies the corporate card in this box as follows:
  - The corporate card used in the employee's most recent expense receipt is selected (if the corporate card is still active in the system and assigned to the employee). The most recent receipt is determined by the receipt's creation date.

- If the corporate card that was used most recently is unavailable—that is, inactive, deleted, or no longer assigned to the employee—the system inserts the employee's only active card or the first active card it finds for the employee. The first corporate card is the first card in the employee's card list; this list is sorted alphabetically by name.
- In the **Ref. Nbr.** box, you enter the reference number that usually matches the number of the original receipt.
- In the **Project/Contract**, **Project Task**, and **Cost Code** box, you enter the contract, or the project budget key, if the incurred expenses are related to a particular project or contract.

Claiming of Expense Receipts Paid with Corporate Cards

On the *Expense Claim* (EP301000) form, you can claim with a single expense claim all of your expense receipts paid with corporate cards. Each expense claim line on the **Details** tab contains a link to an expense receipt. If you create a new expense claim line on the form that does not originate from any expense receipt, on release of the expense claim, the system creates the corresponding expense receipt for that expense claim line and inserts the link into the expense claim.

After you have added expense claim lines, you click **Submit** to assign the expense claim the *Approved* status. Then you click **Release**. The system assigns the expense claim the *Closed* status and creates the corresponding AP documents for the expenses. On release of the AP documents, the system generates a project transaction (if expenses are related to a particular project) and the corresponding GL transaction. On release of this project transaction, the system updates the actual amount in the corresponding project budget line to decrease the expenses recorded to the project budget and returns the refunded amount to the balance of the credit card.

The following table summarizes the types of the documents that are prepared on release of the expense claim, depending on the sign of the amount in the line and the value in the **Paid With** column.

Paid With	Total Line Amount	AP Document Type	Number of Documents
Personal Account	Positive	AP bill	A single document for all expense claim lines of this type
Personal Account	Negative	AP debit adjustment	A single document for all expense claim lines of this type
Corporate Card, Personal Expense	Positive only	AP debit adjustment	A single document for all expense claim lines of this type
Corporate Card, Company Expense	Positive or *0*	Cash purchase	One document or multiple documents, depending on the state of the **Post Summarized Company Expenses by Corporate Card** check box on the **General** tab of the *Time and Expenses Preferences* (EP101000) form
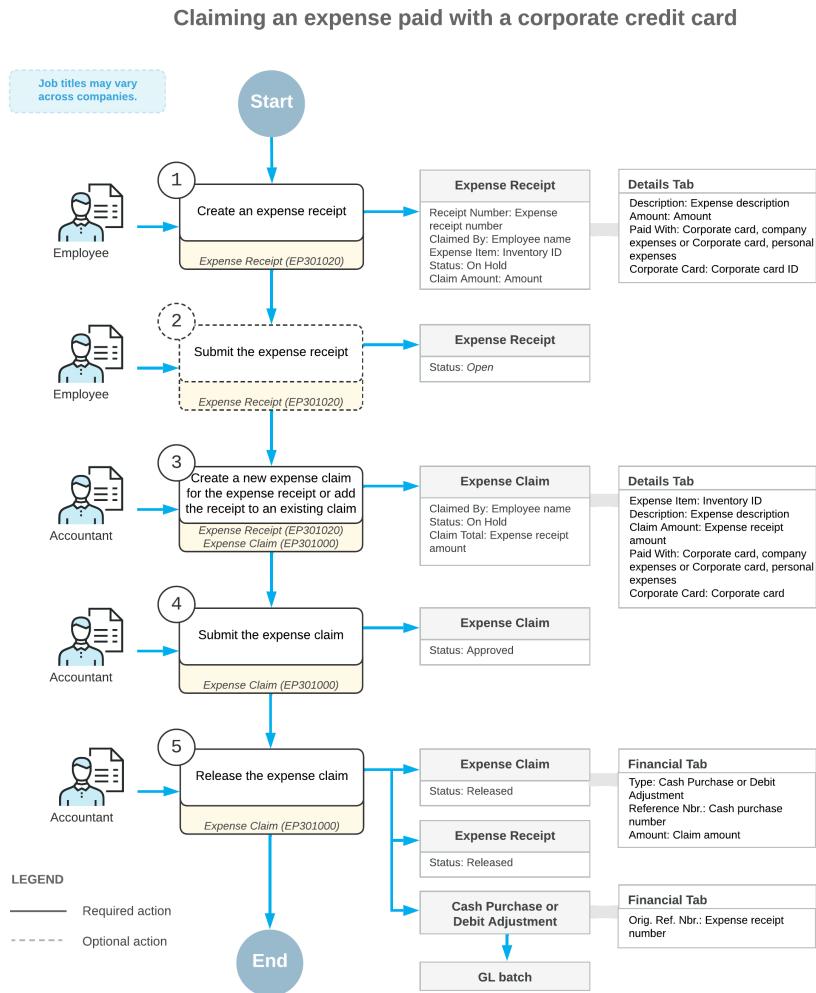
Paid With	Total Line Amount	AP Document Type	Number of Documents
Corporate Card, Company Expense	Negative	Cash return	One document or multiple documents, depending on the state of the **Post Summarized Company Expenses by Corporate Card** check box

For the lines that have the *Corporate Card, Company Expense* option selected in the **Paid With** column on the **Details** tab of the *Expense Claim* (EP301000) form, the system aggregates the AP documents (cash purchases or cash returns) generated on release of the expense claim as follows:

- If the **Post Summarized Company Expenses by Corporate Card** check box is selected on the *Time and Expenses Preferences* form, the system creates a single document for each group of expense claim lines with this **Paid With** option that have the same expense receipt date, receipt reference number, corporate card, and tax calculation mode.
- If the **Post Summarized Company Expenses by Corporate Card** check box is cleared, the system creates a separate AP document for each expense claim line with this **Paid With** option.

Workflow of Claiming Expenses Paid with Corporate Cards

The following diagram illustrates the workflow of an employee claiming an expense paid with a corporate credit card.

Claiming an expense paid with a corporate credit card

Job titles may vary across companies.

Start

1 — Create an expense receipt
Expense Receipt (EP301020)
Employee

Expense Receipt
Receipt Number: Expense receipt number
Claimed By: Employee name
Expense Item: Inventory ID
Status: On Hold
Claim Amount: Amount

Details Tab
Description: Expense description
Amount: Amount
Paid With: Corporate card, company expenses or Corporate card, personal expenses
Corporate Card: Corporate card ID

2 — Submit the expense receipt
Expense Receipt (EP301020)
Employee

Expense Receipt
Status: *Open*

3 — Create a new expense claim for the expense receipt or add the receipt to an existing claim
Expense Receipt (EP301020)
Expense Claim (EP301000)
Accountant

Expense Claim
Claimed By: Employee name
Status: On Hold
Claim Total: Expense receipt amount

Details Tab
Expense Item: Inventory ID
Description: Expense description
Claim Amount: Expense receipt amount
Paid With: Corporate card, company expenses or Corporate card, personal expenses
Corporate Card: Corporate card

4 — Submit the expense claim
Expense Claim (EP301000)
Accountant

Expense Claim
Status: Approved

5 — Release the expense claim
Expense Claim (EP301000)
Accountant

Expense Claim
Status: Released

Financial Tab
Type: Cash Purchase or Debit Adjustment
Reference Nbr.: Cash purchase number
Amount: Claim amount

Expense Receipt
Status: Released

Cash Purchase or Debit Adjustment

Financial Tab
Orig. Ref. Nbr.: Expense receipt number

GL batch

LEGEND
——— Required action
- - - - - Optional action

End

Expense Receipts with Corporate Cards: To Claim Expenses for a Project

This activity will walk you through the process of creating and processing expense receipts with corporate cards.

Story

Suppose that the West BBQ Restaurant customer ordered the installation service for previously bought juicers from the SweetLife Fruits & Jams company. The project accountant of SweetLife created a project to account for the provided services.

Jon Waite, a SweetLife employee, worked in the customer's restaurant installing a juicer on January 29, 2025, and realized that there was not enough electric cable. Jon went to a construction store and bought 20 meters of electric cable for $27, which he paid for with a company corporate card. He also bought a cup of coffee in a cafe near the store and paid $6 for it by using the same corporate credit card. Then Jon took a taxi, for which he paid $10 in cash, to return to SweetLife. The next day, January 30, another SweetLife employee, Alberto Jimenez, went to a meeting with the customer to discuss the project. He took a taxi and paid $25 by using a corporate card.

Acting as Jon Waite, you will enter all related expenses into the system and file a claim for the reimbursement of expenses.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- The *Expense Management* feature has been enabled on the *Enable/Disable Features* (CS100000) form.
- On the *Projects* (PM301000) form, the *WESTBBQ7* project has been created, and the *INSTALL* project task has been created for the project and specified as the default task. The cost budget of the project includes a single line with 12 hours of installation.
- On the *Non-Stock Items* (IN202000) form, the *CABLE*, *MEAL*, and *TAXI* non-stock items with the *Expense* type have been created.
- On the *Employees* (EP203000) form, the accounts for Jon Waite and Alberto Jimenez have been created.

Process Overview

First, you will create an expense receipt for Jon Waite paying for electric cable on the *Expense Receipts* (EP301010) form. You then will create an expense claim, which will also include expenses for the taxi and coffee, on the *Expense Claim* (EP301000) form. As the last step, you will create the second expense receipt, for Alberto Jimenez paying for the taxi, on the *Expense Receipts* form.

System Preparation

To prepare to perform the instructions of the activity, do the following:

1. Sign in to the system as Jon Waite by using the *waite* username and the *123* password.
2. 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 *1/29/2025*. If a different date is displayed, click the Business Date menu button, and select *1/29/2025* from the calendar. For simplicity, in this activity, you will create and process all documents in the system during this business date.

Step 1: Creating the First Expense Receipt

To create an expense receipt to enter the purchase of electric cable, do the following:

1. Open the *Expense Receipts* (EP301010) form.
2. On the form toolbar, click **Add New Record**. The system opens the *Expense Receipt* (EP301020) form.
3. In the Summary area, select *CABLE* in the **Expense Item** box.
4. Make sure that the expense date is *1/29/2025* and *EP00000003 - Jon Waite* is selected in the **Claimed by** box.
5. On the **Details** tab, specify the following settings:
   - **Description**: `Electric cable`
   - **Unit Cost**: `27.00`
   - **Project/Contract**: *WESTBBQ7*
   - **Project Task**: *INSTALL* (inserted automatically)
   - **Cost Code**: *00-000*
   - **Paid With**: *Corporate Card, Company Expense*
   - **Corporate Card**: *000001 - USD Corporate Card* (inserted automatically)
6. Save the receipt, and notice that it has the *Open* status.

Step 2: Processing an Expense Claim for the Expense Receipt

To claim the expense receipt you have created, along with the cost of coffee and a taxi, do the following:

1. While you are still viewing the expense receipt on the *Expense Receipt* (EP301020) form, on the form toolbar, click **Claim**.

   The *Expense Claim* (EP301000) form opens. On the **Details** tab, notice the line for the electric cable.

2. On the table toolbar of the **Details** tab, click **Add Row**, and specify the following settings in the new row (see the screenshot below):

   - **Date**: *1/29/2025*
   - **Expense Item**: *MEAL*
   - **Description**: `Coffee`
   - **Quantity**: `1`
   - **Unit Cost**: `6`
   - **Paid With**: *Corporate Card, Personal Expense*

     Notice that when you select *Corporate Card, Personal Expense* in the **Paid With** column, the system automatically populates the **Project/Contract** column with the non-project code (*X*) and clears the **Project Task**, **Cost Code**, **Customer**, and **Location** columns.

   - **Corporate Card**: *000001 - USD Corporate Card* (inserted automatically)

3. Click **Add Row**, and specify the following settings in the new row:

   - **Date**: *1/29/2025*
   - **Expense Item**: *TAXI*
   - **Description**: `Taxi`
   - **Quantity**: `1`
   - **Unit Cost**: `10`
   - **Project/Contract**: *WESTBBQ7*
   - **Project Task**: *INSTALL* (inserted automatically)
   - **Cost Code**: *00-000*
   - **Paid With**: *Personal Account*

Figure: The expenses to be claimed

4. In the Summary area, make sure that the claim total is $43.

5. Save the expense claim.

6. On the form toolbar, click **Submit**.

   The system assigns the *Approved* status to the claim.

7. On the form toolbar, click **Release**.

   The system assigns the *Released* status to the claim.

In the **Link to AP** table on the **Financial** tab, review the documents that the system has generated for the claim: a $27 cash purchase for the cable, a $6 debit adjustment for the coffee, and a $10 bill for the taxi.

Step 3: Creating the Second Expense Receipt

To create an expense receipt to enter the amount spent on the taxi by Alberto Jimenez, 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 *1/30/2025*.

2. Open the *Expense Receipts* (EP301010) form, and on the form toolbar, click **Add New Record**.

   The system opens the *Expense Receipt* (EP301020) form.

3. In the Summary area, specify the following settings:

   - **Expense Item**: *TAXI*
   - **Claimed by**: *EP00000004 - Alberto Jimenez*

4. On the **Details** tab, specify the following settings:

   - **Description**: `Taxi to the customer's site`
   - **Unit Cost**: `25.00`
   - **Project/Contract**: *WESTBBQ7*
   - **Project Task**: *INSTALL* (inserted by default)
   - **Cost Code**: *00-000*
   - **Paid With**: *Corporate Card, Company Expense*
   - **Corporate Card**: *000001 - USD Corporate Card* (inserted automatically)

5. Save the expense receipt.

6. On the *Projects* (PM301000) form, open the *WESTBBQ7* project.

   On the **Cost Budget** tab, notice that the following lines have been added to the budget when the expense claim that you have processed in this activity has been released. (Alberto Jimenez's expenses on the taxi have not been recorded to the project budget because these expenses have not been claimed yet.)

   - The line with the *CABLE* item has an actual amount of *27.00*
   - The line with the *TAXI* item has an actual amount of *10.00*

You have recorded corporate card expenses to the project budget.

Lesson 11: Configuring Labor Cost Rates

This lesson describes how to create a labor non-stock item that will be used in projects and how to define the labor cost rates to be used for billing projects.

Labor Items: General Information

Among other items your company sells, it may sell the labor of its employees. In Acumatica ERP, you can define a certain type of labor available for sale (that is, a type performed regularly by your company) by creating a labor item.

A labor item is a non-stock item containing information that includes the default price and the sales account to be used for transactions. Labor items are used in projects for recording information on the hourly rates of the applicable employees, the GL accounts used for tracking labor in projects, and the taxes that apply to this labor.

Learning Objectives

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

- Prepare the system for the configuration of labor items
- Create a new labor item
- Assign a labor item to an employee
- Configure labor cost rates for an employee

Applicable Scenarios

You may need to create a labor item in any of the following cases:

- When you are going to track the cost of employees' labor in a particular project
- When you need to sell the same type of labor at different prices
- When you are going to add a new type of expenses to projects

Labor Item Settings

Non-stock items of the *Labor* type are used as a source of general ledger accounts for transactions that the system generates in the process of project billing.

You create labor items and maintain information about their settings by using the *Non-Stock Items* (IN202000) form. On this form, you can enter and maintain a variety of settings for a labor item, including the following:

- The identifier: You assign every labor item a unique identifier (in the **Inventory ID** box of the Summary area) based on the *INVENTORY* segmented key. If you need to change the ID of an existing non-stock item (that is, one that has already been saved), you can click **Change ID** on the More menu of the *Non-Stock Items* form.
- The item type: The item type is selected in the **Type** box of the **General** tab (**Item Defaults** section). When creating a labor item, you select the *Labor* item type.
- The valuation method: When you select the *Labor* type for the item, *Standard Cost* is inserted in the **Cost Based On** box of the **Price/Cost** tab (**Cost Accrual** section).
- Units of measure (UOMs): For each labor item, in the **Unit of Measure** section of the **General** tab, you can select the unit of measure used as the base unit for the item.

> ⚠️ The system must be able to convert the base unit of measure of the labor item into minutes. That is, the conversion rule from a minute to the base unit of measure selected for the labor item must be specified in the table. For more information about how the system selects the unit conversion rules, see *Project Transactions: Update of the Project Budget Structure*.

- General ledger accounts: Each labor item must have the expense account specified on the **GL Accounts** tab; the expense account must be mapped to the appropriate account group. If needed, you can also specify sales and expense accrual accounts.
- Price information: On the **Price/Cost** tab, you can specify settings related to the price and cost of the item, including the default price defined for a labor item (in the **Default Price** box of the **Price Management** section), which is used as the unit rate in the revenue budget lines.

> ⚠️ Make sure that *Purchases* is selected in the **Post Cost to Expenses** box on the **Price/Cost** tab; otherwise, the expenses related to the non-stock item will not be recorded to the cost budget of the applicable project.

To ensure that the system will be able to obtain the required settings from each labor item when an invoice is generated, you need to associate this labor item with the appropriate entity (that is, an employee, a case, a project,

or a contract), which may depend on the type of the billing process that you use. If no labor items are specified for the entities associated with the invoice, the system will not generate the invoice.

Labor Items in Time Cards

You can use time tracking for your activities to facilitate the process of labor tracking and costing. For instance, with time activities, you can bill projects based on the billable time spent on related activities. In Acumatica ERP, to account for work hours and overtime hours spent on projects, employees use time cards. To calculate the cost of labor, the system uses the labor cost rates defined for each employee on the *Labor Rates* (PM209900) form. The cost of overtime labor is calculated based on the employee work hour rates multiplied by the factor specified in the **Multiplier** column of the *Overtime* earning type on the *Earning Types* (EP102000) form. For more information, see *Employee Time Billing: General Information*.

Labor Items: To Configure a Labor Item

This activity will walk you through the process of configuring a labor non-stock item that will then be used for billing employee labor within projects.

Story

Suppose that you, as an implementation manager, are updating the system configuration for the SweetLife Fruits & Jams company. To be able to bill the customers for the provided labor within the projects, you need to create a labor item that will represent the repair service for juicers provided by a particular employee, Eric Killian, for SweetLife customers who have purchased juicers.

Process Overview

You will create a non-stock item representing the repair labor on the *Non-Stock Items* (IN202000) form and specify the item's settings, including the expense account that has been mapped to an appropriate account group. You will also specify the default price for the item. Then on the *Employees* (EP203000) form, you will assign this labor item to the employee who will perform the repair work.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled to support the project accounting functionality.
- On the *Chart of Accounts* (GL202500) form, the *54600 – Repair Expense* account has been defined and mapped to the *MAINTSERV* account group, which has been defined on the *Account Groups* (PM201000) form.
- On the *Posting Classes* (IN206000) form, the *NONSTOCK* posting class has been defined.
- On the *Employees* (EP203000) form, the *EP00000006 – Eric Killian* employee record has been created.

System Preparation

To prepare to perform the instructions of the activity, sign in to the system as system administrator by using the *gibbs* username and the *123* password.

Step 1: Creating the Labor Item

To create the labor item that will be used to represent repair services, perform the following instructions:

1. On the *Non-Stock Items* (IN202000) form, add a new record.

2. In the Summary area, specify the following settings:

   - **Inventory ID**: `JUICERREPAIR`
   - **Description**: `Juicer repair (at the customer's place)`

3. On the **General** tab, specify the following settings:

   - **Type**: *Labor*
   - **Posting Class**: *NONSTOCK*

     Based on the settings of the *NONSTOCK* posting class, the system will use the GL accounts specified for the inventory item.

   - **Tax Category**: *EXEMPT*
   - **Base Unit**: *HOUR*
   - **Sales Unit**: *HOUR*
   - **Purchase Unit**: *HOUR*

4. In the **Default Price** box on the **Price/Cost** tab, enter `80`.

5. On the same tab, make sure *Purchases* is selected in the **Post Cost to Expenses On** box.

6. On the **GL Accounts** tab, specify the following accounts:

   - **Expense Accrual Account**: *11010 (AR Accrual Account)*
   - **Expense Account**: *54600 (Repair Expenses)*
   - **Sales Account**: *40000 (Sales Revenue)*

7. On the form toolbar, click **Save**.

Step 2: Assigning the Labor Item to an Employee

To assign the labor item you have created to the employee who will perform the labor, perform the following instructions:

1. On the *Employees* (EP203000) form, open the *EP00000006 – Eric Killian* employee record.

2. In the **Labor Item** box on the **General** tab, select *JUICERREPAIR*.

3. Save your changes to the employee record.

You have created the labor item to be used for repair service and specified an expense account that is mapped to a particular account group. You also have associated this labor item with the particular employee who will perform this work.

Labor Items: Labor Cost Rates

In Acumatica ERP, you can define labor rates, which are used to determine the cost of employee time spent on a particular project, and bill the customers based on this cost. The following sections explain how the labor cost rates are specified and retrieved in projects.

Creation of Labor Cost Rates

On the *Labor Rates* (PM209900) form, you can define labor cost rates that are specific to particular entities, such as the employee, project, project task, labor item, date, union local, certified job, and workers' compensation code.

When you define a labor cost rate, you specify its type, the rate, and an optional description and external reference number of the rate. Based on the type you select, particular columns become available so you can specify the

particular entity the rate applies to and other relevant details. In the **Type** column of the *Labor Rates* form, you select one of the following options:

- *Labor Item*: If you select this type, in the row, you must also select the labor item and the rate.
- *Employee*: If you select this type, in the row, you must select the employee and the rate; optionally, you can also select a particular labor item to which the rate applies.
- *Project*: If you select this type, in the row, you must select the project and the rate. Optionally, you can select any of the following to which the rate applies: the project task, the employee, and the labor item.
- *Union Wage*: If you select this type, in the row, you must select the applicable union local and labor item.

  You might define a rate of this type if an employee is a member of a local branch of a union; in this case, the union requires the company to pay the dictated union rate, which is usually higher than the prevailing wage rate.
- *Prevailing Wage*: If you select this type, in the row, you must select the project and labor item.

  You might define a rate of this type if a government entity requires the construction companies to pay a non-union employee no less than the dictated prevailing wage rate. The prevailing wage is a government mechanism to equalize the wage rates that are paid by a construction company to non-union workers compared to labor union workers for the same type of work performed for a certified job. (A certified job is a job performed for government, such as a construction project of a municipal building.)

For each labor cost rate, regardless of its type, you specify the effective date. If there are multiple labor cost rates with the same settings, the system uses the rate with the most recent effective date that precedes the current date. You can also create a labor cost rate with the same settings as an existing labor cost rate but with an effective date that is later than the latest effective date of the existing labor cost rate.

Units of Measure in Labor Cost Rates

When you specify the rate for a row with a labor item selected on the *Labor Rates* (PM209900) form, you specify the rate for the base unit of measure (UOM) of the labor item. The base UOM of the labor item should be convertible into minutes so that the system can convert the base UOM to a minute. That is, there should be conversion rules from a minute to the base UOM and from the base UOM to a minute on the *Units of Measure* (CS203500) form.

When you create a labor cost rate for a labor item with a base UOM that is not an hour, make sure that you enter the rate for the base UOM of the labor item on the *Labor Rates* form so that the system calculates the correct amount when a time activity with this labor item is released.

For example, suppose that you have the *TRAINING* labor item, whose base UOM is *UNIT*. According to the conversion rules specified on the *Units of Measure* (CS203500) form, one unit equals four hours. On the *Labor Rates* form, when you add a labor cost rate with an employee and the *TRAINING* labor item, you should specify the rate in the base UOM, which is *UNIT*. When the employee enters a time card on the *Employee Time Cards* (EP305000) form and selects the *TRAINING* labor item in a time activity on the *Activity* (CR306010) form, the time is reported in hours even though the base UOM of the selected item is not an hour. When the time card with the corresponding time activities is released, the system generates a project transaction with the *TRAINING* labor item in the base UOM of the item. If the employee has reported eight hours, the project transaction will contain two *TRAINING* units.

Time Card Population

When you create a time card on the *Employee Time Cards* (EP305000) form, for each line, you select the employee, project, project task, labor item, date, union local, certified job, and worker compensation code.

In a time card, the system automatically populates the **Union Local** column with the union local copied from the settings of the employee specified on the **General Info** tab of the *Employees* (EP203000) form if the employee's union local specified is one of the union locals of the project specified on the **Union Locals** tab of the *Projects* (PM301000) form, or if the project has no union local. Otherwise, the system leaves the column blank.

The system automatically selects the **Certified Job** check box in the time card line if for the corresponding project, the **Certified Job** check box is selected in the **Project Properties** section on the **Summary** tab of the *Projects* form. In a time card, you can override the automatically selected **Certified Job** and **Union Local** settings, if needed.

Retrieval of Labor Cost Rates

For each time card line on the *Employee Time Cards* (EP305000) form, the system retrieves the cost rate from the labor cost rate table on the *Labor Rates* (PM209900) form as follows:

1. Among labor cost rates of the *Project*, *Employee*, and *Labor Item* rate types, the system selects the most specific existing labor cost rate among the defined labor cost rates that matches all the settings specified in the time card line and is effective on the date of the document. The system looks for the following sets of settings that match the time card settings and uses the first set it finds:

   - The *Project* rate type, project, project task, employee, and labor item
   - The *Project* rate type, project, project task, and employee
   - The *Project* rate type, project, project task, and labor item
   - The *Project* rate type, project, and project task
   - The *Project* rate type, project, employee, and labor item
   - The *Project* rate type, project, and employee
   - The *Project* rate type, project, and labor item
   - The *Project* rate type, and project
   - The *Employee* rate type, employee, and labor item
   - The *Employee* rate type, and employee
   - The *Labor Item* rate type, and labor item

2. For the time card line, if the **Certified Job** check box is selected and a **Union Local** is specified, the system selects the *Union Wage* and *Prevailing Wage* rate types that match the settings specified in the time card line. Then the system compares the most specific labor cost rate that has been found in the previous step with the selected labor cost rates of the *Union Wage* and *Prevailing Wage* rate types. Based on the comparison, the system selects the higher labor cost rate.

3. If there are multiple labor cost rates with the same settings, the system uses the rate with the actual effective date corresponding to the date of the time card line in the time zone in which the time card line was reported.

Labor Items: To Define Labor Cost Rates

In the following implementation activity, you will learn how to define labor cost rates.

Story

Suppose that in the SweetLife Fruits & Jams company, the price of the consulting services depends on the qualifications of the consultant who provides the service. Acting as SweetLife's project manager, you need to define the labor cost rates that will become effective on January 1, *2025*, for three of your company's consultants:

- Pam Brawner, a project manager, whose work rate is $48 per hour
- Jon Waite, a senior consultant, whose work rate is $44 per hour
- Alberto Jimenez, a junior consultant, whose work rate is $40 per hour

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- On the *Enable/Disable Features* (CS100000) form, the *Project Accounting* feature has been enabled.

- On the *Non-Stock Items* (IN202000) form, the *CONSULTJR*, *CONSULTSR*, and *CONSULTPM* labor items have been created; on the *Employees* (EP203000) form, these items have been assigned to the *EP00000004 (Alberto Jimenez)*, *EP00000003 (Jon Waite)*, and *EP00000001 (Pam Brawner)* employees, respectively. The base unit of all items is *HOUR*.

Process Overview

You will define labor cost rates that are based on the employee who performed the work on the *Labor Rates* (PM209900) form.

System Preparation

To prepare to perform the instructions of the activity, do the following:

1. Sign in to the system as project accountant by using the *brawner* username and the *123* password.

2. 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 *1/1/2025*. If a different date is displayed, click the Business Date menu button, and select *1/1/2025* on the calendar.

Step: Defining Labor Cost Rates

To define the needed labor cost rates, do the following:

1. On the *Labor Rates* (PM209900) form, to add a new labor cost rate for Alberto Jimenez, click **Add Row** on the table toolbar, and specify the following settings in the row:

   - **Labor Rate Type**: *Employee*
   - **Employee**: *EP00000004 (Alberto Jimenez)*
   - **Labor Item**: *CONSULTJR* (inserted automatically as the labor item associated with the employee)
   - **Rate**: 40
   - **Effective Date**: *1/1/2025* (inserted automatically)

2. To add a labor cost rate for Jon Waite, click **Add Row** on the table toolbar, and specify the following settings in the row:

   - **Labor Rate Type**: *Employee*
   - **Employee**: *EP00000003 (Jon Waite)*
   - **Labor Item**: *CONSULTSR* (inserted automatically as the labor item associated with the employee)
   - **Rate**: 44
   - **Effective Date**: *1/1/2025* (inserted automatically)

3. To add a labor cost rate for Pam Brawner, again click **Add Row** on the table toolbar, and specify the following settings in the row:

   - **Labor Rate Type**: *Employee*
   - **Employee**: *EP00000001 (Pam Brawner)*
   - **Labor Item**: *CONSULTPM* (inserted automatically as the labor item associated with the employee)
   - **Rate**: 48
   - **Effective Date**: *1/1/2025* (inserted automatically)

4. Save your changes to the labor cost rates. The labor cost rates you have defined should look like those shown in the following screenshot.

		Labor Rate Type	Union Local	Project	Project Task	Employee	Employee Name	Labor Item	Description	Type of Employment	Regular Hours per week	Annual Rate	Rate	Currency	External Ref. Nbr	*Effective Date
>		Employee				EP00000001	Pam Brawner	CONSULTPM	Project Manager	Hourly	40.0		45.0000	USD		12/1/2024
		Employee				EP00000035	Jeffrey Vega	TECHNICIAN	Service and repair technician	Hourly	40.0		45.0000	USD		12/1/2024
		Union Wage	NYS					CONSULTJR	Junior Consultant	Hourly			30.0000	USD		1/1/2024
		Union Wage	NYS					CONSULTSR	Senior Consultant	Hourly			45.0000	USD		1/1/2024
		Employee				EP00000004	Alberto Jimenez	CONSULTJR	Junior Consultant	Hourly	40.0		40.0000	USD		1/1/2025
		Employee				EP00000003	Jon Waite	CONSULTSR	Senior Consultant	Hourly	40.0		44.0000	USD		1/1/2025
		Employee				EP00000001	Pam Brawner	CONSULTPM	Project Manager	Hourly	40.0		48.0000	USD		1/1/2025

Figure: The added labor cost rates

You have completed configuring labor cost rates.

Lesson 12: Tracking Employees' Work on Projects

This lesson describes how to track billable hours and employees' work time on projects, and how to bill projects based on this time.

Employee Time Billing: General Information

In Acumatica ERP, you can use the time reporting functionality to give employees the ability to report the time that they spend for the project. During project billing, you can bill customers for this time.

Learning Objectives

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

- Enter a billable time activity related to a project, and log the time spent for the project
- Enter a billable time card related to a project, and log the time spent for the project
- Bill a project for employees' time spent working on it

Applicable Scenarios

You may want to learn more about employee time billing if you are an employee who needs to log work time spent on particular project.

This information is also useful if you are a project accountant, and you need to bill the customer for employee time that was spent for a particular project and logged by using time cards.

Entry of Time Tracking Documents

In Acumatica ERP, employees can report their work time by creating time cards that include separate detail records associated with different projects or project tasks.

A time card, which an employee enters on the *Employee Time Cards* (EP305000) form, is a weekly report on the time an employee has spent on each activity. In each line of a time card, the following information is specified:

- The earning type, which defines whether the reported work should be billed
- The project and project task related to the reported hours

- The labor item assigned to the employee who performed the work
- The time spent on each day of the week for which the time card is prepared

For each time duration reported in the time card, the system creates a time activity linked to the project; the activity is assigned the *Completed* status. You can review the list of time activities related to a project on the **Activities** tab of the *Projects* (PM301000) form.
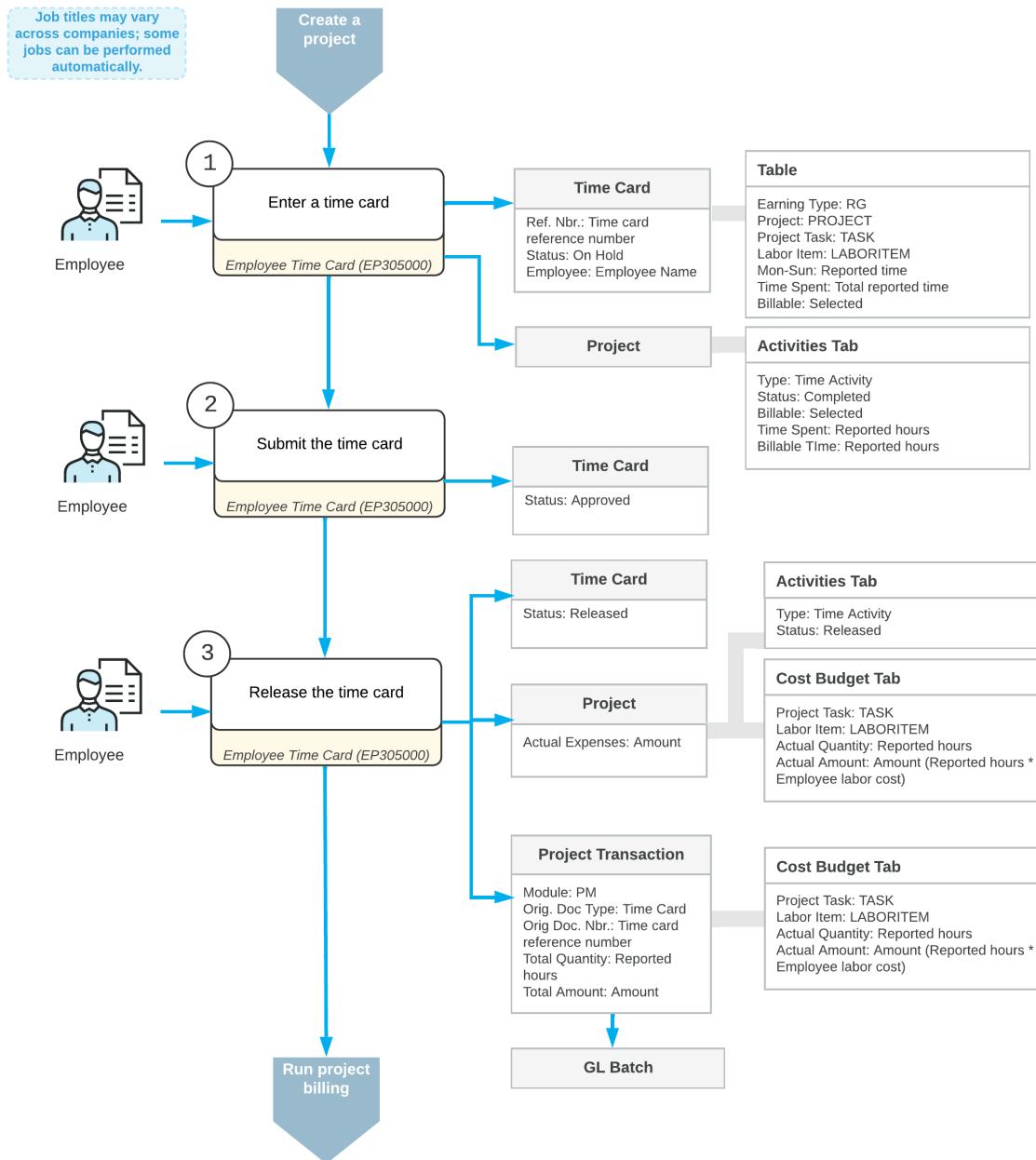
> (i) If time tracking with time activities is configured, on the **Activities** tab, you can add an individual project-related activity to the selected project by clicking **Create Activity** on the table toolbar and selecting the type of activity to be created. Then you enter the details of the time activity on the *Activity* (CR306010) form, which opens. To indicate that the time activity is related to a project, you select the **Track Time and Costs** check box and specify the project-related information in the Summary area of the form. Finally, you complete the activity to submit it. The reported data from the time activity becomes available in the employee time card; the time activity can be released within this time card or individually.

When the time card is released, the related project transaction is created and released, so that the logged employee time is tracked in the related project and can then be billed. Also, on release of the time card, for each day of the week with reported time, a separate time activity is released.

Workflow of the Submission of a Time Card

For a project-related time card, the processing involves the actions and generated documents shown in the following diagram.

Reporting billable time for a project

Job titles may vary across companies; some jobs can be performed automatically.

Create a project

1 Enter a time card
Employee
Employee Time Card (EP305000)

Time Card
Ref. Nbr.: Time card reference number
Status: On Hold
Employee: Employee Name

Table
Earning Type: RG
Project: PROJECT
Project Task: TASK
Labor Item: LABORITEM
Mon-Sun: Reported time
Time Spent: Total reported time
Billable: Selected

Project

Activities Tab
Type: Time Activity
Status: Completed
Billable: Selected
Time Spent: Reported hours
Billable TIme: Reported hours

2 Submit the time card
Employee
Employee Time Card (EP305000)

Time Card
Status: Approved

Time Card
Status: Released

Activities Tab
Type: Time Activity
Status: Released

3 Release the time card
Employee
Employee Time Card (EP305000)

Project
Actual Expenses: Amount

Cost Budget Tab
Project Task: TASK
Labor Item: LABORITEM
Actual Quantity: Reported hours
Actual Amount: Amount (Reported hours * Employee labor cost)

Project Transaction
Module: PM
Orig. Doc Type: Time Card
Orig Doc. Nbr.: Time card reference number
Total Quantity: Reported hours
Total Amount: Amount

Cost Budget Tab
Project Task: TASK
Labor Item: LABORITEM
Actual Quantity: Reported hours
Actual Amount: Amount (Reported hours * Employee labor cost)

GL Batch

Run project billing

Billing Employee Time in Projects

Once time tracking is configured for projects and the system is configured to generate transactions from time activities, the working time reported by employees is tracked in the related projects and can be billed automatically during the project billing procedure.

Each line of a time card is a time activity. On release of a time card with project-related lines, the system processes these lines as follows:

- Generates project transactions for each time activity within a time card that is associated with a project.

This extra step between the release of the time-tracking document and the updating of balances of general ledger accounts makes it possible to define labor costs and bill customers based on these costs and the quantity of working hours reported by employees for the project. The system further processes the project transactions originating from a time card based on the allocation or billing rules assigned to the project tasks of the project to which this transactions relates.

- Generates general ledger transactions (and does not generate project transactions) for each time activity within a time card that is associated with a non-project code.

Employee Time Billing: Process Activity

This activity will walk you through the process of billing employee time spent on a particular project.

Story

Suppose that Lake Cafe has requested 40 hours of training on operating juicers that were previously purchased from and installed by the SweetLife Fruits & Jams company. Jon Waite, SweetLife's senior consultant, has provided 16 hours of training (three hours on Monday, January 27, 2025; five hours on Tuesday, January 28; and eight hours on Thursday, January 30).

Acting as SweetLife's project accountant, Pam Brawner, you need to create a project to account for the provided services. Then acting as Jon Waite, you need to enter a time card to log the work related to the project. Finally, again acting as Pam Brawner, you need to bill the project and review the invoice prepared for the customer.

Configuration Overview

In the *U100* dataset, the following tasks have been performed to support this activity:

- The *Project Accounting* feature has been enabled on the *Enable/Disable Features* (CS100000) form.
- The *54100 (Project Labor Expense)* account is mapped to the *LABOR* expense account group, which has been defined on the *Account Groups* (PM201000) form.
- On the *Billing Rules* (PM207000) form, the *TM* billing rule has been created, and a step for billing project transactions associated with the *LABOR* account group has been added to the rule.
- On the *Customers* (AR303000) form, the *LAKECAFE (Lake Cafe)* customer has been created.
- On the *Projects* (PM301000) form, the *TRAINCAF* project has been configured.

Process Overview

You will create and release a time card on the *Employee Time Cards* (EP406000) form. You will review the project transaction generated based on the time card on the *Project Transactions* (PM304000) form. Next, you will bill the project on the *Projects* (PM301000) form, and release both the prepared pro forma invoice on the *Pro Forma Invoices* (PM307000) form and the AR invoice on the *Invoices and Memos* (AR301000) form. Finally, on the *Projects* form, you will make sure that the project cost and revenue budget have been updated with the billed employee time.

System Preparation

To prepare to perform the instructions of this activity, do the following:

1. Sign in to the system as Jon Waite by using the *waite* username and the *123* password.

2. In the info area, in the upper-right corner of the top pane of the Acumatica ERP screen, click the Business Date menu button, and select *1/30/2025* on the calendar.

Step 1: Entering an Employee Time Card

In this step, you will enter Jon Waite's working hours for the project by creating an employee time card as follows:

1. On the form toolbar of the *Employee Time Cards* (EP406000) form, click **Add New Timecard** to create a new time card. The system opens the *Employee Time Cards* (EP305000) form with the new time card created for the employee who is currently signed in (Jon Waite).

2. In the Summary area, make sure that *2025-05 (01/26 - 02/01)* is specified in the **Week** box. This is the work week during which the work for the project has been performed.

3. On the **Summary** tab, add a row, and specify the following settings:

   - **Earning Type**: *RG* (inserted automatically)
   - **Project**: *TRAINCAF*
   - **Project Task**: *TRAINING* (inserted automatically)
   - **Cost Code**: *00-000*
   - **Labor Item**: *CONSULTSR* (inserted automatically)
   - **Mon**: `03:00`
   - **Tue**: `05:00`
   - **Thu**: `08:00`
   - **Time Spent**: *16:00* (calculated and inserted automatically)

     When you enter hours in the columns representing the days of the week for any row, the system calculates the **Time Spent** in the Summary area as the sum of all these columns.

   - **Billable**: Selected (selected automatically based on the settings of the selected earning type)
   - **Description**: `Training provided by senior consultant`
   - **Approval Status**: *Not Required* (inserted automatically)

4. Save the time card.

5. On the form toolbar, click **Submit** to submit the time card. The status of the time card is changed to *Approved*.

6. On the form toolbar, click **Release** to release the time card; its status is changed to *Released*.

7. On the form toolbar, click **View Transactions**. On the *Project Transactions* (PM304000) form, the system opens the project transaction that has been generated based on the released time card. Notice that the system has created a separate project transaction line for each time activity within the time card. The total billable quantity of the transaction is 16, which is the quantity of reported hours, and the total amount is calculated based on the billable quantity and employee labor cost as follows:

   `16.00 * 44.00 = 704.00`

8. Sign out of the system.

Step 2: Billing the Project

To review the cost budget of the project and bill the project on behalf of the project accountant, do the following:

1. Sign in to the system as Pam Brawner by using the *brawner* username and the *123* password.

2. In the info area, in the upper-right corner of the top pane of the Acumatica ERP screen, click the Business Date menu button, and select *2/5/2025* on the calendar.

3. On the *Projects* (PM301000) form, open the *TRAINCAF* project.

   On the **Cost Budget** tab, notice that the system has updated the actual quantity and amount with the data of the project transaction that was generated on release of the time card, as shown in the screenshot below.

Figure: The cost budget updated based on the released time card

4. On the form toolbar, click **Run Billing**. The system creates a pro forma invoice and opens it on the *Pro Forma Invoices* (PM307000) form.

   On the **Time and Material** tab of this form, notice that based on the settings of the step of the *TM* billing rule that processes the project transactions associated with the *LABOR* account group, the invoiced amount for each line has been calculated as the amount of the related project transaction line (that is, the cost of the provided employee labor) multiplied by 1.25. The total invoiced amount is $880 ($704.00 * 1.25).

5. On the form toolbar, click **Remove Hold** to assign the pro forma invoice the *Open* status, and then click **Release** to release the pro forma invoice.

6. On the **Financial** tab, click the **AR Ref. Nbr.** link to open the accounts receivable invoice that has been created.

7. On the form toolbar of the *Invoices and Memos* (AR301000) form that opens, click **Remove Hold** to assign the invoice the *Balanced* status, and then click **Release** to release the accounts receivable invoice.

8. On the *Projects* form, open the *TRAINCAF* project, and in the only line on the **Revenue Budget** tab, make sure that the **Actual Amount** is now $880.

You have billed the project for the employee labor.

Additional Materials

This part provides supplemental information related to the processes and examples in the course.

Appendix 1: Two-Tier Change Management

This appendix provides additional materials for the lessons of Part 1.

Two-Tier Change Management: Related Report and Forms

In the following sections, you can find details about the reports and forms you may want to review to gather information about change requests.

Reviewing Change Requests by Project

You can review the list of change requests related to a particular project on the **Change Requests** tab of the *Projects* (PM301000) form.

Reviewing Change Requests by Change Order

You can review the list of change requests related to a particular change order on the **Change Requests** tab of the *Change Orders* (PM308000) form.

Printing of a Change Request

You can print a change request with any status by clicking **Print** on the toolbar of the *Change Requests* (PM308500) form. The system opens the printable form of the change request, which is project-specific and specified for the *CHANGE REQUEST* mailing of the project on the **Mailing & Printing** tab of the *Projects* (PM301000) form. By default, the generated report is the *Change Request* (PM643500) report, which supports the printing of estimation lines of the change request, header-level and line-level notes, and the detailed description of the change request. You can review the change request and print it.

Appendix 2: Budgets

This appendix provides additional materials for the lessons of Part 2.

Overhead in the Project Budget: Generated Transactions

When you allocate projects, the system creates allocation transactions based on the settings of the allocation rules associated with the project tasks. Depending on the settings of the allocation rules and project tasks, the system can also create reversing allocation transactions. These transactions are described in the following sections.

Allocation Transactions Generated on the Allocation of a Project

When a project is allocated, the system generates a batch of allocation transactions shown in the table below. The system assigns the *Allocation for <Project ID>* description to the generated batch.

The system uses the following account groups as the source accounts in the batch it creates:

- The debit account group, which is specified in the **Account Group** box on the **Allocation Settings** tab (**Debit Transaction** section) of the *Allocation Rules* (PM207500) form.
- The credit account group, which is specified in the **Account Group** box on the **Allocation Settings** tab (**Credit Transaction** section) of the *Allocation Rules* form.

Debit Account Group	Credit Account Group	Source of Account	Orig. Doc Type
Debit account group	Empty	Allocation rule	*Allocation*

You can review the created allocation transactions on the *Project Transaction Details* (PM401000) form. In the Selection area of this form, you select the project in the **Project** box. In the table, the allocation transactions have the *Allocation* type in the **Orig. Doc. Type** column. You can review only allocation transactions on the **Allocation Transactions** tab.

Overhead in the Project Budget: Related Reports and Forms

In the following sections, you can find details about the reports and forms you may want to review to gather information related to the allocation process performed for a project.

Reviewing Allocation Transactions

You can review the list of all the corresponding allocation transactions of a project, including reversing allocation transactions, on the *Project Transaction Details* (PM401000) form. In the Selection area of this form, you select the project, as well as the project task, account group, and inventory item to narrow the listed project transactions. You can review only allocation transactions on the **Allocation Transactions** tab. If the *Allocation* is in the **Orig. Doc. Type** column of the table, the transaction in the line is an allocation transaction.

> The project transactions that have already been used as a source of allocation transactions have the check box selected in the **Allocated** column.

Printing Allocation Transactions

You can prepare the printable list of project transactions related to a particular project, including allocation transactions and reversing allocation transactions, by using the *Project Transactions* (PM633000) report.

> The report shows the project transactions that the signed-in user has access rights to view.

Reviewing Project Balances

You can review the project budget broken down by account group on the **Balances** tab of the *Projects* (PM301000) form. To review the corresponding project transactions of an account group, including allocation transactions and reversing allocation transactions, you click the line with this account group; then on the table toolbar, you click **View Transactions**, and the system opens the *Project Transaction Details* (PM401000) form.

Overhead in the Project Budget: Mass-Processing of Documents

This topic explains how to allocate multiple projects, and how the system generates, changes, or works with projects as a result of the mass processing.

Mass-Allocating Projects

You can initiate allocating for multiple projects on the *Run Allocations by Projects* (PM502500) form; this allocation entails the creation of allocation transactions. On this form, you select the unlabeled check boxes in the rows of the projects to be processed in the table, and you click **Allocate** on the form toolbar. The system initiates allocation for the selected projects. Allocation transactions will be created for only those projects that have tasks with an associated allocation rule.

To initiate processing for all the projects listed in the table of the *Run Allocations by Projects* form, you click **Allocate All** on the form toolbar. The system initiates allocating for all the projects listed in the table.

Mass-Allocating Project Tasks

You can initiate allocating for multiple project tasks on the *Run Allocations by Tasks* (PM502000) form; this allocation entails the creation of allocation transactions. On this form, which displays only those project tasks that have an associated allocation rule, you select the unlabeled check boxes in the rows of the project tasks to be processed in the table, and you click **Allocate** on the form toolbar. The system initiates allocation for the selected project tasks.

To initiate processing for all the project tasks listed in the table of the *Run Allocations by Tasks* form, you click **Allocate All** on the form toolbar. The system initiates allocation for all the project tasks listed in the table.

Project Budget Forecasts: Related Reports and Inquiries

In the following sections, you can find details about the reports and inquiry forms you may want to review to gather information about project budget forecasts.

Navigating to the Last Modified Revision of the Budget Forecast

You can navigate to the last modified revision of the budget forecast of the project by clicking **Project Budget Forecast** on the More menu of the *Projects* (PM301000) form. The system opens the last modified revision of the project budget forecast on the *Project Budget Forecast* (PM209600) form. If the project has no budget forecast, a new budget forecast revision is created for the project.

Printing of a Budget Forecast Revision

You can print a budget forecast revision by clicking **Print** on the More menu of the *Project Budget Forecast* (PM209600) form. The system opens the printable form of the budget forecast on the *Project Budget Forecast by Month* (PJ629600) form.

Appendix 3: Corrections and Adjustments

This appendix provides additional materials for the lessons of Part 3.

Time and Material Billing: Generated Transactions

The following sections describe the transactions that are related to time and material billing.

Transactions Related to Time and Material Billing

The release of a pro forma invoice does not generate general ledger transactions or project transactions directly. When you release the pro forma invoice, the system creates a corresponding accounts receivable invoice with all the information copied from the pro forma invoice. On release of the accounts receivable invoice, the system generates the general ledger transactions and project transactions. For more information about these transactions, see *Pro Forma Invoices: Generated Transactions*.

Project Transactions Generated for an Unbilled Remainder

If an amount has been postponed in a pro forma invoice and the corresponding accounts receivable invoice (which contains the line from which this postponed amount originates) is released, the system generates the project transaction shown in the following table.

Billable	Billed	Amount	Orig. Doc. Type	Orig. Doc. Nbr.
Selected	Cleared	Postponed amount	*Unbilled Remainder*	The AR invoice in which the amount was postponed

The main attributes of the created transaction—such as the project, project task, and inventory item—are the same as those of the original project transaction from which this unbilled remainder originates. The date and financial period of the unbilled remainder transaction is the date of the AR invoice on release of which this unbilled remainder transaction was created.

The system uses the following accounts as the debit and credit accounts in the project transaction it creates:

- If the project transaction to which the unbilled remainder relates was not posted to the general ledger, the system copies the debit and credit accounts (the specified accounts or empty values) of the corresponding project transaction from which the unbilled remainder originates.

- If the project transaction to which the unbilled remainder relates was posted to the general ledger, the system copies the accounts that are specified in the **GL Settings for Unbilled Remainders** section of the **General** tab of the *Projects Preferences* (PM101000) form. If no accounts are specified in the **GL Settings for Unbilled Remainders** section, the system copies the debit and credit accounts of the corresponding project transaction from which the unbilled remainder originates. In the line, the system also specifies the account group that is mapped to the debit account.

    On release of the project transaction generated for the unbilled remainder, the system also generates a batch of general ledger transactions. For details, see *Project Transactions: Generated Transactions*.

When the accounts receivable invoice that contains the unbilled remainder is released, the system generates the reversing project transaction for the unbilled remainder that is shown in the following table.

Billable	Amount	Orig. Doc. Type	Orig. Doc. Nbr.
Cleared	–(Postponed amount)	*Unbilled Remainder Reversal*	The AR invoice in which the postponed amount was billed

The main attributes of the created transaction—such as the project, project task, inventory item, account group, debit account, and credit account—are the same as those of the original project transaction of the unbilled remainder. The date and financial period are copied from the AR document that has caused the reversal of the unbilled remainder transaction (either credit memo that reverses the original AR invoice, or the AR invoice prepared for the unbilled remainder).

You can review the created transactions on the *Project Transaction Details* (PM401000) form. In the Selection area of this form, you select the project in the **Project** box. In the table, you can find the project transactions by the original document type in the **Orig. Doc. Type** column.

Project Invoice Correction: Reversing AR Documents

In Acumatica ERP, the amount of a released accounts receivable invoice cannot be changed directly in the released document. If you have found out that you have undercharged or overcharged the customer, you first need to reverse the accounts receivable invoice to correct the customer balance.

Reversal of AR Invoice

You reverse an account receivable invoice by clicking **Reverse** on the More menu of the *Invoices and Memos* (AR301000) form. When you reverse a released accounts receivable invoice that was created based on a project transaction, the system creates the credit memo in the same amount. When you release this reversing credit memo, the system automatically creates project transactions that clear the project revenue budget, adjust the customer balance, and make the amount billable again.

> ⚠️ Project transactions generated on release of the reversing credit memos are excluded from further allocations.

After you have reversed the invoice, you can run billing procedure for the project again and make changes to the newly created accounts receivable invoice.

Generated Project Transactions

As a result of reversal of the accounts receivable invoice that was created during billing of a project, the system generates the following project transactions:

- The project transaction that have *PM* in the **Module** box in the Summary area on the *Project Transactions* (PM304000) form. This transaction originated from credit memo and includes the following lines:
  - The line with non-billable reversing project transaction. This line has the amount opposite to the amount of the original project transaction and the same expense account group. That is, this project transaction line reverses the impact of the original project transaction.

    > ⚠️ The system reverses only the project transactions that have been billed with the invoice being reversed. If you have processed any additional allocations for the original cost transaction, the system does not reverse them automatically. You need to reverse such allocation transactions manually by opening them on the *Project Transactions* form and clicking **Reverse Allocation** on the form toolbar.

  - The line with billable project transaction, which is the copy of the original project transaction with the same quantity and amount. This project transaction is ready for billing.

  The date and the financial period in both lines are copied from the original project transaction if the financial period is not locked or closed. If the financial period of the original transaction is locked or closed, the financial period of the created transactions is copied from the credit memo.

- The non-billable project transaction that have *AR* in the **Module** box in the Summary area on the *Project Transactions* (PM304000) form. This line has the amount opposite to the amount of the project transaction that was generated on release of the AR invoice and the same revenue account group.

  This transaction reverses the impact of the AR invoice to the project budget. The date and the financial period of this project transaction are the date and period of reversal, that is the system copies these values from the credit memo.

  Notice that after reversal of the AR invoice, the original project transaction remains billed.

Appendix 4: Billing Rates and WIP Costs

This appendix provides additional materials for the lessons of Part 4.

WIP Labor Costs in Cost-Plus Projects: Generated Transactions

When you allocate projects, the system creates allocation transactions based on the settings of the allocation rules associated with the project tasks. Depending on the settings of the allocation rules and project tasks, the system also can create reversing allocation transactions. These transactions are described in the following sections.

Allocation Transactions Generated on Allocation of a Project

When a project is allocated, the system generates a batch of the allocation transactions shown in the table below. The system assigns the *Allocation for <Project ID>* description to the generated batch.

The system uses the following accounts as the source accounts in the batch it creates:

- The debit account, which is specified in the **Account Origin** box on the **Allocation Settings** tab (**Debit Transaction** section) of the *Allocation Rules* (PM207500) form
- The credit account, which is specified in the **Account Origin** box on the **Allocation Settings** tab (**Credit Transaction** section) of the *Allocation Rules* form

Debit Account	Credit Account	Source of Account	Orig. Doc Type	Amount
Debit account	Credit account	Allocation rule	*Allocation*	Amount

You can review the created allocation transactions on the *Project Transaction Details* (PM401000) form. In the Selection area of this form, you select the project in the **Project** box. You can review allocation transactions in the table on the **Allocation Transactions** tab.

Reversing Allocation Transactions Generated on Billing of a Cost-Plus Project

When a cost-plus project is billed with a time and material billing rule, the system generates a batch of reversing allocation transactions shown in the table below, which prevents the allocation transactions used for billing from affecting the project balance. Reversing transactions copy original allocation transactions and reverse the sign of the amount.

The system assigns one of the following descriptions to the reversing batch, depending on when the reversing batch is created according to the option selected in the **Reverse Allocation** box on the **Allocation Settings** tab (**Transaction Reversal** section) of the *Allocation Rules* (PM207500) form:

- *Allocation Reversal on AR Invoice Release*: The batch is created with the *Released* status on the release of the corresponding accounts receivable document based on the *On AR Invoice Release* option of the allocation rule.

- *Allocation Reversal on AR Invoice Generation*: The batch is created on the creation of the corresponding accounts receivable document based on the *On AR Invoice Generation* option of the allocation rule.

  If the accounts receivable document is created with the *Balanced* status, the reversing batch is also created with the *Balanced* status. The reversing batch is automatically released or deleted when the corresponding accounts receivable document is released or deleted, respectively.

Debit Account	Credit Account	Source of Account	Orig. Doc Type	Amount
Debit account	Credit account	Allocation transaction	*Allocation Reversal*	–(Amount)

You can review the created allocation transactions on the *Project Transaction Details* (PM401000) form. In the Selection area of this form, you select the project in the **Project** box. In the table, you can find the allocation transactions, which have the *Allocation Reversal* type in the **Orig. Doc. Type** column. You can review only allocation transactions on the **Allocation Transactions** tab.

WIP Labor Costs in Cost-Plus Projects: Related Reports and Forms

In the following sections, you can find details about the reports and forms you may want to review to gather information related to the allocation process performed for a project.

Reviewing Allocation Transactions

You can review the list of all the corresponding allocation transactions of a project, including reversing allocation transactions, on the *Project Transaction Details* (PM401000) form. In the Selection area of this form, you select the project, as well as the project task, account group, and inventory item to narrow the listed project transactions. You can review only allocation transactions on the **Allocation Transactions** tab. The *Allocation* type in the **Orig. Doc. Type** column corresponds to allocation transactions. The *Allocation Reversal* type in the **Orig. Doc. Type** column corresponds to reversing allocation transactions.

> (i) The project transactions that have already been used as a source of allocation transactions have the check box selected in the **Allocated** column.

Printing Allocation Transactions

You can prepare the printable list of project transactions related to a particular project, including allocation transactions and reversing allocation transactions, by using the *Project Transactions* (PM633000) report.

> ⚠ The report shows the project transactions that the signed-in user has access rights to view.

Reviewing Project Balances

You can review the project budget broken down by account group on the **Balances** tab of the *Projects* (PM301000) form. To review the corresponding project transactions of an account group, including allocation transactions and reversing allocation transactions, you click the line with this account group; then on the table toolbar, you click **View Transactions**, and the system opens the *Project Transaction Details* (PM401000) form.

WIP Labor Costs in Cost-Plus Projects: Mass-Processing of Documents

This topic explains how to allocate multiple projects, and how the system generates, changes, or works with projects as a result of the mass processing.

Mass-Allocating Projects

You can initiate allocating for multiple projects on the *Run Allocations by Projects* (PM502500) form; this allocation entails the creation of allocation transactions. On this form, you select the unlabeled check boxes in the rows of the projects to be processed in the table, and you click **Allocate** on the form toolbar. The system initiates allocation for the selected projects. Allocation transactions will be created for only those projects that have tasks with an associated allocation rule.

To initiate processing for all the projects listed in the table of the *Run Allocations by Projects* form, you click **Allocate All** on the form toolbar. The system initiates allocating for all the projects listed in the table.

Mass-Allocating Project Tasks

You can initiate allocating for multiple project tasks on the *Run Allocations by Tasks* (PM502000) form; this allocation entails the creation of allocation transactions. On this form, which displays only those project tasks that have an associated allocation rule, you select the unlabeled check boxes in the rows of the project tasks to be processed in the table, and you click **Allocate** on the form toolbar. The system initiates allocation for the selected project tasks.

To initiate processing for all the project tasks listed in the table of the *Run Allocations by Tasks* form, you click **Allocate All** on the form toolbar. The system initiates allocation for all the project tasks listed in the table.

Billing Rates: Rate Selection Rules

When a project transaction is billed or an allocation is run, the system finds the applicable rate—that is, the value of the *@Rate* parameter specified in the billing rule formula. This selection is based on the combination of the rate type assigned to the current step of a billing rule (or allocation rule) and the rate table that is assigned to the project task to which the billed or allocated transaction corresponds.

Each combination of rate table code, rate type, and rate code includes one rate sequence or multiple rate sequences, each of which defines billing rates based on a set of factors. The numeric identifiers of the sequences in the table define the order in which the system will search these sequences to find the applicable rate during the project billing or allocation process.
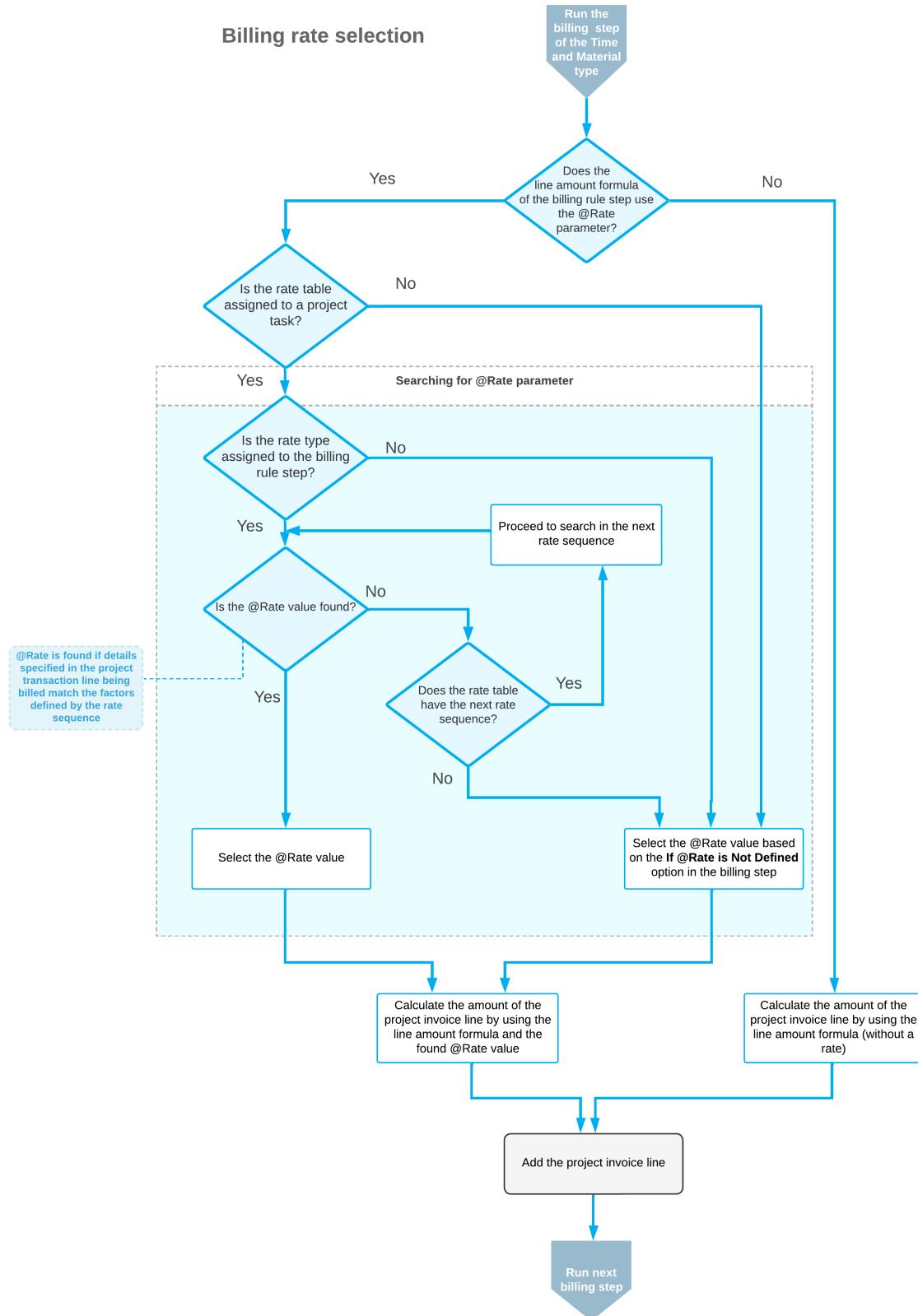
Starting with the first sequence defined in the table on the *Rate Lookup Rules* (PM205000) form, the system compares the settings specified in the project transaction to the factors defined by the rate sequence. If all the settings match, the system stops the search and uses the rate it has found as the value of the *@Rate* parameter in the formula. If any factor does not match, the system continues searching for the applicable billing rate in the next rate sequence until an applicable rate is found.

The system may not find an applicable rate in all sequences defined in the system for the combination of rate table code, rate type, and rate code. In this case, the system performs the action determined by the option selected in the **If @Rate Is Not Defined** box on the *Billing Rules* (PM207000) or *Allocation Rules* (PM207500) form for the step being performed. The system can do one of the following:

- Set the *@Rate* value to 0
- Set the *@Rate* value to 1
- Skip billing or allocating for the current project transaction

- Throw an error and stops the billing or allocation process

The following diagram shows how the system selects the value of the *@Rate* parameter if the account group specified in the project transaction is the same as the account group of the billing rule step.

Billing rate selection

Run the billing step of the Time and Material type

Does the line amount formula of the billing rule step use the @Rate parameter?

Yes — No

Is the rate table assigned to a project task?

No

Yes

Searching for @Rate parameter

Is the rate type assigned to the billing rule step?

No

Yes

Proceed to search in the next rate sequence

Is the @Rate value found?

No

@Rate is found if details specified in the project transaction line being billed match the factors defined by the rate sequence

Yes

Does the rate table have the next rate sequence?

Yes

No

Select the @Rate value

Select the @Rate value based on the **If @Rate is Not Defined** option in the billing step

Calculate the amount of the project invoice line by using the line amount formula and the found @Rate value

Calculate the amount of the project invoice line by using the line amount formula (without a rate)

Add the project invoice line

Run next billing step

Appendix 5: Time and Expenses

This appendix provides additional materials for the lessons of Part 5.

Expense Receipts with Corporate Cards: Bank Reconciliation for a Corporate Card

You can maintain internal control over corporate credit cards by performing regular reconciliations of the cash account configured for corporate cards. Generally, the goal of reconciliation is to find discrepancies between account balances tracked by different means, locate any errors, and make needed corrections or adjustments. Reconciliation is usually done at the end of each period or more frequently. For more information on the reconciliation process, see *Bank Reconciliation: General Information*.

Learning Objectives

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

- Upload a bank statement to the system
- Reconcile a bank statement for the corporate credit card
- Create and release a bill for the bank

Importing of Bank Transactions

On the *Import Bank Transactions* (CA306500) form, you upload bank statement records for the liability cash account of corporate cards. If a bank statement record contains the corporate card number in text format, this number is shown in the **Card Number** column on the form. A single bank statement may contain the transactions of all the corporate cards associated with the same cash account. For more information about importing bank transactions, see *Bank Reconciliation: Uploading and Processing of Bank Transactions* and *Importing Transactions*.

Processing of Imported Bank Transactions

On the *Process Bank Transactions* (CA306000) form, for the selected liability cash account configured for corporate cards, you match an uploaded bank statement record to an existing payment, AP bill, or expense receipt, as well as create a cash transaction if such a transaction has not been found in the system. For details about matching bank transactions, see *Processing Imported Transactions*.

When you click **Auto-Match** on the form toolbar, the system uses the available information about imported transactions for calculating the relevance rate, which is a measure of how closely a document matches the selected transaction and for searching for matching documents with the following priority:

1. The system searches payments and invoices as matching candidates by using the following settings in the **Weights for Relevance Calculation** section of the **Transaction Match Settings** dialog box: **Ref. Nbr. Weight**, **Doc. Date Weight**, and **Doc. Payee Weight**. For more information about the matching process and the relevance calculation, see *Transaction Matching Settings*.

2. If no payment or invoice is found, the system searches expense receipts for matching candidates by using the following settings in the **Weights for Relevance Calculation** and **Expense Receipt Matching** sections of the **Transaction Match Settings** dialog box: **Ref. Nbr. Weight**, **Doc. Date Weight**, and **Amount Weight**.

After the system has matched imported bank transactions on the *Process Bank Transactions* form, for a bank transaction selected in the left pane, in the right pane, the system shows the list of matching documents it has found. The documents are shown on the followings tabs of the form:

- Payments are shown on the **Match to Payments** tab.

- AP documents (bills, debit adjustments, cash purchases,and cash returns) are shown on the **Match to Invoices** tab.
- A cash transaction can be created for the bank transaction on the **Create Payment** tab.
- Expense receipts (both with positive and negative amounts) that have *Open* or *Pending Approval* status are shown on the **Match to Expense Receipts** tab, which is displayed on the form only for the cash accounts that are used for corporate cards.

The system selects the **Matched** check box for the best candidate among all the found candidates by using the following rules:

1. The best match is the document with the highest match relevance that is greater than 0.75.
2. If multiple documents have the same highest match relevance, the system selects the first document it finds by using the following priority: a payment, an AP document, and an expense receipt.
3. If no documents have a match relevance greater than 0.75, the best match is a document whose match relevance is greater than or equal to 0.2.

   For example, if the match relevance of one document is 0.25 and the match relevance of another document is 0.5, the system selects the document with a match relevance of 0.5.

   If more than one document satisfies this condition, the system selects the first document it finds by using the following priority: a payment, an AP document, and an expense receipt.
4. If only one document is found, it is the best match if its match relevance is greater than or equal to 0.2.

If none of the conditions above has been met, there is no best match for the transaction of the bank statement.

When the imported transactions are matched, you click **Process** on the form toolbar of the *Process Bank Transactions* form to complete reconciliation. An expense receipt and a corresponding bank statement record that have been matched and processed are no longer displayed on the form.

Limitations of the Matching Process

The matching process on the *Process Bank Transactions* (CA306000) form has the following limitations:

- If you match a bank transaction to an expense receipt in a different currency with an amount that is within the amount difference threshold, release the corresponding claim, and the cash transaction is posted, and then you unmatch the bank transaction from the expense receipt, the cash transaction will not appear as a candidate for matching because the amounts differ.
- If a cash transaction originates from an expense claim, the cash transaction date in the system is the same as the expense claim date. There can be a significant delay between the date of the bank statement transaction and the date of the cash transaction in the system, which should be considered in the filter of dates in the **Transaction Match Settings** dialog box.

Calculation of the Relevance Rate for Expense Receipts

Unlike the relevance calculation for payments and invoices, for calculating the relevance rate for expense receipts on the *Process Bank Transactions* (CA306000) form, the system includes in the calculation the amount weight instead of the payee weight, by using the following formula:

```
AmountDistance() = NORMDIST(x, 0, DifferenceAmount, probability mass
function) / NORMDIST(0, 0, DifferenceAmount, probability mass function)

x = ABS(BankTransactionAmount - ExpenseCardCurrencyAmount)

DifferenceAmount = Amount Difference Threshold (%) * BankTransactionAmount /
100
```

Payments and invoices are selected as matching candidates by the exact amount of a bank transaction, which is consistent to the logic of bank transaction matching for regular bank accounts. The **Amount Difference Threshold (%)** is not applied for matching of payments and invoices and applied for matching of expense receipts that are

recorded with the expense currency that differs from the card currency and therefore a difference between the amount of a bank transaction and the amount of an expense receipt may take place.

The `AmountDistance()` formula returns a floating number that ranges in value from *0* to *1*.

The system calculates the relevance rate for an expense receipt by using the following formula:

```
Match Relevance = DocDateWeight*DateDistance() + RefNbrWeight*RefNbrDistance()
+ AmountWeight*AmountDistance()
```

Expense Receipts with Corporate Cards: Generated Transactions

The release of an expense claim does not generate general ledger transactions or project transactions directly. When you release the expense claim, the system creates the corresponding accounts payable documents. On release of the accounts payable documents, the system generates the general ledger transactions. For the project-related lines of the AP documents, the system also generates project transactions.

GL Transactions Generated on Release of a Cash Purchase

When a cash purchase related to an expense claim is released, the system generates a batch of the general ledger transactions shown in the table below.

Account	Source of Account	Debit	Credit
The expense account	The inventory item	Amount	0.00
The liability account	The cash account of the corporate card	0.00	Amount

You can view the details of the batch associated with the release of a cash purchase by clicking the link in the **Batch Nbr.** box on the **Financial** tab (**GL Link** section) of the *Cash Purchases* (AP304000) form. The system opens the batch on the *Journal Transactions* (GL301000) form.

If a cash purchase line is related to a project, on release of the cash purchase, the system generates a batch of the general ledger transactions shown in the table below.

Account	Source of Account	Project Budget Key	Debit	Credit
The expense account	The inventory item	The project, project task, and cost code in the cash purchase line	Amount	0.00
The liability account	The cash account of the corporate card	X (non-project code)	0.00	Amount

GL Transactions Generated on Release of an AP Bill

When an accounts payable bill related to an expense claim is released, the system generates a batch of the general ledger transactions shown in the following table.

Account	Source of Account	Debit	Credit
The expense account	The inventory item	Amount	0.00
The liability account	The AP bill	0.00	Amount

If an accounts payable bill line is related to a project, on release of the bill, the system generates a batch of the general ledger transactions shown in the table below.

Account	Source of Account	Project Budget Key	Debit	Credit
The expense account	The inventory item	The project, project task, and cost code in the bill line	Amount	0.00
The liability account	The AP bill	X (non-project code)	0.00	Amount

You can view the details of the batch associated with the release of a bill by clicking the link in the **Batch Nbr.** box on the **Financial** tab (**Link to GL** section) of the *Bills and Adjustments* (AP301000) form. The system opens the batch on the *Journal Transactions* (GL301000) form.

GL Transactions Generated on Release of an AP Debit Adjustment

When a debit adjustment related to an expense claim is released, the system generates a batch of the general ledger transactions shown in the following table.

Account	Source of Account	Debit	Credit
The liability account	The AP account of the employee	Amount	0.00
The liability account	The cash account of the corporate card	0.00	Amount

If a debit adjustment line is related to a project, on release of the debit adjustment, the system generates a batch of the general ledger transactions shown in the table below.

Account	Source of Account	Project Budget Key	Debit	Credit
The liability account	The AP account of the employee	The project, project task, and cost code in the bill line	Amount	0.00
The liability account	The cash account of the corporate card	X (non-project code)	0.00	Amount

You can view the details of the batch associated with the release of a debit adjustment by clicking the link in the **Batch Nbr.** box on the **Financial** tab (**Link to GL** section) of the *Bills and Adjustments* (AP301000) form. The system opens the batch on the *Journal Transactions* (GL301000) form.

Project Transactions Generated on Release of the GL Batch

If a cash purchase line or bill line is related to a project, on release of this cash purchase or AP bill, in addition to the creation of a batch of general ledger transactions, the system also generates a batch of the project transactions shown in the following table.

Project Budget Key	Account Group	Debit Account	Credit Account	Amount
The project, project task, inventory item, and cost code in the GL transaction	The account group mapped to the expense account	The expense account in the GL transaction	Empty	Amount

You can review the created transactions on the *Project Transaction Details* (PM401000) form. In the Selection area of this form, you select the project in the **Project** box. In the table, you can find the project transactions created on release of the accounts payable bill or cash purchase by the reference number of the document in the **Orig. Doc. Nbr.** column.

Expense Receipts with Corporate Cards: Related Reports and Forms

In the following sections, you can find details about the reports and forms you may want to review to gather information about expense claims.

Printing Expense Claims

You can print an expense claim that you are viewing on the *Expense Claim* (EP301000) form by clicking **Print** on the More menu. The system opens the printable form of the expense claim, which is the *Expense Claim Details* (EP612000) report. You can review the expense claim and print it.

Printing the Expense Claims of an Employee

You can prepare a printable list of expense receipts that are grouped by expense claims related to the employee associated with the current user, as well as any subordinates of this employee, by using the *Expense Claim Details* (EP613000) report.

Printing Expenses Claimed by Employee

You can prepare a printable list of expenses claimed by the employee associated with the current user, as well as any subordinates of this employee, by using the *Expense Claim Details by Employee* (EP614020) report. The report displays total claimed amounts that can be optionally broken down by expense items.

Printing Expenses Claimed by Department

You can prepare a printable list of expenses claimed by a particular department by using the *Expense Claim Details by Department* (EP614010) report. The report displays the total claimed amounts, which can be optionally broken down by expense items.

Expense Receipts with Corporate Cards: Mass-Processing of Documents

This topic explains how to process multiple expense claims, and how the system generates, changes, or works with documents as a result of the mass processing.

Mass-Claiming Expense Receipts

Expense receipts can be mass-claimed. To claim multiple expense receipts at a time, you open the **To Be Claimed** tab of the *Expense Receipts* (EP301010) form, select the unlabeled check boxes in the rows of the expense receipts to be claimed, and click **Claim** on the form toolbar. The system creates expense claims for the selected expense receipts.

To create expense claims for all the expense receipts listed on this tab, you click **Claim All** on the form toolbar.

Mass-Releasing Expense Claims

Expense claims can be mass-released. To release multiple expense claims at a time, you open the *Release Expense Claims* (EP501000) form, select the unlabeled check boxes in the rows of the expense claims to be processed, and click **Release** on the form toolbar. The system releases the selected expense claims.

To release all the expense claims listed in the table on this form, you click **Release All** on the form toolbar.

Mass-Billing Customers for Claimed Expenses

Customers can be mass-billed for claimed expenses. To create invoices for all the approved expense claims of particular customers at a time, you open the *Bill Expense Claims* (EP502000) form, select the unlabeled check boxes in the rows of the customers to be billed, and click **Process** on the form toolbar. The system releases the corresponding expense claims of the selected customers and creates invoices.

To bill all the customers listed in the table on this form for claimed expenses, you click **Process All** on the form toolbar. The system releases the corresponding expense claims of all the customers listed in the table and creates invoices.

Labor Items: Related Forms

This topic describes forms you may review to gather information about labor items.

Reviewing Sales Prices

You can review the sales prices of a labor item by clicking **Sales Prices** on the More menu of the *Non-Stock Items* (IN202000) form. The system navigates to the *Sales Prices* (AR202000) form, where you can review and add the sales prices for the selected labor item. For details about managing sales prices, see *Sales Prices: General Information*.

Reviewing Vendor Prices

You can review the vendor prices of a labor item by clicking **Vendor Prices** on the More menu of the *Non-Stock Items* (IN202000) form. The system navigates to the *Vendor Prices* (AP202000) form, where you can review and add the vendor prices for the selected labor item. For details about managing vendor prices, see *Vendor Prices: General Information*.

Employee Time Billing: Generated Transactions

To be able to bill customers for employee time spent on particular projects, you configure time tracking in projects. When project-related time cards are released, the system generates the transactions described in the following sections.

Project Transaction Generated for a Time Card

When you release a project-related time card, the system generates the following project transaction for each time activity in the time card line.

Project and Project Task	Account Group	Inventory ID	Billable Quantity	Unit Rate	Amount
Project and project task in the time card line	Account group mapped to Expense account	Labor item in the time card line	Reported billable hours in the time card line	Labor cost rate defined on the *Labor Rates* (PM209900) form	Billable quantity * unit rate

You can review the project transaction that was generated on release of a particular time card by opening a time card on the *Employee Time Cards* (EP305000) form and clicking **View Transactions** on the form toolbar.

GL Transaction Generated from a Project Transaction

When a project transaction related to time card is released, the system creates a batch of the following accounting transactions.

Account	Project	Project Task	Debit	Credit
Expense account defined by the **Expense Account Source** setting on the *Projects Preferences* (PM101000) form	The value in the time card line	The value in the time card line	Billable quantity * unit rate	0.00
Expense Accrual account defined by the **Expense Accrual Account Source** setting on the *Projects Preferences* form	Non-project code	Empty	0.00	Billable quantity * unit rate

You can view the reference number of the GL batch in the **GL Batch Nbr.** box in the project transaction line on the *Project Transactions* (PM304000) form. You can click the link in this box to view the details of the batch on the *Journal Transactions* (GL301000) form.

GL Transaction Generated from an AR Invoice

When an AR invoice generated by the project billing procedure is released, the system creates a batch of the following accounting transactions.

Account	Project	Project Task	Debit	Credit
Accounts Receivable account of the customer	Non-project code	Empty	Invoiced amount	0.00
Sales account of the labor item	The value in the time card line	The value in the time card line	0.00	Invoiced amount

You can view the reference number of the GL batch in the **GL Batch Nbr.** box in the project transaction line on the *Project Transactions* (PM304000) form. You can click the link in this box to view the details of the batch on the *Journal Transactions* (GL301000) form.

Project Transactions Generated from GL Transaction

When the batch of GL transactions generated on release of an AR invoice generated by the project billing procedure is released, the system generates the following project transaction for each invoice line.

Project and Project Task	Account Group	Inventory ID	Amount	Debit Account
The values in the time card line	Account group mapped to the Sales account	Labor item assigned to the employee	Amount calculated by billing rule	Sales account of the labor item

You can review the project transaction that was generated on release of a particular time card by opening a time card on the *Employee Time Cards* (EP305000) form and clicking **View Transactions** on the form toolbar.

Employee Time Billing: Related Report and Inquiry Forms

In the following sections, you can find details about the reports and inquiry forms you may want to review to gather information about employee time spent on a project.

Reviewing Time-Tracking Documents for a Project

You can review the list of all time cards and time activities (if applicable) that relate to a particular project on the **Activities** tab of the *Projects* (PM301000) form.

Reviewing Time Cards for an Employee

You can review the list of time cards submitted by a particular employee on the *Employee Time Cards* (EP406000) inquiry form. You select the employee in the **Employee** box of the Selection area, and the system groups this employee's time cards by their status.

Reviewing Time Activities for an Employee

You can review the list of time activities on the *Employee Time Activities* (EP307000) form. In the Summary area of this form, you select an employee and the time range (in weeks) for which you want to review the time activities submitted by the employee. You can also select a particular project (and, optionally, a project task) to review only the time activities that have been performed by the employee for the project.

You can review all existing time activities in the system on the *Activities* (EP404300) form.

Finding Project Transaction Generated for Time Card

You can review the project transaction that was generated on release of a particular time card by opening a time card on the *Employee Time Cards* (EP305000) form and clicking **View Transactions** on the form toolbar. The system opens the project transaction on the *Project Transactions* (PM304000) form.

Employee Time Billing: Mass Processing of Documents

This topic explains how to perform mass-processing operations related to employee time tracking, and how the system generates, changes, or works with documents as a result of the mass processing.

Mass-Releasing Time Activities

To mass-release time activities, you use the *Release Time Activities* (EP507020) form. On this form, you select the unlabeled check boxes in the rows of the documents to be released and click **Release** on the form toolbar to process the selected documents; alternatively, you can click **Release All** to process all the documents shown in the table.

Mass-Releasing Time Cards

To mass-release time cards, you use the *Release Time Cards* (EP505010) forms. On this form, you select the unlabeled check boxes in the rows of the documents to be released and click **Release** on the form toolbar to process the selected documents; alternatively, you can click **Release All** to process all the documents shown in the table.