

Release Notes 2024 R2

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Introduction

This document provides important information about fixes, enhancements, and key features that are available in Acumatica ERP 2024 R2. The document is designed particularly for those who install Acumatica ERP. All users can benefit from reviewing this content to determine how they may benefit from the changes in this release.

Information about fixes, enhancements, and key features for those who customize Acumatica ERP or develop applications for it can be found in the separate [Release Notes for Developers](#) document.

Installation and Upgrade Notes

We strongly recommend that before administrators upgrade Acumatica ERP to a newer product version, they back up all configuration files and databases used by the application instances. For a detailed description of the general procedure of updating Acumatica ERP, see [Upgrading of Acumatica ERP: General Information](#).

Multiple changes have been made between Acumatica ERP 2024 R1 and Version 2024 R2 that may affect customizations and integrations. For details, see [Release Notes for Developers](#).

If the Acumatica ERP instance was integrated with software provided by an independent software vendor (ISV) partner, we recommend that the administrator consult with this partner about the compatibility of its products with Acumatica ERP 2024 R2.

Supported Web Browsers for Acumatica ERP Workstations

Supported web browsers that can be used to work with Acumatica ERP 2024 R2 workstations are listed in the following table.



Web browsers on mobile devices are not supported. We recommend that the Acumatica mobile app be used. Microsoft Internet Explorer is not supported.

Table: Supported Web Browsers

Web Browser	Version
<i>Microsoft Edge</i>	120 or later
<i>Mozilla Firefox</i>	130 or later
<i>Apple Safari</i>	17 or later
<i>Google Chrome</i>	120 or later

For details on system requirements, see [System Requirements for the Acumatica ERP Installation](#).

Deprecated Support for the Authorize.Net Payment Plug-In

Starting in Acumatica ERP 2025 R1, the Authorize.Net plug-in will no longer be supported or available in the system. We encourage customers to take advantage of the Acumatica Payments plug-in, which provides greater functionality, better support, and competitive rates.

The customer company should contact its partner to create a presales support case to learn more about making the switch. Customers that use Acumatica ERP 2023 R2 or higher can configure the Acumatica Payments plug-in without making any software changes.

For more information about Acumatica Payments, see [Configuring and Using Acumatica Payments](#) and [To Configure Acumatica Payments](#).

Deprecated Third-Party Software

Starting in Acumatica ERP 2024 R2, the system no longer supports the versions of third-party software listed in the following table.

Software	Version
Windows Server	2016 64-bit edition
Microsoft SQL Server	<ul style="list-style-type: none"> • 2016 Service Pack 1 • 2017
MySQL Community Server	5.7

For details on system requirements, see [System Requirements for the Acumatica ERP Installation](#).

Upgrade Policy

On the [Apply Updates](#) (SM203510) form, only minor updates are available for the currently installed version of Acumatica ERP. The administrator should upgrade the Acumatica ERP instance from previous major versions of the system to Version 2024 R2 manually on the server. (An upgrade through the web interface is not supported because the customization of the Acumatica ERP instance may be incompatible with Version 2024 R2 due to changes in Version 2024 R2.)

Prerequisite Steps

Before administrators install Acumatica ERP 2024 R2 or upgrade to it locally, they need to do the following:

1. Switch the Internet Information Services application pool where the Acumatica ERP 2024 R2 instance will be installed to Integrated mode. (Classic mode is not supported.)
2. Install Microsoft .NET Framework 4.8 on the server where the Acumatica ERP 2024 R2 instance will be installed.

Upgrade Path

The upgrade to Acumatica ERP 2024 R2 must be performed as described in the following table. The upgrade process depends on the version before the upgrade.

Table: Upgrade Paths for Acumatica ERP

From Version	Upgrade Path
2024 R1	A direct upgrade to Acumatica ERP 2024 R2 is supported.
2023 R2	A direct upgrade to Acumatica ERP 2024 R2 is supported.
2023 R1	A direct upgrade to Acumatica ERP 2024 R2 is supported.
2022 R2	An incremental upgrade is required. The following steps must be performed in the listed order: <ol style="list-style-type: none"> 1. Upgrade to the latest Version 2023 R1 build available. 2. Upgrade to Version 2024 R2.

From Version	Upgrade Path
2022 R1	An incremental upgrade is required. The following steps must be performed in the listed order: <ol style="list-style-type: none">1. Upgrade to the latest Version 2023 R1 build available.2. Upgrade to Version 2024 R2.

Acumatica ERP 2024 R2 can be upgraded from the following particular versions:

- 2024 R1 Update 10 (Build 24.110.0017) and earlier
- 2023 R2 Update 14 (Build 23.214.0020) and earlier
- 2023 R1 Update 19 (Build 23.119.0015) and earlier

For the list of upgradable versions for later 2024 R2 updates, see the Release Notes for the particular 2024 R2 update.

Post-Upgrade Changes and Actions

An administrator should be aware of the changes that have been made in the system after the upgrade to Acumatica ERP 2024 R2 has been performed. The following sections describe these changes, as well as any actions that the administrator needs to take after the upgrade.

Inventory and Order Management

After an upgrade to Acumatica ERP 2024 R2, the system will assign the *Awaiting Payment* status to each RMA order on the [Sales Orders](#) (SO301000) form if all of the following conditions are met:

- The order's type has the following settings on the **Template** tab of the [Order Types](#) (SO201000) form:
 - **Automation Behavior:** *RM Order*
 - **Default Operation:** *Issue*
 - **AR Document Type:** *Invoice or Debit Memo*
- The order's credit terms have the **Prepayment Required** check box selected on the [Credit Terms](#) (CS206500) form.
- The order's total payment and prepayment application amount is less than the required payment amount.
- The order was assigned the *Open* or *Credit Hold* status before the upgrade.

We highly recommend that after the upgrade, users recalculate the quantities of stock items available at warehouses on the [Recalculate Inventory](#) (IN505000) form if any unprocessed RMA orders with the settings listed above exist in the system.

Report Designer

Versions of the Report Designer that were delivered with previous versions of Acumatica ERP do not work with Acumatica ERP 2024 R2. For details about changes to the Report Designer, see [Platform: Changes to the Report Designer](#).

To create or edit reports for Acumatica ERP 2024 R2, a user has to install the Report Designer that is delivered with Acumatica ERP 2024 R2.

CRM: Case Commitment Inquiry Forms

Acumatica ERP 2024 R2 introduces new case commitment inquiry forms. These inquiry forms help users to analyze the service team's fulfillment of case commitments defined in service-level agreements (SLAs) with each customer.

The following sections describe the new case commitment inquiry forms, as well as the changes that have been made to support their implementation.

Creation of an Initial Activity for a New Case

Starting in Acumatica ERP 2024 R2, changes have been made to simplify the saving and retrieving of case commitment statistics that will be used in inquiry forms. The system will automatically create an initial system activity for a new case at the moment of case creation if no initial activity exists for the case—that is, if a user has created the case that is not based on an initial activity, such as an incoming email. The system uses the date and time of the initial activity's creation to calculate the period of time for fulfilling case commitments, such as the response time.

To support this improvement, the [Activity Types](#) (CR102000) form has been changed as follows (see the screenshot below):

- The **Application** column has been renamed to **Originated By**.
- In the **Originated By** column, the options in the drop-down list have been renamed as follows:
 - *Back-end to ERP Users*
 - *Portal to Portal Users*
- A new **System** type has been added to the drop-down list of the **Originated By** column. This type is used only for incoming activities that are created in the system (that is, for this activity type on the [Activity Types](#) form, the **Incoming** check box is selected but the **Outgoing** check box is not). Users cannot create, change, or delete activities of this type directly in Acumatica ERP.

Class	* Type ID	* Description	Active	System Default	Originated By	Image	Internal	Track Time and Costs	Incoming	Outgoing
Event	AA	Event	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ERP Users		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Email	AE	Email	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Portal Users		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Activity	ASI	System Message	<input checked="" type="checkbox"/>	<input type="checkbox"/>	System		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Task	AT	Task	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ERP Users		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Activity	C	Chat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ERP Users		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Activity	E	Appointment	<input type="checkbox"/>	<input type="checkbox"/>	ERP Users		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Activity	EN	Note	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Portal Users		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Activity	ES	Escalation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ERP Users		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Activity	M	Message	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ERP Users		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Activity	N	Note	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ERP Users		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Activity	P	Phone Call	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ERP Users		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Activity	W	Work Item	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ERP Users		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure: The changes to the Activity Types form

If a user has created a new case that is not based on an initial incoming activity, the system creates a new activity of the **System** type for this case with the following settings:

- **Summary:** Case created in ERP or Case created in Portal, depending on where a user creates the case

- **Type:** System
- **Date:** The values that the system has copied from the **Reported On** box of the related case
- **Status:** Completed
- **Related Entity Type:** Case
- **Related Entity:** The related case for which the system has created this activity

Changes to the Calculation of Response Time Statistics

Acumatica ERP 2024 R2 introduces changes that improve the calculation of response time statistics that are used in case commitment inquiry forms; these changes also link incoming and outgoing activities within a case. Specifically, the following changes have been made on the [Activity](#) (CR306010), [Email Activity](#) (CR306015), [Task](#) (CR306020), and [Event](#) (CR306030) forms.

- The **Response Due** box has been added, as shown in the following screenshot. This box is read-only and contains the date and time by which the company must send a response to the incoming activity. The value in this box is copied from the **Response Due** box on the [Cases](#) (CR306000) form.

The screenshot shows the Acumatica Activity form interface. At the top, there are tabs for NOTES, FILES, CUSTOMIZATION, and TOOLS. Below the tabs, there are standard file operations: New, Open, Save, and Delete. The main area contains various fields for entering activity details. One field, "Response Due," is highlighted with a red border. The "Response Due" field displays the value "6/5/2024 6:00 AM". Other visible fields include "Summary" (Call from the client), "Type" (Activity Incoming), "Started On" (6/6/2024 11:20 AM), "Workgroup" (empty), "Owner" (Kimberly Gibbs), "Related Entity Type" (Case), "Related Entity" (000012, Delivery of fruits), and "Internal" and "Track Time and Costs" checkboxes. Below these fields is a section for "Response Provided In" and "Parent Activity". At the bottom, there is a rich text editor toolbar with buttons for Visual, Paragraph, Bold, Italic, Underline, and other styling options.

Figure: The Response Due box on the Activity form

This box appears on the noted forms if all of the following conditions are met:

- The activity is incoming. The incoming activity is logged as it arrives in the system from a customer, another user, or the system itself. For this type of activity, the **Incoming** check box is selected on the [Activity Types](#) (CR102000) form.
- The activity is related to the case. That is, a case is selected in the **Related Entity** box.
- Response time tracking is activated for the case class. That is, on the [Case Classes](#) (CR206000) form, the **Enable** check box with the **Response Time Tracking** tooltip is selected for the severity level and case class.
- There is no completed outgoing activity for the case whose date and time of creation are later than the date and time of the incoming activity.
- The **Response Provided In** box has been added, as shown in the following screenshot.

The screenshot shows the Acumatica Activity form. At the top, there are buttons for Notes, Files, Customization, and Tools. Below the header, there are several input fields: Summary (send to the client the invoice), Type (Activity Outgoing), Started On (6/7/2024 4:13 AM), Workgroup, Owner (Kimberly Gibbs), Related Entity Type (Case), Related Entity (000012, Delivery of fruits), and Response Provided In (Request from the client). The 'Response Provided In' field is highlighted with a red border. There are also checkboxes for Internal and Track Time and Costs, and a Parent Activity field. At the bottom, there is a toolbar with Visual, Paragraph, and other editing options.

Figure: The Response Provided In box on the Activity form

The box is read-only and contains the summary of the activity to which this activity is responding. The system inserts one of the following based on whether the activity is incoming or outgoing:

- For an incoming activity: The summary of the last outgoing activity
- For an outgoing activity: The summary of the last incoming activity

The Case Response Times Inquiry Form

Starting in Acumatica ERP 2024 R2, users can view response time statistics by using the *Case Response Times* (CR3066B1) inquiry form. The response time statistics are based on the following data stored in the system:

- The date and time when the case's incoming activity was created
- The expected response date and time for the customer's request within the case
- The date and time when the response activity was completed

This inquiry form includes the **Response Status** column (see the screenshot below). The column contains one of the following options, which indicate whether response time tracking is activated and whether the response to the incoming activity was on time:

- *Tracking Disabled*: Response time tracking is not activated for the severity level and class of the case on the [Case Classes](#) (CR206000) form.
- *Tracking Enabled*: Response time tracking is activated for the severity level and case class on the [Case Classes](#) form. This option is used if the record was created before response time tracking was activated.
- *On-Time*: The value in the **Response Due** column is in the future, or the response to the incoming activity was provided by the date and time specified in the **Response Due** box on the [Cases](#) (CR306000) form.
- *Overdue*: The response to the incoming activity was not provided on time. That is, it was not provided before the date and time specified in the **Response Due** box on the [Cases](#) form.

Description	Summary	Incoming	Outgoing	Case ID	Status	Severity	Priority	Reported On	Response Status	Incoming Activity Date	Response Due	Response Date
> Phone Call	A call from Diane Doe abou...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	000005	New	Medium	Medium	12/8/2024 6:27 AM	Tracking Enabled	12/8/2024 6:2		
System Message	Case created in ERP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	000012	Open	Medium	Medium	6/5/2024 12:00 AM	Overdue	6/6/2024 7:28	6/5/2024 2:00	
Activity Incoming	Call from the client	<input checked="" type="checkbox"/>	<input type="checkbox"/>	000012	Open	Medium	Medium	6/5/2024 12:00 AM	Overdue	6/6/2024 11:21	6/5/2024 2:00	6/7/2024 4:13
Activity Incoming	call from the client_2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	000012	Open	Medium	Medium	6/5/2024 12:00 AM	Overdue	6/7/2024 4:12	6/4/2024 10:01	6/7/2024 4:13
Activity Outgoing	send to the client the invoice	<input type="checkbox"/>	<input checked="" type="checkbox"/>	000012	Open	Medium	Medium	6/5/2024 12:00 AM	Tracking Disabled	6/7/2024 4:13		6/7/2024 4:23
Activity Outgoing	Sent to client the answer for...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	000012	Open	Medium	Medium	6/5/2024 12:00 AM	Tracking Disabled	6/7/2024 4:16		6/7/2024 4:23
Activity Incoming	Request from the client	<input checked="" type="checkbox"/>	<input type="checkbox"/>	000012	Open	Medium	Medium	6/5/2024 12:00 AM	On-Time	6/7/2024 4:23	6/7/2024 6:12	6/7/2024 4:13
Activity Incoming	Request 2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	000012	Open	Medium	Medium	6/5/2024 12:00 AM	On-Time	6/7/2024 4:29	6/7/2024 6:12	6/7/2024 4:16
Email	[Case #0000011] Which veg...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	000011	Open	Medium	Medium	4/26/2024 10:17 AM	Tracking Disabled	12/3/2024 7:0:		
Phone Call	A request from Chuck Hest...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	000009	New	Medium	Medium	1/30/2024 12:00 AM	Tracking Enabled	12/8/2024 6:4'		

Figure: The Case Response Times inquiry form

In an out-of-the-box company, a link to the inquiry form is available in the **Support** workspace. Administrative users can also use this inquiry form to build a dashboard or expose the data to external BI tools via OData or an API.

The Case Initial Response Times Inquiry Form

Starting in Acumatica ERP 2024 R2, users can view initial response time statistics by using the *Case Initial Response Times (CR3065B)* inquiry form. The initial response time statistics are based on the following data stored in the system:

- The date and time when the case or the initial incoming activity was created
- The expected response date and time for the customer's initial request within the case
- The date and time when the initial response activity in the case was completed

The **Initial Response Status** column has been added to the *Case Initial Response Times* inquiry form (see the screenshot below). The following options in the column indicate whether initial response time tracking is activated and whether the response to the initial incoming activity was on time:

- *Tracking Disabled*: The tracking of the initial response time is not activated for the severity level and class of the case on the [Case Classes](#) (CR206000) form.
- *Tracking Enabled*: The tracking of the initial response time is activated for the severity level and case class on the [Case Classes](#) form. This option is used if a record was created before the tracking of the initial response time was activated.
- *On-Time*: The value in the **Initial Response Due** column is in the future, or the response to the initial incoming activity was provided by the date and time specified in the **Initial Response Due** box on the [Cases](#) (CR306000) form.
- *Overdue*: The response to the initial incoming activity was not on time. That is, it was not provided before the date and time specified in the **Initial Response Due** box on the [Cases](#) form.

Case ID	Case Class	Business Account	Status	Severity	Priority	Reported On	Initial Response Status	Initial Activity Date	Initial Response Due	Response Date
000010	JREPAIR	STOREHUT	New	Medium	Medium	12/8/2024 6:51	Tracking Disabled			
000008	JREPAIR	CAKFADO	New	Medium	Medium	12/8/2024 6:41	Tracking Disabled			
000007	PRESALE		New	Medium	Medium	12/8/2024 6:31	Tracking Enabled			
000006	DELIVERY	CAKFADO	New	Low	Medium	12/8/2024 6:31	Tracking Enabled			
000005	JREPAIR	DELIENERGY	New	Medium	Medium	12/8/2024 6:21	Tracking Disabled			12/8/2024 6:28 AM
000004	SERVCONS	GOODFOOD	New	Medium	Medium	8/27/2024 12:01	Tracking Disabled			
000003	SERVCONS	COFFEESHOP	Open	High	High	8/27/2024 12:01	Tracking Disabled			
000014	DELIVERY	BISCCITY	New	Medium	Medium	6/7/2024 10:31	Overdue	6/7/2024 10:31 AM	6/7/2024 10:30 AM	6/7/2024 10:31 AM
000013	PRESALE	ITACOM	New	Medium	Medium	6/7/2024 10:21	On-Time	6/7/2024 10:28 AM	6/7/2024 12:08 PM	6/7/2024 10:29 AM
000011	PRESALE	ABAKERY	Open	Medium	Medium	6/7/2024 12:01	Tracking Enabled			6/7/2024 10:26 AM
000012	DELIVERY	BISCCITY	Open	Medium	Medium	6/5/2024 12:01	Tracking Enabled			6/7/2024 4:13 AM
000009	PRESALE		New	Medium	Medium	1/30/2024 12:01	Tracking Enabled			12/8/2024 6:47 AM

Figure: The Case Initial Response Times inquiry form

In an out-of-the-box company, the link to the inquiry form is available in the **Support** workspace. Users can also use this inquiry form to build a dashboard or expose the data to external BI tools via OData or an API.

Changes to the Calculation of Resolution Time Statistics

In Acumatica ERP 2024 R2, an informational box has been added to facilitate the use of resolution time statistics in case commitment inquiry forms after a case has been resolved. The read-only **Solution Provided On** box has been added to the **Commitments** section on the **CRM Info** tab of the **Cases** (CR306000) form (see the following screenshot).

Case ID:	000011	Business Account:	ABAKERY - Allen's Bakery	Reported On:	4/26/2024 10:17 AM	
Case Class:	PRESALE - Pre-sales requests from pole	Location:		Severity:	Medium	
Status:	Closed	Contact:	Beverly Hail	Priority:	Medium	
Reason:	Resolved	Owner:	Jeffrey Vega	Closed On:	6/17/2024 5:51 AM	
Subject:	Which vegetables can be juiced by using JUICER10?					
WORKFLOW	Case Status	Case Type	Case Subtype	Case Priority	Case Resolution	Case Owner
DETAILS	Case ID	Case Class	Business Account	Reported On	Severity	Priority
CRM	Workgroup:	Active	Initial Response Due:			
BILLING	Billable	Manual Override	Response Due:			
STATISTICS	Billable Time:	0.00	Resolution Due:			
	Billable Overtime:	0.00	Solution Provided In:	Phone Call 6/17/2024 5:44:55 AM Call to		
	Time Spent:	0 h 00 m	Solution Provided On:	6/17/2024 5:44 AM		
	Overtime Spent:	0 h 00 m	First Outgoing Activity:	6/17/2024 5:44 AM		
			Last Activity:	6/17/2024 5:44 AM		
			Last Incoming Activity:	6/17/2024 5:44 AM		
			Last Outgoing Activity:	6/17/2024 5:44 AM		

Figure: The Solution Provided On box on the Cases form

The box appears on the form if resolution time tracking is activated for the case class. That is, it appears if on the **Case Classes** (CR206000) form, the **Enable** check box with the **Resolution Time Tracking** tooltip is selected for the severity level and class of the case.

The **Solution Provided On** box is filled in depending on the option selected in the **Stop Counting Time** box on the **Commitments** tab of the [Case Classes](#) form for the case class:

- If the *If Case Solution Is Provided in Activity* option is selected, one of the following is true of the **Solution Provided On** box:
 - The box contains the date and time of the activity selected in the **Solution Provided In** box if this **Solution Provided In** box is not empty.
 - The box is empty if the **Solution Provided In** box is empty.
- If the *If Case Becomes Inactive* option is selected, one of the following is true of the **Solution Provided On** box:
 - The box contains the date and time when the case became inactive—that is, when the system cleared the **Active** check box for the case.
 - The box is empty if the case is active.

The Case Resolution Times Inquiry

Starting in Acumatica ERP 2024 R2, users can view resolution time statistics by using the *Case Resolution Times* (CR3067BI) inquiry form. The resolution time statistics are based on the following data:

- The date and time when the case was created
- The expected date and time for the case resolution
- The date and time when the solution for the case was provided or the case became inactive (depending on the case class settings)

The inquiry form includes the **Resolution Status** column (see the screenshot below). The following options in the column indicate whether resolution time tracking is activated and whether the resolution of the case was on time:

- *Tracking Disabled*: Resolution time tracking is not activated for the severity level and class of the case on the [Case Classes](#) (CR206000) form.
- *Tracking Enabled*: Resolution time tracking is activated for the severity level and case class on the [Case Classes](#) form. This option is used if a record was created before resolution time tracking was activated.
- *On-Time*: The value in the **Resolution Due** column is in the future, or the resolution for the case was provided by the date and time specified in the **Resolution Due** box on the [Cases](#) (CR306000) form.
- *Overdue*: The resolution for the case was not on time. That is, it was not provided before the date and time specified in the **Resolution Due** box on the [Cases](#) form.

Case ID	Case Class	Business Account	Status	Severity	Priority	Reported On	Resolution Status	Resolution Due	Solution Provided On
> 000010	JREPAIR	STOREHUT	New	Medium	Medium	12/8/2024 6:51	Tracking Disabled		
000008	JREPAIR	CAKEFADO	New	Medium	Medium	12/8/2024 6:44	Tracking Disabled		
000007	PRESALE		New	Medium	Medium	12/8/2024 6:33	Tracking Enabled		
000006	DELIVERY	CAKEFADO	New	Low	Medium	12/8/2024 6:30	Tracking Enabled		
000005	JREPAIR	DELIENERGY	New	Medium	Medium	12/8/2024 6:22	Tracking Disabled		
000004	SERVCONS	GOODFOOD	New	Medium	Medium	8/27/2024 12:00	Tracking Disabled		
000003	SERVCONS	COFFEEESHOP	Open	High	High	8/27/2024 12:00	Tracking Disabled		
000015	PRESALE	COFFEEESHOP	Closed	Medium	Medium	6/7/2024 10:51	On-Time	6/8/2024 10:51	6/7/2024 10:51
000014	DELIVERY	BISCCITY	New	Medium	Medium	6/7/2024 10:31	Tracking Disabled		
000013	PRESALE	ITACOM	New	Medium	Medium	6/7/2024 10:21	Overdue	6/7/2024 10:21	
000011	PRESALE	ABAKERY	Open	Medium	Medium	6/7/2024 12:00	Overdue	6/7/2024 12:00	
000012	DELIVERY	BISCCITY	Open	Medium	Medium	6/5/2024 12:00	Tracking Disabled		
000009	PRESALE		New	Medium	Medium	1/30/2024 12:00	Tracking Enabled		

Figure: The Case Resolution Times inquiry form

In an out-of-the-box company, the link to the inquiry form is available in the **Support** workspace. Users can also use this inquiry form to build a dashboard or expose the data to external BI tools via OData or API.

Access Rights to Case Commitment Inquiry Forms

In an out-of-the-box system, access rights to the *Case Initial Response Times (CR3065BI)*, *Case Response Times (CR3066BI)*, and *Case Resolution Times (CR3067BI)* inquiry forms have been configured based on user roles as follows:

- *Administrator*, *AcumaticaSupport*, and *CR Support Admin* roles: *Delete* access rights
- *CR Support Representative* role: *Insert* access rights
- *CR Viewer* role: *View Only* access rights
- All other user roles: *Revoked* access rights

Other Changes in Case-Related Inquiries

The following columns have been removed from all case-related inquiry forms—including *CR-Cases2018R1 (CR3060PL)*, *CR-Cases (CR3060P9)*, and *BI-Cases (CR3060BI)*—because they are obsolete:

- **Last Activity Age**
- **Init. Response**
- **Init. Response (minutes)**
- **Remaining**
- **Remaining (minutes)**
- **Estimation**
- **Promised**
- **SLA**

Changes on the BI-Cases Inquiry Form

On the *BI-Cases (CR3060BI)* inquiry form, multiple changes have been made.

The following UI elements have been removed from the inquiry form because they are obsolete:

- The **Closed on Time** tab
- The **Case On Time** column

The following columns have been added to the inquiry form and hidden by default, as the **Column Configuration** dialog box shows in the following screenshot:

- **Response Due**
- **Initial Response Due**
- **Resolution Due**

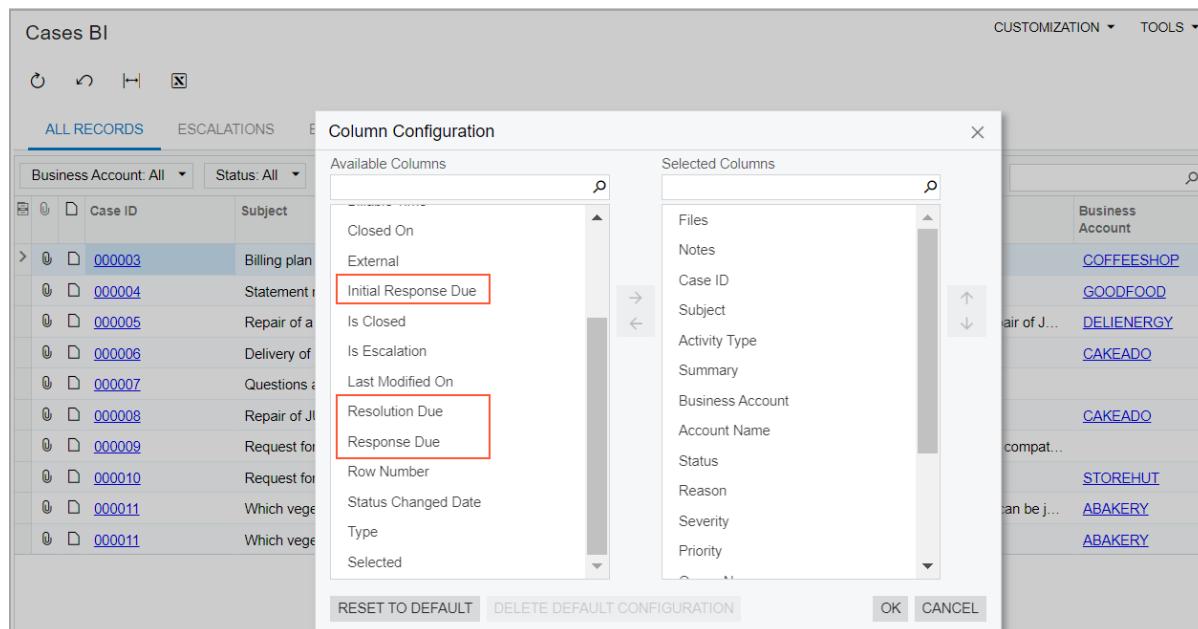


Figure: The added hidden columns on the Cases BI inquiry form

The **SLA** column has been replaced with **Resolution Due**.

The **Resolution (minutes)** box has been renamed to **Resolution Time (Minutes)**.

The time calculations in the following columns have been updated as follows:

- **Resolution Time:**

```
Resolution Time = Solution Provided On - Reported On
```

- **Resolution Time (Minutes):** The value is calculated in minutes.

```
Resolution Time (Minutes) = Solution Provided On - Reported On
```

Additional Information

For more information on tracking case commitments, see [Case Management: Tracking of Case Commitment Times](#).

CRM: Placement of an Email Template

In previous versions of Acumatica ERP, if a user inserted an email template in an email on the [Mass Emails](#) (CR308000) or [Email Activity](#) (CR306015) form, the system added the text of the selected template to the end of the email body.

Users can now select where to insert the email template data to the email. The following section describes this capability in detail.

Selecting the Placement for the Email Template

Starting in Acumatica ERP 2024 R2, if a user creates an email on the [Mass Emails](#) (CR308000) or [Email Activity](#) (CR306015) form and clicks **Select Template**, the improved **Select Template** dialog box opens.

This dialog box now contains the **Insert Template Text** group of option buttons (see the screenshot below). The user can select one of the following option buttons, each of which determines where the email template data will be inserted in the email:

- **Replacing Email Body:** The system copies the values in the **Subject**, **To**, **CC**, and **BCC** boxes of the template, as well as the text in the body of the email template. It then inserts these values in the corresponding boxes in the email and the text in the email body.
- **After Email Body:** The system adds the values in the **Subject**, **To**, **CC**, and **BCC** boxes of the template, as well as the text in the body of the email template, after the current values in the corresponding boxes in the email and the current text in the email body. This option button is selected by default on the [Mass Emails](#) form.
- **Before Email Body:** The system adds the values in the **Subject**, **To**, **CC**, and **BCC** boxes of the template after the current values in the corresponding boxes in the email. However, the text of the email template is added *before* the current text in the email body. This option button is selected by default on the [Email Activity](#) form.

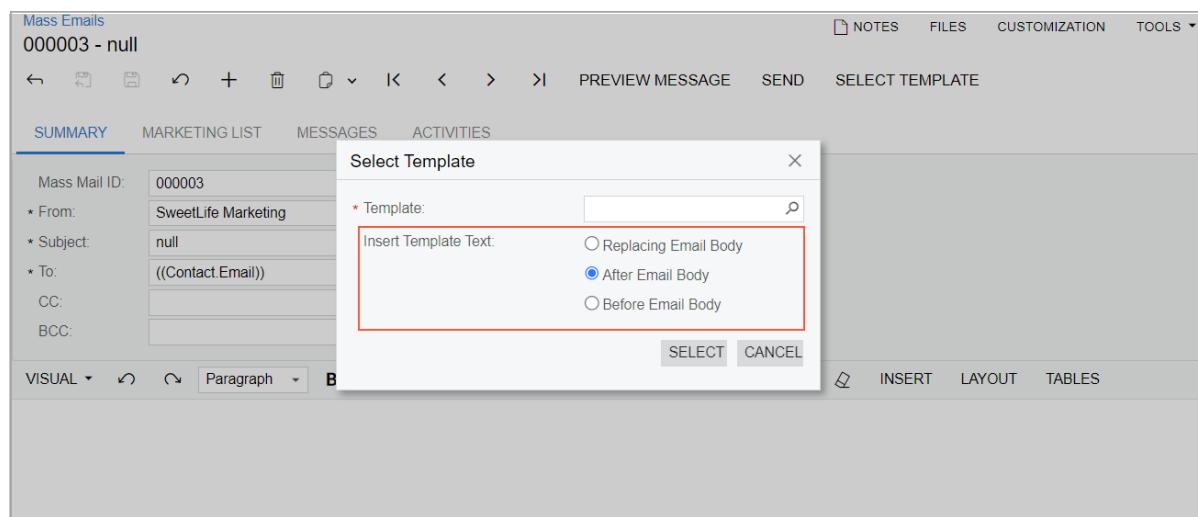


Figure: The Insert Template Text group of option buttons on the Mass Emails form

Additional Information

For more information on creating emails by using email templates, see [Emails and Activities: Emails](#).

CRM: Other Changes

In Acumatica ERP 2024 R2, the list of features on the [Enable/Disable Features](#) (CS100000) form has been changed, as described below.

Removal of Business Card Recognition

Starting in Acumatica ERP 2024 R2, the *Image Recognition for Business Cards* feature cannot be enabled on the [Enable/Disable Features](#) (CS100000) form, and its check box is not listed on the form. Previously, this feature was used for business card recognition, which is no longer available in the system.

Documentation: Improvements in User Guides

In Acumatica ERP 2024 R2, significant improvements have been made to the content and structure of the guides that make up the documentation, as described in the following sections.

DeviceHub Documentation

The documentation for the DeviceHub application, previously located in the *Configuring Hardware Devices in DeviceHub* chapter of the Integration Guide, has been reworked and relocated to the new *Implementing DeviceHub* part of the *Acumatica ERP Implementation Guide*.

This part consists of the following chapters:

- *Getting Started with DeviceHub*: In the topics of this chapter, implementation specialists will learn how to install DeviceHub and perform the initial configuration. This includes the connection with Acumatica ERP, methods of retrieving print and scan jobs, and logging of technical information. They will also learn about the user interface of DeviceHub.
- *Configuring Printers*: In the topics of this chapter, implementation specialists will learn how to add a printer to DeviceHub, synchronize this printer in Acumatica ERP, and print a document. They will also learn how to configure default printers in Acumatica ERP and set up printer access by using restriction groups.
- *Configuring Scanners*: In the topics of this chapter, implementation specialists will learn how to add a scanner to DeviceHub, synchronize this scanner in Acumatica ERP, and scan a document. They will also learn how to configure default scanners in Acumatica ERP.
- *Configuring Digital Scales*: In the topics of this chapter, implementation specialists will learn how to add a digital scale to DeviceHub, review the results of measuring in Acumatica ERP, and use the scale for measuring a package. They will also learn how to configure default scales in Acumatica ERP.

Inventory and Order Management

In the *Order Management* Guide, the *Cancelling Sales Orders* chapter is now available. This chapter explains how a user can cancel a sales order and reopen a sales order that has previously been canceled.

Projects and Construction

In the *Construction* Guide, the *Managing Project Materials* chapter is now available. This chapter describes the overall flow of project material management in construction projects, describes how the system accrues the costs of non-stock items, and explains how material expenses are recorded to the project budget.

Installation

The *Acumatica ERP Installation Guide* has been reworked and now has the following structure:

- The *System Requirements for the Acumatica ERP Installation* topic. This topic describes the system requirements for installing Acumatica ERP.
- The *Typical Hardware and Virtual Machine Configurations for PCS and PCP Licenses for the Acumatica ERP Installation* topic. This topic describes the typical server configurations for the Acumatica ERP license series and tiers.
- The *Preparing for Installing Acumatica ERP* chapter. This chapter provides an overview of the installation and deployment options and environment settings required for the Acumatica ERP installation.
- The *Installing Acumatica ERP On-Premises* chapter. This chapter describes the functionality, capabilities, and installation processes of the Acumatica ERP Configuration wizard and the Acumatica ERP Tools.
- The *Installing Acumatica ERP in a Data Center* chapter. This chapter provides information about installing Acumatica ERP in a data center.

- The [*Deploying Acumatica ERP Instances*](#) chapter. This chapter describes the process of deploying an Acumatica ERP instance, as well as creating tenants. Additionally, it provides details about the possible combinations of instances, databases, and tenants.
- The [*Maintaining Tenants*](#) chapter. This chapter describes the ways of adding tenants by using the Acumatica ERP Configuration wizard, provides an overview of the System and custom parent tenants, and explains various changes that can be made to tenants.
- The [*Maintaining Instances*](#) chapter. This chapter provides an overview of the adjustments that can be made to existing instances and databases by using the Acumatica ERP Configuration wizard.
- The [*Upgrading Acumatica ERP*](#) chapter. This chapter describes upgrading and updating Acumatica ERP by using the Acumatica ERP Configuration wizard.
- The [*Using the Acumatica ERP Command-Line Tool*](#) chapter. This chapter provides an overview of using the Acumatica ERP command-line tool.
- The [*Uninstalling Acumatica ERP*](#) chapter. This chapter describes the processes of deleting instances and uninstalling the Acumatica ERP Configuration wizard.

Field Services: Editing of Appointments

In previous versions of Acumatica ERP, a user could correct an appointment only by reopening a *Completed* appointment by clicking the **Reopen** command on the [Appointments](#) (FS300200) form. The system reopened the appointment and assigned it the *Not Started* status, causing all log lines to be removed from the **Log** tab and changing the status in each line on the **Details** tab to *Not Started*. Therefore, along with changing some appointment settings or details, the appointment had to be restarted.

In Acumatica ERP 2024 R2, a new logic has been implemented for the editing of an appointment. Now a user can edit an appointment without losing its time tracking settings and without the appointment and its detail lines being assigned the *Not Started* status.

Enhanced Appointment Editing Logic

The new **Edit** menu command (see the following screenshot) has been added to the More menu on the [Appointments](#) (FS300200) form.

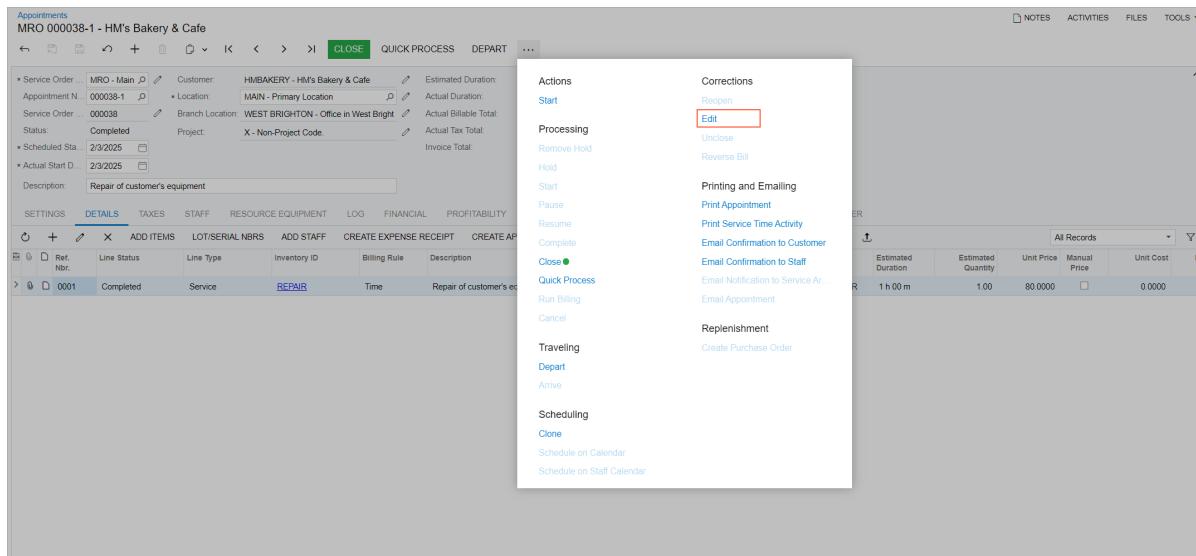


Figure: The Edit command on the Appointments form

This command is available for appointments with the *Completed* status. When a user clicks this command, the appointment is again assigned the *In Process* status. Therefore, the logic typically applied to *In Process* appointments is applicable to the appointment being edited. As a result, all appointment settings remain unchanged, including the following:

- The start date and time, end date and time, duration, and line statuses on the **Log** tab. That is, the time activities related to the appointment also remain unchanged.
- Line settings and statuses on the **Details** tab.

Once an appointment is reassigned the *In Process* status, a user can edit its settings as needed.

Impact on the Related Service Order

When a user clicks **Edit** on the [Appointments](#) (FS300200) form and the appointment is reassigned the *In Process* status, the status of the related service order also changes from *Completed* to *Open* if the following conditions are satisfied:

- The **Complete Service Order When Its Appointments are Completed** check box is selected on the [Service Order Types](#) (FS202300) form for the service order type.

- Multiple appointments have been created for the service order, and the remaining appointments have either the *Canceled* status or the *Completed* status.

Once the service order is assigned the *Open* status, the status of all lines changes to *Scheduled* on the **Details** tab of the [Service Orders](#) (FS300100) form.

Impact on the Related Service Contract

If an appointment is associated with a service contract (or a route service contract)—that is, if a service contract is specified in the Summary area on the [Appointments](#) (FS300200) form—the system recalculates the **Remaining Period Value**, **Used Period Value**, and **Scheduled Period Value** on the **Services per Period** tab of the [Service Contracts](#) (FS305700) form if the following conditions are met:

- The service contract is of the *End-Period Plus* billing type.
- The billing cycle specified for the contract's customer on the **Billing** tab of the [Customers](#) (AR303000) form has the **Appointments** option button selected under **Run Billing For** on the [Billing Cycles](#) (FS206000) form.
- The appointment's service order type has the **Bill Only Closed Appointments** check box cleared on the [Service Order Types](#) (FS202300) form.

Impact on the Related Project

If an appointment is associated with a project (that is, a project is specified in the **Project** box in the Summary area of the [Appointments](#) (FS300200) form), changing the appointment's status from *Completed* to *In Process* by using the **Edit** command does not affect the settings of the associated project.

Impact on the Related Expense Receipts

If any expense receipts are linked to an appointment's detail lines (that is, specified in the **Related Doc. Type** and **Related Doc. Nbr.** columns on the **Details** tab of the [Appointments](#) (FS300200) form), changing the appointment's status from *Completed* to *In Process* by using the **Edit** command does not affect the settings of the expense receipts. The settings of the expense receipts are maintained because the status of the appointment's detail lines remains unchanged during this transition.

Impact on the Related AP Bills

If any accounts payable bills are linked to an appointment's detail lines (that is, specified in the **Related Doc. Type** and **Related Doc. Nbr.** columns on the **Details** tab of the [Appointments](#) form), changing an appointment's status from *Completed* to *In Process* by using the **Edit** command does not affect the settings of the associated AP bill.

Impact on the Related Purchase Orders

If any purchase orders are linked to an appointment's detail lines (that is, a number of a purchase order is specified in the **PO Nbr.** column in detail lines on the **Details** tab of the [Appointments](#) (FS300200) form), changing the appointment's status from *Completed* to *In Process* by using the **Edit** command does not affect the settings of the associated purchase order.

Finance: Approval of Reconciliation Statements

Previous versions of Acumatica ERP did not provide tools for the approval of reconciliation statements. In Acumatica ERP 2024 R2, administrators can set up the approval of reconciliation statements to fit the organization's internal control and financial audit procedures. With this configuration in place, the appropriate users can approve or reject reconciliation statements.

This functionality is available in the system if the *Approval Workflow* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

The following sections describe the changes to the UI and document processing to support this functionality.

Changes to the Approval Maps Form

On the [Approval Maps](#) (EP205015) form, the following UI changes have been made:

- In the **Entity Type** box, the *Reconciliation Statements* option has been added (see Item 1 in the following screenshot). An administrative user can select this option to set up an approval map for these documents.
- On the **Conditions** tab, for the *Reconciliation Statements* entity type, the *Approval* and *Reconciliation Statements* options (Item 2) have been added to the **Entity** column. On this tab, the administrative user lists the conditions of the approval step or rule.

The screenshot shows the 'Approval Maps' form for 'Reconciliation Statement - Reconciliation Statements'. The 'Entity Type' dropdown is set to 'Reconciliation Statements' (Item 1). The 'Steps' section shows a single step named 'Rule' which is active. The 'Conditions' tab is selected, displaying a table of conditions. One condition row is highlighted with a red border and the number '2', showing the 'Entity' column containing 'Approval' and 'Reconciliation Statement'.

Active	Brackets	Condition	Value	Value 2	Brackets	Operator
*	<input checked="" type="checkbox"/>	Approval Reconciliation Statement			-	And

Figure: UI changes on the Approval Maps form

Changes to the Cash Management Preferences Form

On the [Cash Management Preferences](#) (CA101000) form, the *Reconciliation Statements* option has been added to the **Type** column of the table on the **Approvals** tab, as shown in the following screenshot.

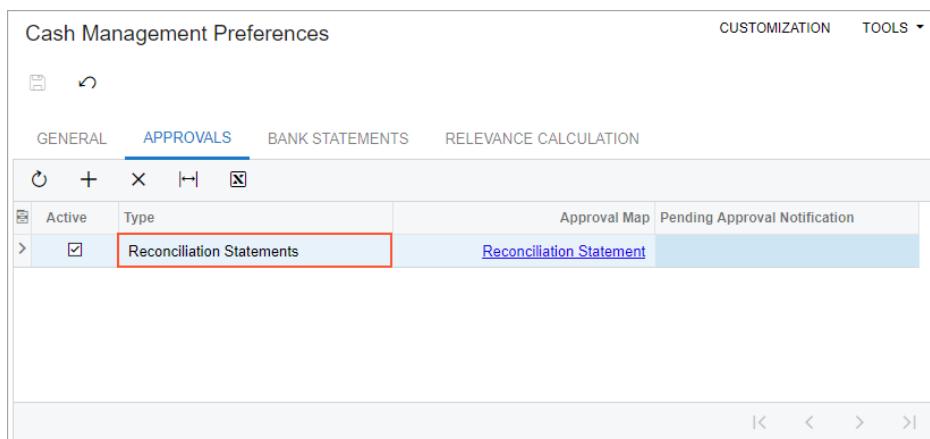


Figure: The new type on the Cash Management Preferences form

This tab contains each approval map that the system uses to assign cash documents to employees for approval. An administrative user selects *Reconciliation Statements* in the **Type** column and then selects an approval map with the *Reconciliation Statements* entity type. The selected approval map will be applied to the reconciliation statements that users create in the system.

Changes to the Reconciliation Statements Form

On the *Reconciliation Statements* (CA302000) form, the following UI changes have been made:

- On the form toolbar, the **Approve** and **Reject** buttons (see Item 1 in the following screenshot) have been added. Clicking the **Approve** button changes the status of the document to *Balanced*. Clicking the **Reject** button changes the status of the document to *Rejected*.
- In the **Status** box, the *Pending Approval* status (Item 2) has been added. The system assigns this status to reconciliation statements that need to be approved.
- The **Approvals** tab (Item 3) has been added to the form. On this tab, users can view the history of approvals for reconciliation statements.

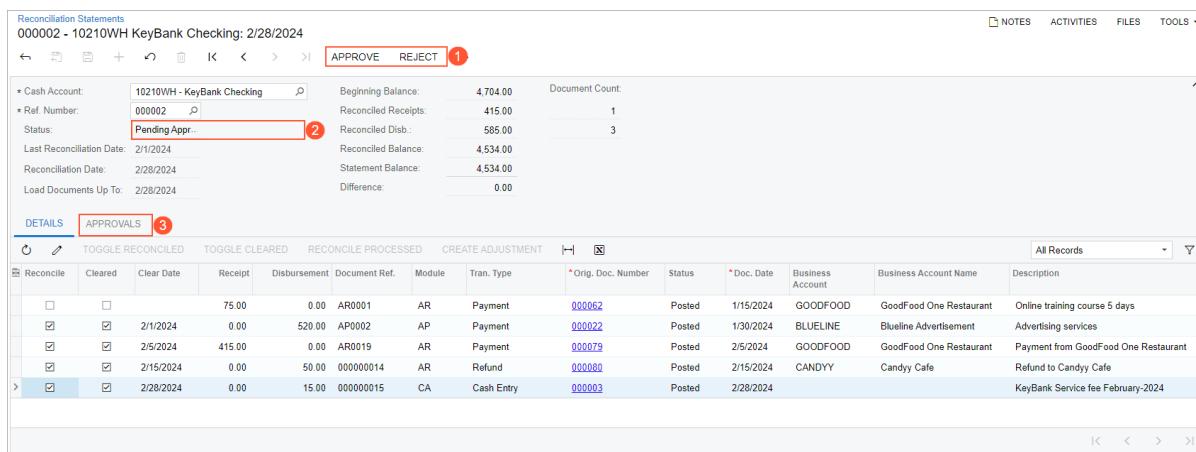


Figure: UI changes on the Reconciliation Statements form

The following screenshot illustrates the **Approvals** tab of the form with the information about the approval of the reconciliation statement.

The screenshot shows the 'Reconciliation Statements' form for record 000002. The top navigation bar includes 'NOTES', 'ACTIVITIES', 'FILES', 'CUSTOMIZATION', and 'TOOLS'. The main area displays financial details: Beginning Balance 4,704.00, Reconciled Receipts 415.00, Document Count 1; Status Closed, Last Reconciliation Date 2/1/2024, Reconciliation Date 2/28/2024; Reconciled Disb.: 585.00, Reconciled Balance: 4,534.00, Statement Balance: 4,534.00; Difference: 0.00. Below this, the 'APPROVALS' tab is selected, showing a grid of approvals. One row is highlighted with a red border: Assignee ID EP00000013, Assigned To Anna Johnson, Workgroup EP00000013, Approved by (ID) Anna Johnson, Approved By 7/12/2024, Status Approved.

Figure: The Approvals tab of the Reconciliation Statements form

Changes to the Approvals Form

The [Approvals](#) (EP503010) form now shows records with the *Reconciliation Statement* type that are pending approval, as shown in the following screenshot.

The screenshot shows the 'Approvals' form with the 'MY APPROVALS' tab selected. The grid lists a single record: Type Reconciliation Statement, Reference Nbr. 000002, Owner Nenad Pasic, Document Date 2/28/2024, Account Name 000002, Description 10210WH - KeyBank Checking (Reconcil...), Requested Time 7/12/2024 4:4, Currency USD, Total Amount 4,534.00, Workgroup Anna Johnson, Assigned Approver ID Anna Johnson.

Figure: A reconciliation statement pending approval

Default Email Template

On the [Email Templates](#) (SM204003) form, the *Reconciliation Statement* email template has been added, as shown in the following screenshot. This default email template is used as a pending approval notification for reconciliation statements. The system automatically send emails to the approver when a reconciliation statement requires their review.

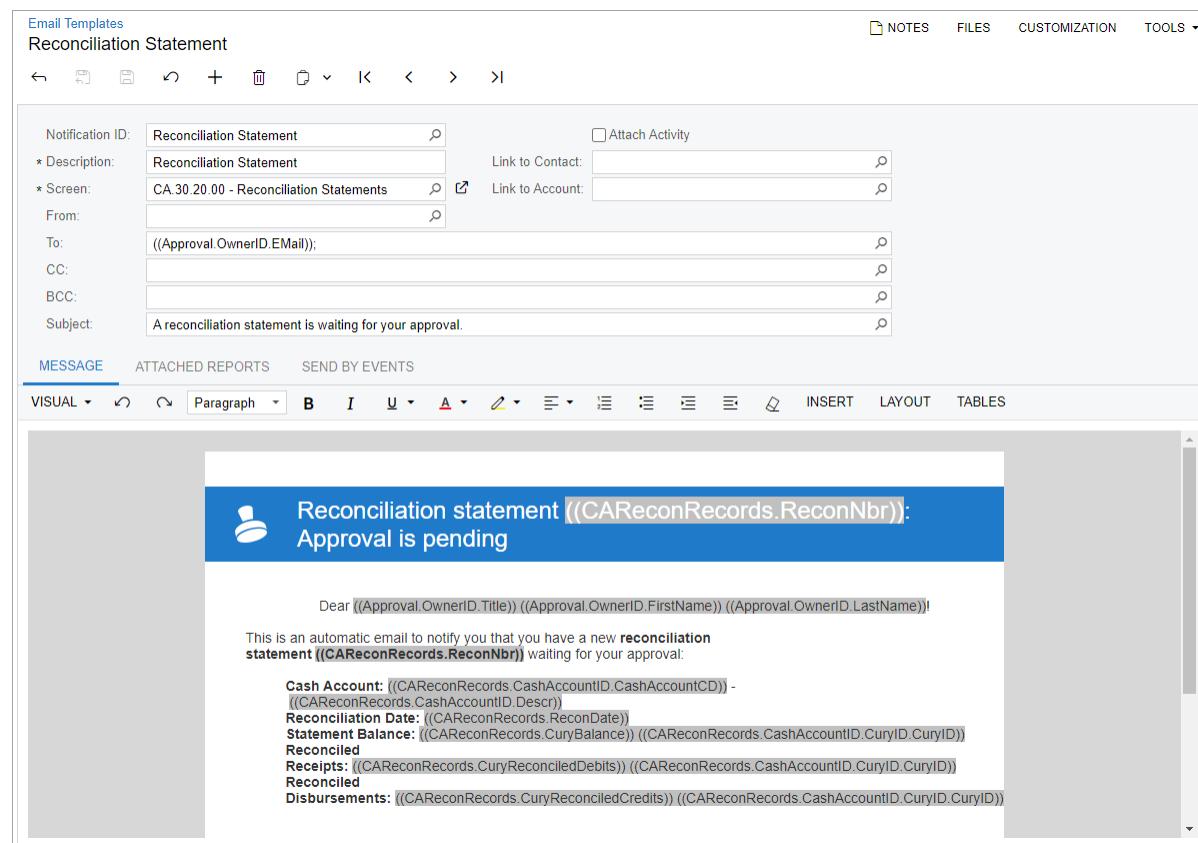


Figure: The Reconciliation Statement email template

Changes in the Bank Reconciliation Workflow

The workflow of reconciliation statement processing now includes the following steps:

1. The user clicks **Remove Hold** on the form toolbar of the *Reconciliation Statements* (CA302000) form.
2. The system checks whether any approval maps are active on the *Cash Management Preferences* (CA101000) form and are applicable to the reconciliation statement.
3. If no approval maps are found, the system sets the status of the reconciliation statement to *Balanced* and no further workflow steps are performed related to approvals.
4. If there is at least one approval map, the system does the following:
 - a. Checks whether the reconciliation statement is balanced. If it is not, the system displays an error message, and the reconciliation statement's status remains *On Hold*.
 - b. If the reconciliation statement is balanced, sets its status to *Pending Approval* until the reconciliation statement is balanced.
 - c. Generates a record with the *Pending* status for each approver on the *Approvals* tab of the *Reconciliation Statements* form.
 - d. Saves the reconciliation statement.
5. If an approver rejects the reconciliation statement, the system does the following:
 - a. Opens the **Enter Reason** dialog box so the user can enter the reason if on the **Rule Actions** tab of the *Approval Maps* (EP205015) form, the **Reason for Rejection** box is set to *Is Optional* or *Is Required* for the approval map.
 - b. Sets the status of the reconciliation statement to *Rejected* and saves the statement.

- c. Sets the status of the approval record to *Rejected* on the **Approvals** tab of the *Reconciliation Statements* form and saves the approval record.
6. If an approver approves the reconciliation statement, the system does the following:
- a. Opens the **Enter Reason** dialog box so the user can enter the reason if on the **Rule Actions** tab of the *Approval Maps* form, the **Reason for Approval** box is set to *Is Optional* or *Is Required* for the approval map.
 - b. Sets the status of the approval record to *Approved* on the **Approvals** tab of the *Reconciliation Statements* form and saves the approval record.
 - c. If the current approver is the last one, sets the status of the reconciliation statement to *Balanced*. If there are additional approvers, the reconciliation statement maintains the *Pending Approval* status.
 - d. Saves the reconciliation statement.

A reconciliation statement for which an approval map has been set up can have one of the following statuses.

Status	Description	Buttons Available on the Toolbar	Commands Available on the More Menu
<i>Pending Approval</i>	Before further processing can occur, the reconciliation statement needs to be approved by responsible approvers, which are assigned according to the approval map specified on the Approvals tab of the <i>Cash Management Preferences</i> (CA101000) form. The reconciliation statement can be either approved (which causes its status to change to <i>Balanced</i>) or rejected (which causes its status to change to <i>Rejected</i>).	<ul style="list-style-type: none"> • Approve • Reject 	<ul style="list-style-type: none"> • Hold • Approve • Reject • Reassign
<i>Rejected</i>	An approver has rejected the reconciliation statement by using the Reject command or button. The user who created the statement can edit it and resubmit it for approval (if needed) if they click Hold , make the edits, and click Remove Hold . The status of the reconciliation statement will change to <i>Pending Approval</i> .	Hold	Hold

Additional Information

For more details on configuring approvals for reconciliation statements, see [Specific Approvals: Reconciliation Statements](#).

For more details on the workflow of processing reconciliation statements with approvals, see [Bank Reconciliation: Approval of Reconciliation Statements](#).

Finance: Loading of Bank Feeds from a File

Some banks do not have integration with Plaid or MX bank feeds, but they provide bank transactions to their customers in a file. Acumatica ERP 2024 R2 now supports the loading of bank transactions from a file located in a Secure File Transfer Protocol (SFTP) folder.

The bank creates an SFTP folder and provides access to it. A user sets up a bank feed in Acumatica ERP, specifying the login, the password, and the SFTP folder as the URL. The user then sets up the mapping between the incoming file fields and the bank feed transaction fields in Acumatica ERP. The bank then exports the transactions to a file and places the file in the SFTP folder. Acumatica ERP detects the new file and extracts transactions from it. The system then performs the following automatic steps:

- On the [Cash Transactions](#) (CA304000) form, creates bank transactions for the cash account that is specified in the bank feed settings
- Detects duplicate transactions by transaction ID from the *Ext. Tran ID* field and omits their creation
- Creates expense receipts for the corporate card and employee that are specified in the bank feed settings and matches them to the respective bank transactions

The files that contain exported bank transactions must have the comma-separated values (CSV) format.

This functionality is available in the system if the *Bank Feed Integration* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

The following sections describe the changes to the UI and document processing to support this functionality.

Changes to the Bank Feeds Form

On the [Bank Feeds](#) (CA205500) form, the following UI changes have been made:

- In the **Bank Feed Type** box, the *File* option has been added (see Item 1 in the screenshot below).
- If *File* is selected in the **Bank Feed Type** box, the **Source File** tab appears on the form (Item 2), and the **Custom Mapping Rules** tab does not appear.

On the **Source File** tab, a user specifies the connection settings, creates a data provider, and sets up the mapping rules between the file fields and the target fields in Acumatica ERP.

The screenshot shows the 'Bank Feeds' screen in Acumatica. At the top, there are standard navigation icons and tabs: NOTES, FILES, CUSTOMIZATION, and TOOLS. Below the header, the form has several sections:

- Bank Feed ID:** FORMAT1 (with a search icon)
- Status:** Setup Required
- Bank Feed Type:** File (highlighted with a red box and circled with a red number 1)
- * Import Start Date:** 1/1/2024 (with a calendar icon)
- Description:** (empty text box)

Below these are tabs for different account types:

- CASH ACCOUNTS (selected, highlighted with a red box and circled with a red number 2)
- GENERAL ACCOUNTS
- INVENTORY
- ASSET
- LIABILITY
- REVENUE
- EXPENSE
- NET INCOME

Under the CASH ACCOUNTS tab, there are sections for **CONNECTION TO SOURCE FILE** and **SOURCE FILE**. The CONNECTION section includes fields for URL (sftp://), File Format (CSV (comma-separated values)), Login, and Password, along with a TEST CONNECTION button. The SOURCE FILE section includes a SET UP DATA PROVIDER button.

Below these sections is a **MAPPING RULES** table. The table has columns: Active (checkbox), Target Field or Value (text input), and Source Field or Value (text input). There are also icons for creating new rows: a plus sign, a minus sign, and a cross.

Figure: UI changes on the Bank Feeds form

On the **Cash Accounts** tab of the form, the user can now manually enter values in the **Account Name** and **Description** columns, and select a currency in the **Currency** column.

When the user clicks **Set Up Data Provider** (see Item 1 in the screenshot below), the following UI changes are applied to the tab:

- In the **Source File** section, the **Data Provider** and **Amount Format** boxes appear (Item 2).

The **Data Provider** box shows the name of the data provider created or updated by the system. This name consists of the *Bank Feed* string, followed by the current Bank Feed ID and the file format in parentheses. The user can click the Edit button right of this box to review the data provider on the [Data Providers](#) (SM206015) form.

The **Amount Format** box shows the amount format in the source file. (The available amount formats are described in detail below.)
 - The **Mapping Rules** table (Item 3) appears on the tab.
- In this table, the user maps the target fields of Acumatica ERP with the fields in the source file. The **Source Field or Value** column supports the entry of formulas. For the required rows in the table, the **Active** check box is selected and unavailable. Rows with the **Active** check box cleared are optional.

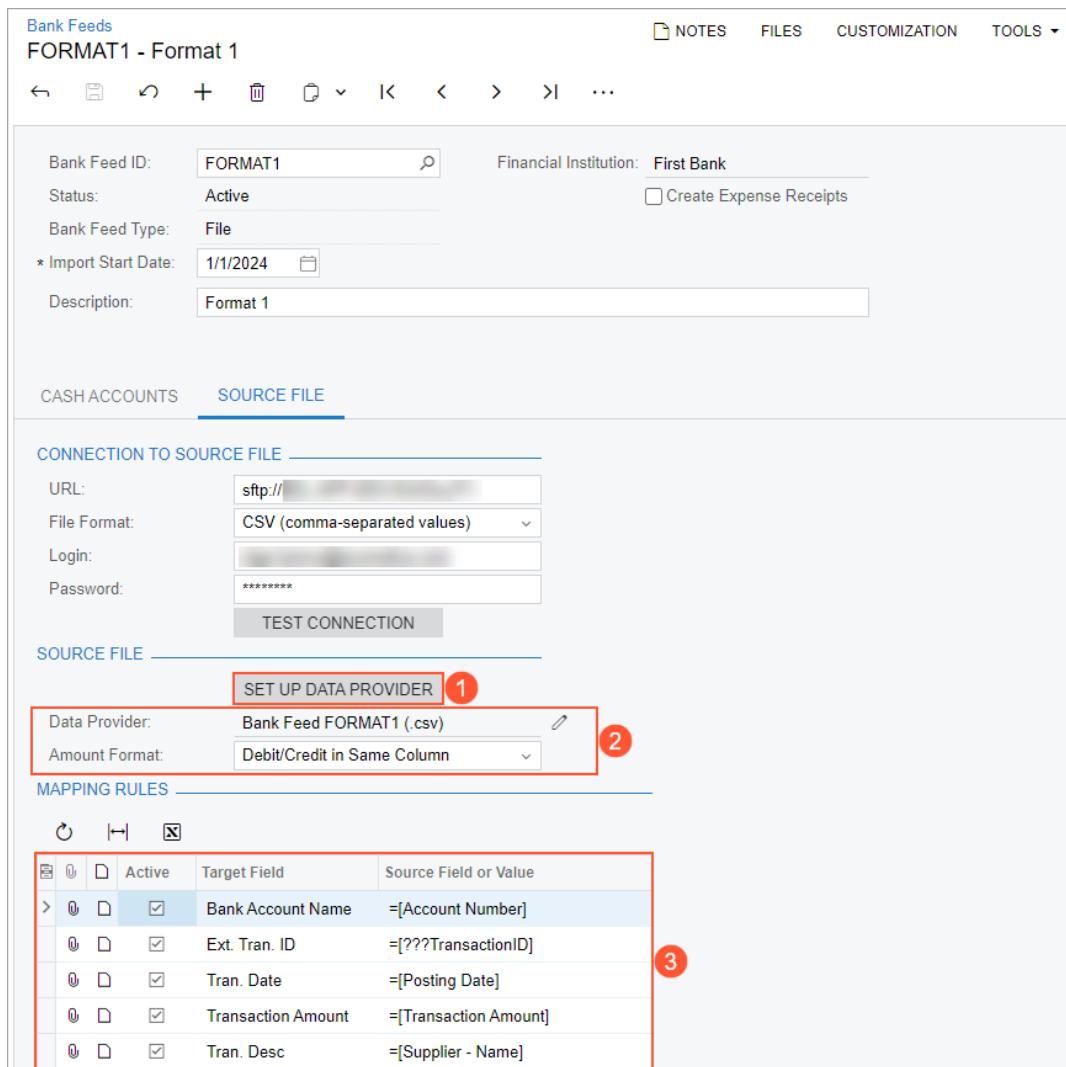


Figure: The Source File and Mapping Rules sections

Amount Formats

Depending on the amount format in the source file, the user can select one of the following options in the **Amount Format** box on the **Source File** tab (**Source File** section):

- **Debit/Credit in Same Column** (default): Debit (positive) amounts and credit (negative) amounts are displayed in the same column of the source file. The system will create disbursement transactions from debit entries and receipt transactions from credit entries. If this option is selected, the *Transaction Amount* row in the **Mapping Rules** table will remain in the list of required fields.

The following screenshot illustrates the mapping rules for this amount format.

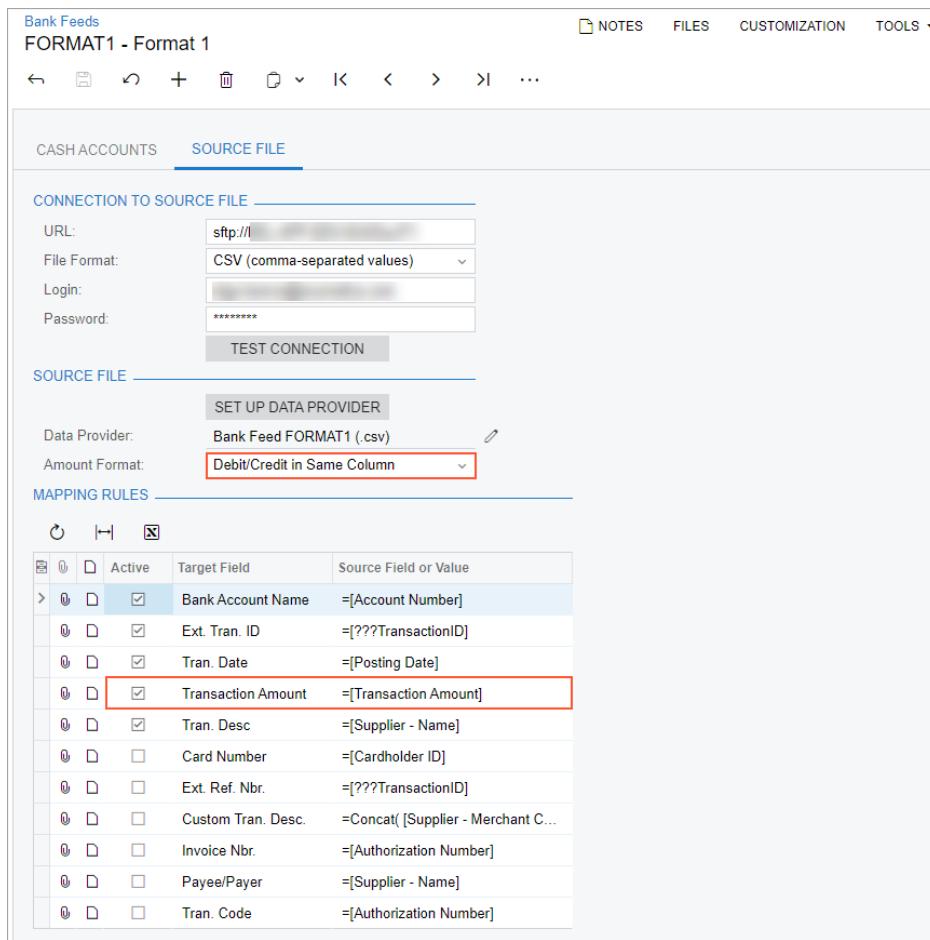


Figure: Mapping rules for the Debit/Credit in Same Column option

- **Debit and Credit in Different Columns:** Each amount in the source file is located either in the *Debit* column or in the *Credit* column. If this option is selected, the *Transaction Amount* row in the **Mapping Rules** table is replaced with two required rows: *Receipt Amount* and *Disbursement Amount*. The user must specify the mapping for each of these rows, so the system creates a disbursement when it finds an amount in one column and creates a receipt when it finds an amount in the other column.

The following screenshot illustrates the mapping rules for this amount format.

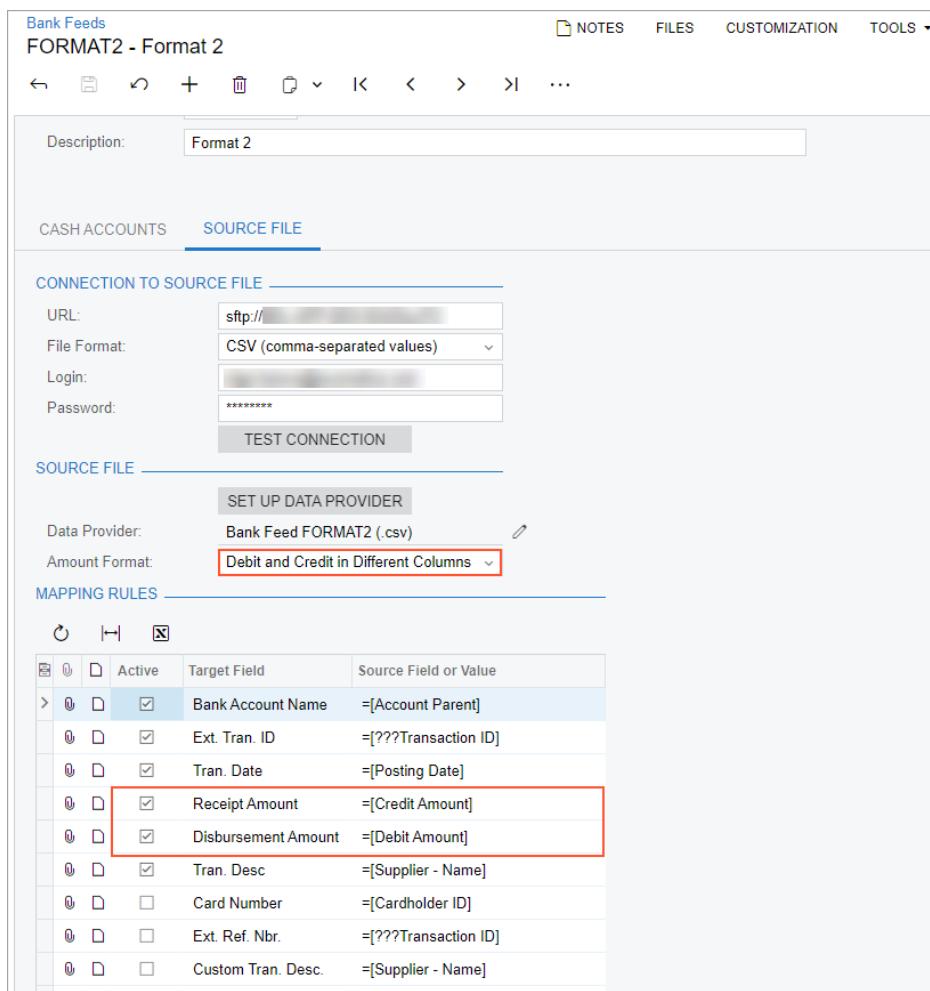


Figure: Mapping rules for the Debit and Credit in Different Columns option

- **Debit/Credit Property in Separate Column:** Debit amounts and credit amounts in the source file are displayed in the same column, and an amount's debit property (*Dr*) or credit property (*Cr*) is displayed in a separate column. If this option is selected, the **Disbursement Property** and **Receipt Property** boxes (see Item 1 in the following screenshot) appear in the **Source File** section. The user must fill in these fields with exact values from the source file, which indicate whether the amount should be used for disbursement or receipt creation. The **Transaction Amount** row remains in the **Mapping Rules** table, and the **Debit/Credit Property in Separate Column** row (Item 2) is added and marked as required. The user must specify which column in the source file contains the debit or credit property.

The following screenshot illustrates the mapping rules for this amount format.

The screenshot shows the 'Bank Feeds' form with 'FORMAT3 - Format 3' selected. The 'Source File' tab is active, displaying connection details (URL: sftp://, File Format: CSV (comma-separated values), Login: [REDACTED], Password: [REDACTED]) and a 'TEST CONNECTION' button. Below this, under 'SET UP DATA PROVIDER', the Data Provider is set to 'Bank Feed FORMAT3 (.csv)' and the Amount Format is 'Debit/Credit Property in Separate C...'. The Disbursement Property is 'Dr' and the Receipt Property is 'Cr', both highlighted with a red box and numbered 1. The 'Mapping Rules' section contains a table with columns: Active, Target Field, and Source Field or Value. A row for 'Debit/Credit Property in...' is highlighted with a red box and numbered 2. Other rows include: Bank Account Name = [Account Parent], Ext. Tran. ID = [???Transaction ID], Tran. Date = [Posting Date], Transaction Amount = [Transaction Amount], Tran. Desc = [Supplier - Name], Card Number = [Cardholder ID], Ext. Ref. Nbr. = [???Transaction ID], Custom Tran. Desc. = Concat([Posting Date], [Supplier - Name]), Invoice Nbr. = [Authorization Number], and Payee/Payer = [Supplier - Name].

Figure: Mapping rules for the Debit/Credit Property in Separate Column option

Transaction Loading in Test Mode

To load transactions in test mode from a file for a bank feed with the *File* type, the user performs the following actions on the [Bank Feeds](#) (CA205500) form:

1. On the More menu, clicks **Load Transactions in Test Mode**.

The system fetches a list of files available in the specified SFTP folder with the specified format. These files are shown in the drop-down list in the **File with Transactions** box.

2. In the **Load Transactions in Test Mode** dialog box, which is opened, selects the needed file in the **File with Transactions** box.
3. In the dialog box, clicks **Load Transactions**.

The system loads transactions to the table according to the mapping rules specified on the **Source File** tab.

The following screenshot illustrates bank transactions loaded in test mode on the [Bank Feeds](#) form.

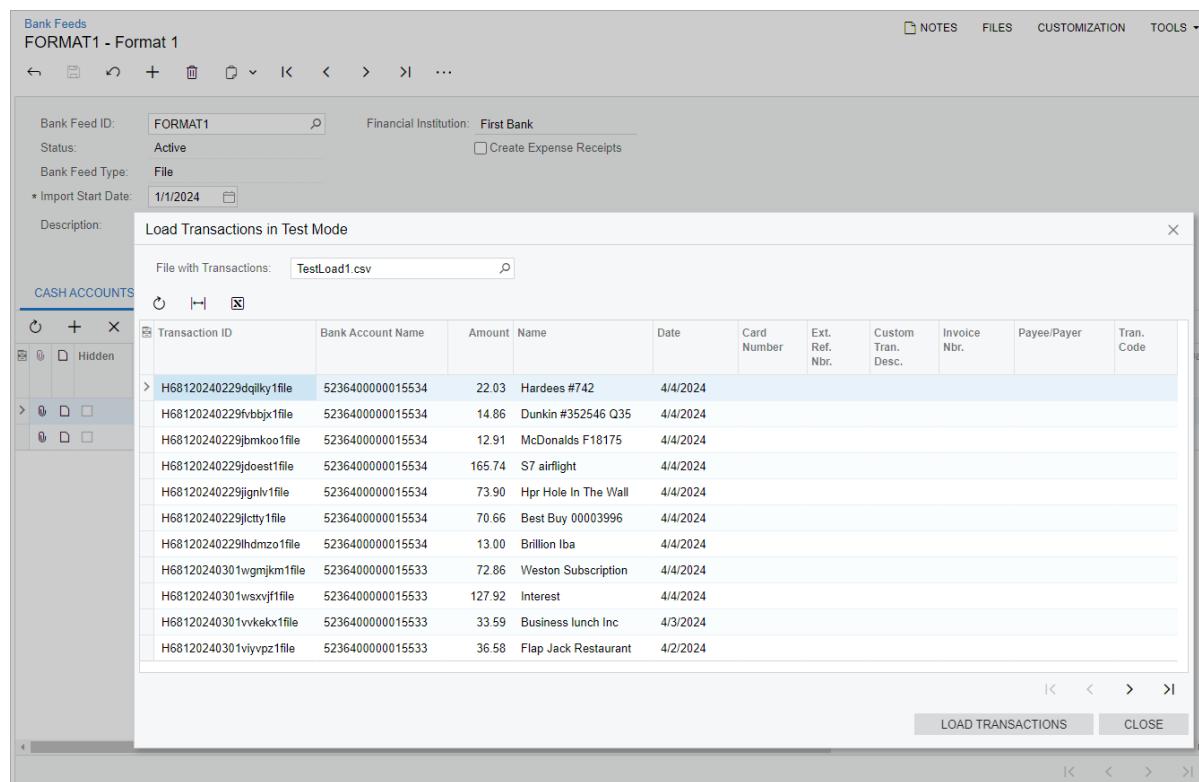


Figure: Transactions loaded in test mode

Creation of Expense Receipts

To cause the system to create expense receipts, the user must select the **Create Expense Receipts** check box in the Summary area of the [Bank Feeds](#) (CA205500) form and specify the needed settings on the **Corporate Cards** and **Expense Items** tabs, which appear on the form.

The **Create Expense Receipts for Pending Transactions** check box does not appear for bank feeds with the *File* type because source files contain only posted transactions.

Loading of Bank Feed Transactions From a File

A bank feed with the *File* type can have one of the following statuses on the [Bank Feeds](#) (CA205500) form:

- **Setup Required:** This status is assigned to a bank feed when the bank feed is created. Also, this status is assigned if some bank feed settings are removed in an active or suspended bank feed.
- **Active:** This status is assigned to a bank feed when the user clicks **Activate** on the More menu and all of the following conditions are met for the bank feed:
 - In the **Connection to Source File** section of the **Source File** tab, the URL, login, and password have been specified.
 - In the **Mapping Rules** table of the **Source File** tab, mapping rules have been set up for all the required rows (those that have the **Active** check box selected)
 - On the **Cash Accounts** tab, at least one line has been added with both the **Account Name** column and the **Cash Account** column filled in.

Only bank feeds with this status can be processed on the [Retrieve Bank Feed Transactions](#) (CA507500), [Import Bank Transactions](#) (CA306500), and [Process Bank Transactions](#) (CA306000) form.

- **Suspended:** This status is assigned to a bank feed when the user clicks **Suspend** on the More menu.

When a user selects a bank feed and clicks **Process** on the toolbar of the *Retrieve Bank Feed Transactions* form, the system does the following:

1. Verifies that the status of the bank feed is **Active**.
2. Detects new files in the SFTP folder that were previously unprocessed.
3. Pulls the new files into Acumatica ERP and parses them to create bank transactions by using the mapping from the **Mapping Rules** section of the **Source File** tab on the *Bank Feeds* form.
4. Applies the mapping of bank accounts to the cash accounts listed on the **Cash Accounts** tab of the *Bank Feeds* form, and determines the cash account for which transactions should be created and the transactions' dates.
5. Applies the corporate cards from the **Corporate Cards** tab and determines the card for which employee expense receipts must be created or updated, as well as the receipts' dates.
6. Creates transactions and expense receipts using the current **Import Transactions From** date and bank transaction ID to avoid duplication of transactions. (Transactions dated earlier than this date are not created.)

The imported transactions are displayed on the *Import Bank Transactions* (CA306500) form, as shown in the following screenshot.

The screenshot shows the 'Import Bank Transactions' form with the following details:

- Header:** Import Bank Transactions, 000004 - 10100 Petty Cash: 3/31/2024, with buttons for NOTES, FILES, CUSTOMIZATION, and TOOLS.
- Toolbar:** Includes standard navigation icons (back, forward, search, etc.) and buttons for PROCESS TRANSACTIONS and RETRIEVE TRANSACTIONS.
- Search and Filter:** Fields for * Cash Account (10100 - Petty Cash), * Statement Date (3/31/2024), * Start Balance Date (3/1/2024), Beginning Balance (0.00), * Reference Nbr. (000004), * End Balance Date (3/31/2024), Ending Balance (-4,054.14), and Calculated Balance (-4,054.14).
- Table:** A grid displaying a list of transactions. The columns include:
 - Matched (checkbox)
 - Processed (checkbox)
 - Hidden (checkbox)
 - Ext. Tran. ID (e.g., H68120240304chkhvq1file)
 - Ext. Ref. Nbr. (e.g., H68120240304chkhvq1file)
 - * Tran. Date (e.g., 3/11/2024)
 - Tran. Desc (e.g., Car and Truck Rental, Dunkin #352546 Q35, Car and Truck Rental, Dollar Tree, Business lunch Inc, Kwik Trip #1099, Nd Safety Council, Walmart Com Subscription, S7 airticket, Interest, WeatherTech, Paypal Erbessd Ins, Menards Racine WI, S7 flightlight, Scribd Inc 576612786)
 - Receipt (e.g., 0.00, 36.97, 178.57, 114.58, 361.20, 90.08, 150.00, 66.44, 446.95, 40.52, 292.13, 1,299.95, 41.50, 1,102.45, 12.96)
 - Disbursement (e.g., 0.00, 36.97, 178.57, 114.58, 361.20, 90.08, 150.00, 66.44, 446.95, 40.52, 292.13, 1,299.95, 41.50, 1,102.45, 12.96)
 - Card Number (e.g.,)
 - Invoice Nbr. (e.g.,)
 - Applied Rule (e.g.,)

Figure: Transactions imported from a file

If the user clicks **Process Transactions** on the form toolbar, the system navigates to the *Process Bank Transactions* (CA306000) form, where the user can proceed to matching the transactions and creating new transactions in the system.

Manual File Loading

On the More menu of the *Bank Feeds* (CA205500) form, the **Load File Manually** command has been added, as shown in the following screenshot.

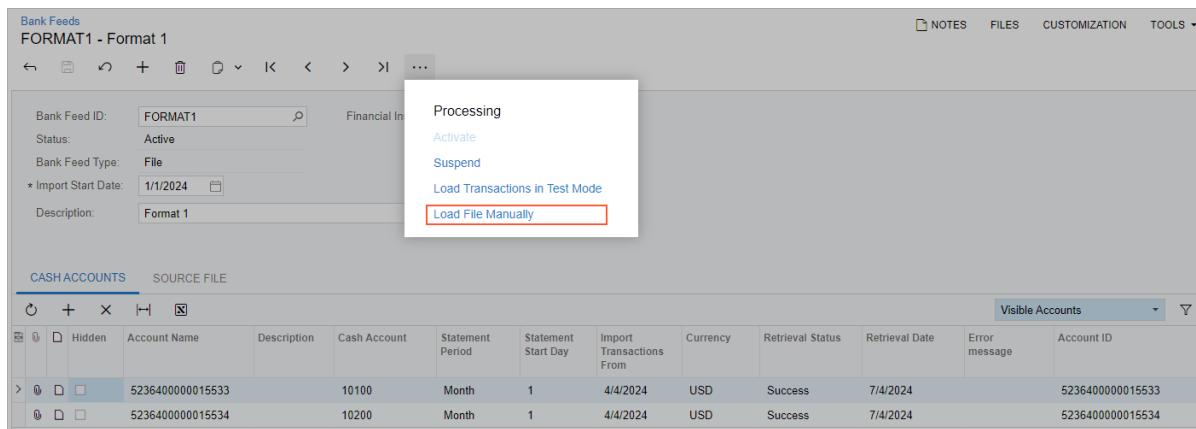


Figure: The Load File Manually command

The user can click this command to reload the same file with transactions. When the user clicks this command, the **Load File Manually** dialog box is displayed (see the following screenshot).

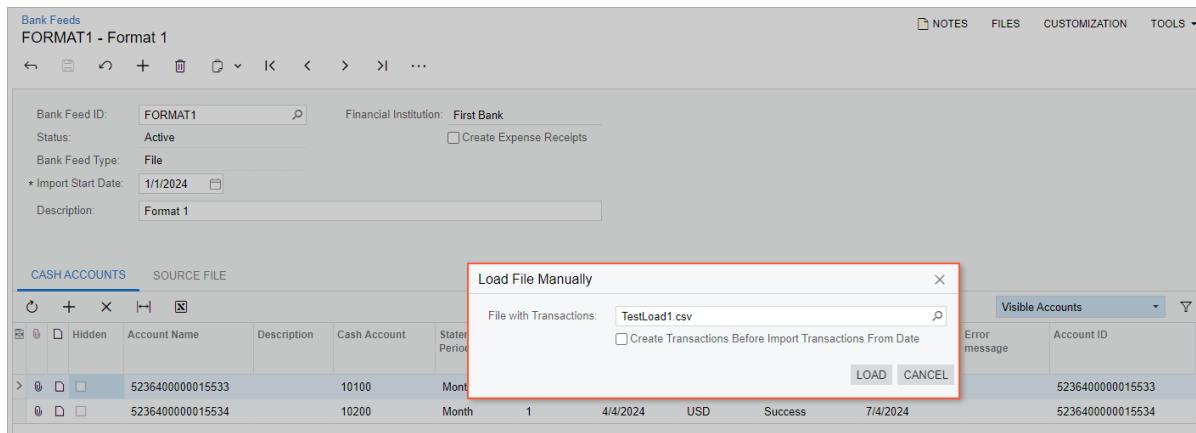


Figure: The Load File Manually dialog box

In this dialog box, the user selects a file with transactions from the list of files and clicks **Load**. If the **Create Transactions Before Import Transactions From Date** check box is selected, all transactions from the selected file will be created, regardless of the date. The system will skip duplicated transaction IDs during the creation process.

Additional Information

For more details about bank feeds loaded from a file, see [Loading of Bank Feeds from a File](#) and [To Set Up Bank Feeds Loaded from a File](#).

For details about loading bank transactions on different forms, see [To Load Bank Transactions from a File](#).

Finance: Matching of Bank Transactions to Debit Adjustments

In previous versions of Acumatica ERP, a receipt bank transaction could not be matched to a debit adjustment, and debit adjustments were not shown on the **Match to Invoices** tab of the [Process Bank Transactions](#) (CA306000) form. As a result, when performing bank reconciliation, a user had to match each debit adjustment individually to a bank transaction on the **Create Payment** tab of this form. The auto-matching process did not support the matching of bank transactions to debit adjustments either.

Starting in Acumatica ERP 2024 R2, users can match a receipt bank transaction to a debit adjustment on the **Match to Invoices** tab of the [Process Bank Transactions](#) form. Alternatively, users can perform the auto-matching process for this purpose.

Changes to the Cash Management Preferences Form

On the **Bank Statements** tab of the [Cash Management Preferences](#) (CA101000) form, the **Allow Matching to Debit Adjustment** check box has been added to the **Receipt Matching** section, as shown in the following screenshot.

The screenshot shows the 'Cash Management Preferences' window with the 'BANK STATEMENTS' tab selected. The 'DISBURSEMENT MATCHING' section contains fields for 'Days Before Bank Transaction Date' (5) and 'Days After Bank Transaction Date' (5), along with a checkbox for 'Allow Matching to Credit Memo'. The 'RECEIPT MATCHING' section contains fields for 'Days Before Bank Transaction Date' (5) and 'Days After Bank Transaction Date' (5), with a checked checkbox for 'Allow Matching to Debit Adjustment' which is highlighted with a red box. The 'INVOICE MATCHING' section contains checkboxes for 'Match by Cash Account' and 'Match by Discount and Due Date'. The 'OTHER MATCHING SETTINGS' section contains checkboxes for 'Allow Matching to Unreleased Batch Payments' and 'Skip Reconciled Transactions in Matching'. The 'AUTO-MATCH THRESHOLDS' section shows 'Absolute Relevance Threshold' at 75.00 and 'Relative Relevance Threshold' at 20.00. The 'IMPORT SETTINGS' section includes checkboxes for 'Ignore Currency Check on Bank Statement Import' (checked), 'Allow Empty FITID' (unchecked), and 'Import Bank Statement to Single Cash Account' (checked). The 'Statement Import Service' dropdown is set to 'PX.Objects.CA.OFXStatementReader'.

Figure: The new check box on the Cash Management Preferences form

If this check box is selected, the system will allow the matching of receipt bank transactions to AP debit adjustments. If the check box is cleared (the default value), receipt bank transactions are matched to AR invoices.

Changes to the Process Bank Transactions Form

On the [Process Bank Transactions](#) (CA306000) form, the **Transaction Matching Settings** dialog box opens when a user clicks **Match Settings** on the form toolbar. The **Allow Matching to Debit Adjustment** check box has been added to this dialog box, as shown in the following screenshot.

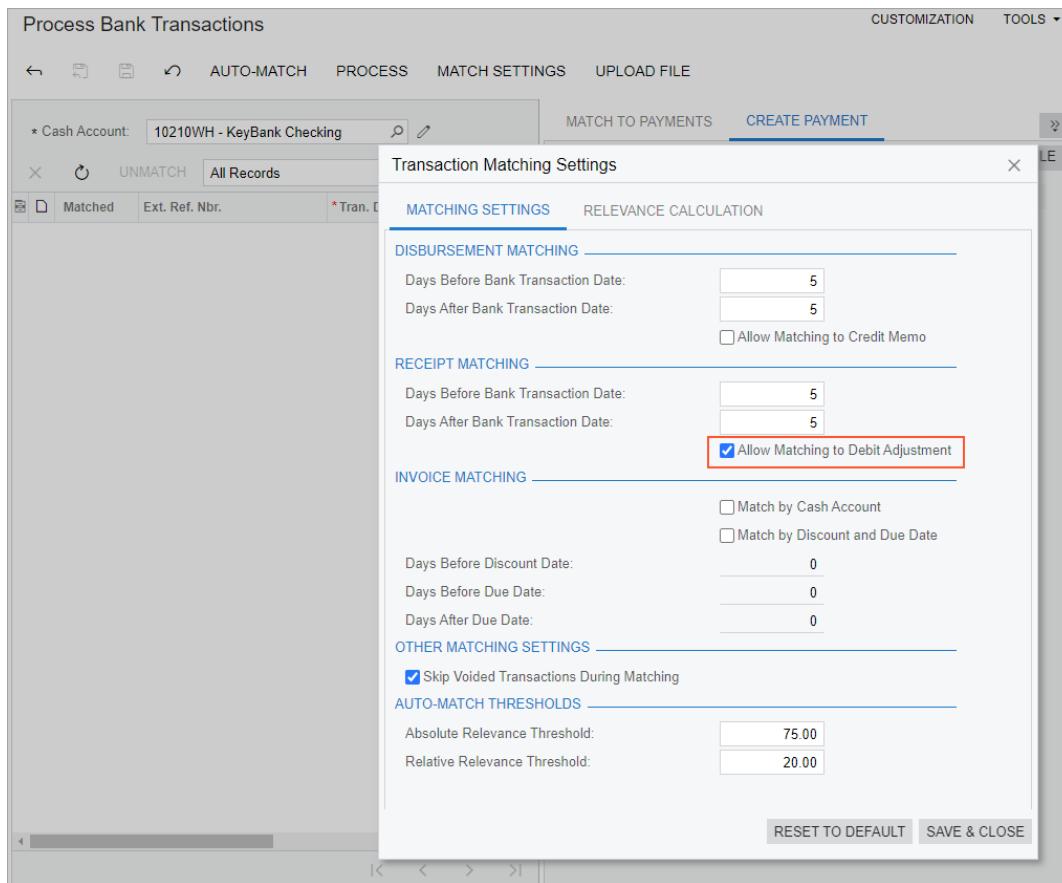


Figure: The new check box on the Process Bank Transactions form

To match a receipt bank transaction to a debit adjustment, a user should perform the following general steps:

1. On the **Import Bank Transactions** (CA306500) form, the user uploads the bank statement file for the needed cash account and period and clicks **Process Transactions** on the form toolbar.
2. On the **Process Bank Transactions** (CA306000) form, the user selects the receipt bank transaction in the left pane and goes to the **Match to Invoices** tab.
- On this tab, the system loads the documents that match the selected bank transaction.
3. The user selects the **Matched** check box for the debit adjustment to match it to the bank transaction, as shown in the following screenshot.

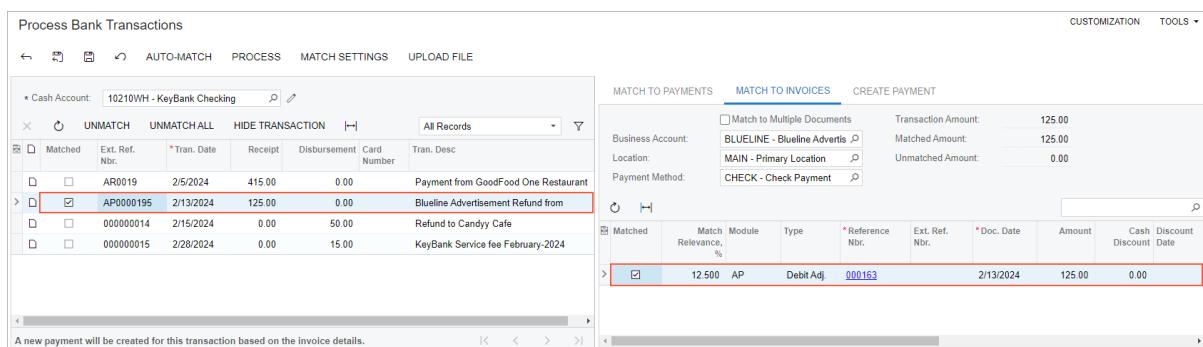


Figure: A bank transaction matched to a debit adjustment

4. The user completes the matching of bank transactions and clicks **Process** on the form toolbar.

When the processing is completed, for each receipt transaction matched to a debit adjustment, the system will create a refund. For this document, the **Ext. Ref. Nbr.** setting of the bank transaction shown in the left pane on the [Process Bank Transactions](#) form will be copied to the **Payment Ref.** box on the [Checks and Payments](#) (AP302000) form, as shown in the following screenshot.

The screenshot shows the 'Checks and Payments' application window. At the top, it displays 'Refund 000030 - Blueline Advertisement'. The main form contains fields for Type (Refund), Vendor (BLUELINE - Blueline Advertisement), Payment Amount (125.00), Reference Nbr. (000030), Location (MAIN - Primary Location), Unapplied Balance (0.00), Status (Closed), Joint Payee N... (Application Amount 0.00), Application Date (2/13/2024), Payment Meth. (CHECK), Application Period (02-2024), Cash Account (10210WH - KeyBank Checking), Description (Blueline Advertisement Refund from), and Payment Ref. (AP0000195). Below the main form, there are tabs for DOCUMENTS TO APPLY, APPLICATION HISTORY, FINANCIAL, REMITTANCE, CHARGES, and COMPLIANCE. The APPLICATION HISTORY tab is selected, showing a table with columns: Branch, Batch Number, Doc. Type, Reference Nbr., Line Inventory ID, Amount Paid, Cash Discount Taken, With. Tax, Application Period, Application Date, Date, Due Date, Cash Discount Date, Balance, and Cash Description. A single row is visible, corresponding to the refund application.

Branch	Batch Number	Doc. Type	Reference Nbr.	Line Inventory ID	Amount Paid	Cash Discount Taken	With. Tax	Application Period	Application Date	Date	Due Date	Cash Discount Date	Balance	Cash Description
HEADOFFICE	AP000178	Debit Adj	000163	0	125.00	0.00	0.00	02-2024	2/13/2024	2/13/2024		0.00	0.00	Refund

Figure: The created refund with the debit adjustment applied to it

Additional Information

For more details, see [Bank Reconciliation: Transaction Matching](#).

For an example of matching a bank transaction to a debit adjustment, see [Bank Reconciliation: To Process a Bank Statement in OFX Format \(Part 2\)](#).

Finance: Predefined Synchronization Schedule for Validating Card Payments

In previous versions of Acumatica ERP, to automate data synchronization between Acumatica ERP and an external e-commerce system, an administrative user had to set up automation schedules from scratch for each data entity.

To save time and simplify the automation of data synchronization, in Acumatica ERP 2024 R2, predefined automation schedules have been added to the [Automation Schedules](#) (SM205020) form. On the [Validate Card Payments](#) (AR513000) form, a predefined synchronization schedule for validating card payments has been added to run once a day.

Changes to the Validate Card Payments Form

On the [Validate Card Payments](#) (AR513000) form, to set up the predefined automation schedule for validating card payments, an administrative user should perform the following instructions:

1. On the form toolbar, click **Schedules** (see Item 1 in the screenshot below).
2. In the **Automation Schedules** dialog box, which is opened, select *Validate Card Payments* in the **Screen ID** box (Item 2).

The *Validate Card Payments* schedule has the following default settings:

- **Active:** Cleared (Item 3)
- **Executions to Keep in History:** 5 (Item 4)
- **Next Execution:** <Date> 12:00 AM (Item 5)



This setting is read-only but can be overridden on the **Schedule** tab.

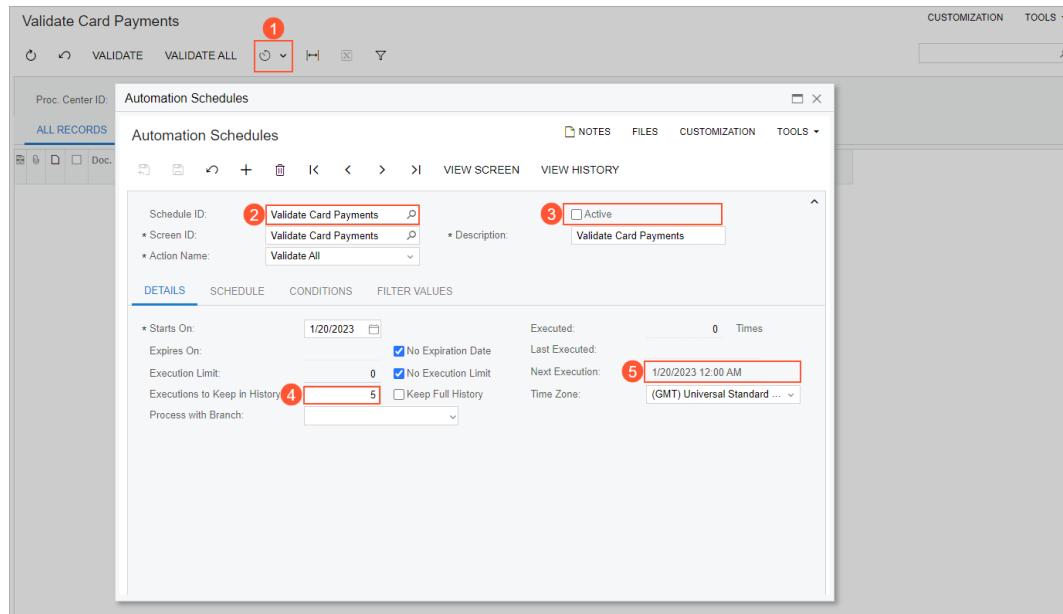


Figure: The new Validate Card Payments automation schedule

3. Select the **Active** check box, specify the required settings for the schedule, and save the new schedule.

The *Validate Card Payments* schedule will run for all active processing centers to which it has been added.

Additional Information

For details about the configuration of the *Validate Card Payments* schedule, see [Automatic Payment Collection](#) and [To Schedule Validation of Card Payments](#).

Finance: Prepayment Invoices in Accounts Receivable



This functionality is available in Acumatica ERP starting in 2024 R1 Update 5.

In some countries with value-added tax (VAT) regulations, companies are required to report taxes upon receiving prepayments from clients. Therefore, when a company receives a prepayment from a customer, it is typically required to report taxes on that prepayment for the period in which the prepayment was received.

To help companies meet these requirements, Acumatica ERP has introduced the prepayment invoice functionality. With this functionality, users can create prepayment invoices for the items and services ordered by customers. The system calculates taxes on each prepayment invoice. Once the prepayment invoice is paid, the company can report the taxes in the reporting period in which the prepayment was received.

Users can create prepayment invoices when the new *VAT Recognition on Prepayments* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

Creation and Processing of a Prepayment Invoice

A user creates a prepayment invoice on the [Invoices and Memos](#) (AR301000) form. In the **Type** box of the Summary area, the user selects the new *Prepm. Invoice* document type (see the following screenshot).

The screenshot shows the 'Invoices and Memos' (AR301000) form. The 'Type' field is highlighted with a red box, showing a dropdown menu with options: 'Invoice', 'Debit Memo', 'Credit Memo', 'Credit WO', and 'Prepm. Invoice'. The 'Prepm. Invoice' option is selected. Other fields visible include 'Customer', 'Location', 'Terms', 'Due Date', 'Cash Discount', and 'Project'. Below the summary area, there are tabs for 'DETAILS', 'FINANCIAL', 'ADDRESSES', 'TAXES', 'APPROVALS', 'APPLICATIONS', and 'COMPLIANCE'. The 'DETAILS' tab is active, showing a grid for entering transaction details like 'Inventory ID', 'Transaction Descr.', 'Quantity', 'UOM', 'Unit Price', 'Ext. Price', 'Discount Percent', 'Discount Amount', 'Amount', 'Order Type', and 'Order Nbr.'

Figure: The new *Prepm. Invoice* type

Once the prepayment invoice is saved, the system assigns a reference number to the prepayment invoice based on the numbering sequence specified in the new **Prepayment Invoice Numbering Sequence** box on the [Accounts Receivable Preferences](#) (AR101000) form (shown in the following screenshot).

The screenshot shows the 'Accounts Receivable Preferences' window with the 'GENERAL' tab selected. Under the 'NUMBERING SETTINGS' section, there is a list of sequence types and their corresponding codes. The 'Prepayment Invoice Numbering Sequence' is listed as 'PRPMTINV - Prepayment Inv' and is highlighted with a red border. Other sequences include GL Batch Numbering Sequence (BATCHAR - AR Batch), Invoice Numbering Sequence (ARINVOICE - AR Invoice), Payment Numbering Sequence (ARPAYMENT - AR Payment), Debit Memo Numbering Sequence (ARINVOICE - AR Invoice), Credit Memo Numbering Sequence (ARINVOICE - AR Invoice), Write-Off Numbering Sequence (ARINVOICE - AR Invoice), Price Worksheet Numbering Sequence (ARPRICEWS - AR Price Worl), and Dunning Fee Numbering Sequence (ARINVOICE - AR Invoice). To the right of these, under 'DATA PROCESSING SETTINGS', are options like 'Enable Integrated CC Processing' and 'Age Credits'. Below these are sections for 'CONSOLIDATION SETTINGS', 'DEFAULT WRITE-OFF REASON CODES' (with 'Balance Write-Off Reason Code' set to 'BALWOFF'), 'VAT RECALCULATION SETTINGS', and 'RETAINAGE SETTINGS'.

Figure: The prepayment invoice numbering sequence

In the prepayment invoice, the system calculates the total invoice amount, including taxes, and displays it in the **Unpaid Balance** box of the Summary area.



The **Unpaid Balance** box is shown instead of the **Balance** box if the prepayment invoice has one of the following statuses: *On Hold*, *Pending Approval*, *Pending Print*, *Pending Email*, *Rejected*, *Balanced* and *Pending Payment*. When the prepayment invoice is paid in full, the **Balance** box is displayed again instead of the **Unpaid Balance** box.

When the user releases the prepayment invoice, the system assigns it the *Pending Payment* status and generates a GL batch to debit the Accounts Receivable account and credit the Prepayment Account in the amount of the prepayment invoice.

Once the prepayment invoice is released, it can be paid. On the *Invoices and Memos* form, a user clicks **Pay** on the form toolbar. The system creates a payment application and opens it on the *Payments and Applications* (AR302000) form. On this form, on the **Documents to Apply** tab, the prepayment invoice is added. The prepayment invoice can be paid fully or partially as follows:

- To pay the prepayment invoice in full, the user ensures that the system has inserted the amount of the unpaid balance of the prepayment invoice in the **Payment Amount** box of the Summary area and in the **Amount Paid** column of the **Documents to Apply** tab of the *Payments and Applications* form. The user releases the payment.

On release, the system generates a GL batch to debit the company's cash account and credit the Accounts Receivable account. The batch also includes tax transactions debiting the Pending Tax Payable account and crediting the Tax Payable account. The *Payment* document is assigned the *Closed* status. On the **Application History** tab of the *Payments and Applications* form, the system has added the line with the reference numbers of the prepayment invoice and of the generated GL batch. The prepayment invoice has been assigned the *Unapplied* status, which means that the prepayment invoice can be applied to AR invoices or debit memos issued to the customer specified in the prepayment invoice. For a fully paid prepayment invoice, the available balance is displayed in the **Balance** box in the Summary area of the *Invoices and Memos* form; this box replaces the **Unpaid Balance** box once the prepayment invoice is paid. The system also updates the customer's balance on the *Customers* (AR303000) form.

- To apply a partial payment to the prepayment invoice, the user specifies the payment amount in the **Payment Amount** box of the Summary area and in the **Amount Paid** column on the **Documents to Apply**

tab of the [Payments and Applications](#) form; the user then releases the application. The generated GL batch includes tax transactions, with tax amounts calculated based on the partially paid amount. The *Payment* document is assigned the *Closed* status. The system removes the line on the **Documents to Apply** tab and adds a new line with the prepayment invoice on the **Application History** tab. The prepayment invoice keeps the *Pending Payment* status. The remaining invoice amount is specified in the **Unpaid Balance** box of the Summary area on the [Invoices and Memos](#) form.

The unpaid balance of the prepayment invoice can be either paid or written off. To write off the unpaid balance of the invoice, the user clicks **Write Off Unpaid Balance** on the More menu of the [Invoices and Memos](#) form. The system creates a document of the *Credit Memo* type and opens it on the current form. On release of the credit memo, the system generates a GL transaction, which debits the customer's prepayment account and credits the Accounts Receivable account.

When the prepayment invoice has been fully paid, it can be applied to any number of accounts receivable invoices or debit memos. The user applies the prepayment invoice with the *Unapplied* status to one AR invoice or debit memo in full or distributes the unapplied balance of the prepayment invoice to multiple invoices or debit memos of the customer. In the prepayment invoice, on the [Invoices and Memos](#) form, the user clicks **Apply** on the form toolbar. The system opens the [Payments and Applications](#) form with the prepayment invoice selected in the Summary area. On the **Documents to Apply** tab, the user selects one or more AR invoice or debit memos of the customer. In the **Amount Paid** column of the tab, they specify the amount to be paid for the selected AR invoice or memo. Then on the form toolbar, they click **Release**. On release, the system generates a GL batch to debit the prepayment account and credit the Accounts Receivable account. The batch also includes tax transactions debiting the Tax Payable account and crediting the Pending Tax Payable account.

The statuses and balances of prepayment invoices and AR invoices or debit memos can be affected as follows, depending on whether the AR invoice or debit memo is fully or partially paid and how much of the unapplied balance from the prepayment invoice is used (an AR invoice is used in this example):

- If part of the AR invoice balance has been specified in the **Amount Paid** column on the **Documents to Apply** tab of the [Payments and Applications](#) form and the application has been released, the AR invoice keeps the *Open* status, and its balance is decreased by the amount paid. If the AR invoice has been paid in full, the invoice's status changes to *Closed*, and its balance is 0.
- If the full available balance of the prepayment invoice has been applied to an AR invoice or multiple AR invoices, the status of the prepayment invoice changes to *Closed* and its available balance is 0. If a part of the available balance of the prepayment invoice has been applied to an AR invoice or multiple invoices, the prepayment invoice's status remains *Unapplied*, and the remaining available balance specified in the **Available Balance** box of the Summary area of the [Payments and Applications](#) form is decreased.

On the **Application History** tab of the current form, the system has added a line with the details of the AR invoice and the reference number of the generated GL batch. The GL batch contains the reversed tax entries posted on application of the payment to the prepayment invoice. The system updates the customer balance on the [Customers](#) form.



If a prepayment invoice has already been applied to an AR invoice or debit memo, the payment applied previously to the prepayment invoice cannot be reversed. To reverse a payment application, a user must first reverse the application of the prepayment invoice to the AR invoice or debit memo, and then reverse the application of the payment to the prepayment invoice.

Correction of Prepayment Invoices

In certain cases, a prepayment invoice may need to be corrected or voided. This could happen, for instance, if the items included in the prepayment invoice are no longer needed. In these cases, the unpaid balance of the prepayment invoice can be written off or a prepayment invoice can be voided if it has not been paid yet.

Writing Off the Unpaid Balance of the Partially Paid Prepayment Invoices

A user can write off the unpaid balance of prepayment invoices that have been paid partially.

To do this, on the [Invoices and Memos](#) (AR301000) form, the user opens a prepayment invoice with the *Pending Payment* status. On the More menu (under **Corrections**), they click **Write Off Unpaid Balance** (see the following screenshot).

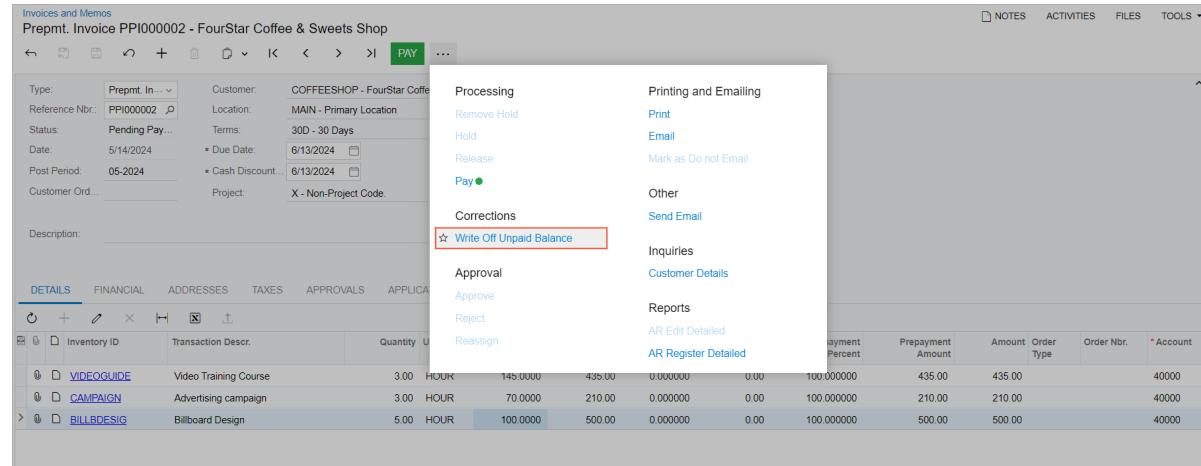


Figure: The Write Off Unpaid Balance Command

The system creates a *Credit Memo* document (see Item 1 in the following screenshot) with the *Write-off of prepayment invoice [Reference Nbr.]* description (Item 2) and opens it on the current form. On the **Details** tab, the credit memo has a single line that summarizes all detail lines of the prepayment invoice (Item 3) and displays the invoice's unpaid balance in the **Ext. Price** column (Item 4). This amount cannot be edited.

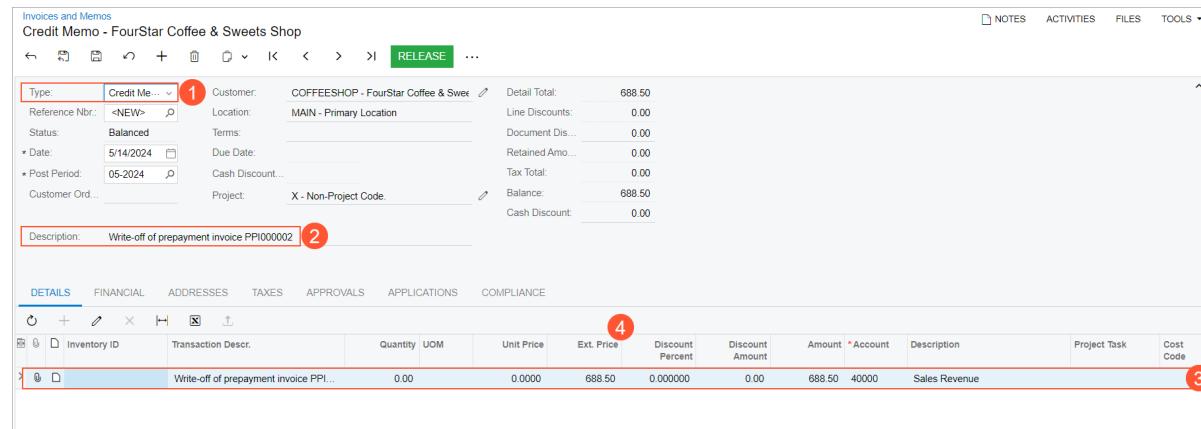


Figure: The credit memo to write off the unpaid balance of the prepayment invoice

On the **Applications** tab, the system has added the related prepayment invoice.

On release of the credit memo, the system generates a GL transaction that debits the customer's prepayment account and credits the Accounts Receivable account. The system specifies the transaction's reference number on the **Financial** tab of the current form. Once the credit memo is released, it is assigned the *Closed* status; the prepayment invoice still has the *Unapplied* status. The prepayment invoice can be applied to the customer's invoices or debit memos or linked to the customer's sales orders.



Prepayment invoices can be linked to sales orders if the *Inventory and Order Management* feature is enabled on the [Enable/Disable Features](#) (CS100000) form. This functionality is described in the next topic of this document.

The application of the credit memo that was created during the write-off of the unpaid balance of a prepayment invoice cannot be reversed.

Voiding the Unpaid Prepayment Invoices

The prepayment invoices with the *Pending Payment* status that have not been paid at all can be voided. A user voids a prepayment invoice by writing off its unpaid balance.

To do this, on the [Invoices and Memos](#) (AR301000) form, the user opens the prepayment invoice with the *Pending Payment* status. On the More menu, the user clicks **Write Off Unpaid Balance** under the **Corrections** section. The system creates a *Credit Memo* document with the *Voiding of prepayment invoice [Reference Nbr.]* description and opens it on the current form. On the **Details** tab, the credit memo has a single line that is the sum of all detail lines of the prepayment invoice and displays the invoice's unpaid balance in the **Ext. Price** column. This amount cannot be edited. On the **Applications** tab, the system has added the related prepayment invoice.

On release of the credit memo, the system generates a GL transaction that debits the customer's prepayment account and credits the Accounts Receivable account. This GL transaction reverses the GL transaction that was generated on release of the prepayment invoice. The system specifies the reference number of the newly created transaction on the **Financial** tab of the current form. Once the credit memo is released, it is assigned the *Closed* status, and the prepayment invoice is assigned the *Voided* status.

The application of the credit memo that was created during the write-off of the unpaid balance of a prepayment invoice cannot be reversed.

Reports and Inquiry Forms Affected by Prepayment Invoices

Users can do the following on the report or inquiry forms that have been affected by the prepayment invoice functionality:

- Review the customer balance: When a prepayment invoice is released, the customer's balance is updated. Users can view the prepayment balance of a customer on the [Customer Details](#) (AR402000) form. This form can be opened directly or by clicking **Customer Details** (under **Inquiries**) on the More menu of the [Invoices and Memos](#) (AR301000) or [Payments and Applications](#) (AR302000) form.

Unlike other documents, prepayment invoices are displayed on the [Customer Details](#) form in two lines:

- The first line shows the amount that has been posted to the customer's AR account; this amount has a positive sign.
- The second line shows the amount that has been posted to the customer's prepayment account; this amount has a negative sign.



The **AR Account** and **AR Subaccount** columns are visible only if the *VAT Recognition on Prepayments* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

- Prepare customer statements: Prepayment invoices of the *Pending Payment* status (if they have not been paid yet or have been partially paid) are included in statements. The unpaid balances of prepayment invoices are shown in statements with a positive sign. Users can prepare statements on the [Prepare Statements](#) (AR503000) form or view any generated statement of a particular customer on the [Customer Statement History](#) (AR404600) form.



The total amount due shown in a statement does not match the customer's balance because the customer's balance includes the balances of the fully and partially paid prepayment invoices.

- Prepare dunning letters: Prepayment invoices with the *Pending Payment* status (if they have not been paid yet or have been partially paid) are included in dunning letters. On the [Prepare Dunning Letters](#) (AR521000) form, users can generate dunning letters for customers that have unpaid and overdue invoices and unpaid prepayment invoices.



This functionality is available only if the *Dunning Letter Management* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

- Generate the AR Aging reports: All of the following reports show all AR documents in the system, including unpaid or partially paid prepayment invoices (that is, prepayment invoices of the *Pending Payment* status) that are outstanding at the end of the specified period: [AR Aging](#) (AR631000), [AR Aging by Project](#) (AR631200), [AR Aged Period-Sensitive](#) (AR630500), [AR Aged Period-Sensitive by Project](#) (AR630600), [AR Aging MC](#) (AR631100).



The [AR Aging MC](#) report is available only if the *Multicurrency Accounting* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

In these reports, the unpaid balances of prepayment invoices are included with a positive sign.



The **Customer Total** amount specified in reports does not match the customer's balance because the customer's balance includes the balances of the fully and partially paid prepayment invoices.

The following reports have been also updated to include data related to prepayment invoices:

- [AR Balance by GL Account](#) (AR632000)
- [AR Balance by Customer](#) (AR632500)
- [AR Balance by Customer MC](#) (AR633000)
- [AR Edit](#) (AR611000)
- [AR Edit Detailed](#) (AR610500)
- [AR Register](#) (AR621500)
- [AR Register Detailed](#) (AR622000)
- [Customer Summary](#) (AR401000)

Finance: Prepayment Invoices for Sales Orders



This functionality is available in Acumatica ERP starting in 2024 R1 Update 5.

In certain countries, when a company requests a prepayment for a sales order, they must record taxes on the received prepayment. To meet these requirements, in Acumatica ERP, users can create prepayment invoices containing the same items as a particular sales order. The prepayment invoices include the taxes calculated based on the prepayment amount.

A user can create a prepayment invoice directly from the sales order; alternatively, if a prepayment invoice has been created manually, the user can link it to a sales order.

Processing of a Prepayment Invoice Created from a Sales Order

A user can create a prepayment invoice directly from a sales order, which causes the system to populate the prepayment invoice settings from the sales order.

When a sales order has been created and saved on the [Sales Orders](#) (SO301000) form, a user can create a prepayment invoice to request a full or partial prepayment for the sales order. On the **Payments** tab of the form, the user clicks the **Create Prepayment Invoice** button (see the following screenshot).

The screenshot shows the Sales Orders (SO301000) form for SO 000117 - FourStar Coffee & Sweets Shop. The Payments tab is selected. At the top of the Payments section, there is a button labeled "CREATE PREPAYMENT INVOICE" which is highlighted with a red box. Below this, there are several tabs: DETAILS, TAXES, FINANCIAL, SHIPPING, ADDRESSES, SHIPMENTS, PAYMENTS, RELATIONS, and TOTALS. The PAYMENTS tab is active. Under the PAYMENTS tab, there are sections for "Doc. Type", "Reference Nbr.", "Blanket SO Ref. Nbr.", "Applied To Order", "Transferred to Invoice", "Balance", "Status", "Payment Ref.", "Payment Method", "Cash Accou", "Authorized", "Released", "Total Paid", "Total Transferr...", "Unpaid Balance", and "Unbilled Balan...". The "Balance" field shows 330.00, and the "Status" field shows Active.

Figure: The Create Prepayment Invoice button

In the **Create Prepayment Invoice** dialog box, which opens, the **Prepayment Percent** (see Item 1 in the screenshot below) and **Prepayment Amount** (Item 2) boxes are populated depending on the state of the **Prepayment Required** check box in the customer's credit terms specified on the [Credit Terms](#) (CS206500) form:

- If the check box is cleared, the following values are specified:
 - **Prepayment Percent:** 100 for the first prepayment invoice created for the sales order; the percentage calculated proportionally to the specified prepayment amount for subsequent prepayment invoices
 - **Prepayment Amount:** The unpaid balance of the sales order for the first prepayment invoice created for the sales order; the unpaid balance of the sales order for subsequent prepayment invoices (if the prepayment percentage or prepayment amount was changed for the first prepayment invoice)

A user can either keep these values unchanged (thus creating a prepayment invoice covering the order total) or specify a required prepayment percent or amount, which causes the other value to be calculated automatically.
- If the check box is selected and the prepayment percent is defined in the customer's credit terms, the following values are specified:

- **Prepayment Percent:** The percent defined by the credit terms for the first prepayment invoice; the percentage calculated proportionally to the specified prepayment amount for subsequent prepayment invoices
- **Prepayment Amount:** The amount calculated according to the prepayment percent for the first prepayment invoice; the unpaid balance of the sales order for subsequent prepayment invoices
A user can either keep these values unchanged (thus creating a prepayment invoice covering the required prepayment amount) or change the prepayment percent or amount. If a user reduces the prepayment percent, an additional prepayment invoice or multiple invoices will be required.

Once the user has reviewed the prepayment percent and prepayment amount (and changed them if needed), they click **Create**. The system closes the dialog box and opens the prepayment invoice on the *Invoices and Memos* (AR301000) form with most of the settings copied from the sales order. The system assigns the reference number of the prepayment invoice based on the numbering sequence specified in the **Prepayment Invoice Numbering Sequence** box on the *Accounts Receivable Preferences* (AR101000) form.

On the **Details** tab of the *Invoices and Memos* form, the system has added only the unbilled lines of the sales order to the prepayment invoice that is created. The following settings are specified in the corresponding columns:

- **Prepayment Percent:** The prepayment percent specified in the dialog box during the creation of the invoice
- **Prepayment Amount:** The prepayment amount calculated for the line, which it determines by applying the prepayment percentage to the line's **Ext. Price** (minus the line's **Discount Amount**, if one is specified)
- **Order Type:** The sales order type
- **Order Nbr.:** The reference number of the sales order from which the prepayment invoice has been created

A user can edit the settings of the prepayment invoice (excluding the **Customer** and **Currency** settings) before releasing the document.



If there are group or document discounts in the sales order from which the prepayment invoice is created, the system will not transfer them to the prepayment invoice. As a result, the unpaid balance of the prepayment invoice will be greater than expected. A warning will appear next to the **Unpaid Balance** box. The group or document discounts can be manually added to the prepayment invoice. This limitation will be addressed in the future.

Once the prepayment invoice has been created, the system does the following on the *Sales Orders* form:

- On the **Payments** tab, adds a row with the following settings of the created prepayment invoice:
 - **Doc. Type:** *Prepm. Invoice*
 - **Reference Nbr.:** The reference number of the prepayment invoice
 - **Applied to Order:** The **Unpaid Balance** of the prepayment invoice
- On the **Totals** tab, updates the **Total Paid** and **Unpaid Balance** boxes



If a user has changed the prepayment amount or prepayment percent on the **Details** tab of the *Invoices and Memos* form in the unreleased prepayment invoice created from a sales order, the system updates the **Applied to Order** amount to the new prepayment amount in the sales order on the **Payments** tab of the *Sales Orders* form when the prepayment invoice is released. If a user has changed the prepayment amount in the unreleased prepayment invoice so that the prepayment amount exceeds the unpaid balance of the sales order, then the system will specify the remaining unpaid balance of the sales order in the **Applied to Order** column of the *Sales Orders* form.

For details of how to process prepayment invoices, see *Finance: Prepayment Invoices in Accounts Receivable*.

Payment of a Sales Order

If a prepayment invoice has been created for the total amount of a sales order and then paid in full, when a user creates a sales invoice for the sales order, the system automatically applies the prepayment invoice to the sales invoice. In the sales invoice, on the **Applications** tab of the *Invoices and Memos* (AR301000) form, the system adds

a line with the prepayment invoice. Once a user releases the sales invoice, it is assigned the *Closed* status and the sales order is assigned the *Completed* status.

If a prepayment invoice has been created for part of an order's total amount and then paid, when a user creates a sales invoice for the sales order, the system automatically applies the prepayment invoice to the sales invoice on the **Applications** tab of the *Invoices and Memos* form. Once the sales invoice has been released, in the **Balance** box of the Summary area of the *Invoices and Memos* form, the system specifies the invoice balance, from which it has subtracted the amount paid by the prepayment invoice. The sales invoice remains open and a user will need to pay the amount that has not been covered by the prepayment invoice.

If a prepayment invoice has not been paid, the system does not apply it to the sales invoice automatically.

If a particular prepayment percent is required based on the settings of the customer's credit terms on the *Credit Terms* (CS206500) form, then the sales order retains the *Awaiting Payment* status until the full required prepayment amount is paid. Users can create multiple prepayment invoices or one prepayment invoice that covers 100% of the required prepayment amount. In the latter case, after the prepayment invoice has been paid, the sales order is assigned the *Open* status, and a user can prepare a sales invoice for the remaining amount of the order.

Linking of Prepayment Invoices to a Sales Order

In Acumatica ERP, a user can create a prepayment invoice manually on the *Invoices and Memos* (AR301000) form and then link it to the applicable sales order.

A user links a released prepayment invoice—which has the *Pending Payment* status—to a sales order in either of the following ways:

- A user opens a sales order on the *Sales Orders* (SO301000) form. On the **Payments** tab, the user adds a line. In the line, they select *Prepm. Invoice* in the **Doc. Type** column and the reference number of the prepayment invoice in the **Reference Nbr.** column. In the **Applied to Order** column, they specify the amount to be applied to the sales order. Once they save their changes, the system updates the values in the **Total Paid** and **Unpaid Balance** boxes on the **Totals** tab of the form.
- A user opens a prepayment invoice on the *Payments and Applications* (AR302000) form. On the **Sales Orders** tab, they add a line. In the **Order Nbr.** column of the added line, they specify the reference number of the customer's sales order. In the **Applied to Order** column, they specify the amount to be applied to the sales order. Note that the amount cannot exceed the available balance of the prepayment invoice (the amount specified in the **Available Balance** box of the Summary area of the form) or the unpaid balance of the sales order (the amount specified in the **Unpaid Balance** box on the **Totals** tab of the *Sales Orders* form). In the **Order Total** column of the line, the order amount not covered by the prepayment invoice is shown. Once the prepayment invoice has been linked to the sales order, the system adds a line with the prepayment invoice to the sales order on the **Payments** tab of the *Sales Orders* form.

When the sales order with the linked prepayment invoice is billed—that is, a sales invoice is created for the sales order—the system automatically applies the fully paid prepayment invoice to the sales invoice by adding a line on the **Applications** tab of the *Invoices and Memos* (AR301000) form. On release of the sales invoice, its balance decreases by the **Amount Paid** amount that has been specified in the line on the **Applications** tab.

One released prepayment invoice can be linked to multiple sales orders of the same customer.



A prepayment invoice cannot be linked to a sales order if at least one of the following conditions is met:

- The order type selected for the sales order on the *Sales Orders* form has the *Blanket Order* automation behavior on the *Order Types* (SO201000) form.
- The customer specified in the sales order has multiple-installment credit terms specified on the *Customers* (AR303000) form.

Unlinking of the Prepayment Invoice and Sales Order

A user can unlink the prepayment invoice linked to a sales order and link another one, if needed. They unlink the documents in either of the following ways:

- In a sales order on the [Sales Orders](#) (SO301000) form: On the **Payments** tab, the user clicks the line with the linked prepayment invoice and clicks **Remove** on the table toolbar. They can add a new line and select another prepayment invoice, if needed.
- In a prepayment invoice on the [Payments and Applications](#) (AR302000) form: On the **Sales Orders** tab, the user clicks the line with the sales order and clicks **Remove** on the table toolbar. They can add a new line and select another sales order, if needed.

Once the connection between a prepayment invoice and a sales order has been removed, the total amounts of the sales order on the **Totals** tab of the [Sales Orders](#) form will be affected as follows:

- The **Not Released** amount is decreased by the **Applied to Order** amount of the removed line.
- The **Total Paid** amount is decreased by the **Applied to Order** amount of the removed line.
- The **Unpaid Balance** value is increased by the amount specified in the **Applied to Order** box of the removed line.

Impact of a Voided Prepayment Invoice on a Sales Order

If a prepayment invoice linked to a sales order has been fully written off by a credit memo and the prepayment invoice has been assigned the *Voided* status (for details, see [Finance: Prepayment Invoices in Accounts Receivable](#)), then on release of the application of the credit memo to the prepayment invoice, the system does the following on the [Sales Orders](#) (SO301000) form:

- Reduces the **Applied to Order** amount to *0* in the prepayment invoice line on the **Payments** tab. The line is not removed from the tab.
- Updates the values on the **Totals** tab as follows:
 - Reduces the **Not Released** amount by the **Applied to Order** amount
 - Reduces the **Total Paid** amount by the **Applied to Order** amount
 - Increases the **Unpaid Balanced** by the **Applied to Order** amount

Finance: Transmission of Level 3 Data During Credit Card Processing



This functionality is available in Acumatica ERP starting in 2024 R1 Update 1.

All businesses accepting credit card payments use a certain level of credit card processing. Each level is defined by the amount of information that is required or passed to complete the payment. Level 1 processing, the default one, is the basic level because the merchant adds only the basic payment data to a transaction.

With level 2 and level 3 processing, the merchant provides incremental data, along with the basic payment data, and sends this data electronically to the bank to define the purchase in more detail.

Visa and Mastercard charge a higher interchange rate to process payments created with corporate- or government-issued credit cards. They offer the level 3 program, under which it is possible to reduce this interchange rate. Under the level 3 program, the merchant must submit the transactional data along with the payment data to the card network. This level 3 data is used to identify the purchase in more detail to prevent fraud and chargebacks. In return, the card network lowers the interchange rate.

By default, the support of level 3 data is enabled for all Acumatica merchants. When a transaction is captured, the payment gateway verifies the card used to create the payment. As a result, for every payment created with a commercial credit card, their system will send the default line-level data to the card network on behalf of the merchant. The merchant must then send an update with the correct data from the documents where these payments are applied.



Payments created with personal credit cards are not eligible for the level 3 interchange rate; thus, the payment gateway does not send any default data for them. When such a payment is captured, Acumatica ERP gets no level 3 identifier in response and identifies that level 3 is not supported for this payment. As a result, the merchant is not required to send any transaction data.

This functionality appears in the system if the *Integrated Card Processing* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

The following sections describe the UI changes and changes in document processing to support level 3 data transmission.

Information to be Entered by Users

To be able to successfully send level 3 data to the payment gateway, users must enter the following information when creating particular types of records on data entry forms:

- Required: **Commodity Code** for items in the **International Shipping** section on the **Packaging** tab of the [Stock Items](#) (IN202500) or [Non-Stock Items](#) (IN202000) form. Commodity codes are reference numbers that identify specific products during the import or export of goods.
- Optional: **Tax Registration ID** in the **Tax Settings** section on the **Shipping** tab of the [Customer Locations](#) (AR303020) or [Customers](#) (AR303000) form.
- Optional: **Postal Code** in the **Location Address** section of the **General** tab of the [Customer Locations](#) form or **Postal Code** in the **Account Address** section on the **General** tab of the [Customers](#) form.
- Optional: **Tax Registration ID** in the **Tax Registration Info** section on the **Branch Details** tab of the [Branches](#) (CS102000) form. This setting represents the merchant's tax registration ID.
- Optional: **Postal Code** in the **Main Address** section on the **Branch Details** tab of the [Branches](#) form.



The optional information, although not required, can increase the chances for the transaction to be approved for level 3 rates. We recommend that users enter this information before sending level 3 data of documents on the [Send Level 3 Data](#) (CA508000) form.

The Send Level 3 Data Form

A link to the [Send Level 3 Data](#) (CA508000) form has been added to the **Credit Card Processing** workspace. The form, which is shown in the following screenshot, is used for sending level 3 data to the payment processing gateway.

The screenshot shows the 'Send Level 3 Data' form interface. At the top, there's a toolbar with icons for search, refresh, process, and other functions. Below the toolbar, there are two input fields: 'Processing Center' set to 'ACUPAY' and 'Processing Status' set to 'Pending'. A table below lists two transactions:

Type	Reference Nbr.	Payment Date	Payment Period	Customer	Customer Name	Status	Payment Amount	Currency	Proc. Center ID	Payment Method	Processing Status
Cash Sale	AR013434	4/18/2024	04-2024	ACTIVESTAFF	Active Staffing Service	Closed	679.00	USD	ACUPAY	ACUPAYCC	Pending
Payment	005074	4/17/2024	04-2024	AACUSTOMER	Alta Ace	Closed	200.00	USD	ACUPAY	ACUPAYCC	Pending

Figure: The Send Level 3 Data form

This form shows a list of payments and prepayments that have been captured with commercial or business credit cards and applied partially or in full to other documents and sales orders. A particular payment or prepayment is shown if all of the following conditions are met:

- The payment method of the payment or prepayment has the *Credit Card* means of payment.
- The processing center specified for the payment supports level 3 processing.
- The payment transaction has a status that is supported for level 3 processing (*Pending*, *Sent*, *Failed*, or *Resend Failed*).
- The sales order or sales invoice to which the payment is applied is not on hold, or the payment transaction is related to a cash sale.

Once a user selects at least one payment and clicks **Process** on the form toolbar, the system collects all required information from the documents that are applied to this payment and sends this data to the payment gateway.



The payment gateway does not send any indication of whether the transaction was qualified for level 3 or not because the card networks themselves do not provide this information to the payment gateway. The merchant will receive a monthly statement that will indicate how many transactions were accepted for the level 3 interchange rate.

Processing of Documents Paid by Line

If a payment is applied to an AR invoice that has the **Pay by Line** check box selected on the [Invoices and Memos](#) (AR301000) form and is applied to a specific line or lines but not to the full invoice amount, when the payment is processed, the system will send the level 3 data from these lines only and will exclude the lines to which the payment is not applied.

If on the [Payments and Applications](#) (AR302000) form, a payment is applied to an invoice that has the **Pay by Line** check box cleared, the system will send level 3 data from all the lines of this invoice.

Changes to the Units of Measure Form

On the [Units of Measure](#) (CS203500) form, the **Level 3 Unit ID** box has been added to the Summary area, as shown in the following screenshot.

The screenshot shows the 'Units of Measure' form for the unit 'HOUR'. At the top, there are standard navigation icons like back, forward, and search. Below that, there are three required fields: 'Unit ID' (set to 'HOUR'), 'Description' (set to 'Hour'), and 'Level 3 Unit ID' (set to 'HUR - Hour'). The 'Level 3 Unit ID' field is highlighted with a red border. Below these fields is a section for conversion factors. A row for 'MINUTE' is selected, showing a 'Multiply' operation with a conversion factor of '60.000000'. There are also buttons for adding new rows and deleting existing ones.

Figure: The new box on the Units of Measure form

Although **Level 3 Unit ID** is not a required setting on this form, it is one of the level 3 parameters required by the payment gateway. Users should specify this ID for the needed units of measure to get level 3 interchange rates for payments.

For users in the United States who have the *Canadian Localization* feature disabled in their tenants, the level 3 units of measure have been mapped to the default units of measure. The following table shows this mapping.

Unit of Measure	Description	Level 3 Unit ID
BOTTLE	Bottle	EA
CAN	Can	EA
HOUR	Hour	HUR
KG	kg	KGM
LITER	Liter	LTR
METER	Meter	MTR
MINUTE	Minute	MIN
PACK	Pack	NMP
PALLET	Pallet	EA
PIECE	Piece	PCB

If a specific unit of measure is not a part of the default list or if a user creates a unit of measure for which the **Level 3 Unit ID** mapping is not available, the system will send *EA* because it is the value suggested by the payment gateway for unknown units of measure. Because level 3 units of measure require a minimum of three characters, a space will be added to fill in the third character.

Limitations

The following documents or document lines are excluded from level 3 processing:

- Document lines with negative amounts (invoices and sales orders created for returns and refunds)

- Sales orders with the following behavior: *Cash Return (CR)*, *Return for Credit (RC)*, *Return for Replacement (RR)*, *Transfer (TR)*, and *eCommerce RMA Order (ER)*
- Sales invoices with the following types: *Cash Return (RCS)*, *Credit Memo (CRM)*, and *Credit WO (SMB)*
- Sales orders that have lines with a negative extended price and the following behavior: *RMA Order (RMA)* and *Mixed Order (MO)*
- Documents with no **Inventory ID** specified in their lines

Upgrade Notes

After an upgrade to Acumatica ERP 2024 R1 Update 1, the following changes will be applied in the system:

- The new `ExternalTransaction.L3Status` database field will be set by default to *NA* for all records existing in the table. The `ExternalTransaction.L3Error` field will be set by default to *NULL*.
- The upgrade script will set the default values in the new `L3Code` field for records in the `UnitOfMeasure` table in all companies. The default values are specified in the **Level 3 Unit ID** column in the table above.

Additional Information

For more details on the transmission of level 3 data, see [Level 3 Data Transmission During Card Payments](#).

For details on how to send level 3 data, see [To Send Level 3 Data](#).

Finance: Other Improvements

In Acumatica ERP 2024 R2, multiple improvements to financial management processes and the UI have been introduced, as described below.

Release of Overdue Charges and Credit Memos for Customers on Credit Hold

In previous versions of Acumatica ERP, when the system generated a balanced overdue charge for a customer with the *Credit Hold* status, a user could not release this overdue charge because of the customer's *Credit Hold* status. The user had to manually change the customer's status before and after the release of the overdue charge.

In Acumatica ERP 2024 R2, a user can release overdue charges and credit memos for customers on credit hold without changing the customer's status. On the [Invoices and Memos](#) (AR301000) form, the system now displays a warning message when the user releases these overdue charges and credit memos.

Export of Specific Bank Transactions to Excel

In Acumatica ERP 2024 R2, on the [Process Bank Transactions](#) (CA306000) form, the **Export to Excel** button has been added to the table toolbar in the left pane, as shown in the following screenshot.

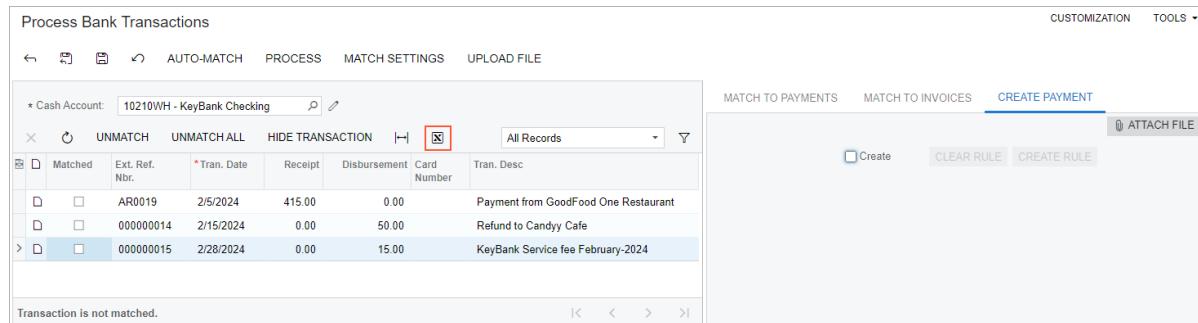


Figure: The Export to Excel button

A user who is completing a bank reconciliation can now export selected bank transactions to an Excel file. For example, the user can export unmatched bank transactions and email them to responsible employees for investigation.

Removed Ability to Set the Payment Date for Integrated Processing

In previous versions of Acumatica ERP, on the [Payment Methods](#) (CA204000) form, a user could select the **Set Payment Date to Bank Transaction Date** check box for a payment method that had the **Integrated Processing** check box selected on the **Settings for Use in AR** tab of this form. By selecting the **Set Payment Date to Bank Transaction Date** check box, the user could override the payment date to the bank transaction date during bank reconciliation on the [Process Bank Transactions](#) (CA306000) form. This could result in the wrong date settings because with integrated processing, all the dates are received from the processing center and the payment date must be the same as the date of the card transaction or EFT transaction.

In Acumatica ERP 2024 R2, if the **Integrated Processing** check box (see Item 1 in the following screenshot) is selected for a payment method, the **Set Payment Date to Bank Transaction Date** check box (Item 2) is now unavailable. The following screenshot illustrates these settings.

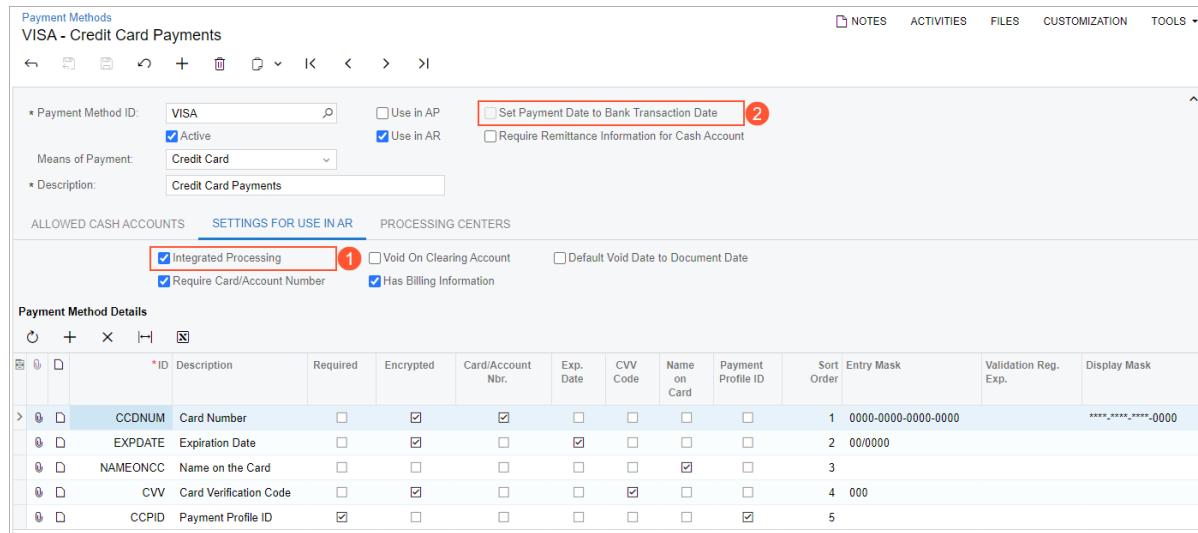


Figure: The settings of a payment method with Integrated Processing selected

If a user selects the **Integrated Processing** check box for a payment method that has the **Set Payment Date to Bank Transaction Date** check box selected, the system shows a warning message and clears the **Set Payment Date to Bank Transaction Date** check box, as shown in the following screenshot.

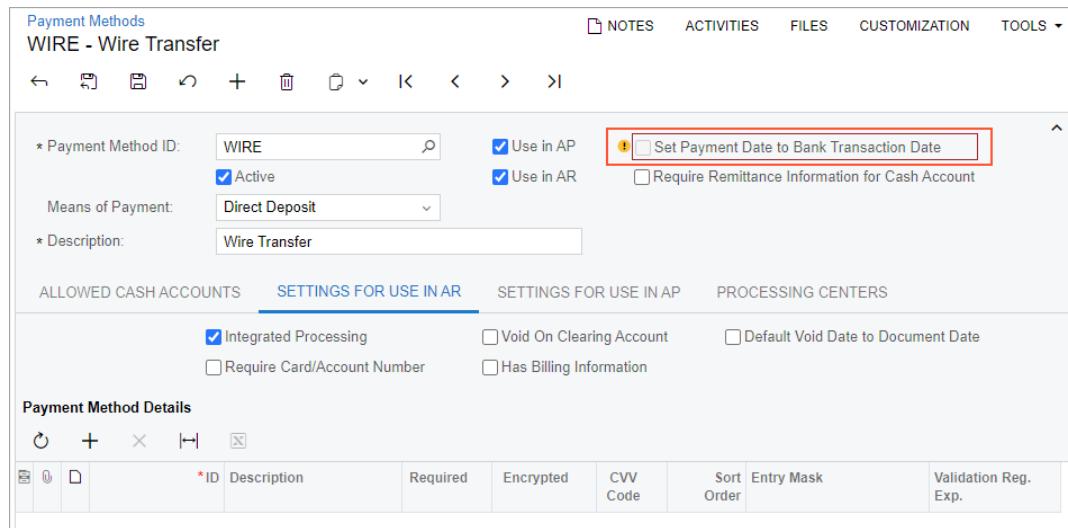


Figure: A payment method with the Integrated Processing check box selected

Integrations: Automated Sign Out from OpenID Provider

OpenID Connect is a simple identity layer on top of the OAuth 2.0 protocol. There are multiple public OpenID identity providers that an administrator can use for authorizing users, such as Microsoft and Google identity platforms, OneLogin, and Okta.

In Acumatica ERP, an administrator can configure integration with multiple OpenID providers for a system tenant or multiple tenants.

Usually, when a user signs in to Acumatica ERP with an OpenID provider, the user remains signed in with the identity provider even after signing out from the system.

In some cases—for example, to comply with legal requirements—it might be necessary to terminate a session with the identity provider when a user signs out of Acumatica ERP.

Acumatica ERP Construction Edition 2024 R2 introduces the ability to configure automated sign-out from the identity provider.

Configuring Automated Sign-Out

The new **Logout Settings** section has been added on the **Authentication Settings** tab of the [OpenID Providers](#) (SM303020) form (see the following screenshot). With these settings specified, when a user signs out of Acumatica ERP, the system redirects the user to the sign-out page of the OpenID provider that was used to sign in to Acumatica ERP. The system also sends a sign-out request to the provider to automatically sign the user out. After successful signing out, the system redirects the user back to the Acumatica ERP sign-in page.

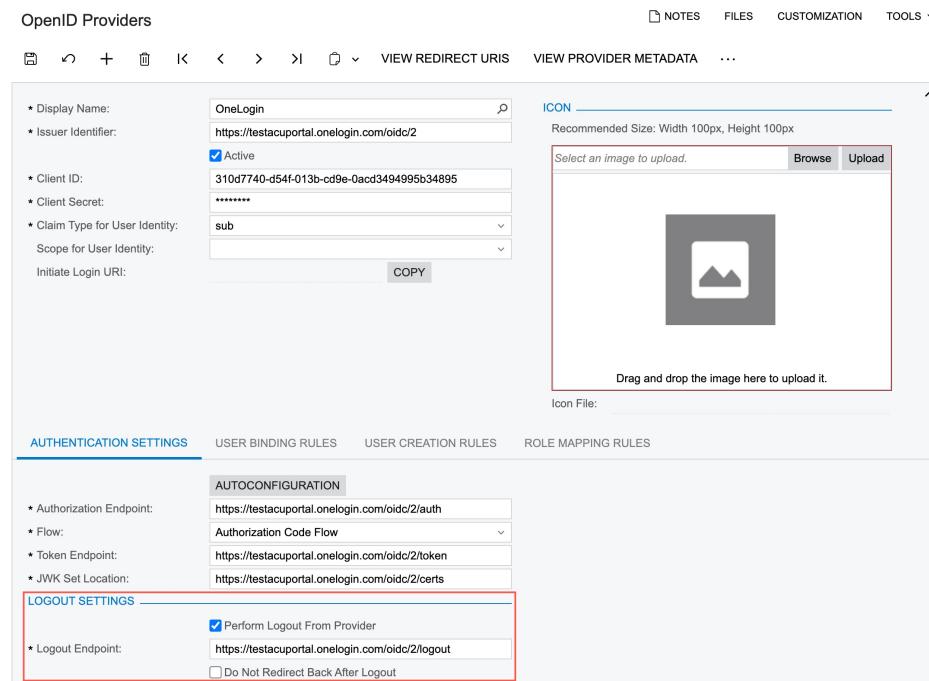


Figure: The settings to configure automated sign-in from an OpenID provider

To configure this behavior, the administrator selects the **Perform Logout From Provider** check box, and the system makes the **Logout Endpoint** box required. In this box, the administrator specifies the sign-out endpoint for the OpenID provider. Alternatively, if the OpenID provider supports discovery requests, the administrator can click the **Autoconfiguration** button on the tab, and the system will automatically fill in the value.

Then the administrator clicks **View Redirect URIs** on the form toolbar, and the system opens the **Redirect URIs** dialog box. In the dialog box, the administrator copies the value from the **Post Logout Redirect URI** box. In the

configuration settings for Acumatica ERP on the OpenID provider platform, the administrator pastes the value to make the OpenID provider redirect a user back to the Acumatica ERP sign-in page. (The place to paste the link may differ, depending on the OpenID provider.)

In some cases, a user should not be redirected back to the Acumatica ERP sign-in page after they sign out from the OpenID provider. To support this system behavior, the administrator selects the **Do Not Redirect Back After Logout** check box in the **Logout Settings** section on the **Authentication Settings** tab of the [OpenID Providers](#) form. In this case, the administrator does not need to specify a corresponding redirect URI in the configuration settings for Acumatica ERP on the OpenID provider platform.

Inventory and Order Management: Improvements to the Receiving of Items in a Warehouse

In previous versions of Acumatica ERP, a warehouse worker performed the receiving of inventory items. This process included the release of a purchase receipt whose items have been received on the [Receive and Put Away](#) (PO302020) form. As a result, the released receipt could have mistakes.

Acumatica ERP 2024 R2 provides users with the ability to perform additional verification of a purchase receipt to ensure the correctness of its item quantities. A warehouse manager or receiving clerk can verify a purchase receipt confirmed by a warehouse worker and make any needed corrections to quantities before releasing the receipt.

The following sections describe the UI changes and changes in document processing that have been made to support this functionality.

Changes to the Purchase Orders Preferences Form

In Acumatica ERP 2024 R2, on the [Purchase Orders Preferences](#) (PO101000) form, the **Verify Receipts Before Release** check box has been added (see the following screenshot). When this check box is selected, a warehouse worker can no longer release a purchase receipt on the [Receive and Put Away](#) (PO302020) form. Instead, a warehouse manager (or another user responsible for this verification) verifies and releases purchase receipts on the [Purchase Receipts](#) (PO302000) form.

When the **Verify Receipts Before Release** check box is selected, the **Keep Zero Lines on Receipt Confirmation** check box becomes available for selection (see the following screenshot). With this check box selected, the system will keep lines with a receipt quantity of 0 in a purchase receipt after the warehouse worker has confirmed the receipt of items.

Purchase Orders Preferences

CUSTOMIZATION TOOLS ▾

GENERAL APPROVAL MAILING & PRINTING **WAREHOUSE MANAGEMENT**

These settings are specific to the current branch.

RECEIVING WORKFLOW

- Display the Receive Tab
- Display the Put Away Tab
- Display the Return Tab
- Display the Scan Log Tab

RECEIVING SETTINGS

- Use Default Quantity
- Use Explicit Line Confirmation
- Use Carts for Putting Away
- Use Default Auto-Generated Lot/Serial Nbr.
- Use Default Expiration Date
- Use Single Receiving Location
- Use Default Receiving Location
- Request Location for Each Item on Receiving
- Request Location for Each Item on Putting Away
- Request Location for Each Item on Returning
- Verify Receipts Before Release
- Keep Zero Lines on Receipt Confirmation

Figure: New check boxes on the Purchase Orders Preferences form

Changes to the Receive and Put Away and Purchase Receipts Forms

In Acumatica ERP 2024 R2, if the **Verify Receipts Before Release** check box is selected on the [Purchase Orders Preferences](#) (PO101000) form, the form toolbar of the [Receive and Put Away](#) (PO302020) form has the following changes in Receipt mode:

- The **Confirm Receipt** button is shown. The button becomes available when the **Receipt Qty.** in at least one line is greater than 0.
- The **Release Receipt** button is not shown.
- The **Complete PO Lines** button is not shown.

See the following screenshot.

PO Order Type	PO Order Nbr.	Inventory ID	Transaction Descr.	Warehouse	Location	Received Qty.	Quantity	Remaining Qty.	UOM
> Normal	PO002385	ELECOMP1	Dell desktop computer	RETAIL	STORAGE	1.00	20.00	19.00	EA
Normal	PO002385	ELEBOARD	Laptop computer motherboard	RETAIL	STORAGE	0.00	15.00	15.00	EA

Figure: Changes to the Receive and Put Away form

Also, the following changes have been made to the [Purchase Receipts](#) (PO302000) form:

- A receipt is assigned the *Received* status (see Item 1 in the following screenshot) when a warehouse worker has confirmed the receipt of its items on the [Receive and Put Away](#) form.
- The read-only **Received to Date** column has been added on the **Details** tab (Item 2) and in the **Line Details** dialog box, which a user opens by clicking **Line Details** on the table toolbar. The column is hidden by default on the **Details** tab.

Type:	Receipt	Vendor:	ELEEASTCOM - East COM Electronic St	Total Qty.:	35.00
Receipt Nbr.:	PR002346	* Location:	MAIN - Primary Location	Unbilled Quant...	35.00
Status:	Received	Currency:	USD 1.00	VIEW BASE	
* Date:	6/18/2024		<input type="checkbox"/> Create Bill		
* Post Period:	06-2024	Vendor Ref.:	EEC-061524-000120		
		Workgroup:			
		Owner:			

DETAILS ORDERS PUT AWAY HISTORY BILLING LANDED COSTS OTHER										
Branch		Inventory ID	Line Type	Warehouse	Location	Transaction Descr.	UOM	Ordered Qty.	Open Qty.	Received Qty.
>	PRODRETAIL	ELECOMP1	Goods for IN	RETAIL	STORAGE	Dell desktop computer	EA	20.00	0.00	20.00
0	PRODRETAIL	ELEBOARD	Goods for IN	RETAIL	STORAGE	Laptop computer motherboard	EA	15.00	0.00	15.00

Figure: A new status and column on the Purchase Receipts form

Receipt Confirmation and Release

To confirm the receipt of items and release the purchase receipt, warehouse personnel proceed as follows:

1. On the [Receive and Put Away](#) (PO302020) form, a warehouse worker performs the needed operations to finish receiving the items in a purchase receipt.
2. On the same form, the warehouse worker scans the *confirm* receipt barcode or clicks **Confirm Receipt**. The purchase receipt is assigned the *Received* status on the [Purchase Receipts](#) (PO302000) form. The *Received* status indicates that the warehouse worker has counted the items and the receipt is now under verification. A receipt with this status can be modified only on the [Purchase Receipts](#) form.
3. A warehouse manager opens the purchase receipt on the [Purchase Receipts](#) form and verifies that the received quantity is correct by comparing the following quantities:
 - The actual quantities of received items in the **Receipt Qty.** column on the **Details** tab
 - The quantities in the documents received from the vendor
4. Optional: The warehouse manager corrects the received quantity in the **Receipt Qty.** column.
5. The warehouse manager releases the purchase receipt.

The warehouse worker can now proceed with putting items away.

New Side Panel on the Purchase Orders Form

The **Receipt Lines by Purchase Order** tab has been added to the side panel of the [Purchase Orders](#) (PO301000) form (see the following screenshot).

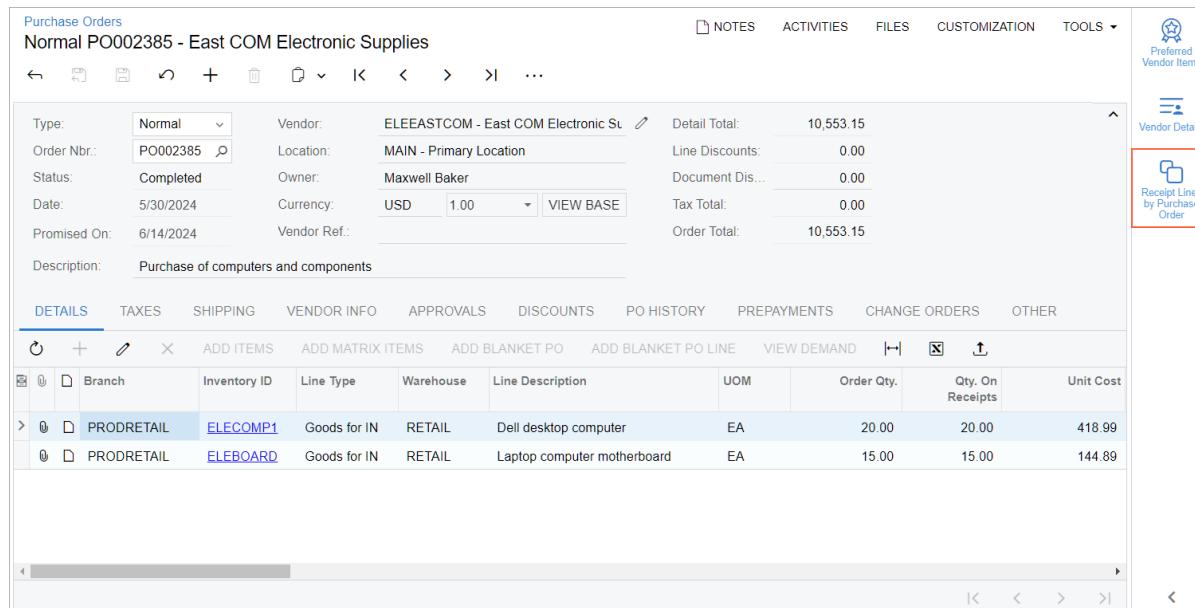


Figure: The Receipt Lines by Purchase Order tab of the side panel

By opening and expanding the side panel, a warehouse manager can see the lines of purchase receipts related to the purchase order on the [Receipt Lines by Purchase Order \(PO3024B\)](#) inquiry form (see the following screenshot).

Purchase Order Nbr.: PO002385 Inventory ID: End Date: 6/18/2024

Purchase Receipt Nbr.: PR002346 Start Date:

Receipt Nbr.	Date	Status	Inventory ID	Transaction Descr.	Order Qty.	Receipt Qty.	UOM	Billed Qty.	Warehouse	Purchase Order Nbr.	PO Line Nbr.
PR002346	6/18/2024	Released	ELECOMP1	Dell desktop computer	20.00	20.00	EA	0.00	RETAIL	PO002385	1
PR002346	6/18/2024	Released	ELEBOARD	Laptop computer motherboard	15.00	15.00	EA	0.00	RETAIL	PO002385	2

Figure: The Receipt Lines by Purchase Order form on the side panel

New Widget on the Receiving Clerk Dashboard

The **Receipts to Verify** widget has been added to the *Receiving Clerk* dashboard (see the following screenshot).

GOODS TO PUT AWAY					
Warehouse	Warehouse Description	Location	Inventor ID	Item Description	Qty. to UOM Put Away
RETAIL	Retail Warehouse	STORA...	ELEBO...	Laptop computer mother...	15.00 EA
RETAIL	Retail Warehouse	STORA...	ELECO...	Dell desktop computer	20.00 EA

Figure: The Receipts to Verify widget on the Receiving Clerk dashboard

If a user clicks the widget, the *Purchase Receipts for Last 12 Months (PO3020B)* inquiry form opens. On this form, the user can view the list of purchase receipts with the *Received* status.

Mobile App

Starting in Acumatica ERP 2024 R2, the *Receive and Put Away* screen of the mobile app has the same changes in Receipt mode as the *Receive and Put Away* (PO302020) form has. If the **Verify Receipts Before Release** check box is selected on the *Purchase Orders Preferences* (PO101000) form, the **Confirm Receipt** button is shown, and the **Release Receipt** and **Complete PO Lines** buttons are not shown.

Additional Information

For more information on receipt verification, see [Receiving and Putting Away Operations: Receipt Verification](#) and [Receiving and Putting Away Operations: To Receive Items and Verify the Receipt](#).

Inventory and Order Management: Enhanced Stock Allocation with Multiple UOMs

In previous versions of Acumatica ERP, if multiple units of measure (UOMs) were specified for a stock item and the item was included in a sales order, rounding differences could occur. This happened when a UOM different from the item's sales UOM was specified in the order line and the item was partially allocated for the sales order. The system used the order line's UOM to calculate the allocated quantity. The resulting rounding differences could cause inaccuracies or errors in the processing of shipments and sales invoices.



A user can specify multiple UOMs for stock items only if the *Multiple Units of Measure* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

Allocation of Stock Items in Multiple UOMs

Starting in Acumatica ERP 2024 R2, the system handles stock items with multiple UOMs differently when it partially allocates for a sales order an item that is either lot tracked or not tracked. The system now checks the state of the **Divisible Unit** check box right of the **Sales Unit** box on the **General** tab of the [Stock Items](#) (IN202500) form for the item (see the following screenshot).



An item can be lot- or serial-tracked only if the *Lot and Serial Tracking* feature is enabled on the [Enable/Disable Features](#) (CS100000) form. Then a tracking method (*Track Serial Numbers*, *Track Lot Numbers*, or *Not Tracked*) can be specified in the **Tracking Method** box for an item's lot or serial class on the [Lot/Serial Classes](#) (IN207000) form.

The screenshot shows the SAP Stock Items form for item ELEHDD2 - Hard drive 1 TB SSD. The 'GENERAL' tab is selected. In the 'UNIT OF MEASURE' section, there are three fields: 'Base Unit' (EA), 'Sales Unit' (EA), and 'Purchase Unit' (EA). The 'Sales Unit' field is highlighted with a red border. To the right of these fields are two checkboxes: 'Divisible Unit' and 'Weight Item'. Below these fields is a conversion table:

* From Unit	Multiply/Divid	Conversion Factor	To Unit
BOX10	Multiply	10.00000	EA

Figure: The Divisible Unit check box for a sales UOM

Suppose that a line has an item quantity on the [Sales Orders](#) (SO301000) form. This quantity is specified for an item in a non-base UOM with the *Multiply* operation on the [Stock Items](#) form. A user opens the **Line Details** dialog box and selects the **Allocated** check box in the line split. If the quantity can be allocated only partially, the system does the following:

- Changes the quantity in this line split to the integer quantity in the order line's UOM if this quantity is available in a warehouse (that is, inserts this quantity in the **Quantity** column for the line split).
- If the available quantity in the order line's UOM is not sufficient in the warehouse but a few more item units in the base UOM are available, adds another line split for this quantity. For this line split, the system selects the **Allocated** check box.
- For any integer quantity that is not sufficient in the warehouse, adds another line split. For this line split, the **Allocated** check box is cleared.
- For the rest of the quantity in the base UOM that is not sufficient in the warehouse, adds another line split. For this line split, the **Allocated** check box is cleared.

See the following screenshot.

The screenshot shows the Sales Orders form for SO S0008207 - ABC Holdings Inc. The Line Details dialog box is open, showing a grid of line items. The first two rows have the 'Allocated' checkbox checked for the 'RETAIL' warehouse, while the others are unchecked. A red box highlights these two rows.

Ship On	Allocated	Alloc. Warehouse	Completed	Quantity	Qty. On Shipments	Qty. Received	UOM	Mark for PO	Related Document
7/10/2024	<input checked="" type="checkbox"/>	RETAIL	<input type="checkbox"/>	2.00	0.00	0.00	BOX10	<input type="checkbox"/>	
7/10/2024	<input checked="" type="checkbox"/>	RETAIL	<input type="checkbox"/>	5.00	0.00	0.00	EA	<input type="checkbox"/>	
7/10/2024	<input type="checkbox"/>	RETAIL	<input type="checkbox"/>	1.00	0.00	0.00	BOX10	<input type="checkbox"/>	
7/10/2024	<input type="checkbox"/>	RETAIL	<input type="checkbox"/>	5.00	0.00	0.00	EA	<input type="checkbox"/>	

Figure: The line splits



The system uses base UOMs in a line split only for allocated quantities—that is, when the **Allocated** check box is manually or automatically selected for the line split in the **Line Details** dialog box of the **Sales Orders** form. If items are not allocated and then processed (for example, if they have been partially shipped), the system will create line splits in the order line's UOM regardless of the divisibility of the sales UOM.

For a serial-tracked item, the system always splits lines on the **Sales Orders** form in the base UOM during the allocation.

Users can now allocate lot- and serial-tracked items without specifying their lot or serial numbers, respectively.



In an order with a type whose automation behavior is *Blanket Order* on the **Order Types** (SO201000) form, the system always uses the UOM of the order's line when the line is partially allocated and split.

Processing on Other Forms

On the **Create Transfer Orders** (SO509000) form, the system adds the split lines with the UOMs specified in the **Line Details** dialog box of the **Sales Orders** (SO301000) form for the sales order.

When a user creates a shipment for the sales order on the **Shipments** (SO302000) form, the system adds to the shipment split lines specified in the **Line Details** dialog box of the sales order, as it did in previous versions of Acumatica ERP.



If the UOM in a sales order line is specified as the **Sales UOM** on the **Stock Items** (IN202500) form and the **Divisible Unit** check box is cleared, it will not be possible to create a shipment if split lines have the base UOM.

On shipment confirmation, the system sums the splits of an order's line and when a sales invoice is created on the **Invoices** (SO303000) form, the system inserts the lines as follows:

- If the sum of all line splits is an integer value (that is, it can be fully converted to the order line's UOM), inserts the order line's UOM in the corresponding line of the sales invoice
- If the sum of all line splits is not an integer value, inserts the base UOM in the invoice line

Example of Stock Allocation

Suppose that a company sells computers and accessories, including 1 TB hard drives. It sells hard drives by piece and in boxes of ten pieces per box. The base and sales units of measure are EA (each), and a conversion to BOX10 (a box of ten pieces) is specified in the item's settings on the **General** tab of the [Stock Items](#) (IN202500) form.

Further suppose that a customer orders 40 hard drives. A salesperson creates a sales order for 4 boxes of hard drives. In the retail warehouse, only 25 hard drives are available (that is, two boxes and five pieces). The rest of the hard drives are available in the wholesale warehouse. Thus, the salesperson wants to allocate all the available hard drives in the retail warehouse to the order and transfer the rest from the wholesale warehouse.

On the [Sales Orders](#) (SO301000) form, the salesperson opens the **Line Details** dialog box for the order line with the hard drives and selects the **Allocated** check box in the line. The system splits the line as follows (see the previous screenshot):

- Line split 1: A quantity of 2 boxes, which are available and allocated in the warehouse.
- Line split 2: A quantity of 5 pieces, which are available and allocated in the warehouse.
- Line split 3: A quantity of 1 box, which is not available. The **Allocated** check box is cleared in the line because the quantity needs to be transferred from another warehouse.
- Line split 4: A quantity of 5 pieces, which are not available. The **Allocated** check box is cleared in the line because the quantity needs to be transferred from another warehouse.

When all the items are available in the retail warehouse, the shipment has been confirmed, and the sales invoice has been prepared for the order, the system sums the splits of the order line (see the following screenshot).

The screenshot shows the **Invoices** screen for **Invoice AR013429 - ABC Holdings Inc**. The top bar includes buttons for **NOTES**, **ACTIVITIES**, **FILES**, **CUSTOMIZATION**, and **TOOLS**. Below the header, there are various input fields for invoice details such as Type (Invoice), Customer (ABCHOLDING - ABC Holdings Inc), Reference Nbr. (AR013429), Status (Balanced), Date (7/12/2024), Post Period (07-2024), Project/Contract (X - Non-Project Code), and Description. On the right side, summary details are listed: Detail Total (12,399.60), Line Discounts (0.00), Document Dis... (0.00), Freight Total (0.00), Tax Total (0.00), Balance (12,399.60), and Cash Discount (0.00). Below these details, a table displays the line items:

		Order Type	Inventory ID	Related Items	Transaction Descr.	Warehouse	Location	Quantity	UOM
>	<input checked="" type="checkbox"/> PRODRETAIL	SO	SO008207	ELEHDD2	Hard drive 1 TB SSD	RETAIL	STORAGE	4.00	BOX10

Figure: The sales invoice

Additional Information

For more information on stock allocation with multiple UOMs, see [Sales of Stock Items: Stock Allocation with Multiple UOMs](#) and [Sales of Stock Items: To Allocate Stock with Multiple UOMs and Process a Sale](#).

Inventory and Order Management: Prepayments in RMA Orders

In Acumatica ERP 2024 R2, improvements to the processing of sales orders with the *RMA Order* automation behavior and credit terms that require prepayments have been introduced, as described below.

RMA Orders Requiring Prepayments

In previous versions, if credit terms requiring a prepayment were used in an RMA order on the [Sales Orders](#) (SO301000) form, the system did not check whether the prepayment requirements were met.

In Acumatica ERP 2024 R2, the system can be configured to require a prepayment for an RMA order whose type has the following settings on the **Template** tab of the [Order Types](#) (SO201000) form (further referred to as *RMA order*):

- **Automation Behavior:** *RMA Order*
- **Default Operation:** *Issue*
- **AR Document Type:** *Invoice or Debit Memo*

To cause the system require a prepayment for the RMA order, a user must select the **Prepayment Required** check box on the [Credit Terms](#) (CS206500) form for the terms specified on the **Financial** tab of the [Sales Orders](#) form (see Item 1 in the following screenshot). In the **Payment Information** section of the tab, the following UI elements will be shown (Item 2):

- The **Override Prepayment** check box
- The **Prepayment Percent** box
- The **Prepayment Amount** box
- The **Prepayment Requirements Satisfied** check box

For the RMA order, the system checks whether the total amount of the applied prepayments and payments meets the required prepayment amount. If the order does not have applied prepayments or payments in the required amount, it is assigned the *Awaiting Payment* status (Item 3).

The screenshot shows the Sales Orders screen for RM SO008211 - ABC Studios Inc. The top navigation bar includes links for NOTES, ACTIVITIES, FILES, CUSTOMIZATION, and TOOLS. The main grid displays various order details, with the 'Status' field highlighted in red and containing the value 'Awaiting Pay...'. A red circle with the number '3' is positioned next to this field.

The 'FINANCIAL' tab is selected, showing the following fields:

- FINANCIAL INFORMATION** (Left side):
 - * Branch: PRODWHOLE - Products Wholesale
 - Disable Automatic Tax Calculation
 - Override Tax Zone
 - Customer Tax Zone: [empty]
 - Tax Exemption Number: [empty]
 - Entity Usage Type: Default
 - Bill Separately
 - Invoice Nbr.: [empty]
 - Invoice Date: [empty]
 - * Terms: PREPAY50 - Prepay 50% before shipr (highlighted with red border and red circle with '1')
 - Due Date: [empty]
 - Cash Discount Date: [empty]
 - Post Period: [empty]
- PAYMENT INFORMATION** (Right side) (highlighted with red border and red circle with '2'):
 - Override Prepayment
 - Prepayment Percent: 50.00
 - Prepayment Amount: 1,899.45
 - Prepayment Requirements Satisfied
 - Payment Method: CHECK - Check
 - Card/Account Nbr.: [empty]
 - Cash Account: 10200 - Company Checking Account
- OWNERSHIP** (Below PAYMENT INFORMATION):
 - Workgroup: [empty]
 - Owner: Maxwell Baker
- OTHER INFORMATION** (Bottom right):
 - Orig. Order Type: [empty]
 - Orig. Order Nbr.: [empty]
 - Printed

Figure: The Awaiting Payment status and prepayment settings

If the RMA order is assigned the *Awaiting Payment* status, users can process the receipt of the returned items and the return of drop-shipped items to the vendor.

When the required prepayment amount has been met, the **Prepayment Requirements Satisfied** check box becomes selected (see Item 1 in the following screenshot) and the RMA order is assigned the next status in the workflow (Item 2).

The screenshot shows the Sales Orders screen for RM SO008211 - ABC Studios Inc. The top navigation bar includes links for NOTES, ACTIVITIES, FILES, CUSTOMIZATION, and TOOLS. Below the header, there are buttons for CREATE RECEIPT, CREATE SHIPMENT, and other actions. The main area displays various order details: Order Type (RM), Order Nbr. (SO008211), Status (Open), Date (7/22/2024), Requested On (7/22/2024), Customer (ABC STUDIOS - ABC Studios Inc), Location (MAIN - Primary Location), Contact (Travis Harper), Currency (USD), Project (X - Non-Project Code), Description (Return of a computer and sale of laptops), and financial summary (Ordered Qty.: 6.00, Detail Total: 3,798.90, Line Discounts: 0.00, Document Dis...: 0.00, Freight Total: 0.00, Tax Total: 0.00, Order Total: 3,798.90). Below the main details, tabs for DETAILS, TAXES, COMMISSIONS, FINANCIAL, SHIPPING, ADDRESSES, DISCOUNTS, SHIPMENTS, PAYMENT LINKS, and PAYMENTS are visible. The FINANCIAL tab is selected, showing sections for FINANCIAL INFORMATION, PAYMENT INFORMATION, OWNERSHIP, and OTHER INFORMATION. In the PAYMENT INFORMATION section, the 'Prepayment Requirements Satisfied' checkbox is checked (indicated by a red box and a circled '1'). Other fields include Branch (PRODWHOLE - Products Wholesale), Prepayment Percent (50.00), Prepayment Amount (1,899.45), Payment Method (CHECK - Check), Card/Account Nbr., Cash Account (10200 - Company Checking Account), Workgroup, Owner (Maxwell Baker), and Orig. Order Type.

Figure: The RMA order with a prepayment for the required amount



The system does not consider the following documents listed on the **Payments** tab of the **Sales Orders** form to be prepayments or payments for the RMA order:

- Payments and prepayments with the *Voided* status
- Credit card payments with an expired pre-authorized transaction
- Credit card payments without an active transaction

If the balance of the RMA order is negative, the **Prepayment Percent** and **Prepayment Amount** boxes contain 0. When the balance becomes positive, the **Prepayment Percent** and **Prepayment Amount** values will be recalculated automatically based on the prepayment percent of the credit terms specified in the order.

Suppose that the **Prepayment Percent** value had been overridden before the balance of the RMA order became negative. In this case, when the balance becomes positive again, the system will recalculate the **Prepayment Percent** and **Prepayment Amount** values based on the overridden **Prepayment Percent** value.

Inventory and Order Management: Other Improvements

In Acumatica ERP 2024 R2, improvements to inventory and order management processes and the UI have been introduced, as described below.

Enhancements to Requisition Processing

In previous versions of Acumatica ERP, if a user deleted a sales order or purchase order that had been created for a requisition, they could not create another sales order or purchase order for the requisition. The **Create Orders** command on the More menu of the **Requisitions** (RQ302000) form remained unavailable, the requisition had the *Released* status, and users could not complete the processing of the requisition.

Acumatica ERP 2024 R2 introduces improved processing when a sales order or purchase order related to a requisition has been deleted and is no longer listed on the **Sales Orders** tab (see Item 1 in the following screenshot) or **Purchase Orders** tab of the **Requisitions** form. Now the system does the following:

- Changes the status of the requisition to *Open* (Item 2)
- Makes the **Create Orders** command available on the More menu (Item 3)

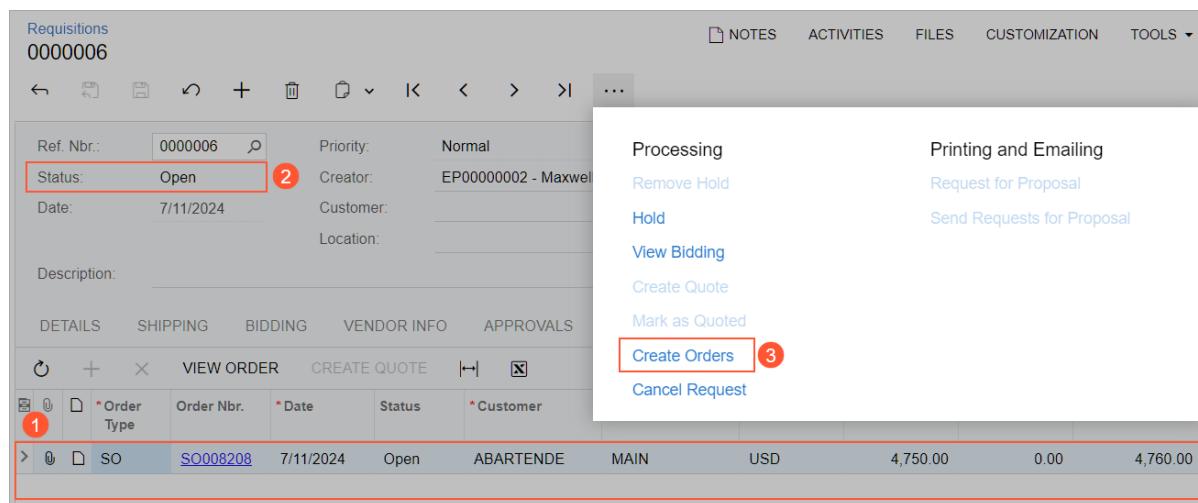


Figure: A requisition for which a related sales order has been deleted

When a user clicks the **Create Orders** command, the system does the following:

- Creates a sales order for each customer whose requested items are included in the requisition but who has no sales orders related to it. The system adds all items and item quantities requested by this customer in the requisition to the new sales order. For the customers that have sales orders related to the requisition, it does not change items and item quantities that have been specified in the sales orders.
- Creates a purchase order for each vendor specified in the requisition that has no purchase orders related to it. The system adds all items and item quantities requested from this vendor in the requisition to the new purchase order. For the vendors that have purchase orders related to the requisition, it does not change items and item quantities that have been specified in the purchase orders.
- Changes the status of the requisition to *Released*.

Users can see the links to the newly created sales orders and purchase orders on the **Sales Orders** and **Purchase Orders** tabs of the **Requisitions** form.

Ability to Consolidate Intercompany Sales Orders into a Single Shipment

In previous versions of Acumatica ERP, a user could create a single shipment for multiple sales orders with the same customer. However, this ability was unavailable for intercompany sales orders—that is, sales orders

for a customer extended from a branch—that were generated from purchase orders. The following functional restrictions were applied to each intercompany sales order:

- The **Ship Separately** check box on the **Shipping** tab of the [Sales Orders](#) (SO301000) form was always selected and unavailable for editing. This setting prevents sales orders for the same customer from being consolidated into a single shipment when the user selects the *Create Shipment* action on the [Process Orders](#) (SO501000) form and clicks **Process** or **Process All** on the form toolbar.
- If a user added an intercompany sales order to a shipment by clicking the **Add Order** button on the table toolbar of the [Shipments](#) (SO302000) form, no additional orders could be added to this shipment.

For more information about intercompany purchases and sales, see [Intercompany Purchases and Returns: General Information](#).

In Acumatica ERP 2024 R2, the functionality of intercompany sales orders has been aligned with the basic functionality of sales orders. For an intercompany order, the default state of the **Ship Separately** check box on the [Sales Orders](#) form now depends on the settings of the sales order's type on the [Order Types](#) (SO201000) form, and the state of the check box can be modified. Also, the user can now add multiple intercompany sales orders to an existing shipment for the same intercompany customer by clicking the **Add Order** button on the [Shipments](#) (SO302000) form.

AP Bill Approval Based on the Estimated Purchase Price Variance

In Acumatica ERP, a user can configure the approval workflow for AP bills based on the amount of the purchase price variance (PPV) between the price in the purchase receipt and AP bill. However, this approval can never trigger because the system calculates the purchase price variance during the release of an AP bill.

Starting in Acumatica ERP 2024 R2, the system calculates the estimated purchase price variance for an item in an AP bill or debit adjustment against the related purchase receipt or return. This amount is calculated when the user saves the bill or adjustment, that is, before the release of the document. The new estimated PPV amount is calculated in the same way as the PPV amount is. The **Estimated PPV Amount** column has been added to the **Details** tab of the [Bills and Adjustments](#) (AP301000) form. By default, the column is hidden.

On the [Approval Maps](#) (EP205015) form, an administrator can now configure an approval map for the *Bills and Adjustments* entity type—that is, for AP bills and debit adjustments—based on the estimated PPV amount. In the approval map, the new *Estimated PPV Amount* option can be selected in the **Field Name** column on the **Conditions** tab for the *AP Transactions* entity, as shown in the following screenshot.

Bracket:	* Entity	* Field Name	* Condition	Value
-	AP Transactions	Estimated PPV Amount	Is Greater Than	0.00

Figure: The Estimated PPV Amount option

After the upgrade to Acumatica ERP 2024 R2, the estimated PPV amount will be calculated in all new AP bills and debit adjustments in which the price differs from the purchase receipts or returns. If an unreleased AP bill or debit adjustment was created before the upgrade, the estimated PPV amount will be calculated only if a user makes any changes to the document and saves it or if a user removes the document from hold.

Processing of Shipments Packed in External Systems

In Acumatica ERP 2024 R2, the new **Packaging Processed in External System** check box has been added to the **Shipping** tab of the [Shipments](#) (SO302000) form (see Item 1 in the following screenshot). This read-only check box provides the ability to bypass the license limits on the number of packages when a shipment is uploaded into Acumatica ERP via the API or an import scenario. It can be selected only if an administrator is using one of those processes.

The screenshot shows the Acumatica Shipments form (SO302000) with the following details:

- Shipment Nbr.:** 000059
- Type:** Shipment
- Status:** Open
- Operation:** Issue
- * Shipment Date:** 1/30/2024
- Description:** Sale of jam #6543001: shipping
- Customer:** COFFEESHOP - FourStar Coffee & Sweets Shop
- Location:** MAIN - Primary Location
- Warehouse ID:** WHOLESALE - Wholesale Warehouse
- Workgroup:**
- Owner:**
- Shipped Quant...**: 8.00
- Shipped Weight:**: 22.720000
- Shipped Volume:**: 22.720000
- Packages:**: 0
- Package Weight:**: 0.000000

The **SHIPPING** tab is selected. In the **SHIPPING INFORMATION** section, the **Shop for Rates** button (labeled 2) is highlighted with a red box. In the **DELIVERY SETTINGS** section, the **Packaging Processed in External System** checkbox (labeled 1) is checked and highlighted with a red box.

Figure: The **Packaging Processed in External System** check box

If the **Packaging Processed in External System** check box is selected for a shipment, the system applies the following rules to the shipment:

- The system does not check the license limit for the number of packages in this shipment. That is, the uploaded shipment can have any number of packages.
- The **Shop for Rates** button on the **Shipping** tab is unavailable for this shipment (see Item 2 in the previous screenshot).
- The user can click the **Get Return Labels** command on the More menu for this shipment, but the system will display an error message stating that the system cannot provide the labels.
- The system does not perform the `GetLabel` API call even if the user clicks **Confirm Shipment**, regardless of the value specified in the **Ship Via** box on the **Shipping** tab.
- Even if the *Auto-Packaging* feature is enabled on the [Enable/Disable Features](#) (CS100000) form, the logic of auto-packaging will not be applied to this shipment when the user changes shipment lines or packaging details.

If the check box is cleared (the default state), the system enforces all existing license limits on the shipment and works as in previous versions of Acumatica ERP.

Redesign of the Update Movement Class Form

In Acumatica ERP 2024 R2, the [Update Movement Class](#) (IN506100) form has been redesigned to simplify and speed the processing and make the form consistent with other mass-processing forms (see the following screenshot).

The screenshot shows the 'Update Movement Class' form. At the top, there is a toolbar with several buttons: a circular arrow (1), a standard 'Process' button (2), a 'PROCESS ALL' button (3), a 'Schedules' menu button (4), and a 'Filter Settings' button (5). To the right of the toolbar are 'CUSTOMIZATION' and 'TOOLS' dropdown menus. Below the toolbar is a selection area containing fields for 'Action' (set to 'Calculate Movement Class'), 'Warehouse' (set to 'WHOLESALE - Wholesale Warehouse'), 'End Period' (set to '07-2024'), 'Item Class' (a dropdown menu), and 'Inventory ID' (a dropdown menu with a 'LIST' button). A red box highlights this selection area. Below the selection area is a table listing inventory items. The table has columns for 'Inventory ID', 'Description', 'Current Movement Class' (checkboxes), 'Fixed' (checkboxes), and 'Projected Movement Class'. A column labeled 'Included' contains checkboxes. A red box highlights the first row of the table, which includes the 'Included' column header (2). The table lists items such as 'AACOMPUT01' (Acer Laptop Computer), 'AALEGO500' (Lego 500 piece set), 'AAMACHINE1' (Injection molding machine - serial numbered), 'AAPOWERAID' (Poweraid 32 Oz - lot numbered), 'AM350WINDO' (350 Series Window), 'AM9000' (Manufactured Item), 'AMCON005' (Stainless Cap Hob - 90 deg. A type 50mm blank - 1200x1200), and 'AMCON006' (Stainless Cap Hob - 90 deg. A type 50mm blank - 1500x1500).

Figure: The Update Movement Class form

The form toolbar has been enhanced as follows:

- The **Process All** button has been added (see Item 1 in the previous screenshot). A user clicks the button to process all the records listed in the table.
- The **Process** button now processes only the selected inventory items in the table. A user selects these items by selecting the check boxes in the unlabeled Included column, which has been added to the table (Item 2).
- The standard **Schedules** menu has been added (Item 3). A user can now schedule the automatic update of movement classes.
- The standard **Filter Settings** button has been added (Item 4). Clicking the button opens the **Filter Settings** dialog box, in which a user can create a filter to view only the records they need; the user can save the filter for later use.

The Selection area (Item 5) has been enhanced as follows:

- The **Year**, **Period Number**, **Start Date**, and **End Date** boxes have been replaced with the **End Period** box. By default, the box shows the current financial period specified in the master calendar on the [Master Financial Calendar](#) (GL201000) form.
- The **Item Class** box has been added. In this box, a user can select the class whose items will be listed in the table.
- The **Inventory ID** box has been added. In this box, a user can select the item that will be listed in the table. The **List** button has been added right of the box. If the user clicks the button, the **Inventory Item List** dialog box opens so that the user can add rows with the items.
- The **Action** box has been added. The box has the following options:
 - Calculate Movement Class* (default): The system calculates the movement classes to be assigned to the processed inventory items and displays them in the **Projected Movement Class** column (see Item 1 in the following screenshot).

- Calculate and Update Movement Class:** The system calculates the movement classes to be assigned to the processed records and updates the movement classes of the records. When the processing has been completed, the **Current Movement Class** column shows the movement classes that have been assigned to the inventory items (Item 2). The **Projected Movement Class** column shows the calculated movement classes for the inventory items.

Inventory ID	Description	Current Movement Class	Projected Movement Class
AACOMPUT01	Acer Laptop Computer	L	L
AALEGO500	Lego 500 piece set	L	L
AAMACHINE1	Injection molding machine - serial numbered		
AAPOWERAID	Poweraid 32 Oz - lot numbered	L	L

Figure: The calculated and updated movement classes

When a movement class has been calculated, the system records this class in the database for the item, the warehouse, and the period of the calculation. If a user selects a warehouse and an end period in the Selection area, and the system finds the recorded calculation of the movement class for this warehouse and period, it shows the calculated movement class in the **Projected Movement Class** column.

Ability to Hide Alternate IDs of the Barcode Type in Order Lines

On the *Sales Orders* (SO301000) and *Purchase Orders* (PO301000) forms, the system automatically inserts an alternate ID of the *Barcode* type into the **Alternate ID** column for a stock or non-stock item in the order line if the following conditions are met on the **Cross-Reference** tab of the *Stock Items* (IN202500) or *Non-Stock Items* (IN202000) form:

- The item does not have an alternate ID of the following type:
 - Customer Part Number* for the *Sales Orders* form
 - Vendor Part Number* for the *Purchase Orders* form
 - Global* for both forms
- The item has an alternate ID of the *Barcode* type.

For some organizations, this behavior could be inconvenient because barcodes could be shared with customers or vendors, although they were used for internal purposes only. To address this issue, in Acumatica ERP 2024 R2, the new **Display Barcodes in Order Lines** check box has been added to the *Inventory Preferences* (IN101000) form, as shown in the following screenshot.

Inventory Preferences

GENERAL **MAILING & PRINTING** **WAREHOUSE MANAGEMENT** **GS1 UNITS**

NUMBERING SETTINGS

- * Batch Numbering Sequence:
- * Receipt/Transfer Numbering Sequence:
- * Issue Numbering Sequence:
- * Adjustment Numbering Sequence:
- * Kit Assembly Numbering Sequence:
- * PI Numbering Sequence:
- * Replenishment Numbering Sequence:

INVENTORY OPTIONS

- Replan Back Orders
- Allocate Items in Documents on Hold

ACCOUNT SETTINGS

- AR Clearing Account:
- * In-Transit Branch:
- * In-Transit Account:
- * Work In-Progress Account:

POSTING SETTINGS

- Update GL
- Post Summary on Updating GL
- Automatically Post on Release

DATA ENTRY SETTINGS

- Hold Documents on Entry
- Validate Document Totals on Entry
- Add One Unit per Barcode
- Automatically Add Receipt Line for Barcode
- Display Barcodes in Order Lines

Default Stock Item Class:

Default Non-Stock Item Class:

DEFAULT REASON CODES

- * Receipt Reason Code:
- * Issue/Return Reason Code:
- * Adjustment Reason Code:
- Assembly/Disassembly Reason ...
- * Phys. Inventory Reason Code:

PHYSICAL INVENTORY SETTINGS

- Use Tags
- Last Tag Number:
- Turnover Periods per Year:
- Release PI Adjustment Automatically

INVENTORY TURNOVER SETTINGS

Calculation Rules:

- Include Sales
- Include Production Orders
- Include Assemblies
- Include Issues and Adjustments
- Include Transfers

Figure: The Display Barcodes in Order Lines check box

If this check box is selected and the conditions on the *Stock Items* (IN202500) or *Non-Stock Items* (IN202000) forms are met for an item in a line of a sales or purchase order, the system inserts the item's alternate ID of the *Barcode* type into this line.

If the check box is cleared (the default state), the system does not insert the item's alternate ID of the *Barcode* type into this line.



At the time, the **Display Barcodes in Order Lines** check box affects only lines of sales and purchase orders in which the user adds stock or non-stock items by specifying them in the **Inventory ID** box on the **Details** tab of the *Sales Orders* (SO301000) or *Purchase Orders* (PO301000) form. If the user adds a line to an order by clicking the **Add Items** button on the table toolbar of the **Details** tab, the system works in the same way as it worked previously. The functionality will be unified in future updates.

Localization (UK): BACS HSBC Plug-In

In previous versions of Acumatica ERP, users could export batch payments to a Bankers' Automated Clearing System (BACS) HSBC file by using an export scenario. (BACS is used in the United Kingdom.) Export scenarios can be complex and hard to configure, and they provide limited abilities to find and display errors. Acumatica ERP 2024 R2 introduces a new plug-in for exporting files in BACS HSBC format.

All the changes described below appear in the system if the *UK Localization* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

Changes to the Payment Methods Form

On the [Payment Methods](#) (CS204000) form, the following UI changes have been made:

- On the **Settings for Use in AP** tab, the *BACS HSBC Plug-In* option has been added to the list in the **Export Method** box (see Item 1 in the following screenshot).
- If *BACS HSBC Plug-In* is selected in the **Export Method** box, the **Plug-In Settings** tab (Item 2) appears on the form.

ID	Description	Required	Sort Order	Entry Mask	Validation Reg. Exp.	Control Type	Default Value
1	Destination Sort Code Number	<input checked="" type="checkbox"/>	1	000000	^d{6,6}\$	Text	
2	Destination Account Number	<input checked="" type="checkbox"/>	2	00000000	^d{8,8}\$	Text	
3	Destination Account Name	<input checked="" type="checkbox"/>	3	CCCCCCCCCCCCCCCC		Text	
4	Destination Payment Ref.	<input checked="" type="checkbox"/>	4	CCCCCCCCCCCCCCCC		Text	

Figure: Changes on the Payment Methods form

The table on the **Plug-in Settings** tab, which is shown in the following screenshot, displays the settings of the selected plug-in.

The screenshot shows the SAP Fiori interface for managing payment methods. The top navigation bar includes 'NOTES', 'ACTIVITIES', 'FILES', 'CUSTOMIZATION', and 'TOOLS'. The main area displays the 'Payment Methods' screen for 'BACSHSBC - BACS HSBC'. The 'PLUG-IN SETTINGS' tab is active. A red box highlights the 'Settings for Use in AP' table, specifically the 'Destination sorting code number' row which has been renamed to 'Destination Sort Code Number'.

Figure: The new Plug-In Settings tab

On the **Settings for Use in AP** tab, the *Destination sorting code number* row in the **Payment Method Details** table has been renamed to *Destination Sort Code Number*.

On the **Remittance Settings** tab, the following changes have been made in the table:

- The *Originating sorting code number* row has been renamed to *Originating Sort Code Number*.
- The *Originating account number* row has been renamed to *Originating Account Number*.

Export of Batches via the BACS HSBC Plug-In

During export of a batch of payments on the [Batch Payments](#) (AP305000) form, the system uses the BACS HSBC plug-in if on the **Settings For Use in AP** tab of the [Payment Methods](#) (CA204000) form, *BACS HSBC Plug-In* is selected as the **Export Method**.

The file exported from the [Batch Payments](#) form by using the BACS HSBC plug-in has the following structure.

BACS File	Comment
VOL	Required. Only one record can be included in a file.
HDR1	Required. Only one record can be included in a file.
HDR2	Required. Only one record can be included in a file.
UHL	Required. Only one record can be included in a file.
Standard record 1	For each payment included in a batch, a separate standard record is added to the file.
Standard record 2	
Standard record N	
Contra record	One record is added for the batch. It includes the total of all payments.

BACS File	Comment
EOF1	Required. Only one record can be included in a file.
EOF2	Required. Only one record can be included in a file.

The name of the file generated by the plug-in is created by using the following format: {PaymentMethodID} - {CashAccountCD} - {Creation Date: yyyyMMdd} - {BatchSeqNbr: 0000}.txt.

The following tables show the structure of standard records and contra records in the BACS HSBC file.

Table: Standard Record

Field Number	Field Name	Data Element Size	Format	Required	Comment
1	<i>Destination Sorting Code Number</i>	6	Numeric	Yes	The vendor's payment setting specified in the Payment Instructions table (Payment tab) on the <i>Vendors</i> (AP303000) form. This setting is mapped to the <i>Destination Sort Code Number</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> (CA204000) form.
2	<i>Destination Account Number</i>	8	Numeric	Yes	The vendor's payment setting specified in the Payment Instructions table (Payment tab) on the <i>Vendors</i> form. This setting is mapped to the <i>Destination Account Number</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> form.
3	<i>Destination Type Account</i>	1			A value of 0.
4	<i>Transaction Code</i>	2			A value of 99 - <i>Bank Giro Credit</i> .
5	<i>Originating sorting code number</i>	6	Numeric	Yes	The remittance setting specified on the Remittance Settings tab of the <i>Cash Accounts</i> (CA204000) form. This setting is mapped to the <i>Originating Sort Code Number</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> form.
6	<i>Originating account number</i>	8	Numeric	Yes	The remittance setting specified on the Remittance Settings tab of the <i>Cash Accounts</i> form. This setting is mapped to the <i>Originating Account Number</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> form
7	<i>Free format</i>	4			A blank value.

Field Number	Field Name	Data Element Size	Format	Required	Comment
8	<i>Amount (in pence)</i>	11	Numeric	Yes	The payment amount from the batch line in \$\$\$\$\$\$\$\$\$\$CC format.
9	<i>User's name</i>	18		Yes	The remittance setting specified on the Remittance Settings tab of the <i>Cash Accounts</i> form. This setting is mapped to the <i>Originating Account Name</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> form
10	<i>User's reference</i>	18		Yes	The vendor's payment setting specified in the Payment Instructions table (Payment tab) on the <i>Vendors</i> form. This setting is mapped to the <i>Destination Payment Ref.</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> form.
11	<i>Destination account name</i>	18		Yes	The vendor's payment setting specified in the Payment Instructions table (Payment tab) on the <i>Vendors</i> form. This setting is mapped to the <i>Destination Account Name</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> form.
12	<i>BACS processing day of data</i>	6		Yes	Two working days after the date mapped to the <i>Creation Date</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> form.

Table: Contra Record

Field Number	Field Name	Data Element Size	Format	Required	Comment
1	<i>Originating Sorting Code Number</i>	6	Numeric	Yes	The remittance setting specified on the Remittance Settings tab of the <i>Cash Accounts</i> (CA204000) form. This setting is mapped to the <i>Originating Sort Code Number</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> (CA204000) form.
2	<i>Originating account number</i>	8	Numeric	Yes	The remittance setting specified on the Remittance Settings tab of the <i>Cash Accounts</i> form. This setting is mapped to the <i>Originating Account Number</i> setting on the Plug-In Settings tab of the <i>Payment Methods</i> form.

Field Number	Field Name	Data Element Size	Format	Required	Comment
3	<i>Type of user's account</i>	1			A value of 0.
4	<i>Transaction code</i>	2			A value of 17.
5	<i>Originating sorting code number</i>	6	Numeric	Yes	The remittance setting specified on the Remittance Settings tab of the Cash Accounts form. This setting is mapped to the <i>Originating Sort Code Number</i> setting on the Plug-In Settings tab of the Payment Methods form.
6	<i>Originating account number</i>	8	Numeric	Yes	The remittance setting specified on the Remittance Settings tab of the Cash Accounts form. This setting is mapped to the <i>Originating Account Number</i> setting on the Plug-In Settings tab of the Payment Methods form.
7	Free format	4			A blank value.
8	<i>Amount (in pence)</i>	11			The sum of the payment amounts from the batch lines in \$\$\$\$\$\$\$\$\$\$cc format.
9	<i>Narrative of user's choice</i>	18			The remittance setting specified on the Remittance Settings tab of the Cash Accounts form. This setting is mapped to the <i>Originating Account Name</i> setting on the Plug-In Settings tab of the Payment Methods form.
10	<i>Contra identification</i>	18			A value of CONTRA.
11	<i>Abbreviated account name of user's nominated account</i>	18		Yes	The remittance setting specified on the Remittance Settings tab of the Cash Accounts form. This setting is mapped to the <i>Originating Account Name</i> setting on the Plug-In Settings tab of the Payment Methods form.
12	<i>BACS processing day of data</i>	6			Two working days after the date mapped to the <i>Creation Date</i> setting on the Plug-In Settings tab of the Payment Methods form.

Limitations

The following limitations apply to this functionality:

- Only multiprocessing files with ACH credits are supported.
- Even though a multiprocessing file is exported, the *BACS processing day of data* setting will be the current day plus two working days for all files. (The same limitation is applicable to the export scenario.)
- The plug-in will export a file with the same data as the export scenario because any changes to the file format require additional testing. By switching to the plug-in, users can more easily process errors. Any additional requirements will be implemented in later versions of Acumatica ERP.

Additional Information

For more details, see [Setup of BACS HSBC Payment Processing](#) and [Settings of the BACS HSBC File](#).

For details on how to set up BACS HSBC payment processing, see [To Add a Payment Method for BACS HSBC Plug-In](#).

Localization (UK): BACS Lloyds Plug-In

In previous versions of Acumatica ERP, users could export batch payments to a Bankers' Automated Clearing System (BACS) Lloyds file by using an export scenario. (BACS is used in the United Kingdom.) Export scenarios can be complex and hard to configure, and they provide limited abilities to find and display errors. Acumatica ERP 2024 R2 introduces a new plug-in for exporting files in BACS Lloyds format.

All the changes described below appear in the system if the *UK Localization* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

Changes to the Payment Methods Form

On the [Payment Methods](#) (CS204000) form, the following UI changes have been made:

- On the **Settings for Use in AP** tab, the *BACS Lloyds Plug-In* option has been added to the list in the **Export Method** box (see Item 1 in the following screenshot).
- If *BACS Lloyds Plug-In* is selected in the **Export Method** box, the **Plug-In Settings** tab (Item 2) appears on the form.

ID	Description	Control Type
1	Destination Sort Code Number	Text
2	Destination Account Number	Text
3	Destination Account Name	Text

Figure: Changes on the Payment Methods form

The table on the **Plug-in Settings** tab, which is shown in the following screenshot, displays the settings of the selected plug-in.

The screenshot shows the 'Payment Methods' screen with the title 'BACSLLOYDS - BACS Lloyds'. At the top right are links for 'NOTES', 'ACTIVITIES', 'FILES', 'CUSTOMIZATION', and 'TOOLS'. Below the title are standard navigation icons. The main area contains fields for 'Payment Method ID' (BACSLLOYDS), 'Active' status (checked), 'Means of Payment' (Direct Deposit), 'Direct Deposit File For...' (BACS Lloyds payment), and 'Description' (BACS Lloyds). To the right of these are checkboxes for 'Use in AP' (checked), 'Set Payment Date to Bank Transaction Date' (unchecked), 'Use in AR' (unchecked), 'Require Remittance Information for Cash Account' (checked), and 'Use in PR' (unchecked). Below these are tabs: 'ALLOWED CASH ACCOUNTS', 'SETTINGS FOR USE IN AP', 'REMITTANCE SETTINGS', and 'PLUG-IN SETTINGS' (which is selected and highlighted in blue). A red box highlights a table under the 'PLUG-IN SETTINGS' tab, which lists various settings and their values. The table has columns 'Setting' and 'Value'.

Setting	Value
*Creation Date	Batch Date
*Originating Sort Code Number	Originating Sort Code Number
*Originating Account Number	Originating Account Number
*Destination Sort Code Number	Destination Sort Code Number
*Destination Account Number	Destination Account Number
*Destination Account Name	Destination Account Name

Figure: The new Plug-In Settings tab

Export of Batches via the BACS Lloyds Plug-In

During export of a batch of payments on the [Batch Payments](#) (AP305000) form, the system uses the BACS Lloyds plug-in if on the **Settings For Use in AP** tab of the [Payment Methods](#) (CA204000) form, **BACS Lloyds Plug-In** is selected as the **Export Method**.

The file exported from the [Batch Payments](#) form by using the BACS Lloyds plug-in contains the sections shown in the tables below.

Table: H Section

Only one line per file is added.

Field Number	Field Name	Max. Length (Min. Length)	Required	Comment
1	<i>Header Identifier</i>	1 (1)	Yes	The value of this field is <i>H</i> .
2	<i>Current Date</i>	8 (8)	Yes	The date mapped to the Creation Date setting on the Plug-in Settings tab of the Payment Methods form.
3	<i>Sequence Number</i>	6 (1)	Yes	The Batch Seq. Number setting on the Batch Payments form.

Table: D Section

Only one line per file is added.

Field Number	Field Name	Max. Length (Min. Length)	Required	Comment
1	<i>Logical Record Type</i>	1 (1)	Yes	The value of this field is <i>D</i> .

Field Number	Field Name	Max. Length (Min. Length)	Required	Comment
2	<i>Value Date</i>	8 (8)	Yes	<p>The payment date from the first line in the batch. The format of this element is YYYYMM-DD.</p> <div style="border: 2px solid orange; padding: 5px; margin-top: 10px;">  The system verifies that only payments with the same date are added to a batch payment if the payment method has BACS Lloyds Payment in the Direct Deposit File Format box. </div>
3	<i>Debit Account Reference</i>	18	Yes	The cash account from the batch payment.
4	<i>Account Number</i>	15 (15)	Yes	<p>A field with the Acc1 – Acc2 format, where:</p> <ul style="list-style-type: none"> Acc1 is the value of the remittance setting specified on the Remittance Settings tab of the Cash Accounts (CA204000) form. This setting is mapped to the <i>Originating Sort Code Number</i> setting on the Plug-In Settings tab of the Payment Methods form. Acc2 is the value of the remittance setting specified on the Remittance Settings tab of the Cash Accounts form. This setting is mapped to the <i>Originating Account Number</i> setting on the Plug-In Settings tab of the Payment Methods form. <p><i>Originating Sort Code Number</i> must contain six characters and <i>Originating Account Number</i> must contain eight characters.</p>

Table: C Section

One line is added to each payment in the batch.

Field Number	Field Name	Max. Length (Min. Length)	Required	Comment
1	<i>Logical Record Type</i>	1 (1)	Yes	The value of this field is C.
2	<i>Payment Amount</i>	18	Yes	The payment amount from the batch payment line. Ending zeros after the decimal point are dropped.

Field Number	Field Name	Max. Length (Min. Length)	Required	Comment
3	<i>Beneficiary Name</i>	18	Yes	The vendor's payment setting specified in the Payment Instructions table (Payment tab) on the <i>Vendors</i> (AP303000) form. This setting is mapped to the Destination Account Name setting on the Plug-In Settings tab of the <i>Payment Methods</i> form.
4	<i>Beneficiary Account Number</i>	8 (8)	Yes	The vendor's payment setting specified in the Payment Instructions table (Payment tab) on the <i>Vendors</i> form. This setting is mapped to the Destination Account Number setting on the Plug-In Settings tab of the <i>Payment Methods</i> form.
5	<i>Beneficiary Sort Code</i>	6 (6)	Yes	The vendor's payment setting specified in the Payment Instructions table (Payment tab) on the <i>Vendors</i> form. This setting is mapped to the Destination Sort Code Number setting on the Plug-In Settings tab of the <i>Payment Methods</i> form.
6	<i>Beneficiary Reference</i>	18	Yes	The Payment Ref. setting from the batch payment line.

Table: T Section

Only one line per file is added.

Field Number	Field Name	Max. Length (Min. Length)	Required	Comment
1	<i>Logical Record Type</i>		Yes	The value of this field is <i>T</i> .

Additional Information

For more details, see [Setup of BACS Lloyds Payment Processing](#) and [Settings of the BACS Lloyds File](#).

For details on how to set up BACS Lloyds payment processing, see [To Add a Payment Method for BACS Lloyds Plug-In](#).

Localization: Changes to the Units of Measure Form

In previous versions of Acumatica ERP, the system had limited abilities to localize the units of measure (UOMs) defined on the *Units of Measure* (CS203100) form. This caused inconveniences for users who needed reports with UOMs in a language different from the default locale.

In Acumatica ERP 2024 R2, the previous *Units of Measure* (CS203100) form has been replaced with the new [Units of Measure](#) (CS203500) form.

UOM Entry on the New Form

[Units of Measure](#) (CS203500) is a standard maintenance form for entering and accessing UOM records. As with other forms for entering records, it has a corresponding list of records that can be used as a starting point. The *Units of Measure* (CS3035PL) list of records (shown in the following screenshot) opens by default when a user clicks the *Units of Measure* link in the **Configuration** workspace or a list of search results.

Unit ID	Description for Reports	Level 3 Unit ID
BOTTLE	Bottle	EA
BOX	BOX	
CAN	Can	EA
DAY	DAY	
EA	EA	
HOUR	Hour	HUR
ITEM	ITEM	
JBOX	JBOX	
KG	kg	KGM
LB	LB	
LITER	Liter	LTR
METER	Meter	MTR

Figure: The *Units of Measure* (CS3035PL) list of records

A user can add a new UOM by clicking **New Record** on the form toolbar. The system opens the [Units of Measure](#) (CS203500) maintenance form, where UOMs can be entered and maintained. To enter a UOM record, the user specifies the identifier of the UOM in the **Unit ID** box (see Item 1 in the following screenshot) and the localizable value for reports in the **Description for Reports** box, which supports multilanguage user input (Item 2). The UOM length in the **Description for Reports** box is limited to six characters.

If multilanguage user input has been configured, the system displays a link with a language ISO code next to the **Description for Reports** box. The user can click this link to open the **Translations** dialog box and add localized values in different languages. For more details on configuring multilanguage input and adding localized values, see [Managing Locales and Languages](#).

In the table (Item 3), the user can add rules to convert this UOM into other UOMs.

The screenshot shows the 'Units of Measure' maintenance form (CS203500). At the top, there are navigation buttons for Notes, Files, Customization, and Tools. Below the header, the title 'Units of Measure' and 'DM' are displayed. The main area contains fields for Unit ID (DM), Description for Reports (Decime), and Level 3 Unit ID. A toolbar below these fields includes icons for Save, Add, Delete, and Find. A table section shows a conversion rule: 'To Unit' is METER, 'Multiply/Divide' is Divide, and 'Conversion Factor' is 10.000000. Red circles numbered 1, 2, and 3 highlight specific fields: 1 points to the Unit ID field, 2 points to the Description field, and 3 points to the Conversion Factor field.

Figure: The Units of Measure (CS203500) maintenance form

Upgrade Notes

After the upgrade to Acumatica ERP 2024 R2, if any conversion rule had the same UOM in the **From Unit** and **To Unit** columns on the old *Units of Measure* (CS203100) form, this UOM will be added to the new *Units of Measure* (CS203500) form as a separate record. The unit ID of the UOM will be copied to the **Description for Reports** box. Conversion rules with different UOMs in the **From Unit** and **To Unit** columns will be added to the conversion table of the UOM specified in the **From Unit** column.

The UOM functionality on the *Non-Stock Items* (IN202000), *Stock Items* (IN202500), and *Item Classes* (IN201000) forms remains unchanged.

The database tables related to the old *Units of Measure* (CS203100) form will remain in the application database to support the web service endpoints of the previous versions. The endpoints for the 2024 R2 version will use the database tables of the new *Units of Measure* (CS203500) form.

Manufacturing: Enhanced Estimating

In Acumatica ERP 2024 R2, significant enhancements have been made to the estimating functionality. Previously, users had to create multiple estimate revisions to incorporate price breaks. Handling these revisions could be challenging and required extra solutions. Now users can create estimates with multiple price points based on the quantity of units a customer plans to purchase, all within the same revision. Price breaks are not mandatory, and users can still create estimates without them, as they did in previous versions of Acumatica ERP.

By specifying price breaks on estimates, users can accurately reflect cost variations based on order quantities and subcontracting costs, so that they can maintain margins and provide competitive pricing to customers. A sales engineer may find the new functionality beneficial in the following scenarios:

- If a vendor provides quantity price breaks for purchase parts, the engineer can specify these price breaks on the estimate to accurately reflect how the quantity ordered by the manufacturing customer affects the cost and margin of the finished product.
- If subcontracting costs are involved, minimum flat fees may be charged by subcontractor vendors for smaller order quantities. By specifying these price breaks on the estimate, the engineer can accurately calculate the increased price and cost of the product, ensuring that margins are maintained despite the additional costs.
- If the sales engineer intends to provide discounts for order quantities in batch or lot size increments by reducing the markup, by specifying price breaks on the estimate, the engineer can adjust pricing accordingly for different order quantities. This ensures that customers will receive discounts for larger orders while the company still meets its margin requirements.

The sections below provide details about the changes that support the enhanced estimating functionality, which is available if the *Estimating* feature (under the *Manufacturing* group of features) is enabled on the [Enable/Disable Features](#) (CS100000) form.

Changes to the Estimate Form

A new tab, **Price Breaks**, has been added to the [Estimate](#) (AM303000) form, as shown in the screenshot below. On this tab, users can add, update, or remove price breaks for primary revisions of estimates with the *New* or *In Process* status. The system automatically calculates the cost and price components for each price break.

The **Primary** check box is selected by default for the first price break added to the tab. The settings of the primary price break are the source for the order quantity and cost and price components displayed on the **Totals** tab of the form. If a user creates an estimate for a sales quote, the system uses the quantity specified in the primary price break of the estimate as the order quantity.

By selecting check boxes in the **Print** column of the table on the **Price Breaks** tab, users can indicate which price breaks are to be included in the [Sales Quote](#) (CR604500), [Quote](#) (SO641000), and [Estimate Summary](#) (AM641000) reports.

The screenshot shows the Estimate form for AME000010 B - Base Unit. The top navigation bar includes links for NOTES, ACTIVITIES, FILES, CUSTOMIZATION, and TOOLS. The main area displays various estimate details like Item Description (Base Unit), Estimate Class (PROTOTYPE), and Item Class (MFGSUBASSY- -- Manufacturi). The Totals tab shows a Total Cost of 179.37. The Price Breaks tab is selected, showing a table with three rows of price break details. The columns include Order Qty, UOM, Lead Time (Days), Unit Price, Total Price, Unit Cost, and Total Cost. An 'Override' column contains check boxes for each row.

Order Qty	UOM	Lead Time (Days)	Unit Price	Total Price	Unit Cost	Total Cost	Override Overall Markup (%)					
10.00	EA	100	20.00	201.22	17.94	179.37	<input type="checkbox"/>					
1.00	EA	100	66.00	66.00	57.50	57.50	<input type="checkbox"/>					
100.00	EA	100	42.00	4,200.00	37.70	3,770.00	<input type="checkbox"/>					

Figure: The Price Breaks tab of the Estimate form

If a user creates a new estimate revision, the system copies the price breaks from the source estimate revision to the new one, along with their notes and attachments. Similarly, if a user creates a new estimate by using the **Create by Copying** command on the More menu, the price breaks of the source estimate and their notes and attachments are copied to the new estimate.

The **Override** check box has been added next to the **Overall Markup (%)** box on the **Totals** tab of the [Estimate](#) form, as shown in the screenshot below. If the check box is selected, a user can modify the system-calculated markup percent for the entire estimate. Also, a user can select any check boxes in the **Override Overall Markup (%)** column on the **Price Breaks** tab to manually enter the overall markup percent for individual price breaks.

If a user enters a new value in the **Overall Markup (%)** box on the **Totals** or **Price Breaks** tab, the system recalculates the values in the **Total Price** and **Unit Price** boxes on the respective tab by using the following formulas:

$$\text{Total Price} = \text{Total Cost} * (1 + \text{Overall Markup \%} / 100)$$

$$\text{Unit Price} = \text{Total Price} / \text{Order Qty.}$$

Also, the **Round Unit Prices** check box has been added to the Summary area of the [Estimate](#) form, as shown in the screenshot below. If the check box is selected, all unit prices specified on the **Totals** and **Price Breaks** tabs will be rounded to the nearest whole unit of the respective currency. For example, 10.49 USD will be rounded down to 10.00 USD, and 10.50 USD will be rounded up to 11.00 USD.

The **Currency** box (also shown in the screenshot below) has been moved from the **Totals** tab to the Summary area. All monetary amounts displayed on the form are shown in the currency specified in this box.

The screenshot displays the Estimate form for a specific project. At the top, the estimate ID is AME000009, the revision is A - Injection molding machine, and the inventory ID is AAMACHINE1. The item description is "Injection molding machine - serial numbered". The estimate class is PROTOTYPE, and the item class is INDEQUIP -300-MOLDING - Mc. The warehouse is Maxwell Baker, and the owner and engineer are also Maxwell Baker. The request date is 1/12/2021. The promise date is 100 days from now. The lead time is 100 days, with an override checked. The branch is PRODWHOLE - Products Wh. The currency is set to USD at 1.00, with a link to view the base currency.

TOTALS Tab:

- Order Qty:** 1.00
- UOM:** EA
- COST/PRICE:**
 - Unit Cost: 57.25
 - Total Cost: 57.25
 - Unit Price: 65.25
 - Total Price: 65.25
- MARKUP:**
 - Labor Markup (%): 20.00
 - Machine Markup (%): 20.00
 - Material Markup (%): 10.00
 - Tool Markup (%): 20.00
 - Overhead Markup (%): 0.00
 - Subcontract Markup (%): 0.00
 - Overall Markup (%): 13.97 Override

Figure: New and relocated elements on the Estimate form

Boxes on the **Totals** tab of the **Estimate** form have been renamed, as shown in the following table.

Old Name	New Name
Order Qty	Order Qty.
Labor Markup Pct	Labor Markup (%)
Machine Markup Pct	Machine Markup (%)
Material Markup Pct	Material Markup (%)
Tool Markup Pct	Tool Markup (%)
Overhead Markup Pct	Overhead Markup (%)
Subcontract Markup Pct	Subcontract Markup (%)

Old Name	New Name
Overall Markup Pct	Overall Markup (%)

Boxes in the Summary area and columns on the **Operations** tab have been renamed, as shown in the following table.

Old Name	New Name
Var Labor Cost	Var. Labor Cost
Var Overhead Cost	Var. Overhead Cost
Fix Labor Cost	Fixed Labor Cost
Fix Overhead Cost	Fixed Overhead Cost

Changes to the Estimate Summary Report

The [Estimate Summary](#) (AM641000) report has been enhanced to display the estimate price breaks that have the **Print** check box selected on the **Price Breaks** tab of the [Estimate](#) (AM303000) form. The following screenshot shows an example with the estimate's price breaks displayed.

The screenshot shows the Acumatica Estimate Summary report interface. At the top, it displays the Acumatica logo and the word "Estimate". On the left, there is a sidebar with company information: Products Wholesale, 11235 SE 6th St., Suite 140, Bellevue, WA, 98004, Phone: 206-555-1212, Web: www.revisiontwo.com. To the right of the sidebar, there are details for the estimate: Estimate ID: AME000010, Revision ID: B, Revision Date: 1/12/2021, Currency: USD, Ext. Ref Nbr.: Customer: (empty). Below this, there are two sections: "General" and "Estimate Quantities and Pricing Details". The "General" section contains fields for Owner (Maxwell Baker), Warehouse, Request Date, and Class (PROTOTYPE). The "Estimate Quantities and Pricing Details" section is highlighted with a red border and contains a table with columns: Item, Description, Lead Time (Days), Qty., UOM, Unit Price, and Extended Price. The table data is as follows:

Item	Description	Lead Time (Days)	Qty.	UOM	Unit Price	Extended Price
MGBASE	Base Unit	100	10.00	EA	20.00	201.22
		100	1.00	EA	66.00	66.00
		100	100.00	EA	42.00	4,200.00

Below this table, there is another section titled "Estimate Materials" with a table:

Material Item	Description	Qty. per Unit	UOM
MGDRIPTRAY	Drip Tray	1.00	EA
MGFHSCREW	Flat Head Screw	3.00	EA
MGSHEET10	Sheet Metal 10 Gauge	0.04	POUND
MGBLACKDYE	Black Dye	1.00	OZ

Figure: Price breaks in the Estimate Summary report

The report layout has been updated as follows:

- The Estimate Quantities and Pricing Details section, which is highlighted in the screenshot above, has been added. This section displays information about price breaks (when applicable) and includes the **Item**, **Description**, **Lead Time (Days)**, **Qty.**, **UOM**, **Unit Price**, and **Extended Price** columns.
- The Estimate Materials section has been formatted and relocated beneath the Estimate Quantities and Pricing Details section.

- The **Quantity** column in the Estimate Materials section has been renamed to **Qty. per Unit**.
- The **Unit Price** and **Total Price** boxes have been removed from the report footer.

Changes to the Sales Quote and Quote Reports

The **Sales Quote** (CR604500) and **Quote** (SO64100) reports have also been enhanced to display the estimate price breaks that have the **Print** check box selected on the **Price Breaks** tab of the **Estimate** (AM303000) form.

In the out-of-the-box system, these reports now display estimates, so manufacturers do not need to modify them further to include the subreports that provide information about estimates.

Other Changes

A new check box, **Price Break**, has been added to the **Quick Estimate** dialog box, which a user can open by clicking the **Quick Estimate** button on the **Estimates** tab of the **Opportunities** (CR304000), **Sales Orders** (SO301000), and **Sales Quotes** (CR304500) forms. This non-editable check box indicates whether the estimate record has price breaks. Also, if price breaks are available for the estimate record, the user can review the information displayed in the dialog box but cannot modify it to perform another quick estimate.

The new check box on the **Sales Quotes** form is shown in the following screenshot.

The screenshot shows the 'Sales Quotes' application interface. In the center, a 'Quick Estimate' dialog box is open over a quote record for 'OP000400 Q000015 - Opportunity for MGBASE Estimate'. The dialog displays a list of costs and their overrides. At the bottom right of the dialog, there is a checkbox labeled 'Price Break' which is checked and highlighted with a red border. The main quote details on the left show a total of 470.00.

Line Item	Description	Value	Override
Fixed Labor Cost	20.00	<input type="checkbox"/>	
Var. Labor Cost	17.00	<input type="checkbox"/>	
Machine Cost	0.00	<input type="checkbox"/>	
Material Cost	140.25	<input type="checkbox"/>	
Tool Cost	2.12	<input type="checkbox"/>	
Fixed Overhead Cost	0.00	<input type="checkbox"/>	
Var. Overhead Cost	0.00	<input type="checkbox"/>	
Total Cost	179.37		
Order Qty.	10.00	<input checked="" type="checkbox"/> Price Break	
UOM:	EA		
Unit Cost:	42.20		
Overall Markup (%):	11.36		
Unit Price:	47.00	<input type="checkbox"/>	
Total Price:	199.75		

Figure: The Price Break check box in the Quick Estimate dialog box

Boxes in the Summary area of the *Estimate Operation* (AM304000) form have been renamed, as shown in the following table.

Old Name	New Name
Var Labor Cost	Var. Labor Cost
Var Overhead Cost	Var. Overhead Cost
Fix Labor Cost	Fixed Labor Cost
Fix Overhead Cost	Fixed Overhead Cost

Manufacturing: Enhanced Linking of Production Orders

In Acumatica ERP 2024 R2, linking between parent and child production orders has been significantly enhanced. The following changes, which are described in the sections below, have been introduced:

- Improved visibility of related production orders
- Enhanced numbering of subassembly orders
- Allocation of a subassembly as a material to another production order
- Enhanced generation of orders for subassemblies
- Enhancements in finite production scheduling

Improved Visibility of Related Production Orders

In previous versions of Acumatica ERP, it was not possible to display all dependencies of a production order in a single view. Production managers had to select each material line in a production order on the [Production Order Details](#) (AM209000) form to see its child orders, which was inconvenient and time-consuming.

To address this issue, the new **Related Production** tab has been added on the [Production Order Maintenance](#) (AM201500) form. The tab displays the product production order (that is, the top-level production order), immediate parent production order, and immediate child production orders in a single view along with the details of these related production orders. (See the following screenshot.)

The screenshot shows the Production Order Maintenance screen for order RO AM000108-002 - Build Base Unit. The top navigation bar includes links for NOTES, ACTIVITIES, FILES, CUSTOMIZATION, and TOOLS. Below the header are various input fields: Order Type (RO - Regular Orders), Inventory ID (MGBASE - Base Unit), Qty. Complete (0.00), Production Nbr. (AM000108-002 - Build Base Unit), Qty. to Produce (9,158.00), Qty. Scrapped (0.00), Status (Planned), UOM (EA), Qty. Remaining (9,158.00), Order Date (5/16/2024), and Description (Build Base Unit). The tabs at the bottom are GENERAL, REFERENCES, RELATED PRODUCTION, EVENTS, ATTRIBUTES, TOTALS, and LINE DETAILS. The RELATED PRODUCTION tab is selected. A sub-section titled 'Product Order Type' shows 'RO - Regular Orders'. Another sub-section titled 'Product Production Nbr.' shows 'AM000108-000 - Build Keurig Model 4!'. Below these, a table lists relationships between production orders. The table has columns: Relationship Type, Order Type, Production Nbr., Inventory ID, Status, Start Date, End Date, UOM, Qty. to Produce, Qty. Remaining, and Qty. Complete. Two rows are shown: a Parent entry for AM000108-001 and a Child entry for AM000108-004.

Relationship Type	Order Type	* Production Nbr.	Inventory ID	Status	* Start Date	* End Date	* UOM	Qty. to Produce	Qty. Remaining	Qty. Complete
> Parent	RO	AM000108-001	MGRESVINL1	Planned	8/18/2023	5/15/2024	EA	9,158.00	9,158.00	0.00
> Child	RO	AM000108-004	MGSHEET10	Planned	11/6/2022	11/6/2022	POUND	183.16	183.16	0.00

Figure: The product, parent, and child orders on the Related Production tab

The **Related Production** tab only displays production orders that have an item plan linked directly to the current production order and production orders to which the current production order's item plan is linked as a supply. Consequently, if a user cancels or deletes a production order or production material demand, the item plan is removed and the system updates all parent and child relationships displayed on the **Related Production** tab accordingly.

To avoid the display of duplicate information, the **Linked Orders** section has been removed from the **References** tab of the [Production Order Maintenance](#) form.

Enhanced Numbering of Subassembly Orders

In previous versions of Acumatica ERP, it was not possible to distinguish linked production orders (that is, the parent and child production orders) by looking at their identifiers.

Starting in Acumatica ERP 2024 R2, users can set up the system to assign the product production order and all its child production orders identifiers that have the same segment and a unique suffix. This makes it easier for users to identify production orders that are part of the same production bill of material (BOM).

To support this functionality, on the [Production Order Types](#) (AM201100) form, the new **Add Suffix for Production Subassemblies** check box has been added to the **General** tab (**Numbering Settings** section), as shown in the following screenshot.

The screenshot shows the 'Production Order Types' form for 'RO - Regular Orders'. The 'GENERAL' tab is selected. In the 'NUMBERING SETTINGS' section, there is a checkbox labeled 'Add Suffix for Production Subassemblies' which is checked and highlighted with a red box. Other settings include 'Order Type: RO', 'Description: Regular Orders', 'Function: Regular', 'Order Numbering Sequence: AMPROD - Production Order', 'Scrap Source: Order Type RETAIL - Retail Warehouse', 'Scrap Warehouse: RETAIL - Retail Warehouse', 'Scrap Location: RETURNS - Returns area', and various checkboxes for 'COPY BOM NOTES' like 'Item/Header', 'Operation', 'Material', 'Step', 'Tool', and 'Overhead'. There are also sections for 'ACCOUNT SETTINGS' and 'DATA ENTRY SETTINGS'.

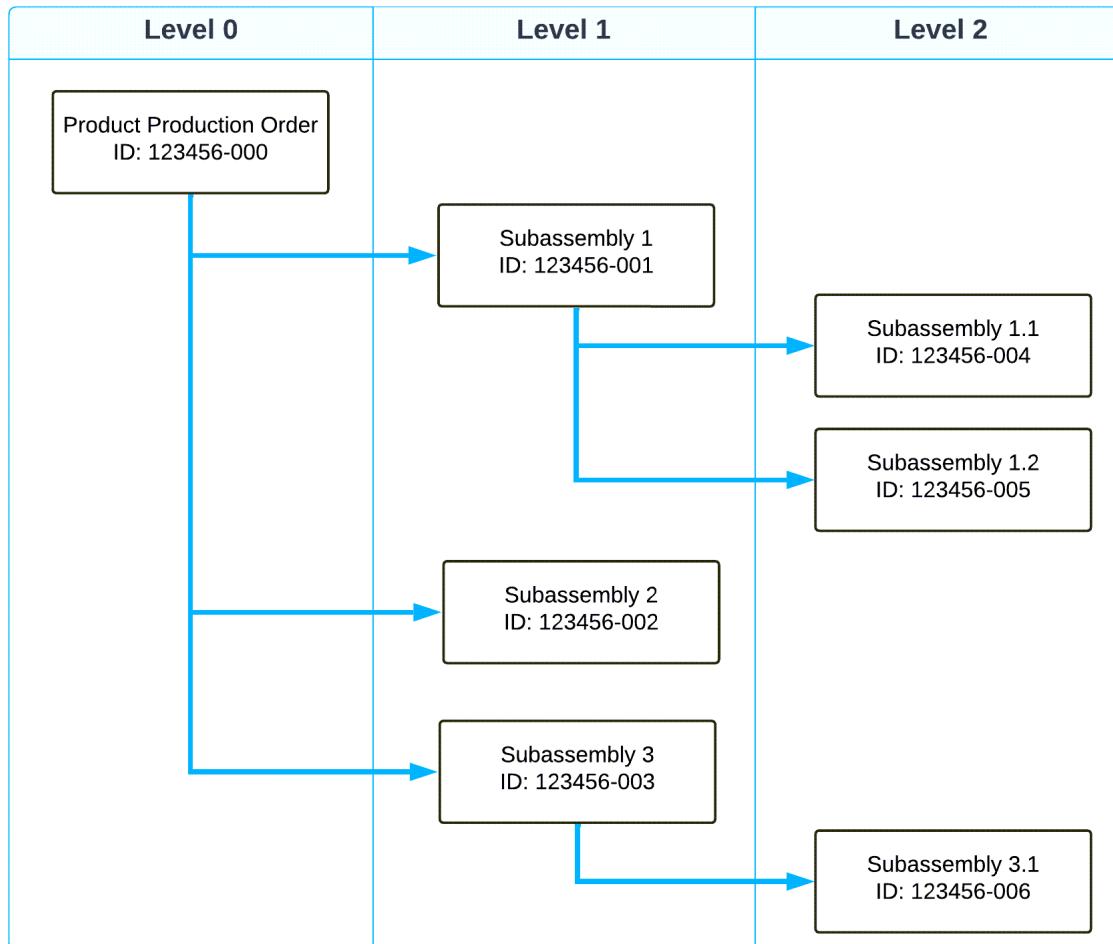
Figure: The Add Suffix for Production Subassemblies check box

If the check box is cleared, the system generates the identifiers of production orders based on the production order numbering sequence, as it did in previous versions. If the check box is selected, the system assigns the identifiers as follows:

- The common segment of the identifier is generated based on the production order numbering sequence. Its length is shortened by four digits.
- The product production order (that is, the top-level production order) is assigned the common segment of the identifier followed by *-000*.
- All child orders of the product production order are assigned the common segment of the identifier followed by a hyphen and an incremental three-digit suffix. The incremental suffix is assigned sequentially from the top down, first to each immediate child production order, and then to the related production orders on each subsequent level in the order hierarchy.

The following diagram illustrates the assignment of identifiers to the related production orders.

Assignment of production order identifiers with suffixes



For the automatic assignment of suffixes to production order identifiers, the numbering sequence specified for the production order type must be set up with automatic numbering. That is, the **Manual Numbering** check box must be cleared for the numbering sequence on the [Numbering Sequences](#) (CS201000) form.

The system assigns the incremental suffix to related production orders when a user generates these orders on the following forms:

- [Production Order Maintenance](#) (AM201500)
- [Sales Orders](#) (SO301000)
- [Inventory Planning Display](#) (AM400000)
- [Projects](#) (PM301000)
- [Estimate](#) (AM303000)
- [Create Production Orders](#) (AM510000)
- [Critical Materials](#) (AM401000)

The **Add Suffix for Production Subassemblies** check box is cleared by default for all new and existing production order types.

Allocation of a Subassembly as a Material to Another Production Order

In previous versions of Acumatica ERP, for an item produced in the scope of a subassembly production order, production managers had to wait until the item was moved to inventory before they could allocate it as a material to a parent production order. Acumatica ERP 2024 R2 introduces the ability to allocate an existing subassembly as a material to a parent production order.

On the [Production Order Details](#) (AM209000) form, the **Link Prod. Order** button has been added to the table toolbar on the **Materials** tab, which is shown in the following screenshot. A user can link a production order's material demand to a subassembly production order if the following conditions are met:

- The production order has the *Planned* or *On Hold* status.
- The **Mark for Production** check box is selected in the material line.
- The line's material is not linked to any subassembly production order.
- The status of the line's material is *Planned*, *Released*, or *In Process*.

Operation ID	Work Center	Operation Description	* Setup Time	Run Units	* Run Time	Machine Units	* Machine Time	* Queue Time	* Finish Time	* Move Time	Qty to Produ
0010	WC10	Assembly	01:00	10.00	01:00	0.00	01:00	00:00	00:00	00:00	1.00
0020	WC30	Final Assembly	00:00	10.00	01:00	0.00	01:00	00:00	00:00	00:00	0.00

MATERIALS											
RESET LINES		LINE DETAILS		ALLOC. DETAILS		PO LINK		LINK PROD ORDER			
		* Inventory ID	Description	Qty Required	* UOM	Unit Cost	Material Status	Backflush Materials	Warehouse Override	* Warehouse	Location
>	0	MGCIRBOARD	Circuit Board	1.00	EA	1.04	Planned	<input type="checkbox"/>	<input type="checkbox"/>	WHOLESALE	<input type="checkbox"/>
>	0	MGRESISTOR	Resistor	4.00	EA	4.00	Planned	<input type="checkbox"/>	<input type="checkbox"/>	WHOLESALE	<input checked="" type="checkbox"/>

Figure: The **Link Prod. Order** button

When a user clicks a material line and clicks **Link Prod. Order**, the new **Production Details** dialog box opens. This dialog box displays production orders for the item specified in the selected material line if they have the *Planned*, *On Hold*, *Released*, or *In Process* status and are not allocated to any other parent production order.

When the user selects a subassembly production order in the dialog box and clicks **Save**, the system updates the allocation type of that production order from *Production Supply Prepared to Production for Prod. Prepared* on the [Inventory Allocation Details](#) (IN402000) form. Also, the system updates the product, parent, and child relationships on the **Related Production** tab of the [Production Order Maintenance](#) (AM201500) form for all related production orders.

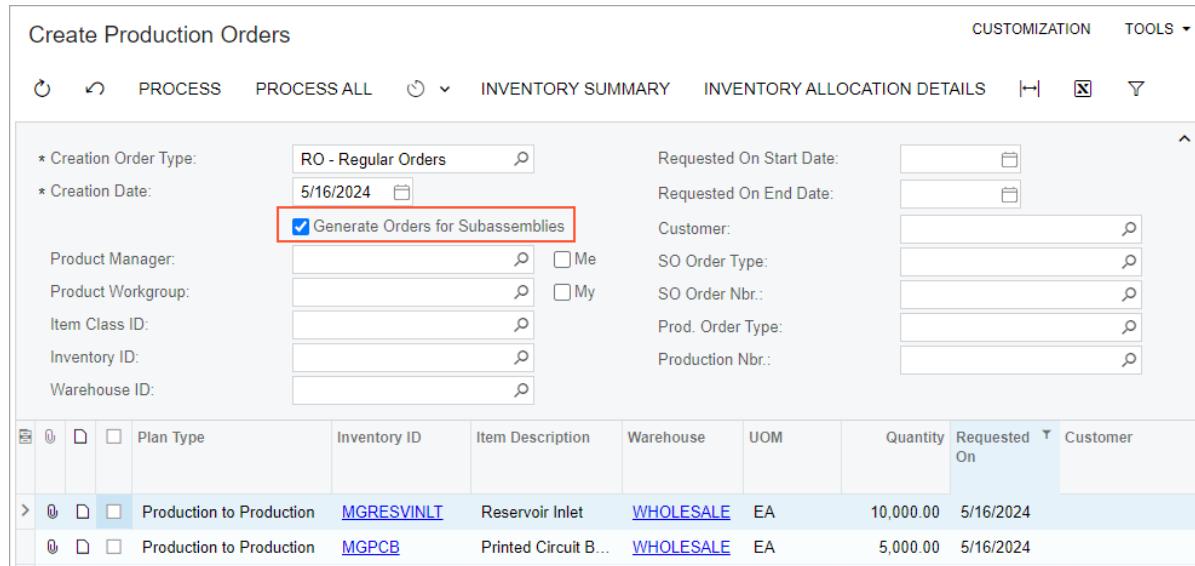
Generation of Orders for Subassemblies

In previous versions of Acumatica ERP, users could generate subassembly production orders on the [Production Order Maintenance](#) (AM201500) and [Critical Materials](#) (AM401000) forms. However, this functionality was not available on any other forms that support the creation of production orders.

Now users can generate subassembly production orders on the following forms:

- [Create Production Orders](#) (AM510000)
- [Sales Orders](#) (SO301000)
- [Inventory Planning Display](#) (AM400000)
- [Projects](#) (PM301000)
- [Estimate](#) (AM303000)

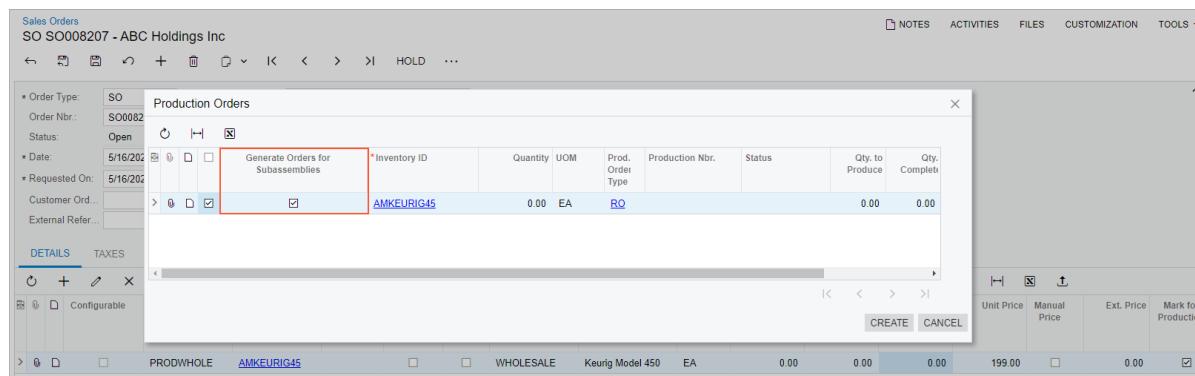
On the [Create Production Orders](#) form, the **Generate Orders for Subassemblies** check box has been added to the Selection area. If a user selects this check box, for each item selected in the table, the system creates a production order along with all required subassembly production orders.



The screenshot shows the 'Create Production Orders' form. In the top-left, there's a section labeled 'Selection Area' containing fields for 'Creation Order Type' (set to 'RO - Regular Orders'), 'Creation Date' (set to '5/16/2024'), and a checked 'Generate Orders for Subassemblies' checkbox. Below this is a table with two rows. The first row has columns: Plan Type (Production to Production), Inventory ID (MGRESVINLT), Item Description (Reservoir Inlet), Warehouse (WHOLESALE), UOM (EA), Quantity (10,000.00), Requested On (5/16/2024), and Customer. The second row has similar columns: Plan Type (Production to Production), Inventory ID (MGPCB), Item Description (Printed Circuit B...), Warehouse (WHOLESALE), UOM (EA), Quantity (5,000.00), Requested On (5/16/2024), and Customer.

Figure: The new check box on the Create Production Orders form

On the [Sales Orders](#) form, the **Generate Orders for Subassemblies** column has been added to the **Production Orders** dialog box (see the following screenshot), which opens when a user clicks **Create Production Orders** on the More menu. If the **Generate Orders for Subassemblies** check box is selected for a sales order line that has been marked for the creation of a production order (that is, a line with the unlabeled check box selected), the system creates a production order for the line's stock item along with all required subassembly production orders.



The screenshot shows the 'Sales Orders' form for SO SO008207. A 'Production Orders' dialog box is open over the main form. In the dialog box, there's a table with one row. The first column contains a checked 'Generate Orders for Subassemblies' checkbox. The other columns in the row are: *Inventory ID (AMKEURIG45), Quantity (0.00), UOM (EA), Prod. Order Type (RQ), Production Nbr. (Keurig Model 450), Status (Open), Qty. to Produce (0.00), and Qty. Completed (0.00). At the bottom of the dialog box are 'CREATE' and 'CANCEL' buttons.

Figure: The Generate Orders for Subassemblies check box

On the [Inventory Planning Display](#) form, the **Generate Orders for Subassemblies** column has been added to the **Create Production Orders** dialog box, which opens when a user clicks **Manufacture** on the form toolbar. If the user selects the **Generate Orders for Subassemblies** check box in a row with an item that has been marked for

the creation of a production order (that is, a row with the unlabeled check box selected), the system creates a production order for the item along with all required subassembly production orders.

On the [Projects](#) form, the **Generate Orders for Subassemblies** check box has been added to the **Create Production Orders** dialog box, which opens when a user clicks **Create Prod. Order** on the toolbar of the **Production Orders** tab. If the user selects this check box, the system creates a production order for the specified inventory item along with all required subassembly production orders.

On the [Estimate](#) form, the **Generate Orders for Subassemblies** check box has been added to the **Create Production Order** dialog box, which opens when a user clicks **Create Production Order** on the More menu. If the user selects this check box, the system creates a production order for the estimate along with all subassembly production orders required for the estimate.

Also, in previous versions of Acumatica ERP, when a user generated subassemblies by clicking **Generate Orders for Subassemblies** on the More menu of the [Production Order Maintenance](#) form, for each material line, the system created a production order if the following conditions were met for the material line's stock item on the **Manufacturing** tab of the [Item Warehouse Details](#) (IN204500) or [Stock Items](#) (IN202500) form:

- The **Default BOM ID** has been specified.
- The replenishment source is set to *Manufacturing*.

Now the system checks the state of the **Mark for Production** check box for the production material line on the [Production Order Details](#) (AM209000) form and creates a subassembly production order only if this check box is selected.



The system automatically selects the **Mark for Production** check box for a material line if the stock item in the line has *Production* selected in the **Dflt Mark For** box on the **Manufacturing** tab of the [Stock Items](#) form.

Enhancements in Production Scheduling



The changes described in this section were rolled back in Acumatica ERP 2024 R2 Update 6.

If a finished product is meant to be sold, and at least one of its subassemblies is engineered to order, production should be scheduled so that all dependent components are produced prior to the final assembly of the finished product.

Acumatica ERP 2024 R2 introduces improvements to the finite scheduling functionality, which is available when the *Advanced Planning and Scheduling* feature is enabled on the [Enable/Disable Features](#) (CS100000) form. Now the system considers the constraints of related production orders, along with the availability of work centers and machines. For example, if a parent production order is scheduled along with all of its child production orders on the [Rough Cut Planning](#) (AM501000) form, the system schedules the child production orders in such a way that they can be completed in time to be issued to the parent production order.

Also, in previous versions, a user could encounter unexpected results when they were scheduling a production order on the [Rough Cut Planning](#) and [Production Order Maintenance](#) (AM201500) forms and the system calculated the production order's scheduled start date to be in the past. In this case, the system would automatically reschedule the production order by changing its **Scheduling Method** to *Start On* and its **Constraint Date** to the current date. Now the system does not automatically update the constraint date and scheduling method for a product production order or for child production orders that are scheduled individually. Instead, if a user sets the **Scheduling Method** to *Finish On* and the system calculates the production start date to be in the past, a notification is shown. Similarly, the system displays warnings if updating the constraint date of a parent or child production order will result in the inability to produce subassemblies to fulfill the parent order's demand on time.

Other Improvements

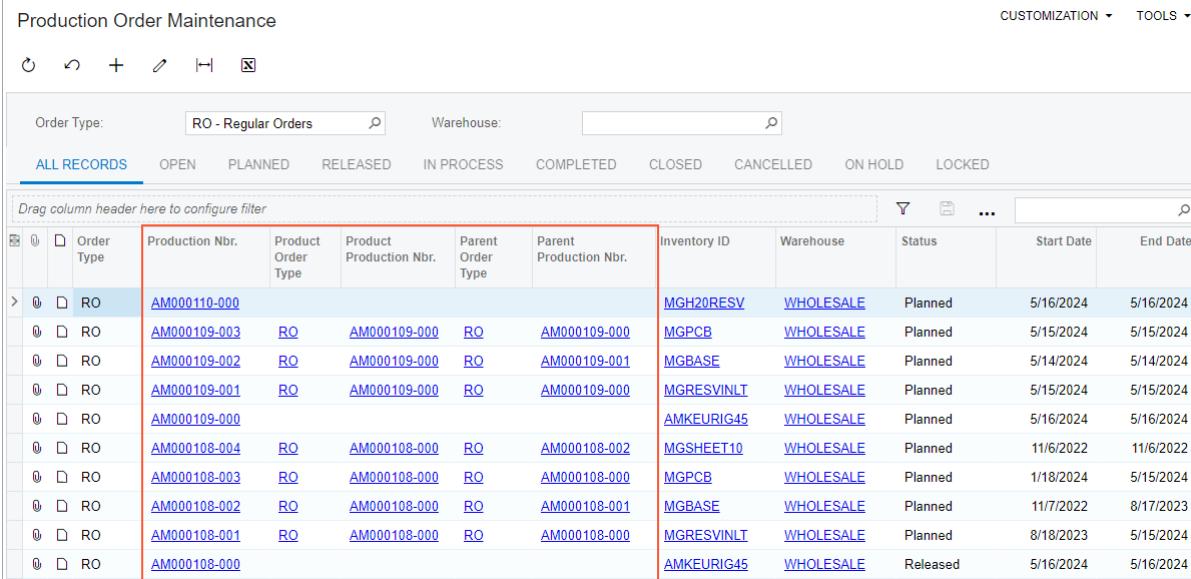
In the *Production Order Maintenance (AM2015PL)* list of records and on the *Material Wizard* (AM300010) form, the following columns have been renamed for improved clarity:

- **Product Order** to **Product Production Nbr.**
- **Parent Order** to **Parent Production Nbr.**

The **Product Order Type**, **Product Production Nbr.**, **Parent Order Type**, and **Parent Production Nbr.** columns are now displayed on the following forms:

- *Release Production Orders* (AM500000)
- *Close Production Orders* (AM506000)
- *Print Production Orders* (AM511000)
- *Rough Cut Planning* (AM501000)
- *Lock Production Orders* (AM517000)
- *Transactions by Production Order* (AM000011)
- *Production Summary* (AM000006)
- *Production Order Maintenance* (AM2015PL)

The following screenshot shows how these columns help to identify related orders in the *Production Order Maintenance* list of records.



The screenshot shows the 'Production Order Maintenance' list of records interface. At the top, there are search fields for 'Order Type' (set to 'RO - Regular Orders') and 'Warehouse'. Below the header, there are buttons for filtering: 'ALL RECORDS', 'OPEN', 'PLANNED', 'RELEASED', 'IN PROCESS', 'COMPLETED', 'CLOSED', 'CANCELLED', 'ON HOLD', and 'LOCKED'. The main table displays production orders with columns: Order Type, Production Nbr., Product Order Type, Product Production Nbr., Parent Order Type, Parent Production Nbr., Inventory ID, Warehouse, Status, Start Date, and End Date. A red box highlights the columns 'Production Nbr.', 'Product Order Type', 'Product Production Nbr.', 'Parent Order Type', and 'Parent Production Nbr.' in the first row. The table contains several rows of production order data, with some entries in the 'Status' column showing 'Planned' or 'Released'.

Figure: Related production orders in the Production Order Maintenance list of records

The same columns are also displayed in the lookup table for the **Production Nbr.** box on multiple forms.

The system now displays confirmation dialog boxes when a user does the following on the *Production Order Maintenance* (AM201500) and *Production Order Details* (AM209000) forms:

- Deletes or cancels a production order that has child production orders
- Removes material demand linked to another production order
- Deletes an operation whose materials are linked to other production orders

Manufacturing: Enhancements to the Production Order Performance Report

In Acumatica ERP, the *Production Order Performance* (AM652000) report has offered users a summary of the planned, actual, and variance costs of all manufacturing cost components. This summary could be used for evaluating production order costs before closing the production order.

In Acumatica ERP 2024 R2, this report has been enhanced to include more detailed information, such as labor hours, costs, overhead by operation, and all transactions related to materials and labor. This enhanced information provides users with comprehensive access to all relevant data in a single, consolidated view, enabling more granular reviews and easier investigation of anomalies.

Changes to the Report Layout

Starting in Acumatica ERP 2024 R2, depending on the selected report parameters and the availability of data, the layout of the *Production Order Performance* (AM652000) report may include the following new sections, each of which is shown in the screenshot below its description:

- Operations:** This section gives users the view of the planned and actual production hours and labor cost by operation.

Operation ID	Work Center	Description	Labor Hours			Labor Cost			Labor and Overhead		
			Planned	Actual	Planned	Actual	Variance	Planned	Actual	Variance	
0010	WC40	Cutting	1 h 00 m	1 h 00 m	10.00	10.00	0.00	10.00	10.00	0.00	
0020	WC70	Form	1 h 00 m	1 h 00 m	10.00	10.00	0.00	10.00	10.00	0.00	
0030	WC100	Inspection	1 h 00 m	1 h 00 m	10.00	10.00	0.00	20.00	20.00	0.00	

Figure: The Operations section

- Subcontracts:** This section displays the subcontracting details related to the production order.

Subcontracts	Inventory ID	Description	Estimated			Actual			Variance		
			Qty.	UOM	Cost	Qty.	Cost	Qty.	Cost	Qty.	Cost
	MGCIRBOARD	Circuit Board	15.00	EA	15.60	15.00	15.57	0.00	0.00	-0.03	
	MGRESISTOR	Resistor	60.00	EA	240.00	60.00	240.00	0.00	0.00	0.00	
	CSTRCONNEC	Connector	15.00	EA	45.00	0.00	0.00	-15.00	-45.00	-45.00	
					300.60		255.57				

Figure: The Subcontracts section

- Materials:** This section shows the details of materials related to the production order.

Materials	Inventory ID	Description	Estimated			Actual			Variance		
			Qty.	UOM	Cost	Qty.	Cost	Qty.	Cost	Qty.	Cost
	MGSHEET10	Sheet Metal 10 Guage	0.20	POUND	5.00	0.20	5.00	0.00	0.00	0.00	0.00
	MGBLACKDYE	Black Dye	10.00	OZ	150.00	10.00	150.00	0.00	0.00	0.00	0.00
	MGDRIPTRAY	Drip Tray	10.00	EA	20.00	10.00	20.00	0.00	0.00	0.00	0.00
	MGFHSCREW	Flat Head Screw	30.00	EA	150.00	30.00	150.00	0.00	0.00	0.00	0.00
					325.00		325.00				

Figure: The Materials section

- Subcontract Transactions:** In this section, users learn about the subcontract transactions related to the production order.

Subcontract Transactions			Qty. UOM	Unit Cost	Cost	Batch Nbr.
Operation ID	Inventory ID	Description				
0010	MGCIRBOARD	Circuit Board	15.00 EA	1.04	15.60	AMB000044
0010	MGRESISTOR	Resistor	60.00 EA	4.00	240.00	AMB000044
0010		Connector			0.00	

Figure: The Subcontract Transactions section

- Material Transaction:** This section provides data on the material transactions related to the production order.

Material Transactions		Tran. Date	Qty.	UOM	Unit Cost	Ext. Cost	Batch Nbr.
Inventory ID	Description						
MGSHEET10	Sheet Metal 10 Guage	8/12/2020	0.20	POUND	25.00	5.00	AMB000010
MGBLACKDYE	Black Dye	8/12/2020	10.00	OZ	15.00	150.00	AMB000010
MGDRIPTRAY	Drip Tray	8/12/2020	10.00	EA	2.00	20.00	AMB000010
MGFHSCREW	Flat Head Screw	8/12/2020	30.00	EA	5.00	150.00	AMB000010

Figure: The Material Transactions section

- Operation Transactions:** This section shows the operation transactions related to the production order.

Operation Transactions		Employee	Actual Labor Time	Planned Labor	Qty.	Scrapped Qty.	Batch Nbr.
Operation ID	Tran. Date						
0010	8/12/2020	Joseph Becher	01:00	2 h 00 m	0.00	0.00	AMB000005
0020	8/12/2020	Eric Cozzi	00:30	1 h 00 m	0.00	0.00	AMB000005

Figure: The Operation Transactions section

- Sales Order Production Totals:** In this section, users can view the costs of the production order that are linked to sales order demand.

Sales Order Production Totals	Planned	Actual	Variance
Labor	358.84	40.00	-318.84
Machine	0.00	0.00	0.00
Material	3,806.25	2,106.25	-1,700.00
Tool	0.00	0.00	0.00
Fixed Overhead	0.00	0.00	0.00
Variable Overhead	25.00	0.00	-25.00
Subcontract	0.00	0.00	0.00
Adjustment		0.00	
Scrap		0.00	
Total	4,190.09	2,146.25	-2,043.84

Figure: The Sales Order Production Totals section

Changes to the Report Parameters

On the [Production Order Performance](#) (AM652000) report form, the **Report Parameters** tab has been enhanced as follows (see the screenshot below):

- The **Order Type** parameter has been renamed to **Prod. Order Type**.
- The **Include Production Transaction Details** check box has been added after the **Production Nbr.** parameter. If the check box is selected, the **Subcontract Transactions**, **Material Transaction**, and **Operation Transactions** sections are added to the resulting report. The check box is cleared by default.
- The **Sales Order Type** and **Sales Order Nbr.** parameters have been added. By specifying these parameters, users can generate reports by sales order demand and review the costs of the entire production order.

Production Order Performance

RUN REPORT SAVE TEMPLATE REMOVE TEMPLATE SCHEDULE TEMPLATE EDIT REPORT

Template

Default Shared

REPORT PARAMETERS ADDITIONAL SORT AND FILTERS PRINT AND EMAIL SETTINGS REPORT VERSIONS

Prod. Order Type:	RO - Regular Orders	<input type="button" value="🔍"/>
Production Nbr:	AM000110-000	<input type="button" value="🔍"/>
<input checked="" type="checkbox"/> Include Production Transaction Details		
Inventory ID:	AACOMPUT01 - Acer Laptop Computer	<input type="button" value="🔍"/>
Sales Order Type:	SO	<input type="button" value="🔍"/>
Sales Order Nbr.:	SO008207	<input type="button" value="🔍"/>

Figure: The Report Parameters tab of the report form

A New Command

The **Production Order Performance** command has been added to the More menu of the *Production Order Maintenance* (AM201500) and *Production Order Details* (AM209000) forms. By clicking this command, users can generate the *Production Order Performance* (AM652000) report for the opened production order.

Manufacturing: Extension of Project Inventory Tracking to Production Orders

In previous versions of Acumatica ERP, manufacturing forms did not provide details about project inventory in production orders integrated with projects. Additionally, project-specific inventory was excluded from the calculation of on-hand quantities on the [Critical Materials](#) (AM401000) form and available quantities on the [Material Wizard 2](#) (AM300020) form. This limitation led to inaccurate information regarding project-specific inventory or inventory available in project-specific locations if production orders were linked to projects.

Also, manufacturing transaction forms lacked clear visibility of project-specific inventory in production transactions, making it difficult for users to quickly determine whether a production order record was linked to a project or project task and, consequently, whether product transactions would update project costs.

In Acumatica ERP 2024 R2, the production order flow has been enhanced to account for project-specific inventory and project inventory tracked by warehouse location. These enhancements are available if the *Projects* feature is enabled on the [Enable/Disable Features](#) (CS100000) form.

For more information about inventory tracking in projects, see [Project Inventory Tracking: General Information](#) and [Project Inventory Tracking by Warehouse Location: General Information](#).

Changes to the Critical Materials Form

The **Qty On Hand for Project** and **Qty Short for Project** columns have been added to the [Critical Materials](#) (AM401000) form, as shown in the following screenshot.

The screenshot shows the 'Critical Materials' form interface. At the top, there are search and filter fields for 'Order Type' (set to 'PJ - Project') and 'Production Nbr.' (set to 'AM000110'). Below these are two checkboxes: 'Show All Items' and 'Show Allocated'. The main grid displays items with columns for 'Operation ID', 'Inventory ID', 'Description', 'Qty Remaining', 'UOM', and two new columns: 'Qty On Hand for Project' and 'Qty Short for Project'. A third column, 'Replenishment Source', is also present. The row for 'MGBAT06' shows values: 10.00 for Qty On Hand for Project and 90.00 for Qty Short for Project, both highlighted with a red border. The 'Replenishment Source' is listed as 'Purchase'.

Operation ID	Inventory ID	Description	Qty Remaining	UOM	Qty On Hand for Project	Qty Short for Project	Replenishment Source
001	MGBAT06	Six hour life battery	100.00	EA	10.00	90.00	Purchase

Figure: New columns on the Critical Materials form

In these columns, the system displays the quantities of project-specific inventory or project inventory tracked by location related to the project and project task specified for the production order. These settings are specified in the **Project** section of the **References** tab of the [Production Order Maintenance](#) (AM201500) form. The new columns are visible if the production order is integrated with the project (that is, if the **Update Project** check box is selected in the same section of the [Production Order Maintenance](#) form).

If the production order is not integrated with the project (that is, if the **Update Project** check box is cleared), the **Qty On Hand** and **Qty Short** columns are visible, as they were in previous versions of Acumatica ERP. Also, regardless of whether the production order is integrated with the project, if the **Show All Items** check box is selected in the Summary area of the [Critical Materials](#) form, all four columns (**Qty On Hand**, **Qty Short**, **Qty On Hand for Project**, and **Qty Short for Project**) are visible at the same time.

The quantities displayed in these columns are calculated differently depending on the option selected for the associated project in the **Inventory Tracking** box on the **Summary** tab of the *Projects* (PM301000) form. The calculation rules are described in the following table.

Column	Inventory Tracking Option of the Project	Calculation of the Quantity
Qty On Hand for Project	<i>Track by Location</i>	The total on-hand quantity across all warehouse locations that have the Production Allowed and Sales Allowed check boxes selected on the Locations tab of the <i>Warehouses</i> (IN204000) form and share the same combination of project and project task that is specified for the production order
	<i>Track by Project Quantity or Track by Project Quantity and Cost</i>	The sum of all on-hand quantities of the item associated with the same combination of project and project task that is specified for the production order
Qty Short for Project	<i>Track by Location</i>	The difference between Qty Remaining and Qty Hard Available in the project-linked warehouse location
	<i>Track by Project Quantity or Track by Project Quantity and Cost</i>	The difference between Qty Remaining and Qty On Hand for Project

If the production order is integrated with a project, only material records with positive **Qty Short for Project** values are displayed on the *Critical Materials* form. If the production order is not integrated with a project, material records with positive **Qty Short** values are displayed on the form.

Changes to the Material Wizard 2 Form

The **Available Qty for Project** column has been added to the *Material Wizard 2* (AM300020) form, as shown in the following screenshot.

The screenshot shows the 'Material Wizard 2' interface. At the top, there are buttons for CANCEL, SELECT, and SELECT ALL, along with a refresh icon and an export button. The main area is a grid with the following columns:

Selected	Inventory ID	Required Qty	Release Qty	UOM	Available Qty	Available Qty for Project	Warehouse	Order Type	Production Nbr.
> <input checked="" type="checkbox"/>	MGBAT06	100.00	10.00	EA	20.00	10.00	WHOLESALE	PJ	AM000110

The 'Available Qty for Project' column is highlighted with a red border. The row for item MGBAT06 shows a value of 10.00 in this column.

Figure: New column on the Material Wizard 2 form

If the production order is integrated with a project, this column holds the available quantities of project-specific inventory or project inventory tracked by location related to the project associated with the production order; otherwise, the **Available Qty for Project** column is empty.

The quantities displayed in this column are calculated differently depending on the option selected for the associated project in the **Inventory Tracking** box on the **Summary** tab of the *Projects* (PM301000) form. The calculation rules are described in the following table.

Inventory Tracking Option of the Project	Calculation of the Quantity
<i>Track by Location</i>	<p>The calculation depends on whether a warehouse location is specified for the material in the production order details:</p> <ul style="list-style-type: none"> If no warehouse location is specified, the sum of Qty Hard Available values across all warehouse locations that have the Production Allowed and Sales Allowed check boxes selected on the Locations tab of the Warehouses (IN204000) form and share the same combination of project and project task that is specified for the production order If a warehouse location is specified, the Qty Hard Available value of the warehouse location if it shares the same combination of project and project task that is specified for the production order
<i>Track by Project Quantity or Track by Project Quantity and Cost</i>	The sum of all item quantities associated with the same combination of project and project task that is specified for the production order

If the production order is integrated with a project, the value in the **Release Qty** column is now calculated as follows:

- If **Required Qty** exceeds or is the same as **Available Qty for Project**, then **Release Qty** is the same as **Available Qty for Project**.
- If **Required Qty** is less than **Available Qty for Project**, then **Release Qty** is the same as **Required Qty**.

If the production order is not integrated with a project, the existing logic is maintained for the calculation of **Release Qty**.

On the [Material Wizard 2](#) form, a material line is displayed only if the production order is integrated with a project and the line's **Available Qty for Project** value is positive. The system will not display a material line if its **Available Qty** and **Available Qty for Project** values are 0 or negative or if the production order is integrated with a project and the line's **Available Qty for Project** value is 0 or negative.

Other Enhancements

On the [Labor](#) (AM301000) and [Move](#) (AM302000) forms, the **On Hand**, **Available**, and **Available for Shipping** quantities (availability buckets) are now displayed in the table footer.

For each of the availability buckets on the [Labor](#), [Move](#), [Materials](#) (AM300000), [Disassembly](#) (AM301500), and [Vendor Shipments](#) (AM310000) forms, the system now shows two values separated by a slash, similar to how project inventory details are displayed on the [Issues](#) (IN302000) and [Receipts](#) (IN301000) forms:

- The first value is the quantity of project-specific inventory or project inventory tracked by location.
- The second value is calculated as the first value increased by the quantity of free stock. (*Free stock* refers to inventory that is not reserved for projects that use the *Track by Project Quantity or Track by Project Quantity and Cost* inventory tracking mode.)

The following screenshot shows an example with the availability buckets displayed on the [Materials](#) form.

The screenshot shows the 'Materials' form for item 'AMB000043'. The top section displays basic document details: Batch Nbr., Status (On Hold), Orig Doc Type, Total Qty. (10.00), and Total Amount (0.00). Below this is a 'LINE DETAILS' grid showing a single row for a production order (AM000110) with details like Production Nbr. (001), Operation ID (MGBAT06), Warehouse (WHOLESALE), Location (R1S1), Quantity (10.00), and UOM (EA). At the bottom of the grid, a message box contains the text: 'On Hand 10.00/30.00 EA, Available 10.00/30.00 EA, Available for Shipping 10.00/30.00 EA, Available for Issue 10.00/30.00 EA'. This message is highlighted with a red box.

Figure: Availability buckets on the Materials form

These quantities are displayed if the production order is integrated with a project, providing visibility into stock item availability for the project associated with the production order.

The **Project**, **Project Task**, and **Cost Code** columns have been added to the [Labor](#), [Move](#), [Materials](#), [Disassembly](#), [Cost Transactions](#) (AM309000), [WIP Adjustment](#) (AM308000), [Material Wizard 2](#) (AM300020), and [Vendor Shipments](#) forms. If the associated production order is integrated with a project, the values specified in these columns will indicate how the resulting transactions will affect project costs.

The new columns on the **Materials** form are shown in the following screenshot.

This screenshot shows the same 'Materials' form for item 'AMB000043' as the previous one, but it highlights the newly added columns in the 'LINE DETAILS' grid. The columns are labeled 'Project', 'Project Task', and 'Cost Code'. In the grid, the first row for production order AM000110 has these values filled in: Project (PR00000016), Project Task (02), and Cost Code (00-000). These columns are also highlighted with a red box.

Figure: The new columns on the Materials form

The **Project** and **Project Task** columns appear only if the *Project Accounting* feature is enabled on the [Enable/Disable Features](#) (CS100000) form, and the **Cost Code** column appears only if the *Cost Codes* feature is enabled on the same form.

Manufacturing: Improvements to Outside Processing and Purchasing Visibility

In Acumatica ERP 2024 R2, the process of managing outside services for production operations has been significantly improved. Previously, when a manufacturing company sent manufactured goods to a vendor to perform a service, upon completion of that service a production manager had to manually move the goods from the outside operation to the next operation as a separate step from receiving the purchase order. Users found this manual step redundant and cumbersome. Now the system can be configured to automatically create and release move and material transactions when the purchase orders are received.

Additionally, multiple enhancements have been introduced on the [Purchase Orders](#) (PO301000) and [Production Order Maintenance](#) (AM201500) forms to improve the visibility of potential links between purchase orders and production orders.

The sections below provide details about the improvements.

Improved Visibility of Production Order Demand in Purchase Orders

In previous versions of Acumatica ERP, the [Purchase Orders](#) (PO301000) form did not indicate whether a purchase was made to fulfill the demand of a production order material. To address this issue, the form has been enhanced to provide visibility into the production order demand linked to each purchase order line.

The **View SO Demand** button on the table toolbar of the **Details** tab of the [Purchase Orders](#) form has been renamed to **View Demand**. In the **Demand** dialog box, which opens when a user clicks this button, information specific to the production order demand is now displayed if the purchase order line is linked to the production order demand, as illustrated in the following screenshot.

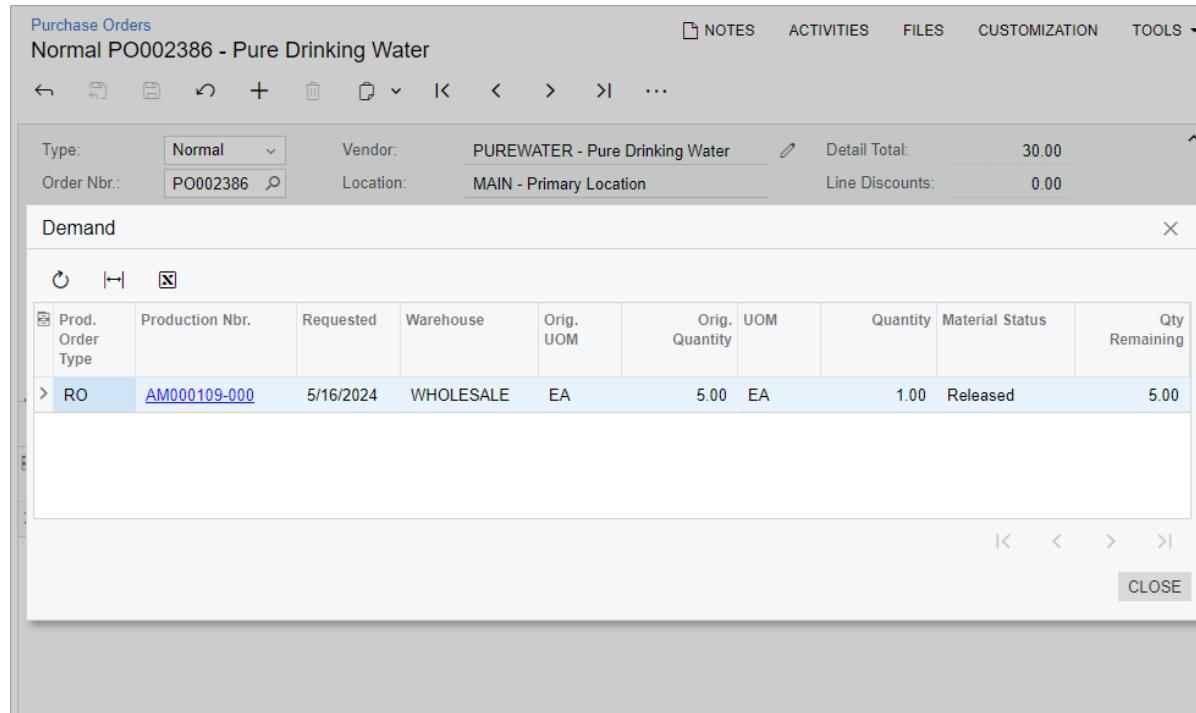


Figure: The Demand dialog box

Improved Handling of Outside Processing

On the **Materials** tab of the *Production Order Details* (AM209000) form, a new option, *Purchase and Move*, has been added to the drop-down list in the **Subcontract Source** column, as shown in the following screenshot. If a purchase order is created for a material line with the *Purchase and Move* subcontract source selected, the system will automatically create and release a move transaction for the outside operation when a user releases the purchase receipt for the purchase order line. The **PO Link** button on the table toolbar of the **Materials** tab is not available when a user selects this material line, which maintains the one-to-one mapping between such material demand lines.

The screenshot shows the *Production Order Details* form for order PJ AM000110. The top section displays basic order information: Order Type (PJ - Project), Production Nbr. (AM000110), Status (On Hold), Order Date (5/13/2024), Inventory ID (AACOMPUT01 - Acer Laptop Computer), Qty. Complete (0.00), Qty. Scrapped (0.00), Qty. Remaining (10.00), UOM (EA), Warehouse (WHOLESALE - Wholesale Warehouse), and Branch (PRODWHOLE - Products Wholesale). Below this is a table for creating a purchase order, showing an operation line for WC10 Assembly. The bottom section is the **MATERIALS** tab, which includes tabs for STEPS, TOOLS, OVERHEAD, TOTALS, and OUTSIDE PROCESS. In the OUTSIDE PROCESS section, the **Subcontract Source** dropdown menu is open, showing options: None, Purchase, Drop Ship, Vendor Supplied, and Ship to Vendor, with **Purchase and Move** highlighted with a red box.

Figure: The new option in the Subcontract Source drop-down list

On the *Production Order Details*, *Bill of Material* (AM208000), *Engineering Change Request* (AM210000), *Engineering Change Order* (AM215000), and *Estimate Operation* (AM304000) forms, the following applies to material lines with the **Subcontract** material type and *Purchase and Move* subcontract source:

- A user can add only one such material line per operation.
- In each of these material lines, the **Mark for PO** and **Backflush Materials** check boxes are automatically selected and non-editable.
- To ensure that the **Total Required** quantity of such a material line equals **Qty to Produce** of the outside service operation, the system inserts the following settings in the line and makes them non-editable:
 - Batch Size: 1**
 - Qty Required: 1**
 - Scrap Factor: 0**
 - Qty Round Up: Cleared**

When a purchase receipt is released on the *Purchase Receipts* (PO302000) or *Receive and Put Away* (PO302020) form, a move transaction is automatically created and released if all of the following conditions are met:

- The purchase receipt has the *Receipt* type.
- A purchase receipt line is linked to a purchase order line associated with a production order's material line with the *Subcontract* material type and *Purchase and Move* subcontract source.
- The status of the linked production order's material line is *Released* or *In Process*.
- The status of the material line's operation is *Completed* but *Warn* or *Allow* is selected in the **Move on Completed Operation** box on the *Production Order Types* (AM201100) form for the order type of the linked production order.
- The **Qty Remaining** of the production order's outside operation equals or exceeds the **Receipt Qty** of the linked purchase receipt line.

A move transaction with the *On Hold* status is automatically created on release of a purchase receipt if all of the following conditions are met:

- The purchase receipt has the *Receipt* type.
- A purchase receipt line is linked to a purchase order line associated with a production order's material line with the *Subcontract* material type and *Purchase and Move* subcontract source.
- The **Qty Remaining** of the production order's outside operation is less than the **Receipt Qty** of the linked purchase receipt line.

No move transactions will be created automatically if any of the following conditions are met:

- The status of the linked production order's material line is *Canceled*, *Closed*, *Completed*, or *Locked*.
- The **Release IN Documents Automatically** check box on the **General** tab of the *Purchase Orders Preferences* (PO101000) form is cleared, and *Allow* is selected in the **Under Issue Backflush Material** box on the *Production Order Types* form for the order type of the linked production order.

A new tab, **Move**, has been added to the *Purchase Receipts* form, as shown in the following screenshot. This tab holds information about the automatically generated move transaction.

The screenshot shows the 'Purchase Receipts' form for Receipt PR002346 - AA Services. The top navigation bar includes 'NOTES', 'ACTIVITIES', 'FILES', 'CUSTOMIZATION', and 'TOOLS'. Below the header, there are standard toolbar icons. The main area contains various input fields for purchase receipt details, including Type (Receipt), Vendor (AASERVICES - AA Services), Total Qty. (5.00), and Status (Released). A 'MOVE' tab is highlighted at the bottom of the form, which displays information about the generated move transaction. The MOVE tab details include MFG Batch Nbr. (AMB000043), MFG Document Type (Move), Status (On Hold), and dates (5/17/2024, 05-2024).

Figure: The new tab on the Purchase Receipts form

On the *Move* (AM302000) form, the **PO Receipt Nbr.** box has been added to the Summary area, as shown in the following screenshot. This non-editable box holds a link to the purchase receipt that produced the move transaction. These links are also displayed in the **PO Receipt Nbr.** column of the *Move* (AM3020PL) list of records.

The screenshot shows the 'Move' form (AM2000043). At the top, there are standard navigation buttons like back, forward, and search, followed by tabs for 'NOTES', 'ACTIVITIES', 'FILES', 'CUSTOMIZATION', and 'TOOLS'. Below the header, the form has fields for 'Batch Nbr.' (AMB000043), 'PO Receipt Nbr.' (PR002346, highlighted with a red box), 'Status' (On Hold), 'Description', and a checked 'Hold' checkbox. There are also fields for '* Date:' (5/17/2024) and '* Post Period:' (05-2024). Below these are buttons for 'LINE DETAILS', 'ATTRIBUTES', and 'LATE ASSIGNMENT'. The main table section has columns for Order Type, Production Nbr., Inventory ID, Operation ID, Quantity, UOM, Warehouse, and Location. A single row is visible: > RO AM000109-000 AMKEURIG45 0020 5.00 EA WHOLESALE R1S1.

Figure: The new box on the Move form

On the **Events** tab of the [Production Order Maintenance](#) (AM201500) form, the system now records events that occur when a linked purchase receipt is released but no move transaction is created and when a move transaction is created but not released.

The system may encounter the following limitations when handling outside services for production operations:

- The automatic release of move transactions will fail upon purchase order receipt if the production order has attributes with the **Transaction Required** check box selected and a value specified in the **Value** box on the **Attributes** tab of the [Production Order Maintenance](#) form. This is because the transaction requires manual input of the attribute values, which the automatic process cannot fulfill.
- The system will not create an automatic move transaction for a purchase order created from the [Inventory Planning Display](#) (AM400000) form for a material line with the *Purchase and Move* subcontract source because this form does not support the assignment of purchase orders to production order material lines.
- If a production order is lot- or serial-tracked and an outside service operation is the last operation on the [Production Order Details](#) (AM209000) form, the system will create a move transaction with the *On Hold* status and will not release it if user intervention is required to enter or select the lot or serial number.

For example, suppose that the **Allow Preassigning Lot/Serial Numbers** check box is cleared for the production order on the [Production Order Maintenance](#) (AM201500) form; also suppose that the *User Enterable* issue method is selected and the **Auto-Generate Next Number** check box is cleared for the stock item's lot or serial class on the [Lot/Serial Classes](#) (IN207000) form. The system will require the user to manually enter the lot or serial number. In this scenario, the move transaction cannot be automatically released.

To avoid this limitation, the outside service operation should not be set up as the last operation in the production order if the lot or serial class of the stock item has the *User Enterable* issue method with the automatic number generation disabled and if the lot or serial numbers are not preassigned or involve more than one record.

New Tabs on the Side Panel of the Production Order Maintenance Form

The **Production Transactions** and **Purchase History by Production Order** tabs have been added to the side panel of the [Production Order Maintenance](#) (AM201500) form, as shown in the following screenshot. By default, these tabs display all production transactions and the purchase history of the selected production order.



After an upgrade to Acumatica ERP 2024 R2, no data will be displayed on the **Purchase History by Production Order** tab for any production order with the *Closed* or *Canceled* status created in the previous version.

The screenshot shows the Production Order Maintenance form for Production Order RO AM000108. The side panel contains several new tabs:

- Production Order Details**
- Critical Materials**
- MRP Results by Item**
- Production Order Analysis**
- Production Order Supply Documents**
- Project Task**
- Production Transactions** (highlighted with a red box)
- Purchase History by Production Order** (highlighted with a red box)

The main form displays production details such as Order Type (RO - Regular Orders), Production Nbr. (AM000108), Status (Released), Order Date (5/13/2024), Inventory ID (AACOMPUT01 - Acer Laptop Computer), Qty. to Produce (4.00), UOM (EA), Description, Qty. Complete (0.00), Qty. Scrapped (0.00), and Qty. Remaining (4.00). The side panel also shows Production Settings and Scheduling Details sections.

Figure: The new tabs in the side panel of the Production Order Maintenance form

Alignment of Purchase Order Dates with Material Requirements

In previous versions of Acumatica ERP, if a purchase order was created to fulfill a production order's demand, the system did not use the requested date of the purchase order line, which is specified on the **Details** tab of the [Purchase Orders](#) (PO301000) form, as the start date of the material's operation, although material is required before the linked production order's operation starts.

Now the system uses the requested date of the purchase order line as the allocation date of the production order's material demand, which is also the start date of the material's operation. This happens if the purchase order is created through one of the following ways:

- On the [Production Order Details](#) (AM209000) form:
 - Through the use of the **Create Purchase Orders** command on the More menu for the material demand, which opens the [Create Purchase Orders](#) (PO305000)
 - Through the use of the **Create Purchase Order** button on the table toolbar of the Operations table for the subcontracting demand, which opens the [Create Purchase Orders](#)
- On the [Production Order Maintenance](#) (AM201500) form through the use of the **Create Purchase Orders** command on the More menu
- On the [Critical Materials](#) (AM401000) form

When the system aligns the production operation start date to a purchase order it supports only a one-to-one relationship between a purchase order line and the demand of a production order material. It does not support

one-to-many, many-to-one, or many-to-many relationships between purchase order lines and production order material demands.

A one-to-one relationship should always be maintained between purchase order lines and production order material demands—that is, one-to-one relationship between demand and supply. If multiple material demands of a production order are linked to a single purchase order line, the system will always use the start date of the first production material's operation as the requested date in the linked purchase order line. This means the system will not consider the start dates of the other production materials' operations, even if they are required at an earlier time.

Manufacturing: Other Enhancements

In Acumatica ERP 2024 R2, additional changes to the UI have been introduced, as described below.

Support of User-Defined Fields

Starting in Acumatica ERP 2024 R2, the following manufacturing forms support user-defined fields:

- [Bill of Material](#) (AM208000)
- [BOM Attributes](#) (AM208500)
- [Clock Entry](#) (AM315000)
- [Configuration Maintenance](#) (AM207500)
- [Disassembly](#) (AM301500)
- [Engineering Change Order](#) (AM215000)
- [Engineering Change Request](#) (AM210000)
- [Estimate](#) (AM303000)
- [Estimate Classes](#) (AM206000)
- [Estimate Operation](#) (AM304000)
- [Features](#) (AM203500)
- [Inventory Planning Buckets](#) (AM201200)
- [Labor](#) (AM301000)
- [Machines](#) (AM204500)
- [Materials](#) (AM300000)
- [Move](#) (AM302000)
- [Multiple Production Clock Entry](#) (AM316000)
- [Production Order Details](#) (AM209000)
- [Production Order Maintenance](#) (AM201500)
- [Production Order Types](#) (AM201100)
- [Scan Labor](#) (AM302020)
- [Scan Materials](#) (AM300030)
- [Scan Move](#) (AM302010)
- [Tools](#) (AM205500)
- [WIP Adjustment](#) (AM308000)
- [Work Centers](#) (AM207000)

For more information about user-defined fields, see [Managing Attributes and User-Defined Fields](#).

Removal of the Visual BOM Form

In Acumatica ERP 2024 R2, the *Visual BOM* (AM216000) form has been removed from the predefined **Bills of Material** workspace and will no longer appear in search results. However, an administrative user can make the *Visual BOM* form available again by specifying a workspace for the *Visual BOM* record on the [Site Map](#) (SM200520) form. The *Visual BOM* form will be completely deprecated in a future Acumatica ERP release.

All processes available on the *Visual BOM* form can be performed on the [Engineering Workbench](#) (AM208100) form.

Payroll: Mid-Period Compensation for Salaried Employees

Acumatica ERP 2024 R2 now supports compensation calculation for salaried employees hired or terminated in the middle of a pay period or those whose compensation was changed in the middle of a pay period.

On the [Payroll Batches](#) (PR301000) and [Paychecks and Adjustments](#) (PR302000) forms, the system calculates the compensation rate for employees who started or stopped working in the middle of a pay period based on the number of days they worked during the period. The following formula is used.

$\frac{\text{Rate} * \text{Number of employee's work days in the pay period}}{\text{Total number of work days in the pay period}}$

Changes to the employee's compensation in the middle of a pay period (see the following screenshot) are handled the same way.

The screenshot shows the 'Employee Payroll Settings' screen for Layla Beauvoir (Employee ID: EP00000003). The 'GENERAL' tab is selected. In the 'COMPENSATION' tab, there are two entries for 'Earning Type': 'RG' (Regular Hours) with a Pay Rate of 105,000.00 and 'Year' as the Unit of Pay, and another 'RG' entry with a Pay Rate of 120,000.00 and 'Year' as the Unit of Pay. The second entry is highlighted with a red border. The 'Start Date' for both is 1/1/2015 and the 'End Date' is 3/10/2024.

* Earning Type	Description	Active	Pay Rate	Unit of Pay	* Start Date	End Date
RG	Regular Hours	<input checked="" type="checkbox"/>	105,000.00	Year	1/1/2015	3/10/2024
RG	Regular Hours	<input checked="" type="checkbox"/>	120,000.00	Year	3/11/2024	

Figure: Changes to the employee's compensation in the middle of a month

The system calculates the compensation by using the average rate for the period when the rate was changed. It uses the following formula.

$\frac{(\text{Rate 1} * \text{Number of employee's work days in the pay period at Rate 1}) + (\text{Rate 2} * \text{Number of employee's work days in the pay period at Rate 2})}{\text{Total number of work days in the pay period}}$

During payroll processing, the system displays warning messages on the [Payroll Batches](#) and [Paychecks and Adjustments](#) forms if the compensation rate has been updated for an employee during the period (see the following screenshot).

The screenshot shows the Payroll Batches form for batch ID 000108, monthly period 03-2024. It displays employee details, payroll type (Regular), and group (MONTHLY - M). A warning message box is overlaid on the form, stating: "A change of the compensation rate is set up for the employee (EP00000003) during the pay period. As a consequence, the regular amount to be paid to this employee has been automatically adjusted. If the calculated amount is incorrect, you can click Employee Earning Details and manually update the amount in the dialog box." The message box has a yellow border and a small exclamation mark icon.

Figure: A warning about changes to the compensation rate

On the **Payroll Batches** form, a payroll clerk can manually override the calculated amount to be paid, if needed. To do that, on the **Employee** tab, the clerk clicks the line with the employee whose compensation needs to be adjusted and clicks **Employee Earning Details** on the table toolbar. In the **Employee Earning Details** dialog box, which opens, the clerk enters the amount in the **Regular Amount to Be Paid** box of the Summary area, which makes the system select the **Manual Amount** check box, as shown in the following screenshot.

The screenshot shows the Employee Earning Details dialog box. In the Summary area, the Regular Amount to Be Paid is set to 10,000.00 and the Manual Amount check box is selected. The main table lists daily regular hours worked at \$10.00 per hour for an employee named SERVEAST from March 1 to 12, 2024, with a total of 80 hours.

* Branch	* Date	* Code	Description	* Location	Hours	Units	Unit Type	Rate	Manual Rate
SERVEAST	3/1/2024	RG	Regular Hours	MCLEAN	8.00		Hour		
SERVEAST	3/4/2024	RG	Regular Hours	MCLEAN	8.00		Hour		
SERVEAST	3/5/2024	RG	Regular Hours	MCLEAN	8.00		Hour		
SERVEAST	3/6/2024	RG	Regular Hours	MCLEAN	8.00		Hour		
SERVEAST	3/7/2024	RG	Regular Hours	MCLEAN	8.00		Hour		
SERVEAST	3/8/2024	RG	Regular Hours	MCLEAN	8.00		Hour		
SERVEAST	3/11/2024	RG	Regular Hours	MCLEAN	8.00		Hour		
SERVEAST	3/12/2024	RG	Regular Hours	MCLEAN	8.00		Hour		

Figure: A manually overridden amount to be paid to an employee

The payroll clerk can similarly override the employee's compensation in a paycheck in the **Regular Amount to Be Paid** box on the **Financial** tab of the **Paychecks and Adjustments** form.

Platform: New URLs for OData

Acumatica ERP provides the following types of OData interfaces:

- The OData interface that retrieves data from generic inquiries. This interface is called *generic inquiry-based*.
- The OData interface that retrieves data from data access classes (DACs). This interface is called *DAC-based*.

As a part of the migration to .NET Core, Acumatica ERP 2024 R2 introduces new URLs for these OData interfaces.



The URLs that were supported in previous versions of Acumatica ERP will continue to work until the release of Acumatica ERP 2025 R2. We strongly recommend that a technical specialist update the applications to use the new URLs.

URL for the Generic Inquiry-Based OData Interface

The URL for the generic inquiry-based OData interface is *<Acumatica ERP instance URL>/t/<TenantName>/api/odata/gi*.

For example, a technical specialist would specify the *http://sweetlife.com/erp/t/U100/api/odata/gi/\$metadata* URL if the following are true:

- The URL of the Acumatica ERP instance is *http://sweetlife.com/erp* .
- The instance contains the *U100* tenant.
- The technical specialist wants to obtain the list of fields and parameters in exposed generic inquiries in this tenant.

Other Changes to the Generic Inquiry-Based OData Interface

In addition to the new URL of the generic inquiry-based OData interface, a technical specialist can find the following changes in requests to this URL:

- The interface is based on the [OData Version 4.0](#) protocol.
- The *\$format* URL parameter is no longer supported. Now almost all requests return data in JSON format. An exception is the request for the list of field and parameters of generic inquiries, which returns data in XML format. (This request uses the *<Acumatica ERP instance URL>/t/<TenantName>/api/odata/gi/\$metadata* URL.).
- The type of date and time fields has been changed to *DateTimeOffset*. Therefore, if the technical specialist needs to filter records by a date and time field, the technical specialist specifies a string similar to the following in the filter: *LastModifiedOn gt 2024-05-08*. (In previous versions, this filter has been specified as follows: *LastModifiedOn gt datetime'2024-05-08'*.)
- A request for *\$metadata* returns an additional attribute, *Scale="Variable"*, for the fields of the *Decimal* type, as shown in the following example.

```
<Property Name="QtyOnHand" Type="Edm.Decimal" Scale="Variable" />
```

- For each exposed generic inquiry with parameters, the response includes a *Function* element, which specifies the list of parameters of the generic inquiry.

URL for the DAC-Based OData Interface

The URL for the DAC-based OData interface is *<Acumatica ERP instance URL>/t/<TenantName>/api/odata/dac*.

For example, a technical specialist would specify the *http://sweetlife.com/erp/t/U100/api/odata/dac/\$metadata* URL if the following are true:

- The URL of the Acumatica ERP instance is <http://sweetlife.com/erp>.
- The instance contains the *U100* tenant.
- The technical specialist wants to obtain the list of data access classes (DACs), their fields, and the relationships between DACs in this tenant.

Related Links

- [Generic Inquiry Access Through OData: General Information](#)
- [DAC-Based OData: General Information](#)

Platform: Ability to Obtain Removed Records Through DAC-Based OData

In Acumatica ERP 2024 R2, a technical specialist can obtain removed records through the OData interface that retrieves data from data access classes (DACs)—that is, the DAC-based OData interface.

The removed records are stored in the database if the corresponding database table has the DeletedDatabaseRecord column. For details about this mechanism, see [Preservation of Deleted Records \(DeletedDatabaseRecord\)](#).

Retrieval of Removed Records

By default, the removed records are not returned if a technical specialist requests data through the DAC-based OData interface. To retrieve the removed records, the technical specialist needs to specify the PX-ApiDeleted HTTP header with the *SHOW* value in the request.

For example, the following request retrieves both removed customer records and customer records that have not been removed.

```
GET /2024R2/t/U100/api/OData/DAC/Customer?  
$select=BAccountID,DeletedDatabaseRecord HTTP/1.1  
Host: localhost  
PX-ApiDeleted: SHOW
```

Related Links

- [DAC-Based OData: General Information](#)

Platform: Changes to the Report Designer

In Acumatica ERP 2024 R2, the Acumatica Report Designer has been modified to use the internal REST API.



Versions of the Report Designer that were delivered with previous versions of Acumatica ERP do not work with Acumatica ERP 2024 R2. For example, the Report Designer delivered with Acumatica ERP 2023 R1 cannot be used to create or edit reports for Acumatica ERP 2024 R2. Similarly, the Report Designer delivered with Acumatica ERP 2024 R2 does not work with Acumatica ERP 2023 R2 and earlier versions.

In the Report Designer for Acumatica ERP 2024 R2, a consultant or developer can no longer select the WSDL schema of an instance as the source of database tables. To select the source of data for a report, in the Schema Builder, the consultant or developer needs to specify the URL of the site, as shown in the following screenshot.

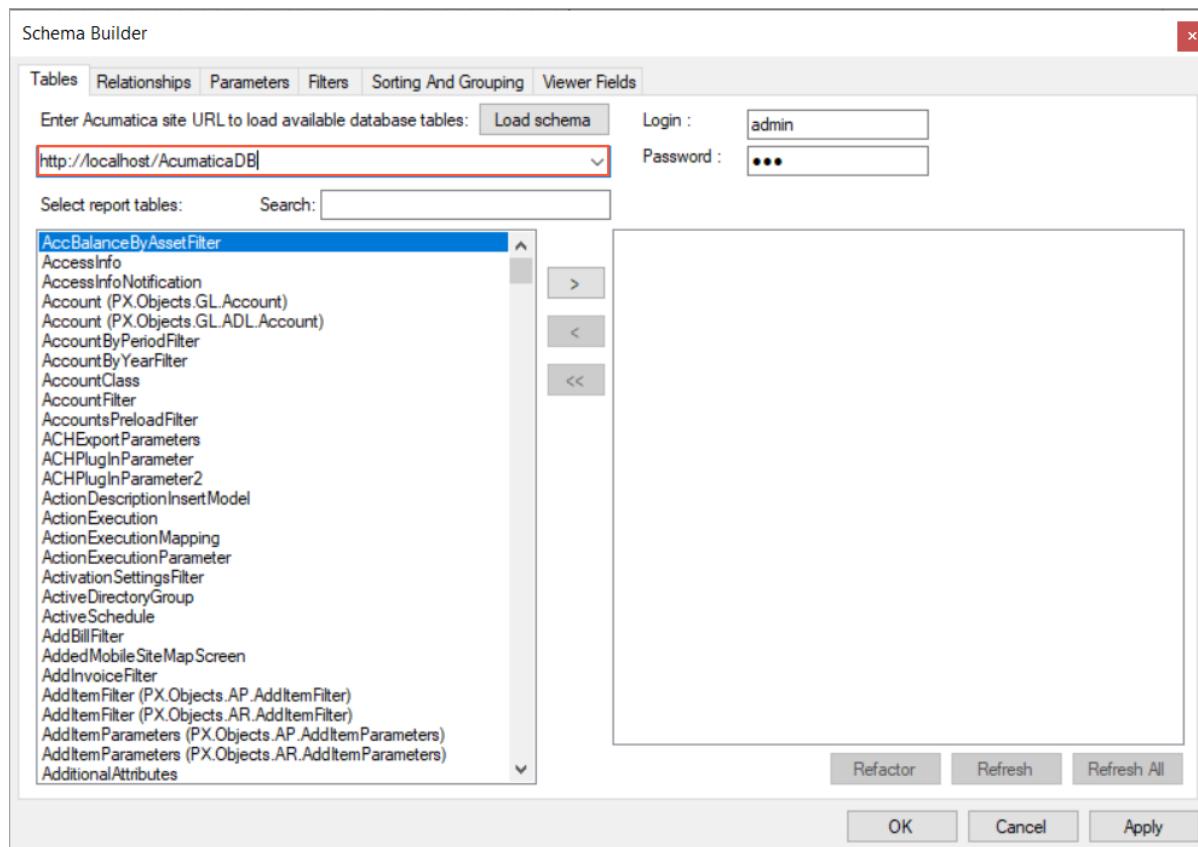


Figure: Selection of the source of data for a report

Platform: Detection of Anomalies in Generic Inquiries

Acumatica ERP 2024 R2 introduces the detection of numeric anomalies in generic inquiries.

Detection of Anomalies

By using the anomaly detection functionality in Acumatica ERP, supply chain managers can detect anomalies in numeric columns of generic inquiry forms. For example, they can quickly find records whose amounts are too large or too small compared to other listed records. The functionality can help supply chain managers to monitor data values and correct any data entry errors, thus preventing ineffective business decisions based on incorrect data. In addition, sales managers and purchase managers can use anomaly detection to recognize deviations in data based on the system's analysis of abnormal figures in amounts, totals, costs, and other values.

Anomaly detection uses an unsupervised machine learning algorithm to classify numeric values as anomalies. The algorithm uses a machine learning model that has been developed to recognize certain patterns. The model can classify certain values as *Significant*, and managers can treat these values as anomalies. The model can classify other values as *Medium*, which means that they can be false positives. The model is operated by a cloud service.

The new functionality can detect anomalies in all records on the generic inquiry form or in groups of records, which can be defined by the system administrator who sets up the functionality. The anomaly detection process can be run on demand or by schedule on a daily, weekly, or monthly basis. The anomalies that the system finds can then be used in business events and shown on dashboards.

An administrator can set up anomaly detection for any generic inquiry. Acumatica ERP 2024 R2 also introduces the following generic inquiries, which have been specifically designed to use anomaly detection:

- *Sales Order Margin Analysis (SO3010ML)*: This generic inquiry form shows the actual margin amount and percentage for sold items per sales order (that is, items for which invoices have already been released). By using anomaly detection, sales managers and supply chain managers can identify anomalies in sales margins, analyze profitability, and make informed pricing decisions in the future.
- *Costs in Purchase Orders (PO3010ML)*: On this generic inquiry form, purchasing managers and supply chain managers can view the cost information of items included in purchase orders. By running anomaly detection, these managers can detect unexpected purchase variations early. They can also analyze the costs of abnormal purchases, identify cost inefficiencies, prevent excessive spending, and negotiate better terms with suppliers.
- *Costs in AP Documents (AP3010ML)*: This generic inquiry form shows the cost information of inventory items included in accounts payable documents. Accountants, purchasing managers, and supply chain managers can use this form to detect anomalies in these documents. They can also analyze the abnormal costs, identify inconsistencies in billing, detect and correct billing errors, and monitor spending.

Setup of Anomaly Detection

To set up the anomaly detection functionality, a system administrator performs the following general actions:

1. On the [Enable/Disable Features](#) (CS100000) form, enables the *Detection of Numeric Anomalies in Generic Inquiries* feature.



The feature is subject to additional licensing; please consult the Acumatica ERP sales policy for details.

2. In the Summary area of the [Generic Inquiry](#) (SM208000) form for a specific generic inquiry, selects the new **Detect Anomalies** check box (see Item 1 in the screenshot below).



The administrator can select this check box for no more than 10 generic inquiries in the system. If the administrator selects the check box for an 11th generic inquiry, they will not be able to save their changes.

3. On the **Anomaly Detection** tab (Item 2), which appears, specifies the following settings:

- The **Field for Analysis** (Item 3).

The administrator can select any data field specified on the **Results Grid** tab of the *Generic Inquiry* form that has a numeric value.

- The time unit by which numeric values can be sorted (Item 4).

In the **Date Field for Timeline** box, the administrator can select only a data field specified on the **Results Grid** tab of the *Generic Inquiry* form that has a date and time value.

- The groups of records that should be analyzed for anomalies (Item 5).

In the table in the **Grouping** section, the administrator can specify multiple data fields by which the records should be grouped. The system isolates these groups of records when detecting anomalies and searches for anomalies in the **Field for Analysis** only inside the specified groups. Anomalies found in one group do not influence the detection of anomalies in another group.

For example, if a generic inquiry form lists sales orders of different types, the administrator can use the grouping by the order type. The system will then analyze data for sales orders of each of the order types (such as SO or IN).

- A check box (**Skip Empty Groups** in the **Grouping** section) indicating whether groups with empty key values should be skipped (Item 6).

Suppose that the administrator selects the *Inventory ID* and *Order Type* fields—which correspond to the **Inventory ID** and **Order Type** boxes on the *Sales Orders* (SO301000) form—for grouping. If **Inventory ID** is empty for a certain record, this record will be skipped, or the model will treat all records with the same **Order Type** and empty **Inventory ID** as one group.

- The frequency (**Update Frequency**) of running the anomaly detection process (Item 7).

The administrator can select *Daily* (the process is run between 12 AM and 6 AM), *Weekly* (it is run on Sundays between 12 AM and 6 AM), *Monthly* (it is run on the first day of the month between 12 AM and 6 AM), or *On Demand* (the administrator starts the process themselves). The default value is *Weekly*. The use of these settings is described further in the *Start of Anomaly Detection on a Schedule* section.

The screenshot shows the 'Generic Inquiry' form with the 'VIEW INQUIRY' button highlighted. Below it, the 'ANOMALY DETECTION' tab is selected, indicated by a red border and a red number '2'. The 'Detect Anomalies' checkbox is checked (Item 1). Other tabs like 'DATA SOURCES', 'RELATIONS', 'PARAMETERS', etc., are visible but not selected. The 'ANOMALY DETECTION' tab contains several configuration fields: 'Field for Analysis' set to 'Margin Amount' (Item 3), 'Date Field for Timeline' set to 'Date' (Item 4), a 'GROUPING' section with a checkbox for 'Skip Empty Groups' (Item 6), and a 'Data Field' section containing 'Customer ID' and 'Inventory ID' (Item 5). At the bottom, 'UPDATE FREQUENCY' is set to 'On Demand' (Item 7).

Figure: The new Anomaly Detection tab



The system skips anomaly detection for groups of less than 10 records.

Start of Anomaly Detection

Once the initial configuration is complete, the administrator starts the anomaly detection process on the new *Detect Anomalies in Generic Inquiries (ML502000)* form (see the screenshot below). The administrator can open this form by clicking **Detect Anomalies** on the form toolbar of the *Generic Inquiry* (SM208000) form or on the form toolbar of the appropriate generic inquiry form.

To start the manual process, the administrator performs the following general actions on this form:

1. Selects the needed generic inquiry or inquiries by selecting the unlabeled check box for each generic inquiry to be included.
2. Clicks **Process** on the form toolbar (see Item 1 in the screenshot below).

The system uploads the data to the server.



Instead of Steps 1 and 2, the administrator can select **Process All** on the form toolbar (Item 2).

3. After the status of anomaly calculation changes to *Data Uploaded*, selects the same generic inquiries by selecting the unlabeled check boxes, and clicks **Process** on the form toolbar again.

The system starts the calculation, and the status changes to *Calculation in Progress* (Item 3).

4. After the status becomes *Ready to Download*, selects the needed generic inquiries by selecting the unlabeled check boxes and clicks **Process** on the form toolbar again to download the calculation results into the system.

If the process is successful, the final status of anomaly calculation is *Completed*.

Figure: The new Detect Anomalies in Generic Inquiries (ML502000) form



The total number of records sent for processing, which may be reduced by conditions specified on the **Conditions** tab of the [Generic Inquiry](#) form, is 1 million per day. This limit is calculated in the UTC time zone for all tenants.

After the administrator performs those actions for the first time, the following new columns appear on the processed inquiry form:

- **Anomaly Severity:** An indicator of the difference between the expected value and the real value: *Normal*, *Medium*, or *Significant*.

The system highlights the rows with the *Medium* and *Significant* anomaly severity, as well as the rows that have not been processed.



Results with the *Medium* anomaly severity can be false positive. We recommend that the administrator uses these results when it is important to detect even small deviations.

- **Expected Value:** The value in the data field that the administrator has selected as the field for analysis on the [Generic Inquiry](#) (SM208000) form.
- **Reviewed:** A check box that the administrator selects to indicate to the system that the current row has been reviewed or verified and should be excluded from subsequent analysis.
- **Comment:** A comment about the processing results that the administrator can enter.

The following screenshot shows the *Sales Order Margin Analysis* (SO3010ML) inquiry form with the results of processing. Notice that the rows with the *Medium* and *Significant* anomaly severity are highlighted in red, and that the records that have not been processed are highlighted in yellow.

Sales Order Margin Analysis													CUSTOMIZATION ▾	TOOLS ▾													
													SHOW ANOMALY SETTINGS	FILTER BY GROUP	DETECT ANOMALIES												
Start Date:		1/1/2023	Customer:		<input type="text"/>																						
End Date:		7/16/2024	Inventory:		<input type="text"/>																						
ALL RECORDS SIGNIFICANT AND MEDIUM ANOMALIES																											
Drag column header here to configure filter																											
Inventory ID	Base Qty.	Base Unit	Net Sales Amount	Cost	Margin Amount	Unit Cost	Margin Amount per Unit	Base Currency ID	Margin (%)	Blanket SO Ref. Nbr.	Anomaly Severity	Expected Value (Margin Amount)	Comment	Reviewed	Difference from Expected Value												
ELEBOSE1	10.00	EA	2,990.00	2,100.69	889.31	210.07	88.93	USD	29.74	Normal	840.70	<input type="checkbox"/>		48.61													
ELEBOSE2	20.00	EA	2,999.00	2,110.98	888.02	105.55	44.40	USD	29.61	Significant	434.36	pay attention <input checked="" type="checkbox"/>		453.66													
INDMIXER1	4.00	EA	64,581.44	45,207.00	19,374.44	11,301.75	4,843.61	USD	30.00	Normal	19,374.44	<input type="checkbox"/>		0.00													
INDLIFT3	1.00	EA	43,724.00	30,606.80	13,117.20	30,606.80	13,117.20	USD	30.00	Normal	13,117.20	<input type="checkbox"/>		0.00													
ELEBOSE2	50.00	EA	7,497.50	5,277.44	2,220.06	105.55	44.40	USD	29.61	Medium	1,349.40	<input type="checkbox"/>		870.66													
ELEBOSE1	40.00	EA	11,960.00	8,402.77	3,557.23	210.07	88.93	USD	29.74	Normal	3,377.92	<input type="checkbox"/>		179.41													
LABORJR	200.00	HOUR	14,400.00	6,000.00	8,400.00	30.00	42.00	USD	58.33			<input type="checkbox"/>															
LABORJR	430.00	HOUR	27,520.00	12,900.00	14,620.00	30.00	34.00	USD	53.13			<input type="checkbox"/>															
LABORJR	150.00	HOUR	12,000.00	4,500.00	7,500.00	30.00	50.00	USD	62.50			<input type="checkbox"/>															
LABORSR	140.00	HOUR	14,000.00	5,600.00	8,400.00	40.00	60.00	USD	60.00			<input type="checkbox"/>															
LABORSR	40.00	HOUR	3,600.00	1,600.00	2,000.00	40.00	50.00	USD	55.56			<input type="checkbox"/>															
LABORJRO	20.00	HOUR	1,800.00	720.00	1,080.00	36.00	54.00	USD	60.00			<input type="checkbox"/>															
LABORJR	100.00	HOUR	7,200.00	3,000.00	4,200.00	30.00	42.00	USD	58.33			<input type="checkbox"/>															
CONSULTING	510.00	HOUR	51,000.00	20,400.00	30,600.00	40.00	60.00	USD	60.00	Normal	29,400.00	<input type="checkbox"/>		1,200.00													

Figure: The results of anomaly calculation

Start of Anomaly Detection on a Schedule

The administrator can configure anomaly detection to be run on a schedule. The administrator does this by selecting the needed frequency in the **Update Frequency** box of the [Generic Inquiry](#) (SM208000) form (**Anomaly Detection** tab). We recommend that the administrator select the *Daily*, *Weekly* (default), or *Monthly* mode to run the processes, and use the *On Demand* mode only during initial configuration.



The administrator should not use the **Schedule > Add** button on the form toolbar of the *Detect Anomalies in Generic Inquiries* (ML502000) form for schedule configuration.

If the administrator has run the process at least once during a certain day, the system will not start the next calculation for at least the next 24 hours (even if the *Daily* update frequency is specified). Suppose that the administrator has specified the *Daily* frequency and then changed this setting to *On Demand*. Further suppose that the administrator started the calculation on Wednesday and then changed the update frequency back to *Daily*. The system will run the next daily schedule at 12 AM on Friday.



The schedule runs according to the time zone specified on the [Site Preferences](#) (SM200505) form.

The administrator can reset the status of the processed records and remove all temporary data related to the anomaly calculation by clicking **Reset Data** on the form toolbar of the *Detect Anomalies in Generic Inquiries* (ML502000) form.

Use of Anomaly Detection in Dashboards

The administrator can use a generic inquiry with anomaly detection configured in a dashboard. Before adding a widget, the administrator must do the following:

- Specify the anomaly detection settings for this generic inquiry
- Run the anomaly detection process at least once
- Create a shared filter for the generic inquiry form

The administrator then adds a widget by using the standard process (for details, see [Specific Widgets: To Add KPI Widgets](#)). The following screenshot shows the predefined *Sales Manager* (SO3015DB) dashboard with the widget that lists detected anomalies.

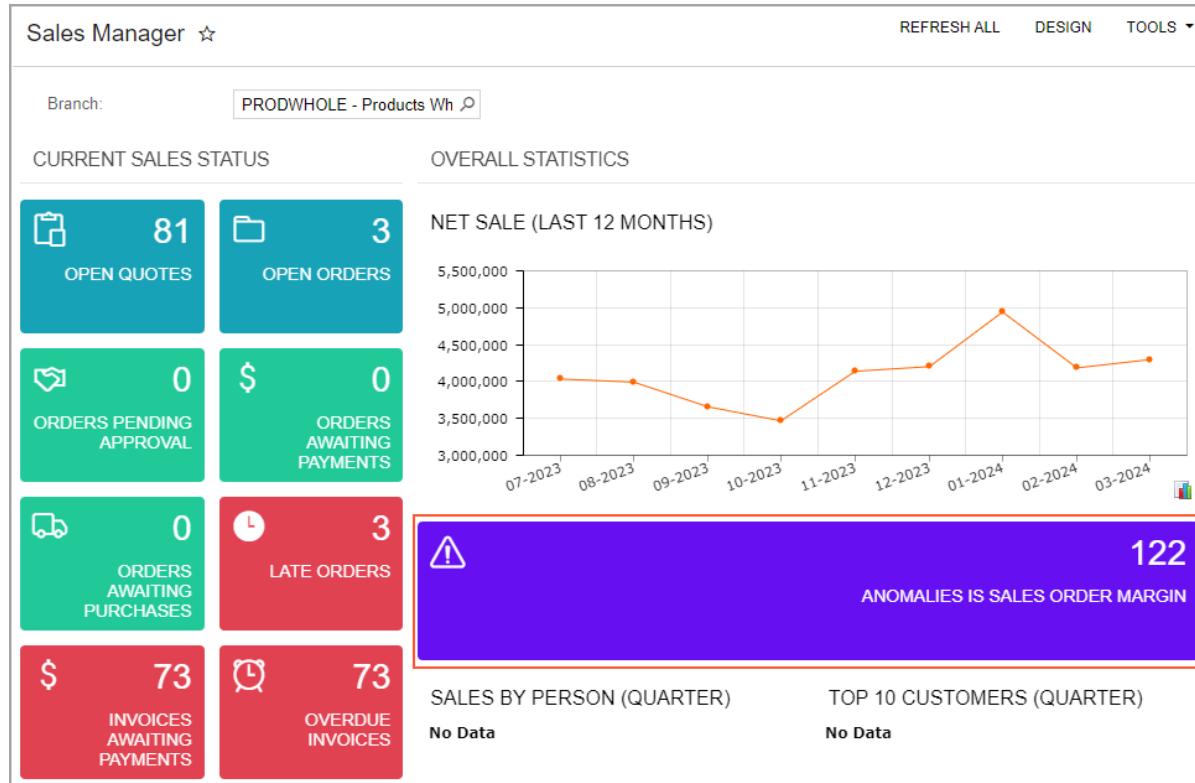


Figure: The widget with the number of detected anomalies

We recommend that the administrator add to the filter a condition that excludes records that have been marked as *Reviewed*. In this case, the system will display only the newly found anomalies.

Use of Anomaly Detection to Trigger Business Events

An administrator can configure business events to send notifications when the system detects anomalies with certain severity. The following screenshot shows the settings of a business event on the *Business Events* (SM302050) form that the system triggers if the anomaly severity is *Significant* or *Medium* (see Item 1 in the following screenshot) and the record has not been marked as *Reviewed* (Item 2). Notice that the system will raise the event once for all records in the inquiry form (Item 3).

* Event ID: Anomaly Event Active

* Type: Trigger by Schedule

Raise Event: Once for All Records (3)

Group Records By:

Description: Anomaly is detected

TRIGGER CONDITIONS

Active	Brackets	Table Name	Field Name	Condition	From Schema	Value 1	Value 2	Brackets	Operator
> <input checked="" type="checkbox"/>	1	(GIMLResult	Anomaly Severity (anomalyClass)	Equals	<input checked="" type="checkbox"/>	Significant	-	Or
<input checked="" type="checkbox"/>	-	GIMLResult	Anomaly Severity (anomalyClass)	Equals	<input checked="" type="checkbox"/>	Medium)	And	
< <input checked="" type="checkbox"/>	2	(GIMLReview	Reviewed (reviewed)	Equals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-	Or
<input checked="" type="checkbox"/>	-	GIMLReview	Reviewed (reviewed)	IsEmpty	<input checked="" type="checkbox"/>	<input type="checkbox"/>)	Or	

Figure: The business event to receive notifications about anomaly detection



For a business event for anomaly detection, the administrator must set the type to *Triggered by Schedule*.

This business event uses an email notification as a subscriber. The following screenshot shows an example of such a notification on the [Email Templates](#) (SM204003) form.

Notification ID: Anomaly Margin SO

* Description: Anomaly Margin SO

* Screen: SO.30.10.ML - Sales Order Margin Analysis

From: admin

To: EMAIL((andrews));

CC: EMAIL((admin));

BCC:

Subject: Anomaly Low Margin in SO detected

MESSAGE

Here is the list of new anomalies:

Anomaly Class	Order Number	Order Type	Customer	Order Total	Expected Value
((GIMLResult_AnomalyClass))	((ARTran_sOrderNbr))	((ARTran_sOrderType))	((ARTran_customerID))	((ARTran_cost))	((GIMLResult_expectedValue))

Figure: The subscriber for the business event

When the business event is triggered, the sales manager, purchasing manager, or supply chain manager will receive an email with the new anomalies. The following screenshot shows an example of such an email on the [Email Activity](#) (CR306015) form.

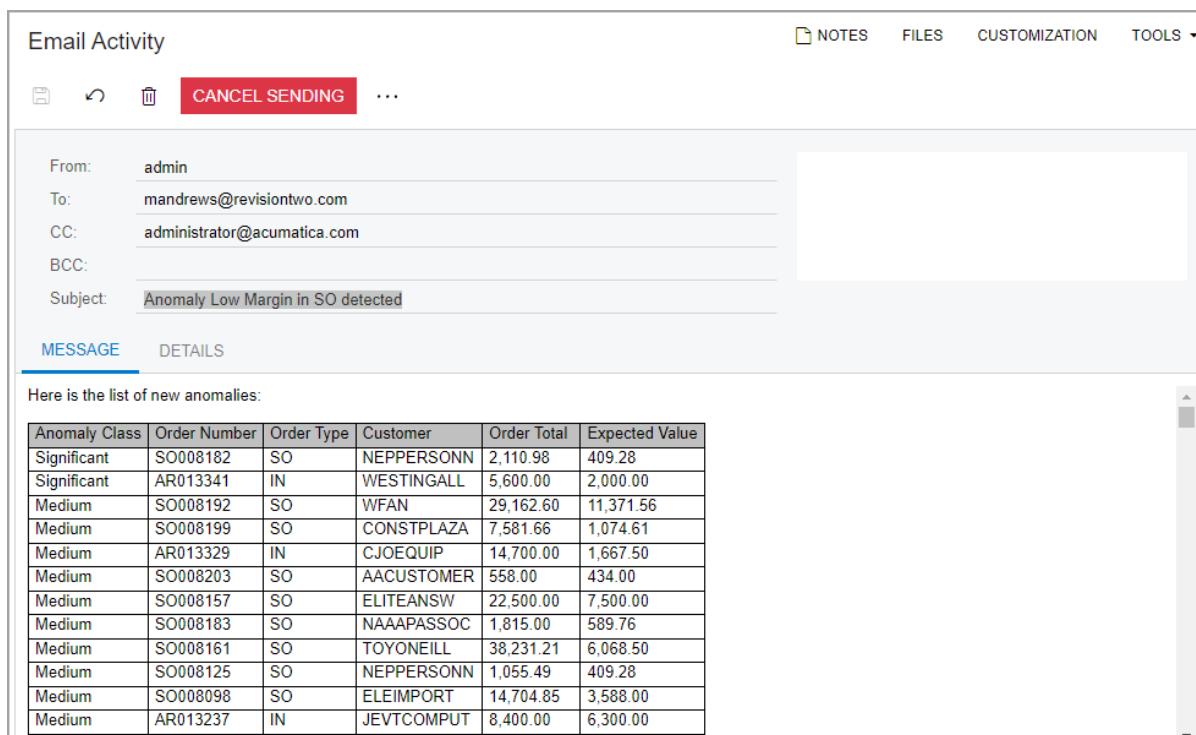


Figure: The email with the list of new anomalies

The following screenshot shows the schedule that the administrator sets up for the business event on the [Automation Schedules](#) (SM205020) form.

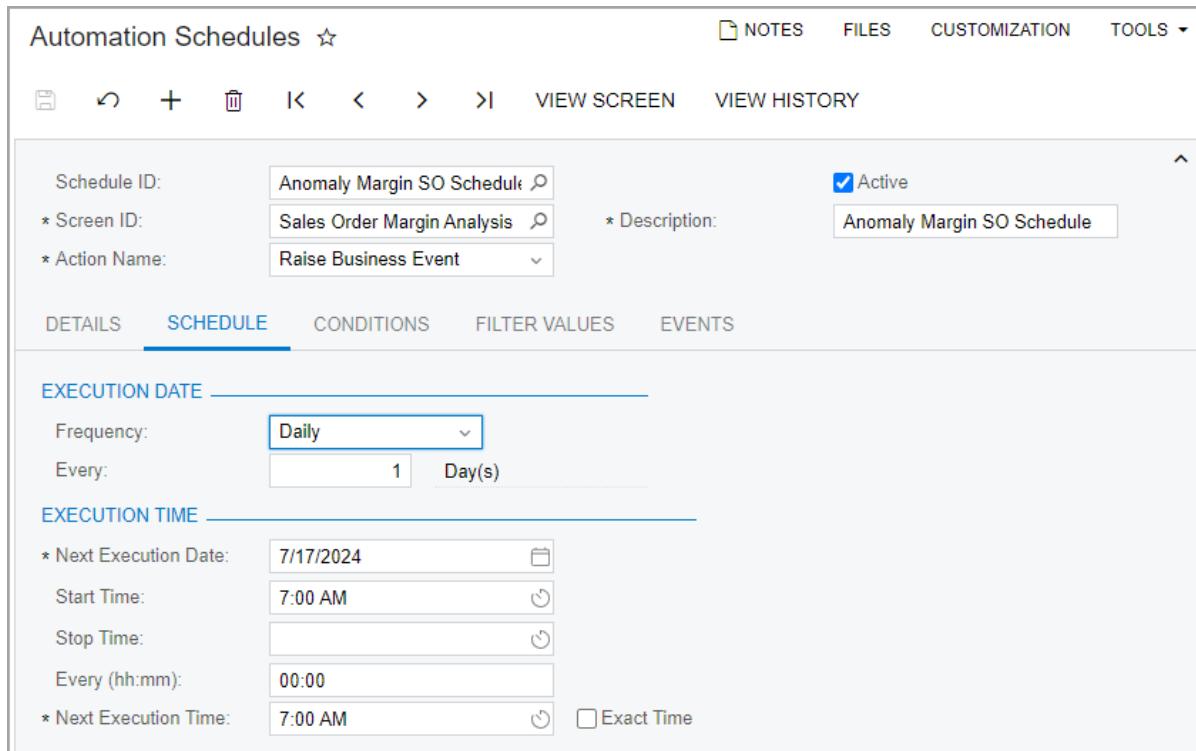


Figure: The schedule for the business event

The administrator should specify the same frequency in the schedule as specified on the **Anomaly Detection** tab of the [Generic Inquiry](#) (SM208000) form.

Changes to the Generic Inquiry Forms

The following commands appear on an inquiry form if the anomaly detection is configured for the corresponding generic inquiry and the process has run at least once:

- **Show Anomaly Settings:** Opens the **Anomaly Settings** dialog box, which displays the anomaly calculation settings.
- **Filter by Group:** The system filters the records on the form by the values of the fields listed in the **Grouping** section of the **Anomaly Detection** tab.
- **Detect Anomalies:** Opens the *Detect Anomalies in Generic Inquiries (ML502000)* form, on which the administrator can run the process of anomaly detection.

Additional Information

For more details on anomaly detection in generic inquiries, see [Detecting Anomalies in Generic Inquiries](#).

Platform: Improvements to Integration Scenarios

Acumatica ERP 2024 R2 introduces multiple improvements to integration scenarios, which are described in the following sections.

Support of Data Types in the Data Provider

In some cases, a system administrator might need to export records to Excel that contain data in various formats. In previous versions of Acumatica ERP, the system exported all data, including numbers, to an Excel file as strings. As a result, each cell in the file had the *General* format specified for it. Also, exported numbers were left-aligned, and the administrator could not apply formulas to the cells.

In Acumatica ERP 2024 R2, the administrator can now use the new *Excel Provider with Data Types* type of file provider when exporting data of different formats. A data provider of this type takes into account the data types specified in the **Source Fields** pane of the *Data Providers* (SM206015) form, as shown in the following screenshot.

The screenshot shows the 'Data Providers' form in Acumatica. The 'Name' field is set to 'Data Types' and the 'Provider Type' is 'Excel Provider with Data Type'. The 'Active' checkbox is checked. The 'SCHEMA' tab is selected, showing the 'Source Fields' grid. The grid has columns for Active, Field, Key, Description, Data Type, and Length. Several fields are listed with their corresponding data types and lengths:

Field	Data Type	Length
Branch Name	String	-1
Account	Int32	-1
Description	String	-1
Financial Period	Int32	-1
Fin. Beginning Balance	Double	-1
Fin. PTD Debit	Double	-1
Fin. PTD Credit	Double	-1
Fin. YTD Balance	Double	-1
Ledger	String	-1

Figure: Selection of data types for fields

The new type of data provider supports the following data types:

- *String*
- *DateTime*
- *Int32*
- *Double*
- *Decimal*
- *Boolean*

In an export scenario, the administrator adds the mapping as usual. As a result, the system exports the data while preserving the data types, as shown in the following table.

Table: Export of Data of Various Types

Type of Data in the System	Category of Cell Format in Excel	Comments
Int32	Number	No decimal places are displayed in the exported data.
Double	Number	The number of decimal places in the exported data is the same as in the system.
Decimal	Number	The number of decimal places in the exported data is the same as in the system if this number is greater than or equal to 2. Otherwise, the system adds two decimal places.
Date	Date	In the exported data, the full date format is used (that is, the short version of date and the long version of time) according to the locale settings in the system.

Selection of a Branch in the Import Scenario Mapping

Certain records in the system are visible in a lookup table of a box on a form only if a particular branch or company is selected in the Company and Branch Selection menu. To make these records available for selection during import, the system administrator needs to ensure that the mapping of the import scenario includes the selection of a branch or company from this menu.

In Acumatica ERP 2024 R2, the administrator can do this by adding a row with the new `<Set: Branch>` command to the import scenario on the [Import Scenarios](#) (SM206025) form. In the row, the administrator specifies the following settings:

- **Target Object:** The Summary area of the record
- **Field / Action Name:** `<Set: Branch>`
- **Source Field / Value:** The name of the branch or company, or a formula that calculates the branch or company to be used



The row with the `<Set: Branch>` command must be the first row in the mapping.

The following screenshot shows the use of this command in a scenario that imports AR invoices. If customer visibility is restricted to a specific branch or company group, the branch determines whether customers are shown in the lookup table of the **Customer** box and which set of customers is shown. As a result, the administrator must select a branch when importing records by using the scenario.

The screenshot shows the 'Import Scenarios' screen with the 'Import AR Invoices' scenario selected. The 'MAPPING' tab is active. A specific mapping rule is highlighted with a red border:

*Target Object	*Field / Action Name	Commit	Source Field / Value	Ignore Error	Execute Action
<code><Set: Branch></code>		<input type="checkbox"/>	<code>=PRODWHOLE</code>	<input type="checkbox"/>	
<code><Key: DocType></code>		<input type="checkbox"/>	<code>=[Document DocType]</code>	<input type="checkbox"/>	
<code><Key: RefNbr></code>		<input type="checkbox"/>	<code>=[Document RefNbr]</code>	<input type="checkbox"/>	
<code><Action: Cancel></code>		<input type="checkbox"/>		<input type="checkbox"/>	For Each Record
Type		<input checked="" type="checkbox"/>	<code>DOC TYPE</code>	<input type="checkbox"/>	
<code><Action: Cancel></code>		<input type="checkbox"/>		<input type="checkbox"/>	For Each Record
Reference Nbr.		<input checked="" type="checkbox"/>	<code>INVOICE REF NBR</code>	<input type="checkbox"/>	
Customer		<input checked="" type="checkbox"/>	<code>CUSTOMER ID</code>	<input type="checkbox"/>	
Date		<input checked="" type="checkbox"/>	<code>DATE</code>	<input type="checkbox"/>	
Post Period		<input checked="" type="checkbox"/>	<code>POST PERIOD</code>	<input type="checkbox"/>	
Customer Order Nbr.		<input type="checkbox"/>	<code>CUSTOMER REF NBR</code>	<input type="checkbox"/>	
Description		<input type="checkbox"/>	<code>DOC DESCRIPTION</code>	<input type="checkbox"/>	
Details	<code><Line Number></code>	<input type="checkbox"/>	<code>=-1</code>	<input type="checkbox"/>	
Details	Transaction Descr.	<input type="checkbox"/>	<code>LINE DESCRIPTION</code>	<input type="checkbox"/>	
Details	Ext. Price	<input checked="" type="checkbox"/>	<code>EXT PRICE</code>	<input type="checkbox"/>	
Details	Account	<input checked="" type="checkbox"/>	<code>ACCOUNT</code>	<input type="checkbox"/>	
Details	Subaccount	<input checked="" type="checkbox"/>	<code>SUBACCOUNT</code>	<input type="checkbox"/>	
Invoice Summary	Amount	<input checked="" type="checkbox"/>	<code>TOTAL AMOUNT</code>	<input checked="" type="checkbox"/>	
Invoice Summary	<code><Action: Remove Hold> (Rele...</code>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	Once, for Last Detail Line
Invoice Summary	<code><Action: Save></code>	<input type="checkbox"/>		<input type="checkbox"/>	Once, for Last Detail Line

Figure: The branch selection in the scenario mapping

Other Improvements

An administrator can now use the **Recalculate Prices** command, which is available on the toolbar of the [Sales Orders](#) (SO301000) form, in integration scenarios on the [Import Scenarios](#) (SM206025) or [Export Scenarios](#) (SM207025) form. For the recalculation of prices and discounts in an integration scenario, the administrator can specify any of the settings that are available in the **Recalculate Prices** dialog box.

The *Action: Recalculate Discounts on Import* and *Action: Recalculate Prices and Discounts on Import* actions are obsolete. However, they are still available in integration scenarios.

The administrator now has the ability to import shipments with any number of packages from an external system. The license limit on the number of lines per document does not apply to these shipments. To indicate to the system that the shipments have been created in an external system, the administrator adds a row with the following settings to the scenario mapping:

- **Target Object:** *Shipping* → *Shipping Information*
- **Field / Action Name:** *Packaging Processed in External System*
- **Source Field / Value:** = 'True'

These settings reflect the selection of the **Packaging Processed in External System** check box on the **Shipping** tab of the [Shipments](#) (SO3020000) form.

Additional Information

For details on configuring branch selection, see [Key Fields and Search in Import Scenarios](#).

For details on mapping actions that open dialog boxes, see [Actions in Import Scenarios](#).

Platform: Support of Multiselect Fields in Integration Scenarios

Acumatica ERP 2024 R2 introduces the support of multiselect fields in integration scenarios.

Multiselect fields are fields in Acumatica ERP for which a user can select multiple values at the same time. The most common example is the attributes of the *Multiselect Combo* type that a system administrator creates on the **Attributes** (CS205000) form. On the **Attributes** tab of the appropriate form, the user can then select these values. See the following screenshot, which shows the selection of multiple values for an attribute on the **Vendors** (AP303000) form.

The screenshot shows the Acumatica Vendors form for ARCHCO - Architectural Design Company. The Vendor ID is set to 'ARCHCO - Architectural Design Comp'. Under the ATTRIBUTES tab, there is a table with columns for Attribute, Required, and Value. A dropdown menu for the 'Vendor Ownership' attribute shows three options: 'Minority-Owned Business, Women-Owned Business' (selected), 'Minority-Owned Business' (checked), and 'Women-Owned Business' (checked). The 'Minority-Owned Business' option is highlighted with a red box.

Figure: Selection of multiple attribute values

In previous versions of Acumatica ERP, during the import or export of records with multiselect fields, the system correctly imported or exported the user-friendly names of the values (the **Description** column on the **Attributes** form) if only one value was selected. If multiple values were selected, the system imported or exported only the internal IDs of the fields (the **Value ID** column on the **Attributes** form). To import or export records correctly, the administrator had to create substitution lists that contained all possible combinations of values.

In Acumatica ERP 2024 R2, the administrator can use the new `MultiselectSubstituteAll` and `MultiselectSubstituteListed` functions in the scenario mapping to import or export these records.



The functions are available in the Formula Editor on multiple forms but are supported for only import and export scenarios.

New Functions

Each of the new `MultiselectSubstituteAll` and `MultiselectSubstituteListed` functions has three parameters, which are described in the following table.

Parameter	Description
<code>sourceField</code>	The name of the Acumatica ERP field for export scenarios. For import scenarios, this is the name of the field from which the values are imported (for example, the name of the column in an Excel file).
<code>substitutionList</code>	The name of the substitution list that is used for the attributes.

Parameter	Description
externalDelimiter	The external delimiter. For export scenarios, this is the delimiter in the downloaded file or in the external system. For import scenarios, this is the delimiter in the file for import or in the external system.

The new functions work as follows:

- `MultiselectSubstituteAll`: Replaces all values of the `sourceField` field with the values from the `substitutionList` substitution list, and uses the `externalDelimiter` as a delimiter.
- `MultiselectSubstituteListed`: Replaces the values of the `sourceField` field with the values from the `substitutionList` substitution list if a substitution value is defined for a particular value of the field, and uses the `externalDelimiter` as a delimiter.

System Preparation

Before the use of the new functions, the administrator needs to copy the list of attribute values to a substitution list. The administrator can do this by clicking **Export to Excel** on the table toolbar of the *Attributes* (CS205000) form for the needed attribute, and then clicking **Load Records from File** on the table toolbar of the *Substitution Lists* (SM206026) form.

Use of New Functions in Integration Scenarios

In an export scenario, each of the functions works as follows:

1. Parses the values from the source fields by using the , (comma) character as a delimiter.
2. Substitutes every found value according to the substitution list.

For the `MultiselectSubstituteAll` function, if the system cannot find at least one value for a record, the system does not process this record (that is, it does not substitute any values for it) and displays an error.

For the `MultiselectSubstituteListed` function, the system substitutes only the values that it has found. If a value is not found, the system does not substitute it. No error is displayed in this case.

3. Exports the results to a file. The system uses the delimiter specified as the `externalDelimiter` parameter.

In an import scenario, each of the functions works as follows:

1. Parses the values from the source file with the delimiter specified as the `externalDelimiter` parameter.
2. Substitutes every found value according to the substitution list.

For the `MultiselectSubstituteAll` function, if the system cannot find at least one value for a record, the system does not process this record (that is, it does not substitute any values for it) and displays an error.

For the `MultiselectSubstituteListed` function, the system substitutes only the values that it has found. If a value is not found, the system does not substitute this value. No error is displayed in this case.

3. Imports the records by using the , (comma) character as a delimiter.

Projects and Construction: Direct Creation of Pro Forma Invoices

In previous versions of Acumatica ERP, pro forma invoices in projects were created during the project billing procedure. Users were able to create manual pro forma invoices only if migration mode was activated for projects.

Starting in Acumatica ERP 2024 R2, users can create pro forma invoices directly on the [Pro Forma Invoices](#) (PM307000) form regardless of the state of the migration mode. A user can now enter and adjust pro forma invoices independently of the established billing schedule and easily enter ad hoc expenses that initially were not planned in the project budget. For more information, see [Pro Forma Invoices: Manual Creation of Pro Forma Invoices](#).

Manual Creation of a Pro Forma Invoice

On the form toolbar of the [Pro Forma Invoices](#) (PM307000) form, the user can now click **Add New Record** to create a pro forma invoice. After selecting the project to which the pro forma invoice is related, the user adds the lines to the pro forma invoice.

To add a progress billing line, on the **Progress Billing** tab, the user clicks **Add Row** and specifies the line settings (see the following screenshot).

The screenshot shows the Acumatica Pro Forma Invoices (PM307000) form. At the top, there is a toolbar with various icons and buttons like 'PRINT AIA REPORT' and 'NOTES ACTIVITIES'. Below the toolbar, the main area displays form fields for Reference Nbr., Project, Status, Invoice Date, Post Period, Customer, Location, Application Nbr., and Description. To the right, summary totals are shown for Progress Billing Total, Time and Material Total, Tax Total, Invoice Total, Retainage Total, and Amount Due. Below these details, tabs for PROGRESS BILLING, TIME AND MATERIAL, TAXES, FINANCIAL, and ADDRESSES are visible. The PROGRESS BILLING tab is selected and shows a table with columns for Branch, Account Group, Project Task, Description, Revised Budgeted Quantity, Revised Budgeted Amount, Actual Quantity, Previously Invoiced Quantity, Previously Invoiced Amount, Total Completed (%), Quantity to Invoice, UOM, Unit Price, and Amount. A new row is being added, with 'SWEETEQUIP' in the Branch field, 'REVENUE' in the Account Group field, 'PHASES' in the Project Task field, and 'Ad-hoc expenses' in the Description field. The 'Amount' column for this row is highlighted in red.

Figure: Progress billing line manually added to the pro forma invoice



Users can manually add progress billing lines to the pro forma invoices that have been generated by the billing procedure as well.

When the project budget key details have been specified, the system searches for the corresponding line of a revenue project budget. If the line was found, the system loads the default values from the found line of the project budget. Otherwise, if a line does not exist, the system specifies the default values in the pro forma invoice line based on the selected project task and adds a new line with the project budget key from the pro forma invoice line to the revenue budget, as shown in the following screenshot.

The screenshot shows the 'REVENUE BUDGET' tab of a project named 'HMBAKERY5 - Juicers with the installation and training for employees'. The 'PHASE1' row has its 'SITEREVIEW' task highlighted in blue. The 'PHASE5' row, which contains the entry '<N/A>', is highlighted with a red border. The table includes columns for Project Task, Inventory ID, Account Group, Description, Original Budgeted Quantity, UOM, Unit Rate, Original Budgeted Amount, Revised Budgeted Quantity, Revised Budgeted Amount, Draft Invoice Quantity, and Draft Invoice Amount.

Project Task	Inventory ID	Account Group	Description	Original Budgeted Quantity	UOM	Unit Rate	Original Budgeted Amount	Revised Budgeted Quantity	Revised Budgeted Amount	Draft Invoice Quantity	Draft Invoice Amount
PHASE1	SITEREVIEW	REVENUE	Site review	4.00	HOUR	50.0000	200.00	4.00	200.00	0.00	200.00
PHASE2	INSTALL	REVENUE	Installation of equipment at the customers' ...	3.00	HOUR	100.0000	300.00	3.00	300.00	0.00	300.00
PHASE2	JUICER10	REVENUE	Pro series juicer with a production rate of 1...	0.00	PIECE	0.0000	0.00	0.00	0.00	0.00	0.00
PHASE3	INSTALL	REVENUE	Installation of equipment at the customers' ...	4.00	HOUR	100.0000	400.00	4.00	400.00	0.00	400.00
PHASE3	JUICER15	REVENUE	Commercial juicer with a production rate of ...	0.00	PIECE	0.0000	0.00	0.00	0.00	0.00	0.00
PHASE4	INSTALL	REVENUE	Installation of equipment at the customers' ...	6.00	HOUR	100.0000	600.00	6.00	600.00	0.00	600.00
PHASE4	JUICER20C	REVENUE	Commercial citrus juicer with a production r...	0.00	PIECE	0.0000	0.00	0.00	0.00	0.00	0.00
PHASE5	<N/A>	REVENUE		0.00		0.0000	0.00	0.00	0.00	0.00	115.00
PHASE5	TRAINING	REVENUE	Training on juicer usage (at customer's place)	24.00	HOUR	50.0000	1,200.00	24.00	1,200.00	0.00	1,200.00

Figure: Budget line added based on the new progress billing line

To load all applicable lines automatically, the user clicks **Load Lines** on the table toolbar of the **Progress Billing** tab (see the following screenshot). The system loads the lines from the revenue budget of the project in which an active or completed project task of the *Revenue Task* or *Cost and Revenue Task* type is specified and the billing rule assigned to the project task includes the progress billing step. If a line with the same project budget key already exists in the pro forma invoice, the system will skip adding it.

The screenshot shows the 'PROGRESS BILLING' tab of a project named '000019 - Juicers with the installation and training for employees'. The 'LOAD LINES' button is highlighted in red. The table includes columns for Branch, Account Group, Project Task, Description, Revised Budgeted Quantity, Revised Budgeted Amount, Actual Quantity, Previously Invoiced Quantity, Previously Invoiced Amount, Total Completed (%), Quantity to Invoice, UOM, Unit Price, and Amount.

Branch	Account Group	Project Task	Description	Revised Budgeted Quantity	Revised Budgeted Amount	Actual Quantity	Previously Invoiced Quantity	Previously Invoiced Amount	Total Completed (%)	Quantity to Invoice	UOM	Unit Price	Amount
SWEETEQUIP	PHASES	REVENUE	Ad-hoc expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000	115.00	
SWEETEQUIP	PHASE1	REVENUE	Site review	4.00	200.00	0.00	0.00	100.00	0.00	HOUR	50.0000	200.00	
SWEETEQUIP	PHASE2	REVENUE	Installation of equipment at the customers' ...	3.00	300.00	0.00	0.00	100.00	0.00	HOUR	100.0000	300.00	
SWEETEQUIP	PHASE3	REVENUE	Pro series juicer with a production rate of 1...	0.00	0.00	0.00	0.00	0.00	0.00	PIECE	0.0000	0.00	
SWEETEQUIP	PHASE3	REVENUE	Installation of equipment at the customers' ...	4.00	400.00	0.00	0.00	100.00	0.00	HOUR	100.0000	400.00	
SWEETEQUIP	PHASE4	REVENUE	Commercial juicer with a production rate of ...	0.00	0.00	0.00	0.00	0.00	0.00	PIECE	0.0000	0.00	
SWEETEQUIP	PHASE4	REVENUE	Commercial citrus juicer with a production r...	6.00	600.00	0.00	0.00	100.00	0.00	HOUR	100.0000	600.00	
SWEETEQUIP	PHASE5	REVENUE	Training on juicer usage (at customer's place)	24.00	1,200.00	0.00	0.00	100.00	0.00	HOUR	50.0000	1,200.00	

Figure: Progress billing lines loaded automatically

To add lines with unbilled project transactions, on the **Time and Material** tab, the user clicks the **Upload Unbilled Transactions** button (as shown in the screenshot) and then selects the lines to be added in the dialog box that opens.

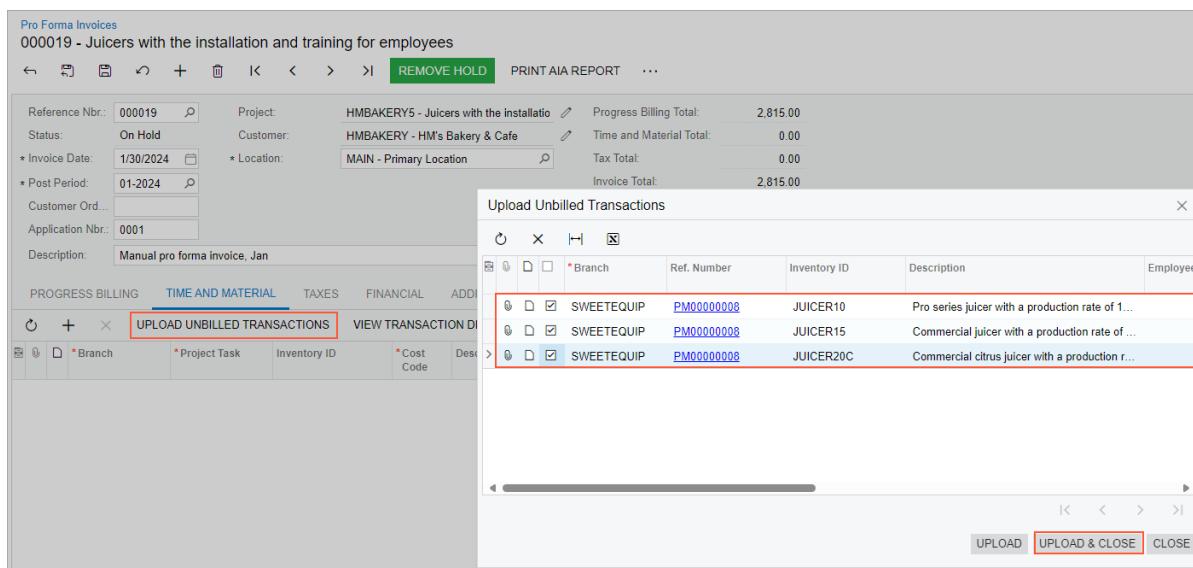


Figure: List of unbilled project transactions

After the user clicks **Upload & Close** (shown in the screenshot above), the corresponding lines are added to the pro forma invoice, as shown in the following screenshot.

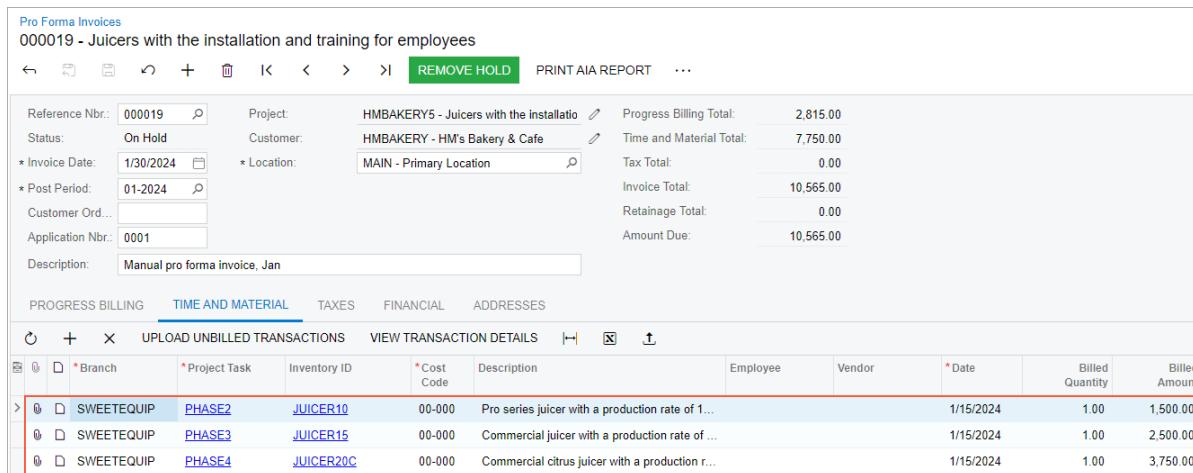


Figure: Time and material lines added to the pro forma invoice

Alternatively, the user can click **Add Row** and manually add a new time and material line that is not related to any project transaction.



Users can also upload pro forma invoice lines (both progress and time and material ones) from an Excel file or configure an import scenario to mass-import pro forma invoices.

After the pro forma invoice is saved, the system shows it on the **Invoices** tab of the [Projects](#) (PM301000) form for the project, as shown in the following screenshot.

Projects
HMBAKERY5 - Juicers with the installation and training for employees

* Project ID: HMBAKERY5 Customer: HMBAKERY - HM's Bakery & Cafe
Template: Project Manager: EP00000001 - Pam Brawner
Status: Active Actual Income: 0.00
Description: Juicers with the installation and training for employees Actual Expenses: 6,200.00
Margin Amount: -6,200.00
Margin (%): 0.00
Pending Invoice Amon... 0.00

SUMMARY TASKS REVENUE BUDGET COST BUDGET BALANCES INVOICES UNION LOCALS ACTIVITIES EMPLOYEES EQUIPMENT ADDRESSES

AIA REPORT RELEASE RETAINAGE

Pro Forma Date	Pro Forma Reference Nbr.	Application Nbr.	Description	Status	Invoice Total	AR Doc. Type	AR Reference Nbr.	AR Doc. Date
1/30/2024	000019	0001	Manual pro forma invoice, Jan	On Hold	10,565.00			

Figure: Pro forma invoice created manually for the project

The amounts and quantities from the pro forma invoice lines are shown in the **Draft Invoice Amount** and **Draft Invoice Quantity** columns, respectively, on the **Revenue Budget** tab.

Projects
HMBAKERY5 - Juicers with the installation and training for employees

* Project ID: HMBAKERY5 Customer: HMBAKERY - HM's Bakery & Cafe
Template: Project Manager: EP00000001 - Pam Brawner
Status: Active Actual Income: 0.00
Description: Juicers with the installation and training for employees Actual Expenses: 6,200.00
Margin Amount: -6,200.00
Margin (%): 0.00
Pending Invoice Amon... 0.00

SUMMARY TASKS REVENUE BUDGET COST BUDGET BALANCES INVOICES UNION LOCALS ACTIVITIES EMPLOYEES EQUIPMENT ADDRESSES DEFAULTS ATTRIBUTES

Group by Task

VIEW TRANSACTIONS

* Project Task	* Inventory ID	* Account Group	Description	Original Budgeted Quantity	UOM	Unit Rate	Original Budgeted Amount	Revised Budgeted Quantity	Revised Budgeted Amount	Draft Invoice Quantity	Draft Invoice Amount
PHASE1 SITEREVIEW	REVENUE	Site review		4.00	HOUR	50.0000	200.00	4.00	200.00	0.00	200.00
PHASE2 INSTALL	REVENUE	Installation of equipment at the customers' ...		3.00	HOUR	100.0000	300.00	3.00	300.00	0.00	300.00
PHASE2 JUICER10	REVENUE	Pro series juicer with a production rate of 1...		0.00	PIECE	0.0000	0.00	0.00	0.00	1.00	1,500.00
PHASE3 INSTALL	REVENUE	Installation of equipment at the customers' ...		4.00	HOUR	100.0000	400.00	4.00	400.00	0.00	400.00
PHASE3 JUICER15	REVENUE	Commercial juicer with a production rate of ...		0.00	PIECE	0.0000	0.00	0.00	0.00	1.00	2,500.00
PHASE4 INSTALL	REVENUE	Installation of equipment at the customers' ...		6.00	HOUR	100.0000	600.00	6.00	600.00	0.00	600.00
PHASE4 JUICER20C	REVENUE	Commercial citrus juicer with a production r...		0.00	PIECE	0.0000	0.00	0.00	0.00	1.00	3,750.00
</N/A>	REVENUE			0.00		0.0000	0.00	0.00	0.00	0.00	115.00
PHASE5 TRAINING	REVENUE	Training on juicer usage (at customer's place)		24.00	HOUR	50.0000	1,200.00	24.00	1,200.00	0.00	1,200.00

Figure: Budget values updated by the manually entered pro forma invoice

The processing of a manually created pro forma invoice has no differences from the processing of pro forma invoices that are generated by the billing procedure. The following processes are fully supported for manual pro forma invoices:

- Generation of AR documents on release of the pro forma invoice
- Correction of pro forma invoices
- Preparation of American Institute of Architects (AIA) reports based on the pro forma invoice
- Managing retainage in AP and AR documents
- Processing payments by line
- Validating for sequential release of project invoices

Projects and Construction: Enhanced Account Selection in Reason Codes and Posting Classes

In previous versions of Acumatica ERP, if a company's business processes required materials to be issued from inventory directly for a project, a user had to create an issue on the [Issues](#) (IN302000) form. In each line, the user needed to specify a project, a project task, and the reason code from which the expense account and subaccount should be copied. This could require the configuration of multiple unique reason codes for projects and project tasks.

Starting in Acumatica ERP Construction Edition 2024 R2, users can set up the accounts and subaccounts of reason codes and posting classes to be copied from the project and project tasks. For more information, see [Project Material Management: Accounting for Project Stock](#).

Changes in Reason Code Settings

On the [Reason Codes](#) (CS211000) form, new options are available for combining subaccounts for reason codes with the *Issue* or *Adjustment* type (that is, for reason codes that can be used in inventory issue or adjustment transactions). In the **Combine Sub. From** box, the following options are now available, as shown in the screenshot below:

- *J*: The system copies the subaccount segment from the project—that is, from the **Default Cost Subaccount** box on the **Defaults** tab of the [Projects](#) (PM301000) form.
- *T*: The system copies the subaccount segment from the project task—that is, from the **Default Cost Subaccount** box on the **Summary** tab of the [Project Tasks](#) (PM302000) form.

These option codes are available for reason codes that are used in inventory issues on the [Issues](#) (IN302000) form or inventory adjustments on the [Adjustments](#) (IN303000) form. For more information about reason codes used for inventory transactions, see [Reason Codes: General Information](#)

The screenshot shows the 'Reason Codes' form with the title 'PROJECT - Material for project'. The form includes fields for Reason Code (PROJECT), Description (Material for project), Usage (Issue), and Combine Sub from (JJJ-TTT). A modal window titled 'Department' is open, showing a list of items under 'SELECT'. The list includes:

Value	Description
III	Inventory Item
JJJ	Project
PPP	Posting Class
RRR	Reason Code
> TTT	Project Task
WWW	Warehouse

Figure: Source of the COGS/Expense account

If a non-project code is specified in a line of an inventory issue or inventory adjustment, or if no default cost subaccount has been specified in the project task or project, the system will instead use the subaccount associated with the reason code (that is, specified in the **Subaccount** box on the *Reason Codes* form).

For more information about automatically combined subaccounts, see [Combined Subaccounts: General Information](#).

Changes in Posting Class Settings

In the **Use COGS/Expense Account From** box on the *Posting Classes* (IN206000) form, the following options have been added: *Project* and *Project Task* (see the following screenshot). With these options, a user can specify the project or project task to be used as the source of the cost of goods sold (COGS) or expense account in the purchase orders, purchase receipts, and sales orders that include lines with items of this posting class.

The screenshot shows the 'Posting Classes' screen with the title 'AOL - All Other Items'. The 'GENERAL' tab is selected. In the 'COGS/Expense Account' section, the 'Posting Class' dropdown is open, displaying several options: 'PPP-PPP', 'TTT-JJJ', and 'Project Task' (which is highlighted with a red border). Other visible fields include 'Use Inventory/Accrual Account from:' (set to 'Posting Class'), 'Combine Inventory/Accrual Sub. from:' (set to 'PPP-PPP'), 'Use Sales Account from:' (set to 'Posting Class'), 'Combine Sales Sub. from:' (set to 'TTT-JJJ'), 'Use COGS/Expense Account from:' (set to 'Posting Class'), 'Combine COGS/Expense Sub. from:' (set to 'PPP-PPP'), 'Use Std. Cost Variance Account from:' (set to 'Posting Class'), and 'Combine Std. Cost Variance Sub. from:' (set to 'PPP-PPP').

Figure: Source of the COGS/Expense account

If a non-project code is specified in a line of one of these documents, or if no default cost account has been specified in the project task or project, the system will instead use the account associated with the posting class (that is, specified in the **COGS/Expense Account** box on the **GL Accounts** tab of the *Posting Classes* form).

In the **Combine COGS/Expense Sub. From** box on the **General** tab of the *Posting Classes* form, the following options can now be used to define subaccount masks, as shown in the following screenshot:

- **J:** The system copies the subaccount segment from the project—that is, from the **Default Cost Subaccount** box on the **Defaults** tab of the *Projects* (PM301000) form.
- **T:** The system copies the subaccount segment from the project task—that is, from the **Default Cost Subaccount** box on the **Summary** tab of the *Project Tasks* (PM302000) form.

Figure: Subaccount masks for the COGS/Expense subaccount

If a non-project code is specified in a line of a document, or if no default cost subaccount has been specified in the project task or project, the system will instead use the subaccount associated with the posting class—that is, specified in the **COGS/Expense Sub.** box on the **GL Accounts** tab of the *Posting Classes* form.

In the **Use Sales Account From** box on the *Posting Classes* form, the following options have been added: *Project* and *Project Task* (see the following screenshot). With these options, a user can specify the project or project task to be used as the source of the sales account in the documents that include lines with items of this posting class.

The screenshot shows the 'Posting Classes' application interface. At the top, it says 'Posting Classes' and 'AOL - All Other Items'. Below that is a toolbar with various icons. The main area has two input fields: '* Class ID: AOL' and 'Description: All Other Items'. Below these are two tabs: 'GENERAL' (which is selected) and 'GL ACCOUNTS'. Under the 'GENERAL' tab, there are several configuration options. One of these is a dropdown menu labeled 'Combine Sales Sub. From'. This dropdown is currently set to 'Posting Class'. A list of subaccounts is shown in a dropdown menu, with 'Posting Class' being the selected item. Other items in the list include 'PPP-PPP', 'Inventory Item', 'Warehouse', 'Project', and 'Project Task'. The 'Project' and 'Project Task' options are highlighted with a red box.

Figure: Source of the Sales account

If a non-project code is specified in a line of a document, or if no default sales subaccount has been specified in the project task or project, the system will instead use the subaccount associated with the posting class and specified in the **Sales Account** box on the **GL Accounts** tab of the *Posting Classes* form.

In the **Combine Sales Sub. From** box on the **General** tab of the *Posting Classes* form, the following options can now be used to define subaccount masks, as shown in the screenshot below:

- *J*: The system copies the subaccount segment from the project—that is, from the **Default Sales Subaccount** box on the **Defaults** tab of the *Projects* form.
- *T*: The system copies the subaccount segment from the project task—that is, from the **Default Sales Subaccount** box on the **Summary** tab of the *Project Tasks* form.

The screenshot shows the 'Posting Classes' screen for 'AOL - All Other Items'. At the top, there are standard navigation icons. Below them, the 'GENERAL' tab is selected, showing fields for 'Class ID' (AOL) and 'Description' (All Other Items). The 'GL ACCOUNTS' tab is also visible.

In the 'GENERAL' section, several dropdowns and input fields are displayed:

- 'Use Inventory/Accrual Account from:' dropdown set to 'Posting Class'.
- '* Combine Inventory/Accrual Sub. from:' dropdown set to 'PPP-PPP'.
- 'Use Sales Account from:' dropdown set to 'Posting Class'.
- '* Combine Sales Sub. from:' dropdown set to 'TTT-JJJ'.
- 'Use COGS/Expense Account from:' dropdown set to 'Department'.
- '* Combine COGS/Expense Sub. from:' dropdown set to 'PPP'.
- 'Use Std. Cost Variance Account from:' dropdown set to 'Posting Class'.
- '* Combine Std. Cost Variance Sub. from:' dropdown set to 'TTT'.
- 'Use Std. Cost Revaluation Account from:' dropdown set to 'Warehouse'.
- '* Combine Std. Cost Revaluation Sub. from:' dropdown set to 'WWW'.
- 'Use PO Accrual Account from:' dropdown set to 'Project Task'.
- '* Combine PO Accrual Sub. from:' dropdown set to 'Project'.
- 'Use Purchase Price Variance Account fr...' dropdown set to 'Inventory Item'.
- '* Combine Purchase Price Variance Sub. f...' dropdown set to 'PPP'.
- 'Use Landed Cost Variance Account from:' dropdown set to 'Posting Class'.

A modal dialog titled 'Department' is open, showing a list of items with columns for 'Value' and 'Description'. The item 'JJJ Project' is highlighted with a red border. Other items listed are 'III Inventory Item', 'PPP Posting Class', 'TTT Project Task', and 'WWW Warehouse'.

Figure: Subaccount masks for the Sales subaccount

If a non-project code is specified in a line of a document, or if no default sales subaccount has been specified in the project task or project, the system will instead use the subaccount associated with the posting class and specified in the **Sales Sub.** box on the [Posting Classes: General Information](#).

For more information about posting classes, see [Posting Classes: General Information](#).

List of Affected Forms and Documents

The listed changes are applicable to documents created on the following forms:

- Inventory issues on the [Issues](#) (IN302000) form
- Inventory adjustments on the [Adjustments](#) (IN303000) form
- Purchase orders on the [Purchase Orders](#) (PO301000) form
- Purchase receipts on the [Purchase Receipts](#) (PO302000) form
- Sales orders on the [Sales Orders](#) (SO301000) form

Projects and Construction: Enhanced Workflow for Project Quotes

A project quote in Acumatica ERP is a document that is used to estimate the revenue and costs of a potential project. The project quote is sent to the customer for review and can be modified as many times as is necessary until an agreement is reached. After the customer agrees to the terms of a quote, the project quote is converted to a project. If no agreement has been reached or the project quote has not been approved internally, the project quote is rejected.

Previous versions of Acumatica ERP provided no ability to distinguish the project quotes that were rejected internally (within the company) from the project quotes that were rejected by a customer. Starting in Acumatica ERP 2024 R2, the project quote workflow includes additional workflow statuses and commands that help users to track the customer acceptance status of project quotes. For more information, see [Processing Project Quotes](#).

New Workflow Statuses and Commands

To give users the ability to reflect customer acceptance or rejection of the quote, the following commands have been added to the More menu on the [Project Quotes](#) (PM304500) form, as shown in the screenshot below:

- **Mark as Accepted**
- **Mark as Declined**

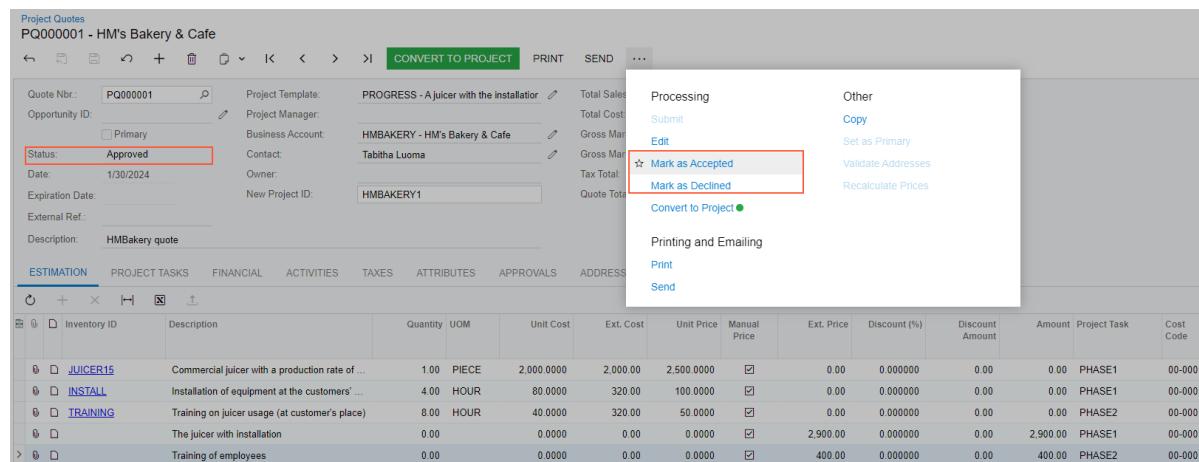


Figure: New commands on the More menu

The following new statuses have been introduced for project quotes:

- **Accepted by Customer:** The system assigns the status to a project quote when a user clicks **Mark as Accepted** on the More menu (see the following screenshot).

This screenshot shows a project quote for 'PQ000001 - HM's Bakery & Cafe'. The 'Status' field is highlighted with a red border and contains the value 'Accepted by Customer'. Other fields include 'Project Template: PROGRESS - A juicer with the installer', 'Business Account: HMBAKERY - HM's Bakery & Cafe', and financial details like 'Total Sales: 3,300.00' and 'Total Cost: 2,640.00'. The 'ESTIMATION' tab is selected, showing a table of items with columns for Inventory ID, Description, Quantity, UOM, Unit Cost, Ext. Cost, Unit Price, Manual Price, Ext. Price, Discount (%), Discount Amount, and Amount. Items listed include 'JUICER15', 'INSTALL', 'TRAINING', and others.

Figure: A project quote that has been accepted by the customer

- **Declined by Customer:** The system assigns the status to a project quote when the user clicks **Mark as Declined** on the More menu (see the following screenshot).

This screenshot shows the same project quote as the previous one, but the 'Status' field is now highlighted with a red border and contains the value 'Declined by Customer'. The rest of the form remains identical, including the project template, business account, and estimation table.

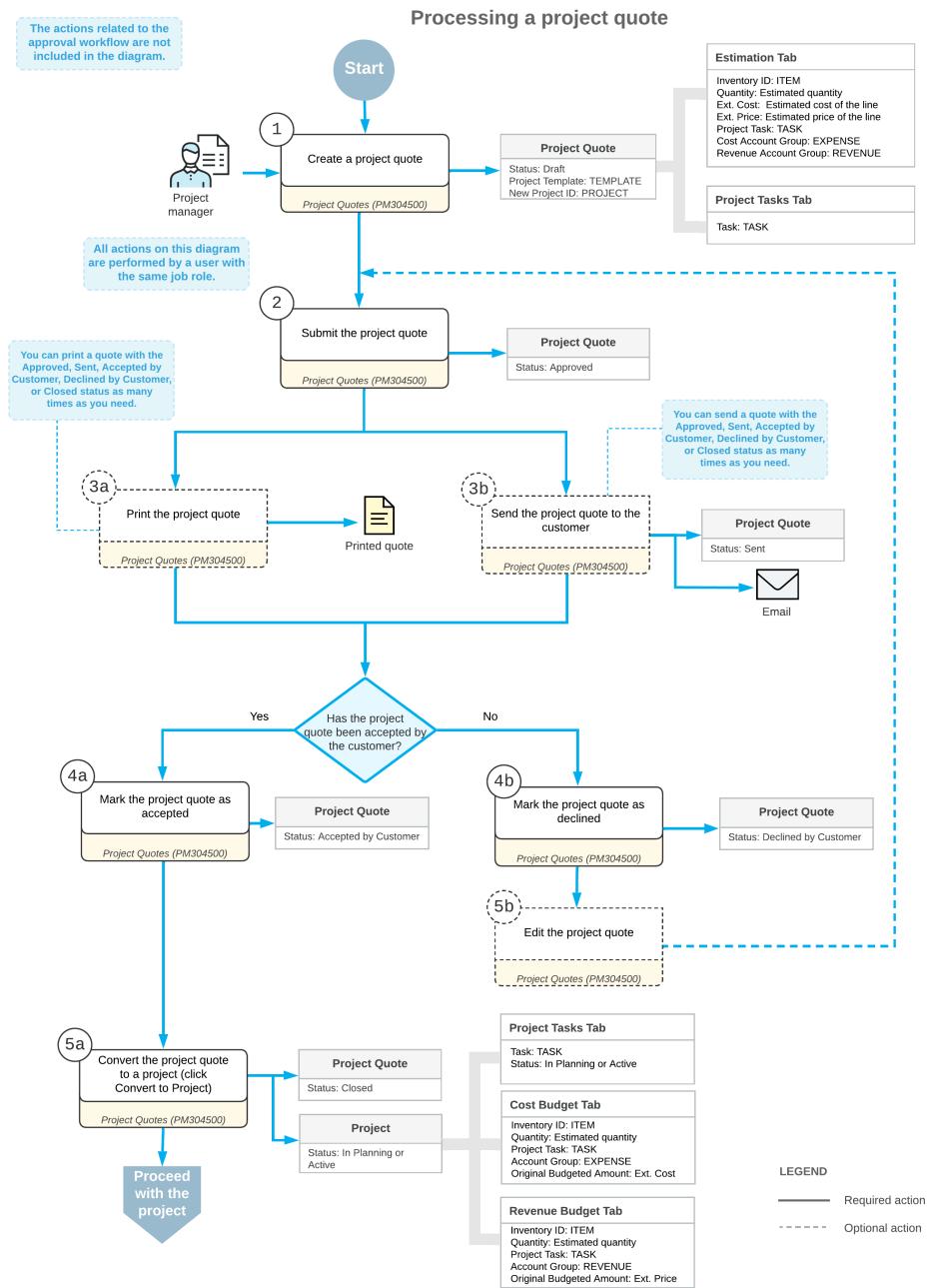
Figure: A project quote that has been declined by the customer

In addition, the *Prepared* status of the project quote has been renamed to *Approved*. If no approval workflow has been configured for project quotes, this status indicates that the project quote has been submitted and can now be sent to the customer or converted to a project. If an approval workflow has been configured for project quotes, the internal approval and rejection of the document is indicated by the following pair of statuses:

- **Approved:** The system assigned this status to a project quote when the approver clicks **Approve** on the form toolbar.
- **Rejected:** The system assigned this status to a project quote when the approver clicks **Reject** on the form toolbar.

Project Quote Workflow Diagram

The following diagram illustrates the workflow of a project quote without an approval workflow.



Other UI Changes on the Project Quotes Form

Also on the [Project Quotes](#) (PM304500) form, the **Email** command has been renamed to **Send**.

The **Override Contact and Address** check box has been removed from the **Finance** tab. Instead, the **Override Contact** and **Override Bill-To Address** check boxes have been added to the respective sections on the **Addresses** tab.

Projects and Construction: Import of Subcontracts in Migration Mode

In previous versions of Acumatica ERP Construction Edition, users had no ability to migrate historical data for subcontracts from a legacy system. If migration mode was active, the [Subcontracts](#) (SC301000) form was not available for data entry, and the users could not link a subcontract or subcontract line to a bill line on the [Bills and Adjustments](#) (AP301000) form.

In Acumatica ERP Construction Edition 2024 R2, migration mode in the accounts payable subledger now supports the creation of subcontracts. For more information, see [Migrating Documents to Acumatica ERP](#).

Import of Subcontracts

A user can now select the **Activate Migration Mode** check box on the [Accounts Payable Preferences](#) (AP101000) form and import subcontracts with their balances, original amounts, and dates without affecting the general ledger. When the migration mode for the accounts payable subledger is active, the user can now do the following:

- Create migrated subcontracts manually on the [Subcontracts](#) (SC301000) form. To mass-import migrated subcontracts from the legacy system, the user can configure an import scenario on the [Import Scenarios](#) (SM306025). When the user runs the import scenario on the [Import by Scenario](#) (SM206036) form, the system creates subcontracts.
- Link a line of a migrated bill to a subcontract or subcontract line on the [Bills and Adjustments](#) (AP301000) form by clicking **Add Subcontract** or **Add Subcontract Line**, respectively, on the **Details** tab of the form.

The user can also configure an import scenario for importing historical AP documents to link these AP documents to the corresponding subcontract lines during the import. The AP documents imported in migration mode will update the values in the **Billed Amount** and **Unbilled Amount** columns in the corresponding subcontract lines on the [Subcontracts](#) form without affecting the general ledger.

Other Improvements

The following changes have also been made:

- The footer of the *Subcontracts (SC3010PL)* list of records now shows the total values for the **Subcontract Qty.**, **Subcontract Total**, and **Unbilled Amount** columns.
- The footer of the *Project Transactions (PM3040PL)* list of records now shows the total of **Total Amount** column.

Projects and Construction: Improvements to Commitment Tracking

In previous versions of Acumatica ERP, users did not have to map expense and COGS accounts to an account group to create and process a project commitment. Starting in Acumatica ERP 2024 R2, users can process commitments to projects only if the accounts specified in the document lines are mapped to account groups.

If the **Internal Cost Commitment Tracking** check box is cleared on the [Projects Preferences](#) (PM101000) form, on a user's attempt to remove a purchase order from hold on the [Purchase Orders](#) (PO301000) form, for the purchase order lines with the *Goods for IN* and *Goods for Project* types, the system validates the account mapping for the COGS account that is specified in the settings of the corresponding inventory item on the [Stock Items](#) (IN202500) form.

If the **Internal Cost Commitment Tracking** check box is selected on the [Projects Preferences](#) (PM301000) form, the system also validates the account mapping on a user's attempt to remove from hold any of the following project-related documents:

- A purchase order on the [Purchase Orders](#) (PO301000) form.
The system validates the account mapping for the accounts specified in the **Account** column in the purchase order lines with the *Service*, *Non-Stock*, and *Non-Stock for Project* line type.
- A subcontract on the [Subcontracts](#) (SC301000) form.
The system validates the account mapping for the accounts specified in the **Account** column in the subcontract lines.
- A change order to commitment on the [Change Orders](#) (PM308000) form.
The system validates the account mapping for the accounts specified in the **Account** column in the lines on the **Commitments** tab that have the *New Line* and *New Document* status.

If an account is not mapped to an account group, the system shows a error message indicating that account mapping is mandatory for further document processing. The following screenshot shows an example of the error that appears for a subcontract on the [Subcontracts](#) form.

The screenshot shows the Subcontracts form for subcontract SC-000040 - Acme Doors & Glass. The form includes fields for Subcontract Nbr., Status (On Hold), Date (1/30/2025), Start Date (1/30/2025), Vendor Ref., Description (Installation services for project), and various financial details like Detail Total, Line Discounts, Document Discounts, Tax Total, Subcontract Total, and Retainage Total. Below the main form, there is a grid for ADD PROJECT ITEMS. A red callout box highlights an error message: "The account specified in the project-related line must be mapped to an account group. Assign an account group to the 54200 account and recalculate the project balance for the HMBAKERY2 project."

Figure: An error indicating that account is not mapped to an account group

To proceed with the processing of the document, the user should map the account to the account group on the [Chart of Accounts](#) (GL202500) form or the [Account Groups](#) (PM201000) form. For more information, see [Account Groups: General Information](#).

Projects and Construction: Improvements to the Substantiated Billing Reports

In the construction industry, when contractors bill their customers, the customers may want to see proof of the costs. In this case, the contractors need to provide supporting documentation along with the customer statement or invoice. Acumatica ERP Construction Edition includes the [Substantiated Billing](#) (PM650000) and [Substantiated Billing - Consolidated](#) (PM650050) reports, which are specifically designed to display a detailed breakdown of and supporting documentation for the costs incurred during a specific date range.

Previously, the substantiated billing reports could show the cost transactions of a project that were not yet billed, so the users had to manually filter the list of cost transactions in the exported report. Also, a user could not prepare these reports for a particular pro forma invoice. In Acumatica ERP Construction Edition 2024 R2, the substantiated billing reports have been enhanced. Now the reports now provide additional capabilities for selecting and filtering the cost transactions to be included in the generated report. The [Substantiated Billing - Consolidated](#) report now may include line-level attachments to the prepared PDF with supporting documentation. For more information about substantiated billing reports, see [Construction Reports: Substantiated Billing Reports](#).

Improvements to the Linked Cost Transactions Side Panel

Previously, on the side panel of the [Pro Forma Invoices](#) (PM307000) form, a user could view the *Linked Cost Transactions* (PM307100) inquiry form and link only cost transactions that originate from AP documents. Now the user can link cost transactions from various sources to the selected pro forma invoice or its lines.

To support this functionality, the following UI changes have been made to the *Linked Cost Transactions* inquiry form:

- The **Source** box has been added in the Selection area (see the screenshots below). A user views all cost transactions if *All Sources* is selected in this box, or filters the transactions shown in the table by selecting a particular source (that is, the functional area of the system from which the cost transactions originate, which can be one of the following: *AP, AR, CA, DR, GL, IN, PM, or PR*).
- The **Orig. Source** column has been added to the table on the side panel and to the table in the **Add Transactions** dialog box, which opens when the user clicks + on the table toolbar. This column indicates the source from which the cost transaction originates.
- In the table on the side panel (shown in the first screenshot below) and in the table of the **Add Transactions** dialog box (shown in the second screenshot), the following columns have been renamed to reflect the functionality changes:
 - **AP Doc. Type to Orig. Doc. Type**
 - **AP Doc. Nbr. to Orig. Doc. Nbr.**
 - **AP Doc. Line Nbr. to Orig. Doc. Line Nbr.**

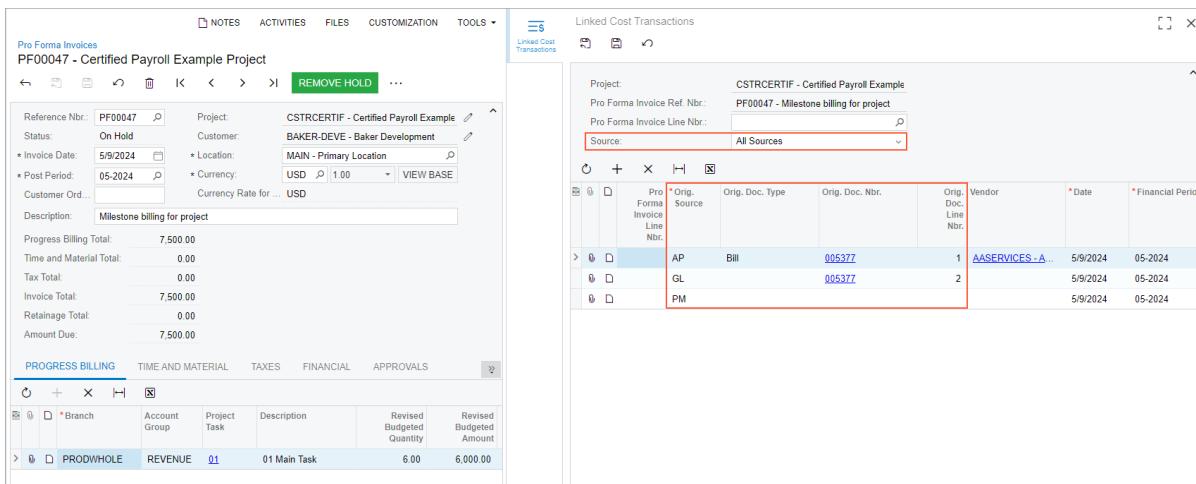


Figure: The table on the side panel

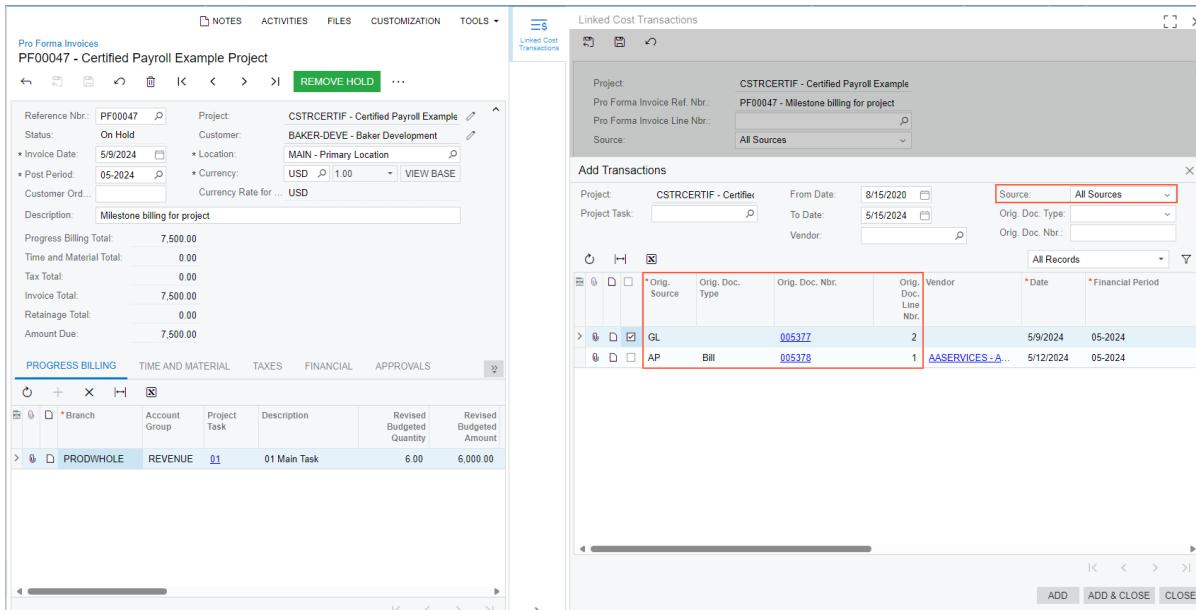


Figure: The Add Transactions dialog box

For more information about linking cost transactions to pro forma invoice lines, see [Pro Forma Invoices: Links to Project Transactions](#).

Substantiated Billing Report

On the [Substantiated Billing](#) (PM650000) report form, the following report parameters have been introduced (see the screenshot below):

- Select Transactions By:** An option indicating how the system selects the cost transactions to be included in the report. A user can select one of the following options:
 - Date Range* (default): The printable report will show all cost transactions that have been posted to account groups of the *Expense* type within the specified date range and that are related to the selected project. If this option is selected, the **Start Date** and **End Date** parameters become required.
 - Pro Forma Invoice*: The printable report will show all cost transactions that have been posted to account groups of the *Expense* type and are related to the selected pro forma invoice of the selected project. If this option is selected, the **Pro Forma Invoice Nbr.** parameter becomes required.

- **Pro Forma Invoice and Date Range:** The printable report will show all cost transactions that have been posted to account groups of the *Expense* type within the specified date range and are related to the selected pro forma invoice of the selected project. If this option is selected, the **Start Date**, **End Date**, and **Pro Forma Invoice Nbr.** parameters become required.
- **Pro Forma Invoice Nbr.:** The reference number of the pro forma invoice for which the printable report will be prepared. The user can select only an open or closed pro forma invoice of the project that is currently selected in the **Project** box.
- **Include Non-Billable Transactions:** A check box that indicates, if selected, that non-billable cost transactions are included in the printable report. If the check box is cleared, the report includes only billable cost transactions—that is, project transactions that have the **Billable** check box selected on the *Project Transactions* (PM304000) form.

Substantiated Billing

Template	<input type="text"/> x v	<input type="checkbox"/> Default	<input type="checkbox"/> Shared	
REPORT PARAMETERS		ADDITIONAL SORT AND FILTERS	PRINT AND EMAIL SETTINGS	REPORT VERSIONS
* Project:	CSTRCERTIF - Certified Payroll Exam			
* Select Transactions By:	Pro Forma Invoice and Date Range			
Start Date:	5/1/2024		End Date:	5/9/2024
Pro Forma Invoice Nbr.:	PF00047 - Milestone billing for project			
<input checked="" type="checkbox"/> Include Non-Billable Transactions				

Figure: New parameters of the Substantiated Billing report

The layout of the printable report has also been revised and improved. The following screenshot shows the report prepared for the project for the particular date range and pro forma invoice. The report includes the list of cost transactions linked to the pro forma invoice.

Cost Transactions											Page 1 of 1	Date 5/9/2024 5:40 AM									
Company	01_SalesDemo	Project CSTRCERTIF Certified Payroll Example Project									Start Date	5/1/2024									
User	Joseph Becher										End Date	5/9/2024									
Bill To	Baker Development 1011 Westward Drive Miami , FL 33166										Pro Forma Invoice Nbr.	PF00047									
Cost Code																					
Transaction Source AP																					
PM Date	Description	GL Date	PF Invoice Nbr. Ref. Number	PM Tran.	Vendor	UOM	Earning Type	Unit Rate	Qty/Hours	Amount											
5/9/2024		5/9/2024	PF00047	005377	27457	AASERVICES				2,800.00											
											Subtotal for AP Transaction Source										
											2,800.00										
Transaction Source GL																					
PM Date	Description	GL Date	PF Invoice Nbr. Ref. Number	PM Tran.	Vendor	UOM	Earning Type	Unit Rate	Qty/Hours	Amount											
5/9/2024	additional subcontract works	5/9/2024	GL002150	27458						1,200.00											
											Subtotal for GL Transaction Source										
											1,200.00										
Transaction Source PM																					
PM Date	Description	GL Date	PF Invoice Nbr. Ref. Number	PM Tran.	Vendor	UOM	Earning Type	Unit Rate	Qty/Hours	Amount											
5/9/2024		5/9/2024	PF00047	PM00002159	27459			0.00	0.000000	3,500.00											
											Subtotal for PM Transaction Source										
											3,500.00										
											7,500.00										
											Project Total										
											7,500.00										

Figure: The Substantiated Billing report

Substantiated Billing - Consolidated Report

On the [Substantiated Billing - Consolidated](#) (PM650050) report form, the **Get File** button has been renamed to **Download Report**. Also, the following parameters have been introduced (see the screenshot below):

- **Select Transactions By:** An option indicating how the system selects the cost transactions to be included in the report:
 - *Date Range* (default): The PDF report will show all cost transactions that have been posted to account groups of the *Expense* type within the specified date range and that are related to the selected project. If this option is selected, the **Start Date** and **End Date** parameters become required.
 - *Pro Forma Invoice*: The PDF report will show all cost transactions that have been posted to account groups of the *Expense* type and are related to the selected pro forma invoice of the selected project. If this option is selected, the **Pro Forma Invoice Nbr.** parameter becomes required.
 - *Pro Forma Invoice and Date Range*: The PDF report will show all cost transactions that have been posted account groups of the *Expense* type within the specified date range and are related to the selected pro forma invoice of the selected project. If this option is selected, the **Start Date**, **End Date**, and **Pro Forma Invoice Nbr.** parameters become required.
- **Pro Forma Invoice Nbr.:** The reference number of a pro forma invoice for which the PDF report is prepared. The user can select only open and closed pro forma invoices of the project that is currently selected in the **Project** box.
- **Include Non-Billable Transactions:** A check box that indicates, if selected, that non-billable cost transactions are included in the PDF report. If the check box is cleared, the report includes only billable cost transactions—that is, project transactions that have the **Billable** check box selected on the [Project Transactions](#) (PM304000) form.
- **Copy Line Attachments to Report:** A check box that indicates, if selected, that line-level attachments of the included documents originating from the *AP*, *PM*, *GL*, or *CA* source are included in the prepared PDF report, along with the document-level attachments of these documents. If the check box is cleared, the prepared PDF report includes only document-level attachments of the included documents that originate from the *AP*, *PM*, *GL*, or *CA* source.

The screenshot shows the 'Substantiated Billing - Consolidated' report form. At the top, there is a 'DOWNLOAD REPORT' button. Below it, there are several input fields and dropdowns. The 'Project' field contains 'CSTRCERTIF - Certified Payroll'. The 'Select Transactions By' dropdown is set to 'Date Range'. The 'Start Date' is '5/1/2024' and the 'End Date' is '5/9/2024'. The 'Pro Forma Invoice Nbr.' field contains 'PF00047 - Milestone billing for p'. Below these fields are two checked checkboxes: 'Include Non-Billable Transactions' and 'Copy Line Attachments to Report'. The 'Select Transactions By' dropdown and the 'Copy Line Attachments to Report' checkbox are both highlighted with red boxes.

Figure: Substantiated Billing - Consolidated report

The layout of the PDF report has also been revised and improved. The following screenshot shows the prepared PDF when it includes line-level attachments.

The screenshot shows a dark-themed 'Table of Contents' application window. On the left, a tree view lists attachments under a 'Report Summary' node, which is highlighted with a red border. The attachments are:

- 005377 (Journal Transactions (GL) GL002150 2)\2024-05-09_14-44-03.png
- PM00002159 (Project Transactions (27459)\2024-05-09_14-49-21.png)

On the right side of the window, there are two large preview panes. The top pane is titled 'Cost Transactions' and displays a table with columns: Transaction Number, Description, P1000, P10000000, Net Amount, P100000000, P1000000000, and Project Number. The bottom pane is also titled 'Cost Transactions' and shows a similar table, with the first few rows blurred out.

Figure: Line-level attachments in the prepared PDF report

Projects and Construction: Improvements to the WIP Reports

In the construction industry, companies that use the percentage-of-completion method for revenue recognition provide a work-in-progress (WIP) schedule along with their financial statements. A WIP schedule is a detailed report used in project management to track the progress of ongoing projects and their financial status. It provides a snapshot of all projects that are currently in progress and offers insights into their financial performance, including costs incurred, revenue earned, and the percentage of completion.

In Acumatica ERP 2024 R2, the WIP reports provided in the system have been improved to provide better capabilities for tracking the current progress of a project, as well as the financial performance of particular project tasks. The following sections list the changes made to the [Project WIP](#) (PM651500) report and [Project WIP Detail](#) (PM651500) report. For more information about WIP reports, see [Construction Reports: WIP Reports](#).

Changes to Report Contents

The following columns have been renamed in the [Project WIP](#) (PM651500) and [Project WIP Detail](#) (PM651500) reports:

- **Recognized Revenue** to **Earned Revenue**
- **% Completed** to **% Complete**
- **Budgeted CO** (in the **Commitments** section) to **Approved CO**

The following report columns have been added:

- The **Pending CO** column in the **Commitments** section.
This column shows the total amount of change orders with the *On Hold* and *Pending Approval* statuses.
- The **Gross Profit %** column.
The system calculates the value by using the following formula: Gross Profit % = Gross Profit / Earned Revenue.
It calculates the **Gross Profit % Total** value by using the following formula: Gross Profit % Total = Gross Profit Total / Earned Revenue Total.

The following improvements have been made to the report calculation logic:

- If the shifted calendar is used in the selected company or branch, the system now uses the master calendar for the following report parameters: **From Period**, **To Period**, and **Actuals to Period**.
- All change order-related columns are now calculated based on the **Actuals to Period** report parameter.
- The **Remaining Contract** column is now calculated based on the project transactions that originate from AR.

Also, the printed report layout has been improved. The following report sections have been added:

- **Actual from [Period 1] to [Period 2]** with the following columns:
 - **Period Costs**
 - **% Budget Used**
 - **Period Billings**
- Period 1* and *Period 2* in the section title correspond to the financial periods that are specified in the **From Period** and **To Period** report parameters, respectively.
- **Actual to Period [Period 3]** with the following columns:
 - **Costs To Period**
 - **% Complete**
 - **Earned Revenue**

- **Billings To Period**
- **Billings in Excess of Cost**
- **Cost in Excess of Billings**
- **Gross Profit**
- **Gross Profit %**

Period 3 in the section title is the financial period that is specified in the **Actuals to Period** report parameters.

Changes to the Report Parameters

On the *Project WIP* (PM651500) report form, the **Company/Branch** box is now empty by default. If the **Company/Branch** parameter is empty, the projects that have the **Branch** box empty on the **Summary** tab of the *Projects* (PM301000) form are now included in the report.

On the *Project WIP Detail* (PM652500) report form, the options in the **Level of Details** box have been changed as follows:

- The *Account Group* and *Account Group + Cost Code* options have been removed.
- The *Project Task* and *Project Task and Cost Code* options have been added.

Projects and Construction: UI Enhancements

In Acumatica ERP 2024 R2, multiple enhancements have been made to the forms related to projects and construction. Also, some UI elements on these forms have been renamed for clarity and consistency.

This topic describes the main UI changes made to forms' layout and to the UI elements on these forms. The sections cover the changed forms in alphabetical order.

Account Groups (PM201000) Form

The form's layout has been improved. Also, the **Default Line Markup, %** box on the **Change Request Settings** tab has been renamed to **Default Line Markup (%)**.

Allocation Rules (PM207500) Form

The **Rate Type** and **If @Rate Is Not Defined** boxes on the **Calculation Rules** tab have been moved to the **Calculation Settings** section of the tab. (The **Rate Settings** section of the tab, where they were previously located, has been removed.)

In the **Debit Transaction** and **Credit Transaction** sections on the **Allocation Settings** tab, the following boxes have been renamed:

- **Task to Project Task**
- **Subaccount to Subaccount Mask**

Billing Rules (PM207000) Form

In the left pane, the **Invoice Group** column is now hidden by default. In the right pane of the form, the **Invoice Group** box has been added to the **Invoice Grouping** section.

The **Rate Type** and **If @Rate Is Not Defined** boxes have been moved from the **Transaction Selection Criteria** section to the **Calculation Settings** section of the tab.

In addition, the form's layout has been improved.

Change Order Classes (PM203000) Form

The form's layout has been simplified: The **Details** and **Attributes** tabs have been removed and the corresponding UI elements are now located in the Summary area of the form.

Change Orders (PM308000) Form

The form's layout has been improved. Also, in the Summary area of the form, the following boxes have been renamed:

- **Contract Time Change, Days to Contract Change (Days)**
- **Gross Margin % to Gross Margin (%)**

The **Change Request Cost Total**, **Change Request Line Total**, **Change Request Markup Total**, and **Change Request Price Total** boxes have been moved from the Summary area to the right pane of the **Change Requests** tab.

On the **Change Requests** tab, the following UI elements have been renamed:

- The **Contract Time Change, Days** column to **Contract Change (Days)**.
- The **Select Change Requests** button (and the dialog that opens when it is clicked) to **Add Change Request**.

The **Add Change Requests** and **Add Change Requests & Close** buttons in the dialog box have been renamed to **Add** and **Add & Close**, respectively.

On the **Revenue Budget** and **Cost Budget** tabs, the **Select Budget Lines** button (and the dialog that opens when it is clicked) has been renamed to **Add Budget Lines**.

On the **Commitments** tab, the **Select Commitments** button (and the dialog that opens when it is clicked) has been renamed to **Add Commitments**.

Change Requests (PM308500) Form

The form's layout has been improved. Additionally, in the Summary area of the form, the following boxes have been renamed:

- **Contract Time Change, Days to Contract Change (Days)**
- **Ext. Ref. Nbr. to External Ref. Nbr.**
- **Gross Margin % to Gross Margin (%)**

If a user creates a revenue change order based on a change request, the system now warns the user if any of the following settings were not filled in:

- **Estimation** tab: **Revenue Task**, **Revenue Account Group**, **Revenue Item**, and **Revenue Code**
- **Markups** tab: **Account Group**, **Project Task**, **Inventory ID**, and **Cost Code**

Commitments (PM306000) Form

The form's layout has been improved. The following elements have been removed from the Selection area of the form:

- The **Vendor**, **Project Manager**, and **Related Document Type** boxes
- The **Committed Totals** section (along with all its boxes)

Common Tasks (PM208030) Form

On the **Summary** tab, the **Progress Billing Base** box has been renamed to **Progress Billing Basis**.

In the **GL Accounts for Payroll** section on the **Summary** tab, the following boxes have been renamed:

- **Earnings Sub.** to **Earnings Subaccount**
- **Benefit Expense Sub.** to **Benefit Expense Subaccount**
- **Tax Expense Sub.** to **Tax Expense Subaccount**
- **PTO Expense Sub.** to **PTO Expense Subaccount**

Also, the form's layout has been improved.

Compliance Management (CL401000) Form

The form's layout has been improved. Additionally, the following columns have been renamed:

- **Received Date (Vendor)** to **Vendor Received Date**
- **Received from Joint Payee (Vendor)** to **Received from Joint Payee**

Daily Field Report (PJ304000) Form

The form's layout has been improved. In addition, on the following tabs, buttons have been renamed as follows:

- On the **Change Orders** tab: **Create New Change Order** is now named **Create Change Order**.

- On the **Change Requests** tab: **Create New Change Request** is now called **Create Change Request**.
- On the **Progress Worksheets** tab: **Select Budget Line** (and the dialog that opens when it is clicked) is now named **Add Budget Line**.
- On the **Project Issues** tab: **Create New Project Issue** is now called **Create Project Issue**.
- On the **Photo Logs** tab: **Create New Photo Log** is now named **Create Photo Log**.
- On the **Employee Expenses** tab: **Create New Expense Receipt** is now named **Create Expense Receipt**.

Drawing Log Preferences (PJ102000) Form

The form has been removed from the system. The settings from the form have been moved to the **Drawing Logs** tab of the [Project Management Preferences](#) (PJ101000) form.

Drawing Log (PJ303000) Form

The form's layout has been improved. Also, the **Export Drawing Log** command on the More menu has been renamed to **Export Drawings**. The **Current** check box in the Summary area of the form has been renamed to **Latest Revision**.

Drawing Logs (PJ403000) Form

The form's layout has been improved. In addition, the following commands on the More menu have been renamed:

- **New RFI to Create RFI**
- **New Project Issue to Create Project Issue**
- **Download ZIP to Export Drawings**

The **Current Only** check box in the Summary area of the form has been renamed to **Show Latest Revisions Only**.

Enable/Disable Features (CS100000) Form

The **Weather Services** check box has been added in the **Construction Project Management** group of features. If this check box is selected, the weather services functionality becomes available in the system.

Expense Receipt (EP301020) Form

The **Approval Details** tab has been renamed to **Approvals**.

Equipment (EP208000) Form

The **Status** box in the Summary area has been removed and its information is now reflected in the **Active** check box.

Equipment Time Cards (EP308000) Form

The **Setup**, **Run**, and **Suspend** sections, along with their corresponding UI elements, have been moved from the Summary area of the form to the **Totals** tab.

Photo (PJ305010) form

The **Change Photo** button in the Summary area has been replaced with the **Change Photo** button on the form toolbar.

Photo Log (PJ305000) Form

The form's layout has been improved. In addition, the following commands on the More menu have been renamed:

- **Export Photo Logs** to **Export Photos**
- **Email Photo Logs** to **Email**

Photo Logs (PJ405000) Form

In the Selection area of the form, the following boxes have been renamed:

- **Date From** to **From Date**
- **Date To** to **To Date**

Photo Log Preferences (PJ103000) Form

The form has been removed from the system. The settings from the form have been moved to the **Photo Logs** tab of the *Project Management Preferences* (PJ101000) form.

Potential Project Budget Overruns (PM404000) form

The form's layout has been improved. Additionally, in the Selection area of the form, the **Account Group**, **Cost Code**, and **Inventory ID** boxes have been removed. The **Start Date** and **End Date** boxes have been combined into one UI element, the **Date Range** box.

Print/Email Lien Waivers (CL502000) Form

The form's layout has been improved. Also, the **Received from Joint Payee (Vendor)** column has been renamed to **Received from Joint Payee**.

Pro Forma Invoices (PM307000) Form

The form's layout has been improved. In addition, on the **Progress Billing** tab, the **Progress Billing Base** column has been renamed to **Progress Billing Basis**.

Progress Worksheets (PM303000) Form

On the **Details** tab, the **Select Budget Line** button has been renamed to **Add Budget Line**, as has the dialog box that opens when a user clicks this button.

Project Budget Forecast (PM209600) Form

The form's layout has been improved. Also, the **Distribute** dialog box has been renamed to **Generate Forecast**. This dialog box opens when a user clicks **Generate Forecast** on the form toolbar.

Project Issue (PJ302000) Form

The **Print Project Issue** command on the More menu has been renamed to **Print**.

The **Schedule Impact** check box and the **Schedule Impact (Days)** box have been combined to have a single label, **Schedule Impact (Days)**, with a check box and a box. The box is now always visible; it is available for editing only if the check box is selected.

The **Cost Impact** check box and the **Cost Impact** box have also been combined to have a single label, **Cost Impact**, with a check box and a box. The box is now always visible; it is available for editing only if the check box is selected.

In addition, the form's layout has been improved.

Project Tasks (PM302000) Form

The form's layout has been improved. Additionally, on the **Summary** tab, the following boxes have been renamed:

- **Location to Customer Location**
- **Progress Billing Base to Progress Billing Basis**

In the **GL Accounts for Payroll** section on the **Summary** tab, the following boxes have been renamed:

- **Earnings Sub. to Earnings Subaccount**
- **Benefit Expense Sub. to Benefit Expense Subaccount**
- **Tax Expense Sub. to Tax Expense Subaccount**
- **PTO Expense Sub. to PTO Expense Subaccount**

Project Template Tasks (PM208010) Form

The form's layout has been improved. Also, on the **Summary** tab, the **Progress Billing Base** box has been renamed to **Progress Billing Basis**.

In the **GL Accounts for Payroll** section on the **Summary** tab, the following boxes have been renamed:

- **Earnings Sub. to Earnings Subaccount**
- **Benefit Expense Sub. to Benefit Expense Subaccount**
- **Tax Expense Sub. to Tax Expense Subaccount**
- **PTO Expense Sub. to PTO Expense Subaccount**

Project Templates (PM208000) Form

The form's layout has been improved. Additionally, on the **Tasks** tab and the **Revenue Budget** tab, the **Progress Billing Base** column has been renamed to **Progress Billing Basis**.

In the **GL Accounts for Payroll** section on the **Defaults** tab, the following boxes have been renamed:

- **Earnings Sub. to Earnings Subaccount**
- **Benefit Expense Sub. to Benefit Expense Subaccount**
- **Tax Expense Sub. to Tax Expense Subaccount**
- **PTO Expense Sub. to PTO Expense Subaccount**

In the **Retainage** section of the **Summary** tab, the **Use Steps** check box has been reworked to be an option button group that include two option buttons:

- **Fixed Retainage**, which corresponds to the cleared **Use Steps** check box
- **Retainage with Steps**, which corresponds to the selected **Use Steps** check box

Project Management Preferences (PJ101000) Form

The form has been completely redesigned and now includes settings for all construction project management documents. The following tabs are now available on the form:

- **Daily Field Reports** tab

The settings of the **Weather Services** section on this tab are available if the *Weather Services* feature is enabled on the [Enable/Disable Features](#) (CS100000) form. The **Enable Weather Service Integration for Daily Field Reports** check box has been removed from the section; the weather service functionality is now available when the feature is enabled.

- **Copy Settings** tab
- **Submittals** tab
- **Project Issues** tab
- **RFI** tab
- **Photo Logs** tab
- **Drawing Logs** tab
- **Due Dates** tab

Projects Preferences (PM101000) Form

The following boxes are now grouped in the **Default Settings** section on the **General** tab of the form: **Non-Project Code**, **Empty Item Code**, **Empty Item UOM**, **Default Change Order Class**, and **Default Quote Template**.

Project Transaction Details (PM401000) Form

The **Allocation Transactions** tab has been added. On this tab, the system shows only project transactions that have the **Allocation Transaction** check box selected.

The following elements have been removed from the Summary area of the form: the **Show Only Allocation Transactions** check box and the **Account**, **Employee**, **End Date**, **Start Date**, **AR Doc. Type**, **AR Doc. Nbr.**, **Tran. ID** boxes.

Also, the form's layout has been improved.

Project Transactions (PM304000) Form

On the **Details** tab, the **Type** column has been added to the lookup table that is opened when a user clicks the magnifier button in the **Project** column. This column indicates the type of the record in the table (*Customer Contract* or *Project*).

Also, the form's layout has been improved.

Projects (PM301000) Form

The form's layout has been improved. Also, in the Summary area of the form, the following UI elements have been renamed:

- **Currency Rate for Budget** to **Budget Currency Rate**
- **Margin** to **Margin Amount**
- **% to Margin (%)**

The following commands on the More menu have been renamed:

- **Activate Project** to **Activate**
- **Complete Project** to **Complete**
- **Suspend Project** to **Suspend**
- **Cancel Project** to **Cancel**
- **Run Project Billing** to **Run Billing**

On the **Summary** tab, the following changes have been made:

- In the **Retainage** section, the **Use Steps** check box has been reworked to be a group with the following option buttons:
 - **Fixed Retainage**, which corresponds to the cleared **Use Steps** check box
 - **Retainage with Steps**, which corresponds to the selected **Use Steps** check box
- In the **Billing and Allocation Settings** section, the **Default Location** box has been renamed to **Customer Location**.
- The **Project Manager** box has been moved from the **Summary** tab to the Summary area of the form.

On the **Tasks** tab and the **Revenue Budget** tab, the **Progress Billing Base** column has been renamed to **Progress Billing Basis**.

The **Project Task** box has been removed from the table selection area on the **Cost Budget** and **Revenue Budget** tabs.

On the **Cost Budget** tab, the **View Commitment Details** button has been renamed to **View Commitments**.

On the **Change Orders** tab, the + button has been renamed to **Create Change Order**.

On the **Change Requests** tab, the **Create Change Request** button has been added.

In the **GL Accounts for Payroll** section on the **Defaults** tab, the following boxes have been renamed:

- **Earnings Sub. to Earnings Subaccount**
- **Benefit Expense Sub. to Benefit Expense Subaccount**
- **Tax Expense Sub. to Tax Expense Subaccount**
- **PTO Expense Sub. to PTO Expense Subaccount**

Rate Tables (PM206000) Form

In the Summary area of the form, the **Rate Table** box (and the column in the lookup table that opens when a user clicks the magnifier button) has been renamed to **Rate Table Code**.

Rate Table Codes (PM204200) Form

The *Rate Tables (PM204200)* form has been renamed to *Rate Table Codes* to distinguish it from the *Rate Tables*(PM206000) form.

The **Rate Table** column on the form has been renamed to **Rate Table Code**.

Release Pro Forma Invoices (PM506000) Form

The following commands on the More menu have been renamed:

- **Process to Release**
- **Process All to Release All**

Report Definitions (CS206000) Form

The form's layout has been improved. Also, in the **Default Data Source Settings** section, the following boxes have been renamed:

- **Start Acc. Group to Start Account Group**
- **End Acc. Group to End Account Group**

Request for Information (PJ301000) form

The form's layout has been improved. Additionally, the **Documentation Link** box in the Summary area has been renamed to **Specification**.

The **Schedule Impact** check box and the **Schedule Impact (Days)** box have been combined to have a single label, **Schedule Impact (Days)**, with a check box and a box. The box is now always visible; it is available for editing only if the check box is selected.

The **Cost Impact** check box and the **Cost Impact** box have also been combined to have a single label, **Cost Impact**, with a check box and a box. The box is now always visible; it is available for editing only if the check box is selected.

Run Project Billing (PM503000) Form

The following columns have been added to the table on the form:

- **Project Manager:** The project manager of the project in the line
- **Branch:** The branch of this project
- **Billing Result:** The type of the document that will be generated during billing the project (pro forma invoice or AR invoice)

Submittals (PJ306000) form

The form's layout has been improved.

Other User Experience Improvements

The pop-up windows that previously were opened in a separate browser window have been reworked. Now the system opens the corresponding forms in a new browser tab of the same browser.

The **Description** box in the Summary area is no longer mandatory on any of the forms related to projects and construction.

Retail Commerce: Amazon Returns and Refunds

Acumatica ERP 2024 R2 now supports the import of returns and refunds from Amazon stores to Acumatica ERP.

New Entities and Store Settings

To support the import of returns and refunds from Amazon stores, the *Seller-Fulfilled Refund* and *Marketplace-Fulfilled Refund* entities with the *Import* sync directions have been added as follows:

- To the **Entities** tab of the *Amazon Stores* (BC201020) form, as shown in the following screenshot
- To the *Entities* (BC202000) form

The screenshot shows the 'Amazon Stores' form with the 'Amazon Amazon Store' selected. The top navigation bar includes 'CUSTOMIZATION' and 'TOOLS'. Below the header are standard toolbar icons. The main area has tabs for 'GENERAL', 'ENTITIES' (which is selected), 'INVENTORY', 'ORDERS', 'PAYMENTS', and 'SHIPPING'. Under 'GENERAL', there's a section for 'Connector' set to 'Amazon' and 'Store Name' set to 'Amazon Store'. A checkbox for 'Active' is checked, and 'Default' is unchecked. The 'ENTITIES' tab displays a list of entities with their sync direction, primary system, and max failed attempts. Two entities are highlighted with a red border: 'Seller-Fulfilled Refund' (Import, External System, 5 attempts) and 'Marketplace-Fulfilled Refund' (Import, External System, 5 attempts). Other entities listed include Product (Linking Only), Product Availability, Sales Order, Marketplace-Fulfilled Order, Sales Invoice (Obsolete), Payment, Non-Order Fees, and Shipment.

Entity	Sync Direction	Primary System	Max. Failed Attempts
Product (Linking Only)	Import	External System	5
Product Availability	Export	ERP	5
Sales Order	Import	External System	5
Marketplace-Fulfilled Order	Import	External System	5
Sales Invoice (Obsolete)	Import	External System	5
Payment	Import	External System	5
Non-Order Fees	Import	External System	5
Shipment	Export	ERP	5
Seller-Fulfilled Refund	Import	External System	5
Marketplace-Fulfilled Refund	Import	External System	5

Figure: The new entities on the Amazon Stores form

On the **Orders** tab (**Returns** section) of the *Amazon Stores* form, the **Seller-Fulfilled Return Type**, **Marketplace-Fulfilled Return Type**, and **Refund Reason Code** boxes have been added (see the following screenshot). While importing returns from the Amazon store, the system creates return orders of the types specified in these boxes, depending on the return fulfillment, and assigns the specified reason code to the return order lines.

The screenshot shows the 'Amazon Stores' configuration page. At the top, it displays 'Amazon Amazon Store' and has 'TEST CONNECTION' and 'AUTHORIZE' buttons. Below the tabs, there's a 'GENERAL' section with fields for 'Branch' (RETAIL - SweetLife Store) and 'Generic Customer' (ECOMGUEST - eCommerce). The 'TAXES' section contains a 'Tax Synchronization' checkbox. The 'ORDER' section includes fields for 'Seller-Fulfilled Order Type' (EO - eCommerce Order) and 'Marketplace-Fulfilled Order Type' (IN - Invoice). The 'SUBSTITUTION LISTS' section lists 'Ship Via Codes to Carriers' and 'Ship Via Codes to Carrier Services', both set to 'SPCCARRIERS'. The 'RETURNS' section is highlighted with a red border, showing fields for 'Seller-Fulfilled Return Type' (ER - eCommerce Return Ord), 'Marketplace-Fulfilled Return Type' (CM - Credit Memo), and 'Refund Reason Code' (EREFUND - eCommerce Ref). The 'MARKETPLACE-FULFILLED ORDER' section includes a 'Release Invoices' checkbox and fields for 'Marketplace Warehouse', 'Marketplace Warehouse Location', and 'Shipping Account'.

Figure: The return settings on the Amazon Stores form

Configuration of Seller-Fulfilled Returns

To enable the import of seller-fulfilled returns and refunds, an administrative user activates the **Seller-Fulfilled Return** entity on the **Entities** tab of the [Amazon Stores](#) (BC201020) form. On the **Orders** tab (**Returns** section), the administrator also specifies the order type in the **Seller-Fulfilled Return Type** box and the reason code in the **Refund Reason Code** box; these settings will be used for imported returns. On the [Order Types](#) (SO201000) form, the specified order type must have the **RC - Return for Credit** order template selected in the Summary area and the **Disable Automatic Tax Calculation** check box selected on the **General** tab.

Configuration of Marketplace-Fulfilled Returns

To enable the import of marketplace-fulfilled returns and refunds, an administrative user activates the **Marketplace-Fulfilled Return** entity on the **Entities** tab of the [Amazon Stores](#) (BC201020) form. On the **Orders** tab (**Returns** section), the administrator also specifies the order type in the **Marketplace-Fulfilled Return Type** box and the reason code in the **Refund Reason Code** box; these settings will be used for imported returns. On the [Order Types](#) (SO201000) form, the specified order type must have the **CM - Credit Memo** order template selected in the Summary area and the **Disable Automatic Tax Calculation** check box selected on the **General** tab.

Import of Returns and Refunds

During the preparing and processing of the data for the **Seller-Fulfilled Refund** and **Marketplace-Fulfilled Refund** entities on the [Prepare Data](#) (BC501000) and [Process Data](#) (BC501500) forms, the system creates return orders of the type specified on the **Orders** tab of the [Amazon Stores](#) (BC201020) form that corresponds to the return fulfillment. The status of return orders created on the [Sales Orders](#) (SO301000) form is one of the following, depending on the state of the **Hold Orders on Entry** check box for the order type on the **General** tab of the [Order Types](#) (SO201000) form:

- *On Hold* if the check box is selected
- *Open* if the check box is cleared



If the *Approval Workflow* feature is enabled on the [Enable/Disable Features](#) (CS100000) form and the approval workflow is configured for sales orders, the imported returns are assigned the *Pending Approval* status.

The system-inserted description of an imported return order holds the information about the return identifier as well as the identifier of the original order in Amazon in the following format: *Return order <return ID> for marketplace-fulfilled order <original order ID> from <ERP store name> store*.

On the **Details** tab of the [Sales Orders](#) (SO301000) form, the system adds returned items to the created return order with the following settings:

- **Warehouse:** The default warehouse of the item.
For a marketplace-fulfilled return, the system uses the warehouse specified in the **Marketplace Warehouse** box on the **Orders** tab (**Marketplace-Fulfilled Order** section) of the [Amazon Stores](#) form, if any.
- **Location:** The default receipt location of the item.
For a marketplace-fulfilled return, the system uses the location specified in the **Marketplace Warehouse Location** box on the **Orders** tab (**Marketplace-Fulfilled Order** section) of the [Amazon Stores](#) form, if any.
- **UOM:** The sales UOM of the item.
- **Reason Code:** The reason code specified in the **Refund Reason Code** box on the **Orders** tab of the [Amazon Stores](#) form.
- **Notes:** The specific reason code from the Amazon store in the following format: *<return type> || <return reason code>*.

For each return order, the system also imports the payment with the refunded amount.

Limitations of Importing Returns and Refunds

The following limitations apply to the import of returns and refunds from Amazon:

- The system does not support real-time synchronization of returns and refunds. That is, the returns and refunds can be imported from Amazon with delays.
- Returns can be imported for a date range of not more than 60 days at once. That is, on the [Prepare Data](#) (BC501000) form, in the *Incremental* mode, the system prepares the returns to be imported that have been created within the last 60 days. In the *Incremental by Date* or *Full* mode, the selected date range must not exceed 60 days.
- During the import of marketplace-fulfilled returns for which Amazon's warehouse has received returned items, Amazon provides no information if the items have been discarded or put back in stock. Thus, the system always puts the returned items in stock with the imported marketplace-fulfilled returns.
- Amazon does not provide any tax-related information except the tax amount. Thus, the default tax zone and tax specified in the **Primary Tax Zone** and **Default Tax** boxes on the **Orders** tab (**Taxes** section) of the [Amazon Stores](#) (BC201020) form are used for returns and refunds.



To avoid amount discrepancies in returns and refunds, the tax recalculation should be disabled for the return types specified in the **Seller-Fulfilled Return Type** and **Marketplace-Fulfilled Return Type** boxes on the **Orders** tab (**Returns** section) of the [Amazon Stores](#) form. That is, an administrative user should select the **Disable Automatic Tax Calculation** check box on the **General** tab of the [Order Types](#) (SO201000) form for the return types.

- Amazon charges a seller fees for refunds and pays the seller back the refund amount deducting the fee. However, Acumatica ERP has no ability to add these charges to payments, and no refund fees are imported to Acumatica ERP.

Retail Commerce: Improvements to the Import of Customer and Companies from Shopify

In Shopify, it is possible to sell goods and services to business customers and individual customers. A business customer is set up in the Shopify store as a *company* (see Item 1 in the screenshot below), whereas an individual customer is set up as a *customer* and can be associated with a company. A company may have multiple locations (Item 2), and multiple customers may be associated with the company (Item 3). Each customer that is associated with a company may be assigned a role in multiple company's locations.

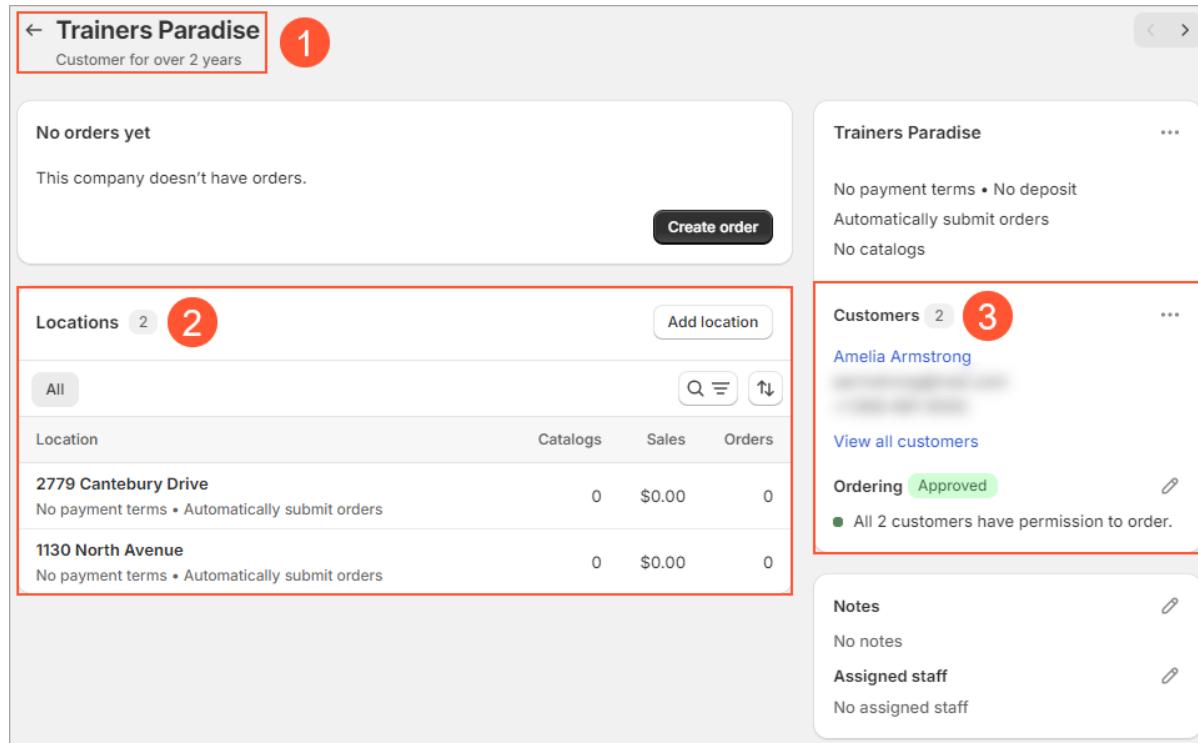


Figure: A company in a Shopify store

Starting in Version 2023 R1, Acumatica ERP began supporting the Shopify's customer hierarchy. It performs the synchronization of companies and customers as follows:

- It defines companies in Shopify as customers of the *Organization* category on the [Customers](#) (AR303000) form.
- It defines customers in Shopify as customers of the *Individual* category on the [Customers](#) form.
- It defines customers associated with companies in Shopify as contacts on the [Contacts](#) (CR303000) form.
- It defines company and customer locations in Shopify as locations on the [Customer Locations](#) (AR303020) form.

To identify each company or customer that has been created on the [Customers](#) form during the import from the Shopify store, the system inserts the external identifier of the company or customer, along with the store name, in the **Ext. Ref. Nbr.** box on the **General** tab in the following format: <External Identifier> - <Store Name>. See the following screenshot, which also shows *Organization* in the **Customer Category** box to indicate that it is a company in Shopify. For details, see [Synchronizing Individual and Business Customers](#).

The screenshot shows the Acumatica ERP Customer form for a record named 'C000000001 - Trainers Paradise'. The top navigation bar includes 'NOTES', 'FILES', 'CUSTOMIZATION', and 'TOOLS'. Below the header, there's a toolbar with icons for search, add, delete, etc., followed by 'VIEW ACCOUNT' and a three-dot menu.

General Information:

- * Customer ID: C000000001 - Trainers Paradise
- * Customer Status: Active
- * Customer Class: COMMERCEBB - Local B2B customer
- Customer Category: Organization (highlighted with a red border)

Financials:

Balance	0.00
Prepayment Balance	0.00
Retained Balance	0.00

Tab Navigation: GENERAL, FINANCIAL, BILLING, SHIPPING, LOCATIONS, PAYMENT METHODS, CONTACTS, SALESPERSONS.

ACCOUNT INFO: Account Name: Trainers Paradise

ACCOUNT ADDRESS:

- Address Line 1: 1130 North Avenue
- Address Line 2:
- City: Burlington
- State:
- Postal Code: 05408
- * Country: US - United States of America

ADDITIONAL ACCOUNT INFO:

- Business 1:
- Business 2:
- Fax:
- Account Email:
- Web:
- Ext Ref Nbr: 524543 - B2B (highlighted with a red border)

PRIMARY CONTACT:

- Name:
- Job Title:
- Email:
- Business 1:
- Cell:

Figure: A customer that represents a Shopify company

Acumatica ERP 2024 R2 extends this functionality to create references between contacts and locations imported from Shopify to better support the Shopify hierarchy and avoid duplication of contacts and locations.

Changes to the Import of Companies

During the synchronization of the *Company* entity, when the system imports a company from the Shopify store to Acumatica ERP, it also specifies the following settings in the newly created or previously imported records on the following forms:

- The **Contacts** (CR303000) form: For a contact created for a customer associated with the company, the system inserts the identifier of the customer from the Shopify store, along with the store name, in the **Ext. Ref. Nbr.** box on the **CRM Info** tab in the following format: <Customer Identifier> - <Store Name> (see the following screenshot).

The screenshot shows the Acumatica Contacts module. At the top, it displays 'Danny Heady - Trainers Paradise'. The CRM INFO tab is selected. In the CRM section, the 'Ext Ref Nbr' field contains '7387114995967 - B2B', which is highlighted with a red border. Other fields include 'Contact Class: BAKERY - Bakeries', 'Workgroup: ', and 'Sales Territory ID:'. Below the CRM section, tabs for DETAILS, ACTIVITIES, ATTRIBUTES, RELATIONS, LEADS, OPPORTUNITIES, CASES, and CAMPAIGNS are visible.

Figure: A contact created for a Shopify customer associated with a company

- The **Customer Locations** (AR303020) form: For a location created for a company location, the system inserts the identifier of the location from the Shopify store, along with the store name, in the **External ID** box on the **General** tab in the following format: <Location Identifier> - <Store Name> (see the following screenshot).

The screenshot shows the Acumatica Customer Locations module. At the top, it displays 'C000000001 MAIN - 1130 North Avenue'. The GENERAL tab is selected. In the LOCATION INFO section, the 'Location Name' field contains '1130 North Avenue'. In the ADDITIONAL LOCATION INFO section, the 'External ID' field contains '557311 - B2B', which is highlighted with a red border. Other fields include 'Account Name: Trainers Paradise', 'Attention: ', 'Business 1: Business 1', 'Business 2: ', 'Fax: ', 'Email: ', 'Web: ', and 'Override' checked.

Figure: A location associated with a Shopify location

Changes to the Import of Individual Customers

During the synchronization of the *Customer* entity, when the system imports a customer, including a customer associated with a company, from the Shopify store to Acumatica ERP, it inserts an additional setting in the newly

created or previously imported locations. On the [Customer Locations](#) (AR303020) form, the system adds the location identifier from the Shopify store, along with the store name, to the **External ID** box on the **General** tab in the following format: <Location Identifier> - <Store Name>.

Manual Matching of Existing Records

After the synchronization of companies and customers from the Shopify store made after an upgrade of Acumatica ERP to Version 2024 R2, the system may fail to assign external identifiers from Shopify to some companies, customers, contacts, or locations in Acumatica ERP. This may happen, for example, because these records have been created manually or their sync records have been deleted before the first import with Acumatica ERP 2024 R2. In this case, it is still possible to manually create these references. The administrator can add the external identifier of a record from the Shopify store, along with the store name, to the corresponding record in Acumatica ERP as follows:

- The <Company Identifier> - <Store Name> reference to the customer of the *Organization* category in the **Ext. Ref. Nbr.** box on the **General** tab of the [Customers](#) (AR303000) form
- The <Customer Identifier> - <Store Name> reference to the customer of the *Individual* category in **Ext. Ref. Nbr.** box on the **General** tab of the [Customers](#) form
- The <Customer Identifier> - <Store Name> reference to the contact created for the customer associated with the company in the **Ext. Ref. Nbr.** box on the **CRM Info** tab of the [Contacts](#) (CR303000) form
- The <Location Identifier> - <Store Name> reference to the company location associated with the company or to the customer location associated with the customer in the **External ID** box on the **General** tab of the [Customer Locations](#) (AR303020) form

The system will validate all the manually added references during the next synchronization of the *Company* and *Customer* entities on the [Process Data](#) (BC501500) and [Sync History](#) (BC301000) forms and raise errors if issues are found.

Retail Commerce: Synchronization of Payments with Amazon

In Amazon, if an order is shipped in parts, a separate payment is recorded for each shipment. In previous versions of Acumatica ERP, these payments are imported as separate documents, which negatively affects the synchronization performance and makes the processing of sales orders more complex.

Acumatica ERP 2024 R2 improves the synchronization of Amazon payments.

Improvements to the Payment Synchronization

After an upgrade of Acumatica ERP to Version 2024 R2, if an Amazon order has multiple payments, the system allows importing all the order payments as a single document when the order is fully shipped in the Amazon store. The external identifier of such a payment equals the external identifier of the order.

For backward compatibility, if at least one payment has already been imported for an Amazon order to Acumatica ERP before the upgrade to Version 2024 R2, the system continues importing the rest of the order payments as separate documents by using the previous approach. The external identifiers of such partial payments consist of the external identifier of the order followed by a semicolon and the sequence number in the following format: <Order External ID>;<Sequence Number>.

On the [Sync History](#) (BC301000) form, a user can manually create a sync record for a payment to be imported from the Amazon store. A user does this by clicking **Add New** to open the **Add or Edit Sync Status** dialog box, selecting the **Need to Sync** check box, and entering the **External ID** (see the following screenshot). When the user clicks **OK**, the system allows the creation of the sync record only if the following conditions are met:

- The sales order with the provided external ID has already been imported.
- The format of the provided payment identifier has been entered correctly considering if the order has any imported payments.

If there are no sync records for payments imported for the order, the entered external ID must consist of only the order number, for example, 123-1234567-1234567.

If there is at least one sync record for a partial payment imported for the order, the entered external ID must consist of the order number followed by a semicolon and the sequence number, for example, 123-1234567-1234567;2.

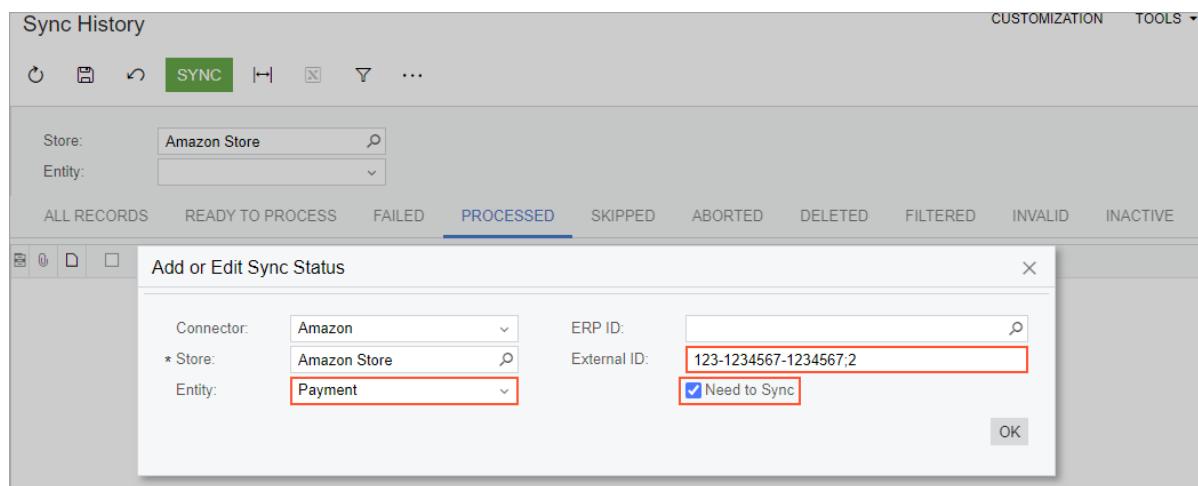


Figure: The manual creation of a sync record for an Amazon payment

Retail Commerce: Synchronization of Shopify Payment Terms

In Shopify, users can select payment terms for orders that are due to be paid at a later date, as the following screenshot shows.

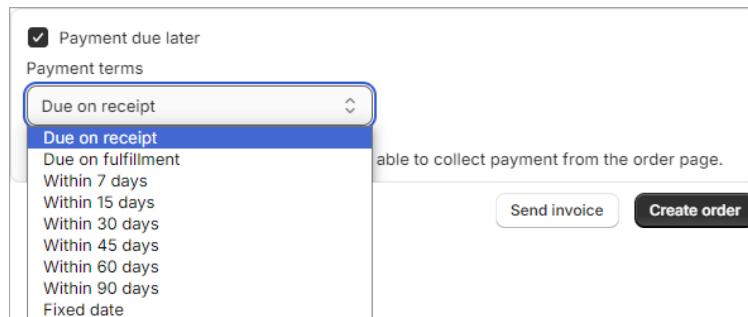


Figure: The selection of payment terms for a Shopify order

In Acumatica ERP 2024 R1 and previous versions, the system assigned the credit terms specified for the customer in Acumatica ERP to imported sales orders instead of the exact payment terms specified in Shopify.

Starting in Acumatica ERP 2024 R2, the payment terms specified for Shopify orders can be imported to Acumatica ERP sales orders.

Mapping of Payment Terms

To make the system assign the proper credit terms to an order imported from a Shopify store, an administrative user should perform the following steps to set up the mapping of the Shopify payment terms:

1. Defining a set of credit terms on the [Credit Terms](#) (CS206500) form that corresponds to each set of payment terms in Shopify.
2. Creating a substitution list for payment terms on the [Substitution Lists](#) (SM206026) form, as shown in the following screenshot. For each identifier of a set of payment terms from Shopify in the **Original Value** column, the administrator specifies the identifier of a set of credit terms defined on the [Credit Terms](#) form in the **Substitution Value** column.

Substitution Lists		CUSTOMIZATION	TOOLS
* Substitution List:	SPCTERMS		
Table Name:			
Field Name:			
Original Value	Substitution Value		
Net 7	7D		
Net 15	15D		
Net 30	30D		
Net 45	45D		
Net 60	60D		

Figure: A substitution list defined for payment terms

3. Selecting the substitution list in the **Payment Terms** box of the **Orders** tab on the [Shopify Stores](#) (BC201010) form, as the following screenshot shows.

The screenshot shows the Acumatica interface for managing Shopify stores. The top navigation bar includes 'CUSTOMIZATION' and 'TOOLS'. The main area has tabs for GENERAL, ENTITIES, CUSTOMERS, INVENTORY, ORDERS (which is selected), PAYMENTS, and SHIPPING. Under the ORDERS tab, there are several configuration sections. One section is labeled 'TAXES' with checkboxes for 'Tax Synchronization' and 'Use as Primary Tax Zone'. Another section is labeled 'SUBSTITUTION LISTS' with dropdowns for 'Taxes' (SPCTAXCODES), 'Tax Categories' (SPCTAXCLASSES), 'Shipping Carriers' (SPCCARRIERS), and 'Payment Terms' (SPCTERMS). The 'Payment Terms' dropdown is specifically highlighted with a red border.

Figure: The substitution list specified on the Shopify Stores form

The following table lists all the options that can be selected for an order in the **Payment terms** drop-down box in Shopify (in the left column) and their identifiers (in the right column), which should be mapped with Acumatica ERP credit terms.

Payment Terms	Identifier
<i>Due on receipt</i>	<i>Due on receipt</i>
<i>Due on fulfillment</i>	<i>Due on fulfillment</i>
<i>Within 7 days</i>	<i>Net 7</i>
<i>Within 15 days</i>	<i>Net 15</i>
<i>Within 30 days</i>	<i>Net 30</i>
<i>Within 45 days</i>	<i>Net 45</i>
<i>Within 60 days</i>	<i>Net 60</i>
<i>Within 90 days</i>	<i>Net 90</i>
<i>Fixed date</i>	<i>Fixed</i>

Optional Settings for Mapping of Payment Terms

In addition to creating the substitution list for the Shopify payment terms, an administrative user can perform the following optional setup steps:

1. Creating credit terms on the [Credit Terms](#) (CS206500) form with identifiers identical to identifiers of the Shopify payment terms. The system will search for credit terms that match the payment terms on this form if no mapping has been found in the substitution list selected on the [Shopify Stores](#) (BC201010) form.

2. Assigning a set of credit terms to each customer on the **Financial** tab of the [Customers](#) (AR303000) form. The system will use the customer-specific credit terms and ignore the payment terms specified for the Shopify order only if it finds no matching credit terms in the substitution list or on the [Credit Terms](#) form.



If no payment terms are specified for an order in the Shopify store, the system uses the customer's credit terms for the sales order imported to Acumatica ERP.

Importing of Payment Terms

When sales orders with payment terms selected are imported from the Shopify store, the system searches for the credit terms to fill in the **Terms** box on the **Financial** tab of the [Sales Orders](#) (SO301000) form for the corresponding sales order as follows:

1. Checks whether the payment terms are mapped to any credit terms in the substitution list specified in the **Payment Terms** box of the **Orders** tab on the [Shopify Stores](#) (BC201010) form; if so, it inserts the terms and stops the search.
2. Checks whether the payment terms match any credit terms on the [Credit Terms](#) (CS206500) form; if so, it inserts the terms and stops the search.
3. Inserts the credit terms that have been specified for the customer on the **Financial** tab of the [Customers](#) (AR303000) form.

Limitations of Importing Payment Terms

If payment terms have been changed for an order in the Shopify store, the connector will not import this change timely because of the limitations of the Shopify Rest API. This may lead to the synchronization of the order with outdated payment terms. As a workaround, after changing payment terms for an order in the Shopify store, a user should archive the order and then unarchive it back. The order synchronization performed after this action imports the updated payment terms.

Retail Commerce: UI Enhancements

In Acumatica ERP 2024 R2, multiple enhancements have been made to the forms related to the Acumatica ERP Retail Edition. Also, some UI elements on these forms have been renamed for clarity and consistency.

This topic describes the main UI changes made to forms' layout and to the UI elements on these forms. The sections cover the changed forms in alphabetical order.

Amazon Stores (BC201000) Form

The following tabs have been renamed:

- **Connection Settings** to **General**
- **Entity Settings** to **Entities**
- **Inventory Settings** to **Inventory**
- **Order Settings** to **Orders**
- **Payment Settings** to **Payments**
- **Shipping Settings** to **Shipping**

On the **General** tab, the following changes have been made:

- The **Settings** section has been renamed to **Connection**.
- The **System Settings** section has been renamed to **Miscellaneous**.
- The **Administrator** box has been moved from the **Store Administrator Details** section to the **Miscellaneous** section.
- The **Store Administrator Details** section has been removed.
- The **Store Properties** section has been removed, including the **Seller Partner ID** box within it.

On the **Entities** tab, the **Max. Number of Failed Attempts** column has been renamed to **Max. Failed Attempts**.

On the **Orders** tab, the following changes have been made:

- The **Generic Customer** box has been moved from the **Customer** section to the **General** section.
- The **Customer** section has been deleted.
- An **Edit** button has been added to the right of each of the following boxes:
 - **Gift Wrapping Item (Order** section)
 - **Marketplace Warehouse (Marketplace-Fulfilled Order** section)
 - **Marketplace Warehouse Location (Marketplace-Fulfilled Order** section)
 - **Shipping Account (Marketplace-Fulfilled Order** section)
 - **Primary Tax Zone (Taxes** section)
 - **Default Tax (Taxes** section)

A user can click the **Edit** button to view the selected record on the form where it was created and make any needed changes.

BigCommerce Stores (BC201000) Form

The following tabs have been renamed:

- **Connection Settings** to **General**
- **Entity Settings** to **Entities**
- **Customer Settings** to **Customers**
- **Inventory Settings** to **Inventory**

- **Order Settings** to **Orders**
- **Payment Settings** to **Payments**
- **Shipping Settings** to **Shipping**

On the **General** tab, the following changes have been made:

- The **Rest Settings** section has been renamed to **Connection**.
- The **WebDAV Settings** section has been renamed to **File Access**.
- The **System Settings** section has been renamed to **Miscellaneous**.
- The **Store Admin Path** box has been renamed to **Store Admin URL** and moved to the **Connection** section.
- The **Administrator** box has been moved from the **Store Administrator Details** section to the **Miscellaneous** section.
- The **Store Administrator Details** section has been removed.

On the **Entities** tab, the **Max. Number of Failed Attempts** column has been renamed to **Max. Failed Attempts**.

On the **Orders** tab, an **Edit** button has been added to the right of each of the following boxes:

- **Default Tax Zone** (**Taxes** section)
- **Taxes** (**Substitution Lists** section)
- **Tax Categories** (**Substitution Lists** section)
- **Shipping Carriers** (**Substitution Lists** section)

Entities (BC202000) Form

In the Summary area, the **Max. Number of Failed Attempts** box has been renamed to **Max. Failed Attempts**.

Prepare Data (BC501000) Form

In the Selection area, the **Start Date** and **End Date** boxes have been combined into one UI element, the **Date Range** box.

By clicking the column header of the Selected column, a user can now select all the records in the table at once.

Process Data (BC501500) Form

In the Selection area, the **Processing Limit (Rows)** box has been renamed to **Row Limit**.

Protect Personal Data (BC502000) Form

The identifier of the [Protect Personal Data](#) form has been changed from *BC601000* to *BC502000*.

In the Selection area, the **Document Date Within** box has been renamed to **Max. Document Age (Days)**.

The **Pseudonymized** column now contains a check box instead of options (*True* or *False*). If the personal data of a document has been pseudonymized, the system selects the check box in the column; otherwise, the check box is cleared.

In the table, the following columns have been renamed:

- **Type to Doc. Type**
- **Ref Nbr to Ref. Nbr.**
- **Master Entity Type to Entity**
- **Ship-To Company Name to Ship-To Account Name**
- **Bill-To Company Name to Bill-To Account Name**

Shopify Stores (BC201010) Form

The following tabs have been renamed:

- **Connection Settings** to **General**
- **Entity Settings** to **Entities**
- **Customer Settings** to **Customers**
- **Inventory Settings** to **Inventory**
- **Order Settings** to **Orders**
- **Payment Settings** to **Payments**
- **Shipping Settings** to **Shipping**

On the **General** tab, the following changes have been made:

- The **Store Settings** section has been renamed to **Connection**.
- The **System Settings** section has been renamed to **Miscellaneous**.
- The **Administrator** box has been moved from the **Store Administrator Details** section to the **Miscellaneous** section.
- The **Store Administrator Details** section has been removed.
- The **API Key** box (**Connection** section) has been removed.

On the **Entities** tab, the **Max. Number of Failed Attempts** column has been renamed to **Max. Failed Attempts**.

On the **Orders** tab, the following changes have been made:

- The **Branch** box has been moved out of the **General** section.
- The **General** section has been removed.
- The order of sections has been reorganized to improve the tab's layout.
- An **Edit** button has been added to the right of each of the following boxes:
 - **Default Tax Zone (Taxes** section)
 - **Taxes (Substitution Lists** section)
 - **Tax Categories (Substitution Lists** section)
 - **Shipping Carriers (Substitution Lists** section)

Sync History (BC301000) Form

The **Created Date (External)** and **Created Date (ERP)** columns have been added to the table.

The **Created Date (External)** column holds the date and time of created documents of the *Sales Order*, *Marketplace-Fulfilled Order*, and *Payment* entities in the Amazon store.

The **Created Date (ERP)** column holds the date and time of created documents of the *Sales Order* and *Marketplace-Fulfilled Order* entities in Acumatica ERP during the import of the corresponding documents from the Amazon store.

Retail Commerce: Volume Pricing and Quantity Rules in Shopify

In Shopify, a pricing manager can use quantity rules and volume pricing to specify certain quantity requirements or price breaks for products sold to business customers. For example, a company may use quantity rules if it needs to sell a product in certain increments or provide the minimum quantity of the product that a customer can purchase at the same time. If a company needs to offer price breaks to customers who purchase a certain quantity of a product, volume pricing for the product is configured.

In Acumatica ERP 2024 R1 and previous versions, the system has already supported the export of sales price lists. For details, see [Synchronizing Sales Price Lists](#).

Acumatica ERP 2024 R2 expands this functionality with the ability to define volume pricing and quantity rules at the price-list level and export these rules to Shopify.

Configuration of Quantity Rules

To define the minimum quantity of an item that can be sold, a pricing manager creates a price of the *Customer Price Class* type for the item on the [Sales Prices](#) (AR202000) form and specifies a whole number greater than 1 as the break quantity, as shown in the following screenshot.

The screenshot shows the Acumatica Sales Prices form. The top section includes fields for Price Type (All Prices), Price Code (7/9/2024), Item Class ID, Inventory ID, Warehouse, Price Class, Price Manager, and Price Workgroup. Below this is a toolbar with icons for search, add, edit, delete, and refresh. The main grid displays a single record for an item. The columns include Price Type, Price Code, Inventory ID, Description, UOM, Warehouse, Promotion, Break Qty, Price, Effective Date, and Expiration Date. The record shown is for a Customer Price Class (RETAIL) with Price Code APJAM96, Description Apple jam 96 oz, UOM PIECE, Break Qty 5.00, Price 45.1500, Effective Date 1/1/2024, and Expiration Date (not visible).

Price Type	Price Code	Inventory ID	Description	UOM	Warehouse	Promotion	Break Qty	Price	Effective Date	Expiration Date
Customer Price Class	RETAIL	APJAM96	Apple jam 96 oz	PIECE			5.00	45.1500	1/1/2024	

Figure: A price with a minimum quantity

During the synchronization of price lists, the system creates a catalog for each price code in Shopify. In the catalog, it defines quantity rules for the corresponding product with a minimum quantity equal to the item's break quantity from Acumatica ERP, as the following screenshot shows.



If the *Multicurrency Accounting* feature is enabled on the [Enable/Disable Features](#) (CS100000) form, the system also considers the currency and creates a catalog for each combination of the price code and the currency in Shopify.

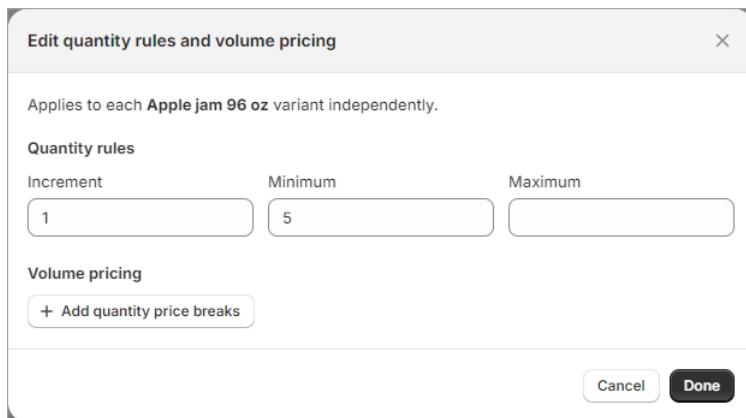


Figure: Quantity rules exported to a product in a Shopify store

If there are multiple prices for the same item with the same price code but different break quantities on the [Sales Prices](#) form, during the export, the system uses the lowest break quantity as the minimum quantity.

If an item has only a price with a break quantity of either of 0 or 1, the system does not create quantity rules for the item.

Configuration of Volume Pricing

To define volume pricing for an item, a pricing manager creates a set of prices of the *Customer Price Class* type for the item on the [Sales Prices](#) (AR202000) form and specifies the same price code but different break quantities and prices for them, as the following screenshot shows.

Sales Prices											CUSTOMIZATION	TOOLS
											All Records	
Price Type:	All Prices	Item Class ID:										
Price Code:										Inventory ID:		
Effective As Of:	7/9/2024	Warehouse:										
Price Class:										Price Manager:		
Price Workgroup:										Price Workgroup:		
<input type="checkbox"/> Me										<input type="checkbox"/> My		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All Records	
Price Type	Price Code	* Inventory ID	Description	* UOM	Warehouse	Promotion	Break Qty	Price	Effective Date	Expiration Date		
Customer Price Class	RETAIL	CHERJAM96	Cherry jam 96 oz	PIECE			1.00	45.1500	1/1/2024			
Customer Price Class	RETAIL	CHERJAM96	Cherry jam 96 oz	PIECE			5.00	43.4500	1/1/2024			
Customer Price Class	RETAIL	CHERJAM96	Cherry jam 96 oz	PIECE			10.00	41.7500	1/1/2024			
Customer Price Class	RETAIL	CHERJAM96	Cherry jam 96 oz	PIECE			15.00	39.9500	1/1/2024			
Customer Price Class	RETAIL	CHERJAM96	Cherry jam 96 oz	PIECE			20.00	38.1000	1/1/2024			

Figure: A set of prices with volume pricing

During the synchronization of price lists, the system creates a catalog in Shopify for each price code. In the catalog, it defines volume pricing for the corresponding product based on the item's break quantities and prices from Acumatica ERP, as shown in the following screenshot.



If the *Multicurrency Accounting* feature is enabled on the [Enable/Disable Features](#) (CS100000) form, the system also considers the currency and creates a catalog for each combination of the price code and the currency in Shopify.

Quantity	Price
Minimum 1	\$ 45.15
Break 1 5	\$ 43.45
Break 2 10	\$ 41.75
Break 3 15	\$ 39.95
Break 4 20	\$ 38.10

Figure: Volume pricing rules exported to a product in a Shopify store

If there are break quantities greater than 1 among the item's prices with the same price code on the [Sales Prices](#) form, the system also defines quantity rules for the product with the minimum quantity equal to the item's lowest break quantity.

Required Settings of Price Lists

All the price lists to be exported to Shopify, including those that have volume pricing and quantity rules defined, must meet the following criteria:

- **Price Type** is set to *Customer Price Class*.
- A customer price class is specified in the **Price Code** column.
- The sales UOM of the item is specified in the **UOM** column.
- A whole number is specified in the **Break Qty.** column.

Exporting of Price Lists

To export price lists along with volume pricing and quantity rules from Acumatica ERP to a Shopify store, an administrative user first needs to activate the *Price List* entity on the **Entity Settings** tab of the [Shopify Stores](#) (BC201010) form.

During the synchronization of the *Price List* entity, the system creates a catalog in the Shopify store for each combination of the price code and the currency. The name of the catalog consists of the price code followed by a hyphen and the currency code. For example, prices that have been defined for the *LOCAL* price code in *USD* and *CAD* will be exported to the *LOCAL-USD* and *LOCAL-CAD* catalogs in the store.

If any errors happen during the import of price lists with volume pricing and quantity rules, the system creates detailed log records that can be accessed by clicking **Tools > Trace** on the form title bar.

The following limitations apply to the exporting of price lists with volume pricing and quantity rules to Shopify:

- Only prices that are effective on the date of the synchronization are exported.
- If both a regular price and a promotional price exist for the same item, price code, UOM, currency, and break quantity on the [Sales Prices](#) (AR202000) form, the promotional price is exported rather than the regular one.

- A maximum of 11 price tiers can be exported per item in a price list. Price tiers beyond the limit are skipped.
- The system exports only prices with whole numbers specified as the break quantity.
- The incremental value for new quantity rules created during the export is always 1 and is not updated. For example, if the incremental value is changed for the quantity rules in the admin area of the Shopify store, the system does not update it during the subsequent imports.
- The system neither specifies nor updates the maximum value for quantity rules during the export.
- If the incremental value, the maximum quantity, or both are changed for the quantity rules of a product in the admin area of the Shopify store, the system exports only those item prices whose break quantities comply with the incremental value and are not greater than the maximum quantity.
- If an item has prices with a break quantity of 0 and a break quantity of 1 and the same price code and currency on the [Sales Prices](#) form, the system exports the one with a break quantity of 1 rather than the one with a break quantity of 0, unless the price with a break quantity of 0 is promotional.
- If all the prices of an item already exported to the Shopify store are deleted in Acumatica ERP, during the synchronization, the system deletes the volume pricing for the corresponding product from the catalog. The system also deletes the quantity rules, which resets the minimum quantity to the default value of 1, if the incremental value has not been manually changed for the product in the admin area of the Shopify store. If the incremental value has been changed, the system does not delete the quantity rules and does not reset the minimum quantity.

System Administration: Ability to Customize Snapshot Configuration Files

In Acumatica ERP 2024 R2, a customizer can now customize a predefined snapshot configuration in multiple files, and the system will merge all changes to the same snapshot configuration. This capability may be useful when, for example, a customization project adds a new table. The customizer can exclude the records of this table from the snapshot in one customization project and edit a numbering sequence for this table in another customization project.

Snapshot Configuration Files

A snapshot configuration is stored in a ESC file, which has XML format, in the `App_Data/SnapshotConfigs` folder of the instance. For details, see [Schemas: Custom Snapshot Configurations](#).

Previously, to customize a snapshot, an administrator had to create a new type of a snapshot—that is, copy the predefined ESC file, edit it, and then add it to the `App_Data/SnapshotConfigs` file by using a customization project.

Now for each snapshot configuration (ESC file), the `SnapshotConfigs` folder has a separate folder with the same name as the ESC file.

Also, now the instance contains a single configuration for a *Full* snapshot. So for the *Full* configuration, the `App_Data/SnapshotConfigs` includes the `Full.esc` file and the `Full` folder.

In the folder with the same name as the predefined snapshot configuration, a customizer can save a customization of a predefined snapshot configuration (a snapshot *adjustment file*). This file can contain only the differences with the predefined ESC file. The snapshot adjustment file should follow the rules described in [Schemas: Custom Snapshot Configurations](#). An example of a snapshot adjustment file is shown in the following code.

```
<Tables>
  <Exclude table="UploadFile" />
  <Exclude table="UploadFileInScreen" />
  <Exclude table="UploadFileRevision" />
  <Exclude table="NoteDoc" />
</Tables>
```

To save a snapshot adjustment file to a customization project, a customizer should select it on the [Custom Files](#) page of the Customization Project Editor. When the customization project is published, the file will be saved to the `AppData/SnapshotConfigs` folder of the instance. Customization projects that contain the snapshot configuration files for the previous versions should work as they did before.



An administrator can still create a custom snapshot configuration by copying the predefined file and saving it to the `SnapshotConfigs` folder. They can also create a folder for a custom configuration and save adjustment files for this custom configuration.

Merging of the Snapshot Configurations

When a user creates a snapshot on the [Tenants](#) (SM203520) form, if an instance of Acumatica ERP 2024 R2 includes multiple snapshot adjustment files, the system merges them into a single snapshot configuration, and then applies it to the predefined configuration. If the system generates an error during the merge process, a detailed error message is displayed and saved to the trace log, and the snapshot is not created. In the trace log, a user can always see the file in which the conflict occurred.



During the update process, an administrator should make sure that the configuration files are merged successfully.

Related Links

- [*Snapshots: Custom Snapshot Configurations*](#)
- [*Snapshots: Examples of Sensitive Data Being Excluded from Snapshots*](#)

System Administration: Node.js Installation

In Acumatica ERP 2024 R2, for the publication of customization projects with Modern UI files, Node.js must be installed, including the node version manager (nvm) and node package manager (npm). The Acumatica ERP Configuration wizard installs the needed version of Node.js if the **Install NodeJS** check box is selected on the Website Configuration page of the wizard. This check box is selected by default, as shown in the following screenshot.

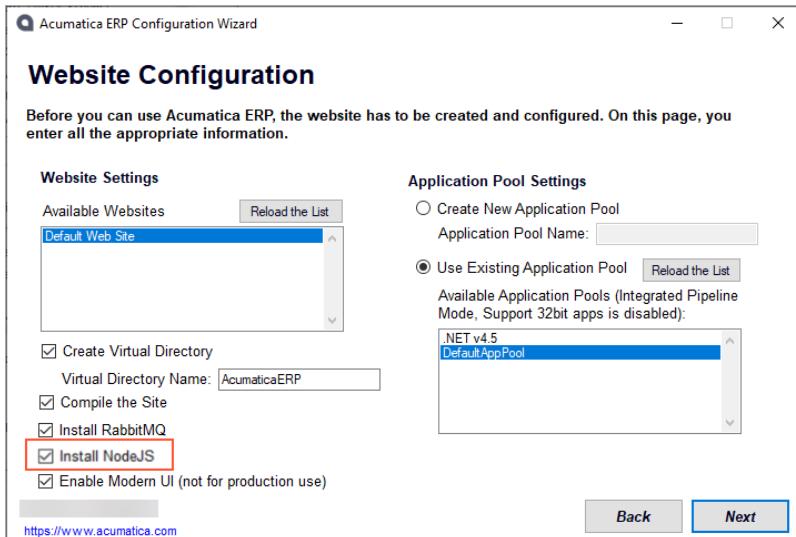


Figure: The Install NodeJS check box

If a system administrator wants to use the version of Node.js that has already been installed in the system, the administrator can clear the **Install NodeJS** check box and proceed with the use of the wizard. The administrator should then add the following key to the `appSettings` section of the `Web.config` file of the instance: `<add key="NodeJs:NodeJsPath" value="C:\Program Files\NodeJs"/>`, where `value` specifies the path to the location where Node.js has been installed.

Before publishing a customization project with Modern UI files, the administrator may need to further configure the Acumatica ERP instance by specifying the following keys in the `Web.config` file of the instance:

- `NodeJs:NpmCachePath`: Specifies the path for the npm cache, such as `C:\instances\site\App_Data\npm-cache`.
- `NodeJs:DevBuild`: If its value is `true`, turns on the developer mode while the Customization Project Editor compiles the UI sources.

Related Links

- [Instance Deployment: Creation of an Instance](#)

System Administration: Support of Report Templates for Reports Attached to Emails

Acumatica ERP 2024 R2 provides the ability to select report templates for reports attached to email templates.

Email templates define the look and content of the emails to be sent to employees, customers, or vendor contacts. Report templates, which can be configured for each report, include the typical settings for selecting, filtering, and sorting the data in the reports that users would otherwise specify manually before running the report.

The Use of Report Templates in Email Templates

For each report for which a template has been created on the corresponding report form, the system administrator can select this template on the [Email Templates](#) (SM204003) form. As a result, the email that the system generates by using this email template contains the report generated by using the specified report parameters.

Suppose that the administrator has modified the parameters of the predefined [Daily Sales Profitability](#) (AR676000) report. The modified report displays the sales of a particular inventory item (see Item 1 in the following screenshot) in a particular branch (Item 2). The administrator has then saved the changes as a template (Item 3).

The screenshot shows the 'Daily Sales Profitability' report form. At the top, there are buttons for RUN REPORT, SAVE TEMPLATE, REMOVE TEMPLATE, SCHEDULE TEMPLATE, and EDIT REPORT. Below these, a 'Template' section shows 'SweetLife Apple Jam Sales' selected in a dropdown (Item 3). A checkbox for 'Shared' is checked (Item 4). The main area contains 'REPORT PARAMETERS' with fields for Report Format (Detailed), Company/Branch (SWEETLIFE - no branch name) (Item 2), From Date (1/1/2024), To Date (5/8/2024), Document Type, Warehouse, Customer, and Inventory (APJAM96 - Apple jam 96 oz) (Item 1). There are also checkboxes for 'Released Transactions Only' and 'Completed Transactions Only'.

Figure: The template for the Daily Sales Profitability report



A report template must have the **Shared** check box selected on the appropriate report form (see Item 4 in the screenshot above) for this template to be available for selection in the **Report Template** box on the [Email Templates](#) form.

In an email template on the [Email Templates](#) (SM204003) form, the administrator adds the [Daily Sales Profitability](#) report on the **Attached Reports** tab (see Item 1 in the following screenshot). In the right pane of the tab, the administrator then selects the saved template in the new **Report Template** box (Item 2). In the **Report Parameters** table, the system displays the values that have been specified in the template (Item 3).

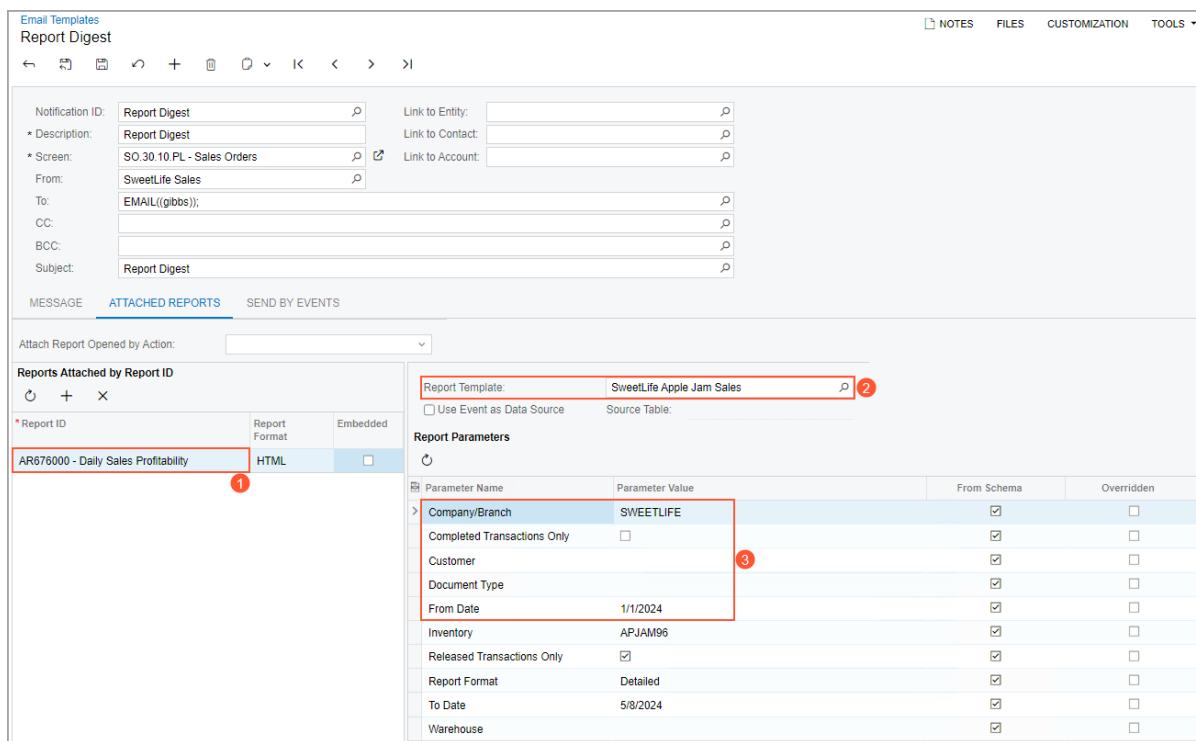


Figure: Selection of the report template in the email template

The administrator can change any of the values in the **Report Parameters** table. For parameters whose values have been modified, the system selects the new **Overridden** check box (see the following screenshot).

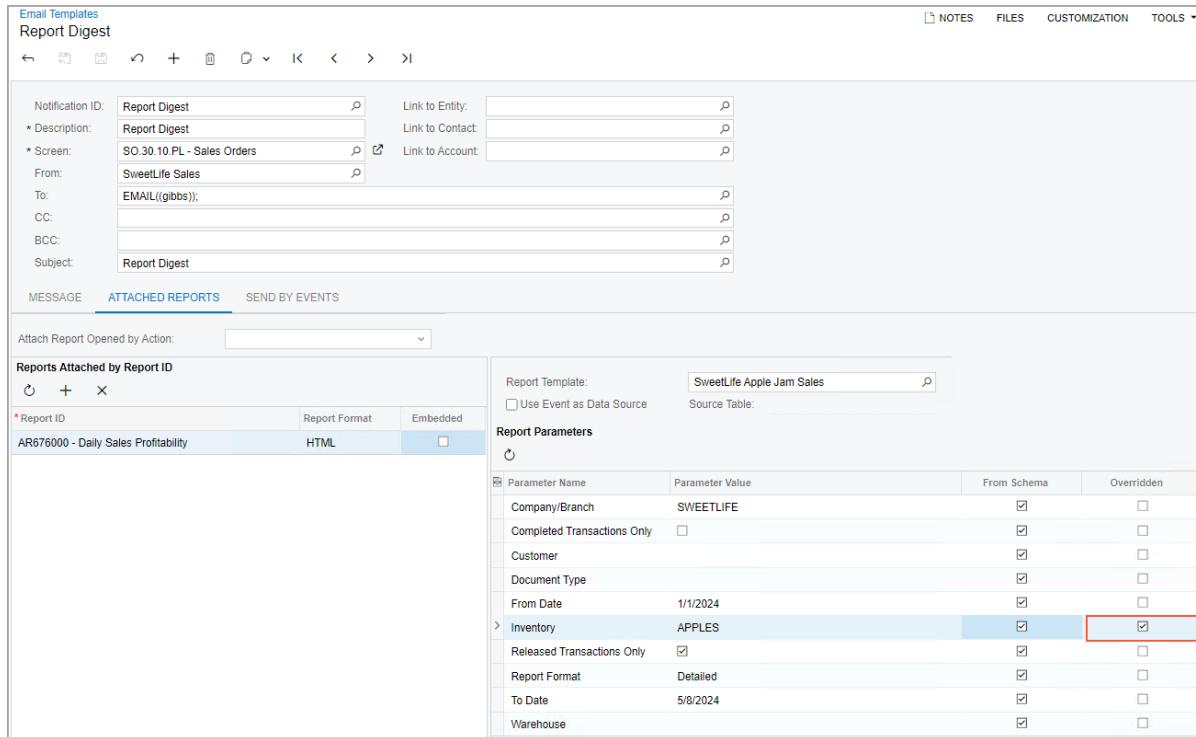


Figure: Selection of the Overridden check box for a parameter

To reverse changes to a particular parameter, the administrator clears the **Overridden** check box. The system then inserts the default value in the **Parameter Value** column for this parameter.

Displaying of Default Parameters of a Report

If the administrator adds a report but does not select any template for it, the **Report Parameters** table now displays the default parameters of the added report (see the following screenshot). The administrator can modify any default value.

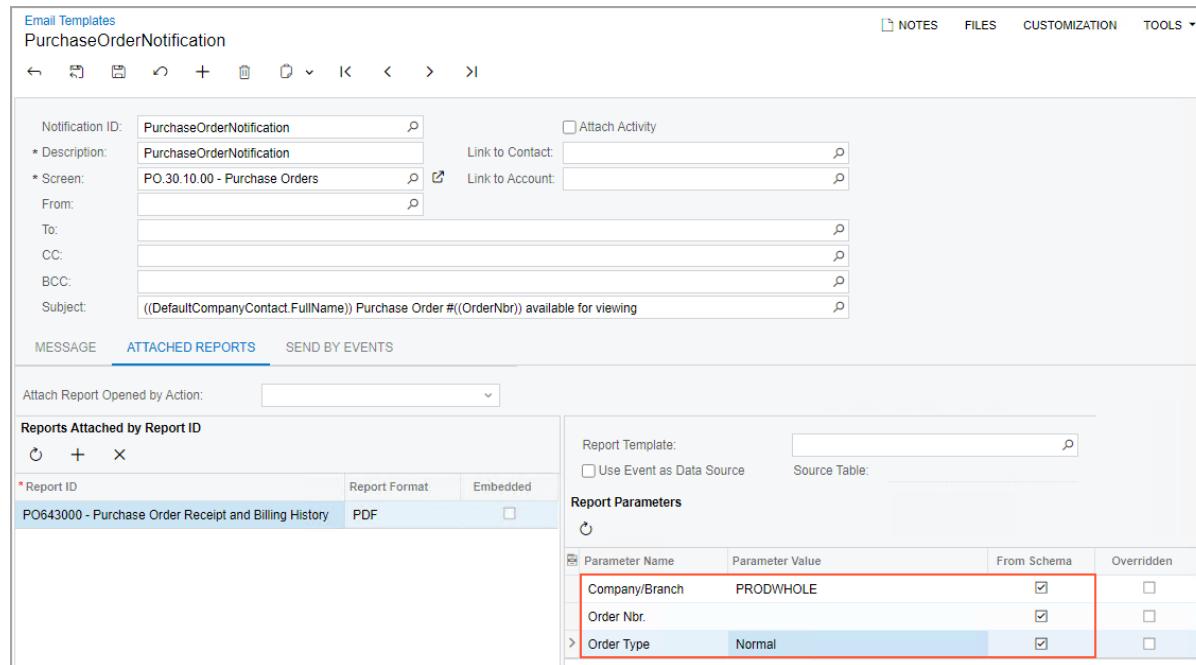


Figure: Default parameters of the report

Additional Information

For details on attaching report templates to emails, see [Business Events: Subscribers](#).

Customization: Removal of the SOAP API for Managing Customization Projects

As a part of the migration to .Net Core, in Acumatica ERP 2024 R2, the SOAP API that a developer could use for managing customization projects has been removed. This API was available through the <Instance URL>/Api/ServiceGate.asmx, <Instance URL>/api/ServiceGate.asmx, or <Instance URL>/Api/Interface.asmx URL. Along with the removal of the SOAP API, the CstPublishTool tool has been removed.

If a CI pipeline or any custom code used the SOAP API or the CstPublishTool tool, the developer must modify the CI pipeline or the custom code to use one of the following:

- The customization web API, which is described in [Managing Customization Projects by Using the Web API](#)
- The PX.CommandLine tool, whose description is available in [Managing Customization Projects by Using the PXCommandLine Tool](#)

Developer Documentation: New Topics

In Acumatica ERP 2024 R2, a developer can find a number of new and reworked topics, as described in the following sections.

Modern UI Development

A developer can find information about the customization, testing, and troubleshooting of the Modern UI in the following new parts of the [UI Developer Guide](#):

- [Customizing Acumatica ERP Forms in HTML and TypeScript](#)
- [Handling UI Events](#)
- [Testing the Modern UI](#)
- [Troubleshooting the Modern UI](#)
- [Supporting UI Localization](#)

The developer can find descriptions of the properties of the Modern UI controls and other frontend API elements, along with examples of their usage, in the [Frontend API Reference](#), whose card is shown in the following screenshot.

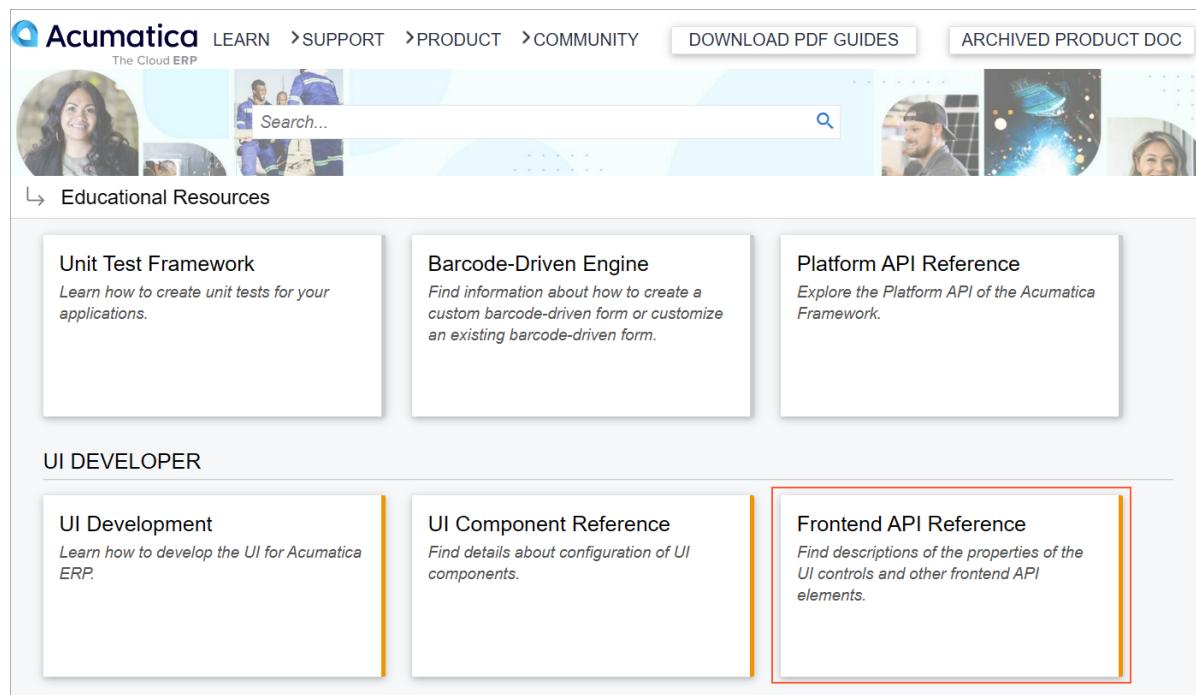


Figure: Frontend API Reference

The [UI Component Guide](#) has been extended with chapters about each of the following UI components:

- [Address Lookup](#)
- [Collapsible Area](#)
- [Color Picker](#)
- [Error, Warning, or Informational Notification](#)
- [Record Title](#)
- [Formula Editor](#)
- [Image Uploader](#)

- [*Image Viewer*](#)
- [*Label*](#)
- [*Radio Button \(Option Button\)*](#)
- [*Resizer*](#)
- [*Rich Text Editor*](#)
- [*Splitter*](#)
- [*Time Span*](#)
- [*Text Box*](#)
- [*Tree*](#)
- [*Tree Selector*](#)

New and Reworked Information for Integration Developers

An integration developer can find new and reworked information about the following subjects:

- Requests through the generic inquiry-based OData interface in [*Accessing the Exposed Inquiry Results Through OData*](#)
- OData requests that retrieve data from the data access classes (DACs) in [*Accessing DACs Through OData*](#)
- The distribution of generic inquiry changes to other Acumatica ERP instances in [*Including Generic Inquiries in a Customization Project*](#)
- The proof key for code exchange (PKCE) in [*Implementing the Authorization Code Flow*](#)
- REST API examples in [*Create a Payment with a Credit Card Transaction Imported from Another System*](#) and [*Register a Customer Credit Card*](#)

Platform API: Introduction of the PXCopyPasteEmptyFields Attribute

In previous versions of Acumatica ERP, if a document was copied that had empty elements and then this document was pasted, the empty elements were filled in with their corresponding default values. In Acumatica ERP 2024 R2, this behavior has been modified to provide more control to a developer.

A developer can now specify the fields whose corresponding elements should remain empty and not be filled in with default values when these fields are empty in the document that is going to be copied and pasted. To do this, the developer adds the `PXCopyPasteEmptyFields` attribute to the appropriate data view in the corresponding graph, and lists the fields as parameters of this attribute. The following code shows an example.

```
[PXCopyPasteEmptyFields(
    typeof(ARShippingContact.fullName),
    typeof(ARShippingContact.attention),
    typeof(ARShippingContact.phone1),
    typeof(ARShippingContact.email))]
public PXSelect<ARShippingContact,
    Where<ARShippingContact.contactID,
    Equal<Current<ARInvoice.shipContactID>>>> Shipping_Contact;
```

Platform API: Introduction of the UNION and UNION ALL SQL Database Operations in BQL

Starting with Acumatica ERP2024 R2, the Acumatica Framework now natively supports the standard `UNION` and `UNION ALL` SQL database operations in BQL. Developers can now write BQL queries that support these operations by using the `Union` and `UnionAll` keywords in their BQL statements.

Performing a Union Operation in BQL

Suppose that a developer is working with two data access classes (DACs) called `ExternalStorage` and `InternalStorage`. These DACs are shown in the following code.

```
public class ExternalStorage : PXBqlTable, IBqlTable
{
    #region StorageID
    [PXDBInt(IsKey = true)]
    public virtual Int32? StorageID { get; set; }
    public abstract class storageID : BqlInt.Field<storageID> { }
    #endregion

    #region StorageCD
    [PXDBString]
    public string StorageCD { get; set; }
    public abstract class storageCD : BqlString.Field<storageCD> { }
    #endregion

    #region Active
    [PXDBBool]
    public virtual Boolean? Active { get; set; }
    public abstract class active : BqlBool.Field<active> { }
    #endregion

    #region StorageType
    [PXDBInt]
    public virtual int? StorageType { get; set; }
    public abstract class storageType : BqlInt.Field<storageType> { }
    #endregion
}

public class InternalStorage : PXBqlTable, IBqlTable
{
    #region StorageID
    [PXDBInt(IsKey = true)]
    public virtual Int32? StorageID { get; set; }
    public abstract class storageID : BqlInt.Field<storageID> { }
    #endregion

    #region StorageCD
    [PXDBString]
    public string StorageCD { get; set; }
    public abstract class storageCD : BqlString.Field<storageCD> { }
    #endregion

    #region Active
    [PXDBBool]
    public virtual Boolean? Active { get; set; }
    public abstract class active : BqlBool.Field<active> { }
    #endregion
}
```

```

[PXDBBool]
public virtual Boolean? Active { get; set; }
public abstract class active : BqlBool.Field<active> { }
#endregion

#region TheType
[PXDBCalced(typeof(int_1), typeof(int))]
public virtual int? TheType { get; set; }
public abstract class theType : BqlInt.Field<theType> { }
#endregion
}

```

Further suppose that the developer wants to perform a UNION operation by using the DACs above. The developer needs to declare a DAC that will store the result of the UNION operation. To do this, the developer can declare a shared DAC called `Storage` as follows.

```

public class Storage : PXBqlTable, IBqlTable
{
    #region StorageID
    [PXDBInt(IsKey = true)]
    public virtual Int32? StorageID { get; set; }
    public abstract class storageID : BqlInt.Field<storageID> { }
    endregion

    #region StorageCD
    [PXDBString]
    public string StorageCD { get; set; }
    public abstract class storageCD : BqlString.Field<storageCD> { }
    endregion

    #region Active
    [PXDBBool]
    public virtual Boolean? Active { get; set; }
    public abstract class active : BqlBool.Field<active> { }
    endregion

    #region StorageTypeCD
    [PXDBCalced(typeof(Switch<Case<Where<storageType, Equal<int_1>>,
                    string_Int, Case<Where<storageType, Equal<int_2>>,
                    string_Nas, Case<Where<storageType, Equal<int_3>>,
                    string_Clo>>>, string_Unc>), typeof(string))]
    public virtual string StorageTypeCD { get; set; }
    public abstract class storageTypeCD : BqlInt.Field<storageTypeCD> { }
    endregion

    #region StorageType
    [PXDBInt]
    public virtual Int32? StorageType { get; set; }
    public abstract class storageType : BqlInt.Field<storageType> { }
    endregion
}

```

Before performing the UNION operation on the `ExternalStorage` and `InternalStorage` DACs and storing the resulting data in the shared `Storage` DAC, the developer must define the relationship between the fields of the `ExternalStorage` and `InternalStorage` DACs and the fields of the shared `Storage` DAC in the relevant graph. A developer can do this by using the `BqlTableMapper` class, as shown in the following code.

```

public class InternalStorageMapped : BqlTableMapper<InternalStorage, Storage>
{
    public InternalStorageMapped()
    {
        Map<Storage.storageType.EqualTo<InternalStorage.theType>>();
    }
}

public class ExternalStorageMapped : BqlTableMapper<ExternalStorage, Storage>
{
}

```

A developer can also use the `BqlFieldMapper` class, which maps the fields of the DACs involved in the UNION operation with the shared DAC. By default, the `BqlFieldMapper` class maps these fields based on their names. However, a developer can override this mapping in a number of ways, as shown in the following code.

```

public class ExternalStorageToStorage : BqlFieldMapper<ExternalStorage, Storage>
{
    public ExternalStorageToStorage()
    {
        Map<Storage.storageType.EqualTo<ExternalStorage.theType>>();
        Map<Storage.storageID.EqualTo<const_int_1>>();
        Map<Storage.storageCD.EqualTo<ConvertToStr<ExternalStorage.storageID>>>();
        Map<Storage.active.EqualTo<ConvertToBool<DateDiff<PXDateAndTimeAttribute.now,
            PXDateAndTimeAttribute.now, DatePart.day>>>();
    }
}

```



The shared DAC can have more or fewer fields than the DACs on which the UNION operation is to be performed. The shared DAC may also have fields that are calculated.

Finally, to perform the UNION operation by using the `Union` keyword, the developer can execute the following BQL statement.

```

MappedSelect<Storage, From<InternalStorageMapped, Union<ExternalStorageMapped>>,
Where<Storage.storageID, Greater<int_1>>, OrderBy<Asc<Storage.storageID>>>

```

To facilitate the use of the `Union` and `UnionAll` operations in BQL, a new type of BQL select command called `MappedSelect` has been introduced, as shown in the code above. This command is used to specify the following:

- How the union operation will be performed on a set of DACs representing the relevant database tables
- Which shared DAC the data of this operation will be stored in

To perform a UNION ALL operation by using the `UnionAll` keyword, the developer can perform steps that are similar to the ones described in this section, and exclude the filtering criteria from their BQL statement, if necessary.

Web Services: New System Endpoint

Acumatica ERP 2024 R2 introduces the new *Default/24.200.001* system endpoint, which is shown on the [Web Service Endpoints](#) (SM207060) form in the following screenshot. The new endpoint uses Contract Version 4.

The screenshot shows the Acumatica ERP 2024 R2 interface for managing Web Service Endpoints. The title bar reads "Web Service Endpoints" and "Default 24.200.001". The top navigation bar includes "CUSTOMIZATION" and "TOOLS". Below the title, there are buttons for "INSERT", "DELETE", "EXTEND ENDPOINT", and "...".

The main area has two search fields: "* Endpoint Name:" containing "Default" and "* Endpoint Version:" containing "24.200.001". To the right, under "ENDPOINT PROPERTIES", the values are listed as follows:

- * Endpoint Name: Default
- * Endpoint Version: 24.200.001
- System Contract: 4
- Base Endpoint Name: (empty)
- Base Endpoint Version: (empty)

The left sidebar contains a tree view of available endpoints, including categories like Account, Activity, Appointment, and Case, along with specific entities like AccountDetailsForPeriodInquiry, AccountGroup, and BigCommerceStores.

Figure: New system endpoint

The following sections briefly describe the changes to the entities, fields, and actions of the new endpoint as compared to the *Default/23.200.001* endpoint. For a detailed list of changes, see [Changes to the Entities, Fields, and Actions of the Default/24.200.001 Endpoint as Compared to the Default/23.200.001 Endpoint](#).

Cross-Functional Changes

The `Attributes.IsActive` field has been added. The field is available in the entities—such as `TemplateItems`, `Customer`, and `Opportunity`—that provide the API for attributes.

Inventory and Order Management

The API related to the inventory and order management functionality has been enhanced as follows:

- The `TransferOrderDetailAllocation.ExpirationDate` field has been added. The corresponding **Expiration Date** column is unavailable for editing on the **Details** tab of the [Transfers](#) (IN304000) form.
- A developer can now add landed costs to AP bills via the API. The following new fields have been added to the `BillDetail` entity, which corresponds to the [Bills and Adjustments](#) (AP301000) form: `LCType`, `LCNbr`, and `LCLineNbr`. The developer can add a particular line of the landed cost document by specifying the values of all these fields, or add all lines of the landed cost document by specifying the `LCType` and `LCNbr` values.
- The `InventoryReceiptDetail.ReasonCode` field has been added. The corresponding column is available on the **Details** tab of the [Receipts](#) (IN301000) form.
- The developer can now use the **Recalculate Prices** command, which is available on the More menu of the [Sales Orders](#) (SO301000) form, through the REST API. For the recalculation of prices and discounts, the developer can use the new `SalesOrder.RecalculatePricesDiscounts` action.

- The `Shipment.UnlimitedPackages` field has been added, which allows the developer to bypass the license limits on the number of packages when a shipment is uploaded to Acumatica ERP via the API. The field corresponds to the **Packaging Processed in External System** check box on the **Shipping** tab of the [Shipments](#) (SO3020000) form.

Retail and Commerce

The new endpoint introduces the following entities and fields related to the retail and commerce functionality:

- The `AmazonStore` entity, which corresponds to the [Amazon Stores](#) (BC201020) form.
- The `CashTransaction` entity, which corresponds to the [Cash Transactions](#) (CA304000) form.
- The `NonStockItem.IsAKit` and `NonStockItem.VendorDetails.RecordID` fields. We recommend that the developer use the `NonStockItem.IsAKit` field instead of the `NonStockItem.IsKit` field, which will be removed in a future endpoint version.
- Multiple fields of the `SalesInvoice` and `SalesInvoiceDetail` entities.
- The `StockItem.LastModifiedDateTime` field. We recommend that the developer use the `StockItem.LastModifiedDateTime` field instead of the `StockItem.LastModified` field, which will be removed in a future endpoint version.
- The `TemplateItems.LastModifiedDateTime` and `TemplateItems.VendorDetails.RecordID` fields. We recommend that the developer use the `TemplateItems.LastModifiedDateTime` field instead of the `TemplateItems.LastModified` field, which will be removed in a future endpoint version.

Web Services: Support of OpenAPI 3.0

Acumatica ERP 2024 R2 now provides the OpenAPI 3.0 schema instead of the OpenAPI 2.0 schema. For details about OpenAPI 3.0, see [OpenAPI Specification v3.0.1](#).

OpenAPI 3.0 of an Endpoint

A developer can retrieve the OpenAPI 3.0 schema of a contract-based API endpoint by clicking **OpenAPI 3.0** on the More menu of the **Web Service Endpoints** (SM207060) form, as shown in the following screenshot.

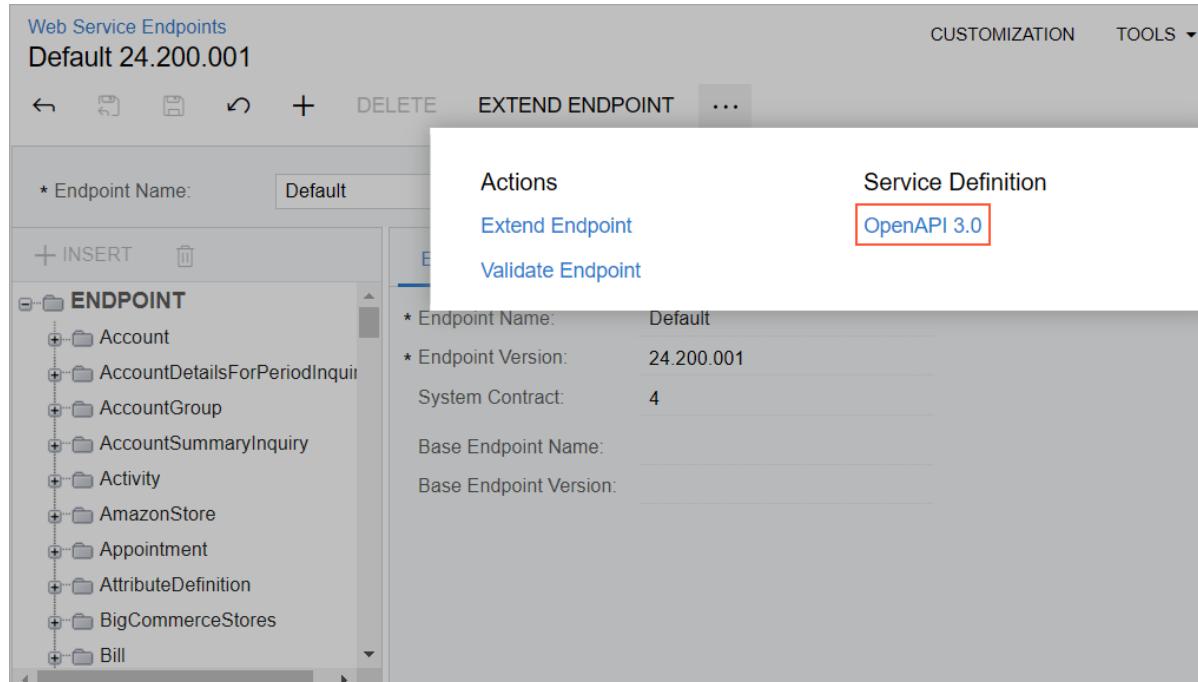


Figure: The Open API 3.0.1 command

The developer can also retrieve the OpenAPI 3.0 schema of a contract-based API endpoint by using the following URL.

```
http://<Base endpoint URL>/swagger.json?company=<Tenant name>
```

In this URL, <Base endpoint URL> is the URL of the contract-based endpoint through which the developer is going to work with Acumatica ERP, such as <http://localhost/AcumaticaDB/entity/MyEndpoint/24.200.001/swagger.json?company=MyTenant>. The developer can specify the company URL parameter to obtain information on the API of the endpoint available in a particular tenant.

OpenAPI 3.0 of an Instance

The developer can retrieve the OpenAPI 3.0 schema of an Acumatica ERP instance by using the following URL.

```
http://<Acumatica ERP instance URL>/entity/swagger.json
```

For example, if the developer uses a local instance with the name *AcumaticaU100*, they would retrieve the *swagger.json* file related to this instance by using the following URL: <http://AcumaticaU100/entity/swagger.json>.

Related Links

- [*OpenAPI 3.0*](#)

Web Services: Ability to Specify a Comment for an Attached File

In Acumatica ERP 2024 R2, a developer can use the REST API to specify a comment for a file that is attached to a record. A user can see this comment in the **Comment** column of the **Files** dialog box, which is shown in the following screenshot. (The dialog box opens if the user clicks **Files** in the title bar of an Acumatica ERP form that is open for a record with at least one attached file.)

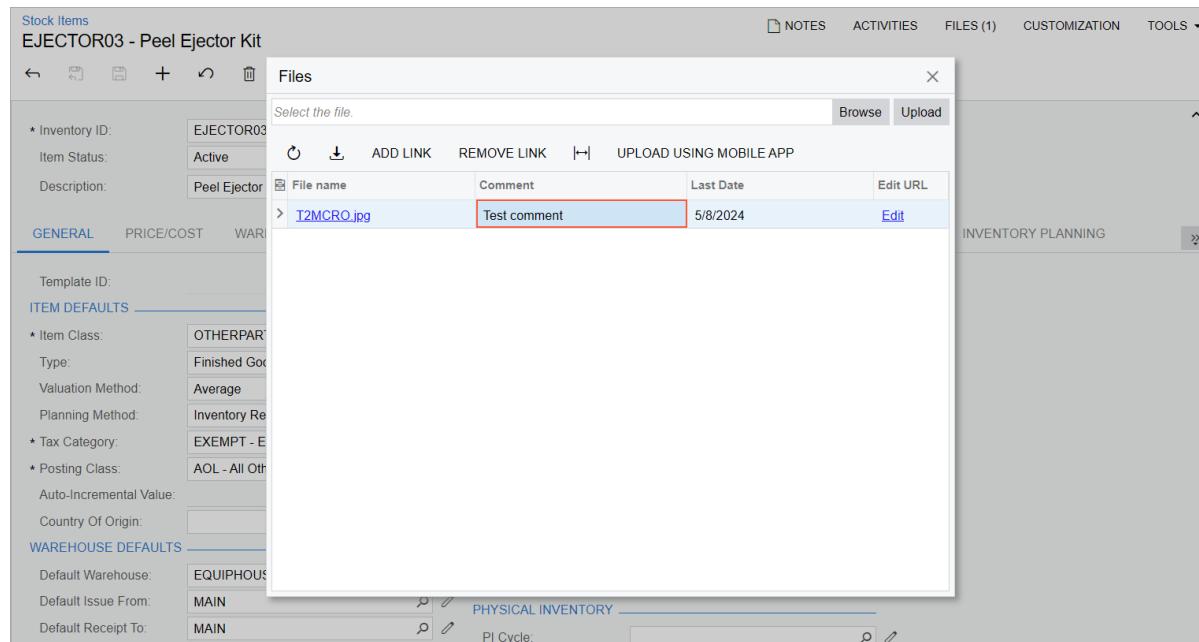


Figure: The Comment column

Adding a Comment

To add a comment for a file that is attached to a record, the developer needs to send the `PUT` request to the URL for attaching a file to a particular record and include the following in the request:

- The `PX-CbFileComment` header with the comment text
- The file in the request body

For details on this request, see [Attach a File to a Record](#). An example of the request is shown in the following code.

```
PUT /a0f8594a-7de2-e811-b816-00155d408001/T2MCRO.jpg HTTP/1.1
Host: [<Acumatica ERP instance URL>]/entity/Default/24.200.001/files/
PX.Objects.IN.InventoryItemMaint/Item
Accept: application/json
Content-Type: application/octet-stream
PX-CbFileComment: Test comment

"<file contents here>"
```

The following usage details apply to comments that the developer adds to a file in this way:

- If a new version of the file is added without a comment, the **Comment** column in the **Files** dialog box becomes empty for the file.
- If multiple `PX-CbFileComment` headers are specified in the request, the **Comment** column contains the comments from all headers. The comments are separated with a comma.

- A comment for the file cannot exceed 500 characters.

Obtaining a Comment

If a developer obtains the list of files attached to a record, a comment for a file is returned in the `comment` field for the file item in the `files` array.

The following example request retrieves the list of files attached to the *EJECTOR03* stock item.

```
GET /EJECTOR03?$select=InventoryID,files&$expand=files HTTP/1.1
Host: [<Acumatica ERP instance URL>]/entity/Default/24.200.001/StockItem
Accept: application/json
Content-Type: application/json
```

The response body, shown below, includes the comment in the `comment` field.

```
{
  "id": "a0f8594a-7de2-e811-b816-00155d408001",
  "rowNumber": 1,
  "note": {
    "value": ""
  },
  "InventoryID": {
    "value": "EJECTOR03"
  },
  "custom": {},
  "_links": {
    "self": "...",
    "files:put": "..."
  },
  "files": [
    {
      "id": "8050623c-b31f-42a1-876a-13598c90fd29",
      "filename": "Stock Items (EJECTOR03 ) \\T2MCRO.jpg",
      "href": "...",
      "comment": "Test comment"
    }
  ]
}
```

For details about retrieval of file comments, see [Retrieve Comments for Attached Files](#).

Web Services: Changes in Manufacturing Endpoints

In Acumatica ERP 2024 R2, the list of manufacturing endpoints that are available for integration developers has been changed, as described in this topic.

New Endpoint

The new *MANUFACTURING/24.200.001* endpoint is available. A developer can review this endpoint and obtain its OpenAPI schema on the [Web Service Endpoints](#) (SM207060) form, which is shown in the following screenshot.

The screenshot shows the 'Web Service Endpoints' form for the 'MANUFACTURING 24.200.001' endpoint. The top navigation bar includes 'CUSTOMIZATION' and 'TOOLS'. Below the title, there are buttons for 'INSERT', 'DELETE', 'EXTEND ENDPOINT', and '...'. The main area has fields for 'Endpoint Name' (MANUFACTURING) and 'Endpoint Version' (24.200.001). On the left, a tree view shows the 'ENDPOINT' category expanded, listing various sub-endpoints like APSMaintenance, BillOfMaterial, BomAttributes, etc. On the right, the 'ENDPOINT PROPERTIES' section displays the current values for the endpoint name, version, system contract, and base endpoint information.

Figure: The new endpoint

The endpoint provides access to the following new fields and actions, as compared to the *MANUFACTURING/23.200.001* endpoint:

- MRPPreferences.IncludeOnHoldKitAssemblies
- MRPPreferences.PlanningHorizon
- OrderOperationDetail.AutoReportQty
- OrderTypes.AutoBackwardReporting
- ProductionOrder.AutoBackwardReporting
- ProductionOrder.LockOrder
- ProductionOrder.UnlockOrder
- ProductionPreferences.LockProductionOrdersBeforeClosing

The following fields have been removed:

- EventHistoryDetail.EventID
- OrderMaterialDetail.CompBOMEffDate

Removed Endpoint

The obsolete *MANUFACTURING/20.200.001* endpoint has been removed. If the application uses this endpoint, the developer needs to switch the application to a supported endpoint so that the application can work with the manufacturing functionality in Acumatica ERP 2024 R2.

Fixes and Enhancements

You can find fixes and minor enhancements introduced in Acumatica ERP 2024 R2 in the following document:
[*Acumatica ERP 2024 R2 Release Notes: Fixes and Enhancements.*](#)