RELEASE NOTES Acumatica ERP 2021 R1



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Introduction

This document provides important information about fixes, enhancements, and key features that are available in Acumatica ERP 2021 R1. 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 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.

To try new features and improvements, you can use the demo company, which you can easily deploy by selecting the *SalesDemo* item in the Acumatica ERP Configuration Wizard. For detailed information on deploying the demo company and working with the demo data, see *Demo Materials* on the Acumatica partner portal.

from

from

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 Updating Acumatica ERP in the Installation Guide.

Multiple changes have been made in Acumatica ERP 2021 R1 in comparison to Version 2020 R1 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 2021 R1.

Upgrade Policy

On the Apply Updates (SM203510) form, only minor updates for the currently installed version of Acumatica ERP are available. The administrator should upgrade the Acumatica ERP instance from previous major versions of the system to Version 2021 R1 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 2021 R1 due to changes in Version 2021 R1.)

Prerequisite Steps

Before administrators install Acumatica ERP 2021 R1 or upgrade to it locally, they need to do the following:

- 1. Switch the Internet Information Services application pool where the Acumatica ERP 2021 R1 instance will be installed to Integrated mode. (Classic mode is not supported.)
- 2. Install Microsoft .NET Frameworks 4.8 on the server where the Acumatica ERP 2021 R1 instance will be installed.
- 3. Install Microsoft .NET Core 3.1 on the server where the Acumatica ERP 2021 R1 instance will be installed.

Upgrade Path

The upgrade to Acumatica ERP 2021 R1 must be performed as described in the following table. The upgrade process depends on the version before the upgrade.

Table: Upgrade Paths f	or Acumatica ERP
From Version	Upgrade Path
2021 R1 Beta	An upgrade to later builds of Acumatica ERP 2021 R1 is supported.
2021 R1 Preview 2	An upgrade to later builds of Acumatica ERP 2021 R1 is not supported. The administra- tor must completely remove all components of the system and install the later build fro scratch.
2021 R1 Preview 1	An upgrade to later builds of Acumatica ERP 2021 R1 is not supported. The administra- tor must completely remove all components of the system and install the later build fro scratch.
2020 R2	A direct upgrade to Acumatica ERP 2021 R1 is supported.

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From Version	Upgrade Path
2020 R1	A direct upgrade to Acumatica ERP 2021 R1 is supported.
	If the <i>Payroll</i> feature is enabled in the system, incremental upgrade is re- quired. The following steps must be performed in the listed order:
	1. Upgrade to the latest Version 2020 R2 X build available.
	2. Upgrade to Version 2021 R1.
2019 R2	A direct upgrade to Acumatica ERP 2021 R1 is supported.
2019 R1	Incremental upgrade is required. The following steps must be performed in the listed or- der:
	1. Upgrade to the latest Version 2020 R2 X build available.
	2. Upgrade to Version 2021 R1.
2018 R2	Incremental upgrade is required. The following steps must be performed in the listed or- der:
	1. Upgrade to the latest Version 2020 R2 X build available.
	2. Upgrade to Version 2021 R1.
2018 R1	Incremental upgrade is required. The following steps must be performed in the listed or- der:
	1. Upgrade to the latest Version 2020 R1 X build available.
	2. Upgrade to Version 2021 R1.

Acumatica ERP 2021 R1 can be upgraded from the following particular versions:

- 2020 R2 Update 8 (20.208.0031) and earlier
- 2020 R1 Update 13 (20.113.0025) and earlier
- 2019 R2 Update 15 (19.215.0010) and earlier

For the list of previous upgradable versions for later 2021 R1 updates, see the Release Notes for the particular 2021 R1 update.

Actions Before the Upgrade

Before performing the upgrade to Acumatica ERP 2021 R1, the administrator should do the following:

- If the company uses the functionality of cost commitments, read the *Upgrade Notes* section of the *Projects: Closing of Commitments* topic.
- If the company uses the CRM functionality and a new business account is created through an API, make sure that the business account has the *Prospect* status, which is reflected in the **Customer Status** box of the Summary area on the *Business Accounts* (CR303000) form. If the *Active* status is assigned to the new business account when it is created, errors that are related to the extension of the account as a customer may occur.

Actions After the Upgrade

After performing the upgrade to Acumatica ERP 2021 R1, the administrator should do the following:

- If the company uses Acumatica ERP Retail-Commerce Edition, update the license by clicking Update
 License on the toolbar of the Activate License (SM201510) form because the licensing schema has been
 changed for external connectors (such as Shopify and BigCommerce). Otherwise, license restrictions could
 be applied incorrectly to the company's instance.
- If the company uses automation steps, import scenarios, or export scenarios for the following forms related to projects, construction, and time and expenses, which have been rewritten to support the new automation workflow, read the *Automation Changes* section of the *Projects: New Workflow Support on Entry Forms* topic:
 - Projects (PM301000)
 - Project Tasks (PM302000)
 - Pro Forma Invoices (PM307000)
 - Change Orders (PM308000)
 - Change Requests (PM308500)
 - Project Templates (PM208000)
 - Subcontracts (SC301000)
 - Cost Projections (PM305000)
 - Request for Information (PJ301000)
 - Project Issue (PJ302000)
 - Daily Field Report (PJ304000)
 - Expense Claim (EP301000)
 - Expense Receipt (EP301020)
 - Employee Time Card (EP305000)
 - Equipment Time Card (EP308000)
- If the company uses projects or project tasks as a source of default accounts and subaccounts in the process of project billing or allocation, update billing and allocation rules, if needed. For more details, see *Projects: Default Accounts and Subaccounts*.
- If the company uses the functionality of cost commitments, be aware that the logic related to the closing of commitments has been adjusted. Perform the instructions from the *Upgrade Notes* section of the *Projects: Closing of Commitments* topic.
- Read the Automation Changes section of the CRM: New Workflows for Business Accounts, Customers, Vendors, and Locations topic if the company uses automation steps, import scenarios, or export scenarios for the following forms related to CRM functionality, which have been modified to support the new automation workflow:
 - Business Accounts (CR303000)
 - Update Business Accounts (CR503320)
 - Account Locations (CR303010)
- Read the Automation Changes section of the Manufacturing: New Workflow in Engineering Change Requests, Engineering Change Orders, and Vendor Shipments topic if the company uses automation steps, import scenarios, or export scenarios for the following forms of Acumatica ERP Manufacturing Edition, which have been modified to support the new automation workflow:
 - Engineering Change Request (AM210000)
 - Engineering Change Order (AM215000)
 - Vendor Shipments (AM310000)

- Read the Automation Changes section of the Finance: New Workflow Support on Finance Forms topic if the
 company uses automation steps, import scenarios, or export scenarios for the following forms related to
 accounts payable, accounts receivable, tax management, cash management, and fixed assets, which have
 been rewritten to support the new automation workflow:
 - Quick Checks (AP304000)
 - Bills and Adjustments (AP301000)
 - Checks and Payments (AP302000)
 - Batch Payments (AP305000)
 - Vendor Price Worksheets (AP202010)
 - Vendors (AP303000)
 - Vendor Locations (AP303010)
 - Invoices and Memos (AR301000)
 - Payments and Applications (AR302000)
 - Cash Sales (AR304000)
 - Sales Price Worksheets (AR202010)
 - Customers (AR303000)
 - Customer Locations (AR303020)
 - Customer Contracts (CT301000)
 - Trial Balance (GL303010)
 - Journal Vouchers (GL304000)
 - Journal Transactions (GL301000)
 - Tax Adjustments (TX301000)
 - Tax Bills and Adjustments (TX303000)
 - Transactions (CA304000)
 - Funds Transfers (CA301000)
 - Bank Deposits (CA305000)
 - Reconciliation Statements (CA302000)
 - Fixed Asset Transactions (FA301000)
 - Fixed Assets (FA303000)
- If the company uses automation steps, import scenarios, or export scenarios for the following forms related to the Order Management functionality, which have been rewritten to support the new automation workflow, read the *Automation Changes* section of the *Order Management: New Workflow in Order Management Documents* topic:
 - Adjustments (IN303000)
 - *Issues* (IN302000)
 - Kit Assembly (IN307000)
 - Landed Costs (PO303000)
 - Purchase Orders (PO301000)
 - Purchase Receipts (PO302000)
 - Receipts (IN301000)
 - Requests (RQ301000)
 - Requisitions (RQ302000)
 - Transfers (IN304000)
- If the company uses the functionality of the attachment of files and notes to tables used in generic inquiries, specify a value in the Attach Notes To box of the *Generic Inquiry* (SM208000) form for generic inquiries created in Acumatica ERP versions earlier than 2021 R1. After the upgrade, in the generic inquiries

that were created in previous versions, no value is specified in this box (which was not on the form in previous versions); in some scenarios, a user who is working with the grid of a generic inquiry form might inadvertently attach a file or note to a record of a different internal table than the record that the user expected. For more details, see *Modifying Inquiry Results: General Information*.

We also recommend that the administrator read the *How to resolve errors on custom reports and generic inquiries after Acumatica ERP has been upgraded* Knowledge Base article, which provides instructions on how to adjust the company's custom generic inquiries if they stopped working after the upgrade.

Important Notes

Because important changes have been made in Acumatica ERP 2021 R1 that affect user scenarios, the administrator should do the following:

- If the company uses the CRM functionality, note the following:
 - For the business accounts that formerly had the *Prospect (PR)* type, on the *Business Accounts* (CR303000) form, the system changes the value in the **Type** box to *Business Account*.
 - Business account locations that had the **Active** check box selected on the *Account Locations* (CR303010) form are assigned the *Active* state. Other locations are assigned the *Inactive* state
 - Contacts of the *Person* type that had the **Active** check box selected on the *Contacts* (CR302000) form are assigned the *Active* state. Other contacts of the *Person* type are assigned the *Inactive* state.
 - If the company has modified a generic inquiry form—such as the Business Accounts (CR3030PL), Opportunities (CR3040PL), Contacts (CR3020PL), and Cases (CR3060PL) forms, which list records created in the system— before the upgrade, the new side panels for these forms will be unavailable, unless their settings are reset to the default ones. For more details, see *CRM: Multifaceted View for the List of Business Accounts* and *CRM: Multifaceted View for the Lists of Opportunities, Contacts, and Cases.*
- If the company uses the budget functionality, be aware that after an upgrade to Acumatica ERP 2021 R1, on the *Budgets* (GL302010) form, the *Statistical* type of ledger will be changed to the *Budget* type if lately this ledger has been updated on the *Budgets* form. If for a statistical ledger, there are records in the GLBudgetLine table in the year corresponding to the maximum GLHistory.FinPeriodID, the ledger type will be changed to *Budget*. After this change, it will not be possible to use this ledger on the *Journal Transactions* (GL301000) form.
- If the company uses the default or customized AR Docs by Project With Paid Amt (AR734100) report, be aware
 that after the upgrade, the report will be removed from the Construction workspace and replaced with the
 AR Open Documents by Project (AR634100) report and also will be removed from the site map. However, the
 report will remain available in the UserReport database table. To get access to the AR Docs by Project With
 Paid Amt report after the upgrade, add it to the site map.
- If the company allows credit cards to be used as a customer payment method and works with credit card processing centers, read *Credit Card Processing: Upgrade Notes*.
- If the company uses the functionality of sales prices and sales price worksheets, be aware that for all sales prices and sales price worksheets existing in the system, the system sets the value in the Tax Calculation Mode box on the Sales Prices (AR202000) and Sales Price Worksheets (AR202010) forms to Not Set. For more details, see Finance: Support of Price Lists for Net/Gross Prices.
- If the company uses the functionality of subcontracts, be aware of adjustments to the logic related to the billing of subcontract lines that are closed by amount. For more details, see *Construction: Subcontract Billing*.
- If the company uses the construction functionality, be aware that multiple minor enhancements have been made to construction-related forms. For more details, see *Construction: UI Improvements*.
- If the company uses the *Inventory* feature for purchases of stock item and plans using the *Purchase Receipts Without Inventory* feature after the upgrade to Acumatica ERP 2021 R1, see *Order Management: Purchase Receipts for Non-Stock Items Without the Inventory Feature*.

• If the company uses the functionality of business events, be aware that the history of business events (on the *Business Event History* (SM502030) form) will be cleared during the upgrade. Review the history before the upgrade and process all failed events, if needed.

Order Management: Upgrade Notes

The following topic lists upgrade notes and limitations related to improved drop-ship processing released in Acumatica ERP 2021 R1.

Preparations Before the System Upgrade

We recommend that the existing drop-ship purchase orders on the *Purchase Orders* (PO301000) form be linked to sales orders on the *Sales Orders* (SO301000) form before the upgrade to Acumatica ERP 2021 R1. We also highly recommend that all drop-ship documents be processed before the upgrade. During the upgrade, if a drop-ship purchase order has at least one line linked to a sales order line or has a released purchase receipt, the system will mark it as a legacy drop-ship purchase order in the database.

Sales order lines that are partially linked to drop-ship purchase order lines—that is, a drop-ship purchase order has been created for some of the quantity of the sales order line—will be marked as legacy sales order lines. After the upgrade, the legacy drop-ship purchase orders lines can be linked to only legacy sales orders lines, and legacy sales order lines can be linked to only legacy drop-ship purchase orders lines.

If a sales order line is marked for drop shipping and is not linked to a purchase order, after the upgrade, this line can be drop-shipped as usual. A new purchase order can be created for this line, or the line can be linked to another non-legacy drop-ship purchase order.

If a sales order line is marked for drop shipping and is partially linked to a purchase order, after the upgrade, a user can link the remaining part of the line's quantity to a legacy drop-ship purchase order or can make the quantity in the sales order line equal to the linked quantity and add a new line with the remaining quantity.

If a drop-ship purchase order is not linked to a sales order and does not have released purchase receipts associated with it, after the upgrade, the purchase order will not be marked as a legacy purchase order. A user can link this purchase order to non-legacy sales order lines, or can create a new sales order for this purchase order by using the **Create Sales Order** action on the *Purchase Orders* form.

If at least one line in a drop-ship purchase order was linked to a sales order line or the purchase order had partially or completely released purchase receipts before the upgrade, after the upgrade, this purchase order can be linked to only legacy sales orders. If no legacy sales orders are available for linking, the **Create Sales Order** action will be available if the legacy drop-ship purchase order has the *Open, Completed*, or *Closed* status; in this case, the action will cause the system to create a legacy sales order for only the purchase order lines with stock and non-stock items that are not linked to a sales order.

After the upgrade, a user should note the following rules of drop shipping:

• If a sales order line with multiple splits in the **Line Details** dialog box is marked for drop shipping, the user will not be able to process the sales order. On attempt to save the sales order, the system will display an error message.

The only exception occurs when the user returns lot/serial tracked items marked for drop shipping by using a sales order of the *RMA* type.

- If the user needs to ship some quantity of an item with the same inventory ID on one day and the remaining quantity on another day, separate sales order lines with the appropriate **Requested On** and **Ship On** dates should be added to the sales order.
- If the user needs to ship an item with the same inventory ID and different subitems, separate sales order lines for each subitem should be added and marked for drop shipping.

- If there is at least one partially released purchase receipt for a sales order line on the **Details** tab of the *Sales Orders* form, the user will not be able to clear the **Mark for PO** check box for this line and to ship the rest of line quantity from the warehouse.
- If there is at least one shipment confirmed for a sales order line, the user will not be able to select the **Mark for PO** check box for this line and to drop ship the rest of the line quantity.
- If there is at least one shipment confirmed for a sales order line, the user will not be able to select the **Mark for PO** check box for this line and to drop ship the rest of the line quantity.
- If a purchase receipt is prepared for a drop-ship purchase order that is linked to a sales order, the user will not be able to cancel this sales order.
- If a purchase return is prepared for a sales order of the *RMA* type, the user will not be able to cancel this sales order.
- If there is at least one shipment confirmed for a sales order line, the user cannot cancel the sales order that contains this line.
- If there is at least one purchase receipt released and applied to the drop-ship purchase order, the user cannot cancel this drop-ship purchase order.

Credit Card Processing: Upgrade Notes

The following topic lists upgrade notes and limitations related to specific credit card processing features released in Acumatica ERP 2021 R1.

Discontinued Plug-Ins for Processing Credit Card Payments (in 2019 R2)

The information below is relevant for companies that are using Acumatica ERP 2019 R1 or earlier before the upgrade.

In Acumatica ERP 2019 R2, the following plug-ins, which were used for the processing of payments with payment methods based on credit cards, have been discontinued:

- The CIM and AIM plug-ins for the Authorize.Net processing center.
- Plug-ins for processing centers other than Authorize.Net that use Version 1 of the interfaces. For more information, see *Interfaces for Processing Credit Card Payments*.

After the system has been upgraded to Acumatica ERP 2021 R1, users will no longer be able to process payments with customer payment methods based on credit cards if the processing centers configured for these customer payment methods are using the deprecated plug-ins.

Customer payment methods based on credit cards must be updated to use processing centers with the supported plug-ins before the upgrade to Acumatica ERP 2021 R1. If an organization uses customer payment methods that have been configured to use processing centers with the plug-ins based on Version 1 of the interfaces, to ensure that credit card processing can be continued after the upgrade from a previous version of the system, the following procedure must be followed:

- 1. If a version of Acumatica ERP earlier than build 19.109.0021 is being used, the system must first be upgraded to build 19.109.0021 or a later version of Acumatica ERP 2019 R1 from which an upgrade to Acumatica ERP 2021 R1 is supported.
- 2. In build 19.109.0021 or a later version of Acumatica ERP 2019 R1 from which an upgrade to Acumatica ERP 2021 R1 is supported, all existing customer payment methods based on credit cards must be updated to use the supported plug-ins, which are based on the applicable processing centers as follows:
 - For Authorize.Net, the only supported plug-in is Authorize.Net API.
 - For a processing center other than Authorize.Net, the organization should request a supported plug-in from its partner.

For instructions on updating customer payment methods to use a processing center with the new supported plug-in, see *To Replace a Processing Center that Uses a Discontinued Plug-In*.

If any issues arise during the conversion process, the administrator must contact the Acumatica support provider for assistance. The administrator should proceed with the upgrade to Acumatica ERP 2021 R1 only after all customer payment methods have been configured to use the supported plug-ins.

3. Once all issues have been resolved, the system can be upgraded to Acumatica ERP 2021 R1.

Discontinued Direct Input Mode for Credit Cards (in 2020 R2)

After an upgrade to Acumatica ERP 2021 R1, the system will display a warning message that the processing center uses the direct input mode, which is no longer supported for processing centers with the **Allow Direct Input** check box selected. (The direct input mode was discontinued in Acumatica ERP 2020 R2.) To continue using the processing center, a user should clear this check box. For details, see *Finance: Discontinued Direct Input Mode for Credit Cards*.

Credit Card Transactions in Cash Sale and Cash Return Sales Orders and Invoices

Before an upgrade to Acumatica ERP2021 R1 from Acumatica ERP 2020 R1 or earlier versions, all sales orders and invoices of the *Cash Sale* and *Cash Return* types with applied direct credit card transactions must be fully processed. During the upgrade, the system checks whether there are any sales orders or invoices with applied direct credit card transactions; if so, it displays the *Upgrade failed due to documents with obsolete CC transactions*. *See the release notes for Acumatica ERP 2020 R2 to solve the problem* error message. After the upgrade of the system, the processing of sales orders and invoices of the *Cash Sale* and *Cash Return* type with applied direct credit card transactions will not be possible. For details on the updated payment processing, see *Order Management: Changes in Processing of Payments and Prepayments for a Sales Order*. For details on the error and possible solutions, see the following article in the knowledge base: *During an upgrade to Acumatica ERP 2020 R2, the user received the 'Upgrade failed due to documents with obsolete CC transactions*. See the release notes for Acumatica 2020 R2 to solve the problem' error message.

We strictly do not recommend restoring snapshots in Acumatica ERP 2021 R1 if the snapshots contain unprocessed *Cash Sale* and *Cash Return* sales orders and invoices with applied direct credit card transactions. Restoration of such snapshots will cause a loss of data.

Default Reauthorization Delay

After an upgrade of Acumatica ERP from 2020 R1 and earlier versions to 2021 R1, on the **Processing Centers** tab of the *Payment Methods* (CA204000) form, the system inserts *0* in the **Reauthorization Delay (Hours)** column by default.

Commerce: Changes to the Export of Products

Starting in Acumatica ERP 2021 R1, users can control which stock, non-stock, and template items should be exported to external e-commerce systems.

Changes to the Item Classes Form

On the **General Settings** tab of the *Item Classes* (IN201000) form (**General Settings** section), a new check box, **Export to External System**, has been added (as shown in the following screenshot).

Classes ECCOMP 500RESIS	T - Resistors			NOTES	ACTIVITIES	FILES	CUSTON	IZATION	то
v + 🖻 🕻) • I< < > >I	ACTIO	NS	•					
* Class ID: ELE	CCOMP -500-RESIST - Resistors								
Description: Resi	stors								
GENERAL SETTINGS	RESTRICTION GROUPS AT	TRIBU	TES						
GENERAL SETTINGS				UNIT OF MEASU	RE				
	Stock Item			* Base Unit:	E	A ,A	0 🗸	Divisible Ur	nit
	Allow Negative Quantity			* Sales Unit:	E	A ,O	0 🔽	Divisible Ur	nit
	Accrue Cost			* Purchase Unit:	E	A ,O	0 🔽	Divisible Ur	nit
	Z Export to External System			ۍ +	×				
Item Type:	Finished Good	•		* From	Multiply/Divid	t.	Conversion	To Unit	
Valuation Method:	Average	-		Unit	manapiyibivit		Facto	r	
Replenishment Source:	Purchase	•							
Tax Category:	EXEMPT - Exempt Tax Category	Q	Ø						
Posting Class:	ELE - Electronics & Computers	Q	Ø						
Lot/Serial Class:	NOTTRACKED - Not Tracked	Q	Ø						
Price Class:		Q	Ø	PRICE MANAGE	MENT				
Default Warehouse:	RETAIL - Retail Warehouse	Q	Ø	Price Workgro				,o	
* Availability Calculation	ELECCOMP	Q	Ø	Price Manager:				0	
Country Of Origin:		Q		Min. Markup %:		0.00			
INTERNATIONAL SHIPPI	\G			Markup %:	0.000	0000			
Tariff Code:									
SHIPPING THRESHOLDS									
Undership Threshold (%)	: 100.00								
Overship Threshold (%):	100.00								

Figure: The Export to External System check box on the Item Classes form

This check box is displayed only if the *Commerce Integration* feature is enabled on the *Enable/Disable Features* (CS100000) form. By default, this check box is selected for all new item classes.

Changes to the Stock Items, Non-Stock Items, and Template Items Forms

On the **eCommerce** tab of the *Stock Items* (IN202500) form, *Non-Stock Items* (IN202000) form, and *Template Items* (IN203000) form, the **Export to External System** check box has been added; the following screenshot shows this check box on the *Stock Items* form.

This check box is displayed only if the *Commerce Integration* feature is enabled on the *Enable/Disable Features* (CS100000) form.

Stock Items RES01K021 - Resiste	tors 100ct,1K Ohm , 0.2 Watts, 1% tolerance	.s •
C □ □ □	+ 🔟 🗘 • I< < > >I ACTIONS • INQUIRIES •	
* Inventory ID:	RES01K021 - Resistors 100ct, 1K Ohn A Product Workgroup:	^
item Status.	Active Product Manager.	
Description:	Resistors 100ct,1K Ohm , 0.2 Watts, 1% tolerance	
GENERAL PRICE/CO	DST MANUFACTURING WAREHOUSES VENDORS ATTRIBUTES PACKAGING ECOMMERCE	Ş
]	Export to External System Media URLs	
Visibility:	Visible Č + X	
Availability:	Store Default	
When Qty Unavailable:	Store Default	
Custom URL:		
Page Title:		
Search Keywords:		
Meta Keywords:		
Meta Description:		

Figure: The Export to External System check box on the Stock Items form

When a new stock, non-stock, or template item is created, the state of the **Export to External System** check box is determined by the state of the similar check box of the item class of the item. That is, if the **Export to External System** check box is selected for the item class to which the item belongs, the check box will be selected for the item as well. The user can override the default state of the check box for the selected item, if necessary.

Only items for which the **Export to External System** check box is selected can be exported to an external ecommerce system during the synchronization of the *Stock Item*, *Non-Stock Item*, and *Template Item* entities.

For matrix items, which are based on a template item, the state of the **Export to External System** check box is inherited from the template item settings and cannot be changed. So when a template item for which the **Export to External System** check box is selected is exported, all matrix items generated for it are exported too.

If a user clears the **Export to External System** check box for an item, the next time the item is synchronized, the system will assign the *Invalid* status to the synchronization record of that item.

Commerce: Changes to Tax Settings

In Acumatica ERP 2021 R1, the **Taxes** section of the **Order Settings** tab of the *BigCommerce Stores* (BC201000) and *Shopify Stores* (BC201010) forms has been redesigned (see the screenshot below).

In previous versions of Acumatica ERP, to synchronize taxes between an online store and Acumatica ERP, a user had to select the synchronization type, manual or automatic, and then specify either the default tax zone (which was used if no other tax zone could be determined based on the order details) or the primary tax zone (which overrode any other tax zone that was determined based on the order details).

Starting in Version 2021 R1, to specify each store's settings for the synchronization of taxes, a user needs to perform the following steps:

- 1. Select the new **Tax Synchronization** check box to indicate that taxes should be imported from the external e-commerce system.
- 2. In the **Default Tax Zone** box, specify the tax zone that will be used to calculate taxes if the system cannot determine the tax zone based on the customer location or shipping address.
- 3. To indicate that the tax zone specified as the **Default Tax Zone** should be used as the primary tax zone, select the **Use as Primary Tax Zone** check box. If a tax zone is specified as the primary tax zone, the system uses it to calculate taxes for sales orders imported from the external e-commerce system, even if a different tax zone can be determined based on the customer location of the shipping address.

BigCommerce Stores

		21							
Connector:	BigCommerce				Active				
* Store Name:	Sweet Store			Q	🗹 Default				
CONNECTION SETTING	S ENTITY SETTINGS CU	ISTON	ИER	SETTINGS	INVENTORY S	ETTINGS ORDE	R SETTINGS	PAYMENT SETT	INGS
GENERAL		_	SF	IPPING OPT	TION MAPPING				
* Branch:	PRODWHOLE - Products Wh &	Ø		v +	× 🛏 🛙				
ORDER		_		Activo	Store Shipping	* Store Shipping	Ship Via	Shinning	Shipping
Order Type for Import:	EO - BigCommerce Order 🖉	0		Active	Zone	Method	Ship via	Zone	Terms
Order Types for Export:	EO - BigCommerce Order -								
Return Order Type:	RC - Return for Credit	0							
Refund Amount Item:	REFUNDAMT - Refund Amou 🔎	0							
Refund Reason Code:	REFUND - eCommerce Refui 🔎	0							
Order Time Zone:	(GMT-05:00) Eastern Time *								
Show Discounts In:	Document Discount +								
Gift Certificate Item:	GIFTCERT - Gift Certificate	0							
TAXES		-							
	Tax Synchronization								
Default Tax Zone:	AVALARA - Avalara Tax Calcı 🔎								
	✔ Use as Primary Tax Zone								
SUBSTITUTION LISTS		-							
* Tax List:	BCCTAXCODES ,P								
* Tax Category List:	BCCTAXCLASSES ,P								

Figure: The Taxes section of the Order Settings tab

- If an external tax calculation service is used in the company, the user should select the Tax Synchronization check box, specify the tax zone configured for the service in the Default Tax Zone box, and select the Use as Primary Tax Zone check box. In this case, on the Financial Settings tab of the Sales Orders (SO301000) form, for each sales order imported from the store, the system will select the Override Tax Zone check box and insert the primary tax zone into the Customer Tax Zone box.
 - 2. If the **Tax Synchronization** check box is cleared, taxes are not imported from the external ecommerce system with orders. However, if the tax zone is identified for the order during order import, it will be used for calculating taxes for that order by using the tax settings specified in Acumatica ERP.

If tax synchronization is turned on, when a sales order is imported from the external e-commerce system to Acumatica ERP, the system searches for the tax zone that should be used for tax calculation as follows, stopping the search when it finds a qualifying tax zone:

- 1. The system searches for the primary tax zone (that is, the tax zone that is specified in the **Default Tax Zone** box if the **Use as Primary Tax Zone** check box is selected).
- 2. The system searches for the tax zone of the customer location.
- 3. The system tries to determine the tax zone based on the zip code of the shipping address.
- 4. The system searches for the default tax zone (that is, the tax zone that is specified in the **Default Tax Zone** box if the **Use as Primary Tax Zone** check box is cleared).

The process is illustrated in the following diagram.



Figure: Determination of the tax zone for tax calculation

Commerce: Enhancements in the Commerce Sync Monitoring Dashboard

In Acumatica ERP 2021 R1, multiple enhancements have been made to the *Commerce Sync Monitoring* dashboard, which displays commerce-related statistics (see the screenshot below) for the store selected at the top of the dashboard as follows:

• The following tiles have been added:

i

- *Aborted Records*: The number of synchronization records that have the *Aborted* status. These are the records that exceeded the maximum number of allowed failed attempts.
- *Failed Records*: The number of synchronization records with the *Failed* status. These records are within the limit of the maximum number of allowed failed attempts.
- Unpaid Orders: The number of orders that have been imported from the external system and that do not have payments applied, as well as the orders that have been created in Acumatica ERP without payments applied and exported to an external system.
- Orders > 7 Days, Not Shipped: The number of orders that were created more than 7 days ago and have not been shipped.
- *Total Revenue*: The sum of order total values (in the base currency) of all the orders that were imported or exported by using the commerce connector.
- *Prepared for Processing*: The number of synchronization records with the *Prepared* status.
- *Processed in Last 7 Days*: The number of synchronization records that have been processed in the last 7 days.

The synchronization records are regarded as processed when they have been processed by the connector; these records can have various statuses, such as *Processed*, *Filtered*, *Invalid*, *Deleted*, or *Skipped*.

- Total Processed: The number of synchronization records that have been processed.
- The *Sales Order* line chart has been added, which shows the number of sales orders imported per day. The maximum number of days shown is 10 by default.
- The *Processed Records* bar chart has been added. This chart shows the number of synchronization records that have been processed for each entity type.
- The *Aborted Records* table has been added, which shows the synchronization records with the *Aborted* status.

Commerce: Enhancements in the Commerce Sync Monitoring Dashboard | 21

5		2	(C)		15	SALES ORDE	RS								
-		-MORTED-RECORDE	X		144.80 (500)	1					~				
	3 	•	9 1.10 × 1.11	s	14.83K	2	40	11 FVdX	LINITO	1 ¹	9020 12/W/T020	5	11/2924	110,21997	-
9	870 I VITEDVANETI FETA VVITI DE SSINITI	ψ ; ^{en}	-6 	9	223 1000 (Sectored	TRENDING P	RODUCTS				TOP PRODUCTS				
ROCES	SSED RECORDS	<u> </u>	_		-	1.000 -					5.000 -	1	_	_	
	Reyment					a James	(Mar)	Dige	Cases	101 pdf	Paus (271)	(Har-	Dan	New (Here	THEFT
Sele	en Cettegery					ALCOND O	115min	165711-	TISPIN	Cherter	MCCORN MCCLOT	157/14 115	1111 - 195	and allow all	part of the second seco
Custome	Rafund er Location					ABORTED RE Connector \$	ICORDS	bility	Status	Last Operation	Last Error	Last	ERP I	External ID	A
	Customer					BigCommerce A BigCommerce A	comments 5	Alles Croker	Aborted Aborted	Faced to Save in Sync Faxed	The status of the SCOOMSE. The system advended to and	MARK MARKA		5211 525	
Aliter 1	Proce Deer														
740	solate Dani														

Figure: The Commerce Sync Monitoring dashboard

Commerce: Filtering Entities by Custom Fields and Attributes

Starting in Acumatica ERP 2021 R1, users can filter entities to be exported to an online store by custom fields and attributes.

Export Filtering by Custom Fields

Export filtering by custom fields, which are fields added to a form as a result of publishing a customization project, is available for the *Customer*, *Stock Item*, *Non-Stock Item*, *Template Item*, and *Sales Order* entities.

To use a custom field in a filtering condition, on the **Export Filtering** tab of the *Entities* (BC202000) form, a user should type the name of the field in the **Field Name** column of the table (shown in the following screenshot). The system validates the field name against the API field list and displays an error if the field name cannot be found.

Entities 🟠											
🖺 🖒 ST/	ART REAL-TIM	E SYNC S	TOP R	EAL-TIME S	SYNC CL	EAR SY	YNC DATA				
Connector:	BigCommerce			Sync Direct	tion:		Bidirectional	-	Real-Time Import:	Stopp	ed
Store:	SweetStore	ز	0	Primary Sys	stem:		External	-	Real-Time Export:	Stopp	ed
Entity:	Customer		-	Max. Numb	er of Failed At	ttempts:		5	Real-Time Mode:	Prepa	re -
	Active								Real-Time Webhook URL:		
IMPORT MAPPIN	ig import	filtering	EXPOR	RT MAPPING	EXPORT	TFILTER	ING				
🖹 🕕 🗅 Active	Brackets	* Field Name		*(Condition	Value		Va	lue 2	Brackets	Operator
< 0 D Ø	-	BAccount.Usr	Loyalty	•	quals					-	And

Figure: The Field Name column

To avoid typing errors, the user can copy the name of the needed field from the API Advanced list as follows:

- 1. On the **Export Mapping** tab, in the **Source Object** column, the user selects the $\langle Entity \rangle \rightarrow Advanced$ option.
- 2. In the **Source Field / Value** column, the user clicks the down arrow, and then selects and copies the needed field name.

Export Filtering by Attributes

Export filtering by attributes is available for the Customer, Stock Item, Non-Stock Item, and Template Item entities.

When an attribute is created and added to a customer class or item class, it becomes available for selection on the *Entities* (BC202000) form. To use an attribute in a filtering condition, a user should select it in the **Field Name** column of the table on the **Export Filtering** tab. An attribute can be distinguished from other fields by the *Attributes* prefix before its name (shown in the following screenshot).

Connector:	BigCommerce		Sync Direction:	Export	-	Real-Time Import:	Not S	upported
Store:	SweetStore	Q	Primary System:	Local	-	Real-Time Export:	Stopp	ed
Entity:	Stock Item	-	Max. Number of Failed Attempts:		5	Real-Time Mode:	Prepa	ire .
	Active							
EXPORTMAPH	ING EXPOR	I FILTERING						
с + х	< ⊷ X	1.						
0 🗋 Active	Brackets	* Field Name	*Condition Value		Vá	lue 2	Brackets	Operator
	-	1	✓ oes Not Equal				-	And
	-	ABC Code	✓ oes Not Equal				-	And
	-	ABC Code Attributes.Ingredient	• oes Not Equal				-	And
	-	ABC Code Attributes.Ingredient Attributes.Package	← oes Not Equal				-	And
	-	ABC Code Attributes.Ingredient Attributes.Package Attributes.Volume	• oes Not Equal				-	And
	-	ABC Code Attributes.Ingredient Attributes.Package Attributes.Volume Average Cost Base I Init	• pes Not Equal				-	And
6 Q D 🗹	-	ABC Code Attributes.Ingredient Attributes.Package Attributes.Volume Average Cost Base Unit Default Issue From	• pes Not Equal				-	And
• Q D 🗹	-	ABC Code Attributes.Ingredient Attributes.Package Attributes.Volume Average Cost Base Unit Default Issue From Default Price	• pes Not Equal				-	And
* Q D I	-	ABC Code Attributes.Ingredient Attributes.Package Attributes.Volume Average Cost Base Unit Default Issue From Default Price Default Warehouse	• pes Not Equal					And
* Q D 🗹	-	ABC Code Attributes.Ingredient Attributes.Package Attributes.Volume Average Cost Base Unit Default Issue From Default Price Default Warehouse Description	• pes Not Equal					And

Figure: Attributes in the field list

Special Considerations

In some situations, a custom field or an attribute used in a filtering condition may become unavailable during export. For example, an attribute may be removed from an item class or a customer class of an item or a customer, respectively, being exported, or a customization project that added a field may be unpublished. In this case, the system will treat the value in the condition that contains the missing field as *null*. To avoid issues during the export, the *Is Not Empty* condition should be added to each filtering condition that includes custom fields or attributes. The following screenshot shows an example of an extended condition that contains the *Ingredients* attribute.

Entities 🕁

Đ	∽ STA	ART REAL-TIM	E SYNC STOP RE	AL-TIME SYNC CLE	AR SYNC D	ATA			
Con	nector:	BigCommerce		Sync Direction:	Expo	rt -	Real-Time Import:	Not Sup	oported
Store	e:	SweetStore	Q	Primary System:	Local	-	Real-Time Export:	Stoppe	d
Entit	y:	Stock Item	-	Max. Number of Failed Atte	empts:	5	Real-Time Mode:	Prepare	• •
EXPC Č	ORT MAPPIN	ig <u>export</u> ⊷ ⊠	FILTERING						
	Active	Brackets	* Field Name	*Condition	Value		Value 2	Brackets	Operator
> 0 0		-	Item Class	Equals	JAM			-	And
0 0		-	Attributes.Ingredients	Equals	Apple			-	And
0 0		-	Attributes.Ingredients	Is Not Empty				-	And

Figure: Extended condition for the Ingredients attribute

Commerce: Import of Order Fraud Analysis from Shopify

In Acumatica ERP 2021 R1, for sales orders created in Shopify, the fraud analysis data with risk recommendations can be imported from Shopify.

Setting Up the Import of Order Risk Information

To set up the import of fraud analysis data along with sales orders from Shopify, an implementation manager should do the following in the **Order** section of the **Order Settings** tab of the *Shopify Stores* (BC201010) form:

- 1. Select the new Import Order Risks check box (shown in the following screenshot).
- 2. In the new **Hold on Risk Status** box (also shown in the following screenshot), which became available when you selected the check box, select one of the following options:
 - *High Risk*: The system will assign the new *Risk Hold* status to imported sales orders with high risk only.
 - *Medium or High Risk*: The system will assign the new *Risk Hold* status to imported sales orders with both medium risk and high risk.

```
Shopify Stores
```

🖹 🗠 + 🗓		TEST CONNE	CTION				
Connector:	Shopify		Active				
* Store Name:	Sweet Store - SP	Q	Default				
CONNECTION SETTINGS	S ENTITY SETTINGS CUSTOM	ER SETTINGS	INVENTOR	Y SETTINGS	ORDER SETTINGS	PAYMENT SETTINGS	SHIPPING SETTINGS
GENERAL		POS ORDE	ER				
* Branch:	HEADOFFICE - SweetLife He 🔎 🧷	🗸 Import	POS Orders				
ORDER	, ,	* POS Dire	ct Order Type:	IN - Invoice	P 0		
* Order Type for Import:	EO - eCommerce Order 🛛 🖉 🧷	* POS Ship	ping Order Ty	SO - Sales Ord	er 🔎 🖉		
* Return Order Type:	RC - Return for Credit 🛛 🔎 🧷	WAREHOU	ISE MAPPING	FOR ORDER IMP	PORT		
* Refund Amount Item:	REFUNDAMT - eCommerce I 🔎 🧷	- ڻ	⊦×⊦	→ X			
Refund Reason Code:	EREFUND - eCommerce Ref $ \mathcal{P} \mathcal{O} $	🛱 * Shonif	v Location	*Warehouse	Location ID		
Order Time Zone:	(GMT-05:00) Eastern Time 🔹	> 2050 H		DETAIL	101		
Show Discounts In:	Line Discount -	> 3900 H	onman Aven	RETAIL	121		
	Import Order Risks						
Hold on Risk Status:	Medium or High Risk -						
Gift Certificate Item:	GIFTCERT - Gift Certificate 🛛 🖉						
	Tag Ext. Order with ERP Order Nbr.						
TAXES							
	Tax Synchronization						
Default Tax Zone:	Q						
	Use as Primary Tax Zone						
SUBSTITUTION LISTS							
* Tax List:	SPCTAXCODES $ ho$						
* Tax Category List:	SPCTAXCLASSES 🔎						

Figure: The Order Settings tab of the Shopify Stores form

Processing Sales Orders with the Risk Hold Status

A manager who reviews sales orders imported from Shopify can do the following to process the orders with the *Risk Hold* status:

- 1. Open the sales order on the Sales Orders (SO301000) form.
- 2. Open the new **Risks** tab (shown in the following screenshot) and analyze information about order risks, such as the following:
 - The status in the Risk Status box, which can be Low, Medium, or High.

- The score in the **Score** % column of the table. (The mapping of risk scores for statuses is listed in the table below the screenshot.)
- The recommendations in the **Recommendation** column.

Sales Orders EO SO005919 ≅ ∽ + îî ĵ • K	> > REMOVE RISK HOLD	ACTIONS - REPORTS							
* Order Type: EO , A * Customer	E00000009 - Acu 123	Ordered Qty.:	1.00						
Order Nbr.: SO005919 P * Location:	MAIN - Acu124 🔎	Discount Total:	0.00						
Status: Risk Hold Contact:	Acu 123 ,0	VAT Exempt T	0.00						
* Date: 1/18/2021 Currency:	USD ,P 1.00 VIEW BASE	VAT Taxable T	0.00						
* Requested On: 1/18/2021 * Project:	X - Non-Project Code.	🖉 Tax Total:	50.50						
Customer Ord #21215		Order Total:	550.50						
External Refer 296928015159 Description	AcumaticaPlus #21215 Paid								
DETAILS TAXES COMMISSIONS FINANCIAL SHIPPING ADDRESSES DISCOUNTS SHIPMENTS PAYMENTS RISKS TOTALS Risk Status: Medium C + × H I									
Score % Recommendation	lessage								
> 50.00 Investigate	Fraud Filter matched rule with name: Medium Risk								

Figure: The Risks tab on the Sales Orders form



Each order can have more than one risk recommendation and score. The **Risk Status** box displays the maximum risk in the list of risk recommendations.

- 3. If it seems too risky to process the order, the manager clicks **Actions > Cancel Order** on the form toolbar. The order is assigned the *Canceled* status and excluded from processing.
- 4. To process the order, the manager clicks the new **Remove Risk Hold** button on the form toolbar. The order is assigned the *Open* or *Pending Approval* status, depending on the workflow configuration.

Table: Mapping of risk scores and statuses

Score %	Risk Status
0.00-20.00	Low
20.00-60.00	Medium
60.00-100.00	High

Additional Information

For details about the import of order risk analysis, see Synchronizing Orders: Import of Order Risk Information.

Commerce: Import of Returns and Refunds from BigCommerce

In Acumatica ERP 2021 R1, the BigCommerce Connector supports the importing of returns and refunds that have been processed in a BigCommerce store.

Configuration of the Import of Refunds in Acumatica ERP

To configure the import of refunds from the BigCommerce store to Acumatica ERP, the user needs to perform the following general steps:

- 1. On the Entity Settings tab of the BigCommerce Stores (BC201000) form, activate the Refund entity.
- 2. On the **Order Settings** tab (see the following screenshot), specify settings in the following boxes:
 - **Return Order Type**: The order type that is assigned to return orders imported to Acumatica ERP from the BigCommerce store. In this box, only order types with the following settings on the **Template Settings** tab of the *Order Types* (SO201000) form can be selected:
 - Automation Behavior: RMA Order
 - Default Operation: Receipt
 - AR Document Type: Credit Memo
 - Refund Amount Item: The non-stock item, which has been created on the *Non-Stock Items* (IN202000) form, that is used to represent imported refund amounts in sales orders and in return orders. The non-stock item selected in this box is excluded from synchronization and is not exported when the *Non-Stock Item* entity is synchronized. The non-stock item representing refund amounts should be exempt from taxes (that is, on the General tab of the *Non-Stock Items* form, in the Tax Category box, a category corresponding to tax-exempt items should be assigned). Also on this tab, the Require Receipt and Require Shipment check boxes must be cleared for the item.
 - **Refund Reason Code**: The reason code, which has been created on the *Reason Codes* (CS211000) form, to be inserted in return orders for refunds imported to Acumatica ERP from the BigCommerce store. In this box, only reason codes of the *Issue* usage type can be selected.

□ + 0	0 • K < >	>	TEST CONNE	CTION		
Connector:	BigCommerce			Active		
* Store Name:	Acumatica2020		Q	Default		
CONNECTION SETTING	S ENTITY SETTINGS CU:	STOM	MER SETTINGS	INVENTORY S	ETTINGS OR	DER SETTINGS
GENERAL			SHIPPING OPT	ION MAPPING		
* Branch:	PRODWHOLE - Products Wh ,0	0	0 +	× ⊷ X	i l	
ORDER			E Active	Store Shipping	* Store Shinning	Shin Via
* Order Type for Import:	EO - BigCommerce Order 0	0	E Houre	Zone	Method	, only the
Order Types for Export:	PO — Phone Commerce O		> 🗹	United States	Ship	MYSHIPVIA
* Return Order Type:	RC - Return for Credit	0		United States	Flat Rate	MYSHIPVIA
* Refund Amount Item:	REFUNDAMT - Refund Amou 🔎	0		United States	None	MYSHIPVIA
* Refund Reason Code:	REFUND - Ecommerce Refur ,0	0				
Order Time Zone:	(GMT-05:00) Eastern Time ·					
Show Discounts In:	Document Discount *					
0.0 0		1				

Figure: Refund and return import settings

Import of Refunds

Refunds are imported from the BigCommerce store to Acumatica ERP as part of the synchronization of the *Refund* entity, which can be synchronized only in the *Import* direction. During the preparation of refund data for synchronization, the system creates one synchronization record for all refunds that have been issued for a single sales order in the BigCommerce store.

For a refund to be imported successfully, all of the following conditions must be met:

- The original sales order has been synchronized.
- The original sales order must be either not shipped or shipped in full. If the sales order has been shipped partially, the refund will not be imported.
- The original payment to which the refund pertains has been imported and released.

This condition does not apply if the sales order is refunded in full or canceled and if the original payment has the *Pre-Authorized* processing status. In this case, it is not necessary to release the original payment, because processing the refund will void the original payment.

For more information about the synchronization process, see *Data Synchronization: General Information*. The subsequent sections of this topic describe the results of the successful synchronization of various types of refunds.

Refunds Without Returns

A refund without any returned item is a refund that does not involve the return of a product. A refund of this type may be issued, for example, if a customer has not received the ordered items or has been charged more than expected.

During the import of refunds on order amounts, if the original sales order has the *Open* or *On Hold* status on the *Sales Orders* (SO301000) form, the following actions occur:

- On the *Payments and Applications* (AR302000) form, the system creates a payment of the *Customer Refund* type in the refunded amount and applies it to the original payment if it is a partial refund.
- If the sales order is fully refunded or canceled and the processing status of the original payment is *Pre-Authorized*, then the original payment is voided.
- In the original sales order, on the Document Details tab of the Sales Orders form, the system inserts a line (shown in the following screenshot) for the non-stock item that was specified in the Refund Amount Item box on the Order Settings tab of the *BigCommerce Stores* (BC201000) form. In the Unit Price and Ext. Price columns of the added line, the system inserts the reversed refund amount (that is, an amount with the minus sign). In the Reason Code column, the system inserts the reason code that was specified on the Order Settings tab of the *BigCommerce Stores* form.

EO SO005928 - Fadi Kabuk ← ♡ ▷ · · · · · · · · · · · · · · · · · ·																	
*	Order	Type:	EO	Q	Customer:	ABARTE	NDE - Fadi	Kabuk	0	Ordered Qt	y.:	8.00					
	Order	Nbr.:	SO00592	8 0	Location:	L000000	004 - USA E	artending School		Discount To	tal:	0.00					
	Statu	5:	Complete	d	Contact:	Fadi Kat	uk		0	VAT Exemp	t T	0.00					
	Date:		1/20/2021		Currency:	USD	1.00	* VIEW BASE		VAT Taxable	e T	0.00					
	Requ	ested On:	1/20/2021		Project:	X - Non-	Project Code		Ø	Tax Total:		159.66					
	Custo	mer Ord								Order Total:		2,519.66					
	Exter	nal Refer	349 - Acu	matic	Description:	BigComr	nerce Order	349									
	DETAILS TAXES COMMISSIONS FINANCIAL SHIPPING ADDRESSES DISCOUNTS SHIPMENTS PAYMENTS TOTALS																
	0 0) *Branch	1	*Inventory	ID V	Varehouse	Line De	scription			*UOM	Quantity	Unit Price	Qty. On Shipments	Open Qty.	Manual Price	Ext. Price
	0 (PROD	VHOLE	AACOMPL	JT01	WHOLESALE	Acer La	ptop Computer.			EA	4.00	500.00	4.00	0.00	1	2,000.00
	0 (PROD	VHOLE	AALEGO5	00	WHOLESALE	Lego 5	00 piece set			EA	4.00	100.00	4.00	0.00	1	400.00
>	0 () PROD	VHOLE	REFUNDA	MT		Refund	Amount			PC	1.00	-50.00	0.00	0.00	1	-50.00

Figure: The refund amount item in a sales order line

If the original sales order has the Completed status, the following actions are performed:

- On the Sales Orders form, the system creates a return order of the type selected in the Return Order Type box on the Order Settings tab of the *BigCommerce Stores* form. In the External Reference box of the Summary area, the system inserts the identifier of the refund in the BigCommerce store.
- In the return order, on the **Document Details** tab, the system inserts a line with the non-stock item that was specified in the **Refund Amount Item** box on the **Order Settings** tab of the *BigCommerce Stores* form. In the **Unit Price** and **Ext. Price** columns, the system inserts the refund amount. In the **Reason Code** column, the system inserts the reason code that was specified on the **Order Settings** tab of the *BigCommerce Stores* form.

If the original sales order has a status other than *Open*, *On Hold*, or *Completed*, the system displays an error message saying that the refund cannot be applied.

Refunds for Item Returns

A refund for a returned item is a refund that involves the return of a product. A refund of this type may be issued if, for example, a customer wants to amend the order to decrease the quantity of a purchased item or because the customer wants to return the item whose condition or performance is unsatisfactory.

During the import of refunds on item returns, if the original sales order has the *Open* or *On Hold* status on the *Sales Orders* (SO301000) form, the following actions occur:

- On the *Payments and Applications* (AR302000) form, the system creates a payment of the *Customer Refund* type in the refunded amount and applies it to the original payment if it is a partial refund.
- If the sales order is fully refunded or canceled and the processing status of the original payment is *Pre-Authorized*, then the original payment is voided.

- If the sales order is fully refunded or canceled and the processing status of the original payment is *Captured* or *Settled*, then a new voided payment is created against the original payment.
- In the original sales order, on the **Document Details** tab of the *Sales Orders* form, the system updates the order line or lines to decrease the item quantities. Discounts and taxes, if applied, are recalculated accordingly.

If the original sales order has the *Completed* status, the following actions occur:

- On the Sales Orders form, the system creates a return order of the type that was specified in the Return
 Order Type box on the Order Settings tab of the BigCommerce Stores (BC201000) form. In the External
 Reference box of the Summary area, the system inserts the identifier of the refund in the BigCommerce
 store.
- In the return order, on the **Document Details** tab of the *Sales Orders* form, the system inserts a line with the applicable quantity of the returned item. In the **Reason Code** column, the system inserts the reason code that was specified on the **Order Settings** tab of the *BigCommerce Stores* form.
- In the return order, on the Document Details tab of the Sales Orders form, the system inserts a line with the non-stock item that was specified in the Refund Amount Item box on the Order Settings tab of the BigCommerce Stores form. In the Unit Price and Ext. Price columns, the system inserts the refund amount. In the Reason Code column, the system inserts the reason code that was specified on the Order Settings tab of the BigCommerce Stores form.

If the original sales order has a status other than *Open*, *On Hold*, or *Completed*, the system displays an error message saying that the refund cannot be applied.

Notes

When a user imports refunds from the BigCommerce store to Acumatica ERP, the user should keep in mind the following information:

- If a refund is created for a sales order in the BigCommerce store before the sales order is synchronized, when the *Sales Order* entity is synchronized, the refunded or partially refunded sales order is imported with the amount that reflects the refund. In this case, no *Customer Refund* document is created on the *Payments and Applications* (AR302000) form.
- If a refund has been imported for a sales order and a *Customer Refund* document has been created for it on the *Payments and Applications* form, a second refund for the same sales order can be imported only after the *Customer Refund* document is released.
- A *Customer Refund* document is created on the *Payments and Applications* form for each refunded payment. If the original sales order had two payments (for example, if the customer redeemed a gift card for part of the order amount and paid the rest with a credit card) and then two refunds were created (one for each of these payment methods), after the *Refund* entity is synchronized, two *Customer Refund* documents are created in Acumatica ERP.

Additional Information

For details about importing refunds from BigCommerce, see Importing Refunds: General Information.

Commerce: Support of Multiple Warehouse Locations for Shopify

In Acumatica ERP 2021 R1, multiple warehouse locations are now supported in the synchronization settings of the Shopify store on the *Shopify Stores* (BC201010) form.

If more than one warehouse location has been created in Shopify, then an implementation manager can now specify the way the inventory availability data will be exported from Acumatica ERP. To make this possible, multiple settings have been added to the **Inventory Settings** tab (see the following screenshot).

Shopify Stores		CUSTOM
ä∽ + â Ô•	IC CONT	NECTION
Connector: Shopi	fy	✓ Active
* Store Name: Acu-S	hop $ ho$	Default
CONNECTION SETTINGS E	NTITY SETTINGS CUSTOMER SETTINGS	INVENTORY SETTINGS ORDER SETTINGS
INVENTORY SETTINGS		
Sales Category Export:	Export as Product Tags	¥
Default Availability:	Set as Available (Track Qty)	¥
When Qty Unavailable:	Do Nothing	*
Availability Mode:	Available for Shipping	•
Warehouse Mode:	Specific Warehouses	*
WAREHOUSE MAPPING FOR INV	ENTORY EXPORT	
Ů + × ⊢ Ŭ	X	
*Warehouse Location	n ID * Shopify Location	
RETAIL R10R/	ACK1 11235 SE 6th St #140	
> WHOLESALE	New Warehouse	

Figure: The Inventory Settings tab on the Shopify Stores form

In the Warehouse Mode box, the implementation manager can select one of the following options:

- *All Warehouses*: The system will always export the inventory availability data to the first warehouse location created in Shopify, even if multiple locations have been created.
- Specific Warehouses: An implementation manager specifies the warehouses and their locations in the **Warehouse Mapping for Inventory Export** table, which appears below the **Warehouse Mode** box when this option is selected.

The Warehouse Mapping for Inventory Export table contains the following columns:

- **Warehouse** (required): A warehouse from Acumatica ERP that holds inventory items whose availability data should be exported to Shopify. The implementation manager should select a warehouse from the list, which contains the active warehouses that have been created on the *Warehouses* (IN204000) form.
- Location ID (optional): A warehouse location from Acumatica ERP that contains inventory items whose availability data should be exported to Shopify. The implementation manager can select a warehouse location from the list, which contains the active locations that have been created on the *Warehouses* form for the warehouse selected in the **Warehouse** column of the row. If no location is selected, the system exports the availability data for items stored in all locations of the selected warehouse.

• **Shopify Location** (required): The Shopify warehouse location where the system will export availability data for inventory items from Acumatica ERP. The implementation manager selects a location from the list, which contains all the warehouse locations created in Shopify.



If no values are selected in the **Warehouse Mapping for Inventory Export** table, the system will behave as it would if the *All Warehouses* mode is selected.

Additional Information

For more information about the synchronization of the availability data between Acumatica ERP and the Shopify store, see *Synchronizing Product Availability*.

Commerce: Support of Shopify Point-of-Sale (POS) Orders

In Acumatica ERP 2021 R1, the ability to import Shopify point-of-sale (POS) orders has been implemented. This functionality is available only when the *Shopify POS* feature is enabled on the *Enable/Disable Features* (CS10000) form.

An implementation manager can specify the import settings for POS orders on the **Order Settings** tab of the *Shopify Stores* (BC201010) form, as shown in the following screenshot.

Shopify Stores	© • K < > >I	TEST CONNECTION
Connector: * Store Name: CONNECTION SETTING:	Shopify Acu-Shop S ENTITY SETTINGS CUSTOME	Active C Default R SETTINGS INVENTORY SETTINGS ORDER SETTINGS PAYMENT SETTING
GENERAL* Branch: ORDER* * Order Type for Import: * Return Order Type: * Refund Amount Item:	PRODWHOLE - Products Wr Image: Constraint of the second	POS ORDER Import POS Orders * POS Direct Order Type: IN - Invoice > * POS Shipping Order Ty SO - Sales Order > WAREHOUSE MAPPING FOR ORDER IMPORT C + × IN - Invoice > > POS Shipping Order Ty SO - Sales Order > O
* Refund Reason Code: Order Time Zone: Show Discounts In: Hold on Risk Status: Gift Certificate Item:	REFUND - Direct Issues P (GMT-05:00) Eastern Time ···· * Document Discount * Import Order Risks Medium or High Risk * GIFTCERT - Gift Certificate P	* Warehouse Location ID * Shopify Location RETAIL R10RACK1 11235 SE 6th St #140 SMWARE SMLOCATION New Warehouse
TAXES	Tag Ext. Order with ERP Order Nbr. Tax Synchronization	

Figure: The Order Settings tab on the Shopify Stores form

The following new settings have been added to the new **POS Order** section:

- **Import POS Orders** check box: The implementation manager selects this check box to import POS orders from Shopify to Acumatica ERP.
- **POS Direct Order Type**: The order type that is used by the system for the orders that do not involve shipping and have already been fulfilled from the brick-and-mortar store. In this box, the order types with the *Invoice* order type template are displayed.
- **POS Shipping Order Type**: The order type that is used for orders with shipping. In this box, the order types with the *Sales Order* order type template are displayed.

Orders of this type will also be included in the shipment export process.

• Warehouse Mapping for Order Import: The table where the implementation manager can specify the warehouses and warehouse locations in Acumatica ERP that the system will use when importing the orders for each order line. If the warehouses and locations are not specified, the system will use the default warehouse and location specified in the settings of the item on the *Stock Items* (IN202500) form.

Commerce: Synchronization of Multiple Order Types with BigCommerce

In Acumatica ERP 2021 R1, support has been added for the export of orders of multiple types to BigCommerce stores.

This functionality is available only if the *Custom Order Types* feature is enabled on the *Enable/Disable Features* (CS100000) form.

Export of Orders of Multiple Order Types

In previous versions of Acumatica ERP, during the synchronization of the *Sales Order* entity, only one order type could be assigned to orders imported to Acumatica ERP from a BigCommerce store, and only orders of that order type could be exported from Acumatica ERP to the BigCommerce store. An administrative user specified that order type in the **Order Type** box (which has been renamed to **Order Type for Import**) on the **Order Settings** tab of the *BigCommerce Stores* (BC201000) form during the configuration of the connection to the store.

In 2021 R1, a new box, **Order Types for Export** (see Item 2 in the following screenshot), has been added to the **Order Settings** tab. For the BigCommerce store selected on the form, in this box, an administrative user can now select any number of order types for orders to be exported to the BigCommerce store. Orders of the type selected in the **Order Type for Import** box (Item 1) will also be exported to the BigCommerce store, in addition to being imported from it.

BigCommerce Stores									
E v + 🖻	□ - 	>I	TEST CONNE	CTION					
Connector:	BigCommerce			Active					
* Store Name:	Sweet Store		Q	🗹 Default					
CONNECTION SETTINGS ENTITY SETTINGS CUSTOMER SETTINGS INVENTORY SETTINGS ORDER SETTINGS PAYMENT SETTINGS									
GENERAL			SHIPPING OPT						
* Branch:	PRODWHOLE - Products Wh ,P	Ø	ڻ +	× 🛏 🗵					
ORDER		-	Active	Store Shipping	* Store Shipping	Ship Via	Shipping	Shipping	
Order Type for Import:	EO - BigCommerce Order 🖉 🔎	0		Zone	Method		Zone	Terms	
2 Order Types for Export:	EO - BigCommerce Order 🔹								
Return Order Type:	RC - Return for Credit 🖉 🔎	0							
Refund Amount Item:	REFUNDAMT - Refund Amou 🔎	0							
Refund Reason Code:	REFUND - eCommerce Refur 🔎	0							
Order Time Zone:	(GMT-05:00) Eastern Time 💌								
Show Discounts In:	Document Discount -								
Gift Certificate Item:	GIFTCERT - Gift Certificate	0							
TAVEC									

Figure: The Order Settings tab on the BigCommerce Stores form

Orders are exported to the BigCommerce store only if the synchronization direction of the Sales Order entity is set to *Export* or *Bidirectional* for that store on the *BigCommerce Stores* form or on the *Entities* (BC202000) form.

Changes to the Order Types for Imported Orders

As was the case in previous versions of Acumatica ERP, when orders are imported from a BigCommerce store, by default, they are created in Acumatica ERP based on the order type specified in the **Order Type for Import** box on the **Order Settings** tab of the *BigCommerce Stores* (BC201000) form.

Starting in 2021 R1, an administrative user can override the default order type assigned to imported orders (that is, the order type selected in the **Order Type for Import** box) by configuring an import mapping rule on the **Import Mapping** tab of the *Entities* (BC202000) form.

For example, to make the system assign the *IO* (international order) order type instead the default *EO* (e-commerce order) order type to an order shipped to a country other than the United States, on the **Import Mapping** tab, a user can specify the following settings in a mapping rule for the *Sales Order* entity.

Active	Target Object	Target Object Target Field Source Object		Source Field / Value		
Selected	Sales Order	Order Type	Order Data → Order Shipping Address	=IIf(Country='US', 'EO', 'IO')		

With these settings, during the import of a sales order from the BigCommerce store, the system checks the shipping address of the order and assigns the following order type to the imported order:

- If the country is US, the EO order type
- If the country is anything other than US, the IO order type

The order types used in the mapping rule must exist in Acumatica ERP; otherwise, the import of the order will fail.

Commerce: Other Improvements

In Acumatica ERP 2021 R1, a number of improvements have been made to the e-commerce functionality. The sections of this topic describe these improvements.

Updated List of Fields Available for Mapping and Filtering

Revisions have been made to the list of fields that can be used for mapping on the **Export Mapping** and **Import Mapping** tabs of the *Entities* (BC202000) form and for filtering on the **Export Filtering** and **Import Filtering** tabs of that form. Some of the fields have been removed from the lists of available fields and can no longer be specified in mappings or filtering conditions.

If a removed field was used in a mapping or a filtering condition, after the upgrade, the system will display an error as follows:

- If the removed field was used in a mapping for an entity, an error is displayed when the *Prepare Data* process for the entity is started for the first time, or when the user makes changes to the entity settings on the *Entities* form and tries to save these changes.
- If the removed field was used in a filtering condition for an entity, the system displays an error when the *Process Data* process is started for any prepared synchronization records of the entity for the first time; it also displays an error when the user makes changes to the entity settings on the *Entities* form and tries to save the changes.

Support for the Drag-and-Drop Functionality on the Entities Form

On the **Export Mapping** and **Import Mapping** tabs of the *Entities* (BC202000) form, users can now change the order of any row in the table by dragging it to its new position.

Renaming of Availability Options

The options available for selection in the following boxes have been renamed:

- The **Default Availability** box (in the **Inventory Settings** section of the **Inventory Settings** tab) on the *BigCommerce Stores* (BC201000) and *Shopify Stores* (BC201010) forms
- The **Availability** box of the *Non-Stock Items* (IN202000), *Stock Items* (IN202500), and *Template Items* (IN203000) forms; this box is found on the **eCommerce** tab of each of these forms

The options in these boxes have been renamed as follows (see the following screenshot):

- Available Track Qty to Set as Available (Track Qty)
- Available Don't Track Qty to Set as Available (Don't Track Qty)
- Pre-Order to Set as Pre-Order
- Disabled to Set as Unavailable

BigCommerce Stores

🖹 🖍 + 🖻	¢٠	K < >	>>> >I TEST CONN	NECTION		
Connector:	BigCon	nmerce		Active		
* Store Name:	Sweet	Store - BC	Q	Default		
CONNECTION SETTINGS	EN	ITITY SETTINGS	CUSTOMER SETTINGS	S INVENTORY SETTING	S ORDER SETTINGS	PAYMENT SETTINGS
INVENTORY SETTINGS _						
Default Stock Categories:		Other		-		
Default Non-Stock Catego	ories:	Other		•		
Related Items:				-		
Default Visibility:		Visible		•		
Default Availability:		Set as Available (E	Oon't Track Qty)	-		
When Qty Unavailable:		Set as Available (T	rack Qty)			
Availability Mode:		Set as Available (D Set as Pre-Order	lon't Track Qty)			
Warehouse Mode:		Do Not Update				
		Set as Unavailable				

Figure: The default availability settings for a BigCommerce store

Skipping of the Availability Synchronization

In some cases, companies may want to update the available quantity of particular items manually in a store instead of exporting this quantity from Acumatica ERP. To support this scenario, in Version 2021 R1, a new option, *Do Not Update*, has been added to the availability synchronization settings to prevent the export of the quantity and availability settings for particular items (or all items) during the synchronization of the *Stock Item*, *Non-Stock Item*, *Template Item*, and *Product Availability* entities.

The new *Do Not Update* option has been added to the following forms in the noted boxes:

- *BigCommerce Stores* (BC201000) and *Shopify Stores* (BC201010): The **Default Availability** box on the **Inventory Settings** tab (**Inventory Settings** section)
- Non-Stock Items (IN202000), Stock Items (IN202500), and Template Items (IN203000): The Availability box on the eCommerce tab

The *Do Not Update* setting is applicable during the synchronization of the *Stock Item*, *Non-Stock Item*, *Template Item*, or *Product Availability* entity if any of the following conditions is met:

- The Do Not Update option is selected for a non-stock, stock, or template item in the Availability box on the eCommerce tab of the Non-Stock Items, Stock Items, or Template Items form, respectively.
- The Store Default option is selected for a non-stock, stock, or template item in the Availability box on the eCommerce tab of the Non-Stock Items, Stock Items, or Template Items form, respectively, and the Do Not Update option is selected for the store with which data is synchronized in the Default Availability box on the Inventory Settings tab of the BigCommerce Stores or Shopify Stores form.

The following screenshot shows the *Do Not Update* setting for a stock item.
New Status: Active Product Manager: P Description Apple Jam 8 ez	ivenicity in	APJAM08 - Apple jam 8 oz. P Product Wor	xgroup.		,p				
Description Apple jam 8 oz. CENERAL PRICE/COST WAREHOUSES VENDORS ATTRIBUTES PACKAGING CROSS-REFERENCE RELATED ITEMS REPLENISHMENT GLACCOUNTS DESCRIPTION ECOMME	em Status:	Active + Product Mar	nager:		,e				
SENERAL PRICE/COST WAREHOUSES VENDORS ATTRIBUTES PACKAGING CROSS-REFERENCE RELATED ITEMS REPLENISHMENT GLACCOUNTS DESCRIPTION ECOMME Set as Available (Dan Track Oly) Set as A	Vescription	Apple Jam 8 oz.							
Image: Control External System Modie URLs Visibility Visibility Store Default Availability: Store Default O When Oty Unavailable Set as Available (Don'Track Oty) Set as Available (Don'Track Oty) Data Table Desa Table Set as Available (Don'Track Oty)	ENERAL PRICE/C	OST WAREHOUSES VENDORS ATTRIBUTES	PACKAGING	CROSS-REPERENCE	RELATED ITEMS	REPLENISHMENT	GLACCOUNTS	DESCRIPTION	ECOMMERCE
Vidbility Visible - > Availability. Store Default Type When QfV Unavailable State Available (Crack Ofly) Image State Available (Conn Track Ofly) Image		Export To External System	Media URLs						
Availability: Store Default • Type When Qfy Unavailable: Star Available (Track Qfy) Sata Available (Don't Track Qfy) Deap Tala Sata Available (Don't Track Qfy) Deap Tala Sata Pre-Order	Sibility	Visible -	0 -	×					
When Qhy Unavailable: Store Default Image Clustom URL Set as Available (Track Qhy) Image Dace Table Set as Pre-Order	vallability:	Store Default +	ER SUDI		Type				
Set as Available (Track Oty) mege Custom URL Set as Available (Don't Track Oty) Pace Tale Set as Pre-Order	When Qty Unavailable:	Store Default	and area		Impo				
Pane Title Set as Pre-Order	Custom URL	Set as Available (Track Qty) Set as Available (Doo't Track Qtv)	0		image				
	age Title:	Set as Pre-Order							
Search Keywords Do Not Update	earch Keywords	Do Not Update							
Set as Unavailable	lata Kassuntde	Set as Unavailable							
Mata Kanande	vera rveynorus.								
Search Keywords Search Keywords Search Keywords	rage Title iearch Keywords leta Keywords:	Set as Pre-Order Do Not Update Sot as Unavailable							
	leta Keywords:	Set as chavanable							
leta Keywords:									

Figure: The Do Not Update availability option on the Stock Items form

If this setting is applicable, during the synchronization of the *Stock Item*, *Non-Stock Item*, *Template Item*, or *Product Availability* entity, the following settings of the product in this store are not updated:

- For a BigCommerce store, in the **Inventory** section of the product management page: The **Track inventory** check box, the **On the product level** and **On the variant level** option buttons, and the **Stock** box
- For a Shopify store, in the **Inventory** section of the product management page: The **Track quantity** and **Continue selling when out of stock** check boxes, and the **Available** box

Changes to the Availability Synchronization Settings for Shopify Stores

Because the ability to make products available for pre-order is not available in Shopify stores out of the box, the availability synchronization settings have been updated on the **Inventory Settings** tab of the *Shopify Stores* (BC201010) form as follows:

- In the **Default Availability** box, the *Pre-Order* option has been removed.
- In the When Qty Unavailable box, the Set as Pre-Order option has been removed.

If any of the removed options was selected on the *Shopify Stores* form before the upgrade to 2021 R1, during the upgrade, the system will change the selected option to *Set as Available (Don't Track Qty)*.

Stock items, non-stock items, and template items can be synchronized with stores built on e-commerce platforms other than Shopify (for example, BigCommerce). Thus, the *Set as Pre-Order* option is still available on the **eCommerce** tab of the following forms:

- Non-Stock Items (IN202000): In the Availability box
- Stock Items (IN202500) and Template Items (IN203000) forms: In the Availability and When Qty Unavailable boxes

If the Set as Pre-Order option is selected for an item in the **Availability** box or the **When Qty Unavailable** box and the item is synchronized with a Shopify store, the e-commerce connector processes it as if the Set as Available (Don't Track Qty) was selected in the corresponding box instead of Set as Pre-Order.

Removal of Overrides for Matching Billing and Shipping Data

In previous versions of Acumatica ERP, when a sales order was imported from an external e-commerce system, the **Override** check box was always selected for the billing contact, billing address, shipping contact, and shipping address, and these details were saved in the database separately even if they matched the existing customer and customer location information. To reduce the amount of data to be stored and improve the system performance,

starting in Version 2021 R1, during the export of a sales order, the system clears the check boxes on the *Sales Orders* (SO301000) form as follows:

- If the billing contact matches the customer's saved data, the **Override Contact** check box in the **Bill-To Contact** section on the **Financial Settings** tab
- If the billing address matches the customer's saved data, the **Override Address** check box in the **Bill-To Address** section on the **Financial Settings** tab
- If the shipping contact matches the data of a customer location, the **Override Contact** check box in the **Ship-To Contact** section on the **Shipping Settings** tab
- If the shipping address matches the data of a customer location, the **Override Address** check box in the **Ship-To Address** section on the **Shipping Settings** tab

In guest orders—that is, in orders that are placed in an online store by non-registered customers—that are imported to Acumatica ERP, the **Override Contact** and **Override Address** check boxes are always selected.

Renamed Statuses, Actions, and Columns on the Sync History (BC301000) and Process Data (BC501500) Forms

The following enhancements have been made on the Sync History (BC301000) and Process Data (BC501500) forms:

- The following statuses for the commerce records have been renamed so that they align with the names of the forms where the statuses are displayed:
 - Pending to Prepared
 - Synchronized to Processed
- The following columns have been renamed:
 - Local ID to ERP ID
 - Pending Sync to Ready to Process
- The following actions have been renamed:
 - Set as Synced to Set as Processed
 - Set Selected Synced to Set Selected as Processed
 - Set All Synced to Set All as Processed

The following screenshot shows these changes in the *Sync History* form.

(Ċ		0	SYNC DELETE	SKIP	SET AS PROCESSED	ADD NEW	EDIT VIEV	W DETAILS
	St	tore:		Acu-Shop	Q				
	A	LL REC	ORDS	READY TO PROCES	S FAILED	PROCESSED	SKIPPED	ABORTED DI	ELETED FI
8	0	D		Entity	Store	ERP ID	Ready to Process	External ID	Status
>	0	D		Product Availability	Acu-Shop	Tape hello	Ξ	<u>623253510571</u> .	Processed
	0	D		Stock Item	Acu-Shop	<u>Widget 04 - small i</u> .	🗹		Prepared
	0			Stock Item	Acu-Shop	Widget 03 - Stand	🗹		Prepared
	0			Stock Item	Acu-Shop	Widget 02 - Serial.	🗹		Prepared

Figure: Sync History form

Sync History

Ability to Tag an External Order Number with an Acumatica ERP Order Number

For Shopify connector, for orders imported from Shopify to Acumatica ERP, the ability to export the sales order number generated in Acumatica ERP back to Shopify has been implemented. To manage this ability, the **Tag Ext. Order with ERP Order Nbr.** check box has been added to the **Orders** section of the **Order Settings** tab on the *Shopify Stores* (BC201010) form, which is shown in the following screenshot. This functionality would be useful for customer sales representatives to cross-verify sales orders in Acumatica ERP and Shopify.

Shopify Stores						
B v + 🖻	○ · 	TEST CON	NECTION			
Connector: * Store Name: CONNECTION SETTINGS	Shopify Acu-Shop ENTITY SETTINGS CUSTO		Active	Y SETTINGS	ORDER SETTINGS	PAYMENT SETTINGS
GENERAL	PRODWHOLE - Products WF P EO - BigCommerce Order RC - Return for Credit PREFUNDAMT - Refund Amou P REFUND - Direct Issues (GMT-05:00) Eastern Time ··· * Document Discount * Import Order Risks Medium or High Risk GIFTCERT - Gift Certificate * Tag Ext. Order with ERP Order Nbr.	POS ORI POS DI POS DI POS SI POS SI WAREHO C C RETA > SMW	The post of the po	IN - Invoice SO - Sales Orde OR ORDER IMPO -1 IN Location ID R10RACK1 SMLOCATION		opify Location 235 SE 6th St #140 w Warehouse
IAXES	Z Tax Synchronization	-				

Figure: The Tag Ext. Order with ERP Order check box on the Shopify Stores form

Construction: Creation of Partial Debit Adjustments for AP Bills Linked to Subcontracts

Previously, a user could not create a debit adjustment to partially adjust an accounts payable bill linked to a subcontract. Also, when a user reversed an AP bill with the retainage, the lines in the created debit adjustment had the quantity, unit cost, and extended cost unavailable for editing.

Starting in Acumatica ERP 2021 R1, a user can create a partial debit adjustment for a subcontract-related bill.

UI Changes to the Bills and Adjustments Form

The Add Subcontracts dialog box has been renamed to Add Subcontract.

On the table toolbar of the **Document Details** tab of the *Bills and Adjustments* (AP301000) form, the **Add Subcontract Line** button has been added for the documents that have the *Debit Adj.* type. In the **Add Subcontract Line** dialog box, which is opened when the user clicks the **Add Subcontract Line** button, the **Project Task** and **Cost Code** columns have been added; the **Subitem** column has been removed, and the **Subcontract Date** has been renamed to **Date**.

Debit Adjustment Creation

A user can create a debit adjustment on the *Bills and Adjustments* (AP301000) form and add particular lines or all lines of a subcontract to this document.

When the user click the **Add Subcontract** button, the system opens the **Add Subcontract** dialog box, which lists the subcontracts of the selected vendor that have at least one non-canceled line (see the following screenshot). For each subcontract, the system displays the following columns: **Subcontract**, **Project**, **Vendor**, **Location**, **Date**, **Currency**, **Subcontract Total**, **Total Billed Qty.**, and **Total Billed Amount**.

Bills De ←	an bit	id Ad Ad ج	djustr Ij	nents Am	erican [ທ	Door +	& Glass	K	<	>	>I F	REMOVE HO	LD A		NS ▼ INQUIRI	ES - REP	ORTS ·		
Ту	pe:)ebit Adj.	.	* Vendor:		AMERD	OOR -	Americar	n Door & Glass	20	Deta	ail Total:	0.00			
Re	fer	ence	e Nbr	: [<new></new>	Q	* Location:		MAIN - I	Primary	/ Locatior	1	Q	Disc	count Total:	0.00			
Sta	atus	S:		C	On Hold		Currency:		USD 🖇	0 1.0	D	VIEW BA	SE	VAT	Taxable Total:	0.00			
							Terms:							VAT	Exempt Total:	0.00			
* Da	ite:			1	/25/2021	-	Due Date							Tax	Total:	0.00			
* Po	st F	Perio	od:	C	1-2021	Q	Cash Disc	count			Pa	y by Line		With	n. Tax:	0.00			
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Figure: Adding a subcontract to a debit adjustment

When the user clicks the **Add Subcontract Line** button, the system opens the **Add Subcontract Line** dialog box, which lists the non-canceled lines of the subcontracts of the selected vendor (see the following screenshot). By default, the table lists the lines with a nonzero billed quantity and billed amount. The user can select the **Show Unbilled Lines** check box to also review the lines with a zero billed quantity and a zero billed amount).

For each subcontract line, the following columns are displayed: **Subcontract**, **Project**, **Project**, **Project**, **Cost**, **Cost**

Construction: Creation of Partial Debit Adjustments for AP Bills Linked to Subcontracts | 42

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Figure: Adding lines of a subcontract to a debit adjustment

In the **Add Subcontract** or **Add Subcontract Line** dialog box, when the user selects the unlabeled check box for the subcontract or subcontract lines to be added, and clicks **Add & Close**, the system adds the selected subcontract lines to the debit adjustment. The following values are specified in the added debit adjustment lines:

- Account, Subaccount, Tax Category, Project, Project Task, and Cost Code, which are copied from the corresponding subcontract line and can be overridden
- Ext. Cost, which is copied from the Billed Amount of the subcontract line and can be overridden
- Quantity and Unit Cost, which are equal to zero and can be overridden
- Discount Percent and Discount Amount, which are equal to zero and cannot be overridden
- Retainage Percent and Retainage Amount, which are equal to zero and cannot be overridden

On release of the debit adjustment, the system decreases the billed amount and billed quantity in the subcontract lines of the corresponding subcontract on the *Subcontracts* (SC301000) form.

If the debit adjustment line is linked to a subcontract line that was closed and completed, on the release of the debit adjustment, the system also clears the **Closed** and **Completed** check boxes in the subcontract line on the **Document Details** tab of the *Subcontracts* form.

Known Limitations

The following limitations apply to the functionality:

- A quantity in a debit adjustment line may not exceed the billed quantity in the corresponding subcontract line. If the quantity in a debit adjustment line is greater than the billed quantity in the subcontract line, the debit adjustment cannot be released.
- In a debit adjustment line linked to a subcontract, the particular project and project task specified in this line cannot be changed; the system will warn the user that the specified project and project task differs from those in the corresponding subcontract line. If a non-project code is specified in a debit adjustment line linked to a subcontract, it can be changed to a particular project, and a project task can be specified in the line.

Additional Information

For description of a process of correcting bills prepared for subcontracts, see *Correction of a Bill for a Subcontract: General Information*.

For details on how to create a debit adjustment for a bill, see Correction of a Bill for a Subcontract: Process Activity.

Construction: Subcontract Billing

The logic related to the billing of subcontract lines that are closed by amount has been adjusted in Acumatica ERP 2021 R1 and works as described below.

If the inventory item of a subcontract line has the *By Amount* option selected in the **Close PO Line** box on the **General Settings** tab of the *Non-Stock Items* (IN202000) form, when an accounts payable bill is created for the subcontract line or the subcontract line is added to an AP bill on the **Document Details** tab of the *Bills and Adjustments* (AP301000) form, the system populates the value of the **Ext. Cost** column of the corresponding AP document line (see the screenshot below) with the value of the **Unbilled Amount** column of the subcontract line from the **Document Details** tab of the *Subcontracts* (SC301000).

Also, the system does not copy the discount percent and discount amount of such a subcontract line to an accounts payable bill created for the line. That is, the values in the **Discount Percent** and **Discount Amount** columns on the **Document Details** tab of the *Bills and Adjustments* form will be zero, as the following screenshot shows.

Bills and Adjustme Bill 002574 -	ents Plumbing	Wor	ks												ACTIVITIES FIL	ES CUS	TOMIZATION	TOOLS +
< 2 8	0	+	₿ 0- к	< >	×	REMOVE	HOLD	ACTIONS	- INQUI	RIES - RE	PORTS -							
Туре	BII		Vendor	PLUMBING	Plumbi	ng Works		/ Detail To	stal	831.25	5							^
Reference Nbc	002574	,p	Location	MAIN - Prima	ry Loca	tion	p	Discourt	t Total:	0.00	1							
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* Date:	1/19/2021		+ Due Date	2/18/2021	- 0	Apply Retain	age	Tax Tota	d.	0.00	3							
* Post Period	01-2021	P	* Cash Discount	2/18/2021	- 6	Pay by Line		With: Ta	x	0.00)							
* Vendor Ref.	45174			Joint Payer	es.			Balance		831 25	5							
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DOCUMENT DE	ETAILS	FINANC	CIAL DETAILS TAX	COETAILS	APPR	OVAL DETAIL	s p	SCOUNT DE	AILS R	ETAINAGE	APPLICATIO	vs co	MPLIANCE					
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R 0 D Inventor	ity ID	Transa	ction Descr.	Quantity	UOM	Unit Cost	Ext. Cost	Discount Amount	Discount Percent	Amount	Retainage Amount	Retainage Percent	*Account	Description	* Project	Project Task	Cost Code	Subcontract Nbc.
O D CSTR	SUBCON	Testin	g. Adjusting, Balances	0.00	LS	1,750.00	875.00	0.00	0.000000	831.25	43.75	5.000000	51250	COGS - Subcontractor	S CSTRMEPJO	8 04	15-950	SC-000034

Figure: An AP bill created for a subcontract

Construction: UI Improvements

In Acumatica ERP 2021 R1, multiple minor enhancements have been made to construction-related forms to make these forms easier to use. These changes are described below.

On the **General** tab of the *Vendors* (AP303000) form, the **Vendor Defaults** section has been renamed to **Project Defaults**.

In the tables on the following forms, the **Has Expired Compliance Documents** column has been renamed to **Expired Compliance**:

- The Document Details tab of the Bills and Adjustments (AP301000) form
- The Documents To Apply and Application History tabs of the Checks and Payments (AP302000) form
- The Document Details and Applications tabs of the Invoices and Memos (AR301000) form
- The Documents To Apply and Application History tabs of the Payments and Applications (AR302000) form
- The Commitments tab of the Change Orders (PM308000) form
- The Document Details tab of the Purchase Orders (PO301000) form

On the *Subcontracts* (SC301000) form, the following changes has been introduced:

- On the form toolbar, the Mark as Do not Email action has been renamed to Do not Email.
- On the **Other Information** tab, the **Don't Print** check box has been renamed to **Do not Print**.
- On the Other Information tab, the Don't Email check box has been renamed to Do not Email.

For other changes related to new workflow on the form, see *Projects: New Workflow Support on Entry Forms*.

CRM: New Workflows for Business Accounts, Customers, Vendors, and Locations

In Acumatica ERP 2021 R1, the workflows used for business accounts, customers, vendors, and locations have been redesigned.

Because the implementation of the new workflow engine entails changes to data access classes (DACs) and business logic, it may affect custom generic inquiries, customization projects, import and export scenarios, and API integrations. For the complete list of changes, see *Release Notes for Developers*.

Improved Layout of the Business Accounts Form

In previous version of Acumatica ERP, a user manually changed the state of a business account. Starting in Acumatica ERP 2021 R1, with the new workflow, the state of a business account is changed by the system based on the actions in the **Actions** menu that are executed. On the *Business Accounts* (CR303000) form, all the actions to change the state of a business account are in the **Actions** menu of the form toolbar (see the following screenshot).

Business Accounts AACUSTOMER - Alta	Ace			NOTES	FILES (1)	CUSTOMIZATION	TOOLS	•
← □ □ 20	+ 🗓 🗘 •	I< <	> > VIEW CUSTO	MER	ACTIONS -		1	
* Business Account: Customer Status: GENERAL CRM INFO	AACUSTOMER Active	ACTIVITIES	Owner: Class: CONTACTS LOCATION	Max BUS	Activate Hold Credit Hol Deactivate Extend as	ld e Vendor	0 DS	^ ≫
ACCOUNT INFO * Account Name: ACCOUNT ADDRESS	Alta Ace		 PRIMARY CONTACT Name: Job Title: Email: 	Ai	Change II Create Co Create Le	D ontact ad		
Address Line 1: Address Line 2: City:	156 10th Ave		Business 1 + Cell +	+'	Set as On Set as Re Check for Mark as V	e-Time Customer gular Customer Duplicates ′alidated		
State: Postal Code: * Country:	NY - NEW YORK 10011 US - United States of Am	م nerica ہ			Close as I	Duplicate		
ADDITIONAL ACCOUNT IN Business 1 • Cell • Fax •	+1 (212) 555-6724		-]]					
Account Email: Web:	ap@altaace.con	2 2						

Figure: The new Actions menu on the Business Accounts form

When a user clicks a particular action, the system automatically changes the state of the business account in the **Customer Status** box of the form (Item 1 in the following screenshot) as part of its processing. The **Customer Status** box is no longer available for manual editing.

		-						
Business Account: AA	CUSTOMER	Q	Ov	vner:	Maxwe	ll Baker	Q	•
Customer Status: Act	ive			ass:	BUSIN	ESS - Business Clas	s P /	4
GENERAL CRM INFO	ATTRIBUTES	ACTIVITIES	CONTAC	CTS LOCATIONS	SHIF	PPING RELATIO	ONS LEADS	
CRM				CONTACT PRE	FERENCI	ES		
Туре:	Customer			Contact Meth	od:	Any		-
Workgroup:			Q			Do Not Call	No Marketing	
Parent Account:				0		🗌 Do Not Email	🗌 No Mass Mail	
Ext Ref Nbr:								
Source Campaign:			Q	0				
Duplicate:	Validated							
ACTIVITIES								
Last Incoming Activity: 4/	17/2020 5:18:44 AM							
Loot Outgoing Activity:	17/2020 5.10.44 414							

Figure: The new layout of the Business Accounts form

Also, the following changes to the layout of the form have been made:

- The **Type** box has been moved from the Summary area of the form to the **CRM Info** tab (Item 2 in the previous screenshot). After the upgrade to Acumatica ERP 2021 R1 from previous versions, for the business accounts that formerly had the *Prospect (PR)* type, the system changes the value in the **Type** box to *Business Account*.
- The former **Class ID** box has been renamed to **Class** and moved from the **CRM Info** tab of the form to the Summary area (Item 3). Also, the Edit button has been added right of the **Class** box (Item 4).

Enhanced Workflow for Business Accounts, Customers, and Vendors

Starting in Acumatica ERP 2021 R1, the workflow for business accounts and customers works the same way, and business accounts and customers share the same states. When the state of a business account is changed to a new one, the state of the associated customer changes accordingly. For example, if a user clicks **Actions > Activate** on the form toolbar of the *Business Accounts* (CR303000) form, which causes the system to change the state of the selected business account to *Active*, the system changes the state of the associated customer record. Customers (AR303000) form as soon as the user specifies the required settings and saves the new customer record. The customer state is displayed in the **Customer Status** box of the Summary area on the *Business Accounts* and the *Customers* forms. Note that for a business account that has been extended as a vendor, the **Customer Status** box still shows the business account and the customer status, and not the vendor status, even though the business account type becomes *Vendor*. For more information about the new workflow for customers, see *Finance: New Workflow Support on Finance Forms*.

Starting in Acumatica ERP 2021 R1, the workflow for vendors has become independent from the workflows for customers and business accounts. For example, if a vendor has the *Active* state in the **Vendor Status** box of the *Vendors* (AP303000) form, and a user clicks **Actions > Hold** on the *Business Accounts* form, which causes the system to change the state of the associated customer, the state of the vendor remains *Active*. (The state of the associated customer changes to *On Hold*.) For more information about the new workflow for vendors, see *Finance: New Workflow Support on Finance Forms*.

States of a Business Account and Transitions Between States

With the new workflow, the states of a business account are shared with the states of the associated customer, but these states are separated from the states of the associated vendor.

With the new workflow, transitions between states of a business account have been implemented through actions on the **Actions** menu on the *Business Accounts* (CR303000) form. When an action is executed, as part of the processing, the system changes the current state of a business account and the associated customer to the particular state that is defined in the workflow. Customers or partners can customize the new workflow by changing these transitions and defining new values for the states, if needed. For more information about the updated states of a business account and the associated customer, and about the updated states of the vendor, see *Finance: New Workflow Support on Finance Forms*.

When a new business account is created through an API, the business account should have the *Prospect* status (reflected in the **Customer Status** box of the Summary area). If the *Active* status is assigned to the new business account when it is created, errors related to the extension of the account as a customer occur.

Improved Layout of the Update Business Accounts Form

To support transitions between states in business accounts with the new workflow, in the Summary area of the *Update Business Accounts* (CR503320) form, the following changes have been made:

- The Operation box has been added (Item 1 in the following screenshot). In this box, a user can select one of the following options: *Update Settings* or *Execute Action*. If *Execute Action* is selected and a user clicks Process or Process All on the form toolbar, the system executes the action selected in the Action box (see the following item) for the selected business account records or all business account records in the table.
- The **Action** box has been added (Item 2). If *Update Settings* is selected in the **Operation** box, the **Action** box is unavailable for editing and the form can be used as it was used in Acumatica ERP 2020 R2 and earlier versions. If *Execute Action* is selected in the **Operation** box, the **Action** box can be edited and a filter is applied to the table with the list of business account records, so that the table displays only those records to which the selected action can be applied (Item 3).

ι	Jpdate Business Accounts ☆ customization tools ▼											
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>	0			Customer		ABCVENTURE	ABC Capital Ventures	Active		ABCHOLDING		
	0			Customer		ABCHOLDING	ABC Holdings Inc	Active				
	0			Business A	ccount	ELCENTROBO	El Centro Books	Prospect	BUSINESS			
	0			Customer		FDIWEST	Southwest Food Distribution	Active				
	0			Customer		WIDPARENT	Widget Consolidated Holdings	Active				

Figure: The new layout of the Update Business Accounts form

Improved Layout of the Account Locations Form

In previous versions of Acumatica ERP, in the Summary area of the *Account Locations* (CR303010) form, the **Active** check box indicated (if selected) that the business account location was active and could be used in documents. Starting in Acumatica ERP 2021 R1, the **Active** check box has been replaced by the new **Status** box, as shown in the following screenshot.

Account Locations	AIN - Primary Location		NOTES	FILES	CUSTOMIZATION	TOOLS -
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* Business Account: * Location ID:	AACUSTOMER - Alta Ace					^
Status:	Active					
GENERAL SHIPPIN	IG OPPORTUNITIES CASES					
LOCATION INFO		_ ADDITIC	NAL LOCATION	INFO		
Location Name:	Primary Location				e	
LOCATION ADDRESS		Accour	nt Name:	Alta Ace		
	Override	Attentio	on:	Amelia Ar	rmstrong	
	ADDRESS LOOKUP	Busin	ess 1	+1 (212)	555-6724	
Address Line 1:	156 10th Ave	Cell				
Address Line 2:		Fax				
City:	New York	Email:		ap@altaa	ice.con	
State:	NY - NEW YORK	Web:				ß
Postal Code:	10011	OTHER	SETTINGS			
Country:	US - United States of America	Default	Branch:			Q
		Price C	lass:			Q
		Default	Project:			Q,

Figure: The new layout of the Account Locations form

Similar changes have been made on the *Customer Locations* (AR303020) and *Vendor Locations* (AP303010) forms. For more information, see *Finance: New Workflow Support on Finance Forms*.

Enhanced Workflow for Business Account Locations

With the new workflow, transitions between the states of a business account location have been implemented through actions on the **Actions** menu on the *Account Locations* (CR303010) form. When an action is executed, as part of the processing, the system changes the current state of the business account location to the particular state that is defined in the workflow.

The state of the business account location is reflected in the **Status** box and can have one of the following options:

- Active: The business account location is active and can be used in documents.
- Inactive: The business account location is inactive and cannot be used in documents.

During the upgrade from Acumatica ERP 2020 R2 and earlier versions, business account locations that had the **Active** check box selected on the *Account Locations* form are assigned the *Active* state. Other locations have been transitioned to the *Inactive* state. On the Account Locations (CR3031PL) form, the **Active** column has been hidden and replaced by the new **Status** column, but a user can still add it back, if needed.

Similar changes have been made on the *Customer Locations* (AR303020) and *Vendor Locations* (AP303010) forms. For more information, see *Finance: New Workflow Support on Finance Forms*.

Automation Changes

If the organization uses automation steps, import scenarios, or export scenarios for the *Business Accounts* (CR303000), *Update Business Accounts* (CR503320), *Account Locations* (CR303010), *Customers* (AR303000), *Customer Locations* (AR303020), *Vendors* (AP303000) or *Vendor Locations* (AP303010) forms, users who work on customizations will need to redesign the automation of the processes related to these forms by using the new workflow engine. For more information, see the *Creating Workflows* chapter in the Acumatica ERP Customization Guide.

Additional Information

For more details on new workflows for business accounts, customers, and vendors, see *Business Accounts: Workflow for Accounts, Customers, and Vendors*.

CRM: Enhanced Duplicate Validation Workflow

In Acumatica ERP 2021 R1, users can more flexibly configure duplicate validation workflow, which helps to decrease the number of duplicate leads, contacts, and business accounts in the system.

Enhanced Duplicate Validation Workflow for Leads and Contacts

In previous versions of Acumatica ERP, users could check if a new lead or contact had duplicates only after the new record had been created in the system.

Starting in Acumatica ERP 2021 R1, the system gives users the ability to check if a lead or contact has duplicates before a new record has been created.

On the *Customer Management Preferences* (CR101000) form (Lead and Contact Validation Rules and Lead and Account Validation Rules tabs), the Create on Entry column has been added. In this column, a user can select one of the following options:

- Allow (default): The system can check the values in the **Matching Field** column for a new lead or contact record to find duplicates before it is saved at least once. However, the system will not either display a warning message or block the creation of a duplicate record. (The duplicate validation process is the same as in previous versions.) In the Summary area of the **Duplicate Validation Settings** tab, the **Validate Leads and Contacts for Duplicates on Entry** check box is available for editing.
- Warn (see Item 1 in the following screenshot): The system makes the value in the **Score Weight** column (Item 2) equal to the value in the **Lead and Contact Validation Threshold** box (Item 3). The **Validate Leads and Contacts for Duplicates on Entry** check box becomes selected and unavailable for editing (Item 4).

As a result, if a user tries to create a lead or contact that has the duplicate setting, the system inserts *Possible Duplicate* in the **Duplicate** box of the Summary area of the *Leads* (CR301000) or *Contacts* (CR302000) form, respectively (see Item 1 in the screenshot below) and displays the warning message if the user tries to save the lead or contact (Item 2). The user can choose to save the lead or contact or to cancel record creation.

Customer Management Preferences	🕒 NOTES FILE	S CUSTOMIZATION TOOLS -
GENERAL SETTINGS DUPLICATE VALIDATIO	N SETTINGS MAILING SETTINGS	
3 Lead and Contact Validation Score Threshold:	5.00	
Lead and Account Validation Score Threshold:	6.00	
Account Validation Score Threshold:	5.00	
Close Leads with no Activities with Score Higher Tha	n: 6.00	
	4 Validate Leads and Contacts for Duplica	tes on Entry
	Validate Accounts for Duplicates on Entr	у
		COUNT VALIDATION DULES
Č + × ⊢ ⊠		
*Matching Field	Score Weight Transformation Rule	Create on Entry
> Email 2	5.0000 None	1 Warn
First Name	1.0000 None	Allow
Account Name	1.5000 Split Words	Allow
Last Name	1.0000 None	Allow
Phone 1	0.5000 None	Allow
Web	0.5000 Domain Name	Allow

Figure: New duplicate validation settings for leads and contacts

The **Require Unique Email Address on Contact Validation** check box in the Summary area has become obsolete and has been removed from the *Customer Management Preferences* form.

Leads New Record ← ♡ ♡ ◇	+ 10 0 - 1< < >	>I OPEN ACTION	🗅 NOTES	FILES C	USTOMIZATION TOOLS -
Lead ID:	<new> ,0</new>	Contact:		0	^
Status:	New	Business Account:		0	
* Reason:	Created -	Owner:	Maxwell Baker	Q	
Description:		Source:	Campaign	•	
		Source Campaign:	HAB2020 - Highway ad boards 2020	Q	
	1	Duplicate:	Possible Duplicate		
CONTACT INFO AC	TIVITIES CRM INFO DUPLICATES	Warning At least one duplin Do you want to sa	X MARKETI	NG LISTS	OPPORTUNITIES
First Name:	Matthew	YES	NO		
Last Name:	Morrison	Address Line 1:			
Account Name:	McLaughlin LLC	Address Line 2:			
Job Title:	Manager	City:			
Email:	m.morrison@mclaughlin.example.com 🗠	State:		Q	
Business 1 👻		Postal Code:			
Cell 👻		* Country:	US - United States of America	20	
Home 👻					
Fax 👻					
Web:	ď				

Figure: A warning message on an attempt to create a duplicate lead

Enhanced Duplicate Validation Workflow for Business Accounts

In previous versions of Acumatica ERP, users could check if a new business account had duplicates only after the account had been created in the system.

Starting in Acumatica ERP 2021 R1, the system gives users the ability to check if a business account has duplicates before the account has been created or to prevent creation of duplicate business accounts. The system can prevent manual creation of a business account or mass creation of multiple business accounts through an import scenario or API.

On the *Customer Management Preferences* (CR101000) form (**Account Validation Rules** tab), the new **Create on Entry** column has been added. In this column, a user can select one of the following options:

- Allow (default): The system can check the values in the Matching Field column for a new business account record to find duplicates before it has been saved at least once. However, the system will not display a warning message. (The duplicate validation process is the same as in previous versions.) In the Summary area of the Duplicate Validation Settings tab, the Validate Accounts for Duplicates on Entry check box is available for editing.
- *Warn* (see Item 1 in the following screenshot): If this option is selected for a setting, the system makes the value in the **Score Weight** column (Item 2) equal to the value in the **Account Validation Threshold** box (Item 3). The **Validate Accounts for Duplicates on Entry** check box becomes selected and unavailable for editing (Item 4).

As a result, if a user tries to create a business account that has the duplicate setting, on the *Business Accounts* (CR303000) form, the system inserts *Possible Duplicate* in the **Duplicate** box of the Summary area and displays the warning message. The user can choose to save the business account or to cancel record creation.

Block (Item 5): If this option is selected for the setting in the Matching Field column, the system makes the value in the Score Weight column (Item 6) equal to the value in the Account Validation Threshold box (Item 3). The Validate Accounts for Duplicates on Entry check box becomes selected and unavailable for editing (Item 4).

As a result, the system prevents creation of a duplicate business account and shows an error message when the user tries to save the account (see the screenshot below).

	C	Customer Manager	nent Preference	S		🗅 NOTES	FILES	CUSTOMIZATION	TOOLS -
	Ē	2 V							
		GENERAL SETTINGS	DUPLICATE VALIDA	TION SETT	INGS MAIL	NG SETTINGS			
		Lead and Contact Validatio	on Score Threshold:		5.00				
		Lead and Account Validation	on Score Threshold:		6.00				
e		Account Validation Score T	hreshold:		5.00				
		Close Leads with no Activit	ties with Score Higher T	Than:	6.00				
					Validate Leads	and Contacts for Dup	licates on E	ntry	
				4	🖉 Validate Accou	ints for Duplicates on I	Entry		
		LEAD AND CONTACT VAI	LIDATION RULES	LEAD AND	ACCOUNT VAL	IDATION RULES	ACCOUNT	VALIDATION RULES	
	(Ů + × !⊶!	X						
	8	*Matching Field			Score Weight	Transformation Rule		Create on Entry	
	>	EMail	6		5.0000	None		5 Block	
		FullName	2		5.0000	Split Words		1 Warn	
		Phone1			1.0000	None		Allow	
		Phone2			1.0000	None		Allow	
		WebSite			1.0000	Domain Name		Allow	

Figure: New duplicate validation settings for business accounts

Search Business Accounts ABCNEWYORK	say CR Error: Cannot save the entity because at leas been found for this entity.	rs st one duplicate has OK		1/11/20 3:05 AM S FILES	021 🗸 CUSTON		то	V OLS -
← ₽ ₽ └ * Business Account Customer Status:	ABCNEWYORK P Prospect	Owner: Class:	BUS	NESS - Busin	ess Class	ير بر		^
GENERAL OC	RM INFO DUPLICATES ATTRIBUTES	ACTIVITIES C	CONTACTS	LOCATIONS	SHIF	PING		\$
ACCOUNT INFO		PRIMARY CONT	ACT				_	
* Account Name:	ABC Holdings Inc	Name:	Lis	a	Smith			
ACCOUNT ADDRESS	à	Job Title:	Off	ice Manager				
	ADDRESS LOOKUP	Email						
Address Line 1:	65 Broadway	Business 1	- +1	(212) 532-952	2			
Address Line 2		Cell	-					
City:	New York							
State:	9							
Postal Code:								
* Country	US - United States of America							
ADDITIONAL ACCOU	NT INFO	-						
Business 1 +								
Business 2 +								
Fax -								
Account Email:	info@abcholdings.example.com							
Web:	C							

Figure: An error message on an attempt to create a duplicate business account

Additional Information

For more details on how to configure duplicate validation, see *Duplicate Validation: General Information, Duplicate Validation: Rules*, and *Duplicate Validation: Calculation of Validation Scores*.

For more details on how to validate leads, contacts, and business accounts for duplicates, see Validating Records for Duplicates: General Information and Validating Records for Duplicates: Mass-Validation of Records.

CRM: Enhancements Related to Contacts and Employees

In Acumatica ERP 2021 R1, enhancements have been made to the layout of the *Employees* (EP203000) and *Contacts* (CR302000) forms, and the workflow for contacts has been improved.

Removal of Access to Employee Contact Information from Contacts

In previous versions of Acumatica ERP, on the *Contacts* (CR302000) form, a user could view the employee settings of contacts that had the *Employee* type.

Starting in Acumatica ERP 2021 R1, employee settings are no longer available for viewing from the *Contacts* form: In the **Contact ID** box of the Summary area, a user can select only a contact record of the *Contact* type (see Items 1 and 2 in the following screenshot; Item 3 is described in the next section).

Contacts Adrian Perez ← 🛱 🛱 ∽	+ 🛍 🗘 •	- I< < > >I	ACTIONS -	C NOTES	FILES C	USTOMIZATION	TOOLS •
Contact ID:	Adrian Perez	1 P Busin	ess Account:		Q	0	^
Status:	Active	Select - Contact ID					\square ×
		SELECT ⊘ ↔			1		Q
DETAILS ACTIVITIE	ES CRM INFO	E Contact †	Job Title	Business 2 Account	Туре	Company Name	
CONTACT		> Adrian Perez	Central Mobility Analyst		Contact	Athletic Wareho	use
First Name:	Adrian	Alan Baumgarten	Consultant	VERACITYCR	Contact	Veracity Credit (Consultants
* Last Name:	Perez	Aloiandro Hall	Accountant		Contact	Glacior Northwo	ct
Company Name:	Athletic Warehouse	Alejandro Hali	Accountant	OLACIEKIW	Contact		51
Job Title:	Central Mobility Anal	Aleks Neverov	Specialist	ABCSTUDIOS	Contact	ABC Studios Inc	2
Email:	tellus.sem.mollis@ac	Aleksandr Mazo	System Administrator	DATATECHN	Contact	Datacenter Serv	ices
Business 1 👻	795-746-4278	Alex Samson	Doctor	RICHVISION	Contact	Rich Vision	
Business 2 -		Alex Samualson	Manager	ВСРНСО	Contact	BC Phillips Com	pany
Home -		Alexander Mazow	System Administrator	MEPVENTURE	Contact	MEP Capital Ver	ntures
Fax -		Alexandra Samson	Team Lead	BAKER-DEVE	Contact	Baker Developm	nent
Web:		4				-	Þ
						IK K S	> >

Figure: The new layout of the Contacts form

Also, the **Type** box has been removed from the Summary area of this form.

Enhanced Workflow for Contacts

In previous versions of Acumatica ERP, in the Summary area of the *Contacts* (CR302000) form, the **Active** check box indicated (if selected) that the contact was active and could be used in documents. Starting in Acumatica ERP 2021 R1, the **Active** check box has been replaced with the new **Status** box (see Item 3 in the previous screenshot).

With the new workflow, transitions between the states of a contact have been implemented through actions on the **Actions** menu on the *Contacts* form. When an action is executed, as part of the processing, the system changes the current state of the contact to the particular state that is defined in the workflow.

The state of the contact is reflected in the **Status** box and can have one of the following options:

- Active: The contact is active and can be used in documents.
- *Inactive*: The contact is inactive and cannot be used in documents.

During the upgrade from Acumatica ERP 2020 R2 and earlier versions, contacts of the *Person* type that had the **Active** check box selected on the *Contacts* form are assigned the *Active* state. Other contacts of the *Person* type are assigned the *Inactive* state.

Improvements to the Employees Form

The layout of the *Employees* (EP203000) form has been enhanced. The **Employee Contact** box (in the **Contact Info** section of the **General Info** tab; this section is shown in Item 1 of the following screenshot), which showed the link to the associated contact record, has been removed.

P00000009 - Da	avid Chubb ∽ + D ▼) ۱۲ آ	< >	>I ACTIONS - IN	NQUIRIES -	11220	000101112111	
Employee ID:	EP0000009		م	Status: Active	•			
Employee Name:	David Chubb							
GENERAL INFO	EMPLOYMENT HISTOR	RY FI	NANCIAL S	ETTINGS ATTRIBUTES	ACTIVITIES	MAILINGS	S	
CONTACT INFO				EMPLOYEE SETTINGS -				
Title:	Mr.		-	Employee Ref. No.:				
First Name:	David			* Employee Class:	EMPHOURLY - I	Employee -	Hourly $ ho$	0
Middle Name:				* Branch:	PRODWHOLE -	All Fruits M	Iall 🔎	0
* Last Name:	Chubb			* Department:	CONSULT - Con	sulting	Q	0
Phone 1:	Home -	+1 (777) 89	96-8954	* Calendar:	PST - Pacific Tin	ne Zone	Q	0
Phone 2:	Cell -			Default Workgroup:			Q	
Phone 3:	Business 1 -			Regular Hours Validation	n: Warning Only		•	
Fax:	Home Fax 👻			Reports to:	EP0000038 - C	lark Willard	م ر	0
Email:	dchubb@revisiont	wo.com		Salesperson:			Q	0
Web:			්	Employee Login:	chubb - David C	hubb		
ADDRESS INFO				Currency ID:	USD 🔎	Enabl	e Currency Ov	erride
	ADDRESS LOOK	UP		Curr. Rate Type:	SPOT 🔎	Enabl	e Rate Overrid	е
Address Line 1:	722 23rd Ave			Labor Item:	LABORSR - Lab	or - Senior	Consultant 🔎	
Address Line 2:				Union Local ID:			Q	
City:	Seattle				✓ Route Emails			
Country:	US - United States	of America	Q		Time Card is R	equired		
State:	WA - WASHINGT	ON	Q		Staff Member in Staff Membe	n Service M	lanagement	
Postal Code:	98122			2	Synchronize to	Exchange		
				PERSONAL INFO				
				Data Of Pisth	401414004			

Figure: The updated Employees form

Another improvement has been made to the **General Info** tab of the *Employees* form: In the **Employee Settings** section, the **Synchronize to Exchange** check box has been added (see Item 2 in the previous screenshot). If needed, a user can select this check box for an employee record regardless of the value in the **Status** box.

CRM: Multifaceted View for the List of Business Accounts

In Acumatica ERP 2021 R1, a side panel with a number of tabs has been added for the list of business accounts, which gives users the ability to view the list of business accounts while simultaneously viewing (and modifying, if necessary) various information related to any listed account (prospect, customer, or vendor).

A Side Panel for the List of Business Accounts

In previous versions of Acumatica ERP, a user seeking more information about a particular business account had to open multiple forms to find contacts, opportunities, sales orders, support cases, or other information associated with the business account, which could be time-consuming. Starting in Acumatica ERP 2021 R1, the Business Accounts (CR3030PL) form has a side panel, so that the user can have a comprehensive view of a prospect, customer, or vendor by switching between tabs on the side panel (which show forms and dashboard widgets). Thus, the user can quickly find, view, and modify the information related to any business account.

Users' ability to view or modify the objects on the tabs of the side panel depends on the access rights of their roles for each form or dashboard shown on a tab and each form underlying a dashboard widget. Thus, after the upgrade from a previous version to Acumatica ERP 2021 R1, the side panel tabs or widgets on a dashboard may not be initially available. In this case, on the *Access Rights by Role* (SM202015) form, a system administrator makes sure each required user role has the needed access rights to the form with the side panel, to each of the forms and dashboards that are displayed on the tabs of the side panel, and to the forms any dashboard widgets are based on.

The access rights have been preconfigured for the predefined CRM user roles, such as *CR Marketing Manager* or *CR Viewer*, to give users with these roles the ability to view, modify, or delete the objects on the side panel. A system administrator can configure similar access rights for any other user role, if needed. On the Business Accounts (CR3030PL) generic inquiry form, a generic inquiry designer can specify a different set of navigation targets to be displayed on the tabs of the side panel, if needed.

The following screenshot shows the Business Accounts (CR3030PL) form with the tab of the side panel (Item 1) displaying customer invoices of the selected business account.

Business Accounts Customiz	ATION - TOOLS -	, 2 風	Receivable Alta Ace Customer A	s ecount ID. AAC	CUSTOMER - Alta Ace	,e (3)				000
Type All ▼ Class All ▼	ą.	4	14-490	<u>e.</u>		4.71K	DVCRDUE		4.7	'1K
B D Business Business Account Name Account	Туре	0	INVOICE	STDAPPROVE	STORY + 4	0	INVERSES ON DREDH	г нага		0
Image: Second	Customer Vendor Vendor Customer Customer Customer	D D O	Type Invoice Invoice Invoice Invoice	Reference Nbr. AR009045 AR008943 AR008835 AR008692 AR008691	Description Office food order Office food order Office food order Office food order Consumer order wit	Status Open Closed Closed Closed h discount Closed	Date 11/16/2020 10/14/2020 9/18/2020 8/17/2020 8/17/2020	Amount 4,707.72 4,707.72 4,711.71 4,707.72 278,847.71	Currency USD USD USD USD USD	
Image: Construction of the state o	Customer Vendor Customer Vendor	1 & B	PAYMEN Reference	IS TO A TPROVE THISTORY + Status	Payment	O	PAYMENTS ON HOLD	nent Currency	Payment	0
AEROCOREBE Aerocorebe Travel Agency Corporation D AFTONBLADE Aftonbladet ALDHABETLD Alphabetland School Center	Vendor Business Account Customer	691	003191 003143 003055 003055	Closed Closed Closed Closed Closed	11/13/2020 10/1/2020 9/11/2020 8/13/2020 7/20/2020	Current month payme Current month payme Current month payme Current Month Payme	4,700 4,700 ent 4,703 ent 283,555 ent 11,372 ent 18,878	00 USD 011 USD 013 USD 0143 USD 0143 USD 0141 USD	CHECK CHECK CHECK CHECK	

Figure: A side panel for the list of business accounts

The side panel has the following tabs (Item 2 in the previous screenshot):

- **Business Accounts**: The selected business account on the *Business Accounts* (CR303000) form. A user can view the account settings and any files and notes associated with the account, and the user can modify the data of the account, if needed.
- **Contacts**: The list of any contacts associated with the business account. If the user clicks the link to a contact, the system will open the *Contacts* (CR302000) form for the contact in a separate browser tab.
- **Opportunities**: A dashboard with widgets that show details about any opportunities associated with the business account, including open opportunities and the number of open sales quotes associated with these opportunities.
- **Sales Orders**: A dashboard with widgets that show details of all sales orders associated with the business account, including open and completed sales orders and the number of late sales orders.
- **Receivables**: A dashboard with widgets that show details about any customer invoices associated with the business account, including the customer balance, the list of invoices associated with the business account, and payment history.
- **Cases**: A dashboard with widgets that show details about any support cases associated with the business account, including the list of open cases and the number of pending cases.
- Services: A dashboard with widgets that show details about all service orders associated with the business account. The tab is available if the Service Management feature is enabled on the Enable/Disable Features (CS100000) form.
- **Equipment**: A dashboard with widgets that show details about any customer equipment. The tab is available if the *Service Management* feature is enabled on the *Enable/Disable Features* form.
- **Contracts**: A dashboard with widgets that show details about any contracts associated with the business account. The tab is available if the *Service Management* feature is enabled on the *Enable/Disable Features* form.
- **Projects**: A dashboard with widgets that show details about all projects and project quotes associated with the business account. The tab is available if the *Projects* feature is enabled on the *Enable/Disable Features* form.

The user can click any widget or its title (Items 3 and 4) of a dashboard to drill down for more details, and in a separate browser tab, the system will display these details on the form the widget is based on.

CRM: Multifaceted View for the Lists of Opportunities, Contacts, and Cases

In Acumatica ERP 2021 R1, side panels with a number of tabs have been added for the lists of opportunities, contacts, and cases, which gives users the ability to view the list of records while simultaneously viewing (and modifying, if necessary) various information related to any listed opportunity, contact, or case, respectively.

Side Panels for the Lists of Opportunities, Contacts, and Cases

In previous versions of Acumatica ERP, in order to find more information about a particular opportunity, contact, or case, a user had to open multiple forms to find records and statistics related to these records, which could be time-consuming. Starting in Acumatica ERP 2021 R1, with side panels on the Opportunities (CR3040PL), Contacts (CR3020PL), and Cases (CR3060PL) forms, the user can have a comprehensive view of a record by switching between tabs on the side panel (which show different forms and dashboard widgets). Thus, the user can quickly find, view, and modify the information related to the record.

Users' ability to view or modify the objects on the tabs of the side panel depends on the access rights of their roles for each form or dashboard shown on a tab and each form underlying a dashboard widget. Thus, after the upgrade from a previous version to Acumatica ERP 2021 R1, the side panel tabs or widgets on a dashboard may not be initially available. In this case, on the *Access Rights by Role* (SM202015) form, a system administrator makes sure each required user role has the needed access rights to the form with the side panel, to each of the forms and dashboards that are displayed on the tabs of the side panel, and to the forms any dashboard widgets are based on.

The access rights have been preconfigured for the predefined CRM user roles, such as *CR Marketing Manager* or *CR Viewer*, to give users with these roles the ability to view, modify, or delete the objects on the side panel. A system administrator can configure similar access rights for any other user role, if needed. On the Opportunities (CR3040PL), Contacts (CR3020PL), or Cases (CR3060PL) generic inquiry form, a generic inquiry designer can specify a different set of navigation targets to be displayed on the tabs of the side panel, if needed.

The following screenshot shows the Opportunities (CR3040PL) form with the tab of the side panel displaying information about quotes related to the selected opportunity.

Opportunities	CUSTOMIZATION - TOOLS -	>	Quotes OP0003	73					[] []
		0	Opportunit	y ID:	OP00037	73 🖉			
Status: All Stage: All Stage		•	QUOTE	S TO PROCES	s				1
Estimation: All Class ID: All		Q	QUOTE						0
🖹 🕕 D Opportunity ID Subject	Company Name								
OP000376 New customer opportunity	Plaza Construction		RELATE	D QUOTES					
OP000375 Consulting for Cartridge World - Multi	Cartridge World Inc		Quote	Туре	Prim	Description	Status	Currency	Amount
	USA Bartending School	(+)	NDr.	Calas Ousta	T	Labor and materia	Deserved	LICD	1 680 00
> 0 D OP000373 Labor and materials for new storefront	DODO Pizza Inc.	Ŭ	000000	Sales Quote	True	Labor and materia	Prepared	050	1,000.00
	Acme Brick Company	A	PRODUC	CTS OR SERV	/ICES				
OP000371 Professional Services Consulting Proj	USA Bartending School		Description			UOM	Quantity	Unit Price	Amount
OP000369 Electronics order	Caribbean Secretary Online		Labor - Juni	or Consultant		HOUR	16.00	80.00	1,280.0000
OP000368 Consumer goods opportunity	Southwest Food Distribution		Widget 03 -	Standard cost ite	m	EA	5.00	50.00	250.0000
			Widget 02 -	Serial numbered	item	EA	1.00	100.00	100.0000
17-24 of 322 records	3 of 41 pages > >		Widget 01 -	High volume, lov	/ cost	EA	50.00	1.00	50.0000

Figure: The side panel for the list of opportunities

The side panel on the Opportunities (CR3030PL) form has the following tabs:

• **Opportunities**: The selected opportunity on the *Opportunities* (CR304000) form. A user can view the opportunity settings and any files and notes associated with the opportunity, and the user can modify the data of the opportunity, if needed.

- Contacts: The list of contacts associated with the account specified in the opportunity.
- **Quotes** (shown in the screenshot above): A dashboard with widgets that show details about any quotes associated with the opportunity.
- **Sales Orders**: A dashboard with widgets that show details about any sales orders associated with the opportunity.
- Invoices: A dashboard with widgets that show details about any invoices associated with the opportunity.
- Services: A dashboard with widgets that show details about any service orders associated with the opportunity. The tab is available if the *Service Management* feature is enabled on the *Enable/Disable Features* (CS100000) form.

The following screenshot shows the Contacts (CR3020PL) form with the tab of a side panel displaying the opportunities related to the selected contact.

Contacts ひっ + ク H 図 All DECORDS ANY CONTACTS	CUSTOMIZATION - TOOLS -	Contact ID	9811 - Mag Darrow	P				13
Business Account All • 37 Ph	0	7 ALLOPEC			4 OPENIÓ			0
Class ID All -		OPEN OPE	ODTINITIES					-
Class ID All		OPEN OPE	ORIUNITIES		Large and	1.000	1000	
e la 🗋 Contact Com	opaoy Name	Opportunity ID	Subject	Status	Stage	Currency	Total Estimatio	Owner
		OP000395	Design and architecture project	Open	Development	USD	15,000.00 1/28/2021	Maxw
G Lisa Khan Cor	rporate Suite	OP000394	Design and architecture project	Open	Nurture	USD	30,000.00 2/3/2021	Maxw
D Lonnie Medina Mot	tion Industries Inc	000092	Design and architecture project	Open	Qualification	USD	25,000.00 9/30/2015	Eric Ki
9 D Lonnie Troutman The	e Crane Company	OPPORTU	NITY PIPELINE					
0 D Lora Jensen Pen	nna Association-School Adm							
D Lorena Rodriguez Mar	irkay Furniture	40,000						
D Lori Bonneville Acti	tive Staffing Service	20.000 -						
D Lucy Los Etel	alligent Solutions	ALCONT.	-					
D Lydia Eisenzimmer Net	tweb Technology	0						
D Mack Peterson Wei	eir Studios		2021 - 190			202	1. 640	
> @ D Mag Dattow deV	Vere and Partners (UK) Ltd		-					
6 D Mandi Stonehouse Star	andard Hardware Company		lurjure	Development				
B D Mandy Ortega Sag	ge Zero	ORDODTU	NITY BY STATUS					
6 D Manny Lee NR	R Westport LLC	OFFORTO	NIT DI SIAIUS					
6 D Margaret Brown Per	riphery Distribution Co.	30,000						
Glo	obal Industrial Tools	20,000						
6 D Mark Denskoy McC	Covern Computers	10,000 -						
D Mark Edwards HD	Technical Services Limited							
G D Mark Hunter Chu	urch of The Apostles		2014 - 589			201	5.989	
•		-	_			1.		
235-252 of 352 records. IC C	14 of 20 pages > >I		ost Open					

Figure: The side panel for the list of contacts

The side panel on the Contacts (CR3020PL) form has the following tabs:

- **Contacts**: The selected contact on the *Contacts* (CR302000) form. A user can view the contact settings and any files and notes associated with the contact, and the user can modify the data of the contact, if needed.
- **Opportunities** (shown in the screenshot above): A dashboard with widgets that show details about any opportunities associated with the contact, including open opportunities and the number of open sales quotes associated with these opportunities.
- **Cases**: A dashboard with widgets that show details about any cases associated with the contact, including the list of open cases and the number of pending cases.

The following screenshot shows the Cases (CR3060PL) form with the tab of a side panel displaying the invoices associated with the customer in the selected case.

CRM: Multifaceted View for the Lists of Opportunities, Contacts, and Cases | 62

Ca	ses		CUSTOMIZAT	ION - TOOLS -	>	Invoices								[]
Q	4	о +			.	Customer Ac	count ID: JEV	TCOMPUT - Jevy	Compu 🔎					
/	ALL R	ECORDS	MY CASES CASE SUMMARY			BALANCE							54.9	K
Bu	sines	s Account: A	I • ▼ 🛱	Q	Ś	INVOICES	TO APPROVE							0
Sta	itus: A	All 👻			÷									
Se	verity	All 🝷				INVOICES								0
Pri	ority:	All 👻				CUSTOME	R INVOICES	+						
		Case ID	Subject	Business	(+)	Туре	Reference Nbr.	Status	Date	Amount	Total Amount	Balance	Currency	
				Account	_	Invoice	AR009081	Open	11/30/	36,000.00	36,000.00	36,000.00	USD	
> 0		000150	Resistors 100ct, 150 Ohm, 2.0 Watts, 5% to	JEVTCOMPUT		Invoice	<u>AR009018</u>	Open	11/7/2	18,900.00	18,900.00	18,900.00	<u>USD</u>	
0		000149	Toshiba Carrier High Wall Indoor Unit - 26	SAFECREDIT		Invoice	AR008977	Closed	10/31/	22,000.00	22,000.00	0.00	<u>USD</u>	
0		000149	M- BBO 18 BC Stalates Set 8 Core	HUNTINGTON		Invoice	AR008812	Closed	9/3/2020	230,112	230,112	0.00	USD	
U		000140	Wir DDQ To PC Starriess Set & Case	HUNTINGTON		Invoice	AR008734	Closed	8/31/2	10,800.00	10,800.00	0.00	USD	
0		<u>000147</u>	Stamina In-Motion Elliptical Trainer	TOYONEILL		Invoice	<u>AR008710</u>	Closed	8/28/2	316,365	316,365	0.00	USD	
0		<u>000146</u>	Radio Flyer Interactive Riding Horse	APOSTELSCH		Invoice	AR008617	Closed	7/31/2	44,600.00	44,600.00	0.00	USD	
						Invoice	AR008556	Closed	7/16/2	19,736.00	19,736.00	0.00	USD	
4				•		Invoice	AR008532	Closed	6/12/2	19,500.00	19,500.00	0.00	USD	
11	-15 of	104 record	dis IC C 3 of 21 p	ages > >		Invoice	<u>AR006493</u>	Closed	0/12/2	500.00	500.00	0.00	050	

Figure: The side panel for the list of cases

The side panel on the Cases (CR3060PL) form has the following tabs:

- **Cases**: The selected case on the *Cases* (CR306000) form. A user can view the case settings and any files and notes associated with the case, and the user can modify the data of the case if needed.
- **Contracts**: A dashboard with widgets that show details about all contracts associated with the case. The tab is available if the *Service Management* feature is enabled on the *Enable/Disable Features* form.
- Cases Links: A dashboard with widgets that show details about any cases related to the selected case.
- **Sales Orders**: A dashboard with widgets that show details about any sales orders associated with the customer specified in the case.
- **Invoices** (shown in the screenshot above): A dashboard with widgets that show details about all invoices associated with the customer specified in the case.
- **Services**: A dashboard with widgets that show details about any service orders associated with the case. The tab is available if the *Service Management* feature is enabled on the *Enable/Disable Features* form.

On a side panel, a user can click the link to a record, such as a contact or an invoice, and the system will open the record in a separate browser tab. The user can also click any widget or its title to drill down for more details, and in a separate browser tab, the system will open the form the widget is based on.

Documentation: Improvements in User Guides

In Acumatica ERP 2021 R1, multiple improvements have been made to the content and structure of the guides that make up the documentation, as described in the following sections.

Customer Relationship Management Guide

The structure of the *Customer Relationship Management* guide has been completely reorganized to follow the new topic structure that was introduced in Acumatica ERP 2019 R2. The topics that describe marketing, sales, and support operations, as well as the configuration of CRM functionality, have been updated and now include activities that users can perform by using the *U100* dataset.

Manufacturing Edition Guide

In the *Manufacturing Edition* guide, the topics that describe the implementation of the basic manufacturing functionality have been significantly updated and extended; the topics now include activities that users can perform by using the *U100* dataset.

Construction Guide Improvements

The *Construction* guide has been updated. Most of the chapters in the guide now include activities that users can perform by using the *U100* dataset to learn how to perform particular business processes. Also, new topics about correcting accounts payable bills for subcontracts have been added to the guide.

Getting Started with Acumatica ERP Guide

The *Getting Started with Acumatica ERP* guide now includes a new chapter, *Working with Attachments*. In this chapter, users can learn how to attach a needed file or a note to a record. Also, the chapter describes how to maintain multiple versions of an attached file, how to delete attachments, and how to attach a file to a record detail.

Reporting Tools Guide

The *Report Designer* guide, which is a part of the *Reporting Tools* guide, has been revamped. The topics in the guide now include activities that users can perform by using the *U100* dataset. Descriptions of changes introduced in Acumatica ERP 2021 R1 have been added to the information on generic inquiries.

Finance: Card Payments Pending Review

In some cases, payment transactions cannot be processed automatically by the system. Users may need to review and manually process these transactions in the following cases:

- A payment matches the criteria for automated processing but cannot be processed because the processing center has declined the transaction. These payments are removed from the automated queue and can remain unnoticed, which can cause delays in credit card processing.
- A payment does not match the criteria for automated processing; for example, it has no value specified in the **Card/Account Nbr.** box on the *Payments and Applications* (AR302000) form and has no transaction (or its transaction has failed or expired). If these payments remain unnoticed, they can cause delays in credit card processing.
- A payment is held for review and requires immediate attention, because transactions held for review expire in a very short time period. If these payments remain unnoticed, they can cause transactions to be lost.

In Acumatica ERP 2021 R1, the new *Card Payments Pending Review* (CA403000) form (shown in the following screenshot) has been introduced. On this inquiry form, users can manually review AR documents paid by credit cards that could not be processed automatically by the system and require manual processing. From the tabs of this form, users can open the listed documents for further processing.

Card Payments Pending Review											CUSTOM	IZATION	TOOLS -	
Ċ	\circlearrowright \bowtie \mathbf{X} \lor													Q,
ALL RECORDS HELD FOR REVIEW DECLINED FAILED PROCESSING FAILED VALIDATION														
8	0 [Type Reference Nbr. Payment Method Card/Account Nbr. Proc. Center ID *Customer						Payment Amount	Payment Date	Processing	Status	Validation S	tatus	
>	0 1		Payment	003292	VISATOK	VISATOK:****-****-****-1111	AUTHNETAPI	WIDGETCC	123,900.00	12/1/2020	Capture Fa	ailed		

Figure: The new Card Payments Pending Review form

As soon as a document appears on the form, the user should open the document on the *Payments and Applications* form or *Cash Sales* (AR304000) form and resolve the issues as follows:

- For a document whose processing has failed, the user should review the transaction in the processing center and in the system and try to repeat the transaction, record the transaction to the payment, or validate the payment.
- For a document for which the credit card has insufficient funds or has been rejected, the user can contact the customer and ask them to add funds to the card account or provide a new payment method.
- For a document with a transaction held for review, the user should review the transaction in the processing center and validate the document in the system by using the **Validate Card Payment** action on the *Payments and Applications* or *Cash Sales* form.
- For a document for which validation has failed after import, the user can review the document and process the payment manually.

When a document has been successfully processed, it disappears from the list on the *Card Payments Pending Review* form.

Additional Information

For details on handling card payments that require manual processing, see *Handling Transactions that Require Manual Processing* in the *Card Payments* topic.

Finance: Company Groups

Starting in Acumatica ERP 2020 R2, users can limit the usage of a customer record to a selected branch or a company. Similar functionality has been implemented for vendors in 2021 R1 (for details, see *Finance: Restricted Visibility of Vendor Records*). However, in some cases, multiple related companies may need to have access to the same set of customer and vendor records. For this purpose, Acumatica ERP 2021 R1 has introduced *company groups*. A company group is an entity that includes multiple companies that share the same customers and vendors. For reporting purposes, a company can be included in more than one group.

The functionality of company groups is available in the system if the *Customer and Vendor Visibility Restriction* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

The Company Groups Form

In Acumatica ERP 2021 R1, the *Company Groups* (CS102500) form, shown in the following screenshot, has been introduced.

C F	omp PRC	any Gro D	oups											
•	() D		¢)	+	Ū	۰ (ŀ	<	<	>		Я
	* Gro * Gro Cui	oup ID: oup Nar rrency I +	ne: D: X	 ←	+	PROD Produc USD	tion Co	ompanies				Q	0	
8	Com	pany ID			Com	pany N	lame			Prima	ary Gro	oup		Actual Ledger
>	PRO	DUCT	<u>s</u>		Rev	vision T	wo Pro	ducts						ACTUAL
	<u>SEF</u>	RVICES			Rev	rision T	wo Ser	vices						ACTUAL

Figure: The new Company Groups form

The form is used for creating, viewing, modifying, and deleting company groups. The structure of the **Group ID** is defined by the *COMPANY* segmented key.

The **Currency ID** box appears on the form, as shown in the screenshot above, if the *Multicurrency Accounting* feature has been enabled on the *Enable/Disable Features* (CS100000) form. The box is unavailable for editing and specifies the base currency of the current tenant.

The *Company Groups* form has also been added to the quick menu of the **Configuration** workspace, as shown in the following screenshot.



Figure: Configuration workspace

Changes to the Companies Form

The **Company Groups** tab has been added to the *Companies* (CS101500) form, as shown in the following screenshot.

TOOLS -
^

Figure: The Company Groups tab on the Companies form

This tab appears on the form if the *Customer and Vendor Visibility Restriction* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

On the tab, a user can review the groups in which the company selected in the Summary area is included, add the company to a group, and exclude the company from a group (by deleting the row with the group). Also, if the company is included in more than one group, the user can or select the company's primary group by selecting the **Primary Group** check box in the row of the group; only one primary group can be selected for a company.

Changes to the Drop-Down List of the Company/Branch Box

The multilevel drop-down list in the **Company/Branch** box on multiple forms has been modified to display company groups, along with companies and branches.

If a company is included in multiple groups, in the **Company/Branch** box, this company (and any branch within it) will be displayed multiple times—once under each of the groups in which the company is included. However, if a company or branch was previously selected in the **Company/Branch** box and a user opens the list, the company or branch will be highlighted under its primary group; non-primary groups can be collapsed if they contain more than three companies.

The following screenshot illustrates an updated multilevel drop-down list in the **Company/Branch** box on the *Customer Details* (AR402000) form.

Customer Details												CUSTOMIZATI	ON TOOLS -
0 0 < >	ACTIONS - REPORTS - H	Ÿ											R
Company/Branch - Customer, Pariod Currency AR Account AR Subaccount:	PRODWHOLE CAP - Capital Companies PRODUCTS - Ravision Two Products PRODERTAL - Products Retail PRODWHOLE - Products Wholese CAPITAL - Revision Two Capital PRODWHOLES - Ravision Two Products PRODUCTS - Ravision Two Products PRODUCTS - Ravision Two Products PRODUCTS - Ravision Two Products	Show All Documents Include Unroleased Documents Balance by Documents. Corrent Balance Prepayment Balance: Balance Discrepancy. Retained Balance	0.0	0.00 0.00 0.00 0.00 0.00	Include Child Accou	nts.	2						^
Si 🖞 🗋 Customer	PRODWHOLE - Products Wholesa	Reference Nor. * Post Period	*Date	Due Date	Status	Currency		Currency Origin. Amount	Currency Bálance	Currency Cash Discount Taken	Currency Original Refainage	Currency Total Amount	Currency Unreleased Refainage

Figure: Company/Branch box on the Customer Details form

Notice that the *PRODWHOLE* company is included in two company groups—*CAP* and *PROD*—and is shown in both company groups, but it is highlighted in its primary group, *PROD*. In the list, a user can also select the *CAP* or *PROD* company group to narrow the records displayed in the table to customers of the companies included in the selected group.

Additional Information

For more information on setting up a company group and using it for visibility restriction, see *Company Groups: General Information*.

Finance: Currency Settings on the Currencies Form

In previous versions of Acumatica ERP, if a currency was selected as the base currency for a company on the *Companies* (CS101500) form, this currency was no longer shown on the *Currencies* (CM202000) form. Different sets of base currency settings were available on the *Companies*, *General Ledger Preferences* (GL102000), and *Currency Management Preferences* (CM101000) forms. In Acumatica ERP 2021 R1, all of the settings of any currency, including the base currency, are available on the *Currencies* form.

Changes to the General Ledger Preferences Form

On the *General Ledger Preferences* (GL102000) form, the boxes with the accounts set up for the base currency –**Rounding Gain Account, Rounding Gain Subaccount, Rounding Loss Account**, and **Rounding Loss Subaccount**—have been removed from the **Rounding Settings** section.

The Rounding Limit box has been removed and added to the Currencies (CM202000) form.

Changes to the Companies Form

On the *Companies* (CS101500) form, the boxes related to the settings of the base currency—**Description**, **Currency Symbol**, and **Decimal Precision**—have been removed from the **Base Currency Settings (Shared)** section on the **Company Details** tab.

The **Base Currency ID** box, which remains on the form, has been changed to display the currency ID and description. The Edit button has been added to the right of this box; a user can click this button to open the *Currencies* (CM202000) form in a pop-up window to review and update the settings of the base currency. The following screenshot illustrates the UI changes on the *Companies* form.

PRODUCTS ← 🖺 🖺 ✔) + @ @ • K <	>	>I ACTIONS - CF	REATE LEDGER
* Company ID:	PRODUCTS		,0 🗸 Active	8
* Company Name:	Revision Two Products	Revision Two Products		
Company Type:	With Branches Requiring Balancing		-	
COMPANY DETAILS	BRANCHES EMPLOYEES L	EDGER	S VISUAL APPEARANCE	E COMPANY GROUPS
MAIN CONTACT			BASE CURRENCY SETTI	NGS (SHARED)
Account Name:	Revision Two Products		Base Currency ID:	USD - U.S. Dollars
Attention:	Maxwell Baker		TAX REGISTRATION INFO)
Email:	admin@revisiontwo.com		* Legal Name:	Revision Two Products
Web:	www.revisiontwo.com	ď	Tax Registration ID:	
Phone 1:	206-555-1212		Tax Exemption Number:	
Phone 2:			Entity Usage Type:	Default
Fax:				File Taxes by Branch
MAIN ADDRESS				✓ File 1099-MISC by Branch
	ADDRESS LOOKUP			1099-MISC Reporting Entity
Address Line 1:	11235 SE 6th St.		CONFIGURATION SETTIN	IGS
Address Line 2:	Suite 140		Access Role:	BRANCH HQ - Product Company Role &
City:	Bellevue		Default Country:	US - United States of America P
* Country:	US - United States of America	P 0	MISCELLANEOUS SETTIN	NGS (SHARED)
State:	WA - WASHINGTON	P 0	Quantity Decimal Places:	2
Postal Code:	98004		Price/Cost Decimal Pla	2
			Weight UOM:	KG 🖉
			Linear UOM:	CM P 0
			Volume UOM:	LITER 0
			Phone Mask:	

Figure: UI changes on the Companies form

Changes to the Currency Management Preferences Form

On the *Currency Management Preferences* (CM101000) form, the sections related to the base currency settings —**Realized Gain and Loss Settings** and **Translation Gain and Loss Settings**—have been removed.

UI Changes to the Currencies Form: Base Currency

All settings of the base currency are now available on the *Currencies* (CM202000) form. For the base currency, the following boxes and sections are shown:

- The **Description**, **Currency Symbol**, and **Decimal Precision** boxes (formerly located on the *Companies* (CS101500) form), which are in the Summary area of the form.
- The **Rounding Limit** box (formerly located on the *General Ledger Preferences* (GL102000) form), which is in the Summary area of the form. This box appears on the form for the tenant's base currency if either the *Invoice Rounding* or *Net/Gross Entry Mode* feature has been enabled on the *Enable/Disable Features* (CS100000) form.
- The **Realized Gain and Loss Accounts** and **Rounding Gain and Loss Accounts** sections of the **GL Accounts** tab, which contain boxes formerly located on the *General Ledger Preferences* (GL102000) and *Currency Management Preferences* forms. These sections appear on the tab if the *Multicurrency Accounting* feature has been enabled on the *Enable/Disable Features* form.

- The Translation Gain and Loss Accounts section of the GL Accounts tab (formerly located on the Currency Management Preferences form). The section appears on the tab if the Translation of Financial Statements feature has been enabled on the Enable/Disable Features form.
- The **Active** and **Use for Accounting** check boxes of the Summary area are always selected and are unavailable for editing.

The following screenshot illustrates the settings of the base currency selected on the Currencies form.

← □ □ Ω	+ 🗊 🗘 • K <	> >	
* Currency ID:	USD ,P		Active
Description:	U.S. Dollars		Use for Accounting
Currency Symbol:	\$	Rounding Limit:	0.00
Decimal Precision:	2		
GLACCOUNTS REALIZED GAIN AND LOS	S ACCOUNTS	TRANSLATION GAIN AND	LOSS ACCOUNTS
* Realized Gain Account:	83000 - Realized Gain / Loss 🔎	* Translation Gain Account	27001 - Translation Gain / Lo: 🔎
* Realized Gain Subacco	000-000 - Default	* Translation Gain Subac	000-000 - Default
* Realized Loss Account:	83000 - Realized Gain / Loss 🔎	* Translation Loss Account	27001 - Translation Gain / Lo: 🔎
* Realized Loss Subacco	000-000 - Default	* Translation Loss Subac	000-000 - Default
		ROUNDING GAIN AND LO	OSS ACCOUNTS
		* Rounding Gain Account:	83100 - Rounding Gain / Loss 🔎
		* Rounding Gain Subacc	000-000 - Default
		* Rounding Loss Account:	83100 - Rounding Gain / Lose 🔎
		* Rounding Loss Subacc	000-000 - Default

Figure: The base currency selected on the Currencies form

The base currency cannot be deleted. If a user attempts to delete the base currency, the system displays an error message.

UI Changes to the Currencies Form: All Currencies

Changes have also been introduced to the *Currencies* (CM202000) form for all currencies (base and non-base). If the *Multicurrency Accounting* feature is disabled on the *Enable/Disable Features* (CS100000) form, the **Rounding Gain and Loss Accounts** section is now visible on the form.

Additional Information

For updated information on the setup of the multicurrency functionality, see *Multicurrency Functionality: Implementation Activity*.

Finance: Financial Dashboards

Previously, financial dashboards in Acumatica ERP were introduced as a customization package. Starting in 2021 R1, financial dashboards have been included in Acumatica ERP. The following dashboards are now available for users:

- AR Clerk (DBAR0001): A dashboard for the sales department (salespeople, adviser, account manager, customer services manager, or sales manager)
- AP Clerk (DBAP0001): A dashboard for employees and managers performing vendor management activities
- Controller (DBCA0001): A dashboard for the finance department

These dashboards include various key performance indicators (KPIs), metrics, and charts, and use generic inquiries to gather the underlying data. Users can access the dashboards from the **Dashboards** workspace, in the **Dashboard: Finance** category.

For more information on types of widgets, see *Platform: Key Performance Indicator (KPI) Widget and Other Enhancements*.

AR Clerk Dashboard

The AR Clerk (DBAR0001) dashboard is shown in the following screenshot.



Figure: AR Clerk dashboard

The following table lists the KPIs included in the AR Clerk dashboard and briefly describes each of them.

КРІ	Acumatica ERP Widget	Description
Documents on Hold	Scorecard KPI	All AR documents and payments with the On Hold status
Unreleased Doc- uments in Prior Months	Scorecard KPI	All unreleased AR documents, payments, and applications that are dated in past months

КРІ	Acumatica ERP Widget	Description
Documents to Re- lease	Scorecard KPI	All AR documents, payments, and applications that are ready to be released
Rejected Refunds	Scorecard KPI	All customer refunds with the <i>Rejected</i> status
Payments to Apply	Scorecard KPI	All AR payments with the <i>Open</i> status and without unre- leased applications
Invoices to Print	Scorecard KPI	All AR documents with the <i>Balanced</i> or <i>Open</i> status, and with the Printed and Don't Print check boxes cleared on the <i>Invoices and Memos</i> (AR301000) form
Invoices to Email	Scorecard KPI	All AR documents with the <i>Balanced</i> or <i>Open</i> status, and with the Emailed and Don't Email check boxes cleared on the <i>Invoices and Memos</i> form
Statements to Print	Scorecard KPI	All unprinted customer statements that have the Don't Print check boxes cleared on the <i>Print Statements</i> (AR503500) form
Statements to Email	Scorecard KPI	All unsent customer statements that have the Don't Email check box cleared on the <i>Print Statements</i> form
Customers on Credit Hold	Scorecard KPI	All customers with the Credit Hold status
Customers Exceeding Credit Limit	Scorecard KPI	All customers for which <i>Credit Limit</i> or <i>Limit and Days Past Due</i> is selected in the Credit Verification box on the Financial tab of the <i>Customers</i> (AR303000) form and the value in the Remaining Credit Limit box is less than or equal to 0.00
Average Days to Pay	Scorecard KPI	The average difference (in days) between the payment date and the invoice's due date for all paid invoices (with the <i>Closed</i> status) starting from the first day of the quarter before the current one
Days Sales Outstand- ing	Scorecard KPI	The average number of days that the company takes to collect revenue after a sale has occurred
		Formula: (Accounts Receivable / Total Credit Sales (Billed Revenue)) * Number of Days
Cash Inflow for 7 Days	Scorecard KPI	The summary of AR document balances that are overdue and due within seven days of today
AR Overdue	Scorecard KPI	The summary of overdue customer balances as of the cur- rent day
КРІ	Acumatica ERP Widget	Description
-----------------------------------	---------------------------------	--
AR Aging	Chart Type: Doughnut	The summary of AR document balances that are current and overdue as of the current day, split by the following aging buckets:
		• Current
		Overdue from 1 to 30 days
		Overdue from 31 to 60 days
		Overdue from 61 to 90 days
		Overdue more than 90 days
Cash Inflow for 7 Days by Days	Chart Type: Column	The summary of document balances that are overdue and due in seven days starting from today, split by days; the first column is the total overdue amount
Top 10 Overdue Bal- ances	Chart Type: Column	The 10 customers with the highest overdue balances
Overdue by Salesper- son	Chart Type: Stacked Col- umn	The 10 salespersons whose customers have the highest overdue balances, split by customer
Total AR	Chart Type: Line	A summary of the changes in document balances for the past 12 months

AP Clerk Dashboard

The following screenshot illustrates the AP Clerk (DBAP0001) dashboard.



Figure: AP Clerk dashboard

The following table lists the KPIs included in the AP Clerk dashboard and briefly describes each of them.

КРІ	Acumatica ERP Widget	Description
Documents on Hold	Scorecard KPI	All AP documents and payments with the On Hold status
Unreleased Documents in Prior Months	Scorecard KPI	All unreleased AP documents, payments, and applications that are dated in past months
Documents to Release (Current Period)	Scorecard KPI	All unreleased AP documents, payments, and applications that are ready to be released
PO Receipts to Bill	Scorecard KPI	All purchase receipts that have not been billed yet
Bills to Pay	Scorecard KPI	All overdue AP documents and documents that will be due within seven days of today
		This KPI does not include documents with re- tainage that have a balance of 0.00, because they are already paid but will be closed once the retainage document is closed.
Documents to Approve	Scorecard KPI	All AP documents with the Pending Approval status
Payments to Approve	Scorecard KPI	All AP payments with the <i>Pending Approval</i> status
Rejected Payments	Scorecard KPI	All customer refunds that have the <i>Rejected</i> status
Payments to Process	Scorecard KPI	All AP payments that need to be printed (that is, they have the <i>Pending Print</i> status)
Vendors on Payment Hold	Scorecard KPI	All vendors that have the Hold Payments status
Cash Discount to Take in 7 Days	Scorecard KPI	The summary of cash discounts of the released and unre- leased AP documents that can be taken within seven days
Cash Outflow for 7 Days	Scorecard KPI	The summary of AP document balances that are past due and due within seven days of today
AP Overdue	Scorecard KPI	The summary of overdue vendor balances as of the cur- rent day
AP Aging	Chart Type: Doughnut	 The summary of AP document balances that are current and past due as of the current day, split by the following aging buckets: Current Overdue from 1 to 30 days Overdue from 31 to 60 days Overdue from 61 to 90 days Overdue more than 90 days

КРІ	Acumatica ERP Widget	Description			
Cash Outflow for 7 Days by Days	Chart Type: Column	The summary of AP document balances that are past due and due within days of today, split by days; the first col- umn is the total past due amount			
Top 10 Overdue Bal- ances	Chart Type: Column	The 10 vendors with the highest overdue balances			
Vendor Purchasing TrendsChart Type: Stacked Column		The seven vendors with the highest summary document amount during the quarter			
Total AP	Chart Type: Line	A summary of changes in AP document balances for the past 12 months			

Controller Dashboard

The following screenshot illustrates the *Controller (DBCA0001)* dashboard.



Figure: Controller dashboard

The following table lists the KPIs included in the *Controller* dashboard and provides a brief description of each.

КРІ	Acumatica ERP Widget	Description				
AR Clerk	Link	A link to the AR Clerk (DBAR0001) dashboard				
AP Clerk	Link	A link to the AP Clerk (DBAP0001) dashboard				
Total AR	Scorecard KPI	The actual summary of customer balances				
AR Overdue	Scorecard KPI	The summary of overdue customer balances as of the current day				
Open SO Amount	Scorecard KPI	The summary of amounts of open sales orders that have the SO (Sales Order), CS (Cash Sale), and IN (Invoice) order types				

КРІ	Acumatica ERP Widget	Description
Customers on Credit Hold	Scorecard KPI	All customers with the Credit Hold status
Total AP	Scorecard KPI	The actual summary of vendor balances
AP Overdue	Scorecard KPI	The summary of overdue vendor balances as of today
Open PO Amount	Scorecard KPI	The summary amount of open purchase orders
Vendors on Payment Hold	Scorecard KPI	All vendors with the <i>Hold Payments</i> status
Payments to Approve	Scorecard KPI	All payments with the Pending Approval status
Cash on Hand	Scorecard KPI	The summary of cash account balances or all active cash accounts for the current month
Cash Demand 30 Days	Scorecard KPI	The summary of balances of all overdue AP documents that will be due within 30 days of today
Unreconciled Trans- actions	Scorecard KPI	The number of unreconciled transactions that are more than 30 days old
AR Aging	Chart Type: Doughnut	 The summary of document balances that are current and overdue as of the current day, split by the following aging buckets: Current Overdue from 1 to 30 days Overdue from 31 to 60 days Overdue from 61 to 90 days Overdue more than 90 days
AP Aging	Chart Type: Doughnut	 The summary of document balances that are current and past due as of the current day, split by the following aging buckets: Current Overdue from 1 to 30 days Overdue from 31 to 60 days Overdue from 61 to 90 days Overdue more than 90 days
Month-to-Date Ex- penses	Chart Type: Doughnut	Expenses by category (class) for the current month
Quarter-to-Date Ex- penses	Chart Type: Doughnut	Expenses by category (class) for the current quarter
Year-to-Date Expens- es	Chart Type: Doughnut	Expenses by category (class) for the current year

КРІ	Acumatica ERP Widget	Description
Income vs Expense by Quarter	Chart Type: Column	A comparison of income and expenses for each quar- ter; the duration is eight quarters, including the current quarter
Cash Position	Chart Type: Stacked Col- umn	The summary of cash account balances for all active cash accounts during the past 12 months
Income vs Expense by Month	Chart Type: Line	A comparison of income and expenses for each month over the duration of the past year.

Finance: Fixed Assets Under Construction

Starting in 2021 R1, Acumatica ERP supports fixed assets that are under construction. Until the construction is complete, these assets do not require depreciation and do not need to have a **Placed-in-Service Date** specified on the **General Settings** tab (**Asset Summary** section) of the *Fixed Assets* (FA303000) form. The cost of assets under construction is recorded in a dedicated asset account. While an asset is under construction, users can process cost additions and deductions, as well as perform other fixed asset operations, except for depreciation.

When the construction of a fixed asset has been completed, a user should do the following:

- 1. Specify the Placed-in-Service Date for the fixed asset on the Fixed Assets form.
- 2. On the *Transfer Assets* (FA507000) form, transfer the asset to a fixed asset class that is not used for underconstruction assets. This process will post the following entry, transferring the asset cost to the Fixed Assets account.

GL Account	Debit	Credit
Fixed Assets	Asset cost	
Fixed Assets under Construction		Asset cost

3. Start depreciating the fixed asset on the *Calculate Depreciation* (FA502000) form by selecting *Depreciate* in the **Action** box of the Summary area.

Changes to the Fixed Asset Classes Form

On the *Fixed Asset Classes* (FA201000) form, the following changes have been made, as shown in the screenshot below:

- On the General Settings tab, the Under Construction check box has been added.
- On the General Settings tab, the Depreciate check box has been renamed to Depreciable.

Fixed Asset Classes

BUILDINGCOM	N							
← 🕄 🗒	S	+	Ū	Ô.	K	<	>	ы
* Asset Class ID:	BUILD	INGC A	þ				~ A	ctive
Parent Class:					,	Q	 ✓ H 	lold on Entry
Description:	Buildir	igs unde	r consti	ruction				
GENERAL SETTIN	IGS	DEPR	ECIATI	ON SETT	INGS	GL A	CCOU	NTS
* Asset Type:		BUILD	DING - E	Building			0	,
		🗸 Tang	gible					
	[🔽 Dep	reciable	÷	1			
		🗹 Und	er Cons	struction				
★ Useful Life, Years	0		50.000	00				
		Acce	elerated	l Deprecia	tion for s	SL Depr	. Metho	bd

Figure: UI changes on the Fixed Asset Classes form

The **Under Construction** check box is available for selection only if a class has the **Depreciable** check box selected, because fixed assets under construction will be depreciable after the construction is complete.

By default, the **Under Construction** check box is cleared. If there is at least one fixed asset associated with an asset class for which is it selected, the user cannot change the state of the check box.

Changes to the Fixed Assets Form

On the *Fixed Assets* (FA303000) form, the **Placed-in-Service Date** box is now optional for a fixed asset associated with a class that has the **Under Construction** check box selected on the *Fixed Asset Classes* (FA201000) form. If the **Placed-in-Service Date** box has a value, and the asset class of the selected fixed asset has the **Under Construction** box selected, the system displays a warning message in the **Placed-in-Service Date** box indicating that the asset will not be depreciated.

The **Placed-in-Service Date** box is available for editing and can be cleared for a fixed asset associated with an under-construction asset class. If the **Placed-in-Service Date** box is empty, the asset can be transferred only to another under-construction asset class. If a user has created at least one depreciation transaction, the asset cannot be transferred to an under-construction class.

The **Depreciate** check box on the **General Settings** tab has been renamed to **Depreciable**. The following screenshot illustrates the UI changes made on the *Fixed Assets* form.

Fixed Assets 00000020 ← 🕄 🛱 ∽	+ 🖻 D • K	< > >1 A	CTIONS -	NOTES ACTIVITIES	FILES CUSTOMIZATION TOOLS -
Asset ID: 0000002	0 Parent Asset:		٩		^
Description: Building	- Head Office				
GENERAL SETTINGS	PURCHASE/TANGIBLE INF	GLACCOUNTS	BALANCE COMPONENT	S LOCATION HISTORY	TRANSACTION HISTORY
ASSET SUMMARY		TRACKING INFO		_	
* Asset Class:	BUILDINGCON - Buildings ur		PRODWHOLE - Products Wh	P 0	
* Property Type:	Property	- Building:		P /	
Status:	Active	Floor:			
* Asset Type:	BUILDING - Building	D / Room:			
	Tangible	Custodian:		P 0	
Quantity:	1.00	* Department:	ADMIN - Administration	P /	
	Depreciable	Reason:			
Useful Life, Years:	50.0000	Tag Number:	0000020		
* Receipt Date:	11/24/2020 -				
Placed-in-Service Date:	12/30/2020 -				
The fixed asset is under con cannot be depreciated.	nstruction and				
Replacement Cost:	0.00				
Disposal Date:					
Disposal Method:					
Disposal Amount:	0.00				

Figure: UI changes on the Fixed Assets form

If a fixed asset has at least one depreciation transaction, the user will not be able to do the following:

- Change the class in the Asset Class box for a class that has the Under Construction check box selected on the Fixed Asset Classes form.
- On the *Transfer Assets* (FA507000) form, transfer the fixed asset to a class that has the **Under Construction** check box selected on the *Fixed Asset Classes* form.

The Calculate Depreciation command on the Actions menu is not available for fixed assets under construction.

Changes to the Calculate Depreciation Form

On the *Calculate Depreciation* (FA502000) form, the records related to fixed assets under construction are now excluded from selection and are not displayed in the table, regardless of the selection criteria specified.

Additional Information

For more information about configuring fixed assets under construction, see *Entering a Fixed Asset Under Construction*.

For details on how to create a fixed asset under construction, see To Enter a Fixed Asset Under Construction.

Finance: Import of Credit Card Refunds

In previous versions of Acumatica ERP, credit card refunds were imported as non-credit card payments. As a result, no verification was performed when documents were imported to Acumatica ERP. Because of this, it was not possible to match an imported *Customer Refund* document with a settlement batch transaction to include this customer refund in a batch payment that was used in a reconciliation process.

In Acumatica ERP 2021 R1, the system allows customer refunds to be imported with credit card transaction information from external e-commerce systems via API calls that pass the list of documents to which the customer refunds should be applied along with application details.

There are two ways of processing credit card refunds when importing them to Acumatica ERP from an external system:

- A payment can be voided by the import process.
- A customer refund can be created and applied to a document or an order.

The Import and Voiding of an Authorized Payment

An authorized payment imported to Acumatica ERP from an external e-commerce system is displayed on the *Payments and Applications* (AR302000) form with the *Pre-Authorized* processing status. Once this payment has been voided in the external e-commerce system, the *Void* transaction is imported and the payment is voided in Acumatica ERP. The processing status of this payment in Acumatica ERP is always *Unknown*, because the transaction received from the external e-commerce system requires validation. The following screenshot shows an authorized payment that has been voided and imported to Acumatica ERP.

1254	TEST	Autho	rize Only	Annroved		2,0000	1/29/2021	601606	00383		Imported External Tra	saction	12/10/2020	Completed	R
1255	TEST	Unkno	awn .	Approved		2.0000		1254 601606	00363		Imported External Tran	saction	1/19/2021	Completed	R
B Tran. Nbr.	* Proc. Center	Tran. 1	ype T	ran. Status		Tran. E Amount (Expire On Est.)	Refereni Proc. Ce Tran. Nbr.	nter Tran. Nbr.	Proc. Center Auth. Nbr.	Proc. Center Response	Reason	* Tran. Time	Proc. Status	CV
OH	x														
DOCUME	NTS TO APPLY	APPLIC	ATION HISTORY	ORDERS 1	TO APPLY	FINANCIA	L DETAILS	APPROVAL DETA	LS CREDI	CARD PROCESSING INFO	FINANCE CHARGES				
			Description:												
			Currency:	USD I	.00 *	VIEW BAS	3	Deducted Cha	0.00						
Payment R	ef.: 601606003	53	Cash Account:	10600 - Crec	dit Card Accou	nt		Finance Charg	0.00						
Application	Pe 01-2021	P	Processing St.	Unknown				Write-Off Amo	0.00						
Application	Date: 1/19/2021		Proc. Center ID	TEST - test				Available Bala	2.00						
Status:	Pending Pr	×	Payment Math.	VISATOK - V	visa Tokenized			Applied to Ord	0.00						
Reference	Nbr.: 003318	,p	Location:	MAIN - Prime	ary Location			Applied to Doc	0.00						
Type:	Payment	*	Customer:	ABARTEND	E - USA Barter	nding Schoo	10	Payment Amo	2.00						^
← 10	12 n	+ =	0 · K	< >	Я	PTURE	ACTION	s • INQUIRIES •	REPORTS .						
Payment	003318 - US/	Barte	nding School								D NOTES	ACTIVITIES	FILES CUSTOM	IZATION TO	DOLS .

Figure: Voided authorized payment

Once the payment has been imported, it also appears on the **Deferred Processing Required** tab of the *Validate Card Payments* (AR513000) form, as shown in the following screenshot.

Validate Card Payments					
ර් ා VALIDATE VALIDATE	all ⊙ • ⊢ 🗵 🏹				
Proc. Center ID:	Q				
ALL RECORDS HELD FOR REVIEW	V DEFERRED PROCESSING RE	EQUIRED			
🗟 🖗 🗋 🔲 Doc. Type 🛛 Doc, Refere	nce Nbr. Proc. Status	Last Activity Date	Proc. Center Tran. Nbr.	Proc. Center ID	Load Payment Profile
> 0 D Payment 003318	Unknown	1/19/2021	60160600363	TEST	

Figure: Voided payment on the Validate Card Payments form

A user can click the unlabeled check box for any payment and click **Validate** on the form toolbar to validate selected payments. After the validation, on the *Payments and Applications* form, the processing status of the payment changes to *Voided*, and the payment status changes to *Voided*, as shown in the following screenshot.

Payments and Applications Payment 003318 - USA Bartending School (c) D C + C + C + S	ACTIONS . INQUIRIES . REPO	rts -	D NOTES	ACTIVITIES	FILES CUSTOMIZATION	TOOLS -
Type: Payment + Customer: ABARTENDE - USA	Bartending School @ Payment Amo.	2.00				^
Reference Nor.: 003318 /P Location: MAIN - Primary Loca	ion Applied to Doc	0.00				
Status: Voided Payment Meth., VISATOK - Visa Toke	Applied to Ord	0.00				
Application Date: 1/19/2021 Proc. Center ID TEST - test	Available Bala.	2.00				
Application Pe 01-2021 Processing St. Voided	Write-Off Amo.	0.00				
Payment Ref.: 60160600363 Cash Account: 10600 - Credit Card A	coount Finance Charg.	0.00				
Currency: USD 1.00 Description:	VIEW BASE Deducted Cha	0.00				
DOCUMENTS TO APPLY APPLICATION HISTORY ORDERS TO APPL	FINANCIAL DETAILS APPROVAL	DETAILS CREDIT CARD PROCESSING INFO FINANCE CHARGE				
O H B						
Than, *Proc, Center Tran, Type Than, Status, Nbr.	Tran. Expire On Referen P Amount (Ext.) Tran. N Nbr.	roc. Center Tran. Proc. Center Proc. Center Response Reason br. Auth. Nbr.	* Tran. Time	Proc. Status	CVV Verification	
1258 TEST Void Approved	2.0000 1255 1	0160600363 Approval	1/19/2021	Completed	Required but Not Verified	
1255 TEST Unknown Approved	2.0000 1254	0160600363 Imported External Transaction	1/19/2021	Completed	Required but Not Verified	
1254 TEST Authorize Only Approved	2.0000	0160600363 Imported External Transaction	12/10/2020	Completed	Required but Not Verified	

Figure: Authorized payment that has been voided

The Import and Voiding of a Captured Payment

If an external e-commerce system has been configured to capture payments, on the *Payments and Applications* (AR302000) form, the processing status of a payment imported to Acumatica ERP is *Captured*. Once this payment has been voided in the external e-commerce system, a user can import the *Void* or *Refund* transaction to Acumatica ERP, and the system changes the processing status of the payment to *Unknown*, as shown in the following screenshot.

Payr	ment	d Applications 003319 - US	A Barte	nding Schoo				0.50 0.50070		NOTES	ACTIVITIES	FILES CUSTOMIZATION	TOOLS .
		*7	+	U. K	() // ~	CENSE WORLD	ACTIONS . INQUIR	des . REPORTS .					
Typ	HE.	Payment		Customer:	ABARTENDE - USA Barter	nding School	Payment Amo.	25.00					^
Ref	erence M	ibr: 003319	p	Location:	MAIN - Primary Location		Applied to Doc.	0.00					
Sta	tus:	Open		Payment Meth	VISATOK - Visa Tokenized		Applied to Ord	0.00					
• Ap;	plication i	Date: 1/19/2021		Proc. Center II	TEST - test		Available Bala	25.00					
• Apr	plication i	Pe 01-2021	p	Processing St.	Unknown		Write-Off Amo	0.00					
Pa	ment Re	r: 601606004	004	Cash Account	10600 - Credit Card Accou	nt	Finance Charg	0.00					
				Currency:	USD 1.00 -	VIEW BASE	Deducted Cha	0.00					
				Description.									
00	CUMEN	TS TO APPLY	APPLIC	ATION HISTORY	ORDERS TO APPLY	FINANCIAL DETAILS	S APPROVAL DETAIL	S CREDIT CARD PROCI	ESSING INFO FINANCE CHARGES				
O	н	x											
20	Tran. Nbr.	* Proc. Center	Tran, 1	lype	Tran, Blatus	Tran. Expire On Amount (Est.)	Referens Proc. Cen Tran, Nbr. Nbr.	ter Tran. Proc. Cenier Auth. Nbr.	Proc. Center Response Reason	+ Tran. Time	Proc. Btatus	CVV Verification	
>	1258	TEST	Unkn	own	Approved	25,0000	1257 6016060	0460	Imported External Transaction	1/19/2021	Completed	Required but Not Verified	
	1257	TEST	Autho	rize and Cap	Approved	25.0000	6016060	0460	Imported External Transaction	12/10/2020	Completed	Required but Not Verified	

Figure: Voided captured payment

The user should further process this payment on the *Validate Card Payments* (AR513000) form by clicking the unlabeled check box for this payment on the **Deferred Processing Required** tab and clicking **Validate** on the form toolbar.

On the *Payments and Applications* form, the system changes the payment status to *Voided*, creates and releases a document with the *Voided Payment* type, and displays a warning that a voided payment has been created. The following screenshot illustrates a captured and voided payment.

Pay Pay	yment of	003319 - USA	Barter	nding Schoo Q • K	·	XI AC	TIONS - INQUI	RIES • REP	orts -				C NOTES	ACTIVITIES	FLES	CUSTOMIZATION	TOOLS .
Тут	pe;	Payment		Customer;	ABARTENDE	E - USA Barter	nding School	Payment Amo.	25.00								^
Re	derence h	lbr.: 003319	Q	Location	MAIN - Prima	ary Location		Applied to Doc	0.00								
St	ahis:	Voided		Payment Meth	VISATOK - V	isa Tokenized		Applied to Ord	0.00								
Ap	plication	Date: 12/10/2020		Proc. Center I	D TEST - test			Available Bala	0.00								
Ap	plication	Pe. 12-2020		Processing St.	Voided			Write-Off Amo.	0.00								
Pa	yment Re	6016060046	0	Cash Account	10600 - Cred	it Card Accourt	nt	Finance Charg	0.00								
				Currency:	USD 1	- 00.	VIEW BASE	Deducted Cha	0.00								
				Description:													
D	DOUMEN	TS TO APPLY	APPLIC	ATION HISTORY	ORDERS T	TO APPLY	FINANCIAL DETAIL	S APPROV	AL DETAILS C	EDIT CARD PROCES	SSING INFO	FINANCE CHARGES					
0	н	x															
8	Tran. Nor.	Proc. Center	Tran. 7)	/pe	Tran. Status		Tran. Expire On Amount (Est.)	Referen Tran, Nbr.	Proc. Center Tran. Nbr.	Proc. Center Auth. Nbr.	Proc. Cente	r Response Reason	* Tran. Time	Proc. Status	CVV W	rilication	
5	1259	TEST	Void		Approved		25.0000	1258	60160600460		Approval		1/19/2021	Completed	Requi	red but Not Verified	
	1258	TEST	Unkno	m	Approved		25.0000	1257	60160600460		Imported E	External Transaction	1/19/2021	Completed	Requi	red but Not Ventiled	
	1257	TEST	Author	ize and Cap	Approved		25.0000		60160600460		Imported E	External Transaction	12/10/2020	Completed	Requi	red but Not Verified	

Figure: Captured payment that has been voided

The Import of a Customer Refund with a Void Transaction

Acumatica ERP 2021 R1 now allows users to create a customer refund for a captured transaction that has not been settled with a bank yet (the transaction status of this transaction in the processing center is *Captured/Pending Settlement*).

When such a payment has been imported to Acumatica ERP from an external e-commerce system, its processing status on the *Payments and Applications* (AR302000) form is *Captured*. Once this payment has been voided in the external e-commerce system and a user imports a customer refund with the *Void* transaction to Acumatica ERP, the processing status of the payment on the *Payments and Applications* form also changes to *Unknown* and the system displays a warning that the document has an unreleased application, as shown in the following screenshot.

Payments and App Payment 003	329 - USA B	artending School								D	NOTES	ACTIVITIES	FILES	CUSTOMIZATION	TOOL	s •
+ D 3	o +	0 · K	< > >I	NELEASE VOID	ACTIONS -	INQUIRIES +	REPORTS .									
Туре:	Payment +	Customar:	ABARTENDE - USA B	artending School 0	Payment Amo.	27.00										•
Reference Nbr.:	003329 ,9	Location:	MAIN - Primary Locatio	n	Applied to Doc	0.00										
Status:	Open	Payment Meth.	VISATOK - Visa Token	zed	Applied to Ord	0.00										
Application Date	1/20/2021 +	Proc. Center ID	AUTHNET - Authorize.	net API	Available Bala.	27.00										
· Application Pe	01-2021 ,0	Processing St.	Unknown		Write-Off Amo.	0.00										
Payment Ref.	60160689086	Cash Account:	10600 - Credit Card Ad	count	Finance Charg	0.00										
		Currency	USD 1.00	- VIEW BASE	Deducted Cha	0.00										
		Description:														
DOCUMENTS T	TO APPLY AP	PLICATION HISTORY	ORDERS TO APPLY	FINANCIAL DETAIL	LS APPROVAL	DETAILS D	REDIT CARD PROC	ESSING INFO	FINANCE CHARGES							
0 - ×	LINEDOC	MENTE AUTONE	H B													
	anch	Doc. Type	* Reference Nbr.	Line Inventory ID Nor.	Project	Project Task	Account	Customer	Amount Paid	Cash Discount Taken	Write-Of Amoun	f Write-Off Re Code	sson	Date Due	Dase	Ca Dis Da

Figure: Imported payment with the Unknown status

The user should further process the customer refund on the *Validate Card Payments* (AR513000) form by clicking the unlabeled check box for this customer refund on the **Deferred Processing Required** tab and clicking **Validate** on the form toolbar, as shown in the following screenshot.

Validate Card Payments					
ර් ර VALIDATE VALIDATE ALI	. O• H 🛛 V				
Proc. Center ID:	Q				
ALL RECORDS HELD FOR REVIEW	DEFERRED PROCESSING REQUIRED				
🗟 🖗 🗋 🗌 Doc. Type 🛛 Doc. Refe	erence Nbr. Proc. Status	Last Activity Date	Proc. Center Tran. Nbr.	Proc. Center ID	Load Payment Profile
> 0 D 🗹 Payment 003329	Unknown	12/19/2020	60160689086	AUTHNET	

Figure: Validating imported payment

If a user imports a customer refund with the *Void* transaction, the related payment should be validated on the *Validate Card Payments* form. If the transaction number of the *Void* transaction differs from the number of the payment transaction, the customer refund should be validated.

After the validation, the system changes the processing status of the payment on the *Payments and Applications* form to *Voided*, as shown in the following screenshot.

Payments and Applications Payment 003329 - USA Bartending School					D NOTES ACTIVITIES FIL	LES CUSTOMIZATION TOOLS -
← □ □ 0 + □ 0 • к	< > > VOID ACTIONS -	INQUIRIES . REPORTS .				
Type: Payment + Customer:	ABARTENDE - USA Bartending School	Payment Amo 27.00				^
Reference Nbr.: 003329 /P Location:	MAIN - Primary Location	Applied to Doc 0.00				
Status: Closed Payment Méth	VISATOK - Visa Tokenized	Applied to Ord 0.00				
Application Date: 12/10/2020 Proc. Center ID	AUTHNET - Authorize.net API	Available Bala				
Application Pe., 12-2020 Processing St.	Voided	Write-Off Amo. 0.00				
Payment Ref.: 60160689086 Cash Account:	10600 - Credit Card Account	Finance Charg 0.00				
Currency	USD 1.00 - VIEW BASE	Deducted Cha 0.00				
Description:						
DOCUMENTS TO APPLY APPLICATION HISTORY	ORDERS TO APPLY FINANCIAL DETAILS	APPROVAL DETAILS CREDIT C	ARD PROCESSING INFO	CE CHARGES		
O H N						
Than. *Proc. Center Tran. Type Tran. Ba	atuw Tran, Expire On Refer Amount (Est.) Tra N	em Proc. Center Tran. Proc. Center an. N2r. Auth. Nbr. Dr.	Proc. Center Response Processon	Tran. Proc. Status Time	CVV Verification	
1281 AUTHNET Void Approv	ed 27.0000 128	0 60160689086	Approval	1/20/2021 Completed	Required but Not Ventiled	
1280 AUTHNET Unknown Approv	ed 27.0000 127	9 80160689086	Imported External Transaction	12/19/2020 Completed	Required but Not Verified	
1279 AUTHNET Authorize an Approv	ed 27.0000	60160689088	Imported External Transaction	12/10/2020 Completed	Required but Not Verified	

Figure: Voided customer refund

If a customer refund has the processing status of *Voided*, the refund and the related payment will not have related bank transactions and will not be included in the bank statement used for reconciliation.

The Import of a Customer Refund with a Refund Transaction

If a credit card transaction has been settled in an external e-commerce system (the transaction status of this transaction in the processing center is *Settled Successfully*), a user can refund it in an external e-commerce system and import it to Acumatica ERP.

In this case, the processing status of the payment and the customer refund on the *Payments and Applications* (AR302000) form also changes to *Unknown*, and the user should further process the customer refund on the **Deferred Processing Required** tab of the *Validate Card Payments* (AR513000) form. On the *Payments and Applications* form, the system changes the processing status of the customer refund to *Refunded*, as shown in the following screenshot.

Payr	stomer	Applications Refund 00332	6 - U	SA Bartendi	ng Sch	lool								D NOTES	ACTIVITIES	FLES	CUSTOMIZATION	TOOLS .
4	12	1 n +		0. 1	< <	>	ы	VOID	ACTIONS +	INQUIRIES .	REPORTS +							
Typ	er.	Customer	•	Customer:	AB	RTEND	E - USA B	artendin	g School 0	Payment Amo	2.00							^
Re	ference f	Nbr.: 003326	Q	Location:	MA	N - Prim	ary Locati	n		Applied to Doc.	0.00							
Sta	646	Closed		Payment Met	h. VIS	ATOK -	visa Token	ized		Applied to Ord	0.00							
Apt	plication	Date: 12/21/2020		Orig. Transac	đi					Available Bala	0.00							
App	plication	Pe. 12-2020		Proc. Center	ID: AU	THNET -	Authorize	net API		Write-Off Amo	0.00							
Pay	ment Re	of.: 60158672283		Processing S	Ref	unded				Finance Charg	0.00							
				Cash Account	£ 106	00 - Cre	dit Card Ar	trucco		Deducted Cha.	0.00							
				Currency:	USI	0 1	.00	* V	IEW BASE									
				Description:														
DC	CUMEN	ITS TO APPLY	APPLIC	ATION HISTOR	Y FI	NANCIA	L DETAILS	A	PPROVAL DETAIL	S CREDIT C	ARD PROCESSING	INFO FINAN	CE CHARGES					
0	н	x								-		_						
R	Tran. Nbr.	* Proc. Center	Tran. 1	lype	Tran, SI	atus		Ar	Tran. Expire On nount (Est.)	Reference P Tran. N Nbr.	Proc. Center Tran. Ibr.	Proc. Center Auth. Nbr.	Proc. Center Response Reason	* Tran. Time	Proc. Status	CVV	Artification	
>	1273	AUTHNET	Refur	d	Approv	be		2	0000	1272	60158672283		Approval	12/21/2020	Completed	Unkr	iowin	
	1272	AUTHNET	Unkn	own	Approv	red		2	0000	4	60158672283		Imported External Transaction	12/19/2020	Completed	Requ	ired but Not Verified	

Figure: Customer refund with a Refund transaction

Changes to the Validate Card Payments Form

In the table on the **Deferred Processing Required** tab of the *Validate Card Payments* (AR513000) form, the system now displays documents with the *Customer Refund* type that have transactions imported from an external e-commerce system and require validation.

Capture of a Previously Authorized Transaction in the E-Commerce System

If a pre-authorized payment that has been imported to Acumatica ERP is then captured in the external e-commerce system, the processing status of the payment on the *Payments and Applications* (AR302000) form will change from *Pre-Authorized* to *Captured* during the next payment import.

In certain cases, an e-commerce manager may change an online order that has a pre-authorized payment and that has previously been imported from an external e-commerce system to Acumatica ERP. If the order amount has decreased as a result, we do not recommend that you capture the new amount in the e-commerce system. Once the updated order has been synchronized with Acumatica ERP, the payment amount applied to the order will change to the new order amount, and when the order is shipped, the new order amount will be captured in Acumatica ERP.

Finance: New Workflow Support on Finance Forms

In Acumatica ERP 2021 R1, the finance forms that used automation steps have been redesigned to support the new workflow engine.

The processes that are performed on multiple forms related to the finance functionality work as they did in the previous version. The UI on these forms has been enhanced to support the functionality of the new workflow engine.

Because the implementation of the new workflow engine entails changes to data access classes (DACs) and business logic, it may affect custom generic inquiries, customization projects, import and export scenarios, and API integrations. For the complete list of changes, see *Release Notes for Developers*.

UI Enhancements

On multiple forms related to accounts payable, accounts receivable, contract management, general ledger, tax management, and cash management, the buttons representing the actions that are most relevant to the current status of the document opened on the form are displayed directly on the form toolbar, in addition to being included as menu commands on the **Actions** menu.

The **Actions** menu on each of these forms displays only the actions that can be performed for the type of the document selected on the form. The order of commands on the **Actions** menu has been rearranged. Now the commands related to the document workflow (such as **Hold** and **Pay**) are located at the top of the menu, and the commands not related to the workflow (such as **Reverse** or **Reclassify GL Batch**) have been moved to the bottom of the menu.

The **Hold** check box has been removed from the Summary area and replaced by the **Hold** and **Remove Hold** actions, which can be selected on the form toolbar. These UI enhancements have been introduced on the following forms:

- Quick Checks (AP304000)
- Bills and Adjustments (AP301000)
- Checks and Payments (AP302000)
- Batch Payments (AP305000)
- Vendor Price Worksheets (AP202010)
- Vendors (AP303000)
- Vendor Locations (AP303010)
- Invoices and Memos (AR301000)
- Payments and Applications (AR302000)
- Cash Sales (AR304000)
- Sales Price Worksheets (AR202010)
- Customers (AR303000)
- Customer Locations (AR303020)
- Customer Contracts (CT301000)
- Trial Balance (GL303010)
- Journal Vouchers (GL304000)
- Journal Transactions (GL301000)
- Tax Adjustments (TX301000)
- Tax Bills and Adjustments (TX303000)

- Transactions (CA304000)
- Funds Transfers (CA301000)
- Bank Deposits (CA305000)
- Reconciliation Statements (CA302000)
- Fixed Asset Transactions (FA301000)
- Fixed Assets (FA303000)

Example of UI Changes to the Invoices and Memos Form

On the *Invoices and Memos* (AR301000) form, actions have been renamed to support the workflow engine, as shown in the following table.



Similar UI changes, which support this functionality, have been made on the other forms listed in the previous section.

Action	Renamed to in 2021 R1
Put on Credit Hold	Credit Hold
Release from Credit Hold	Remove Credit Hold
Enter Payment/Apply Memo	Pay for the documents with the <i>Invoice</i> , <i>Debit Memo</i> , or <i>Overdue Charge</i> type
	Apply for documents with the <i>Credit Memo</i> type
Email Invoice/Memo	Email
Print Invoice/Memo	Print
Generate/View AP Document	Generate AP Document if no AP document has been generated
	View AP Document if an AP document has been generated

The following changes have also been introduced on the form:

- For all document types except for *Credit Memo*, the **Customer Refund** action has been removed from the **Actions** menu.
- The renamed **Print** action has been removed from the **Reports** menu and added to the **Actions** menu.
- For documents of the *Overdue Charge* type, the **Reverse** and **Reverse and Apply** actions have been removed because they are not applicable for this document type.
- For the Credit WO document type, the Pending Print and Pending Email statuses have been removed.
- The **Approve** and **Reject** actions appear on the **Actions** menu if the *Approval Workflow* feature has been enabled on the *Enable/Disable Features* (CS100000) form and an approval map has been added and activated on the **Approval** tab of the *Accounts Receivable Preferences* (AR101000) form.

The following screenshot shows an AR invoice with the *Open* status on the *Invoices and Memos* form. The **Pay** button is displayed on the form toolbar, and the corresponding menu command is included on the **Actions** menu. Other menu commands that can be selected for the selected invoice are available for selection on the menu.

Invoices and Memos Invoice AR008	9179 9 +	= р• к	< > >	PAY	ACTIONS -	INQUIRIES .	REPOR	RTS •			NOTES	ACTIVITIES	FILES	CUSTOMIZA	TION TOOLS -
Type Reference Nbr. Status Date: Post Period Costomer Ord Description.	Involce • AR009179 Ø Open 12/31/2020 12-2020 NEPPERSONF Electronics Head	Customer Location Currinoy Terms • Due Date • Cash Discount Project/Contract. set Order CIAL DETALLS ADI	NEPPERSONN - MAIN - Primary Lo USD 100 30D - 30 Days 1/30/2021 - X - Non-Project C	NEP Personn ication - VII Pay by Li ode. TAX DET/	Print Email Pey Reverse Reverse and J	Apply to Memo	4, 4, 4,	489.50 0.00 0.00 0.00 0.00 489.50 0.00 APPROVA	LDETAILS	DISCOUNT D	ETAILS	APPLICATIONS			^
O - 0	VIEW	DEFERRALS [+-]	IN I		Write Off			Ext. Price	Discount	Discount	Manual	Discount	Amount	*Account	Description
	ETAIL ELEBO	SE1 Bose Quiet C	omfort Noise Cance	Headset				2.990.00	0.000000	Amount 0.00	Discount	Code	2,990.00	40000	Sales Revenue
C D PRODR	ETAIL ELEBO	SE2 Bose Bluetoo	th Headset Series 2		Reclassify GL Send Email	.Batch		1,499.50	0.000000	0.00			1,499.50	40000	Sales Revenue

Figure: Invoice with the Open status on the Invoices and Memos form

Other UI Changes

The following UI changes have been introduced to unify the action names throughout the system:

- On the Customer Details (AR402000) form, the Enter New Invoice action has been renamed to Create Invoice, Enter New Payment has been renamed to Create Payment, and Enter Payment/Apply Memo has been renamed to Pay/Apply Document. The Pay/Apply Document action can be selected for documents with the Invoice, Debit Memo, Overdue Charge, Payment, Prepayment, Credit Memo, and Customer Refund types.
- On the Customers (AR303000) form, the Status box in the Summary area has been renamed to Customer Status. The following commands have been added to the Actions menu: Hold, Credit Hold, Deactivate, Activate, Set as One-Time Customer, and Set as Regular Customer. For more information on the new workflow for customers and customer accounts, see CRM: New Workflows for Business Accounts, Customers, Vendors, and Locations.
- On the Vendor Details (AP402000) form, the Enter New Bill action has been renamed to Create Bill, Enter New Payment has been renamed to Create Payment, and Pay Bill/Apply Adjustment has been renamed to Pay/Apply Document. The Pay/Apply Document action can be selected for documents with the Bill, Debit Adjustment, Credit Adjustment, and Prepayment types.
- On the Vendors (AP303000) form, the Status box in the Summary area has been renamed to Vendor Status. The following commands have been added to the Actions menu: Hold, Hold Payments, Deactivate, Activate, Set as One-Time Vendor, and Set as Regular Vendor. For more information on the new workflow for vendors and vendor accounts, see CRM: New Workflows for Business Accounts, Customers, Vendors, and Locations.
- On the Journal Transactions (GL301000) form, the Reverse Batch action has been renamed to Reverse.
- On the *Manage Credit Holds* (AR523000) form, in the **Action** box, the *Apply Credit Hold* option has been renamed to *Credit Hold*, and the *Release Credit Hold* option has been renamed to *Remove Credit Hold*.

Automation Changes

If the organization uses automation steps, import scenarios, or export scenarios for the forms listed above, users who work on customizations will need to redesign the automation of the processes related to the applicable forms by using the new workflow engine. For more information, see the *Creating Workflows* chapter in the Acumatica ERP Customization Guide.

Finance: Paid Amounts and Line-Level Balances in AR Reports

In Acumatica ERP 2021 R1, the *AR Open Documents by Project* (AR634100) and *AR Open Documents by Customer* (AR634000) reports have been redesigned and now display information as of the current business date; additionally, these reports show amounts paid or applied. By running these reports, a user can see which customers have open documents for a particular project, how much they owe, and how much has been already paid. Both reports are available in the **Project Management** and **Construction** workspaces in addition to the **Receivables** workspace.

Changes to the AR Open Documents by Project Report

The AR Open Documents by Project (AR634100) report is now available if the Projects group of features is enabled on the Enable/Disable Features (CS100000) form.

The following UI changes have been introduced on **Report Parameters** tab of the report form:

- The **Financial Period** box has been removed. The report now displays the data as of the current business date.
- The **Include Retainage Documents** check box has been removed. The report does not list retainage documents because their amounts are already included in the amounts of the related original documents.
- The **Report Format** box has been added. A user can select one of the following options:
 - Detailed (default): The report shows individual documents.
 - Summary: The report shows a list of customers with their aggregated amounts grouped by project.

The following screenshot illustrates the UI changes on the **Report Parameters** tab.

AR Open Docum	ents by Project	TOOLS -
ମ 🖉 RUN RE	PORT SAVE TEMPLATE REMOVE TEMPLATE SCHEDULE TEMPLATE EDIT REPORT	
Template	□ X ▼	
REPORT PARAMETER	RS ADDITIONAL SORT AND FILTERS PRINT AND EMAIL SETTINGS REPORT VERSIONS	
* Format	Detailed -	
Company/Branch:	Summary	
Customer:	Detailed	
Project:	٩	

Figure: UI changes on the AR Open Documents by Project report

In the *AR Open Documents by Project* report, the **Paid/Adjusted** column has been added, which shows the total amount of applications. For original documents, the column includes payment applications to the original documents and to related retainage documents. In the report, the documents are grouped first by project and then by customer.

The following screenshot illustrates the AR Open Documents by Project report printed in the Detailed format.

AR Open	Document	s (by Project)								Page:	11 of 13
Company/Bra	anch: PRO	DWHOLE								Date: 2/18/	2021 10:21 PM
User:	admin adr	nin									
Project		Description									
EQUGRP		The Equity Group	Investors								
Ref. Nbr.	Doc. Type	Customer Ref. /Payment Ref.	Doc Date	Due Date	Description	Total Amount	Original Retainage	Paid/Adjusted	Total Balance	Unreleased Retainage	Net Balance
AR008751	INVOICE	PF00026	9/1/2020	10/1/2020	Invoice for The Beach Hotel and Condos	3,050,619.55	152,530.98	2,898,088.57	152,530.98	0.00	152,530.98
AR008752	INVOICE	PF00027	10/1/2020	10/31/2020	Invoice for The Beach Hotel and Condos	3,278,751.60	163,937.59	3,114,814.01	163,937.59	0.00	163,937.59
AR008753	INVOICE	PF00028	11/1/2020	12/1/2020	Invoice for The Beach Hotel and Condos	3,540,182.30	177,009.12	0.00	3,540,182.30	177,009.12	3,363,173.18
AR008754	INVOICE	PF00029	12/1/2020	12/31/2020	Invoice for The Beach Hotel and Condos	3,499,455.90	174,972.80	0.00	3,499,455.90	174,972.80	3,324,483.10
AR008755	INVOICE	PF00030	1/1/2021	1/31/2021	Invoice for The Beach Hotel and Condos	4,268,577.25	213,428.86	0.00	4,268,577.25	213,428.86	4,055,148.39
AR008756	INVOICE	PF00031	2/1/2021	3/3/2021	Invoice for The Beach Hotel and Condos	4,741,525.35	237,076.28	0.00	4,741,525.35	237,076.28	4,504,449.07
							Cu	stomer Totals:	16,366,209.37	802,487.06	15,563,722.31
								Project Totals:	16,366,209.37	802,487.06	15,563,722.31
CSTRREST		Italian Restaurant	T&M Billing	Example							
Customer		Customer Account	Name								
ITALIANCO		The Italian Compar									
Ref. Nbr.	Doc. Type	Customer Ref. /Payment Ref.	Doc Date	Due Date	Description	Total Amount	Original Retainage	Paid/Adjusted	Total Balance	Unreleased Retainage	Net Balance
AR008757	INVOICE	PF00033	9/15/2020	10/15/2020	Invoice for Italian Restaurant - T&M	193,161.82	9,658.15	9,658.15	183,503.67	0.00	183,503.67
AR008758	INVOICE	PF00035	10/15/2020	11/14/2020	Invoice for Italian Restaurant - T&M	72,110.75	3,605.55	3,605.55	68,505.20	0.00	68,505.20
AR008759	INVOICE	PF00036	11/15/2020	12/15/2020	Invoice for Italian Restaurant - T&M	288,158.38	14,407.95	268,588.37	19,570.01	14,407.95	5,162.06
AR008760	INVOICE	PF00037	12/15/2020	1/14/2021	Invoice for Italian Restaurant - T&M	362,427.10	18,121.36	7,828.85	354,598.25	18,121.36	336,476.89
AR008761	INVOICE	PF00038	1/15/2021	2/14/2021	Invoice for Italian Restaurant - T&M	170,338.00	8,516.90	0.00	170,338.00	8,516.90	161,821.10
							Cu	stomer Totals:	796,515.13	41,046.21	755,468.92
								Project Totals:	796,515.13	41,046.21	755,468.92
CSTRSUB		Eastgate Strip Mall	- Subcontra	ctor Job Exa	ample						
Customer		Customer Account	Name								
BNRCONTR	AC	BNR Contractors									
Ref. Nbr.	Doc. Type	Customer Ref. /Payment Ref.	Doc Date	Due Date	Description	Total Amount	Original Retainage	Paid/Adjusted	Total Balance	Unreleased Retainage	Net Balance
AR008744	INVOICE	PF00014	10/15/2020	11/14/2020	Invoice for Eastgate Strip Mall -	80,687.40	4,034.37	4,034.37	76,653.03	0.00	76,653.03
AR008745	INVOICE	PF00019	11/15/2020	12/15/2020	Invoice for Eastgate Strip Mall -	81,379.58	4,068.99	77,310.59	4,068.99	4,068.99	0.00
AR008746	INVOICE	PF00020	12/15/2020	1/14/2021	Invoice for Eastgate Strip Mall -	76,001.47	3,800.08	0.00	76,001.47	3,800.08	72,201.39
							Cu	stomer Totals:	156,723.49	7,869.07	148,854.42
								Project Totals:	156,723.49	7,869.07	148,854.42

Figure: Printed AR Open Documents by Project report

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Changes to the AR Open Documents by Customer Report

The AR Open Documents by Customer (AR634000) report is available if the Projects group of features is enabled on the Enable/Disable Features (CS100000) form.

The following UI changes have been introduced on **Report Parameters** tab of the report form:

- The Financial Period box has been removed. The report now displays the data as of the current business date.
- The Include Retainage Documents check box has been removed. The report does not list retainage documents because their amounts are already included in the amounts of the related original documents.
- The **Report Format** box has been added. A user can select one of the following options:
 - Detailed (default): The report shows individual documents.
 - Summary: The report shows a list of projects with their aggregated amounts grouped by customer.

The following screenshot illustrates the UI changes on the **Report Parameters** tab.

AR Open Documents by Customer											
nun Rep	ORT SAVE TEMPLATE REMOVE TEMPLATE SCHEDULE TEMPLATE EDIT REPORT										
Template	× *										
C	Default Default Shared										
REPORT PARAMETERS	ADDITIONAL SORT AND FILTERS PRINT AND EMAIL SETTINGS REPORT VERSIONS										
* Format	Detailed										
Company/Branch:	Summary										
Customer:	Detailed										
Project:	٩										

Figure: UI changes on the AR Open Documents by Customer report

In the *AR Open Documents by Customer* report, the **Paid/Adjusted** column has been added, which shows the total amount of applications. For original documents, the column includes payment applications to the original documents and to the related retainage documents. In the report, the documents are grouped first by customer and then by project.

The following screenshot illustrates the AR Open Documents by Customer report printed in the Detailed format.

AR Open Company/Br User:	Document anch: PRO admin adm	s (by Customer) DWHOLE nin)							Page: Date: 2/18/2	3 of 16 2021 10:41 PM
Customer		Customer Account	t Name								
AR009165	INVOICE	BEAUTYSCH2020	12/17/2020	1/16/2021	Office supplies	4,570.00	0.00	0.00	4,570.00	0.00	4,570.00
								Project Totals:	4,570.00	0.00	4,570.00
							Cu	stomer Totals:	4,570.00	0.00	4,570.00
BIBIMBAB		Bibimbab Korean	Restaurant								
Project		Description									
x		Non-Project Code.									
Ref. Nbr.	Doc. Type	Customer Ref. /Payment Ref.	Doc Date	Due Date	Description	Total Amount	Original Retainage	Paid/Adjusted	Total Balance	Unreleased Retainage	Net Balance
AR009047	INVOICE	BIBIMBAB20200-	11/19/2020	12/19/2020	Consumer Good Order	61,040.00	0.00	0.00	61,040.00	0.00	61,040.00
AR009053	INVOICE	BIBIMBAB20200-	11/24/2020	12/24/2020	Consumer Good Order	21,974.40	0.00	0.00	21,974.40	0.00	21,974.40
AR009157	INVOICE	BIBIMBAB20200-	12/21/2020	1/20/2021	Consumer Good Order	48,832.00	0.00	0.00	48,832.00	0.00	48,832.00
AR009171	INVOICE	BIBIMBAB20200-	12/24/2020	1/23/2021	Consumer Good Order	31,740.80	0.00	0.00	31,740.80	0.00	31,740.80
								Project Totals:	163,587.20	0.00	163,587.20
							Cu	stomer Totals:	163,587.20	0.00	163,587.20
BNRCONTE	AC	BNR Contractors									
Project		Description									
CSTRSUB		Eastgate Strip Mal	I - Subcontra	ctor Job Exa	ample						
Ref. Nbr.	Doc. Type	Customer Ref. /Payment Ref.	Doc Date	Due Date	Description	Total Amount	Original Retainage	Paid/Adjusted	Total Balance	Unreleased Retainage	Net Balance
AR008744	INVOICE	PF00014	10/15/2020	11/14/2020	Invoice for Eastgate Strip Mall -	80,687.40	4,034.37	4,034.37	76,653.03	0.00	76,653.03
AR008745	INVOICE	PF00019	11/15/2020	12/15/2020	Invoice for Eastgate Strip Mall -	81,379.58	4,068.99	77,310.59	4,068.99	4,068.99	0.00
AR008746	INVOICE	PF00020	12/15/2020	1/14/2021	Invoice for Eastgate Strip Mall -	76,001.47	3,800.08	0.00	76,001.47	3,800.08	72,201.39
								Project Totals:	156,723.49	7,869.07	148,854.42
							Cu	stomer Totals:	156,723.49	7,869.07	148,854.42
BRASSKEY		Brass Key Bar									
Project		Description									
х		Non-Project Code.									
Ref. Nbr.	Doc. Type	Customer Ref. /Payment Ref.	Doc Date	Due Date	Description	Total Amount	Original Retainage	Paid/Adjusted	Total Balance	Unreleased Retainage	Net Balance
AR009085	INVOICE	BRASSKEY20200	11/23/2020	12/23/2020	Tablet reader order - no shipping	17,043.00	0.00	0.00	17,043.00	0.00	17,043.00
								Project Totals:	17,043.00	0.00	17,043.00
							Cu	stomer Totals:	17,043.00	0.00	17,043.00

Figure: Printed AR Open Documents by Customer report

Other UI Changes

In the **Construction** workspace, the *AR Docs by Project With Paid Amt (AR734100)* report has been removed. Users should instead run the *AR Open Documents by Project* (AR634100) report to view the AR documents that are open as of the current business date and grouped by project, or a list of customers with their aggregated amounts, depending on the report format.

Upgrade Notes

After an upgrade to Acumatica ERP 2021 R1, the default or customized *AR Docs by Project With Paid Amt (AR734100)* report will be removed from the site map, but will remain available in the UserReport database table. To get access to the *AR Docs by Project With Paid Amt* report after the upgrade, the system administrator should add it to the site map.

Finance: Prepare Payments by Project

In previous versions of Acumatica ERP, users could not prepare payments by project, and the system had no way of collecting and paying bills of a particular project. Starting in 2021 R1, the *Prepare Payments* (AP503000) form supports filtering by project.

Changes to the Prepare Payments Form

In the Selection area of the *Prepare Payments* (AP503000) form, the **Project** box has been added, as shown in the following screenshot.

Pre	epare Payr	ments																CUSTOMIZATIO	N TOOL	S Ŧ
2	PROCES	S PROCESS	ALL O.																	
	ranch	PRODWHOLE	Products Wholesale	p	Vendor Class			p			GL Bala	inca 6	51,396,134,18							^
• P	ayment Meth.	CHECK		,0	Vendor.			P			Availab	ie Bala 6	51,403,579.13							
+ 0	ash Account	10200 - Compe	any Checking Account	Ø	Project: CSTR	HBCUS - FI	iagler Cu	sto .P			Selectio	in Total	0.00							
P	ayment Date:	1/11/2021 -			Pay Date Within		7	Days			Number	of Ro	0							
• 8	ost Period.	01-2021		0	Due Date Within		7	Days												
0	urrency:	USO 1.00	VIEW BAS	ε	Cash Discount Expire	Witnie	7	Days												
					Always Take Cash Dis	count														
- 00	DOUMENTS TO	DPAY EXCE	PTIONS																	
Ó	+ <	HX															All Reco	ords		7
部に	Document Type	*Neference Nbr.	Vendor ID	Line Nor.	Vendor Name	Project	Pro	ojeći sk	Cost Code	Account	Inventory ID	Location	Pay Separately	Retainagé Bis	Original Document	Pay Date	Due Date	Cásh Discount Date	Date	
10	Bill	002392	SPECTRUM	0	Spectrum Painting							MAIN				1/9/2021	1/9/2021	1/9/2021	12/10/2	20
2	Bill	002393	TOLIVERCAR	0	Tolivers Carpets & Tiles							MAIN				2/28/2021	2/28/2021	2/28/2021	1/29/203	21
T	Bill	002394	AMERDOOR	0	American Door & Glass							MAIN				2/13/2021	2/13/2021	2/13/2021	1/14/203	1
	Bill	002395	FIRENATCO	0	Fire National Company							MAIN				3/7/2021	3/7/2021	3/7/2021	2/5/202	
	Bill	002398	EASTWESTLA	0	East West Landscaping							MAIN				2/19/2021	2/19/2021	2/19/2021	1/20/203	1
	Bill	002406	HUGHESSUP	0	Hughes Supply							MAIN				4/25/2021	4/25/2021	4/25/2021	3/26/202	1

Figure: The Project box on the Prepare Payments form

The **Project** box is displayed on the form if the *Projects* feature has been enabled on the *Enable/Disable Features* (CS100000) form. Project-related columns (**Project**, **Project Task**, **Account**, **Inventory ID**, and **Cost Code**) appear in the table on the **Documents to Pay** tab if both the *Projects* and *Payment Application by Line* features have been enabled on the *Enable/Disable Features* form.

By selecting a project in the **Project** box, a user can pay bills related to this particular project.

Changes for Documents Paid by Line

For bills with the **Pay by Line** check box selected, each line of a bill that contains the project that matches the project selected in the Selection area of the *Prepare Payments* (AP503000) form is displayed on the **Documents to Pay** tab with the value in the **Amount Paid** column related to the selected project. Bills with the **Pay by Line** check box cleared and multiple projects in their lines are displayed on the **Documents to Pay** tab if at least one line of the bill contains a project that matches the project selected in the Selection area of the *Prepare Payments* form.

A bill with the **Pay by Line** check box cleared is always shown as one aggregate line on the *Prepare Payments* form. If such a bill has multiple projects specified in its lines, when a user filters bills by project, near the line with this bill, the system displays a warning message indicating that the value in the **Amount Paid** column refers to the whole bill and all projects of its lines.

Changes for Documents with Retainage

In Acumatica ERP 2021 R1, on the *Prepare Payments* (AP503000) form, the lines of retainage documents for which the **Pay by Line** check box is cleared are shown if the project specified in the **Project** box in the Summary area of this form is the same as the project specified for a line of the retainage bill.

If an original bill has the same project specified for each of its lines, this project is specified in the retainage bill. If the original bill has various projects specified for its lines, the retainage bill has *X* (the non-project code) in the **Project** column of its lines.

Additional Information

For more details on vendor payments by project, see Vendor Payments for a Project: General Information.

For details on how to process payments for bills, see *Vendor Payments for a Project: To Process a Payment for Multiple Bills* and *Vendor Payments for a Project: To Process a Payment of Bill Lines*.

Finance: Restricted Visibility of Vendor Records

When multiple companies with their own accounting departments are configured within the same tenant, users may want to restrict the visibility of vendor accounts to employees of the particular company or branch. To support this requirement, starting in 2021 R1, the visibility of each vendor account in Acumatica ERP can be associated with one of the following:

- A branch: If the visibility of the vendor is restricted to a branch, the vendor can be accessed by
 users assigned to the role specified for the branch in the Access Role box of the Branch Details tab
 (Configuration Settings section) of the Branches (CS102000) form. The vendor can be selected in
 documents originating from this branch.
- A company: If the visibility of the vendor is restricted to a company, the vendor can be accessed by a user that has access to at least one of the company's branches (or to the company if it has no branches). That is, the vendor can be accessed by a user with access to the role specified in the Access Role box (Configuration Settings section) on the Branch Details tab of the Branches form for the branch, or the Company Details tab of the Companies (CS101500) form for the company. The vendor can be selected in documents originating from any branch of the company.
- No entity: If the visibility of the vendor is not restricted to a branch or company, it can be accessed by any user. The vendor can be selected in documents originating from any branch.

These capabilities are now available if the *Customer and Vendor Visibility Restriction* feature has been enabled on the *Enable/Disable Features* (CS100000) form. With this feature enabled, the UI changes described further in this topic appear on the appropriate forms.

If any restriction groups have been configured in the system, they will be applied in addition to the vendor visibility restriction functionality.

Changes to the Enable/Disable Features Form

On the *Enable/Disable Features* (CS100000) form, the *Customer Visibility Restriction* feature has been renamed to the *Customer and Vendor Visibility Restriction*.

Changes to the Vendor Classes Form

On the Vendor Classes (AP201000) form, the **Restrict Visibility To** box on the **General Settings** tab (**Default General Settings** section) has been added, as shown in the following screenshot. If any active branch or company is selected in this box for the class, this branch or company will be used as the default setting for vendors of the class.

Vendor Classes PRODUCT			
* Class ID:	PRODUCT \wp		
Description:	Products Vendors		
GENERAL SETTINGS	GLACCOUNTS ATTRIBUTES	MAILING SETTINGS	
DEFAULT GENERAL SETT	TINGS	DEFAULT FINANCIAL SET	TTINGS
Country:	US - United States of America 🔎 🧷	Terms:	30D - 30 Days 🔎 🧷
Restrict Visibility To:	CAPITAL - Revision Two *	Payment Method:	CHECK - Check 🔎 🧷
Tax Zone ID:	0 0	Cash Account:	10200 - Company Checking # 🔎 🧷
	Require Tax Zone	Payment By:	Discount Date -
	Default Location ID from Branch	Currency ID:	USD 🔎 🗹 Enable Currency Override
Default Restriction Group	٩ .	Curr. Rate Type:	
DEFAULT PURCHASE SET	TTINGS		□ Pay by Line
Shipping Terms:	Q		□ Apply Retainage
Receipt Action:	Accept but Warn 👻	DEFAULT PRINT AND EM	AIL SETTINGS
			Print Orders
			Send Orders by Email

Figure: The Restrict Visibility To box on the Vendor Classes form

If a user changes this setting for a vendor class, the modified setting applies to new vendors created based on this class and to existing vendors that are reassigned to the class after it has been modified.

Changes to the Vendors Form

On the *Vendors* (AP303000) form, the **Restrict Visibility To** box has been added to the **Financial Settings** section on the **Financial** tab, as shown in the screenshot below. In this box, a user can select a company or a branch that will work with the vendor exclusively.

If a branch is selected in this box, the system copies this value to the **Default Branch** box on the **Purchase Settings** tab (**Other Settings** section) of this form. If a company is selected in this box, in the **Default Branch** box, the system restricts the list of values for selection to the branches of the selected company.

AASERVICES - AA Services ← ♡ ♡ + © ○ · I< < > >I ACTIONS · INQUIRIES · REPORTS ·	
* Vendor ID: AASERVICES $\mspace{0.00}{\mspa$	^
Vendor Status: Active Prepayment Balance: 0.00	
* Vendor Class: SERVICES - Services Vendors D 2 Retained Balance: 0.00	
GENERAL FINANCIAL PAYMENT PURCHASE SETTINGS ATTRIBUTES LOCATIONS CONTACTS ACTIVITIES GLACCOUNTS MAILING SETT	INGS
FINANCIAL SETTINGS RETAINAGE SETTINGS	
Terms: 30D - 30 Days ρ / Apply Retainage	
Restrict Visibility To: SERVICES - Revision Two Services - Retainage Percent: 0.000000	
Currency ID: USD \wp Zenable Currency Override	
Curr: Rate Type: P Denable Rate Override	

Figure: The Restrict Visibility To box on the Vendors form

If a user changes the vendor class of an existing vendor in the **Vendor Class** box, the system displays a dialog box asking the user to confirm this change. If the change is confirmed, the system inserts the **Restrict Visibility To** value that is specified for the newly selected vendor class.

On this form, a user can select in the **Vendor ID** box only vendors that are visible in the branches the user has access to, based on the **Restrict Visibility To** setting of each vendor, the access role assigned to the branch, and

the roles assigned to the user. The list of classes available in the **Vendor Class** box on this form is also restricted based on the roles assigned to the current user: Only vendor classes with a the visibility restriction that is a branch or company accessible by the user can be selected on the form.

Other UI Changes

The following list summarizes other UI changes that have been made to support the restricted visibility of vendor records:

- On the *Vendor Locations* (AP303010) form, the list of values in the **Default Branch** box on the **General** tab (**Other Settings** section) is limited based on the vendor visibility restriction.
- On multiple data entity forms that have the originating branch, the list of vendors is limited to those that are visible in the originating branch.
- On multiple processing forms that have the **Company** or **Branch** setting, only vendors visible in the selected branch or company can be selected in the **Vendor** box and can be processed. On other forms that have the **Vendor** setting but do not have the **Company** or **Branch** setting, the list of vendors is limited based on the current user's access role.
- On the Vendor Summary (AP655000) or Vendor Profiles (AP655500) report forms, when a user runs the report to display vendor-related information, the report will show only the vendors visible to the current user based on the roles assigned to the user.
- The Vendors (AP3030PL) and Vendor Locations (AP3030P1) lists have been modified to restrict the visibility of vendors and vendor locations according to the configured visibility of the user.

Additional Information

For more information on configuring vendor visibility restrictions, see Vendor Visibility: General Information.

Finance: Settlement of Credit Card Payments

In previous versions of Acumatica ERP, users had to manually record deposits of credit card payments to the bank account. In Acumatica ERP 2021 R1, the system automatically creates bank deposits based on payments settled with a bank.

To support this functionality, the *settlement batch* entity has been introduced in the system. A settlement batch is a group of transactions that have been submitted together for settlement with a bank. The total amount of the settlement batch will be deposited into a bank account. A settlement batch of transactions has the following mandatory settings on the *Settlement Batches* (CA307000) form:

- Reference Nbr.: A batch reference number generated automatically by the system
- **Status**: The status in Acumatica ERP: *Pending Import, Error, Processing, Pending Review, Processed*, or *Deposited*
- Proc. Center ID: A link to the processing center
- Ext. Batch ID: The batch ID returned by the GetSettledBatchList function from Authorize.Net
- Settlement Time: The date and time when the batch was settled, expressed in UTC
- Settlement State: The state of the batch in Authorize.Net—Settled Successfully or Settlement Error
- Transaction Count: The total number of transactions
- All Transactions tab: A linked list of transactions

Changes to the Processing Centers Form

On the **Preferences** tab of the *Processing Centers* (CA205000) form, the **Settlement** section has been added, as shown in the following screenshot.

Processing Centers AUTHNETAPI					
← □ □ □ ∽	+ 🗊 🗘 •	I< <	> >	TEST CREDENTIALS	S UPDATE EXPIRATION DATES
 * Proc. Center ID: * Name: * Cash Account: Currency: * Payment Plug-In (Type): PLUG-IN PARAMETERS 	AUTHNETAPI Authorize.Net Tokenized 10600 - Credit Card Acc USD Active Authorize.Net API plug-i PAYMENT METHODS	n P PREFER	Allow Sa Synchror Accept P	ving Payment Profiles nize Deletion ayments from New Cards FEES	
CONNECTION Transaction Timeout (s): Number of Additional Sync Delay Between Synchroni PROFILE CREATION Create Additional Custo REAUTHORIZATION Number of Reauthorizatio Reauthorization Retry Del	chronization Attempts: ization Attempts (ms): omer Profiles n Retries: lay (Hours):	50	SET 0 * Im 0 La * De 3 3	TLEMENT port Start Date: 1 st Settlement Date: posit Account: 1	Import Settlement Batches 1/20/2020 0600 - Credit Card Account Automatically Create Bank Deposits

Figure: The Settlement section on the Processing Centers form

To enable the importing of settlement batches from the selected processing center, a user should select the **Import Settlement Batches** check box. With this check box selected, payments from this processing center will be marked as cleared after the import of a settlement batch.

The **Import Start Date** box becomes available and required if the **Import Settlement Batches** check box is selected. The user should select the date on which the import of settlement batches starts. The **Last Settlement Date** box is read-only and displays the date on which the most recent settlement batch was successfully settled.

To cause the system to automatically create bank deposits after importing the settlement batch, the user should select the **Automatically Create Bank Deposits** check box and specify a cash account in the **Deposit Account** check box.

Also, the **Fees** tab, shown in the following screenshot, has been added to the form.

Processing Centers AUTHNETAPI - Authorize.Net Toker	nized (API)	NOTES ACTIVITIES FILES CUSTOMIZATION TOOLS	- (
	• K K	> > TEST CREDENTIALS UPDATE EXPIRATION DATES	
* Proc. Center ID: AUTHNETAPI	Q	✓ Allow Saving Payment Profiles	^
* Name: Authorize.Net Toke	nized (API)	Synchronize Deletion	
* Cash Account: 10600 - Credit Car	d Account 🔎 🧷	Accept Payments from New Cards	
Currency: USD		Allow Unlinked Refunds	
Active			
* Payment Plug-In (Type): Authorize.Net API	plug-in 🔎		
PLUG-IN PARAMETERS PAYMENT METH	HODS PREFERE	ENCES FEES	
\circlearrowright + × \mapsto \boxtimes			
🖹 * Fee Type	*Entry Type		
Charge	SETTLEMENT		
> Refund	REFUND		

Figure: The Fees tab on the Processing Centers form

On this tab, the user can specify the fee types and corresponding entry types from settlement reports that have been imported from an external e-commerce system on the *Import Settlement Batches* (CA507000) form. For each fee type, an entry type should be defined on the *Entry Types* (CA203000) form. These fees are then displayed by the system on the *Settlement Batches* (CA307000) form and added to bank deposits as charges.

The Import Settlement Batches Form

In Acumatica ERP 2021 R1, the *Import Settlement Batches* (CA507000) form, shown in the following screenshot, has been introduced.

Import Settlement Batches

(5	M IMPOF	T BATCHES (9 - 101 12	s V							
	• Proc	Center ID:	AUTHNETAR	9	,o Last	Settlement Date: 1/25/2	021	Import Batch	nes Through: 2/	1/2021 -		
	ALL	RECORDS	UNPROCESSED	BATCHES								
8	0 0	Reference Number	Status	Ext. Batch ID	Settlement State	Settlement Time	Settled Amount	Refund Amount	Transaction Count	Imported Transaction Count	Unprocessed Bank Transaction Deposit Count	Missing Transaction Coun
>	0 0) <u>50</u>	Pending Review	10841873	Settled Successfully	8/24/2020 7:21:02 PM	0.00	0.00	4	4	4	2
	0 0) <u>49</u>	Pending Review	10838845	Settled Successfully	8/23/2020 7:18:35 PM	0.00	0.00	1	1	1	1
	0 0) <u>48</u>	Deposited	10826187	Settled Successfully	8/19/2020 7:25:18 PM	0.00	931.00	2	2	2	0
	0 0) <u>47</u>	Processed	10816096	Settled Successfully	8/18/2020 7:24:21 PM	2,321.00	0.00	5	5	5	0
	0 0) <u>46</u>	Processed	10796950	Settled Successfully	8/12/2020 7:33:22 PM	620.00	0.00	2	2	2 000235	0
	0 0) <u>45</u>	Deposited	10793440	Settled Successfully	8/11/2020 7:29:24 PM	250.00	1,450.00	5	5	5 <u>000236</u>	0
	0 0) <u>44</u>	Processed	10789870	Settled Successfully	8/10/2020 7:27:41 PM	1,300.00	0.00	4	4	4	C
	0 0) <u>43</u>	Processed	10784498	Settled Successfully	8/8/2020 7:24:10 PM	0.00	0.00	3	3	3	C
	0 0) <u>42</u>	Pending Review	10781736	Settled Successfully	8/7/2020 7:21:54 PM	1,350.00	0.00	4	4	4	1
	0 0) <u>41</u>	Processed	10778078	Settled Successfully	8/6/2020 7:25:39 PM	1,255.00	200.00	5	5	5	C
	0 0) <u>40</u>	Processed	10767453	Settled Successfully	8/3/2020 7:52:07 PM	375.00	170.00	4	4	4	C
	0 0) <u>39</u>	Processed	10764569	Settled Successfully	8/2/2020 7:46:18 PM	0.00	0.00	1	1	1	C
	0 0) <u>38</u>	Processed	10759272	Settled Successfully	7/31/2020 7:22:57 PM	1,090.00	1,010.00	5	5	5	C
	0 0) <u>37</u>	Pending Review	10684637	Settled Successfully	7/8/2020 7:25:54 PM	2,149.00	120.00	10	10	10	1
	0 0) <u>36</u>	Processed	10672278	Settled Successfully	7/4/2020 7:27:34 PM	600.00	0.00	1	1	1	0
	0 0) <u>35</u>	Processed	10669952	Settled Successfully	7/3/2020 7:35:21 PM	920.00	0.00	4	4	4	C
	0 0) <u>34</u>	Processed	10666533	Settled Successfully	7/2/2020 7:34:24 PM	120.00	0.00	1	1	1	0
	0 0) <u>33</u>	Pending Review	10650008	Settled Successfully	6/27/2020 8:51:15 PM	0.00	0.00	1	1	1	1
	0 0) <u>32</u>	Pending Review	10621196	Settled Successfully	6/18/2020 8:30:56 PM	0.00	0.00	2	2	2	2
	0) <u>31</u>	Pending Review	10425454	Settled Successfully	4/17/2020 7:03:31 PM	450.00	0.00	3	3	3	3

Figure: The new Import Settlement Batches form

On this form, users can start the import process by clicking the **Import Batches** button on the form toolbar. The import of settlement batches can be started if there is no previous import in progress for the selected processing center.

A settlement batch can have one of the following statuses.

Status	Description
Pending Import	A batch has been created, and the import of transactions has not yet started or has ended without all the transactions being imported.
Error	An error has occurred during import.
Processing	Transactions are being imported from the processing center or are being matched to transactions in Acumatica ERP.
Pending Processing	The processing of some transactions has resulted in an error, and the processing of the batch should be repeated.
Pending Review	Automatic processing has finished, but some transactions are miss- ing.
Processed	All transactions in the settlement batch have been matched to trans- actions in Acumatica ERP or have been hidden.
Deposited	A bank deposit based on the settlement batch has been released, or there are no payments to deposit.

Import of transactions starts automatically for all batches that have the Pending Import status.

Matching of Transactions

When all the transactions have been imported, on the *Import Settlement Batches* (CA507000) form, the system starts the matching of transactions for all batches with the *Processing* or *Pending Processing* status. The following actions are performed for each transaction in the batch:

- The system searches for a document with the corresponding credit card transaction.
- If the document is not found, the batch transaction status is set to Missing.
- If the document is found, it is linked to the batch transaction, and the transaction status is set to *Processed*.
- If the transaction status in the document is different from the status in the settlement batch, the credit card transaction is validated.
- If the transaction in the batch has the *Settled Successfully* or *Refund Settled Successfully* status, the **Cleared** check box is selected for the document.

If all transactions have the Processed or Hidden status, the status of the settlement batch is set to Processed.

The Settlement Batches Form

The Settlement Batches (CA307000) form, shown in the following screenshot, has been added. The form is opened when the user clicks a link in the **Reference Number** column on either of the tabs (**All Records** or **Unprocessed Batches**) on the *Import Settlement Batches* (CA507000) form. The *Settlement Batches* form displays all the transactions of the selected settlement batch.

Settlement Batches 46 - AUTHNETAPI: 8/12/20 ← IC >>I	020 7:33:22 PM								1	NOTES	ACTIVITIES	FILES	CUSTOMIZ	ATION	TOOLS .
	1.4		-			-									^
Reference Number	46	ų	Settled A	mount:	620.00	Transactio	in Count		2						
Status	Processed		Settled C	ount	2	Imported	Count		2						
Proc. Center ID.	AUTHNETAPI		Refund A	mount	0.00	Processed	d Count		2						
Ext. Batch ID:	10796950		Refund 0	count:	0	Missing C	ount.		0						
Settlement Time:	8/12/2020 7:33:22 PM		Void Cou	int	0	Hidden Co	ount		0						
Settlement State:	Settled Successfully		Decline (Count:	0	Excluded	from Deposit Coun	t	0						
Bank Deposit	000235														
ALL TRANSACTIONS MISSIN	IG TRANSACTIONS	EXCLUDED F	ROM DEPO	SIT CA	RD TYPE SUM	MARY									
O DAME H X															
B B D D Proc. Center Tran. Nbr.	Settlement Status	Processing Status	Amount	Doc. Type	Reference Nbr.	Doc. Status	Card/Account Nor.	Invoice Nbr	Submit Time	Card Ty	pe Fo	ed Perci	entage 1 Fee	otal Fee	Fee Type
> 0 D D 60148491864	Settled Successfully	Processed	470.00	Payment	002943	Open	XXXX6438	PMT002943	8/12/2020	Visa	0.8	50	1.50	2.00	CHARGE
B □ □ 60148491876	Settled Successfully	Processed	150.00	Cash Sale	AR008290	Closed	XXXX6438	CSLAR008290	8/12/2020	Visa				0.00	

Figure: The Settlement Batches form

The form includes the following tabs:

- All Transactions: Shows all transactions in the settlement batch.
- Missing Transactions: Shows all transactions that have the Missing processing status.
- **Excluded from Deposit**: Shows transactions that cannot be included in the bank deposit because they have already been deposited or because the cash account of the document is not a clearing account for the deposit account.
- Card Type Summary: Shows the summary information for each card type in the settlement batch.

Creation of a Bank Deposit

When the status of the settlement batch is changed from *Processing* to *Processed* and the **Automatically Create Bank Deposit** check box is selected for the processing center on the *Processing Centers* (CA205000) form, the system automatically creates a bank deposit. If the batch's status is changed from *Pending Review* to *Processed*, the user should create a deposit manually by clicking **Create Deposit** on the form toolbar of the *Settlement Batches* (CA307000) form. For the settlement batch linked to the payment or cash sale, the system creates a bank deposit that meets the following criteria:

- The cash account is a clearing account of the deposit account.
- The payment has not been deposited yet.
- On the *Import Settlement Batches* (CA507000) form, the settlement state of the settlement batch, which is specified in the **Settlement State** column, is either *Settled Successfully* or *Refund Settled Successfully*.

A bank deposit is created with the following settings specified on the *Bank Deposits* (CA305000) form, as shown in the screenshot below.

Вох	Value
Tran. Type	CA Deposit
Status	<i>On Hold</i> if the Hold Transactions on Entry check box is selected on the <i>Cash</i> <i>Management Preferences</i> (CA101000) form <i>Balanced</i> if the Hold Transactions on Entry check box is cleared
Cash Account	The account specified in the Deposit Account box on the Preferences tab of the <i>Processing Centers</i> form
Deposit Date	The date specified in the Settlement Time box for the settlement batch on the <i>Settlement Batches</i> form
Fin. Period	The financial period of the Deposit Date
Document Ref.	The document reference number, which is determined by auto-numbering
Description	Deposit of settlement batch from <processing center="">. <deposit date=""></deposit></processing>

If the settlement report has fees specified for transactions, during the creation of a bank deposit, the system groups all transactions by fee type. The system adds a charge to the bank deposit for each group of fees and specifies the following settings in the table on the **Charges** tab of the *Bank Deposits* form.

Column	Value
Charge Amount	The sum of the amounts in the Total Fee column on the <i>Settlement Batches</i> form for the group
Chargeable Amount	The sum of the amounts in the Amount column on the Settlement Batches form for the group
Payment Method	Blank
Charge	The entry type linked to the fee type on the Fees tab of the <i>Processing Centers</i> form (<i>Disbursement</i> and <i>Receipt</i> entry types can be used)

The link to the bank deposit is saved in the settlement batch and shown in the **Bank Deposit** box on the *Settlement Batches* form. When the deposit is released, the status of the linked settlement batch is set to *Deposited*. If the deposit is voided, the status of the linked settlement batch is set to *Processed*.

The following screenshot illustrates a bank deposit created automatically by the system.

Bank Deposits CA Deposit 0	00235 7 +	<u>ن</u> م	• ic ()	>I REMOVE HO	D ACT	IONS - R	REPORTS -			D NOTES	ACTIVITIES	FILES CUSTO	MZATION TOOLS -
Tran, Type: Reference Nbr.: Cash Account Currency Status:	CA Depos 000235 10600 - C USD On Hold	p p redit Card Ac 1.00	count + VIEW BASE	* Deposit Date: 8/12/ * Fin. Period: 08-2/ • Document Ref: AUTH Cash Drop Acc. Create Drop Am	2020 ~ 020 ,0 HNETAPI 8/1	12/2020	a	Deposits To Charge Tota Total Amou	rtal: 620 al: (nr 620	0.00 0.00 0.00			^
Description: PAYMENTS	Deposit o	f settlement b S FINAN	atch from AUTHNETA	PI.8/12/2020									
C P >	¢ ADD F	Reference	Customer/Vendor	Account Name	Location	*Account	Currency	Deposit Amount	Payment Method	Status	Payment Ref.	Payment Date	Charge Type
AR C	ash Sale ayment	AR008290	ABARTENDE	USA Bartending School USA Bartending School	MAIN	10400 10400	USD USD	150 00 470 00	VISATOK VISATOK	Closed Open	60148491876 60148491864	8/12/2020 8/12/2020	

Figure: Bank deposit based on a settlement batch

Other Changes

To support the settlement of credit card payments, the following changes to the system behavior have been introduced on the *Payments and Applications* (AR302000) and *Cash Sales* (AR304000) forms for payments and cash sales that use the credit card payment method:

- Previously, for payments and cash sales that used the credit card payment method, the **Cleared** check box was selected when the user selected a cash account that did not require reconciliation, and the **Clear Date** was set to the **Payment Date**. In Acumatica ERP 2021 R1, the **Cleared** check box is selected in the following cases:
 - For credit card payment methods, if the **Import Settlement Batches** check box is cleared on the *Processing Centers* (CA205000) form for the processing center, the **Cleared** check box is selected on successful capture and the **Clear Date** is set to the capture date.
 - For credit card payment methods, if the **Import Settlement Batches** check box is selected for the processing center, the **Cleared** check box is selected on import of a settlement batch.



For non-credit card payment methods, the behavior of the **Cleared** check box remains the same as it was in the previous versions.

- On the *Payments and Applications* and *Cash Sales* forms, if for the selected processing center the **Import** Settlement Batches check box is selected on the *Processing Centers* form and the selected cash account
 is not a clearing account for the deposit account specified for the processing center, the system displays a
 warning message.
- The behavior of the **Record Card Payment** and **Validate Card Payment** commands on the **Actions** menu has been changed as follows:
 - The system checks if the transaction has been settled. The system searches for batch transactions with the *Missing* status and with the same **PCTranNumber** and **ProcessingCenterID**.
 - If the batch transaction is found, the processing status of the batch transaction is set to Processed.
 - If the settlement status of the batch transaction is *Settled Successfully* or *Refund Settled Successfully*, for the linked payment or cash sale, the **Settled** and **Cleared** check boxes are selected, and the **Cleared Date** is set to the date specified in the **Settlement Time** box on the *Settlement Batches* (CA307000) form.
 - If all transactions have the *Processed* or *Hidden* status, the status of the settlement batch is changed to *Processed*.
- The behavior of the **Void Card Payment** command on the **Actions** menu has been changed. The system checks if the transaction has been settled. The process searches for batch transactions with the *Missing* status and with the same **PCTranNumber** and **ProcessingCenterID**. If a batch transaction is found, the processing status of the batch transaction is set to *Processed*.

Additional Information

For more details on how to configure a processing center, import settlement batches, process missing transactions, and create a bank deposit, see *Performing Settlement of Credit Card Payments*.

Finance: Support of Cash Transactions in Bank Deposits

In previous versions of Acumatica ERP, users could not add cash transactions to bank deposits, because clearing accounts could not be selected on the *Transactions* (CA304000) form. Starting in version 2021 R1, Acumatica ERP supports the addition of cash transactions to a bank deposit along with customer payments. Now users can post cash account entries to clearing accounts and add these entries on the **Payments** tab of the *Bank Deposits* (CA305000) form.

Changes to the Transactions Form

On the *Transactions* (CA304000) form, a column for the **Clearing Account** check box has been added to the lookup table for the **Cash Account** box, as shown in the following screenshot.

Tran. Type:	Ca	ish Entry					* Tran	. Date:	1	2/29/2	020 -				Amount:				0.00	
Reference Nbr.:	<new> O</new>			* Fin. Period:			Q			VAT Taxable T				0.00						
* Cash Account:			ر ر	A ★ Entry Type:		 {			Q	O VAT Exempt T				0.00						
Currency:	Select - Cash Account											0.00								
Status.	SELECT O HI V																			
Description:		Cash Account	t	Account	Descrij	otion					Currency	S	ubaccount	Br	anch	Clea Acco	ring ount			
TRANSACTION	>	10100		10100	Petty	Cash					USD	0	00-000	Ρ	RODWHOLE			Ľ		
2		10200		10200	Comp	any Cl	necking	Account			USD	0	00-000	Р	RODWHOLE					
0 + /		10250		10250	Comp	any M	erchant	Account			USD	0	00-000	Р	RODWHOLE					
B 0 D *Branch		10300		10300	Comp	any Sa	avings A	Account			USD	0	00-000	Р	RODWHOLE				Offset Account	Account Description
		10400		10400	Undep	osited	Funds	(clearing a	accou	unt)	USD	0	00-000	Р	RODWHOLE		\checkmark			
		10500		10550	Cash	in Trar	nsit				USD	0	00-000	Р	RODWHOLE					
		10600		10600	Credit	Card	Account	t			USD	0	00-000	Р	RODWHOLE					
		10700		10700	Bank /	Accour	nt - Euro	DS			EUR	0	00-000	Р	RODWHOLE					
		10800		10800	Bank /	Accour	nt - SGE)			SGD	0	00-000	Р	RODWHOLE					
		20500		20500	Corpo	rate C	redit Ca	ard			USD	0	00-000	Р	RODWHOLE					
		22000		22000	Custo	mer Ui	nknown	Deposits			USD	0	00-000	Р	RODWHOLE					

Figure: Cash Account lookup table on the Transactions form

On the **Financial Details** tab of the form, the **Payment Information** section has been added, as shown in the screenshot below. The **Cleared** check box and **Clear Date** box have been moved to the new section from the **Link to GL** section. The boxes in the new section provide information related to the bank deposit, with the **Batch Deposit** check box selected automatically by the system when the user selects a clearing account in the **Cash Account** box of the Summary area.

Cook Entry O	00210				
	00219 □ ∽ + □ ₿ • K	< > >	REVERSE ACTIONS - INC	QUIRIES - O0:00:03	
Tran. Type:	Cash Entry	Tran. Date:	12/29/2020	Amount:	19.00
Reference Nbr.:	000219 P	Fin. Period:	12-2020	VAT Taxable T	0.00
Cash Account:	10400 - Undeposited Funds (clearing a	cc Entry Type:	BANKFEE - Bank Fees	VAT Exempt T	0.00
Currency:	USD 1.00 - VIEW BAS	E Disbursement/	Disbursement	Tax Total:	0.00
Status:	Released	Document Ref.:	29122020-01		
		Owner:	EP00000002 - Maxwell Baker		
Description:	Bank fees				
TRANSACTION	DETAILS TAX DETAILS FINAN	ICIAL DETAILS APPR	ROVAL DETAILS		
TRANSACTION	DETAILS TAX DETAILS FINAN	ICIAL DETAILS APPR	ROVAL DETAILS	-	
TRANSACTION	DETAILS TAX DETAILS FINAN	ICIAL DETAILS APPR TAX SETTINGS Tax Zone:	ROVAL DETAILS	-	
TRANSACTION	CA000214 PRODWHOLE - Products Wr	ICIAL DETAILS APPR TAX SETTINGS Tax Zone:	ROVAL DETAILS	-	
TRANSACTION LINK TO GL Batch Number: Branch: PAYMENT INFO	CA000214 PRODWHOLE - Products WH RMATION	ICIAL DETAILS APPR TAX SETTINGS Tax Zone: tole	ROVAL DETAILS	-	
TRANSACTION LINK TO GL Batch Number: Branch: PAYMENT INFO Deposit After:	CA000214 CA00WHOLE - Products Wr RMATION 12/29/2020	ICIAL DETAILS APPR TAX SETTINGS Tax Zone: nole	ROVAL DETAILS	-	
TRANSACTION LINK TO GL Batch Number: Branch: PAYMENT INFO Deposit After:	DETAILS TAX DETAILS FINAN CA000214 PRODWHOLE - Products Wr RMATION 12/29/2020 Cleared	ICIAL DETAILS APPR TAX SETTINGS Tax Zone: tole	ROVAL DETAILS	-	
TRANSACTION LINK TO GL Batch Number: Branch: PAYMENT INFO Deposit After: Clear Date:	DETAILS TAX DETAILS FINAN CA000214 PRODWHOLE - Products Wr RMATION 12/29/2020 Cleared 12/29/2020	ICIAL DETAILS APPR TAX SETTINGS Tax Zone: nole	ROVAL DETAILS	-	
TRANSACTION LINK TO GL Batch Number: Branch: PAYMENT INFO Deposit After: Clear Date:	DETAILS TAX DETAILS FINAN CA000214 PRODWHOLE - Products Wr RMATION 12/29/2020 Cleared 12/29/2020 Cleared 12/29/2020 Cleared	ICIAL DETAILS APPR TAX SETTINGS Tax Zone: nole	ROVAL DETAILS	-	
TRANSACTION LINK TO GL Batch Number: Branch: PAYMENT INFO Deposit After: Clear Date:	DETAILS TAX DETAILS FINAN CA000214 PRODWHOLE - Products Wr RMATION 12/29/2020 Cleared 12/29/2020 Batch Deposit Deposited	ICIAL DETAILS APPR	ROVAL DETAILS	-	
TRANSACTION LINK TO GL Batch Number: Branch: PAYMENT INFO Deposit After: Clear Date: Batch Deposit I	DETAILS TAX DETAILS FINAN CA000214 PRODWHOLE - Products Wr RMATION 12/29/2020 Cleared 12/29/2020 Batch Deposit Deposited Date:	ICIAL DETAILS APPR TAX SETTINGS Tax Zone: tole	ROVAL DETAILS	-	

Figure: UI changes on the Financial Details tab

Changes to the Bank Deposits Form

On the *Bank Deposits* (CA305000) form, the **Add Payment to Deposit** dialog box opens when a user clicks **Add Payment** on the table toolbar of the **Payments** tab. In Acumatica ERP 2021 R1, the system now displays cash transactions in the table, in addition to customer payments, which can be added to a bank deposit. The following screenshot illustrates the **Add Payment to Deposit** dialog box with cash transactions.

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A	KNCW2 X Fin. Penod: 12-2020 D Charge total: 0.00 Add Payment to Deposit X												×	
	Clea Payn	ring Account: ment Method: + ×	⊢ X		م م	* Start Date: * End Date:	t Date: Date:		020 - Si 020 - Ni	Selection Total: Number of Documents:		-175.00 2		
8		Doc. Module	Туре	Reference Nbr.	Customer/Vendor	r Account Name	Loc	ation	Payment Ref.	Payment Date	Currency	Payment Amount	Cash Accour	ıt
	2	CA	Cash Entry	000219					29122020-01	12/29/2020	USD	19.00	10400	tho
>		CA	Cash Entry	000220					29122020-02	12/29/2020	USD	156.00	10400	
		CA	Cash Entry	000221					29122020-02	12/29/2020	USD	157.00	10400	- 11
		CA	Cash Entry	000222					12292020-01	12/29/2020	USD	19.00	10400	- 11
		CA	Cash Entry	000223					12292020-02	12/29/2020	USD	158.00	10400	- 11
٩							_	_		_				• >I
		<new: CADe <nev: Add F Payr Clean Payr Clean</nev: </new: 	CA Deposit - CA Deposit - CADE Payment to Clearing Account: Payment Method: C + × C + × C - + × C - CA C A C - CA C A C	Add Payment to Deposit Add Payment to Deposit Clearing Account Payment Method: Clearing Account Clearing Account Clear	CA Deposit CADeposit CRW>> Add Payment to Deposit Clearing Account: Payment Method: C + H Image: Construction of the second seco	Image: SNEW> Image: Snew Point of the second sec	CA Deposit Clearing Account: Payment to Deposit Clearing Account: Payment Method: * Start Date: * End Date: * Ca Cash Entry 000220 CA Cash Entry 000221 CA Cash Entry 000222 CA Cash Entry 000223	Image: SNEW> Image: Snew Point State CADeposit CADeposit CADeposit Clearing Account: Payment to Deposit Clearing Account: Payment Method: Image: Start Date: Image: Start Date: Start Date: Image: Start Date: Start Date: Image: Start Date:	CADeposit CADeposit CADeposit CADeposit Clearing Account: Payment to Deposit Clearing Account: Payment Method: Payment Method: <	Image: NEW> Image: NEW>	CNEW> Image: Content of the content of th	NOTE: ACTIVITIES FILE NOTE: I <td>CADeposit 0 CADeposit 0.00 CADeposit 0.00 Cherge Total: 1229/2020 Number of Documents: 2 Cherge Total: 1229/2020 Cherge Total: 175.00 Payment Method: 2 Cherge Total: 1229/2020 Cherge Total: 175.00 Payment Method: 2 Cherge Total: 1229/2020 Cherge Total: 175.00 Payment Method: 2 Cherge Total: 1229/2020 Cherge Total: 1229/2020 Cherge Total: 175.00 Payment Method: 2 Cherge Total: 1229/2020 Cherge Total: 175.00 Cherge Total: 1229/2020 Cherge Total: 1229/2020 Cherge Total: 1229/2020 Ch</td> <td>CNEW> Customization Files Customization CADeposit C + C < > > > Peposit Date: 12/29/2020 + Deposits Total: 0.00 CADeposit • Ein Period 12/29/2020 + Deposits Total: 0.00 Add Payment to Deposit • Ein Period 12/29/2020 + Selection Total: -175.00 Payment Method: </td>	CADeposit 0 CADeposit 0.00 CADeposit 0.00 Cherge Total: 1229/2020 Number of Documents: 2 Cherge Total: 1229/2020 Cherge Total: 175.00 Payment Method: 2 Cherge Total: 1229/2020 Cherge Total: 175.00 Payment Method: 2 Cherge Total: 1229/2020 Cherge Total: 175.00 Payment Method: 2 Cherge Total: 1229/2020 Cherge Total: 1229/2020 Cherge Total: 175.00 Payment Method: 2 Cherge Total: 1229/2020 Cherge Total: 175.00 Cherge Total: 1229/2020 Cherge Total: 1229/2020 Cherge Total: 1229/2020 Ch	CNEW> Customization Files Customization CADeposit C + C < > > > Peposit Date: 12/29/2020 + Deposits Total: 0.00 CADeposit • Ein Period 12/29/2020 + Deposits Total: 0.00 Add Payment to Deposit • Ein Period 12/29/2020 + Selection Total: -175.00 Payment Method:

Figure: UI changes in the Add Payment to Deposit dialog box

A cash transaction added to a bank deposit affects the total amount of the bank deposit as follows, depending on the entry type specified for it on the *Transactions* (CA304000) form:

- *Disbursement* entry type: The cash transaction produces a credit entry for the clearing account. The amount of this entry is shown with a negative value in the **Deposit Amount** column on the **Payments** tab of the on the *Bank Deposits* form. This amount is posted to the debit side of the deposit batch.
- Receipt entry type: The cash transaction produces a debit entry for the clearing account. The amount of this
 entry is shown as a positive value in the **Deposit Amount** column on the **Payments** tab of the *Bank Deposits*form. This amount is posted to the credit side of the deposit batch.

The following screenshot shows a bank deposit to which two cash transactions have been added, one with the *Receipt* entry type and the other with the *Disbursement* entry type. The system has calculated the total amount of the deposit in the **Total Amount** box of the Summary area.

B C €	ank Deposits CA Deposi - 🏹	t 000226 ≌∽	+ 🗊 🗘	• I< <	> >I R	EMOVE HOLD	ACTION	IS • REPO	DRTS -	🗋 NOTES	ACTIVITIES	FILES CUSTOMI	ZATION TOOLS -
	Tran. Type:	CA Depos	it ×	*	Deposit Date:	12/29/2020 -			Deposits Tota	al: 138.00			^
	Reference N	br.: 000226	Q	*	Fin. Period:	12-2020 🔎			Charge Total	0.00			
	Cash Accoun	t: 10200 - C	ompany Checking A	Account *	Document Ref.:	12292020			Total Amount	t: 138.00]		
	Currency:	USD	1.00 - 1	/IEW BASE	Cash Drop Acc			Q					
	Status:	On Hold			Cash Drop Am	0.00							
	Description:	Bank dep	osit										
_	PAYMENTS CHARGES FINANCIAL DETAILS												
(5 0	X ADD F	AYMENI ⊷	X									
	Doc. Module	Туре	Reference Nbr.	Customer/Vendor	Account Name	Location	*Account	Currency	Deposit Payr Amount	ment Method Status	s Payment	t Ref. Payment Date	Charge Type
	CA	Cash Entry	000222				10400	USD	-19.00	Rele	ased 122920	20-01 12/29/202	0
>	CA	Cash Entry	000221				10400	USD	157.00	Rele	ased 291220	20-02 12/29/202	0

Figure: Cash transactions added to a bank deposit

Additional Information

For updated information on preparation of bank deposits, see Preparation of Deposits.

Finance: Support of Price Lists for Net/Gross Prices

In Acumatica ERP, users can define gross and net prices by assigning business-to-business (B2B) and businessto-consumer (B2C) customers or customer locations to different customer price classes and setting up prices that depend on the customer's price class. However, in previous versions, it was not obvious from a price list whether a price was gross or net. For example, it was possible to set up a customer with the *Gross* tax calculation mode and assign a customer price class with *Net* prices to this customer. As a result, prices calculated in a sales order or SO invoice could be incorrect.

In Acumatica ERP 2021 R1, a new setting—**Tax Calculation Mode**—has been added to the *Sales Prices* (AR202000) and *Sales Price Worksheets* (AR202010) forms. Users can now create a sales document with the *Gross* tax calculation mode and specify gross prices or create a sales document with the *Net* tax calculation mode and specify net prices for it.

This functionality is available if the *Net/Gross Entry Mode* feature is enabled on the *Enable/Disable Features* (CS100000) form.

Changes to the Sales Prices Form

On the *Sales Prices* (AR202000) form, the **Tax Calculation Mode** box has been added to the Summary area, and the **Tax Calculation Mode** and **Tax Category** columns have been added to the table, as shown in the following screenshot.

P	rica T	ype.	All Prices		item Class ID		p	Price Class.				p			
P	rice C	ode.	Mode All Modes -		Inventory (D.		p	Price Manager.				P DMe			
Te	ex Ca	iculation Mode			Warehouse	p		Price Workgroup:				.¢ ⊡.My			
E	flectiv	e As Of													
Ċ	0 + х н		Net Not Set										All Records		• 7
F 0-	D	Price Type	Price Code	* Inventory ID	Description	NON	Warehouse	Promotion	Break Qty	Price	.Cnueuca	Tax Calculation Mode	Tax Category	Effective Date	Expiration Date
	D	Base		AACOMPUTE!	Acer Laptop Computer	EA		1	0.00	500.00	USD	Not Set	EXEMPT	1/1/2012	
8	D	Customer	ABARTENDE	AACOMPUT01	Acer Laptop Computer	EA		12	3.00	475.00	USD	Not Set	EXEMPT	5/1/2015	
8		Customer	AACUSTOMER	AACOMPUT01	Acer Laptop Computer	EA		11	3 00	475.00	USD	Not Set	EXEMPT	7/11/2020	
	0	Customer Price C	I. WHOLESALE	AACOMPUT01	Acer Laptop Computer	EA		10	0.00	475.00	USD	Not Set	EXEMPT	1/1/2018	
	D	Customer Price C	I. WHOLESALE	AACOMPUT01	Acer Laptop Computer	EA		11	3 00	450.00	USD	Not Set	EXEMPT	1/1/2018	
9	D	Base		AALEGO500	Lego 500 piece set	EA		12	0.00	110.00	USD	Not	TAXABLE	9/30/2016	
0	D	Base		AAMACHINE1	Injection molding machine - serial numbered	EA		11	0.00	30,000.00	USD	Not Set	EXEMPT	1/1/2012	
	D	Base		AAPOWERAID	Poweraid 32 Oz - lot numbered	EA		10	0.00	1.12	USD	Not Set	EXEMPT	1/1/2019	
	D	Base		CONAIRT1	Harvil 4 Foot Air Hockey Table	EA		11	0.00	142.45	USD	Not Set	TAXABLE	9/30/2016	
	D	Base		CONBABY1	South Shore Savannah Changing Table	EA		121	0.00	168.29	USD	Net	TAXABLE	9/30/2016	
9	D	Base		CONBABY2	Little Tikes Bold n Bright Table & Chairs	EA		11	0.00	602.78	USD	Not Set	TAXABLE	9/30/2016	
8	D	Base		CONBABY3	Grac Pack N Play with Newborn Nappersta	EA		10	0.00	177 10	USD	Not Set	TAXABLE	9/30/2016	
6	D	Base		CONBALBALL	Gaiam Body Balance Ball Kit	EA			0.00	24.18	USD	Not Set	TAXABLE	9/30/2016	
0	۵	Base		CONBOTTLE1	Eddy Insulated Bottle .5L	EA			0.00	27.76	USD	Not Set	TAXABLE	9/30/2016	
0	D	Base		CONCHAIR1	Caravan Canopy Recliner	EA			0.00	72.24	USD	Not Set	TAXABLE	9/30/2016	
0	D	Base		CONCRIB01	Davinci Jayden Convertible Crib	EA			0.00	279.36	USD	Not Set	TAXABLE	9/30/2016	
0	D	Base		CONCRIB92	Graco Stylus Classic Travel System	EA			0.00	261.80	USD	Not Set	TAXABLE	9/30/2016	
	D	Base		CONFLAGPL	Alum Telescoping Flag Pole	EA			0.00	62.57	USD	Not Set	TAXABLE	9/30/2016	

Figure: UI changes on the Sales Prices form

A user can select one of the following values in the **Tax Calculation Mode** box to narrow the prices listed in the table:

- All Modes (default): Prices with all available tax calculation modes are shown.
- Not Set: Only prices with the Not Set tax calculation mode are shown.
- Gross: Only prices with the Gross tax calculation mode are shown.
- *Net*: Only prices with the *Net* tax calculation mode are shown.

When the user clicks the **Create Price Worksheet** button on the form toolbar, the system copies the value selected in the **Tax Calculation Mode** box to the created worksheet. If *All Modes* is selected in this box, the system displays an error message indicating that a tax calculation mode must be selected.

The **Tax Calculation Mode** column in the table can have the following values:

- Not Set (default): The price either includes a tax or does not, depending on the tax settings.
- Gross: The tax amount is included in the item price.
- *Net*: The tax amount is not included in the item price.

The **Tax Category** column is not available for editing; it displays the tax category specified for the stock item or non-stock item on the **General** tab of the *Stock Items* (IN202500) or *Non-Stock Items* (IN202000) form.

Changes to the Sales Price Worksheets Form

On the *Sales Price Worksheets* (AR202010) form, the **Tax Calculation Mode** box has been added to the Summary area, and the **Tax Category** column has been added to the table, as shown in the following screenshot.

Sale	s Price Worksh 0003	neets							🗅 NO	TES FILES	CUSTOMI	ZATION TOOLS -
←	¬ 罰 副 ∽ + 前 Q・ K < >>I RELEASE ACTIONS・											
Re St	Reference Nbr.: 000003 P * Effective Date: 1/17/2021 Promotional ^ Status: Open Expiration Date:											
De Č	Tax Calculation: Gross Image: Constraint of Constraints of Constrain											
🗟 Pr	ice Type	Price Code	Alternate ID	*Inventory ID	Description	*UOM	Warehouse	Break Qty	Source Price	Pending Price	*Currency	Tax Category
В	ase			CONCRIB01	Davinci Jayden Convertible Crib	EA		0.00	253.96	255.000000	USD	TAXABLE
> в	ase			CONCRIB02	Graco Stylus Classic Travel System	EA		0.00	238.00	239.000000	USD	TAXABLE

Figure: UI changes on the Sales Price Worksheet form

A user can select one of the following values in the **Tax Calculation Mode** box:

- Not Set (default): The item price can either include a tax or not include it.
- Gross: The item price includes the tax amount.
- *Net*: The item price does not include the tax amount.

In the **Copy Prices** dialog box, which opens when a user clicks **Copy Prices** on the table toolbar, the system copies only the prices that have a tax calculation mode selected in the **Tax Calculation Mode** box of the Summary area.

The **Tax Category** column is not available for editing; it displays the tax category specified for the stock item or non-stock item on the **General** tab of the *Stock Items* (IN202500) or *Non-Stock Items* (IN202000) form.

Price Selection Rules

The priority of prices copied by default to a document has not been changed, but if the *Net/Gross Entry Mode* feature has been enabled, the system selects only prices that meet particular criteria as follows, depending on the value in the **Tax Calculation Mode** box specified for a document:

- If the document's tax calculation mode is *Gross*, only prices with the *Gross* or *Not Set* tax calculation mode can be selected.
- If the document's tax calculation mode is *Net*, only prices with the *Net* or *Not Set* tax calculation mode can be selected.
- If the document's tax calculation mode is *Tax Settings*, prices with any tax calculation mode can be selected.

Upgrade Notes

After an upgrade to Acumatica ERP 2021 R1, for all sales prices and sales price worksheets existing in the system, the system sets the value in the **Tax Calculation Mode** box on the *Sales Prices* (AR202000) and *Sales Price Worksheets* (AR202010) forms to *Not Set*.
Additional Information

For details on configuring tax calculation mode for sales prices, see *Sales Prices: Support of Net/Gross Tax Calculation Mode*.

Finance: Synchronization of Tax Periods with Financial Periods

In previous versions of Acumatica ERP, if an administrative user changed user-defined periods in the financial calendar on the *Master Financial Calendar* (GL201000) form, the system updated the tax periods for a tax year with all the tax periods having the *Open* status. If at least one tax period in the tax year had the *Prepared* or *Closed* status, the update of the tax periods based on the financial calendar was not performed.

In Acumatica ERP 2021 R1, the tax periods for which *Financial Period* is selected in the **Tax Period Type** box on the *Tax Periods* (TX207000) form can be synchronized with financial periods in the company calendar, regardless of the status of tax periods.

To support this functionality, on the *Tax Periods* (TX207000) form, the **Synchronize Periods with GL** command has been added to the **Actions** menu. This command synchronizes the tax year structure with the company's financial year—which is specified on the *Master Financial Calendar* (GL201000) form, or on the *Company Financial Calendar* (GL201100) form if the *Multiple Calendar Support* feature is enabled—starting from the first open tax period: It deletes the existing tax periods and generates new tax periods for the year. If the next tax year has been generated and the end date of the selected tax year does not immediately precede the start date of the next tax year, the next tax year will be deleted upon confirmation. The new menu command is shown in the following screenshot.

Tax Periods

[n 🖞	Ū	ACT	IONS -	REPO	ORTS -	
*	Company: Tax Agency: Tax Year: Start Date: Tax Period T	ype:	F	Prepare Tax Release Ta Synchroniz 1/1/2014 Financial	x Report x Report e Period Period	t s with GL	P Ainistr P Cear
	Ċ +	\times	⊷	X			
8	Tax Period	Start D	ate	End Date	e s	Status	Net Tax Amount
>	01-2014	1/1/20	14	1/31/20	14	Open	
	02-2014	2/1/20	14	2/28/20	14	Open	
	03-2014	3/1/20	14	3/31/20	14	Open	
	04-2014	4/1/20	14	4/30/20	14	Open	
	05-2014	5/1/20	14	5/31/20	14	Open	
	06-2014	6/1/20	14	6/30/20	14	Open	
	07-2014	7/1/20	14	7/31/20	14	Open	
	08-2014	8/1/20	14	8/31/20	14	Open	
	09-2014	9/1/20	14	9/30/20	14	Open	
	10-2014	10/1/2	014	10/31/2	014	Open	
	11-2014	11/1/2	014	11/30/2	014	Open	
	12-2014	12/1/2	014	12/31/2	014	Open	
	13-2014	12/31	2014	12/31/2	014	Open	

Figure: The Synchronize Periods with GL action on the Tax Periods form

On the *Tax Periods* form, if *Financial Period* is selected in the **Tax Period Type** box for the company specified in the **Company** box and the tax agency selected in the **Tax Agency** box, when a user changes the user-defined financial

periods on the *Master Financial Calendar* or on the *Company Financial Calendar* form, the user should update tax periods based on the updated financial calendar in the following ways:

- On the *Prepare Tax Report* (TX501000) form, the system displays an error message if the start and end dates of the tax period to be prepared differ from those of the corresponding financial periods for the selected company or if the financial periods have been deleted. The user has to correct the tax period structure by using the **Synchronize Periods with GL** command on the *Tax Periods* form.
- On the *Release Tax Report* (TX502000) form, if the start and end dates of the tax period to be released differ from the corresponding financial period of the selected company or if the financial periods have been deleted, the system displays an error message. The user should void the tax report, and then use the **Synchronize Periods with GL** action on the *Tax Periods* form to correct the period structure for the tax year.

Additional Information

For more information on synchronization of tax periods, see Tax Periods: Synchronization with Financial Periods.

Finance: Tax Exemption Number Shown at the Document Level

In previous versions of Acumatica ERP, the exemption certificate number was pulled directly from the customer location and sent to Avalara with the transactional document without being displayed on the document in Acumatica ERP.

In Acumatica ERP 2021 R1, tax exemption numbers have been made available for audit purposes, and users can save, review, and override these numbers at the document level.

UI Changes

The Tax Exemption Number box has been added to the following forms:

- Cash Sales (AR304000): Financial Details tab, Tax Info section
- Invoices (SO303000): Financial Details tab, Tax Info section
- Invoices and Memos (AR301000): Financial Details tab, Tax Info section
- Pro Forma Invoices (PM307000): Financial Details tab, Invoice Settings section
- Sales Orders (SO301000): Financial Settings tab, Financial Information section

The **Tax Exemption Number** box appears on the forms if the *External Tax Calculation Integration* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

The following screenshot shown an example of a cash sale for which a tax exemption number has been specified.

Cash Sales	2000204	2										NOTES	ACTIVITIE
	R009200	, +	Ш Ç- К	<	>	>I RELEA	SE A	стю	NS - INQUIRIE	ES - REPORTS	•		
Type:	Cash Sa	le +	Customer:	AVACU	JST1 -	Avalara Customer		0	Detail Total:	300.00			
Reference Nbr.:	AR00920	06 ,O	* Location:	MAIN -	Prima	ry Location	,		VAT Taxable T	0.00			
Status:	Balanced	ł	Payment Meth	CHECH	K - Che	eck	,		VAT Exempt T	0.00			
Date:	12/29/20	20 -	Card/Account						Tax Total:	0.00			
Post Period:	12-2020	Q	Cash Account:	10200	- Comp	pany Checking Aco	count 🔎		Balance:	300.00			
Payment Ref.:	PMT029	51	Currency:	USD	1.(00 - VIE	W BASE		Payment Amo	300.00			
			* Project:	X - Nor	n-Proje	ct Code.	,Q	0	Cash Discount	0.00			
Description:	Gift certif	ficate							Finance Charg	0.00			
									Deducted Cha	0.00			
Batch Nbr.:					Cust	tomer Tax Zone:	AVAL	.ARA	- Avalara Tax Calcı	Q			
* Branch:		PROD	WHOLE - Products Wh	Q	Tax	Exemption Numbe	er: 0001	3191	5				
* AR Account:		11000	- Accounts Receivable	Q	Entit	ty Usage Type:	Defa	ult		•			
* AR Sub.:		000-0	00 - Default		ASSIC	GNED TO							
Original Docum	nent:				Wor	kgroup ID:				Q			
PAYMENT INFO					Own	ner ID:				Q			
* Terms:		30D -	30 Days	Q	PRIN	FAND EMAIL OPT	IONS						
		Clea	red		P	rinted	~ [Don't l	Print				
Clear Date:					E	mailed	~ [Don't l	Email				
		Batc	h Deposit										
		Dep	osited										
Batch Deposit I	Date:												
Batch Deposit I	Nbr.:												

Figure: UI change on the Cash Sales form

Finance: Tax Support for Expenses on Bank Transfers

In previous versions of Acumatica ERP, users could not apply taxes to bank fees and charges created on the *Funds Transfers* (CA301000) form. In Acumatica ERP 2021 R1, tax support for expenses on the *Funds Transfers* form has been implemented. With this support, users can add a tax to each expense line. One expense line can have multiple tax lines. The taxes entered for expenses support the tax calculation mode from the combination of the selected cash account and an entry type (*Net, Gross, or Tax Settings*).

Changes to the Funds Transfers Form

The following columns have been added to the table on the Funds Transfers (CA301000) form:

- **Tax Amount**: The total amount of all tax lines added to the current expense. The displayed amount is a link a user can click to open the **Expense Taxes** dialog box.
- **Total Amount**: The total amount of the expense, which is calculated based on the following formulas, which differ based on whether the taxes are inclusive:
 - For non-inclusive taxes: Total Amount = Amount + Tax Amount where Taxable Amount = Amount
 - For inclusive taxes: Total Amount = Taxable Amount + Tax Amount where Total Amount
 = Amount

In these formulas, Amount is the amount of the expense manually defined by a user. For non-inclusive taxes, this amount is also known as the taxable amount. Tax Amount is the total amount of the taxes applied to this expense manually or automatically.

- **Tax Zone**: The tax zone applied to the expense. By default, the tax zone is copied from the tax zone of the selected cash account and entry type.
- **Tax Category**: The tax category of the tax zone.
- **Tax Calculation Mode**: The tax calculation mode, which defines which amount (tax-inclusive or taxexclusive) is entered in the row of the funds transfer. This column is available only if the *Net/Gross Entry Mode* feature is enabled on the *Enable/Disable Features* (CS100000) form.

The following screenshot illustrates the UI changes introduced on the Funds Transfers form.

Funds Transfers 000009 - Bank	transfer										D NOT	TES ACTIVITI	IS FILES	CUSTOMIZATION	TOOLS -
H 2 2	v) +	0 D • 1	< < >	>I REMO	WE HOLD	ACTIONS	•								
Transfer Numb	Q, 60000	Description	Bank transfer												^
Status: C	On Hold	RGOL	0.0	0											
SOURCE ACCOUNT						-									
Account	0200 - Compa	ny Checking Account	P Batch	Number:											
* Transfer Date: 2	/15/2021 *	Cleared	Clear	Date											
• Document Ref	765		GL Ba	lance	61,396,37	18									
Currency, L	JSD 1.00	+ VIEW B	ASE Availa	ble Balance:	61,403,82	1.13									
Amount	1,000.00		Base	Currency Amount	1,00	0.00									
DESTINATION ACCO	UNT					_									
+ Account: 1	0300 - Compa	ny Savings Account.	D Batch	Number											
* Receipt Date 2	15/2021 +	Cleared	Clear	Date											
* Document Ref: 6	765		GL Br	lance	31,294,34	.70									
Currency: L	JSD 1.00	- VIEW B	ASE Availa	ble Balance.	31,294,34	.70									
Amount	1,000.00		Base	Currency Amount	1,00	00									
0 + x	H N														
B B D *Cash Acc	ount Entry	y Type Descriptio	n Altoour	t Tax Amount	Total Amount	Currency	Currency Document Rate Ret,	Offset Account	*Offsei Subaccount	* Doc. Data	* Fin. Period	Tax Zonie	Tax Category	Tax Calculation Mode	Cleared
B ⊡ 10200	BAN	KFEE Bank Fee	is 110.00	5.50	115.50	USD	1.00000000	61100	000-000	2/15/2021	02-2021	CANADAAB	TAXABLE	Tax Settings	0.
> B D 10200	BAN	KFEE Bank Fee	s 10.00	0.50	10.50	USD	1.00000000	61100	000-000	2/15/2021	02-2021	CANADAAB	TAXABLE	Tax Settings	101

Figure: UI changes on the Funds Transfers form

The following screenshot illustrates the **Expense Taxes** dialog box, which opens when the user clicks a link in the **Tax Amount** column.

Funds Transfers 0000009 - Ban ← 🛱 🛱	k transfer	₿• K	<	I REMO	OVE HOLD	ACTIONS -					
Transfer Numb	٥٥٥٥٥٥ ، ٩	escription:	Bank transfer								
Status:	On Hold F	GOL:	Expense Ta	xes							×
SOURCE ACCOUN	TT										
* Account:	10200 - Company Check	ing Account 🔎	Ů +	\times	* X						
* Transfer Date:	2/15/2021 - Cle	ared	🖻 *Tax ID		Tax Rate	Taxal	ole Tax A	mount	Deductible	Expense	
* Document Ref.:	6765					Amou	int		Tax Rate	Amount	
Currency:	USD 1.00	VIEW BASE	> CAGST		5.000000	110.0	0	5.50 10	00.000000	0.00	
Amount:	1,000.00										
DESTINATION AC	COUNT										
* Account:	10300 - Company Saving	Is Account 🛛 🔎									
* Receipt Date:	2/15/2021 - Cle	ared									
* Document Ref.:	6765									$ \langle \langle \rangle\rangle$	> >
Currency:	USD 1.00	VIEW BASE									01/
Amount:	1,000.00										UK
с + ×	→ <u>X</u>										
🖹 🖟 🗋 *Cash A	ccount *Entry Type	Description	Amount	Tax Amount	Total Amount	Currency	Currency Rate	Document Ref.	* Offset Account	*Offset Subaccount	*Doc. Dat
> 🕼 🗋 10200	BANKFEE	Bank Fees	110.00	<u>5.50</u>	115.50	USD	1.00000000		61100	000-000	2/15/202
0 🗋 10200	BANKFEE	Bank Fees	10.00	<u>0.50</u>	10.50	USD	1.00000000		61100	000-000	2/15/202

Figure: The new Expense Taxes dialog box

In this dialog box, the user can review the taxes applied to the expense and manually update the values in the **Tax Amount** and **Expense Amount** columns.

Additional Information

For details on how to create a bank transfer with a taxable fee, see *Funds Transfers with Taxable Fees: General Information*.

Finance: Other Improvements

In Acumatica ERP 2021 R1, multiple improvements to the UI and financial management processes have been introduced, as described below.

Renaming of UI Elements from Validate to Recalculate

In previous versions of Acumatica ERP, UI elements on multiple forms used the word *validate* to describe the recalculation of values, but the system did not perform validation. In Acumatica ERP 2021 R1, to make the user experience more intuitive, the following UI changes have been made on the following forms:

- Validate Account Balances (CA503000) has been renamed to Recalculate Account Balances. The Validate and Validate All buttons on the form toolbar have been renamed to Process and Process All, respectively.
- Validate Project Balances (PM504000) has been renamed to Recalculate Project Balances. The Validate and Validate All buttons on the form toolbar have been renamed to Process and Process All, respectively.
- Validate Vendor Balances (AP509900) has been renamed to Recalculate Vendor Balances.
- Validate Customer Balances (AR509900) has been renamed to Recalculate Customer Balances.
- Validate Deferred Balances (DR509900) has been renamed to Recalculate Deferred Balances. The Validate and Validate All buttons on the form toolbar have been renamed to Process and Process All, respectively.
- Validate Inventory (IN505000) has been renamed to Recalculate Inventory.
- Validate Account History (GL509900) has been renamed to Recalculate Account History. The Validate and Validate All buttons on the form toolbar have been renamed to Process and Process All, respectively.
- On the *Projects* (PM301000) form, the **Validate Project Balance** command on the **Actions** menu has been renamed to **Recalculate Project Balance**.

The tooltips for the **Process** and **Process All** buttons on the listed forms have been updated based on these changes.

The Vendor Class Selection Criterion on the Prepare Payments Form

On the *Prepare Payments* (AP503000) form, the **Vendor Class** box has been added to the Selection area, as shown in the following screenshot.

Pre	pare Payr PROCESS	ments s PROCES	SALL O.												CUSTOMIZA	TION TOOLS
• Br	anch	PRODWHOLI	E - Products Wholesale	Vender Class PRODUCT -	Products Ven	dor .0			GL Balance	61.396.13	4.18					
• Pa	yment Meth	CHECK	,Q	Vendor:		Q			Available Bala	61,403,57	9.13					
+ Ci	ish Account	10200 - Comp	oany Checking Account .0	Project		,p			Selection Total		0.00					
Pr	yment Date:	12/29/2020	•	Pay Date Within	1	Days			Number of Ro		0					
+ Po	ist Period:	12-2020	Q.	Due Date Within	7	Days										
Ci	ателсу:	USD 1.	00 - VIEWBASE	Cash Discount Expires Withi	n 7	Deys										
00	CUMENTS TO	H S	EPTIONS											A	Records	
9.0	Document Type	Reference NBC	Vendor ID	Line Vendor Name Nbr.	Project	Project Task	Cost Code	Account	Inventory ID	Location	Pay Separately	Retainage Bill	Original Document	Pay Date	Due Date	Cash Discount Date
	BII	002406	HUGHESSUP	0 Hughes Supply						MAIN				4/25/2021	4/25/2021	4/25/2021
	Bill	002434	HOMEDEPOT	0 Home Depot						MAIN				3/18/2021	3/18/2021	3/18/2021
	Bill	002436	HOMEDEPOT	0 Home Depot						MAIN				1/14/2021	1/14/2021	1/14/2021
D	Bill	002576	INDGLOBAL	0 Global Industrial Tools						MAIN				1/14/2021	1/14/2021	1/14/2021
	Bill	002577	FOODWESTER	0 Westerly Good Foods						MAIN				1/6/2021	1/6/2021	1/6/2021
	BII	002578	ELEMCCOVER	0 McCovern Computers						MAIN				1/7/2021	1/7/2021	1/7/2021
	Bit	002581	CONGOODTOL	0 Good Hardware Pte., Ltd.						MAIN	11			1/8/2021	1/8/2021	1/8/2021
	BII	002503	CONXIAN	0 XIANGTAN Apparel						MAIN				1/14/2021	1/14/2021	1/14/2021
	Bill	002584	CONXIAN	0 XIANGTAN Apparel						MAIN	11			1/3/2021	1/3/2021	1/3/2021
	Bill	002587	CONNETJENN	0 Net Jenn Toy Development						MAIN				1/7/2021	1/7/2021	1/7/2021
	Bill	002591	CONDEWSUP	0 Dewsoft Toy Supply						MAIN				1/10/2021	1/10/2021	1/10/2021
	Bill	002593	ELEEASTCOM	0 East COM Electronic Supplie	15					MAIN				1/14/2021	1/14/2021	1/14/2021
	Rill	002597	FIFEMPEDOR	0 Empany Office Eminment						MAIN				1/9/2021	1/9/2021	1/9/2021

Figure: The Vendor Class box on the Prepare Payments form

By selecting a vendor class in this box, users can narrow the documents that are listed and available for processing on the *Process Payments / Print Checks* (AP505000) form and avoid processing the documents of vendors assigned to other vendor classes.

The implementation of this functionality may affect custom generic inquiries, customization projects, import and export scenarios, and API integrations. For the complete list of changes, see *Release Notes for Developers*.

The Change ID Action Added to the Ledgers Form

On the *Ledgers* (GL201500) form, the **Actions** menu with the **Change ID** command has been added, as shown in the following screenshot.

L	.edg	jers										
•	(Ē.			S	+	Ū	۰ ۵	K	<	>	
		dara ID.			OTUA						0	Change ID
	* Leo	iger ID.		1	ACTUA	L					Q	Currency. USD
	De	scriptio	n:	A	Actual I	Ledger						Consolidation Source
	Тур	be:		A	Actual							
	CON	IPANIE	S	В	RANC	HES						
	Ç	+	×		↔	X						
8	*Cor	mpany			Compa	any Nam	e			Active	e	Company Type
>	CAF	PITAL			Revis	ion Two	Capita	I		\checkmark		Without Branches
	PRO		s		Revis	ion Two	Produ	cts		\checkmark		With Branches Requiring Balancing
	SEF	RVICES			Revis	ion Two	Servic	es		\checkmark		With Branches Not Requiring Balancing

Figure: The Actions menu on the Ledgers form

By clicking **Actions > Change ID**, a user can change the identifier to be used for the ledger—for example, to correct a typo in a ledger ID, or to update the ID of an existing ledger in order to better distinguish it among multiple ledgers in the system. For details, see *To Change a Ledger ID*.

Support for Statistical Ledgers on the Recalculate Account History Form

Previously, on the *Recalculate Account History* (GL509900) form, listed the *Actual* and *Reporting* types of ledgers. On the *Recalculate Account History* form, statistical ledgers—those for which *Statistical* is selected in the **Type** box on the *Ledgers* (GL201500) form—are displayed along with ledgers of other types, and users can recalculate the balances of these ledgers based on the transactions posted to the ledgers. The following screenshot illustrates a statistical ledger selected for recalculation on the *Recalculate Account History* form.

Recalculate Account History ☆

(り	Ľ)	PROCESS	PRO	CESS ALL	୬ •	↔	X	Y
	* Fir	n. Pe	eriod:	10-2020	Q,					
8	0			Ledger ID		Description				
	0			ACTUAL		Actual Ledge	er			
	0			EUACTUAL		Actual Ledge	er - EU Co	nsolida	tion	
	0			REPORTING		Reporting Le	edger			
>	0			STAT		Statistical Le	edger			

Figure: Statistical ledger selected on the Recalculate Account History form

Statistical Ledgers Unavailable on the Budgets Form

On the *Budgets* (GL302010) form, ledgers with the *Statistical* type are no longer available for selection in the **Ledger** box of the Summary area, but they can still be selected in the **Compare to Ledger** box and in the Preload Budget Articles Wizard.

In previous versions of Acumatica ERP, statistical ledgers on the *Budgets* form provided users with an ability to update all statistics for a year at once, without posting multiple transactions to different periods. However, if users decided to use both the *Budgets* form and the *Journal Transactions* (GL301000) form to update the balances in the statistical ledgers, they could see inconsistent data they saw on the *Budgets* form, on the *Account Details* (GL404000) form, or in reports that showed transactions. This is why the *Budget* ledgers cannot have entries posted to them and are not shown on the *Account Details* form and in GL transaction reports. Additionally, in 2021 R1, the ability to recalculate the balances of statistical ledgers on the *Recalculate Account History Form*. The recalculation process removes all the balances entered on the *Budgets* form.

After an upgrade to Acumatica ERP 2021 R1, on the *Budgets* form, the *Statistical* type of ledger will be changed to the *Budget* type if a user has recently been updating this ledger on the *Budgets* form. For a statistical ledger, if there are records in the GLBudgetLine table in the year corresponding to the maximum GLHistory.FinPeriodID, the ledger type will be changed to *Budget*. After this change, it will not be possible to use this ledger on the *Journal Transactions* (GL301000) form.

Improved Usability of the Calculate Overdue Charges Form

On the *Calculate Overdue Charges* (AR507000) form, when a user updated the value in the **Statement Cycle** box of the Selection area, the system reset the value in the **Overdue Charge Date** box. This happened if on the *Accounts Receivable Preferences* (AR101000) form, on the **General Settings** tab (**Data Processing Settings** section), the **Set Default Overdue Charges by Statement Cycle** check box was selected.

To eliminate this unexpected resetting of the date, the **Statement Cycle** box has been moved to the top of the Selection area, as shown in the following screenshot.

Calculate Overdu	ue Charges 🙀											CUSTOMIZATION	TOOLS -
O n CALCU	JLATE PROCESS	PROCESS	SALL O.	VIEW LAST CH	HARGE H	9 7 0							<i>p</i>
Statement Cycle:	EOM -	End of Month	Q										^
* Overdue Charge Dat	te 11/30/3	2019 -											
* Fin Period	11-201	9	,p										
B 🗆 type	Reference Nbr.	Date.	Due Date	Customer	Customer Name	Currency	Amount	Open Balance	Last Payment Date	Lest Charge Date	Overdur Days	Charge Currency	Charge Amount
> Invoice	AR008286	10/15/2019	11/14/2019	AACUSTOMER	Alta Ace	USD	2,436.25	2,436.25	12/31/2019		16	USD	19.22

Figure: UI change on the Calculate Overdue Charges form

Matching of Invoices and Bills Paid by Line to Bank Transactions

In previous versions of Acumatica ERP, bank transactions imported to the system could not be matched to invoices or bills paid by line—those that had the **Pay by Line** check box selected on the *Invoices and Memos* (AR301000) or *Bills and Adjustments* (AP301000) form. The system did not list documents paid by line as possible matches on the **Match to Invoices** tab of the *Process Bank Transactions* (CA306000) form.

In Acumatica ERP 2021 R1, each document paid by line is displayed in one line on the **Match to Invoices** tab of the *Process Bank Transactions* form as a possible match. A user can match a bank transaction to the whole document paid by line. The following screenshot shows an AR invoice with three lines that is paid by line.

11/01/00	AD000206	Activo St	offing Service									I NOTES	ACTIVITIES	FILES	CUSTOMIZATION	TOOLS
ivoice i	n +			> > P	AY ACTIONS -	INQ	JIRIES - REPOR	RTS +								
Туре:	Invoice		Customer:	ACTIVESTAF - A	ctive Staffing Service	1	Detail Total	1,065.00								
Referen	e Nbr. AR009	206 .0	Location	MAIN - Primary L	ocation		Discount Total	0.00								
Status:	Open		Currency	USD 1.00	→ VIEW BASE	2	VAT Taxable T	0.00								
Date:	2/16/2	021	Terms:	30D - 30 Days			VAT Exempt T.	0.00								
Post Per	iod 02-202	1	* Due Date	3/18/2021 *			Tax Total	0.00								
Custom	r Ord.		Cash Discount.	3/18/2021 -	Pay by Line		Balance:	1,065.00								
			Project/Contract	X - Non-Project C	ode	0	Amount	1,065.00								
Provide State	an Trainin						Cash Discount:	0.00								
Descript	trainin	ig courses														
DOCUN	ENT DETAILS	FINANCI VIEW D	ALDETAILS AD	ORESS DETAILS	TAX DETAILS	GALES	PERSON COMMISSI	ON APPR	OVAL DETAILS	DISCOUN	T DETAILS	APPLICATIONS				
DOCUN 0 -	ENT DETAILS	FINANCI VIEW D	AL DETAILS AD EFERRALS (H) e Inventory ID	DRESS DETAILS	TAX DETAILS	GALES	PERSON COMMISSI Unit Pros	ON APPR	OVAL DETAILS Discount Percent	DISCOUN	T DETAILS Manual Discount	APPLIGATIONS Discount Code	Amount	Balance	Tax Amount	*Account
Docum Docum	ENT DETAILS	FINANCI VIEW D Lin Nb	AL DETAILS AD	DRESS DETAILS	TAX DETAILS Quantity 0.00	GALES	Unit Preson Commissi Unit Pres 0.00	ON APPR Ext. Price 565.00	OVAL DETAILS Discount Percent 0.000000	DISCOUN Discount Amount 0.00	T DETAILS Manual Discount	APPLIGATIONS Discount Code	Amount 565.00	Balance 565.00	Tax Amount 0.00	*Account 40000
	ENT DETAILS	FINANCI VIEW D Lin No 2	AL DETAILS AD EFERRALS I	DRESS DETAILS	TAX DETAILS	GALES UOM	Unit Dist Dist Dist Dist Dist Dist Dist Di	ON APPR Ext. Price 565.00 300.00	OVAL DETAILS Discount Percent 0.000000 0.000000	DISCOUN Discount Amount 0.00 0.00	Manual Discount	APPLICATIONS Discount Code	Amount 565.00 300.00	Pisiance 565.00 300.00	Tax Amount 0.00 0.00	*Account 40000 40020

Figure: An AR invoice paid by line

The following screenshot shows the AR invoice listed on the **Match to Invoices** tab as a possible match that is matched to a bank transaction as a whole document.

Process Bank Transactions	CUSTOMIZATION TOOLS +
Cash Account 10200 - Company Checking Account P of	MATCH TO PAYMENTS MATCH TO INVOICES GREATE PAYMENT Distiness Account. ACTIVESTAF - Active Staffing
B O Ext. Ref. Nbr: "Tran. Receipt Disbursement Carl Tran. Receipt Disbursement Carl Tran. Desc	Location MAIN - Primary Location
Date Number > D 2/23/2021 1,065.00 0.00 Training course	Check - Check J
	5 Matched Match Modul Type "Reference Ext. Fet. "Doc. Date Amount Cash: Decount Discount Disc
	87.500 AR Invoice AR009205 2/16/2021 1,065.00 0.00 3/18/2021 ACTIVESTAF

Figure: The AR invoice paid by line matched to a bank transaction

Other UI Improvements

On multiple forms, the following UI changes related to currency management have been made:

• On the *Write Off Balances and Credits* (AR505000) form, the **Branch** box has been replaced with the **Company/Branch** box.

On the *Revalue AP Accounts* (CM504000), *Revalue AR Accounts* (CM505000), and *Revalue GL Accounts* (CM506000) forms, the **Company/Branch** box has been added to the Selection area; in this box, a user can select a company, branch, or company group. The box shows the list of the companies, branches, and company groups to which the current user has access. The default value is the current branch (that is, to which the user is signed in). If a company or branch is selected in the **Company/Branch** box, the **Fin. Period** box shows the financial periods from the company calendar; if a company group is selected or the box is empty, the financial periods from the master calendar are shown.

In the table, the system loads the records related to the branches of the company or company group selected in the **Company/Branch** box or the records of the branch selected in the box.

 On the Cash Flow Forecast (CA401000) form, the Company/Branch box has been added to the Summary area. This box appears on the form if the Multi-Branch Support feature has been enabled on the Enable/ Disable Features form. On this form, too, the box contains the current branch by default, and the list contains the entities to which the current user has access.

Additionally, the following UI changes have been made on this form:

- The Convert To Currency box has been renamed to Forecast Currency.
- The Include AP, AR Documents with No Cash Account Specified check box has been renamed to Include Documents Without Cash Account.
- The Convert Curr. Rate Type box has been renamed to Currency Rate Type.

These changes are the prerequisites for the *Multiple Base Currencies* functionality, which will be implemented in a future version of Acumatica ERP, along with the functionality described in *Finance: Currency Settings on the Currencies Form*.

Integration: Support for OpenID Identity Providers

In Acumatica ERP 2021 R1, support for OpenID identity providers has been implemented. A system administrator can configure integration with multiple OpenID providers for a system tenant or multiple tenants.

The configuration of this integration is available if the *OpenID Connect* feature is enabled on the *Enable/Disable Features* (CS100000) form.

Configuring an OpenID Provider

The new *OpenID Providers (SM303020)* form, shown in the following screenshot, has been added. By using this form, a system administrator can create providers in the system and configure integration settings. On the Sign-In page, the system will display a button with the name the administrator has entered in the **Display Name** box on the **General Settings** tab and the icon uploaded on the **Icons** tab (see the following screenshot).

OpenID Providers Google								🗋 NOTES	FILES (1)	CUSTOMIZATION	TOOLS -
GENERAL SETTIN	۵ GS		< ENTIC.	>	X	CON	HANGE NAME	VIEW REDIREC	CTURI	VIEW PROVIDER ME	TADATA
Display Name:		Googl	e	area a		 	م				
Issuer Identifier:		https:/	//accou	nts.goog	gle.com						
		Activ	/e								

Figure: Configuration of an OpenID provider

By using the **Change Name** and **View Redirect URI** buttons on the form toolbar, a system administrator can change the provider's name to be displayed on the Sign-In page and view the redirect URI, respectively.

If an OpenID provider specified in the **Issuer Identifier** box of the **General Settings** tab supports discovery requests, a system administrator can receive the provider's configuration metadata by clicking the **View Provider Metadata** button on the form toolbar. The system displays the Provider Metadata dialog box, which shows configuration metadata that can be used to specify settings on the **Authentication Settings** tab (see the following screenshot).



Figure: Configuration metadata of the OpenID provider

Signing In with Configured Providers

When general and authentication settings are specified, the users of the system can select a sign-in option on the Sign-In page (see the following screenshot).

In multitenant instance, the system displays the list of available sign-in options for the selected tenant. If a user selects another tenant, the system will display the list of any sign-in options available for the newly selected tenant.

	a
Select a tenant	
01_U100	v
Select a sign-in option	
Userneties	_
Pasaword	
Sign In	Forgot your createntails
G Google	
OneLogin	

Figure: Sign-In page with the configured sign-in options

A system administrator may restrict the list of tenants a user can see only to the tenants the user has access to, by selecting the **Secure Tenant on Login Screen** check box on the Tenant Setup page of the Acumatica ERP Configuration Wizard. In this case, the **Tenant** box does not appear on the Sign-In page (see the following screenshot). Users can authenticate themselves by entering their Acumatica ERP credentials. Also, users can click **More sign-in options for tenant**, type the needed tenant name, and view other sign-in options that are available for the specified tenant.

your credentials?

Figure: Sign-In page with restricted access to tenants

If a browser has saved information about the tenant to which a user previously signed in, the system will display the tenant name and sign-in options available for the tenant, as shown in the following screenshot. A user may remove the tenant selection and specify another tenant after either signing in with Acumatica ERP credentials or clicking the **More sign-in options for tenant** button.

	tica P
Tenant	
01_U100	×
Select a sign-in op	tion
Password	
Sign In	Forgot your credentials?
G Google	
OneLogin	

Figure: Sign-In page with restricted access to tenants and saved tenant information

Integration: Bulk Address Validation

In Acumatica ERP 2021 R1, the ability to validate multiple addresses at once has been added, to reduce time and effort needed to validate business account addresses. To use this functionality, integration with an address validation provider (Avalara or Vertex) needs to be configured. For details, see *Integrating Acumatica ERP with Address Validation Providers*.

Mass Address Validation

The *Validate Addresses (CR509020)* processing form has been added to the system. The form is available if the *Address Validation Integration* feature is enabled on the *Enable/Disable Features* (CS100000) form and integration with an address validation provider is configured.

On the form, you can narrow the list of addresses by country, type, and status of the business accounts to be listed, as demonstrated in the following screenshot.

A	/alic	date Addresses	VALIDATE ALL O - H					CUSTOMIZATION	TOOLS -
	Car Gue	untry. stomer/Vendör Typer stomer/Vendör Stetun	US - United States of Americs ,0 Customer - Active T		C) Overnde Addi	esses Automaticaliy			^
10	.0.2	Gustomer/Wendor	Nama	Type	Bianas:	Address-Line 1	Address Line 2	CHT.	State
>		C000000001	GoodFood One Restaurant	Customer	Active	111 E 36th St		New York.	NY
		CAREADO	Cakeado Cafe	Customer	Active	3056 Hanover Street		New York	
		CAKEADO	Cakeado Cafe	Customer	Active	3056 Hanover Street		New York	
		CANDYY	Candyy Cafe	Customer	Active	4003 Turkey Pen Road		New York	NY

Figure: Selection criteria on the Validate Addresses (CR509020) form

Also, if the **Override Addresses Automatically** check box is selected, the system automatically corrects invalid addresses during the validation process.

Manufacturing: Capable-to-Promise Functionality

In Acumatica ERP Manufacturing Edition 2021 R1, the capable-to-promise (CTP) functionality has been implemented, which will be valuable for organizations who use advanced planning and scheduling. This functionality provides these organizations with the ability to commit to delivery dates for customer orders based on production and on resource capacity and inventory.

CTP determines when delivery will be possible by using finite scheduling. It takes into consideration the constraints of the manufacturing system that might hinder production, such as accessibility of necessary resources, lead times for acquiring raw materials or purchased parts, and the ability to acquire resources needed for subassemblies or lower-level components.

This functionality is available only when the *Advanced Planning and Scheduling* feature is enabled on the *Enable/ Disable Features* (CS100000) form.

Configuration of the CTP Functionality

For an organization using the CTP functionality, we recommend that a specific production order type be created on the *Production Order Types* (AM201100) form that is dedicated to CTP. The order type should be assigned to the *Planning* function and may have a different numbering sequence than the one used for other production order types. We also recommend that the **Exclude from MRP** check box (in the **Order Defaults** section of the **General Settings** tab) be selected for the production order type, so that the system excludes production orders of this type from the MRP regeneration process. The following screenshot shows a production order type with the recommended settings for CTP and other sample settings.

Production Order Types CT					🗋 NOTES	ACTIVITIES	FILES	CUSTOMIZATION	τοοι	.s •
	+ 🔟 (D- K	< >	×						
Order Type:	ст 🔎 🔽	Active								^
Description: (CTP production	order type								
Function:	Planning		•							
GENERAL SETTINGS	ATTRIBUTES									
NUMBERING SETTINGS					SCRAP					
* Order Numbering Sequence	e:	AMCTP - CTP	Order Numbe	r P 🖉	Scrap Source:		Order T	уре	•	
ACCOUNT SETTINGS					Scrap Wareho	use:	RETAIL	- Retail Warehouse	Q	O
* Work in Process Account:		12450 - Work i	in Progress Inv	n ,Q	Scrap Locatior	i:	RETUR	NS - Returns area	Q	0
* Work In Process Sub.:		000-000 - Defa	ault		COPY BOM NO	TES	-			
* WIP Variance Account:		51500 - Work	In Process Var	i P	🛃 Item/Head	ler 🔽 Ma	aterial	🗹 Tool		
* WIP Variance Sub.:		000-000 - Defa	ault		Operation	🛃 St	ер	🗸 Overhead		
ORDER DEFAULTS										
Costing Method:		Estimated		-						
		Exclude from	MRP							
	(Substitute W	ork Centers							
PRINTING										
* Print Production Report ID:	AM.62.5	50.00 - Producti	on Ticket	Q						
SCHEDULING										
		Check for Ma	aterial Availabil	ity						

Figure: The Capable to Promise production order type

The order type dedicated to CTP should be specified in the new **Capable to Promise Order Type** box in the **Data Entry Settings** section of the **General Settings** tab of the *Production Preferences* (AM102000) form, as shown in the following screenshot.

Production Preferences						CUSTOMIZATION TOOLS -
₿ ∽						
GENERAL SETTINGS						
NUMBERING SETTINGS			DATA ENTRY SETTINGS			MANUFACTURING OPERATIONS SETTINGS
* Move Numbering Sequence:	AMBATCH - Batch Numbering &	0	Use Labor Rate:	Standard *		These settings are specific to the current branch.
* Labor Numbering Sequence:	AMBATCH - Batch Numbering &	0	Default Order Type:	RO - Regular Orders 🖉 🔎	0	Use Default Quantity in Materials
* Material Numbering Sequence:	AMBATCH - Batch Numbering &	0	Default Disassemble Order Type:	DA - Disassembly	0	Use Default Quantity in Move/Labor
* Wip Adjust Numbering Sequence:	AMBATCH - Batch Numbering &	0	Capable to Promise Order Type:	CT - CTP production order ty; 🔎	0	Use Remaining Quantity in Materials
* Cost Numbering Sequence:	AMBATCH - Batch Numbering &	Ø		Include Scrap in Completions		Use Remaining Quantity in Move
Disassembly Numbering Sequence:	AMDISASSY - Disassemble ($ \wp $	0		Post Summary on Updating GL		✓ Use Default Order Type
Vendor Shipment Numbering Sequence:	AMVSHIP - Vendor Shipment &	0		Hold Documents on Entry		Request Location for Each Item in Materials
SCHEDULING				Validate Document Totals on En	try	Request Location for Each Item in Move/Labor
* Default Move Time:	00:00			Default User Employee ID		Use Explicit Line Confirmation
	Use Order Start Date for MRP			Restrict Clock Entry to Current U	Jser	✓ Default Warehouse from User Profile
	Use Fixed Manufacturing Times		VENDOR SHIPMENT SETTINGS			✓ Use Default Auto-Generated Lot/Serial Nbr.
	Machine Scheduling			Hold Shipments on Entry		✓ Use Default Expiration Date
	Tool Scheduling			Validate Shipment Total on Conf	irmation	
	Use Shift Crew Size					
Fixed Mfg Calendar ID:	EST - Eastern Time Zone 🖉	0				
Fixed Mfg Units:	Days -					
Block Size:	00:30 -					

Figure: The Capable to Promise Order Type box on the Production Preferences form

Also, to indicate that CTP functionality can be applied to a particular stock item, the new **CTP Item** check box must be selected on the **Manufacturing** tab (**General** section) of the *Stock Items* (IN202500) form, as shown in the following screenshot.

Stock Items MGWIDGET - As	sembled wid	get			🗋 NOTES	ACTIV	ITIES	FILES	CUSTOMIZATIC	N	TOOLS -
\leftarrow	∽ + ₪	© • K <	:	> >	ACTIONS -	ING	UIRIES	•			
* Inventory ID:	MGWIDGE	T - Assembled widget		Pro Pro	duct Workgroup:					Q	^
Item Status:	Active	*		Pro	duct Manager:					Q	
Description:	Assembled	d widget									
GENERAL PRIC	CE/COST MA	NUFACTURING	ARE	HOUSES	VENDORS	ATTR	IBUTES	PACk	AGING		ş
GENERAL				SCRAP							
Default BOM ID:	BOM00008 - A	ssembled widget - b 🔎	0	Scrap War	ehouse:				Q	D	
Planning BOM ID:		م	0	Scrap Loc	ation:				Q	0	
Configuration ID:		م	0	SCHEDULIN	IG						
Group Planning:	0				🛃 Che	eck for	Material A	vailability			
Dflt Mark For:	Production	-									
	🗹 Make to Order	Item									
	MRP Item										
	Quantity Roun	d Up									
	CTP Item										
REPLENISHMENTS											
Source:	Manufacturing	Override									
Safety Stock:	0.00	Override									
Reorder Point:	0.00	Override									
Min Order Qty:	0.00										
Max Order Qty:	0.00										
Lot Size:	1.00										
MFG Lead Time:	0										

Figure: The CTP Item box on the Stock Items form

CTP for Sales Orders

When a customer service manager creates a sales order on the *Sales Orders* (SO301000) form with items to be produced and the customer expects to receive the items by a particular date (the **Requested On** date, which is specified in each line on the **Document Details** tab), the manager can estimate the projected date when the requested quantity of items can be shipped to the customer. To provide this capability, the **Process CTP** action (shown in the following screenshot) has been added to the **Actions** menu of the *Sales Orders* form; the manager can click it to open the new *Process Capable to Promise* (AM515000) form with the lines of the sales order that have the **CTP Item** check box selected on the **Manufacturing** tab of the *Stock Items* (IN202500) form.

The **Process CTP** action is available when all of the following is true:

- The Advanced Planning and Scheduling feature is enabled on the Enable/Disable Features (CS100000) form.
- The type of the sales order has the Allow Production Orders Approved and Allow Production Orders - Hold check boxes selected in the Manufacturing Settings section of the General Settings tab of the Order Types (SO201000) form.
- The sales order has the On Hold or Open status.

REPORTS -	\$\$ +	⊡ C+ K	< > :	VI CREA	TE SHIPME	INT	HOLD	Process CTP Production Orders
Order Type: Order Nbr.: Status: Date: Requested On: Customer Ord External Refer	SO ,0 SO005960 ,0 Open 12/25/2020 ~ 1/18/2021 ~	* Customer: * Location Contact: Currency: * Project: Description:	ELEIMPORT - EI MAIN - Primary L USD 0 1.00 X - Non-Project C Sale of gadgets	lectonic Impo Location ~ V Code.	rters D D D VIEW BASE D	0 0 0	Ordered Q Discount Tr VAT Exemp VAT Taxabl Tax Total Order Total	Quick Process Create Shipment Open Quie Planiper Omn Copy Order Email Sales Order/Quote Remove Credt Holo
								Prepare Invoice
DETAILS E	STIMATES TAJ	EMS ADD MATRIX	NS FINANCIA	AL SHIP	PING A	DDRE	PO LINK	Prepare Invidee Create Purchase Order Create Transfer Order Comunete Order
DETAILS E C + 0 *Inventory ID	STIMATES TAJ	KES COMMISSION EMS ADD MATRIX Line Description	ITEMS ADD *UOM	AL SHIP WVOIGE Quantity	PING A	DDRE NLS	ESSES [PO Lunk Ot Shipn	Prepare Invince Create Purchase Order Create Transfer Order Opmonete Grme Cancel Order Place on Back Order Hold

Figure: The Process CTP action on the Sales Orders form

On the *Process Capable to Promise* form, the customer service manager can select one line or multiple lines of the sales order (by selecting the unlabeled Included check box for each line), select the *Process CTP* action in the **Action** box, and click **Process** on the form toolbar to calculate the projected dates for the items in the selected lines. When the system finishes the calculation, the projected dates are displayed in the **CTP Date** column (see the following screenshot). During the calculation of the projected date, the system creates a planning order, whose type and number are displayed in the **Prod. Order Type** and **Prod. Order Nbr.** columns, respectively (also shown in the following screenshot). The planning order can be viewed on the *Production Order Details* (AM209000) form.

Ρ	rocess C	apa	able to I	Promise									CU	STOMIZATIO	и тооі	LS 🕶
Ç	2	PR	OCESS	PROCESS A	ul ⊙ • ↔	X Y										
	Action:		Process	CTP -	CTP ACCEPTA	NCE SETTINGS										^
	SO Type: SO Nbr.:			م م	* Regular Prod	uction Order Type:	RO - Reg	jular Order	rs ,0							
	SO Type	\$O	Nbr.	Inventory ID	Line Description	Warehouse	UOM	Open Qty.	Requested On	Ship On	Prod. Order Type	Prod. Order Nbr.	CTP Date	CTP Accepted	Original Request Date	
	SO	sc	005960		Assembled widget	WHOLESALE	EA	<u>10.00</u>	1/18/2021	1/18/2021	СТ	CTP000001	1/18/2021			
٩																Þ
														< <	>	\geq

Figure: The CTP Date column on the Process Capable to Promise form

The manager can accept the dates by selecting the needed lines of the sales order (using the Included check boxes), selecting the *Accept* action, and clicking **Process** on the form toolbar. For the accepted lines, the system deletes the planning order, creates a production order, whose type and number are displayed in the **Prod. Order Type** and **Prod. Order Number** columns, respectively, and selects the check box in the **CTP Accepted** column (see the following screenshot).

Р	rocess (Capa	able to	Promise									CU	STOMIZATION	TOOLS -
Ç	2	PRO	DCESS	PROCESS A	ull ⊗ • ⊷	X Y									
	Action: SO Type: SO Nbr.:		Accept	• م م	CTP ACCEPTA * Regular Prod	NCE SETTINGS	RO - Reg	gular Orde	rs O						^
	SO Type	<u>\$0</u>	Nbr.	Inventory ID	Line Description	Warehouse	UOM	Open Qty.	Requested On	Ship On	Prod. Order Type	Prod. Order Nbr.	CTP Date	CTP Accepted	Original Request Date
	SO	SO	005960	MGWIDGET	Assembled widget	WHOLESALE	EA	<u>10.00</u>	1/18/2021	1/18/2021	RO	AM000018	1/18/2021		1/18/2021
•															Þ
														I< <	> >

Figure: The Process Capable to Promise form

If any CTP dates do not meet the date requested by the customer, the manager can reject the dates by selecting the needed lines of the sales order (using the Included check boxes), selecting the *Reject* action, and clicking **Process** on the form toolbar. For the rejected lines, the system deletes the planning order. In this case, the manager can negotiate with the customer to agree on new dates when the items in the order can be shipped; the manager can then update the requested dates in the sales order.

Also, the manager may want to find out how many of the item the company could actually ship to the customer by the requested date. The manager can click the quantity in the **Open Qty.** column of the needed line to open the **Quantity Available** dialog box (shown below), which displays the following:

- **Requested**: The requested quantity of the item
- Available: The available quantity of the item (which is calculated based on availability calculation rules)

- Available for Shipment: The quantity of the item available for shipping.
- **Supply Available by Requested Date**: The quantity of the item projected to be available by the requested date (due to planned receipts of inventory not allocated to other orders).
- **Production Available by Requested Date**: The quantity of the item projected to be produced by the requested date (based on the current available capacity of production and the demand).
- Total Available by Requested Date: The sum of the values in the Available for Shipment, Supply Available by Requested Date, and Production Available by Requested Date columns of this row.

Action:	Process CTP - CTP ACCEPTANCE SETTINGS	DO Device	Dadaas	
SO Type SO Nbr.:	,p * Regular Production Order Type	RO - Regular G	Jrders ,	<u></u>
E D D SO Type	Quantity Available	×	Open Qty.	Requested On
> 🛯 🗆 🗆 so	Requested: Available: DETAILS	10.00 0.00	<u>10.00</u>	2/22/2021
	Available for Shipment:	0.00		
	Supply Available by Requested Date	0.00		
	Production Available by Requested Date:	50.00		
	Total Available by Requested Date.	50.00		

Figure: The Quantity Available dialog box

Additional Information

For more details on the capable-to-promise functionality, see Capable to Promise: General Information.

You can find an instruction for preparing the system to CTP processing in *Capable to Promise: Implementation Activity*.

For details on how to calculate the projected dates by using the capable-to-promise functionality, see *Capable to Promise: Process Activity*.

Manufacturing: Enhanced Linking of Sales Order Lines and Production Orders

In the previous versions of Acumatica ERP Manufacturing Edition, a production order could be linked to a sales order line (SO line) only when the production order was directly created from the SO line. In Acumatica ERP Manufacturing Edition 2021 R1, the ability to link an existing production order to an SO line has been implemented. This ability could be beneficial for organizations that create production orders during material requirements planning and then need to link the production orders to the SO lines that generated the demand.

A user can link the existing production order to the SO line either by specifying the production order for the SO line on the *Sales Orders* (SO301000) form or by specifying an SO line for the production order on the *Production Order Maintenance* (AM201500) form. Additionally, a user can remove the link between an SO line and an production order.

Linking of a Production Order to a Sales Order Line

If a stock item in a sales order should be produced, a production order must be created for the line item. In the previous versions of Acumatica ERP Manufacturing Edition, a customer service manager used the **Production Orders** action on the *Sales Orders* (SO301000) form to create the production order for the entire sales order. In 2021 R1, if the production order for the line item already exists, the sales order line can be linked to a production order in either of the following ways:

- On the Sales Orders form, the customer service manager can do the following:
 - a. Click the line on the **Details** tab.
 - b. On the table toolbar, click **Link Prod Order** to open the **Production Details** dialog box (shown in the following screenshot).

Sales Orders							🗅 NOTES 🛛 AC	TIVITIES FILE	S CUSTOMIZATI	ON TOOLS -
SO SOUDD2 ← □ □) \$\$ +	1) - C	< > >I	CREATE SHIPME	NT HOLD ACTIO	NS - REPC	RTS -			
* Order Type:	S0 ,0	* Customer:	AACUSTOMER -	Alta Ace 🔎	Ordered Qty.:	5.00				^
Order Nbr.:	SO006020 ,P	* Location:	MAIN - Primary Lo	ocation $ ho$	Discount Total:	0.00				
Status:	Open	Contact:		Q	VAT Exempt T	0.00				
* Date:	1/12/2021 -	Currency:	USD ,0 1.00	✓ VIEW BASE	VAT Taxable T	0.00				
* Requested On:	1/12/2021 -	* Project:	X - Non-Project Co	ode. $ ho$	🧷 Tax Total:	0.00				
Customer Ord					Order Total:	995.00				
External Refer		Description:								
DETAILS E	STIMATES T	AXES COMMISSIO	INS FINANCIAL	SHIPPING A	DDRESSES DISCOUN	ITS SHIPMI	ENTS PAYMEI	NTS TOTALS		
<u>ک</u> + ک	Y X ADD	ITEMS ADD MATRI	X ITEMS ADD I	NVOICE LINE DETA	ILS POLINK ITEM	AVAILABILITY		LINK PROD OR	DER ↔ 🛛	t
🗟 🖟 🗋 Configu	rat *Branch	Production D	etails					+	×	. Unit Price
🗟 🖟 🗋 Configu	rat *Branch	Production D	etails	Production Nbr	0 5	itatus:	•	+	×	/. Unit Price
E Configu	BRODWH	Order Type:	etails	Production Nbr:	s م	itatus:	•		×	7. Unit Price
 B B D Configu 	PRODWH	OLE Production D	etails ∽ × ⊢ ⊠	Production Nbr.	ع م	itatus:	•		×	. Unit Price 199.00
 B B D Configu > Q D 	*Branch PRODWH	OLE Production D Order Type: C + B 0 D S	etails , , , , , , , , , , , , , , , , , , ,	Production Nbr.	م Status	itatus:	• Qty to Produce	Qty Complete	× Production UOM	. Unit Pric
 Configuration Configuration	PRODWH	OLE Production D Order Type: C + B 0 D S 0 D	etails P X H Elected Order Type RO	Production Nbr. Production Nbr AM000009	Status Planned	itatus:	• Qty to Produce 4.00	Qty Complete	Production UOM EA	. Unit Pric
 Configuration Configuration	PRODWH	Production D Order Type: OLE	etails	Production Nbr Production Nbr AM000009 AM000024	Status Planned Planned	itatus:	Cty to Produce 4.00 5.00	Qty Complete 0.00 0.00	Production UOM EA EA	. Unit Price 199.00
 B B D Configu 	PRODWH	Production D Order Type: ○ + □ □ s □ □ s □ □ s □ □ s □ □ s	etails	Production Nbr Production Nbr AM000009 AM000024	Status Planned Planned	itatus:	• Qty to Produce 4.00 5.00	Qty Complete 0.00 0.00	Production UOM EA EA	. Unit Price 199.00
 B B Configu 	PRODWH	OLE C +	etails × H X elected Order Type R0	Production Nbr Production Nbr AM000009 AM000024	Status Planned Planned	itatus:	Qty to Produce 4.00 5.00	Qty Complete 0.00 0.00	Production UOM EA EA	: Unit Pric
 B B Configu 	PRODWH	Production D Order Type: OLE ○ + ◎ □ s ◎ □ > ◎ □	etails	Production Nbr Production Nbr AM000009 AM000024	Status Planned Planned	itatus:	Qty to Produce 4.00 5.00	Qty Complete 0.00 0.00	Production UOM EA EA	› Unit Pric
 B B Configu 	PRODWH	Production D Order Type: OLE ○ + ◎ □ ○ s ◎ □ > ◎ □	etails × H S elected order Type RQ Z RQ	Production Nbr Production Nbr AM000009 AM000024	Status Planned Planned	itatus:	Qty to Produce 4.00 5.00	Qty Complete 0.00 0.00	Production UOM EA EA	: Unit Pric
 B B Configu 	PRODWH	Production D Order Type: OLE ○ + ◎ □ s ◎ □ > ◎ □	etails	Production Nbr Production Nbr AM000009 AM000024	Status Planned Planned	itatus:	Qty to Produce 4.00 5.00	Qty Complete 0.00 0.00	Production UOM EA EA	: Unit Pric 199.00

Figure: The Production Details dialog box

c. In the dialog box, select the check box in the **Selected** column in the row with the production order to be linked to the SO line and click **Save**.

When the dialog box closes, the customer service manager can see the identifier of the production order in the **Production Nbr.** column of the linked SO line.

- On the *Production Order Maintenance* (AM201500) form (in the **SO References** section of the **References** tab), a production manager can do the following:
 - a. At the bottom of the section, click the **Link Sales Order** button, which is displayed only if no SO line has been linked to the production order, to open the **SO Line Details** dialog box (shown in the following screenshot).

	RO - Regular	Orders	p 1	* Order Dat	e:	1/12/2021 -					-
Production Nbr	AM000024 - K	Ceurig Model 450	p	Status:		Planned	Hold				
Inventory ID:	AMKEURIG45	5 - Keurig Model 450	20	Product V	Vorkgroup			Q			
Warehouse:	WHOLESALE	- Wholesale Warehouse	20	Product N	lanager:			Q			
Location	R1S1 - Row 1	Shelf 1	20								
Description:	Keurig Model	450									
	EFEDENCES	EVENT WRTODY	ATTON	DUTER	TOTALS	INE DETAILS					
	EFERCINCES	EVENTHISTORY	AUTRIC	50165	TOTALS I	LINE DE IAILO					
O REFERENCES	s				SOURCE						
Customer:				Q	Ø Source:		BO	M			
SO Order Type:					Source	Date	1/1	2/2021 -			
SO Order Nbr.					BOM ID		BO	M000005 - Build	Keurig Model	450 ,0	0
SO Line Nbr.:		0	-		* BOM R	evision:	A -	Build Keurig Mod	del 450	0	
		LINK SALES ORDER			PROJEC	ſ			-	_	3
SO Line Detai	Is	+							×	9	0
Customer		D Order Type		0	Order N	lbr	0		-		
oustomer.		order type.		~	Order				- 11		
0 – Ú		X							- 11		
a o D s	elected	Order Type Order N	br.			Quantity	Open Qt	y. UOM	_		
	-										

Figure: The SO Line Details dialog box

b. In the dialog box, select the check box in the **Selected** column for the SO line to be linked to the production order, and click **Save**.

When the dialog box closes, the production manager can see the boxes of the **SO References** section filled in with the customer, sales order type, sales order, and SO line.

A production order can be linked to an SO line if all of the conditions specified in the following table are met.

Entity	Requirements
Sales order	The sales order is not assigned the <i>Canceled</i> , <i>Back Order</i> , or <i>Completed</i> status.

Entity	Requirements
Production order	 The production order is not linked to an SO line. The order is not assigned the <i>Completed</i>, <i>Canceled</i>, or <i>Closed</i> status.
Stock item	 The same stock item is specified in the production order and in the SO line. The stock item is not a configured item. (That is, the Configurable check box is cleared for the SO line on the Details tab of the <i>Sales Orders</i> form.)
SO line	 The Mark for Production check box is selected for the SO line on the Sales Orders form. No production order is linked to the SO line. The SO line has not been canceled.

When the link between an SO line and a production order is created, the following changes occur in the system:

- The type and number of the production order are displayed in the SO line on the **Details** tab of the *Sales Orders* form.
- The customer, sales order type, sales order number, and SO line are displayed in the **SO References** section of the **References** tab on the *Production Order Maintenance* (AM201500) form.
- The item quantity is allocated for production; the item plan can be viewed on the *Inventory Allocation Details* (IN402000) form.

Changing or Removing of a Link Between an SO Line and a Production Order

The link between an SO line and a production order can be changed or removed only on the *Production Order Maintenance* (AM201500) form because a production manager should know about all changes in production orders. To remove the link, the production manager does the following in the **SO References** section of the **References** tab:

1. Clicks the **Remove Link** button (which is displayed only if the link has been added previously; see the following screenshot).

Manufacturing: Enhanced Linking of Sales Order Lines and Production Orders | 133

Production Order Maintenance C NOTES RO AM000024 - Keurig Model 450								ES A	стіvіті	IES	FILES	NO	TIFICATIONS	CUSTOMIZATIO	N TO	DOLS -
← 📱 🗎	∽ +	- 🔟	0•	K	<	> >		ACTIONS	•	INQUI	RIES	R	EPORTS -			
* Order Type:	RO - Regu	ar Orders	3	į	0 0	* Order Da	ate:		1/12	2/2021	-					^
* Production Nbr:	AM000024	- Keurig I	Model 450	ţ	0	Status:			Plar	nned			d			
* Inventory ID:	AMKEURIC		rig Model 4	50	0 0	Product	Workg	roup:						Q		
* Warehouse:	WHOLESA	LE - Who	lesale War	ehouse)	0 0	Product	Mana	ger:						Q		
* Location:	Kurdenouse. WHOLESALE - Wholesale Waterlouse > > > Product Manager: >> > > > > > > > > > > > > > > > > >															
Description:	Keurig Mod	el 450														
GENERAL R	REFERENCE	S EV	ENT HISTO	ORY	ATTR	IBUTES	TOT	TALS	LINE	DETAIL	S					
SO REFERENCES	s						_	SOURC	E							_
Customer:		AA	CUSTOME	R - Alta	Ace		0	Source	c				BOM		-	
SO Order Type:		SO						Source	Date:				1/12/2021	•		
SO Order Nbr:		SO	006020				0	BOM II	D:				BOM000005	- Build Keurig Mode	el 450 🔎	0
SO Line Nbr.:				1				* BOM F	levisio	n:			A - Build Ke	urig Model 450	2	>
		RE	MOVE LIN	к				PROJEC	т					-		
LINKED ORDERS	i						-	* Project					X - Non-Proj	ect Code.	۶.	0
Product Order Ty	ype:	1				Q	0	Project	Task:							
Product Order:						Q	0						Update Pro	oject		
Parent Order Typ	pe:					Q	0									
Parent Order:						Q	0									
FINANCIAL SETT	INGS						_									
* WIP Account:		124	450 - Work	in Progre	ess Inve	entory (N 🔎										
* WIP Subaccount	t	000)-000 - Defa	ault												
* WIP Variance Ac	count:	515	500 - Work	In Proce	ss Vari	ance 🔎										
* WIP Variance Su	ibaccount:	000	0-000 - Defa	ault												

Figure: The Remove Link button on the Production Order Maintenance form

2. Confirms the removal in the **Confirm** dialog box, which is opened.

When the link between an SO line and a production order is removed, the following changes occur in the system:

- The type and number of the production order are removed from the SO line on the **Details** tab of the *Sales Orders* form.
- The customer, sales order type, sales order number, and sales order line are removed from the SO References section of the References tab on the *Production Order Maintenance* (AM201500) form.
- The allocation of the item quantity for production is removed. That is, the item plan is removed on the *Inventory Allocation Details* (IN402000) form.

When the link to the SO line is removed a production manager can add the link to another SO line.

Implementation Details

The functionality of linking SO lines and production orders has the following requirements:

- One production order can be linked to only one SO line, and an SO line can be linked to only one production order.
- If the *Multiple Warehouses* feature is enabled on the *Enable/Disable Features* (CS100000) form, the same warehouse must be specified in the production order and in SO line.

Other UI Enhancements

To support the enhanced linking of sales order lines and production orders, the following enhancements have been made to the UI:

• On the **General Settings** tab of the *Order Types* (SO201000) form, the manufacturing-related settings have been moved to the new **Manufacturing** section (see the following screenshot).

Order Types SO - Sales Order ← ◯ ◯ ◯ ♡	+ @ @• K < > >	🗅 NOTES	ACTIVITIES FILES CUSTOMIZATION	TOOLS •
 ★ Order Type: Description: Order Template: 	Sales Order			^
GENERAL SETTINGS	TEMPLATE SETTINGS QUICK PROCESS SETTIN	IGS		
ORDER SETTINGS		POSTING SETTINGS		
* Order Numbering Sequen	e: SOORDER ρ	Use Sales Account from:	Inventory Item *	
Days To Keep:	0	* Combine Sales Sub. From:	III-III	
	Hold Orders on Entry	* Freight Account:	40010 - Sales - Freight 🖉	
	Hold Document on Failed Credit Check	Use Freight Account from:	Order Type *	
	Require Control Total	* Freight Sub.:	000-000 - Default	
	Bill Separately	* Combine Freight Sub. from:	TTT-TTT	
	Ship Separately	* Discount Account:	49000 - Discount Taken	
	✓ Calculate Freight	Use Discount Account from:	Order Type *	
	□ Ship in Full if Negative Quantity Is Allowed	* Discount Sub.:	000-000 - Default	
	Supports Approval	* Combine Discount Sub. from:	TTT-TTT	
	Disable Automatic Discount Update		Post Line Discounts Separately	
	Recalculate Discount On Partial Shipment		Use Discount Sub. from Sales Sub.	
	Copy Notes		Auto Write-Off	
	Copy Attachments	INTERCOMPANY POSTING SET	TINGS	
	Copy Line Notes To Shipment	Use Sales Account from:	Inventory Item *	
	Copy Line Attachments To Shipment	Use COGS Account from:	Inventory Item	
	Copy Line Notes To Invoice	MANUFACTURING SETTINGS _		
	Only Non-Stock		Allow Production Orders - Approved	
	Copy Line Attachments To Invoice		Allow Production Orders - Hold	
	Only Non-Stock		Allow Estimating	
	Require Customer Order Nbr.		Allow Configuration Entry	
Customer Order Nbr. Valid	tion: Allow Duplicates		Enable Warehouse On Line With Linked Pro	oducti
ACCOUNTS RECEIVABLE	ETTINGS		MTO Order	
* Invoice Numbering Seque	ce: ARINVOICE ρ			
	Mark as Printed			-

Figure: Manufacturing section on the Order Types form

• On the *Sales Orders* (SO301000) form, the **Production Orders** action has been renamed to **Create Production Order** (shown in the following screenshot).

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OrderTar		0	AAGUSTO		0		0	Process CTP	
Order Type: Order Nhr	SO006020 Q	* Customer:	MAIN - Prim	VIER - Alta Ace	م	0	Discour	Create Production Orders	
Status:	Open	Contact:	W/SUN - 1 101	ary Location	Q	0	VAT Exe	Quick Process	L
Date:	1/12/2021 -	Currency:	USD ,P	1.00 +	VIEW BASE		VAT Tax	Create Shipment	L
Requested On: Customer Ord	1/12/2021 -	* Project:	X - Non-Pro	oject Code.	Q	0	Tax Tota Order Ti	Per Open Orden	
External Refer	STIMATES TAX	Description: (ES COMMISSI	IONS FINA	NCIAL SH	IPPING A	DDRE	SSES	Copy Order Email Sales Order Remove Credit Hills Prepare Involse	
External Refer DETAILS E O + 0 D Configu	STIMATES TA) X ADD IT arat *Branch	Description: (ES COMMISSI EMS ADD MATE *Inventory ID	IONS FINA RIX ITEMS Free Item	NCIAL SH ADD INVOICE Warehouse	IPPING A LINE DET, Liné D	ADDRE AILS	ESSES FOLS tion	Copy Order Email Sales Order Remove Fredd HMM Frendre Involee Create Purchase Order Create Transfer Order Complete Inder Cancel Order	
DETAILS E	ESTIMATES TAX X ADD IT Irât *Branch PRODWHOI	Description: KES COMMISSI EMS ADD MATE *Inventory ID E AMKEURIG	IONS FINA RIX ITEMS Free Item	NCIAL SH ADD INVOICE Warehouse WHOLESA	IPPING A LINE DETA Line D	ADDRE AILS Jescrip	ESSES FOLD tion	Copy Order Email Sales Order Remove Tradit HMA Prenare Incolae Create Purchase Order Create Transfer Order Complete Grae- Cancel Order Place on Back Order	

Figure: The Create Production Orders action on the Sales Orders form

Manufacturing: Enhanced Scheduling of Work Center Capacity

In Acumatica ERP Manufacturing Edition 2021 R1, organizations that use rough-cut planning for scheduling production orders will benefit from managing work center capacity based on crew size and efficiency. The finite scheduling algorithm has been enhanced to consider crew size and efficiency when calculating the duration of an operation. The run time on the operation no longer has to be manually adjusted to account for fluctuations in crew size and efficiency. Instead, the planning manager can alter the crew size number or efficiency percent for the work center, so that when scheduling is executed, the proper resource capacity is utilized.

For example, suppose that a new process has been introduced to a manufacturing operation. The standard run rate is specified for the operation; however, company personnel expect the resources assigned to the operation to need time to gain experience with the new process. The planning manager can set an efficiency lower than 100% for the work center to cause each production order to be scheduled for a longer duration. As the efficiency expectation improves, the manager can increase the efficiency percent of the work center without having to adjust each production operation.

The ability to alter the crew size number or efficiency percent for a work center is available only when the *Advanced Planning and Scheduling* feature is enabled on the *Enable/Disable Features* (CS100000) form.

Enabling the Use of the Crew Size and Efficiency in Scheduling

For those companies who would like to use the new scheduling algorithm, the **Use Shift Crew Size** check box must be selected in the **Scheduling** section of the *Production Preferences* (AM102000) form (shown in the following screenshot).

Production Preferences					CUSTOMIZATION TOOLS -
n n					
GENERAL SETTINGS					
NUMBERING SETTINGS	[-	DATA ENTRY SETTINGS		MANUFACTURING OPERATIONS SETTINGS
 Move Numbering Sequence: Labor Numbering Sequence: 	AMBATCH - Batch Numbering A AMBATCH - Batch Numbering A	0	Use Labor Rate: Default Order Type:	RO - Regular Orders	Use Default Quantity in Materials
* Material Numbering Sequence: * Win Adjust Numbering Sequence:	AMBATCH - Batch Numbering P	0	Default Disassemble Order Type Capable to Promise Order Type	DA - Disassembly P	Use Default Quantity in Move/Labor
* Cost Numbering Sequence:	AMBATCH - Batch Numbering P	0	capable to Frence credit type.	Include Scrap in Completions	Use Remaining Quantity in Move
Disassembly Numbering Sequence: Vendor Shipment Numbering Sequence:	AMDISASSY - Disassemble (P AMVSHIP - Vendor Shipment P	0 0		Post Summary on Updating GL Hold Documents on Entry	✓ Use Default Order Type □ Request Location for Each Item in Materials
SCHEDULING	00.00	-		Validate Document Totals on Entry Default User Employee ID	Request Location for Each Item in Move/Labor Use Explicit Line Confirmation
- Doldar more find.	Use Order Start Date for MRP			Restrict Clock Entry to Current User	✓ Default Warehouse from User Profile
	Use Fixed Manufacturing Times		VENDOR SHIPMENT SETTINGS	✓ Hold Shipments on Entry	✓ Use Default Auto-Generated Lot/Serial Nbr. ✓ Use Default Expiration Date
	Tool Scheduling Ilse Shift Crew Size			□ Validate Shipment Total on Confirmation	
Fixed Mfg Calendar ID:	EST - Eastern Time Zone P	0			
Fixed Mfg Units: Block Size:	Days * 00:30 *				

Figure: The Use Shift Crew Size check box on the Production Preferences form

If the check box is cleared, the system uses the same scheduling algorithm as it did in the previous versions of Acumatica ERP Manufacturing Edition.

Specifying the Crew Size and Efficiency for a Work Center

To make the system consider crew size and efficiency during scheduling of operations in a work center, on the *Work Centers* (AM207000) form, a planning manager selects *Crew Size* in the **Basis for Capacity** box and then specifies

the crew size and efficiency percent for each shift of a work center in the **Crew Size** and **Efficiency** columns, respectively, on the **Shift Info** tab. (See the following screenshot.)

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	De	scrip	otion:					As	sem	oly							[Basis for Capaci	ty:		Crew S	Size		•	
								Z A	ctive)							1	Scrap Action Def	ault		No Act	ion		•	
									Outsi	de Proc	ess										Back	flush	Materials		
	* Wa	areh	ouse:					W	HOLI	ESALE	- Wh	olesa	le Wa	arehou	lse 🔎	D					Z Back	flush	Labor		
	SHI	FT II	NFO	(OVER	RHE	AD	MA	CHIN	IES	W	HERE	USE	ED	SU	BSTI	ITU	TE WORK CENT	ERS						
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2	0		* Shif	t		Γ	Crev	w Size		Efficie	ency	*Cal	endar	r ID	Diff	Туре	•	Shift I	Diff	*Labor Code					
>	0		0001				2.00	0000		0.8000	000	CAL	.1		An	nount		0.	00	DIRLAB					
	0		0002	2		Т	1.00	0000		1.0000	000	CAL	.3		An	nount		1.	00	DIRLAB					

Figure: The Shift Info tab on the Work Centers form

If any adjustments are required in the duration of the operations, the planning manager can correct the crew size, efficiency, or both on the *Work Centers* form and then reschedule the operations by using the *Rough Cut Planning* (AM501000) form.

Calculating the Duration of an Operation

The following formula is now used for calculating the duration of an operation:

QtP * (RT / (RU * C))

Parameters of the formula are the following:

- *QtP* is the quantity to produce, as specified in a production order.
- *RT* is the run time specified on the *Bill of Material* (AM208000) form for the bill of material used to produce the item included in the production order.
- RU is the number of run units specified on the Bill of Material form for the bill of material.
- C is the capacity of a work center assigned to the operation, which is calculated as follows: Crew Size * Efficiency.

For example, suppose that the operation of sticking labels to jam jars is performed in the *WC10* work center, and the throughput of the operation is 10 jars per hour (run time is 1 hour, and run units are 10). Further suppose that one employee, Martha, works in the *WC10* work center with 100% efficiency. If a production order for 20 jars has been created in the system, Martha will be able to process this number of jars in 2 hours.

Then suppose that Martha has been moved to another operation, and a new employee, Kim, has started to stick labels. Because Kim is not yet familiar with this operation, her efficiency is lower than Martha's. To adjust the time required for sticking labels in the operation schedule, a planning manager sets the efficiency to 80%. With this setting, the sticking operation for the production order with 20 jars is expected to take 2.5 hours.

Also, suppose that the work center where the packing operation takes place (which goes after the sticking operation) is idle, so to reduce the idle time, the planning manager decides to involve a second employee, Ben, in

sticking labels in the *WC10* work center. Because both employees are new to the sticking operation, their efficiency will still be set to 80%. The sticking operation for 20 jars will now take 1.25 hours.

Viewing the Work Center Schedule by Crew

A planning manager may want to monitor the number of employees involved in production during a working day. To do this, the manager specifies the standard number of crew members per shift in the newly added **Crew Size** column on the *Shifts* (AM205000) form, which is shown in the following screenshot.

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	0	D	* Shift	Description	* Diff Type	Shift Diff	Crew Size	
>	0		0001	Shift 1, day	Amount	0.00	8.000000	
	0		0002	vShift 2, night	Amount	1.00	4.000000	
	0		0003	Shift 3, graveyard	Amount	2.00	4.000000	
	0		0004	Holiday	Amount	2.00	4.000000	
	0		0005	Shift Overtime	Rate	1.50	2.000000	
							< <	\rightarrow \rightarrow

Figure: The Crew Size column on the Shifts form

With the crew sizes specified, the manager can then open the new *Work Center Crew Schedule* (AM405100) form (shown in the following screenshot) and make sure that the number of employees involved in operations in different work centers during a shift does not exceed the standard crew size. By default, the table on the form displays only the scheduled operations where the sum of the crew size for the operations scheduled during the same time block exceeds the shift crew size. You can view the exceeding number of employees in the **Crew Size Shortage** column. If you want to view all scheduled operations you select the **Show All** check box in the Selection area.

Work Center Crew Schedule

```
CUSTOMIZATION TOOLS -
```

Work Center:			Q I	From Date:	2/16/2021	- Show	v All				
Shift:			, o	To Date:	3/18/2021	•					
\circ + ×	⊢ X										
Work Center	Shift	Scheduled Blocks	Schedule Date	Start Time	End Time	Crew Size	Shift Crew Size	Crew Size Shortage	Order Type	Production Nbr	Operation ID
<u>WC10</u>	<u>0001</u>	2	<u>2/16/2021</u>	9:00 AM	10:00 AM	1.000000	2.000000	1.000000	<u>R0</u>	AM000005	<u>0010</u>
<u>WC100</u>	<u>0001</u>	2	<u>2/16/2021</u>	9:00 AM	10:00 AM	1.000000	2.000000	1.000000	<u>R0</u>	AM000017	0020
<u>WC40</u>	<u>0001</u>	18	<u>2/16/2021</u>	9:00 AM	6:00 PM	1.000000	2.000000	2.000000	<u>R0</u>	AM000004	<u>0010</u>
<u>WC10</u>	<u>0001</u>	1	<u>2/16/2021</u>	10:00 AM	10:30 AM	1.000000	2.000000	1.000000	<u>R0</u>	<u>AM000007</u>	<u>0010</u>
<u>WC100</u>	<u>0001</u>	5	<u>2/16/2021</u>	10:00 AM	12:30 PM	1.000000	2.000000	1.000000	<u>R0</u>	AM000005	0020
<u>WC10</u>	<u>0001</u>	1	<u>2/16/2021</u>	10:30 AM	11:00 AM	1.000000	2.000000	1.000000	<u>R0</u>	<u>AM000009</u>	<u>0010</u>
<u>WC10</u>	<u>0001</u>	8	<u>2/16/2021</u>	11:00 AM	3:00 PM	1.000000	2.000000	1.000000	<u>R0</u>	AM000010	<u>0010</u>
<u>WC100</u>	<u>0001</u>	2	<u>2/16/2021</u>	12:30 PM	1:30 PM	1.000000	2.000000	1.000000	<u>R0</u>	<u>AM000007</u>	0020
<u>WC100</u>	<u>0001</u>	2	<u>2/16/2021</u>	1:30 PM	2:30 PM	1.000000	2.000000	1.000000	<u>R0</u>	<u>AM000009</u>	0020
<u>WC100</u>	<u>0001</u>	3	<u>2/16/2021</u>	2:30 PM	4:00 PM	1.000000	2.000000	2.000000	<u>R0</u>	AM000017	0020
<u>WC10</u>	<u>0001</u>	2	<u>2/16/2021</u>	3:00 PM	4:00 PM	1.000000	2.000000	2.000000	<u>R0</u>	AM000012	<u>0010</u>
<u>WC30</u>	<u>0001</u>	6	<u>2/16/2021</u>	3:00 PM	6:00 PM	1.000000	2.000000	2.000000	<u>R0</u>	AM000010	0020
WC10	<u>0001</u>	4	<u>2/16/2021</u>	4:00 PM	6:00 PM	1.000000	2.000000	1.000000	RO	AM000016	0010

Figure: The Work Center Crew Schedule form

Additional Information

For detailed information about work centers, see Work Centers: General Information.

For more information about work center capacity, see *Defining Capacity*.

Manufacturing: New Workflow in Engineering Change Requests, Engineering Change Orders, and Vendor Shipments

In Acumatica ERP 2021 R1, the processing of engineering change requests, engineering change orders, and vendor shipments has been redesigned to use the new workflow engine.

The processes that are performed by using the *Engineering Change Request* (AM210000), *Engineering Change Order* (AM215000), or *Vendor Shipments* (AM310000) forms work as they did in the previous versions. The UI on these forms has been enhanced to support the functionality of the new workflow engine.

Because the implementation of the new workflow engine entails changes to data access classes (DACs) and business logic, it may affect custom generic inquiries, customization projects, import and export scenarios, and API integrations. For the complete list of changes, see *Release Notes for Developers*.

UI Enhancements

On the *Engineering Change Request* (AM210000) and *Engineering Change Order* (AM215000) forms, the **Hold** check box has been removed and replaced with the **Hold** button and action, which can be selected on the form toolbar.

On the *Vendor Shipments* (AM310000) form, the **Hold** check box has been removed and replaced with the **Remove Hold** and **Hold** buttons and actions, which can be selected from the form toolbar.

On these forms, buttons representing the actions that are most relevant to the current status of the document opened on the form are displayed directly on the form toolbar.

In the following screenshot, an engineering change request with the *Pending Approval* status on the *Engineering Change Request* form is shown. The **Approve** and **Reject** buttons are displayed on the form toolbar and the corresponding menu command is included on the **Actions** menu.

Manufacturing: New Workflow in Engineering Change Requests, Engineering Change Orders, and Vendor Shipments | 141

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	0		0030		<u>WC10</u>		Assen	nbly		00:01		0.00	0	1:00	0.00	01:00	00:00	00:0	0 🗹	No Actior	Unchan	ged
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																						×.

Figure: Engineering Change Request form

The following tables (one is shown for each form) show the actions that are displayed as buttons on the form toolbar of the form for each document type and status.

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Information in the following tables is relevant for the out-of-the-box installation of the system.

Table: Document Statuses and the Corresponding Actions on the Engineering Change Request form

Status	Action
On Hold	Submit
Pending Approval	 Approve Reject
Approved	Create ECOHold

Table: Document Statuses and the Corresponding Actions on the Engineering Change Order form

Status	Action
On Hold	Submit

Manufacturing: New Workflow in Engineering Change Requests, Engineering Change Orders, and Vendor Shipments | 142

Status	Action				
Pending Approval	 Approve Reject				
Approved	Commit Changes to BOMHold				

Table: Document Statuses and the Corresponding Actions on the Vendor Shipments form

Status	Action
On Hold	Remove Hold
Open	 Hold Confirm Cancel

Automation Changes

If the organization uses automation steps, import scenarios, or export scenarios for the *Engineering Change Request* (AM210000), *Engineering Change Order* (AM215000), or *Vendor Shipments* (AM310000) forms, users that work on customizations will need to redesign the automation of the processes related to the applicable forms by using the new workflow engine. Existing workflows can be customized in the Customization Project Editor (see *Creating Workflows*) or by extending graphs and workflows in the PX.Objects.AM namespace (see *To Define a Workflow from Code*). Also, actions of the new workflows can be used through the contract-based API.

Manufacturing: Other Improvements

In Acumatica ERP Manufacturing Edition 2021 R1, multiple enhancements have been introduced, as described in the following sections.

Enhanced Warehouse Location Settings

In previous versions of Acumatica ERP Manufacturing Edition, to indicate that a warehouse location can be involved in production processes, users selected the **Assembly Allowed** check box in the **Location Table** tab on the *Warehouses* (IN204000) form. This check box was also used to indicate that the warehouse location can be involved in kit assembly transactions.

To streamline the configuration of manufacturing processes, the new **Production Allowed** check box has been implemented on the **Location Table** tab. Users should select the check box in this column for warehouse locations involved in production (see the following screenshot). This column is displayed only if the *Manufacturing* feature is enabled on the *Enable/Disable Features* (CS100000) form. (The **Assembly Allowed** column remains on the **Location Table** tab and is displayed when the *Kit Assembly* feature is enabled on the *Enable/Disable Features* form; users can select the check box for warehouse locations that will be involved in kit assembly transactions.)

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* Warehouse ID: WORKHOUSE P Loc					ion Entry:		Do Not Allow On-t	he-Fly En… ▼						^
* Branch: SWEETEQUIP - Ser P				Avg. E	. Default Returns C Average -									
Reple	nishment Class:		Q	FIFO	O Default Returns C Average -									
		Active												
Descri	iption:	Warehous	e for manufacturing	tems										
LOCATION TABLE TOTES GLACCOUNTS ADDRESS INFORMATION MANUFACTURING														
Receiv	ving Location:		Q	RMA L	ocation:			Use Item Default Location for Picking						
Shipping Location: O Drop				Drop-S	-Ship Location:									
	T													
Location Table														
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80 D	*Location ID	Description	on		Active	Sort Locatio	n Qty. Available	Cost Separately	Sales Allowed	Receipts Allowed	Transfers Allowed	Production Allowed	Pick Priority	Path
> 0 D	MAIN	Main loc	ation		\checkmark		\checkmark			\checkmark	\checkmark		1	1
0 D	MG	Location for storing manufacture		ure	\checkmark		\checkmark			\checkmark	\checkmark		1	1
0 D	MTL	Location for storing materials			\checkmark		\checkmark		\checkmark		\checkmark		1	1
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Figure: The Production Allowed check box on the Warehouses form

For customers who upgrade from the previous versions of Acumatica ERP Manufacturing Edition, the state of the **Production Allowed** check box is inherited from the state of the **Assembly Allowed** check box. For new installations of Acumatica ERP Manufacturing Edition, the **Production Allowed** check box is selected by default for all warehouse locations.

Exclusion of Planning Orders from Rough-Cut Planning

With the new Capable-to-Promise functionality (see *Manufacturing: Capable-to-Promise Functionality*), a large number of planning orders could be created in the system. In Acumatica ERP Manufacturing Edition 2021 R1, the new **Exclude Planning Orders** check box has been added to the Selection area of the *Rough Cut Planning* (AM501000) form, which is shown in the following screenshot. When the check box is selected, all planning orders

CUSTOMIZATION

TOOLS -

become hidden from the list of orders on the form. If a planning manager wants to schedule operations for regular production orders only, the manager selects the check box and then does one of the following:

- Clicks Schedule All to process all production orders displayed in the list
- ٠ Selects the production orders to be processed and clicks **Schedule** on the form toolbar

Rough Cut Planning										CUSTOMIZATION	TOOLS -
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	Release Orders]				
8	0			Qty to Produce	Qty Remaining	UOM	Order Type	Production Nbr	Inventory ID	Description	
>	0			10.00	10.00	EA	RO	AM000002	MGRESVIN	Reservoir Inlet	
	0			15.00	15.00	EA	RO	AM000003	MGPCB	Printed Circuit Board	
	0			100.00	100.00	EA	RO	AM000004	MGBASE	Base Unit	
	0			10.00	10.00	EA	RO	<u>AM000005</u>	AMKEURIG	Keurig Model 450	
	0			2.00	0.00	EA	RO	<u>AM000006</u>	AMCTOBAT	Custom Wooden Bat	
	0			3.00	3.00	EA	RO	<u>AM000007</u>	AMKEURIG	Keurig Model 450	
	0			1.00	1.00	EA	RO	<u>AM000008</u>	AMTOOLOSP	Sterilized Scalpel	
	0			4.00	4.00	EA	RO	<u>AM000009</u>	AMKEURIG	Keurig Model 450	
	0			30.00	30.00	EA	RO	<u>AM000010</u>	MGPCB	Printed Circuit Board	
	0			1.00	1.00	EA	RO	<u>AM000011</u>	MGBASE	Base Unit	
	0			10.00	10.00	EA	RO	<u>AM000012</u>	MGRESVIN	Reservoir Inlet	
	0			10.00	10.00	EA	RO	<u>AM000013</u>	MGBASE	Base Unit	
	0			10.00	0.00	EA	RO	<u>AM000015</u>	MGBASE	Base Unit	
	0			10.00	10.00	EA	RO	<u>AM000016</u>	MGPCB	Printed Circuit Board	
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										< <	> >

Figure: The Exclude Planning Orders check box on the Rough Cut Planning form

Changes in Manufacturing-Related Replenishment Settings on the Item Warehouse Details Form

On the Item Warehouse Details (IN204500) form, the following elements have been removed from the Replenishments section of the Manufacturing tab: the Source box, Override check box, and Replenishment Warehouse box.

Users can now view and specify the replenishment source and replenishment warehouse to be used in manufacturing-related processes on the **Replenishment** tab even when the *Inventory Replenishment* feature is disabled on the Enable/Disable Features (CS100000) form (see the following screenshot).
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E v + ū	<u>□ - </u>	
* Inventory ID:	MGWIDGET - Assembled widget $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	^
* Warehouse:	WHOLESALE - Wholesale Warehouse P	
Status:	Active -	
	Override Product Manager	
Product Workgroup:		
Product Manager:	0	
GENERAL REPLEN	ISHMENT PRICE/COST MANUFACTURING	
REPLENISHMENT SETTI	NGS	
	Override Replenishment Settings	
Replenishment Source:	Manufacturing	
Replenishment Wareho.		

Figure: The Replenishment tab on the Item Warehouse Details form

Renamed Allocations Buttons, Tabs, and Dialog Boxes

The following changes have been made to multiple manufacturing-related forms:

- The Allocations button has been renamed to Line Details on the following forms:
 - Approve Clock Entries (AM516000)
 - Clock Entry (AM315000)
 - Labor (AM301000)
 - Materials (AM300000)
 - Move (AM302000)
 - Production Order Details (AM209000)
 - Vendor Shipments (AM310000)
- The **Allocations** dialog box, which opened when a user clicked the **Allocations** button, has been renamed to **Line Details** (shown in the following screenshot).

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		entory ID	Description		Qty Requ	MOU* Deni	Unit Cos	t Backflush	Warehouse Överride	*Warehouse	Location
		RESVINLT	Reservoir Inl	et	1	.00 EA	159.75			WHOLESALE	-
>		PCB	Printed Circu	iit Board	1	.00 EA	86.17			WHOLESALE	
1		FILTER	Internal Purif	ying Filter	1	.00 EA	30.00			WHOLESALE	
	D MG	H20RESV	Water Reser	voir	1	.00 EA	8.00			WHOLESALE	-

Figure: Line Details dialog box on the Production Order Details form

• The **Allocations** tab on the *Production Order Maintenance* (AM201500) and *Disassembly* (AM301500) forms has been renamed to **Line Details** (see the following screenshot of the *Production Order Maintenance* form).

Production Order Ma RO AM000006	aintenance 5 - Custom V	Vooden	Bat	🗅 ио	TES ACT	IVITIES	FILES NO	TIFICATIONS	CUSTOMIZ	ATION	TOOLS -
	∽ +	Ū Ó)• K	< >	>I A	ACTIONS -	INQUIRI	ES • REPO	ORTS -		
* Order Type: * Production Nbr: Inventory ID: Warehouse: Location: Description:	RO - Regular (AM000006 - C AMCTOBAT - (WHOLESALE R1S1 - Row 1 Custom Woode	Drders ustom Woo Custom Wo - Wholesale Shelf 1 en Bat	den Bat oden Bat e Warehous	P Or St Or St O Pr O	der Date: atus: oduct Workgr oduct Manag	roup:	8/12/2020 Completed	Hold			^
Unassigned Qty.: Quantity to Genera	ate: → X	0.00 0.00	Start	Lot/Serial Numb	er: GENEF	RATE		J			
E Location Lot/	Serial Nbr.		UOM	Quantity	y Expiration						
> R1S1			EA	0.00							
									K	<	> >

Figure: The Line Details tab on the Production Order Maintenance form

Mobile: Using the OpenID Connect Protocol

The Acumatica mobile app connected to an instance of Acumatica ERP 2021 R1 supports the OpenID Connect protocol. If the authentication using the OpenID Connect protocol is configured for the instance, users can sign in to the Acumatica mobile app by using their credentials from other systems.

Mobile: Scanning a Business Card on the Mobile App

In Acumatica ERP 2021 R1 users can now scan business cards by using the Acumatica mobile app to simplify the process of creating records on the *Contacts* or *Leads* screen. When a user takes a photo of a business card from this screen, the system analyzes the photo, recognizes values on the photo, and maps them to fields on the *Contacts* or *Leads* screen. If the system maps any of the fields to values in the photo incorrectly, the user can correct the mapping.

For users to be able to use this functionality, both of the following conditions must be met:

- A license that includes the *Image Recognition for Business Cards* feature and service keys has been obtained from Acumatica and applied in the system.
- The *Image Recognition for Business Cards* feature should be enabled on the *Enable/Disable Features* (CS100000) form.

If a license that does not meet these conditions is applied or the *Business Card Recognition Service* feature is not enabled, users can still create a business card from a photo. However, in this case, the recognition process is not performed, and the elements of the created contact or lead contain empty or default values instead of recognized and mapped values.

Scanning a Business Card

To scan a business card into the Acumatica mobile app, a user should do the following:

- 1. Sign in to the Acumatica mobile app.
- 2. On the main menu, open the Contacts or Leads screen.
- 3. At the bottom right corner of the screen, tap + > Capture Business Card, as shown in the following screenshot.



Figure: The Capture Business Card button



If the user taps + > **Insert** and taps the camera icon on the *Contacts* or *Leads* screen, the image will be attached without the recognition process being performed.

- 4. In the camera screen that opens, take a photo of the business card.
- 5. In the photo editor, which opens, tap the check mark, as shown in the first of the following screenshots.

The system analyzes the text of the photo. The process may take several seconds. A user can skip the recognition step by tapping **Skip Recognition**, as shown in the second screenshot below.

The app displays the analyzed photo with the values and mapped fields highlighted, as shown in the third screenshot below



Figure: Scanning a business card

6. If the mapping was performed correctly, click the check mark.

The field values the system recognizes are filled in on the Contact or Lead screen, as shown in the following screenshot. The user can correct the values manually.

5 A B	15:42	:4 🗢 🗢 🕲
× Contac	ct Summary	0. 🗸
Contact I	n William H. Gates	
SUMMARY	ACTIVITIES	OTHER
Eirst Námé		
William H.		
Last Name +		
Gates		
Job Trele		
Businesit Acolumi		q
Gompany Naron		
MICROSOFT		
Type-	Phone #	
Business + 1		.c
Type	Promo Z	
Cell •		6
\bigtriangledown	0	

Figure: Filling in values

If the mapping was performed incorrectly, the user can correct the mapping.

Additional Information

For more details on how to scan expense receipts, see *Mobile: Scanning Expense Receipts*.

For more details on how to create a lead with capture of a business card, see *Leads: Business Card Recognition* and *Leads: To Create a Lead Through Business Card Recognition*.

For more details on how to create a contact with capture of a business card, see *Contacts: Business Card Recognition* and *Contacts: To Create a Contact Through Business Card Recognition*.

Order Management: Cross-Company Sales

In Acumatica ERP 2021 R1, the ability to process sales and purchase orders between companies or branches in the same tenant has been delivered.

The cross-company sales functionality is available in the system if the *Inter-Branch Transactions* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

All cross-company documents are created one to one. That is, for one cross-company purchase order, only one sales order can be generated. For one shipment, only one purchase receipt can be generated. The functionality is available for purchase orders of the *Normal* type.

The Cross-Company Sale Process

Suppose that the Head Office (*MHEAD*) of the Muffins & Cakes company regularly buys apple and orange jam for muffin toppings from the SweetLife Head Office and Whole Center (*HEADOFFICE*) of SweetLife Fruits & Jams. To allow the automatic creation of sales documents by SweetLife's sales managers, in Acumatica ERP, the *MHEAD* branch has been extended to a customer and the *HEADOFFICE* branch has been extended to a vendor. The following example shows the general steps that users perform while processing a cross-company sale:

1. On the *Purchase Orders* (PO301000) form, the procurement manager of the purchasing company, *MHEAD*, enters a purchase order of the *Normal* type and specifies the selling company, *HEADOFFICE*, as the vendor in the purchase order.

Branch	Inventory ID	Warehouse	Quantity	Unit Cost
MHEAD	APJAM96	WHOLESALE	10	25
MHEAD	ORJAM96	WHOLESALE	10	19

2. On the **Details** tab, the procurement manager adds two rows with the following settings.

3. The procurement manager saves the purchase order and clicks the **Remove Hold** button on the form toolbar.

The system assigns the *Open* status to the purchase order and makes the **Generate Sales Order** action available on the **Actions** menu. Also, an intercompany sales order can be generated for the purchase order on the *Generate Intercompany Sales Orders* (S0504000) mass-processing form.

4. A sales manager of the HEADOFFICE branch initiates the generation of a sales order for the purchase order on the Generate Intercompany Sales Orders form. (Alternatively, Actions > Generate Sales Order can be clicked on the form toolbar of the Purchase Orders form, or a schedule can be created on the Generate Intercompany Sales Orders form.)

On the *Sales Orders* (SO301000) form, the system generates a sales order related to the initial purchase order with the *Open* status for the *HEADOFFICE* company and automatically copies the relevant settings and the detail lines of the purchase order. In the sales order, the *MHEAD* company is specified as a customer.

On the Sales Orders form, the system also does the following in the sales order:

- Copies the purchase order number to the Customer Order Nbr. box in the Summary area.
- Inserts the link to the purchase order in the **Related Order Nbr.** box on the **Shipping** tab.

On the *Purchase Orders* form, the system does the following in the purchase order from which the sales order originated:

- Copies the number of the sales order to the Vendor Ref. box in the Summary area.
- Inserts the link to the sales order in the **Related Order Nbr.** box on the **Other** tab.

- 5. The sales manager of the *HEADOFFICE* company verifies that all the data has been inserted correctly, makes changes if necessary, and saves the sales order.
- 6. On the *Shipments* (SO302000) form, a worker of the *WHOLESALE* warehouse of the *HEADOFFICE* company creates a shipment for the sales order.

The system inserts the shipment details in the sales order and assigns the sales order the Shipping status.

- 7. The worker confirms the shipment, and the system does the following:
 - Makes the Generate PO Receipt action available on the Actions menu of the Shipments form
 - Displays the shipment on the *Generate Intercompany Purchase Receipts* (PO504000) mass-processing form
- A warehouse worker of the MHEAD company generates a purchase receipt for the shipment on the Generate Intercompany Purchase Receipts form. (Alternatively, Actions > Generate PO Receipt can be clicked on the form toolbar of the Shipments form, or a schedule can be created for the Generate Intercompany Purchase Receipts form.)

The system creates a purchase receipt on the *Purchase Receipts* (PO302000) form that contains the relevant settings and detail rows copied from the shipment.

The system also does the following on the specified forms:

- On the *Purchase Receipts* form, inserts the shipment link in the **Related Shipment** box on the **Other** tab
- On the *Shipments* form, inserts the link to the purchase receipt in the **Related PO Receipt Nbr.** box on the **Shipping** tab
- On the *Purchase Orders* (PO301000) form, adds the details of the purchase receipt to the **PO History** tab
- 9. An accountant of the *HEADOFFICE* company prepares the SO invoice for the shipment and releases the invoice on the *Invoices* (SO303000) form. The system assigns the *Open* status to the invoice.

The AR invoice becomes available on the Generate Intercompany Documents (AP503500) form.

10. From the open AR invoice, an accountant of the *MHEAD* company generates the related AP bill on the *Generate Intercompany Documents* form. (Alternatively, **Actions > Generate AP Document** can be clicked on the form toolbar of the *Invoices and Memos* (AR301000) form, or a schedule can be created for the mass-processing form.

In the generated AP bill, the lines are linked to the related purchase order and receipt. The system also adds the details of the generated AP bill on the **Billing History** tab of the *Purchase Receipts* form for the related receipt.

The accountants then process the financial documents in the system.

The Cross-Company Return Process

The following example shows the general steps that users of these same companies perform while processing a cross-company return:

- 1. On the *Purchase Receipts* (PO302000) form, a procurement manager of the *MHEAD* company creates a purchase return for *HEADOFFICE* company and releases it.
- A sales manager of the HEADOFFICE company initiates the generation of a sales return for the purchase return on the Generate Intercompany Sales Orders (SO504000) form. (Alternatively, Actions > Generate Sales Return can be clicked on the form toolbar of the Purchase Receipts form, or a schedule can be created for the Generate Intercompany Sales Orders form).
- When the returned items are received, the warehouse worker of the HEADOFFICE company clicks Actions > Create Receipt on the Sales Orders form, and the system generates a shipment with the Receipt operation and the Open status on the Shipments (SO302000) form.
- 4. The worker confirms the shipment, which is then assigned the *Confirmed* status.

For return orders with replacement, a replacement for the returned items can be added to the order on the *Sales Orders* form. When the shipment with the *Issue* operation is created and confirmed for these items,

the warehouse worker of the *MHEAD* company creates a receipt that is linked to the original purchase order on the *Purchase Orders* (PO301000) form.

- 5. To update the customer's balance in the amount of the returned items, an accountant of the *HEADOFFICE* company prepares and releases an SO invoice of the *Credit Memo* type. When the SO credit memo is released, the system automatically generates a corresponding inventory receipt for the returned items; it also creates and releases an AR credit memo on the *Invoices and Memos* (AR301000) form. In the AR credit memo, the *MHEAD* company is specified as the customer so that an intercompany AP debit adjustment can be created.
- 6. The accountant of the MHEAD company opens the Generate Intercompany Documents (AP503500) form and generates the debit adjustment on the Bills and Adjustments (AP301000) form. The system adds the details of the generated debit adjustment to the Billing History tab of the Purchase Receipts form for the initial purchase return.
- 7. The accountants process the financial documents in the system.

Changes to the Sales Orders Preferences Form

On the *Sales Orders Preferences* (SO101000) form, the **Intercompany Order Settings** section has been added. The new section contains the **Default Type for Intercompany Sales** and **Default Type for Intercompany Returns** boxes, as well as the **Disable Adding Items to Orders** and **Disable Editing Prices and Discounts** check boxes (see the following screenshot). The section is displayed only if the *Inter-Branch Transactions* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

Sales Orders Preferences						
GENERAL SETTINGS REPORTING S	SETTINGS WAREHOUSE MANAGE	ME	NT			
DATA ENTRY SETTINGS		_		POSTING SETTINGS		
Default Sales Order Type:	50	p			Automatically Release IN Documer	ath
Default Transfer Order Type	TR - Transfer	R			Use Shipped-Not-Invoiced Account	
Shipment Numbering Sequence:	SOSHIPMENT - SO Shipment	p	0	Shipped-Not-Invoiced Account		
Picking Worksheet Numbering Sequence	PICKWORKSH - SO Picking Workshe	p	0	INTERCOMPANY ORDER SETTINGS		
	Advanced Availability Validation			Default Type for Intercompany Sales.	SO - Sales Order	p
PRICE SETTINGS		_		Default Type for Intercompany Returns:	RM - RMA Order	Q
Validate Min. Markup	No Validation	•			Disable Adding Items to Orders	
	Use a Price Adjustment Multiplier				Disable Editing Prices and Discour	nts
Ignore Min. Markup Validation for Prices S	Specific To			·		
	Customer					
	Customer Price Class					
	Promotional Prices					
FREIGHT CALCULATION SETTINGS		_				
Freight Allocation on Partial Shipping	Full Amount First Time					
SHIPMENT SETTINGS		_				
Free Item Shipping.	Proportional	-				
	Hold Shipments on Entry					

Figure: The Intercompany Order Settings section

The **Default Type for Intercompany Sales** and the **Default Type for Intercompany Returns** settings determine the default type of the sales orders and return sales orders, which the system generates automatically for intercompany purchase orders and PO returns, respectively.

The **Disable Adding Items to Orders** check box indicates whether the **Add Invoice**, **Add Items**, **Add Matrix Items**, **Add Row**, and **Delete Row** buttons are available on the **Details** tab of the *Sales Orders* (SO301000) form for intercompany sales orders generated from a purchase order on the *Purchase Orders* (PO301000) form and in related invoices on the *Invoices* (SO303000) form. Also, the check box indicates whether the same buttons are available for return orders generated from purchase returns on the *Purchase Receipts* (PO302000) form. When the user selects the check box, the buttons are unavailable.

The **Disable Editing Prices and Discounts** check box indicates whether the users can edit the **Unit Price**, **Manual Price**, **Ext. Price**, **Discount Amount**, **Discount Code**, and **Manual Discount** columns in intercompany sales orders generated from a purchase order on the *Sales Orders* form, and in related invoices on the *Invoices* (SO303000) form.

Also, on the **Discounts** tab of the *Sales Orders* form, the **Add Row** and **Delete Row** buttons are unavailable, and the **Recalculate Prices** button is not available on the form toolbar.

Changes to the Order Types Form

On the *Order Types* (SO201000) form, the **Intercompany Posting Settings** section has been added (see the following screenshot). The section is displayed only if the *Inter-Branch Transactions* feature has been enabled on the *Enable/Disable Features* (CS100000) form.



Figure: The Intercompany Posting Settings section

The **Use Sales Account From** box determines which account is used to record the intercompany sales transactions for sales orders of the order type:

- Inventory Item: The account specified in the inventory item settings is used.
- *Customer Location*: The account specified for the customer location is used.

The **Use COGS Account From** box determines which account is used to record the intercompany inventory transactions:

- Inventory Item: The account specified in the inventory item settings is used.
- Customer: The account specified in the customer settings is used.

Changes to the Purchase Orders Form

On the *Purchase Orders* (PO301000) form, the **Generate Sales Order** action on the **Actions** menu of the form toolbar and the **Intercompany Sale** section on the **Other** tab have been added. The new action and section are displayed only if the *Inter-Branch Transactions* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

The **Generate Sales Order** action (shown in the following screenshot) is available on the *Purchase Orders* (PO301000) form if the vendor specified in the purchase order is a related company or branch extended as vendor. When the user clicks **Actions > Generate Sales Order**, the system creates a sales order in which the current branch is specified as the customer and the lines of the current purchase order are copied.

Purchase Orders Normal 0000	29 - SweetLife Hea	ad Office and Whole	sale Center			D NOTES	ACTIVITIES	FILES CUST	OMIZATION	TOOLS -
÷ = =		D• K K	> > ENTERIPO	RELEIPT	ACTIONS . REPO	ORTS .				
Type Order Nbr Status Date Promised On Description	Normal • 000029 > Open 12/20/2020 12/20/2020 purchase of jams	Vendor HEADO Location MAIN - Owner Currency USO Vendor Ref	FFICE - SweetLife Head Of Primary Location 1 00 • VIEW I HISTORY PREPAYM	Rice al Ø	Hold Email Purchase Ord Complete Order Cancel Order	der PLIANCE				^
0 + 0	x ourse	1200 - OAA OEAS		-cooler AM		VIEWS	O DEMAND	H X 1		
B D Branel	Inventory ID	Line Type	Warehouse	Line Descrip	Create Prepayment	Request	Order Dty.	Qty. On Receipts	Unit Cost	Ext. C
	APJAM96	Goods for IN	WHOLESALE	Apple jam 9	1000000000	ECE	10.00	0.00	25 0000	250
> 0 D MHEAT	ORJAM96	Goods for IN	WHOLESALE	Orange jam	Generate Sales Ord	See CE	10.00	0.00	19,0000	190

Figure: The Generate Sales Order action

The Intercompany Sale section (shown in the following screenshot) contains the following boxes:

- **Related Order Type**: The type of the sales order created for the selected purchase order on the *Sales Orders* (SO301000) form.
- **Related Order Nbr.**: The link to the sales order created for the selected purchase order in the related company. When the user clicks the link, the system opens the document on the *Sales Orders* form.
- **Exclude from Intercompany Processing**: A check box indicating (if selected) that the purchase order will not be processed as an intercompany document. That is, it will not be displayed on the *Generate Intercompany Sales Orders* (SO504000).

Purchase Order Normal 000	s 03	1 - Sv	reetL	ife H	lead	Offic	e and	Who	lesale	Cen	ter				D NOTES	ACTIVITIES
← 23	8	5	+	Ū	1	0 -	к	<	>	>1	ENTER PO REC	EIPT	ACTIONS -	REPORTS -		
Type:		Normal			V	endor:		HEAL	DOFFIC	E - Swe	etLife Head Office ar	0	Line Total	500.00		
Order Nbr.		000031	2	2	L	ocation.		MAIN	I - Prima	ry Loca	tion		Discount Total	0.00		
Status		Open			0	wher							VAT Exempt T.	0.00		
Date		2/26/20	21		V	endor R	et	0000	64				VAT Taxable T	0.00		
Promised On:		2/26/20	21										Tax Total:	0.00		
Description:		purchas	e of jar	ms #2	8								Order Total	500.00		
DETAILS	TÁ	XES	SHIP	PING		VENDO	RINF	ġ 1	PO HIST	ORY	PREPAYMENTS	(CHANGE ORDERS	OTHER	COMPLIANCE	
Branch:			мне	EAD -	Muffi	ns Head	Office	& Who	esa		Unbilled Qua	antity	20	00		
Requisition F	lef.	Nbr									Unbilled Amo	ount:	500	00		
Originating P	01	Nbr.									Unbilled Pre	paym	ent T 0	00		
Workgroup II	5										Unpaid Amo	unt	500	00		
			Do	Not P	nnt			Printed			INTERCOMPA	NY S	SALE	_		
			Do	Not E	mail			Emaile	1		Related Orde	er Typ	so - Sales	Order		
			All	ow AP	Bill B	Before F	Receipt				Related Orde	er Nb	r.: 000064			
			Ap	ply Re	taina	ge							Exclude fr	om Intercompan	y Processing	

Figure: The Intercompany Sale section

Changes to the Sales Orders Form

On the **Shipping** tab of the *Sales Orders* (SO301000) form, the **Intercompany Purchase** section has been added (see the following screenshot). The section is displayed only if the *Inter-Branch Transactions* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

	Muffine	Head	Offi	CA 8. M	/holes		ntor						
← □ □	nunnis	+	Ô		K	<	>	×	PREPARE	INVOIC	E	ACTIONS -	REPORTS -
* Order Type:	SO	Q		Custon	ier:	MHEA	D - Mu	ffins He	ad Office & Wł	holesa a	1	Ordered Qty.:	20.00
Order Nbr.:	000064	Q,		Locatio	n:	MAIN	- Prima	iry Loca	tion			Discount Total:	0.00
Status:	Complete	ed		Contac	t					4	1	VAT Exempt T	0.00
Date:	2/26/202	1		Project		X - No	n-Proje	ect Code).	4	1	VAT Taxable T	0.00
Requested On:	2/26/202	1										Tax Total:	0.00
Customer Ord	000031											Order Total:	500.00
External Refer				Descrip	tion:								
DETAILS TA	AXES	FINAN	CIAL	SHIF	PING	ADDI	RESSE	S S		PAYN S SETTIN	MEN IGS	TS TOTALS	
Ship Via:								Sc	hed. Shipment	t	2/2	6/2021	
		Will C	Call								√ S	hip Separately	
FOB Point:								Sh	ipping Rule:		Ca	ncel Remainder	
Priority:				0				Ca	ncel By:		2/2	6/2021	Canceled
Shipping Terms:								Pre	eferred Wareho	ouse ID:			
Shipping Zone:													
		Resi	dentia	Delivery									
		Satu	day D	elivery)									
		Insur	ance										
		Use	Custo	mer's Ac	count								
INTERCOMPANY	PURCHA	SE					—						
Related Order T	ype:	Norma	1										
Related Order N	Nbr.:	00003											

Figure: The Intercompany Purchase section

The Intercompany Purchase section contains the following elements:

- Related Order Type: The type of the purchase order for which for the sales order has been created.
- **Related Order Nbr.**: The link to the purchase order for which for the sales order has been created. When the user clicks the link, the system opens the document on the *Purchase Orders* (PO301000) form.

Changes to the Shipments Form

Color Orden

On the **Shipping** tab of *Shipments* (SO302000) form, the **Intercompany Purchase** section has been added (see the following screenshot). The section is displayed only if the *Inter-Branch Transactions* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

<u>Shipments</u> 000059 - Muf ← 🛱 🖾	ffins Head	I Office 8 + 💼	& Whole	sale (<	Center	PREPARE INVOICE	JPDA	TE IN	ACTIC	ONS	 REPORTS 	0	
Shipment Nbr.:	000059	Q	Custome	r:	MHEAD - N	luffins Head Office & Wholesa	0	Shippe	ed Quant		20.00		
Туре:	Shipment		Location:		MAIN - Prin	nary Location		Contro	l Quantit	y:	20.00		
Status:	Confirmed		Warehou	se ID:	WHOLESA	LE - Wholesale Warehouse		Shippe	ed Weigh	t:	56.800000		
Operation:	Issue		Workgrou	up:				Shippe	ed Volum	e:	56.800000		
Shipment Date:	12/20/2020		Owner:					Packa	ges:		0		
								Packa	ge Weigh	nt:	0.000000		
Description:													
DETAILS C	RDERS	SHIPPING	PACI	KAGES									
SHIP-TO CONT	АСТ					SHIPPING INFORMATIO	N						
		Override C	ontact										
Company Nam	e:	Auffins Hea	d Office & \	Wholes	ale Center	Ship Via:							
Attention:								Will Ca	all				
Phone 1:						Freight Class:							
Email:						FOB Point:							
SHIP-TO ADDRE	ESS					Shipping Terms:							
		Override A	ddress			Shipping Zone ID:		Deside	ntial Dal				
Address Line 1								Saturd	anual Delive	ivery			
Address Line 2									ustomor's	ery 2 A a a	ount		
City:										5 ACC	ount		
Country:	L	JS - United	States of A	merica		Freight Cost:		Insura	0.00				
State:						Treight Cost.		Overri	de Freigh	t Pric	<u>`a</u>		
Postal Code:						Invoice Freight Price	B	Shinmer	nt	it i fit	,o		
INTERCOMPAN	Y PURCHAS	E				Ereight Price	J	Culture	0.00				
Related PO Re	eceipt Nbr.:	000021				riogitti nee.			0.00				

Figure: The Intercompany Purchase section

The Intercompany Purchase section contains the following elements:

- Related PO Receipt Nbr. The link to the purchase receipt generated for the shipment.
- Exclude from Intercompany Processing: A check box indicating (if selected) that the shipment will not be processed as an intercompany document. That is, it will not be displayed on the *Generate Intercompany Purchase Receipts* (PO504000) and *Intercompany Goods in Transit* (IN402010) forms.

Changes to the Purchase Receipts Form

For intercompany purchase receipts, On the **Other** tab of the *Purchase Receipts* (PO302000) form, the **Intercompany Sale** section has been added (see the following screenshot). The section is displayed only if the *Inter-Branch Transactions* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

Purchase Receip Receipt 000	ots 1021 - Swe	eetLif	e Hea	id Offic	e and	d Who	lesale	e Cen	ter							NOTES
←	n s	+	Ū	0 -	K	<	>	Ы	RELEAS	E A	CTION	IS -	REPO	RTS -		
Туре:	Receipt	•	١	Vendor:		HEAD	OFFICI	E - Swee	etLife Head	Office ar	0	Tota	Qty.:		20.00	
Receipt Nbr.:	000021	Q	*	location		MAIN	- Prima	ry Locat	tion	Q		Unbi	lled Quar	nt	20.00	
Status:	Balanced					Crea	te Bill					Tota	Cost:		440.00	
* Date:	12/20/202	20 -	1	Vendor R	ef.:	00005	9									
* Post Period:	12-2020	Q	١	Workgrou	ib:					Q						
			(Owner:						Q						
DETAILS	ORDERS	PUT	AWAY	HIST	FORY	BILL	ING	LAND	DED COSTS	0	THER	_				
IN Ref. Nbr.:																
* Branch:	MHEAD	- Muffi	ns Heac	Office 🔎	C											
Bill Date:	12/20/2	020														
INTERCOMPA	NY SALE				_											
Related Ship	ment Nbr.:	00005	9													

Figure: The Intercompany Sale section

The **Intercompany Sale** section contains the **Related Shipment Nbr.** box, in which the system inserts the link to the related shipment.

For intercompany purchase returns, the **Intercompany Sale** section on the **Other** tab of the *Purchase Receipts* form contains the following elements:

- Related Order Type: The type of the return order created for the selected purchase receipt on the Sales
 Orders (SO301000) form.
- **Related Order Nbr.**: The link to the return order created for the selected purchase receipt in the related company. When the user clicks the link, the system opens the document on the *Sales Orders* form.
- **Exclude from Intercompany Processing**: A check box indicating (if selected) that the purchase return will not be processed as an intercompany document. That is, it will not be displayed on the *Generate Intercompany Sales Orders* (SO504000) and *Intercompany Returned Goods in Transit* (IN402020) forms.

Also, the **Generate Sales Return** action has been added to the **Actions** menu of the *Purchase Receipts* form (see the following screenshot). The action is displayed only if the *Inter-Branch Transactions* feature has been enabled on the *Enable/Disable Features* form and the vendor specified in the purchase return is a related company or branch extended as vendor. When the user clicks the **Generate Sales Return** action, the system creates an intercompany return order in which the current branch is specified as the customer and the lines of the current purchase return are copied.

	5	+	8	0.	к	<	>	х	ENTER AP BILL	ACTIONS -	REPORTS -	0	
Туре:	Return			Vendor:		HEAD	OFFICE	- Swee	tLife Head Office at	4		0.00	
Receipt Nbr	000025	Q		Location:		MAIN -	Primar	y Locat	ion			0.00	
Status	Released					Creat	e Bill			A		0,00	
Date.	2/27/2021			Cost of In	went	Origina	I Cost f	from Re	ceipt	Apply Assi	griment Rules	0.00	
Post Period	02-2021			Vendor R	ef :					Enter AP E	5161		
				Workgrou	qu					Equil Pure	1141		
				Owner:						Generate S	Sales Return		
DETAILS	ORDERS	PUT	AWAY	HIS	FORY	BILLI	NG	OTH	R				
IN Ref. Nbr.:	000065												
Branch	MILLEAD	Muffir	s Ho	d Office 8									
Bill Date	2/27/202	21											
Din Dioto.	NY SALE												
INTERCOMPA													
Related Orde	я Туре												

Figure: The Generate Sales Return action

New Generate Intercompany Sales Orders Mass-Processing Form

The *Generate Intercompany Sales Orders* (SO504000) form, shown in the following screenshot, has been added for the mass generation of intercompany sales orders based on intercompany purchase orders from the purchasing company.

G	Generate Interco	mpany Sales C	rders								CUSTOMIZATION TO
0	D PROCES	SS PROCESS A	ul 0.	⊨ x 7							
	Purchase Doc Type	Purchase Order	s *	Seling Company			Q				
	Date	2/26/2021 *		Purchasing Compar	ný:		Q				
	Sales Order Type	SO - Sales Orde	Q, N	Copy Project Det	ails to Generate	d Sales Orders					
1	Selling Company	Purchasing Company	Document Type	Document Nbr.	Document Date	Promised Date	Currency	Total Amount	Description	Excluded	Related Order Nbr.
>	HEADOFFICE	MHEAD	Normal	000030	2/26/2021	2/26/2021	USD	250.00	purchase of jams #27	0	
	HEADOFFICE	MHEAD	Normal	000031	2/26/2021	2/26/2021	USD	500.00	purchase of jams #28	11	

Figure: Generate Intercompany Sales Orders form

In the boxes of the Selection area of the form, the user specifies the selection criteria for the documents to be loaded in the table. The user can also manage the generation of sales orders by using the **Copy Project Details to Generated Sales Orders** check box. The check box appears only if the *Projects* feature is enabled on the *Enable/ Disable Features* (CS100000) form. If the user selects the check box, the values of the project from the purchase order will be copied to the created sales order.

In the table, the **Excluded** check box in the purchaser order or return line indicates whether the purchase order or return will be excluded from processing when the user clicks the **Process** or **Process All** on the *Generate Intercompany Sales Orders* form. If the check box is selected, the purchase order or return will not be processed.

New Generate Intercompany Purchase Receipts Mass-Processing Form

The *Generate Intercompany Purchase Receipts* (PO504000) form, shown in the following screenshot, has been added for the mass generation of intercompany purchase receipts based on intercompany shipments from the selling company.

¢	Ber	nera	ate	Intercomp	oany Purchase Red	ceipts					CUSTOMIZA
(5	4	2	PROCESS	PROCESS ALL C		Y				
	Da	tte:			12/20/2020 -	Put Creat	ed Receipts on Hold				
	Pi	ircha	ising	Company	MHEAD - Muffins He ,0						
	Se	illing	Con	npany	Q						
88	0	D	0	Purchasing Company	Selling Company	Shipment Nbr.	Shipment Date	Shipped Quantity	Warehouse ID	Description	Related PO Receipt Nbr.
>	0			MHEAD	HEADOFFICE	000060	12/20/2020	1.00	WHOLESALE		
	8	D	0	MHEAD	HEADOFFICE	000061	12/20/2020	1.00	WHOLESALE		

Figure: Generate Intercompany Purchase Receipts form

In the boxes of the Selection area of the form, the user specifies the selection criteria for the documents to be loaded in the table. The user can also manage the generation of purchase receipts by using the **Put Created Receipts on Hold** check box. If the user selects the check box, the generated purchase receipts will be assigned the *On Hold* status on creation. If the check box is cleared, the generated purchase receipts will be assigned the *Balanced* status on creation.

In the table, the **Excluded** check box in the shipment line indicates whether the shipment will be excluded from processing when the user clicks the **Process** or **Process All** on the *Generate Intercompany Purchase Receipts* form. If the check box is selected, the shipment will not be processed.

New Intercompany Goods in Transit Inquiry Form

The *Intercompany Goods in Transit* (IN402010) inquiry form, shown in the following screenshot, has been added to introduce the ability to search for items that have been issued from warehouse of the selling company but have not arrived at the warehouse of the purchasing company.

Intercompany C ひ の H	Goods in Transit						CUSTOM	ZATION
inventory Item	APPLES - Fresh apples 1 lb ,0	Selling Company	HEAD	OFFICE - SweetLife He ,P				
Shipped Before	2/26/2021 *	Selling Warehouse	e	Q				
	Show Only Overdue Items	Purchasing Comp	any	p				
	Show Only Items Without Receipt	Purchasing Wareh	nouse	م				
Inventory ID	Description	Selling Company	Selling Warehouse	Shipment Nbr.	Shipment Date	In-Transit UOM Oty.	Total Cost	Days in Transit
APPLES	Fresh apples 1 lb	HEADOFFICE	WHOLESAL	E 000059	2/18/2021	10.00 LB	25.00	8

Figure: Intercompany Goods in Transit inquiry form

In the boxes of the Selection area of the inquiry form, the user specifies the selection criteria for the documents to be loaded in the table. The user can also narrow the search results by selecting the **Show Only Overdue Items** and **Show Only Items Without Receipt** check boxes.

If the **Show Only Overdue Items** check box is selected, the system shows only documents for which a value exists in the **Days Overdue** column of the inquiry table. If the check box is cleared, all in-transit items are shown.

If the **Show Only Items Without Receipt** check box is selected, the system shows only items for which purchase receipts have not yet been generated. That is, the shipments that contain these items are not linked to intercompany purchase receipts. If this check box is cleared, all in-transit items are shown.

New Intercompany Returned Goods in Transit Inquiry Form

The *Intercompany Returned Goods in Transit* (IN402020) form, shown in the following screenshot, has been added to introduce the ability to search for items that have been returned from warehouse of the purchasing company but have not arrived at the warehouse of the selling company.

Intercompany R	eturned Goods in Transit							CUSTOMIZ	ATION
ONH	X								
Inventory Item	APPLES - Fresh apples 1 lb . D	Selling Company	HEADOFFIC	E - SweetLife He ,0					
Shipped Before	2/26/2021 *	Seiling Warehouse		Q					
		Purchasing Company		Q.					
		Purchasing Warehous	B)	P					
El Inventory ID	Description	Purchasing Company	Purchasing Warehouse	Return Nbr.	Return Date	In-Transit Qty.	UOM	Total Cost	Days in Transit
APPLES	Fresh apples 1 lb	MHEAD	WHOLESALE	000026	2/10/2020	10.00	LB	25.00	0

Figure: Intercompany Returned Goods in Transit inquiry form

In the boxes of the Selection area of the inquiry form, the user specifies the selection criteria for the documents to be loaded in the table.

Changes to the Customers form

On the **GL Accounts** tab of the *Customers* (AR303000) form, the **COGS Account** box has been added (see the following screenshot). The box is displayed only if the *Inter-Branch Transactions* feature has been enabled on the *Enable/Disable Features* (CS100000) form.

Customers MHEAD - Muffins H	ead Office & Wholesale Ce	enter					DTES FILES	CUSTOMIZATION
< 3 回 ?	+ 🗇 Ö• K	< > >I	VIEW ACCOUNT	ACTIONS -	INQUIRIES . REP	ORTS -		
Customer ID	MHEAD - Muffins Head Office & W	hok 🔎 Ba	ance	0.00				
Customer Status	Active	Pre	payment Balance	0.00				
Customer Class:	DEFAULT - Local Customers	P @ Re	tained Balance	0.00				
GENERAL FINANCE	AL BILLING SHIPPING	LOCATIONS	PAYMENT METHODS	CONTACTS	SALESPERSONS	ATTRIBUTES	ACTIVITIES	GLACCOUNTS
AR Account:	11000 - Accounts Receiv	able ,0						
Sales Account	40000 - Sales Revenue	Q						
Discount Account	53000 - Discount Given	Q						
Freight Account:	51300 - COGS - Freight	Q						
· Cash Discount Account.	52600 - Cash Discount	P						
Prepayment Account:	22100 - Customer Depos	it ,0						
COGS Account	51050 - Accrued COGS	Fixed Overh ,D						
Retainage Receivable A	ccount:	<i>,</i> 0	=0					

Figure: The COGS Account box

In intercompany documents, the system uses the account in the **COGS Account** box as a COGS account for stock items and non-stock items with the **Accrue Cost** check box selected on the **Price/Cost** tab of the *Stock Items* (IN202500) and *Non-Stock Items* (IN202000) forms if the *Customer* option is selected in the **Use COGS Account From** box of the **Intercompany Posting Settings** section for the related order type on the *Order Types* (SO201000) form.

Changes to the Vendors and Vendor Locations Form

On **Purchase Settings** tab of the *Vendors* (AP303000) and *Vendor Locations* (AP303010) forms, the **Warehouse** box in the **Shipping Instructions** section is now branch-specific for the vendors that have been extended from branches or companies—that is, the user can specify a particular warehouse for every branch of the tenant.

Order Management: Dead Stock Detection

In Acumatica ERP 2021 R1, the *Dead Stock* (IN405500) inquiry form has been introduced to provide the ability to detect dead stock items.

Dead Stock Inquiry Form

The *Dead Stock* (IN405500) inquiry form (see the screenshot below) has been added to the **Inquiries** category of the **Inventory** workspace. The inquiry form is available if the *Inventory* feature is enabled on the *Enable/Disable Features* (CS100000) form.

Warehouse	WHOLESALE - Wh	olesale Warehouse ,P	· Select by	Days								1
Itim Class.		Q	In Stock For		30							
Inventory ID		Q	No Sales For									
점 Warehouse	Inventory ID	Description	ŀ	n Stock Qty.	Dead Stock Qty.	Base Unit	In Dead Stock (days)	Last Sale Date	Last Cost	Total Dead Stock Cost	Dead Stock Item Average Cost	Currency
WHOLESALE	APJAM08	Apple jam 8 oz.		199.00	46.00	PIECE	34.43	1/25/2021	0,0000	0.0000	0.0000	USD
WHOLESALE	APJAM32	Apple jam 32 oz		147.00	147.00	PIECE	300.03		0,0000	0.0000	0.0000	USD
WHOLESALE	APPLES	Fresh apples 1 lb		54.00	44.00	LB	39.00	1/28/2021	2.2900	100.7600	2.2900	USD
WHOLESALE	BANANAS	Bananas 1 lb		40.00	40.00	LB	32.00		0.5000	20.0000	0.5000	USD
WHOLESALE	COCONUTS	Coconuts 1 lb		15.00	15.00	LB	32.00		1.0500	15.7500	1.0500	USD
WHOLESALE	LEMJAM96	Lemon jam 96 oz		29.00	6.00	PIECE	55.33		0.0000	0.0000	0.0000	USD
WHOLESALE	LEMONS	Fresh lemons 1 lb		2.00	2.00	LB	121.00	1/29/2021	2.5900	5.1800	2 5900	USD
WHOLESALE	ORANGES	Fresh oranges 1 lb		65.00	65.00	LB	38.00	1/29/2021	1.8500	120.2500	1.8500	USD
WHOLESALE	ORJAM08	Orange jam 8 oz.		42.00	42 00	PIECE	78 62	1/25/2021	0.0000	0.0000	0.0000	USD
WHOLESALE	ORJAM32	Orange jam 32 oz		193.00	55.00	PIECE	38,11		0.0000	0.0000	0.0000	USD
WHOLESALE	ORJAM96	Orange jam 96 oz		93.00	93.00	PIECE	109.52		0.0000	0.0000	0.0000	USD

Figure: The Dead Stock inquiry form

The *Dead Stock* inquiry form shows inventory items in stock that have not been moved—that is, the items that have not been added to sales orders, transfers, IN issues, kit assemblies, and other documents that affect the quantity on hand—during the period of time specified in the Selection area of the form. To calculate the quantity of dead stock items, the system deducts the quantity of items in sales orders (including field service orders and production orders), shipments, and other documents that affect the quantity on hand from the quantity of items that have remained in stock for the specified time period.

In the Selection area, the user can specify the following criteria to narrow the range of inventory items to be shown:

- **Warehouse**: The warehouse in which the items are situated, by its ID. This box is empty by default. The user must make a selection in this box to view the list of items.
- Item Class: The class of the items to be shown.
- Inventory ID: The identifier of the item.
- Selected By: The mode of filtering. The following options are available:
 - By Days: The time period by the number of days for which the items have been in stock.
 - By Date: The time period starting from the specified date.
- In Stock For: The number of days the stock items to be defined as dead stock have been stored in the warehouse. This box appears if the *By Days* option is selected in the **Selected By** box.
- No Sales For: The number of days the stock items to be defined as a dead stock have not been sold. This box appears if the *By Days* option is selected in the **Selected By** box.
- In Stock Since: The date from which the stock items defined as a dead stock have been stored in the warehouse. This box appears if the *By Date* option is selected in the **Selected By** box.
- No Sales Since: The date from which the stock items defined as a dead stock have not been sold. This box appears if the *By Date* option is selected in the **Selected By** box.

The following limitations apply to the stock items that can be listed on the *Dead Stock* inquiry form:

- If the **Cost Separately** check box is selected on the **Locations** tab of the *Warehouses* (IN204000) form for a warehouse, the system calculates the cost of an item for the warehouse, not for the location.
- If a stock item has subitems, the system shows information without subitem details.

Order Management: Improvements in Drop-Ship Processing

In Acumatica ERP 2021 R1, the processing of drop shipments has been significantly improved through the improved functionality related to interconnections between sales orders and drop-ship purchase orders, new actions on the *Purchase Orders* (PO301000) form, and direct drop-ship returns from a customer to the applicable vendor. Also, the *Awaiting Link* status can now be assigned to purchase orders on the *Purchase Orders* (PO301000) form.

Improved Interconnection of Sales Orders and Drop-Ship Purchase Orders

On the *Purchase Orders* (PO301000) form, the following columns (shown in the following screenshot) have been added to the **Details** tab for purchase orders of the *Drop Ship* type:

• Sales Order Nbr.: The number of the sales order that was created for this drop-ship purchase order line. The number is a link the user can click to view the sales order on the Sales Orders (SO301000) form.

The system automatically specifies this number when the user creates a drop-ship purchase for a sales order or a sales order for a drop-ship purchase order.

• Sales Order Line Nbr.: The number of the sales order line to which this purchase order line is linked. This is the number displayed in the Line Nbr. column of the Details tab of the Sales Orders.

The system automatically specifies this number when the user creates a drop-ship purchase for a sales order or a sales order for a drop-ship purchase order.

• **SO Linked**: A check box that indicates whether this line of the drop-ship purchase order has an active link to a line of the sales order. The system selects this check box (and thus considers the link active) when the user creates a drop-ship purchase order for the sales order.

When a line of a drop-ship purchase order is linked to a line of a sales order—that is, the SO Linked check box is selected—the user cannot change the details of this line.

Purchase Orders Drop Ship 00	0034 - Tea Compa	any Syndicate				□ NOTES	ACTIVITIES	FILES	CUSTOMIZAT	ION TOOLS -
• 11 5	∽ + ®	D· K < >	>I ENTER PO	RECEIPT ACTIONS -	REPORTS -					
Туре	Drop Ship +	Vendor: TEACOM	PANY - Tea Company Sy	ndicate J Line Total	1,399.30					~
Order Nbr	000034 ,0	Location: MAIN - Pr	imary Location	Discount Total	0.00					
Status	Open	Owner		VAT Exempt T	0.00					
Date	1/19/2021	Currency USD	1.00 + VIEW	BASE VAT Taxable T	0.00					
Promised On	1/19/2021	Vendor Ref.		Tax Total	0.00					
Description	Drop-ship order #270 -	Tea (boxes)		Order Total	1,399.30					
DETAILS T	AXES SHIPPING	VENDOR INFO PO H	ISTORY PREPAYM	ENTS CHANGE ORDERS	OTHER (OMPLIANCE				
0 + 0	SI AND ITEMS	ADDMATRO(FERS	ADDPROACTION	ADD HUMMETING HID	B. My ET FOLT	н	t x			
🗄 🖗 🗋 Branch	Inventory ID	Line Type	Warehouse	Line Description	Sales Order Nbr		Order Qty.	Sales Order Line Nbr.	Unit Cost	SO Linked
	OFFICE GREENTE	A06 Goods for Drop-	Ship RETAIL	An assorted package of tea	000065		30.00	1	19.9900	হা
B D HEADO	OFFICE BLACKTE	A06 Goods for Drop-	Ship RETAIL	An assorted package of tea	000065		40.00	3	19.9900	171

Figure: New columns on the Details tab of the Purchase Orders form

The View SO Demand button has been removed from the Details tab of the Purchase Orders form.

A drop-ship purchase order can be linked to only one sales order at a time. In the drop-ship purchase order, the type and number of the related sales order are now displayed in the **Sales Order Type** and **Sales Order Nbr.** read-only boxes, respectively, on the of the **Shipping** tab (**Ship To** section) of the *Purchase Orders* form; see the following screenshot. If the sales orders is unlinked from the drop-ship purchase order, the system clears the **Sales Order Type** and **Sales Order Nbr. Order Type** and **Sales Order Nbr.**

Purchase Orders Drop Ship 0000	034 - Tea C	ompa	any Sync	licate									NOTES	ACTIVITIES
← □ □	v +		0.	к	<	>	ы	ENTI	ER PO REC	EIPT	ACTIONS -	REPORTS -		
Туре.	Drop Ship +		Vendor:		TEACO	OMPAN	r - Tea	Compa	iny Syndicate	0	Line Total	1,399.30		
Order Nbr	000034 🔎		Location		MAIN	Primary	Locat	tion			Discount Total	0.00		
Status	Open		Öwner								VAT Exempt T	0.00		
Date	1/19/2021		Currency		USD	1.00	0		VIEW BASE		VAT Taxable T	0.00		
Promised On	1/19/2021		Vendor Re	of."							Tax Total:	0.00		
Description I	Drop-ship order	#270 -	Tea (boxes)							Order Total	1,399.30		
DETAILS TAX	ES SHIP	PING	VENDO	RINFO	P	o Histo	RY	PRE	PAYMENTS	С	HANGE ORDERS	OTHER	COMPLIANCE	
SHIP TO				_		_	SHIP			_			_	
Snipping Destinat	tion Ty Custo	omer					FO	B Point						
Ship To	COF	FEESH	OP - FourSt	tar Coffe	ee&Swe	et.	Shi	ip Via						
Shipping Location	MAIN	- Prim	ary Location	r i										
Sales Order Type	SO													
Sales Order Nbr	0000	65												

Figure: New boxes on the Shipping tab

On the *Sales Orders* (SO301000) form, the following read-only columns (shown in the following screenshot) have been added to the **Details** tab:

- **Drop-Ship PO Nbr.**: The number of the drop-ship purchase order to which this sales order line is linked. The number is a link the user can click to view the sales order on the *Purchase Orders* form. The system inserts this value when a drop-ship purchase order is created for a sales order or when a sales order is generated for a drop-ship purchase order.
- **Drop-Ship PO Line Nbr.**: The number of the drop-ship purchase order line to which this sales order line is linked. This is the number displayed in the **Line Nbr.** column of the **Details** tab of the *Purchase Orders*. The system inserts this value when a drop-ship purchase order is created for a sales order or when a sales order is generated for a drop-ship purchase order.
- **PO Linked**: A check box that indicates whether this line of the sales order has an active link to the line of the drop-ship purchase order. The system automatically selects this check box on creation of a drop-ship purchase order for a sales order or creation of a sales order for a drop-ship purchase order (and thus considers the link active). The link can be active only if the inventory ID, quantity, and UOMs of the corresponding lines in the drop-ship purchase order and sales order are equal.

0 000065 -	FourStar	Coffe	e&Sweets Sho	p					D N	OTES ACTIVITIES	FILES	CUSTOMIZATION
• in =	2	+	е 0 • к	< > >	CREATE SHIP	MENT	HOLD A	CTIONS -	REPORTS	•		
Order Type:	so	Q	Customer:	COFFEESHOP -	FourStar Coffee&Sw	00	Ordered Qty		70.00			
Inder Nbr	000065	P	Location	MAIN - Primary L	ocation	Q	Discount Total		0.00			
status:	Open		Contact			20	VAT Exempt T		0.00			
)ate:	1/19/2021		· Project	X - Non-Project C	Code.	20	VAT Taxable T		0.00			
lequested On	1/19/2021						Tax Total	1	46.38			
Sustomer Ord							Order Total	1,7	95.68			
xternal Refer			Description:	Sales order for de	rop-ship #270							
DETAILS T/ + 0 D *Branch	AXES P	ADD ITI	AL SHIPPING EMS ADD MATH ory ID Fro ite	ADDRESSES RIX ITEMS ee Warehouse m	SHIPMENTS	PAYMEI ETAILS	NTS TOTALS PO LINK	ITEM AVAIL/ Quantity	BILITY (Drop-Ship PO Nbr.	Drop- Ship PO Line Nbr.	PO Linked
DETAILS T/ + 0 - Branch	AXES P ×	ADD ITI	AL SHIPPING EMS ADD MATH ory ID Pri Its NTEA06	ADDRESSES RIX ITEMS	SHIPMENTS	PAYME ETAILS n ackage	NTS TOTALS PO LINK	ITEM AVAILA Quantity 30.00	BILITY H Oty. On Shipments 0.00	E t. Drop-Ship PO Nbr. 000034	Drop- Ship PO Line Nbr. 1	PO Linked

Figure: New columns on the Details tab of the Sales Orders form

A drop-ship purchase order and sales order can be linked only if the inventory ID, quantity, and UOMs in all corresponding lines of the drop-ship purchase order and sales order are equal. A sales order line can be linked to only one purchase order. When a user creates a drop-ship purchase order from a sales order by using the *Create Purchase Orders* (PO505000) form, all line links in the created purchase order and the sales order are active by default.

In Acumatica ERP 2021 R1, the UOM of the stock or non-stock item in the sales order line is now copied to the line of a drop-ship purchase order when the user creates a drop-ship purchase order by using the **Create Purchase Order** action on the *Sales Orders* (SO301000) form. In previous versions, the system inserted a purchase UOM specified for the item on the **General Settings** tab of the *Non-Stock Items* (IN202000) or *Stock Items* (IN202500) form to the drop-ship purchase order line.

A new **Drop Ship** column has been added to the **Add Invoice Details** dialog box on the *Sales Orders* (SO301000) form, as shown in the following screenshot. The read-only check box indicates whether the items in the invoice have been drop-shipped.

Add	Invoice Deta	ils					×
Ty • Re	rpe aference Nbr	Invoice 000098	•	[] Sho	w Non-Stock I	Kits by Components	
0							_
ā ()	Inventory ID	Warehouse	Location	UOM	Quantity	Line Description	Drop Ship
	BLACKTEAO	6 RETAIL	MAIN	PACK	30.00	An assorted package of lea variety (6	
D	FRUITTEA12	2 RETAIL	MAIN	PACK	30.00	An assorted package of tea variety (12	
n	GREENTEAC	06 RETAIL	MAIN	PACK	30.00	An assorted package of tea variety (6	
						(c 2	5 51
						ADD ADD & CLOSE	CANCE

/i/

Figure: The Drop Ship check box in the Add Invoice Details dialog box

On the **Details** tab of the *Sales Orders* form, the new *Blanket for Drop-Ship* and *Blanket for Normal* options have been added to the **PO Source** column (see the following screenshot).

Sales Orders SO - FourSt	ar Coffee	&Sw	eets	Shop													S A	CTIVITIES	FILES	CUSTO	MIZATION	TOOLS -
+ 5 B	0	+		0.	1	< <	> >	1 0	REATE	SHIPME	NT	HOLD	ACTIC	NS +	REPO	ORTS .						
Onter Type	50	,ġ		· Customer		COFFE	ESHOP .	FourSt	ar Coffee8	Sw .D	0	Orderiora C	ay.	20	00.0							~
Order Nbr	<new></new>	p		+ Location		MAIN -	Primary L	ocation		,o		Discount	atisi	(00.0							
Status	Open			Contect						,o	0	VAT Exem	pí T	(00.0							
+ Date	3/1/2021			· Project		X - Nor	Project C	ode		,o	2	VAT Taxab	No T	(00,00							
* Requested On	3/1/2021											Tax Tellar		.50	0.57							
Customer Ord												Order Tota	6	620	0.37							
External Refer				Description	20	drop sh	ipment of	teas											-			
	TAKES	FINAM	ICIAL	SHIPP	MA	ADDIN	E'99E'S	500	-MENTS		MEN ILS	PÔ LINK	ALS	AVAILAB	HLITY	н	X	t	*			
count Disc. nount P	Unit Sylow	Amos	unt	Unbilli Amsu	ed ini	*Requester On	Ship Or		Shipping	Rule		Unda Thre	rship shald (%)	Gvers Thresh	hip C old (S)	omplete	Mark for PO	PO Sou	irce	Dro	s-Ship PO No	r. Drop- Statu
0.00 23.9	900	239.5	10	228.9	io :	3/1/2021	101.20	29	Ship Co	mpiete		10	0.00	100	00	11	P	Purcha	ase to Orde	r -		
0.00 32.9	900	329 5	0	329.9	0	3/1/2021	3/1/20	21	Ship Co	mplete		10	0,00	100	00	101	R	Drop-S	ihip			
																		Blanke	L for Drop S ise to Order	ship		
																		Blanke	t for Norma			
4.1																		-				

Figure: Blanket for Drop-Ship and Blanket for Normal options

If the *Blanket for Normal* option is selected in the **PO Source** column of a sales order line, in the **Purchasing Details** dialog box which opens if a user clicks the line and then clicks the **PO Link** button on the table toolbar, the system makes available for selection purchase orders of the *Blanket* type for processing a purchase to order.

If the *Blanket for Drop-Ship* option is selected in the **PO Source** column of a sales order line, in the **Purchasing Details** dialog box, the system makes available for selection purchase orders of the *Blanket* type with the *Open* status in which the quantity of the purchase order line is greater than or equal to the quantity of the sales order line.

When the user clicks the **Create Purchase Orders** action in a sales order that contains lines with the *Blanket for Drop-Ship* option selected in the **PO Source** column, the lines with the *Blanket for Drop-Ship* option selected appear on the *Create Purchase Orders* (PO505000) form only if they are linked to a purchase order of the *Blanket* type.

The Awaiting Link Status

The new Awaiting Link status is now available for drop-ship purchase orders on the Purchase Orders (PO301000) form (see the screenshot below). The system automatically assigns the Awaiting Link status to a drop-ship purchase order in which at least one line with a stock or non-stock item is not linked to a corresponding line of a sales order or at least one line has an inactive link; the system assigns the status when the user removes the On Hold status (or the Pending Approval status, if approval is required).

When all unlinked lines in the drop-ship purchase order with the *Awaiting Link* status have been linked to lines of a sales order, the drop-ship purchase order will be assigned the *Open* status automatically. If at least one line with a stock or non-stock item in the drop-ship purchase order with the *Open* status becomes unlinked or the link is deactivated, the drop-ship purchase order will again be automatically assigned the *Awaiting Link* status.

Purchase Orders Drop Ship 000	0034 - Tea Co の +	ompany Syndica	ate < >	ы	ACTIONS -	REP	DRTS -		NOTES.	ACTIVITIES	FILES	CUSTOMIZAT	ION TOOLS
Туре	Drop Ship +	Vendor	TEACOMPA	NY - Tea C	Company Synd	icate d	Line Total	1,399.30					
Order Nbr	000034 ,0	Location	MAIN - Prim	ary Locatio	on		Discount Total	0.00					
Status.	Awaiting Link	Owner:					VAT Exempt T.	0.00					
Date	1/19/2021	Currency	USD 1	.00	· VIEW BA	SE	VAT Taxable T	0.00					
Promised On:	1/19/2021	Vendor Ref.					Tax Total	0.00					
Description	Drop-ship order	#270 - Tea (boxes)					Order Total	1,399.30					
• DETAILS	TAXES SHI	PPING VENDOR	INFO POH	ISTORY	PREPAYM	ENTS	CHANGE ORDERS	OTHER	COMPLIAN	GE			
0 + 0	× 100	TENS NOT HAT	not mus.						H	x t			
B 🖗 🗋 Branch	Inven	tory ID Lin	не Туре	Wareh	nouse	Line Des	cription	Sales Order Nbr.		Order Oty.	Sales Order Line Nbr.	Unit Cost	SO Linked
B D HEADO	FFICE GRE	ENTEA06 G	oods for Drop-Sh	P RETA	AIL	An asso	rted package of tea	000065		30.00		19,9900	P
> 0 D HEADO	FFICE BLA	CKTEA06 G	oods for Drop-Sh	P RETA	AIL	An asso	rted package of tea.	000065		40.00	3	19.9900	

Figure: A drop-ship purchase order with the Awaiting Link status

For a drop-ship purchase order with the *Awaiting Link* status, the **Enter PO Receipt** action is not available on the form toolbar of the *Purchase Orders* form. If a drop-ship purchase order with the *Open* status has an unreleased purchase receipt and one of the purchase order lines included in this purchase receipt is unlinked from a sales order or has an inactive link, the drop-ship purchase order will be assigned the *Awaiting Link* status, and the release of the purchase receipt will fail.

In the **Purchasing Details** dialog box, which a user opens by selecting a sales order line on **Details** tab of the *Sales Orders* (SO301000) form and clicking **PO Link** to link a purchase order to the sales order line, the system now displays only drop-ship purchase orders with the *Awaiting Link* status that have a line with the same item and item quantity as the selected line of the sales order has. The **Purchasing Details** dialog box can display drop-ship purchase orders with a status different from *Awaiting Link* only if these drop-ship purchase orders are created with the *On Hold* status from a sales order.

New Drop-Ship PO Lines Awaiting Link Inquiry

The new *Drop-Ship PO Lines Awaiting Link* (PO401000) inquiry, shown in the following screenshot, has been added to introduce the ability to search for drop-ship purchase order lines that do not have a link to lines of a sales order or that have an inactive link. The new inquiry has been added to the **Inquiries** category of the **Purchases** workspace.

D	op	Ship PO Li	nes Awaiting Link						CUSTOMIZATION - TOC
0		*/ /** 1	5						
	Vend	lor.		Q.	Start Date.	3/1/2021			
	inve	ntory ID:		٩.	End Date:	3/31/2021			
Dr	sg co	lamn hender her	e to configure filter					Y	s
	0) Type	Order Nbr.	Line Nbr.	Status	Vendor	Vendor Rame	Inventory ID	Description
2		Drop Ship	000035	1	On Hold	TEACOMPANY	Tea Company Syndicate	BLACKTEA06	An assorted package of tea variety
1	9 0	Drop Ship	000035	2	On Hold	TEACOMPANY	Tea Company Syndicate	ERUITTEA12	An assorted package of tea variety

Figure: The Drop-Ship PO Lines Awaiting Link inquiry

In the boxes of the Selection area of the inquiry, the user specifies the selection criteria for the documents to be loaded in the table:

- Vendor: The vendor from which the items are purchased, by its ID.
- Inventory ID: The identifier of the item.
- **Start Date**: The starting date of the date range within which the drop-ship purchase orders were created.
- End Date: The end date of the date range within which the drop-ship purchase orders were created.

New SO Drop-Ship Lines Awaiting Link Inquiry

The new SO Drop-Ship Lines Awaiting Link (SO402000) inquiry, shown in the following screenshot, has been added to introduce the ability to search for sales order lines that have the Drop-Ship value in the **Source** column on the **Details** tab of the Sales Orders (SO30100) form and do not have a link to lines of a drop-ship purchase order or that have an inactive link. The new inquiry has been added to the **Inquiries** category of the **Sales Orders** workspace.

	50	Dre	op-Shi	p Lines Awaiting	Link							CUS	TOMIZATION -	TOOLS -
1	0	1	н	[X]										
	-	istor	000			p	Start Date	3	/1/2021 -					
	Inv	vento	ny ID.			Q	End Date	3	/31/2021 •					
l	yag	colu	mn head	er here to configure filter							Y			,p
-	0		Order Type	Order Nbr.	Line Nbr.	Status	Cu	ustonier	Customer Name	Inventory ID	De	escription		
>	0	D	\$0	000063	1	Open	2	OFFEESHOP	FourStar Coffee&Sweets Shop	BLACKTEA06	A	n assorted pack	age of tea variety (6 black
	0		50	000068	3	Open	0	OFFEESHOP	FourStar Coffee&Sweets Shop	ERUITTEA12	A	n assorted pack	sge of tea variety (12 fruit.

Figure: The SO Drop-Ship Lines Awaiting Link inquiry

In the boxes of the Selection area of the inquiry, the user specifies the selection criteria for the documents to be loaded in the table:

- Customer: The customer that has ordered the goods or services, by its ID.
- Inventory ID: The identifier of the item.
- Start Date: The starting date of the date range within which the sales orders were created.
- End Date: The end date of the date range within which the sales orders were created.

New Actions on the Purchase Orders Form

The following actions, which are shown in the following screenshot and described in detail below, have been added to the **Actions** menu on the form toolbar of the *Purchase Orders* (PO301000) form:

- Unlink from Sales Order
- Convert to Normal
- Create Sales Order

Purchase Orders Drop Ship 000	0034 - T	ea Com	ipany S	yndica	ite				HOLE		ACTIONS	DEDODTO	l	NOTE:	5 /	CTIVIT	IES	FILES	CUSTO	MIZATI	ION	TOOL	5 •
	.,	τ.ε					~	RE	WOVE	HOLD	ACTIONS	REPORTS											
туре	Drop Ship	-	 Vendo 	10	TEAR	COMPAN	Y - Tea	Com	pany Sy	ndi ,0	Rémové	Hold											
Order Nbr	000034	Q	+ Locati	00	MAIN	I - Primar	y Locat	tion		,o													
Status:	On Hold		Owne	C						,p													
Date	1/19/2021		Currie	ncy	USD	1.0	0		VIEW	BASE													
Promised On	1/19/2021	1.4	Vendo	r Ref.																			
Description	Drop-ship	order #27	0 - Tea (bi	oxes)																			
DETAILS	TAXES	SHIPPI	NG V	ENDOR	INFO	PQ HIS	STORY		PREPAY	MENTS	Gancel (Order		OMPLIA	NCE								
0 + 0	×	ADD ITE	MS A	DD MATH	RIX ITEM	IS AL	DD PRC	DJEC	TITEM	ADD	Recalcu	ate Prices	INE	-	N	1							
🗄 🕅 🗋 Branch		Inventory	(D	Line	е Туре		Ware	ehous	e.	Line	Dy		pr.		Ord	er Qty.		Sales Order ine Nbr.	Unit	Cost	SO Linked		
> 8 D HEADO	FFICE	GREEN	TEA06	Go	ods for D	rop-Ship	RET	TAIL		An a	Unlink fr	om Sales Order				30.00		1	19.9	900	1		
B D HEADO	FFICE	BLACK	EA06	Go	ods for D	rop Ship	RET	TAIL		An a	Convert	to Normal				40.00		3	19.9	900	П		
											1												

Figure: New actions on the Purchase Orders form

For a drop-ship purchase order linked to a sales order, a user can now click **Actions > Unlink from Sales Order** to. This action is available if the purchase order has the *Drop Ship* type and has values specified in the **Sales Order Type** and **Sales Order Nbr.** boxes in the **Ship To** section on the **Shipping** tab of the *Purchase Orders* form. The **Unlink from Sales Order** action removes the interconnection of the sales order and the drop-ship purchase order. The system clears the values in the **Sales Order Type** and **Sales Order Nbr.** boxes.

If the purchase order has the *Drop Ship* type and the *On Hold*, *Awaiting Link*, or *Open* status, a user can now click **Actions > Convert to Normal** to convert the purchase order to a purchase order of the *Normal* type. Specifically, when the user clicks the **Convert to Normal** action, the system does the following:

- 1. Removes the link to a sales order in the originating drop-ship purchase order (that is, the drop-ship purchase order from which the user linked the documents)
- 2. Cancels the drop-ship purchase order
- 3. Creates another purchase order of the Normal type
- 4. Copies all lines from the originating drop-ship purchase order to the new purchase order of the *Normal* type with the corresponding *Goods for IN* or *Non-Stock* line types

The values of the **Ship To** section on the **Shipping** tab of the *Purchase Orders* form for the created purchase order are populated with the default values for purchase orders of the *Normal* type based on the selected option in the **Default Ship Dest. Type** box of the *Purchase Orders Preferences* (PO101000) form. The **Vendor Tax Zone** box on the **Vendor Info** tab of the *Purchase Orders* form is populated with the value of the **Tax Zone** box on the **Purchase Settings** tab of the *Vendors* (AP303000) form for the current vendor. The values of the line discounts are copied from the originating drop-ship purchase order. Also, in the new purchase order, the system inserts a link to the originating drop-ship purchase order in the **Originating PO Nbr.** box on the **Other** tab; similarly, in the canceled drop-ship purchase order, the system inserts a link to the created purchase order of the *Normal* type in the **Normal PO Nbr.** box on the **Other** tab.

A purchase order of the *Drop Ship* type cannot be converted to the *Normal* type if it has at least one document applied.

If a purchase order has the *Drop Ship* type, a user can click **Actions > Create Sales Order** to create a sales order from this purchase order. The new action is available for drop-ship purchase orders with the *Awaiting Link* status that don't have a link to a sales order. If the drop-ship purchase order is partially linked to a sales order—that is, some lines of the purchase order are linked to the lines of a sales order and some lines are not, and the system has already inserted the values of the **Sales Order Type** and **Sales Order Nbr.** boxes in the **Ship To** section on the **Shipping** tab of the *Purchase Orders* form—the **Create Sales Order** action is unavailable. The **Create Sales Order** action creates a sales order with the same lines that are in the originating drop-ship purchase order. The lines can contain stock and non-stock items only. The sales order is created with the *On Hold* status, and the **PO Linked** check box is cleared for lines of the new sales order by default.

The system does not allow the creation of a purchase receipt for a drop-ship purchase order if the sales order linked to this purchase order has the *On Hold*, *Pending Approval*, or *Awaiting Payment* status.

Drop-Ship Vendor Returns

Acumatica ERP 2021 R1 introduces the ability to process returns of drop-shipped goods from the customer directly to the vendor, without the organization receiving these goods in the warehouse. The **Create Vendor Return** action is available on the *Sales Orders* (SO301000) form for sales orders with a sales order type that has the *RMA Order* automation behavior.

The automation behavior is specified in the **Automation Behavior** box of the *Order Types* (SO201000) form on the **Template Settings** tab. The predefined *RM* sales order type has this behavior; an organization may have created other order types with the behavior.

To process a drop-ship vendor return, the following steps must be performed:

- 1. On the Sales Orders form, a sales manager creates a return sales order of an order type with the RMA Order automation behavior.
- 2. On the table toolbar of **Details** tab, the sales manager clicks the **Add Invoice** button and adds the invoice with the drop-shipped lines.
- 3. On the **Details** tab, the sales manager selects the **Mark for PO** check box for these lines.
- 4. On the form toolbar, the sales manager selects **Actions > Create Vendor Return**.

The system creates a direct purchase return to the vendor on the *Purchase Receipts* (PO302000) form, which is a receipt of the *Return* type with appropriate settings filled in. On the **Shipments** tab, the system inserts a link a user can click to navigate to the purchase return.

5. A purchasing manager opens and releases the purchase return on the *Purchase Receipts* form.

The system does not generate any batches of transactions on release of the purchase return.

- 6. On the form toolbar, the purchasing manager clicks **Actions > Enter AP Bill** to create a debit adjustment to the vendor. The system opens the *Bills and Adjustments* (AP301000) form with appropriate settings copied, so that the purchasing manager can create a debit adjustment.
- 7. On the Bills and Adjustments form, the purchasing manager releases the debit adjustment.

On release of the debit adjustment, the system debits the Accounts Payable account and credits the Purchase Accrual account.

- 8. The sales manager returns to the return sales order on the Sales Orders form.
- On the form toolbar, the sales manager selects Actions > Prepare Invoice to create a credit memo on the Invoices (SO303000) form.
- 10. The sales manager releases the credit memo.

On release of the credit memo, the system generates an inventory issue on the *Issues* (IN302000) form. When the sales manager releases the inventory issue, the system debits the Purchase Accrual account and credits the COGS account.

Additional Information

For more details on drop-ship vendor returns processing, see Drop-Ship Vendor Returns: General Information

Order Management: Matrix Item Enhancements

In Acumatica ERP 2021 R1, multiple changes have been made to the matrix item functionality to ease the creation and management of matrix items.

The Add Spaces Check Box

On the **Configuration** tab of the *Template Items* (IN203000) form, the **Add Spaces** column has been added to the **Inventory ID Segment Settings** and **Description Segment Settings** tables (see the following screenshot).

When the user selects a check box in the **Add Spaces** column for a segment, the system adds spaces to the values of the inventory ID or description segment of the matrix items if the values of the segments contain fewer characters than the number specified in the **Number of Characters** column. If the user clears the check box in the **Add Spaces** column for a segment, the system always displays the values of the inventory ID and description segments of matrix items without additional spaces.

For example, the user has the *Brand*, *Size* and *Color* attributes in the **Inventory Segment ID Settings** table. For all attributes the **Segment Type** is *Attribute Value* and **Number of Characters** is 6. If the **Add Spaces** check box is selected for all attributes, the **Inventory ID** of the matrix item will be *PUMA-L-RED*. If the **Add Spaces** check box is cleared for all attributes, the **Inventory ID** of the matrix item will be *PUMA-L-RED*.



Figure: The Add Spaces column

The Ability to Add Images to Template Items

On the **Configuration** tab of the *Template Items* (IN203000) form, the **Image** box has been added (see the following screenshot). The user can now upload images that will be used as the template item images when the matrix items are imported to e-commerce stores by using the template item. To upload an image, the user needs to click the **Browse** button and select an image file on the computer or drag the image file to the **Image** box, and then click the **Upload** button.

Template ID	JUIC	E - Juice	p	Stock Rem								
Description	Juice	1										
SENERAL FULF	LLMENT	PRICE/COST	VENDORS	GLACCOUNTS	DESCRIPTION CONF	IGURATION ITE	M CREATION	UPDATE SETTINGS	MATRIX	TEMS	ECOMMERCE	
TTRIBUTES					INVENTORY ID SEGM	IENT SETTINGS						
Attribute	Require	Category Valu	e		0 + x	* + H	x					
> Ingredients		Variant			E Segment Type	"Attinbute (D	Constant	• Numbering ID	Number	Lise	Separator	Add
Package		Variant							Charact	Separator		Spaces
Volume		Variant			> Attribute Value	INGREDIENT			3			
					Attribute Value	VOLUME			4			Ø
	_			×.	Attribute Value	PACKAGE			3			2
Default Colum. IN	GREDIENT	- Ingredients	21									
Default Row At VC	LUME - V	alume	20	-	-							
image; Sei	ēct an imag	te la rolanq		Browse Upload	Inventory ID Exemple	e: APL-080Z-BOX						
					DESCRIPTION SEGM	ENT SETTINGS						
		100	_		0 + ×	↑ ↓ H	x					
					El Segment Type	*Altribute ID	Constant	* Numbering ID	*Number of Charact	Use Space as Separator	Separator	Add Spaces
					> Attribute Caption	INGREDIENT			10			2
					Template Description	on			5		-	Ø
					Attribute Caption	VOLUME			8	2		2
					Attribute Cantion	PACKAGE			14	11		R

Figure: The Image box

Editable Fields on the Matrix Items Tab

On the **Matrix Items** tab of the *Template Items* (IN203000) form, the values in the **Description**, **MSRP**, and **Default Price** columns can now be edited (see the following screenshot). The changes will be displayed on the *Stock Items* (IN202500) form.

Previously, the user could edit these values only by opening the settings of matrix items one by one on the *Stock Items* (IN202500) form or for all matrix items created from a template item by changing the corresponding settings of the template item on the *Template Items* form.

JUICE - Juice					C NOTES	ACTIVITIES FI	ES CUST	OMIZATION TOOL
← ☆ ≦ ∽ +		CHANGE ID	(Regard Analysis)	UPDATE	MATRIX ITEMS			
Template ID JUICE	- Juice P	Stock Item						
Description. Juice								
GENERAL FULFILLMENT	PRICE/COST VENDORS GLAC	COUNTS DESCI	RIPTION CONFIGU	RATION ITE	M CREATION	UPDATE SETTING	S MATRI	X ITEMS
Update Only Selected Items with Te	emplate Chariges						-	
C + DELETE								
B D D Inventory ID	Description	Default Warehouse	Ingredients	MSRP	Package	Default Price	Volume	Item Class
0 D D APL-160Z-GBT	Apple Juice 16 fl oz Glass bottle		Apple	0.0000	Glass bottle	0.0000	16 fl oz	MJUICE
D D APL-320Z-GBT	Apple Juice 32 fl oz Glass bottle		Apple	0,0000	Glass bottle	0 0000	32 fl oz	MJUICE
D CHR-320Z-GBT	Cherry Juice 32 fl oz Glass bottle		Cherry	0.0000	Glass bottle	0.0000	32 fl oz	MJUICE
D D ORG-160Z-GBT	Orange Juice 16 fl oz Glass bottle		Orange	0.0000	Glass bottle	0.0000	16 fi oz	MJUICE
0 D D ORG-320Z-GBT	Orange Juice 32 fl oz Glass bottle		Orange	0.0000	Glass bottle	0.0000	32 fl oz	MJUICE
0 D D PCH-320Z-GBT	Peach Juice 32 fl oz Glass bottle		Peach	0.0000	Glass bottle	0.0000	32 fl oz	MJUICE
D D PNL-160Z-GBT	Pineapple Juice 16 fl oz Glass bottle		Pineapple	0.0000	Glass bottle	0.0000	16 fl óz	MJUICE
© □ □ SWB-32OZ-GBT	Strawberry Juice 32 fl oz Glass bottle		Strawberry	0.0000	Glass bottle	0.0000	32 fl oz	MJUICE
D TMT-160Z-GBT	Tomato Juice 16 fl oz Glass bottle		Tomato	0.0000	Glass bottle	0.0000	16 fl oz	MJUICE

Figure: Matrix Items tab

Enhanced Update of Matrix Items

On the *Template Items* (IN203000) form, the **Apply to Matrix Items** button on the form toolbar has been renamed to **Update Matrix Items**, and the **Update Settings** tab has been added (see the following screenshot).

Template Items JUICE - Juice				e		NOTES
Template (D: Description	JUICE - Julice A Stock Item			•		
GENERAL FULFILLM	ENT PRICE/COST VENDORS GLACCOUNTS DESCI	RIPTION CONFIGURATION	ITEM CREATION	UPDATE SETTINGS	MATRIX ITEMS	ECOMMERCE
FIELDS EXCLUDED FROM	UPDATE					
0 + x H						
R 0 D *Table Name	* Field Name					
* 0 D Inventory Item	Availability					
ATTRIBUTES EXCLUDED	FROM UPDATE					
0 + x H						
etudiotta" D @ B	Required Category Value					
* 0 D	(Q,					

Figure: Update Settings tab

On the **Update Settings** tab, the user can add fields and attributes that will be excluded from the update of matrix items by specifying the required values in the **Fields Excluded from Update** and **Attributes Excluded from Update** sections.

The **Fields Excluded from Update** section contains a table in which the user can list all fields that will be excluded from the update when the user clicks the **Update Matrix Items** button. The table consists of the following columns:

- Notes: A note in which the user can specify the reason for excluding the field from the update.
- Table Name: The name of a table that is available for the matrix items on the Template Items form.
- Field Name: The database field of the table that can be updated.
- Selected: A check box that indicates whether the exclusion is active for the field.

The **Attributes Excluded from Update** section contains a table in which the user can list all attributes that will be excluded from the update when the user clicks the **Update Matrix Items** button. Only attributes with the *Attribute* category that are specified for the template item on the **Attributes** tab of the *Item Classes* (IN201000) form can be excluded from the update. The table consists of the following columns:

- **Notes**: A note in which the user can specify the reason for excluding the attribute from the update.
- **Attribute**: The attribute available for this template item. Only attributes with the *Attribute* category can be selected.
- **Required**: A check box that indicates (if selected) that the attribute value is required for matrix items of the template item.
- **Category**: The attribute category. The category can only be *Attribute*.
- Value: The value of the attribute for the template item.
- Selected: A check box indicates whether the exclusion is active for the attribute.

On the table toolbar of the **Matrix Items** tab of the *Template Items* form, the **Update Only Selected Items with Template Changes** check box has been added (see the following screenshot). If the user selects this check box, only the selected matrix items—that is, the matrix items for which the unlabeled check box is selected in the table are updated when the user clicks the **Update Matrix Items** button on the form toolbar. If the user clears this check box, all matrix items in the list are updated when the user clicks the **Update Matrix Items** button.

Template Items JUICE - Juice ← ♡ ② ♡	+ @ 0+ K < :	> >I CHANGE ID	CREATE MATTRIA	UPDATI	I NOTES	ACTIVITIES FILES	CUSTOMIZATION TOOLS
• Template ID: J	UICE - Juice ,0	Stock Item					
Description J	uice						
GENERAL FULFILLMEN	IT PRICE/COST VENDORS	GLACCOUNTS DES	CONFI	IGURATION ITE	M CREATION	UPDATE SETTINGS	MATRIX ITEMS
Update Only Selected Items	with Template Changes						
O - X DELET							
🗄 🖗 🗋 🚺 Inventory ID	Description	Default Warehouse	ingredients	Package	Volume	MSRP	Default Price Item Class
> 0 D C APL-160Z-GB	Apple Juice 16 fl oz Glass bottle		Apple	Glass bottle	16 fl oz	0 0000	0.0000 MULICE
0 D D APL-320Z-GB	Apple Juice 32 fl oz Glass bottle		Apple	Glass bottle	32 fl oz	0.0000	0.0000 MJUICE
0 D CHR-320Z-GB	Cherry Juice 32 fl oz Glass bott	ie .	Cherry	Glass bottle	32 fl oz	0.0000	0.0000 MJUICE
0 D 0 0RG-160Z-GE	T Orange Juice 16 II oz Glass bot	De	Orange	Glass bottle	16 fl oz	0.0000	0.0000 MJUICE
0 D D ORG-320Z-GB	I Orange Juice 32 fl oz Glass bot	tle .	Orange	Glass bottle	32 fl oz.	0.0000	0.0000 MJUICE
0 D D PCH-320Z-GB	Peach Juice 32 fl oz Glass botti	8	Peach	Glass bottle	32 fl oz	0.0000	0.0000 MJUICE
0 D D PNL-160Z-GB	Pineapple Juice 16 fl oz Glass t	ottle	Pineapple	Glass bottle	16 fl oz	0.0000	0.0000 MJUICE
	T Strawberry Juice 32 fl oz Glass	bottle	Strawberry	Glass bottle	32 fl oz	0.0000	0.0000 MJUICE
0 D D TMT-160Z-GB	Tomato Juice 16 fl oz Glass both	tle	Tomato	Glass bottle	16 fl oz	0.0000	0.0000 MJUICE

Figure: The Update Only Selected Items with Template Changes check box

With the new update options, the user updates matrix items by updating their template item as follows:

- 1. To exclude certain fields from the update of matrix items, the user opens the **Update Settings** tab of the *Template Items* form and selects these fields in the **Fields Excluded from Update** table.
- 2. To exclude certain attributes of the *Attribute* type from the update of matrix items, on the same tab, the user selects these attributes in the **Attributes Excluded from Update** table.
- 3. To update a certain list of matrix items, the user opens the **Matrix Items** tab on the same form, selects the **Update Only Selected Items with Template Changes** check box, and selects the matrix items that should be updated in the table below.
- 4. The user clicks the **Update Matrix Items** button on the form toolbar.

Attribute Configuration on the Item Classes form

On the **Attributes** tab of the *Item Classes* (IN201000) form, the **Default Column Attribute ID** and **Default Row Attribute ID** boxes have been added. Also, the **Inventory ID Segment Settings** and **Description Segment Settings** tables have been added to the same tab (see the following screenshot).

B + B D · K K	> >1	ACTIONS						D NOTES	ACTIVITIES	FILES	CUSTOMIZATION	TOOLS
tem Class Tree ALLOTHER** AI Other BLADE***** Blade Holders COMPUTERS* Computers and Accessories COMPUTERS** Julier Containers and Trays COMPUTERS************************************	Class ID Description OENERAL SE	MJUICE Fruit and ETTINGS	- Fruit and vegetable julces P I vegetable julces REPLENSHMENT SETTINGS RESTRUCTION GROUPS	ATTRIBUTES								
DELIVERING Delivery Services	0 +	хн	×									
B FOOD From Food Class	B Active	*Attribute	Description	Sort Required Order	Contro Type	Category						
INSTALLING INSTALLING SERVICES DAM	2 2	INGRED	Ingredienta		Combo	Variant.						
B JCRCFGPRT* Parts of configurable juicers		PACKAGE	Package		Combo	Variant						
DUICER**** High Speed Juicers		VOLUME	Volume		Combo	Variant						
JUICERCPG* Configurable juicers JUICERLOW* Low Speed Juicers		WEIGHT	Weight		Combo	Attribute						
JUICERMED* Medium Speed Juicers LABOR***** Labor MUUCE**** Fruit and vegetable juices MNUTS****** Nuts	Default Colum Default Row A	INGREDI	ENT - Ingredients P P - Volume P P									
OTHERPARTS Julcer Spare Parts	Inventory ID 5	Segment Setti	105		Desc	ription Segment	Settings					_
PACKAGE*** Package Class	0 +	X +	* H =		0	+ ×	* * H	-				
PRESSSET** Orange Pressing Wheels SPICES**** Spices TEASET**** Tea Assorties	Et Segment Typ	. •4	Imbute ID Constant "Nundering ID "1	nimber Une of Space ex Thatact Separator	E Se	priorit Type	*Attribute ID	Constan	. Nurt	iermg ID	*Number Une of Space Charact Separa	raik ador

Figure: New boxes and tables on the Attributes tab

The functionality of the added boxes and tables duplicates the functionality of the boxes and tables of the same name on the **Configuration** tab of the *Template Items* (IN203000) form. The specified settings will be propagated to

new template items of the item class for which the attribute configuration has been performed on the *Item Classes* form.

Matrix Items with Only One Variant Attribute

On the **Configuration** tab of the *Template Items* (IN203000) form, users can now create matrix items with only one variant attribute. Previously, at least two variant attributes were required to fill in the **Default Column Attribute ID** and **Default Attribute Row ID** boxes. Now one of these boxes can be left blank (as shown in the following screenshot).

femplate Items ←	+ 0.	а к < >	>I CHANGE	ID CREATE MATRIX IT		TRIX ITEMS	FILES CUSTOMIZATION
* Template ID.	MNUTS - Nuts	Q	Stock Item				
Description:	Nuts						
GENERAL SETTINGS	FULFILLMENT	PRICE/COST INFO	VENDOR DETAILS	GLACCOUNTS DESC	RIPTION ATTRIBUT	E CONFIGURATION	MATRIX ITEM CREATION
ATTRIBUTES							
El Attribute Re	quin Category	Value					
2 Ingrédients	Variant						
Volume	Attribute						
Default Colum INGRI Default Row At	EDIENT - Ingredient	s 20 20					
Image Seylect	an mage to upload	-	Browse Upload				

Figure: A matrix item with only one variant attribute

Changed Default View for Add Matrix Items Dialog Box

On the *Sales Orders* (SO301000) and *Purchase Orders* (PO301000) forms, when a user clicks the **Add Matrix Item** button on the table toolbar, the **Add Matrix Items** dialog box is now opened in the matrix view by default instead of the table view. Also, the **Open Table View** button has been added to the bottom of the **Add Matrix Items** dialog box in the matrix view (see the following screenshot).

dd Matrix Item. Matrix View									
Template D	P	0 H	8						
Column Attribu INGREDIENT - Ingredients	Q.	B *Package							
Row Attribute ID VOLUME - Volume	,p								
Display Availability Details		>							
Warehouse:	Q								
OHE									
Attribute Value Apple	Cherry	Orange	Paich	Prinkapple	Shawberry	Tomato -	Total Gity-		
08 fl az							0.00		
12 fl az							0.00		
16 fl az							0.00		
32 # az							0.00		
96.8 az							0.05		
Total Qty. 0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00		
								OPEN TABLE VIEW ADD AND CLOSE	CANCE

Figure: The Open Table View button

The Add Matrix Item Button on Sales Quotes and Opportunities Forms

Matrix items can now be added to documents on the following forms: *Sales Quotes* (CR304500) and *Opportunities* (CR304000). The **Add Matrix Item** button has been added to the **Document Details** tab of both forms (see the following screenshots).

Sales Quotes	合												NOTES	FILES CU	STOMIZATION
< ? 8	5	+ 🗈	к	<	>	ы	ACTIONS	- SUBMIT QUOTE	0	ARK A	S PRIMARY				
Opportunity ID	000004	,p	0	E Poma	ary							Manual Amount			
Quote Nbr	<new></new>	,		Busines	s Accou	int	LAKECAF	E - Lake Cafe		0	Amount	2,337.50			
Status	Draft			Location	Y.		MAIN - Pri	mary Location	p	0	Discount	0.00			
Date	11/30/2020			Contact					,o	0	Tax Total	0.00			
Expiration Date											Total:	2,337.50			
Description	A juicer with	the installat	on and	t training f	lor Lake	Cale				1					
DOCUMENT DET	TAILS E	ETAILS	SHIPP	PING INFO	0 /	ACTIVITIE	IS TAX	DETAILS							
0 + ×	ADD M	ATRIX ITEM	 −	X	T										
	(ID	Descriptio	n				Free Item	Warehouse		Quantit	UOM	Unit Price	Ext. Price	Discount, %	Discount
, . L mountail															
	10	Pro serie	s juicer	with a pro	oduction	n rate of 1		EQUIPHOUSE		1.00	PIECE	1,500.0000	1,500.00	0.000000	0.0000
0 D JUICER	10 L	Pro serie Installatio	s juicer n of eq	with a pro auipment a	oduction at the cu	n rate of 1 ustomers'		EQUIPHOUSE		1.00	PIECE	1,500,0000 100.0000	1,500.00 800.00	0.000000	0.0000

Figure: The Add Matrix Item button on the Sales Quotes form

Opportunities												NOTES	FILES	CUSTOMIZATION
← ⇒ ⇒	v + 0	• 🛙	к	< :	> >1	CLC	OSE AS WON CREAT	TE QUOTE	A	CTIONS +				
Opportunity ID:	000003	,p		Business A	ccount	U	AKECAFE - Lake Cafe		0		Man	nual Amount		
Status:	Open			Location		м	AIN - Primary Location	P	0	Amount:		4,323.25		
Class ID.	PRODUCT - Product	Sales ,0	0	Contact:				P	0	Discount:		0.00		
Stage:	Prospect	*		Owner:				Ŗ		Tax Total:		216.16		
	1/4/2020									Total		4,539.41		
Estimation	1/4/2020													
Subject	Assorted teas for Lak	e Cafe												
ACTIVITIES	Assorted teas for Lak	e Cafe S DETA	uls X	ouotes L	co	NTACT I	NFO SHIPPING INFO	ATTRIB	UTES	RELATION	s ta	X DETAILS	ORDERS	INVOICES
ACTIVITIES	Assorted teas for Lak DOCUMENT DETAIL ADD MATRIX ITE y ID Descrij	e Cafe S DETA M H	uls X	QUOTES L	co	NTACT II Free Item	NEO SHIPPING INFO Warehouse	ATTRIB	UTES	RELATION	S TA	AX DETAILS Ext. Price	ORDERS Discount	INVOICES-
Estimation Subject ACTIV/ITIES C + × D Inventor D BLACKI	Assorted teas for Lak DOCUMENT DETAILL ADD MATRIX ITE ID Descrip IEA06 An ass	e Cafe DETA M H	WLS R ige of t	QUOTES L	CQ	Free Item	NEO SHIPPING INFO Warehouse RETAIL	ATTRIB Quantity 50.00	UTES UOM PACE	RELATION Un	S TA It Price	Ext. Price	ORDERS Discount 0.0000	INVOICES , % Discourt Amoun 00 0.0000
Estimation Subject ACTIV/ITIES C + × D Inventer D BLACKI D GREEN	Assorted teas for Lak DOCUMENT DETAIL ADD MATRIX ITE y ID Descrip TEA06 An ass ITEA06 An ass	B DETA	allus Rege of t	QUOTES <u>1</u> lea variety (6 lea variety (6	CQ black	Free Item	NEO SHIPPING INFO Warehouse RÉTAIL RETAIL	ATTRIB Quantity 50.00 100.00	UOM PACI PACI	RELATION Un K 23 K 22	S TA it Price 1.9900 2.9900	Ext. Price 1,199.50 2,299.00	ORDERS Discount 0.0000 0.0000	INVOICES % Discour Amoun 00 0.0000 00 0.0000

Figure: The Add Matrix Item button on the Opportunities form

Additional Information

For additional information on matrix items, see Matrix Items: General Information.

Order Management: Multi-Currency in Purchase Returns

In previous versions of Acumatica ERP, when a user created a purchase return from the original purchase receipt which had a non-base currency, the purchase return was created in the base currency and the **Currency** and Exchange Rate boxes were unavailable for editing—that is, the user could not change the currency and the exchange rate of the document. In Acumatica ERP 2021 R1, the purchase return created from a purchase receipt can inherit the currency of the original purchase receipt, and the ability to change the currency rate depends on the **Cost of Inventory Return From** drop-down list settings.

Cost of Inventory Return From Drop-Down List

On the *Purchase Receipts* (PO302000) form, the **Cost of Inventory Return From** drop-down list has been added instead of the **Process Return with Original Cost** check box as shown on the following screenshot.

Purchase Receip Return - Off	iceUp Orig	ginal						C	NOTES	ACTIVITIES	FILES CUST	OMIZATION
< 5 (9 0	+	B D. K	< >	>I RELEAS	SE ACTION	NS . REPORTS .					
Туре	Return		Vendor:	OFFICEUP - C	ficeUp Original	1	Total Qty	15.00				
Recept Nbr.	<new></new>	0	* Location	MAIN - Primar	y Location	,0	Unbilled Quant	15.00				
Status	Balanced		Currency.	USD 1.0	0 - VIE	W BASE	Total Cost	149.85				
Date	3/1/2021			Creaté Bill								
Post Period	03-2021	,o	Cost of Invent	Original Cost f	rom Receipt	-						
			Vendor Ref. Workgroup Dwner:	Original Cost from Receipt Cost by issue Strategy Manual Cost Input								
DETAILS	ORDERS	PUTA	WAY HISTORY	BILLING	OTHER							
0 + .	o x	LINE D	ETAILS ADD PR	ADD PR LIN	E VIEW PO	HX						
B B D *Bran	ch	7 Invent	tory ID Line 1	lype	** Warehouse	Location	Transaction D	Descr.		UOM	Ordered Qty.	Open Qty
	DOFFICE	PAPE	R Goot	ts for IN	WHOLESALE	MAIN	A package o	f a printing paper t	for internal u	PIECE		

Figure: The Cost of Inventory Return From drop-down list

The drop-down list defines the way in which the cost of items is determined in a return document. The following options are available:

- Original Cost from Receipt: The items are returned at the cost at which they have been purchased. The currency rate is inherited from the original purchase receipt and is unavailable for editing. The system copies the values in the **Unit Cost** and **Ext. Cost** columns on the **Details** tab of the *Purchase Receipts* form from the original purchase receipt line. In the purchase return, the **Unit Cost** and **Ext. Cost** columns cannot be edited.
- Cost by Issue Strategy: The items are returned at the cost calculated according to the valuation method specified for the item in the Valuation Method box on the General Settings tab of the Stock Items (IN202500) form. The currency rate is set according to the purchase return date and the effective currency rate specified on the Currency Rates (CM301000) form. The currency rate can be overridden if the Enable Rate Override check box is selected on the Vendors (AP303000) form and the Allow Changing Currency Rate on Receipt check box is selected on the Purchase Orders Preferences (PO101000) form.
- Manual Cost Input: The currency rate is set according to the purchase return date and the effective currency rate specified on the *Currency Rates* form. The currency rate can be overridden if the **Enable Rate Override** check box is selected on the *Vendors* form and the **Allow Changing Currency Rate on Receipt** check box is selected on the *Purchase Orders Preferences* (PO101000) form. The system copies the values of the **Unit Cost** and **Ext. Cost** columns on the **Details** tab of the *Purchase Receipts* form from the original purchase receipt line. In the purchase return, the **Unit Cost** and **Ext. Cost** columns can be edited. In case the user changes the values of the **Unit Cost** or **Ext. Cost** columns, the system recalculates the value of the **Estimated IN Ext. Cost** column accordingly and copies this value to the inventory issue on the *Issues* (IN302000) when the user releases the purchase return.

On the *Purchase Receipts* form, in purchase returns that contain stock item lines without a link to the purchase receipt lines, only *Cost by Issue Strategy* option can be used in the **Cost of Inventory Return From** drop-down list.

On the *Purchase Receipts* form, the **Currency** box is available for editing until any line is added to the purchase receipt or return. The user can add purchase receipt lines to the purchase return document with the currency defined in the purchase return.

If the user creates a purchase return on the *Purchase Receipts* form, the currency rate is set according to the date of the created purchase return and the effective currency rate specified on the *Currency Rates* form:

- If the Original Cost from Receipt option is selected in the **Cost of Inventory Return From**, a user can add lines from different purchase receipts with defined currency and the same currency rate, effective dates, and currency rate types. The currency of the purchase return will be overridden by the currency rate in the selected purchase receipt.
- For other options, the user can select lines from different purchase receipts with specified currency. The currency rate of the purchase return cannot be overridden. The user cannot select the *Process Return with Original Cost* option if the purchase return contains lines in non-base currency from purchase receipts with different currency rates, effective dates, or rate types.

Order Management: New Workflow in Order Management Documents

In Acumatica ERP 2021 R1, the processing of purchase orders, purchase receipts, landed cost and inventory documents has been redesigned to use the new workflow engine.

The processes that are performed by using the *Purchase Orders* (PO301000), *Purchase Receipts* (PO302000), *Landed Costs* (PO303000), *Requests* (RQ301000), *Requisitions* (RQ302000), *Receipts* (IN301000), *Issues* (IN302000), *Adjustments* (IN303000), *Transfers* (IN304000), and *Kit Assembly* (IN307000) forms work as they did as in the previous versions. The UI on these forms has been enhanced to support functionality of the new workflow engine.

Because the implementation of the new workflow engine entails changes to data access classes
 (DACs) and business logic, it may affect custom generic inquiries, customization projects, import and export scenarios, and API integrations. For the complete list of changes, see *Release Notes for Developers*.

UI Enhancements

On the *Purchase Orders* (PO301000), *Purchase Receipts* (PO302000), *Landed Costs* (PO303000), *Requests* (RQ301000), and *Requisitions* (RQ302000) forms, the **Hold** check box has been removed and replaced with the **Remove Hold** and **Hold** actions, which can be selected from the form toolbar or the **Action** menu.

On the *Receipts* (IN301000), *Issues* (IN302000), *Adjustments* (IN303000), *Transfers* (IN304000), and *Kit Assembly* (IN307000) forms, the **Hold** check box has been removed and replaced with the **Remove Hold** and **Hold** actions, which can be selected from the form toolbar or the **Action** menu.

On these forms, the buttons representing the actions that are the most relevant to the current status of the document opened on the form are displayed directly on the form toolbar in addition to being included as menu commands in the **Actions** menu. In the following screenshot, a purchase order with the *On Hold* status on the *Purchase Orders* form is shown. The **Remove Hold** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.

Purchase Order Normal 000	s 018 - Sque	ezo Inc.								C	NOTES ACTIVIT	IES FI	LES (CUSTOM	IZATION
(D	0	+ 🗈 🗘) • K	<	> >	REM	OVE HOLD	ACTIONS	- REPORTS -						
Туре	Normal	+ + Von	dor	SQUEEZ	O - Squeez	o Inc.	p	0							
Order Nbr	4br 000018 ,9 + Location			MAIN - Primary Location ,0				Remove	9 Hold						
Status	On Hold	Own	ier				Q								
Date	1/23/2020	- Gun	rency	USD	1.00	1	VIEW BASE								
Promised On	1/23/2020	• Ven	dor Ref												
Description	Purchase f	or Thai Food Res	taurant (Phas	e 1)											
DETAILS	TAXES S	HIPPING VE	NDOR INFO	P0.)	ISTORY	PRE	PAYMENTS			con	PLIANCE				
0 +	0 × 1	ADD ITEMS	ADD MATRIX	ITEMS	ADD PR	OJECTI	TEM AD	DE	late Prices	INE	VIEW SO DEMAN	D ⊷	x	t	
B 🖗 D *Bran	ch	Inventory ID	Line Ty	/pė	Wa	rehouse	Line	Di		y.	Unit Cost	Qty. On Receipts	NON		Ext. Cost
> 0 D SWE	ETEQUIP	SITEREVIEW	Servic	e			Site	e re ee lest	Circle 1	0	40.0000	0.00	HOUR		40.00
0 D SWE	ETEQUIP	INSTALL	Servic	.0			ins	allation of equip	ment at	2.00	80.0000	0.00	HOUR		160.00
0 D SWE	SWEETEQUIP TRAINING S			vice Train			ining on juicer us	ing on juicer usage (at 4.6		40.0000	0.00	HOUR		160.00	

Figure: A purchase order with the On Hold status

In the following screenshot, a purchase receipt with the *Balanced* status on the *Purchase Receipts* form is shown. The **Release** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.
Purchase Reco Receipt 00	00018 - All F	ruits Ma								NOTES	ACTIVITIES	FILES CUS	STOMIZATION TOO
(0	+ 🖻	D. K	< >	>I RELEASE	ACTION	is •	REPORTS .					
Туре	Receipt		Vendor	ALLFRUITS -	All Fruits Mall	Relo	ase		140.00				
Receipt Nor	000018	Q	Location	MAIN - Prima	ry Location	Hold			140.00				
Status	Balanced			Create Bill		- Party		1. A. A.	294 20				
+ Date	1/29/2020		Vendor Ref.			Appl	y Assign	iment Rules					
· Post Period	01-2020	0	Workgroup:										
			Owner										
DETAILS	ORDERS	PUT AWA	Y HISTORY	BILLING	LANDED COSTS	Ema	I Purch	ase Receipt					
0 +	0 ×	LINE DETA	ADD LINE	ADD PO	ADD PO LINE	VIEW PO	+	X					
B & D Bra	anch	* Inventory	ID Line T	pe	* Warehouse	Location		Transaction De	scr.		NOM	Ordered Qt	y. Open Qty.
> B D HE	ADOFFICE	APPLES	Good	s for IN	WHOLESALE	MAIN		Fresh apples 1	b		LB	80.00	0.00
0 D HE	ADOFFICE	ORANGE	Good	for IN	WHOLESALE	MAIN		Fresh oranges	1 lb.		LB	60.00	0.00

Figure: A purchase receipt with the Balanced status

In the following screenshot, a landed costs document with the *Balanced* status on the *Purchase Orders* form is shown. The **Release** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.

Landed Costs Landed Cost -	Wheels Trans	sit Company				D NO	TES ACTIVITIES	FILES	CUSTOMIZATI
< 7 B	∽ +	0 0 · K	> > RELEASE	ACTIONS -					
Туре	Landed Cost	Vendor	TRANSIT - Wheels Transit Compan	Release	ated Am.	0.00			
Reference Nbr	«NEW» ,0	+ Location	MAIN - Primary Location		tal	20.00			
Status	Balanced		Create Bill		e Total	0.00			
+ Date	12/20/2020 -	Vendor Ref		V/II Exe	mpt Total	0.00			
Post Period:	12-2020 P			Tax Tota	t.	0.00			
				Docume	nt Total	20.00			
LANDED COSTS	DETAILS	TAXES FINANCI	AL						
0 + 0	×H	x							
B 🕼 🗋 *Branch	Landed	Cost Code Descri	ption A	llocation Method	Amount	Tax Category	inventory ID	AP Do	ос. Туре
> D HEADOF	FICE TRANS	SPORT Freigh	at and Transportation E	By Weight	20 00				

Figure: A landed costs document with the Balanced status

In the following screenshot, a request with the *On Hold* status on the *Requests* form is shown. The **Release from Hold** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.

Requests Candyy Cafe ← 🕄 🖺	∽ + 1	а р. к	< > >I	REMOVE HOLD	ACTIONS - R	EPORTS -	NOTES	ACTIVITIES	FILES CUSTOMIZATION
Ref. Nbr.	<new> ,0</new>	Priority	Normal		Demous Main		0.00		
* Request Class.	CUSTOMEF ,O	* Requested By	CANDYY - Candyy C	Q, eta	Renove Hold		50 00		
Status.	On Hold	* Location:	MAIN - Primary Loca	tion ,0					
* Date	1/19/2021 -	Description:	pears						
DETAILS 5	SHIPPING VEND	OR INFO OTHE	R						
0 + 0	X ADD ITE	EMS REQUISITIO	ON DETAILS [↔]	x					
B & D Invento	ry Desc	ription	1	UOM Orde	r Qty. Est. Uni Cos	t Est. Ext. Vi t Cost	endor	Location	Vendor Name
- 6 D PEARS	Fres	h pears 1 lb		LB	0.00 29.0000	0.00	SLORYFRUIT	MAIN	Glory Fruit Case

Figure: A request with the On Hold status

In the following screenshot, a requisition document with the *Open* status on the *Requisitions* form is shown. The **Create Orders** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.

Requisitions 0000004 -	Maxwell Baker	0.	кк	> >I CREA	TE ORDERS	ACTIONS - REPO	C NO	res activities	S FILES	CUSTOMIZATION TOOL
Ref Nbr Status Date	Open 3/5/2015	Priority Creator Customen	Normal EP00000	0002 - Maxwell Baker	Currei Est E	Hold View Bidding	VIEW	BASE		
Description DETAILS	internal request	s for laptops	DOR INFO A	PPROVALS OTH	IER PURCH	Create Orders Cancel Request				
0 +	Ø REC	UEST DETAILS	ADVITEME	ALC REDUCTED	TEMS ME		····	x		
8000	Inventory ID	Line Lin Source	е Туре	Warehouse	Description		*UOM	Order Qty.	Est Unit Cost	Est. Ext. Account Cost
> 6 D	AACOMPUT01	Request G	oods for IN	WHOLESALE	Acer Laptop Co	mputer	EA	1.00	250 00	250.00 63000
00	AACOMPUT01	Request G	oods for IN	WHOLESALE	Acer Laptop Co	mputer	EA	1.00	250 00	250.00 63000

Figure: A requisition document with the Open status

In the following screenshot, a receipt with the *Balanced* status on the *Receipts* form is shown. The **Release** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.

Receipts 000053 ←	∽ + a	0• K	< >	> RELEASE	ACTIONS -	REPORTS -	NOTES ACTIVITIES	FILES CUSTOME	ZATION TOOLS .
Reference Nbr Status:	000053 ,0 Balanced	Transfer Nbr			Put on Hold	40.00			^
• Date	12/20/2020 -	Description	Apple jam #5	564	Release				
* Post Penod.	12-2020 ,0								
DETAILS F	INANCIAL								
0 + x	LINE DETAILS	ADD ITEMS	×	t					
Bi D Branch	* Inventory	ID *Ware	nouse	Location	Quantity "U	DM Unit Cost	Ext. Cost Reason Code	- Project	Project Task
> 0 D HEADO	OFFICE APJAM96	WHO	LESALE	MAIN	40.00 Pit	ECE 34.0000	1,360.00	x	

Figure: A receipt with the Balanced status

In the following screenshot, an issue with the *On Hold* status on the *Issues* form is shown. The **Release from Hold** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.

issues 000063 ←	∽ + @	0• K K	> >I RELEAS	E FROM HOLD ACTIO		NOTES ACTIVITIES FILES
Reference Nbr. Status	000063 P On Hold	External Ref.		Total Qty Total Amour	elease from Hold	
* Date	12/20/2020 -	Description Apple	am #42			
Post Period.	12-2020 ,0					
DETAILS F	INANCIAL					
0 + x	LINE DETAILS	ADD ITEMS INVENT	DRY SUMMARY ↔	x t		
🗟 🗋 🗋 Branch	Tran. Type	* Inventory ID	*Warehouse	Location	Quantity UOM	Unit Price Ext. Price
> 0 D HEADO	OFFICE Issue	APJAM96	WHOLESALE	MAIN	24.00 PIECE	45 1500 1,083 60

Figure: An issue with the On Hold status

In the following screenshot, an adjustment with the *Balanced* status on the *Adjustments* form is shown. The **Release** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.

Ad 00 4	just 000	ments 102	\$	+	⊡ ¢•	K (>	ы	RELEASE	ACTIONS	- Ri	EPORTS •	D NOTES	ACTIVITIES	FILES	CUSTOMIZATION
+ + +1 +1	Refe Statu Date	rence Nbr is: Period	000002 Balanced 12/20/202 12-2020	Q • 0	External Description	Ref		ana	idjustment for a	Put on Releas	Hold	t	0.00 45.00			
1	DET	AILS F	INANCIAL													
C	,	+ ×	ADD I	TEMS	INVENTORY	SUMMARY	H	X	T							
	8	Branch		*Invent	tory ID	*Warehouse		Location	n	Quantity	*UOM	Unit Cost	Ext. Cost R	leceipt Nbr.	Reas	on Code
	0	HEADO	FFICE	APJAN	196	WHOLESA	LE	MAIN		0 00	PIECE	39.0000	43.00		LAN	DCOSTADJ
>	0	D HEADO	FFICE	APJAN	408	WHOLESA	E	MAIN		0.00	PIECE	45.5000	2.00		LAN	DCOSTADJ

Figure: An adjustment with the Balanced status

In the following screenshot, a transfer document with the *Balanced* status on the *Transfers* form is shown. The **Release** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.

Transfers 000054										D NOTES	ACTIVITIES
← 21 3	0 -	+ 🖻	0 · K	< >	> [RELEAS	E AC		TS +		
Reference Nbr.	000054	Q	Warehouse ID	WHOLESA	LE - Wholes	ale Waret	nouse	Put on Hold	20.00		
Status	Balanced		To Warehouse	RETAIL - R	etail Wareho	ouse		Es as om fod			
Transfer Type	1-Step		External Ref.				_	Release			
* Date	12/20/2020		Description:								
Post Period	12-2020	Q									
DETAILS F	INANCIAL										
0 + x	LINE DE	TAILS	ADD ITEMS	INVENTORY	SUMMARY	++	x	t			
B 0 D Inventor	y ID	Location	To Lo	ocation ID	NON		Quantity	Reason Code	Description		
	96	MAIN	MAI	N	PIECE		20.00		Apple jam 96 oz		

Figure: A transfer document with the Balanced status

In the following screenshot, an kit assembly with the *Released* status on the *Transfers* form is shown. The **Review Batch** button is displayed on the form toolbar and the corresponding menu command is included in the **Actions** menu.

RitA Pro	duc	tion 000023	+ 0	· K K	> >	REVIEW BATCH	ACTIONS -	D NOTES	ACTIVITIES FILES	CUS	TOMIZATION
Typ	ie:		Production -	Inventory (D	ELECOMPT	- Dell desktop comp		IL - Retail Warehouse			
Ref	lerend	e Nbr	000023 ,0	Revision	20						
Sta	lus		Released	Reason Code							
Dat	e:		1/8/2015				Review Batch	50.00			
Pos	st Per	iod:	01-2015	Description:	Assemble 5	Dell desktop compute					
ST Č	оск	COMPONENTS	NON-STOCK CO	MPONENTS	OT LINE DETA	ILS FINANCIAL					
80	۵	*Inventory ID	Location	- UOM	Quantity	Unit Cost Reason	Code Descriptio	in.	Component Qty.	UOM	Allow Compone Qty. Variance
> 0		ELEBOARD	STORAGE	EA	50.00	144 89	Laptop cr	omputer motherboard	1 00	EA	
0	D	ELECPU1	STORAGE	EA	50,00	139.32	intel CPU	- 2.6GHz	1.00	EA	
0	D	ELEHDD3	STORAGE	EA	50.00	60.50	Hard driv	e 2TB 7200rpm	1.00	EA	10

Figure: A kit assembly with the Released status

The following tables (a table is shown for each form) show the actions that are displayed as buttons on the form toolbar of the form for each document type and status.

Information in the following tables is relevant for the out-of-the-box installation of the system.

_

Table: Document types, Statuses and t	he Corresponding Actions on the Purch	ase Orders form

Document Type	Status	Action
Normal	On Hold	Remove Hold
	Open	Enter PO ReceiptEnter AP Bill
	Completed	Enter AP Bill
Drop Ship	On Hold	Remove Hold
	Open	Enter PO ReceiptEnter AP Bill
	Completed	Enter AP Bill
Blanket	On Hold	Remove Hold
	Open	Email Purchase Order
Standard	On Hold	Remove Hold
	Open	Email Purchase Order
All types	Pending Approval	 Hold Approve Reject
All types	Rejected	Hold
All types	Pending Printing	Print OrderDo Not Print
All types	Pending Email	Email OrderDo Not Email

Table: Document Statuses and the Corresponding Actions on the Purchase Receipts form

Document Type	Status	Action
Receipt	On Hold	Remove Hold
	Balanced	Release
	Released	Enter AP Bill
Return	On Hold	Remove Hold
	Balanced	Release
	Released	Enter AP Bill

Document Type	Status	Action
Transfer	On Hold	Remove Hold
	Balanced	Release
	Released	Enter Landed Costs

Table: Document Statuses and the Corresponding Actions on the Landed Costs form

Status	Action
On Hold	Remove Hold
Balanced	Release
Released	Enter AP Bill

Table: Document Statuses and the Corresponding Actions on the Requests form

Status	Action
On Hold	Remove Hold
Pending Approval	 Approve Reject Hold
Rejected	Hold

Table: Document Statuses and the Corresponding Actions on the Requisitions form

On Hold	Remove Hold
Pending Approval	 Approve Reject Hold
Rejected	Hold
Bidding	 View Bidding Send Request for Proposal
Pending Quotation	Create Quote
Open	Create Orders

Table: Document Statuses and the Corresponding Actions on the Receipts, Issues, Adjustments, and Transfers forms

Status	Action
On Hold	Release from Hold
Balanced	Release

Table: Document Statuses and the Corresponding Actions on the Kit Assembly form

Status	Action
On Hold	Release from Hold
Balanced	Release
Released	Review Batch

Automation Changes

If the organization uses automation steps, import scenarios, or export scenarios for the *Purchase Orders* (PO301000), *Purchase Receipts* (PO302000), *Landed Costs* (PO303000), *Requests* (RQ301000), *Requisitions* (RQ302000), *Receipts* (IN301000), *Issues* (IN302000), *Adjustments* (IN303000), *Transfers* (IN304000), or *Kit Assembly* (IN307000) forms, users that work on customizations will need to redesign the automation of the processes related to the applicable forms by using the new workflow engine. For more information, see the *Creating Workflows* chapter in the Acumatica ERP Customization Guide.

Order Management: Purchase Receipts for Non-Stock Items Without the Inventory Feature

In Acumatica ERP 2021 R1, new functionality has been provided that provides users with the ability to process nonstock items by using purchase receipts and purchase returns when the *Inventory* feature is disabled on the *Enable/ Disable Features* (CS100000) form.

The Purchase Receipts Without Inventory Feature

On the *Enable/Disable Features* (CS100000) form, the **Purchase Receipts Without Inventory** check box has been added to the **Inventory and Order Management** group of features (see the following screenshot).



S	MODIFY ENABLE	
	DeviceHub	
	GDPR Compliance Tools	
	Secure Business Date	
	Inventory and Order Management	
	Inventory	
	✓ Multiple Units of Measure	
	Lot and Serial Tracking	
	✓ Blanket and Standard Purchase Orders	
	Purchase Receipts Without Inventory	

Figure: The Purchase Receipts Without Inventory feature

The *Purchase Receipts Without Inventory* and *Inventory* features are mutually exclusive. That is, a user cannot enable one of these features if the other is enabled; if the user attempts to select the check box on the *Enable/ Disable Features* form corresponding to one of these features and the check box corresponding to the other feature is selected, the system displays an error indicating that the user must disable the other feature first.

If a company has the *Inventory* feature enabled and has any unprocessed documents with stock items, we strongly recommend that these documents be processed before the company disables the *Inventory* feature and enables the *Purchase Receipts Without Inventory* feature.

When the *Purchase Receipts Without Inventory* feature is enabled and the *Inventory* feature is disabled on the *Enable/Disable Features* form, the following forms can be used:

- Purchase Receipts (PO302000)
- Release Purchase Receipts (PO501000)
- Purchase Receipt (PO646000)
- Purchase Receipt Summary (PO620500)
- Purchase Receipt Unbilled Summary (PO631020)
- Purchase Order Receipt and Billing History (PO643000)
- Purchase Receipt Details by Vendor (PO621000)

When the *Purchase Receipts Without Inventory* feature is enabled, on the *Purchase Orders* (PO301000) form, the **Enter PO Receipt** menu command becomes available in the **Actions** menu if the selected purchase order has non-stock items (see the following screenshot).

Purchase Or	rders										NOTES	ACTIVITIES	FILES	BUSINESS	EVENTS	CUSTOMIZATION
SIVE A		8	n +		0.	ĸ	< >	Я	ACTIONS -	RE	PORTS -					
Type Order Nbr	Normal 000028	• 0	Vendor		TEACON MAIN - F	PANY	Tea Com	pany Synd	Email Pur	chase Receip	Order	0.00				
Status Date Promised Ori	Open 11/3/2020		Owner Currency Vendor R	r let	USD	1.00	•	VIEW BA	Enter AP Complete Cancel O	Bill Order rder		0.00				
Description	fdfsd															
O +	e TAILS	TAX DE	TAILS SH	ADIL	ELANAET	HONS	ADD SUA	TOR INFO		x	T	ITS DIHE	RINEDRA	MIN		
B 🖗 🗋 Branch		Invento	ny ID	Line Ty	/pe		Line Desc	ription			UOM	Order 0	aty.	Qty. On Receipts	Unit Cos	t Ext. Cost
	OFFICE	KINGT	EA	Servic	e		King's De	stiny - Rar	re Ceylon tea		BOX	0	00	0.00	50.0000	0.00

Figure: The Enter PO Receipt action with the Inventory feature disabled

On the *Non-Stock Items* (IN202000) form, the **Process Item via Receipt** check box appears on the **General Settings** tab (see the following screenshot), and the **Require Shipment** and **Require Receipt** check boxes have been removed from the same tab. When the **Process Item via Receipt** check box is selected for a non-stock item, the purchases of this non-stock item must be processed by using a purchase receipt.

Non-Stock Items									ES ACTIVITIES	FILES CUSTOMIZATION
SAVE & CLUSE		к	$\langle \rangle \rangle$	I AC	TIONS .	INQUIF	RIES .			
* Inventory ID	VIDEOGUIDE - Video Training Course	o	Product Workgr	oup.				Q		
Item Status	Active *		Product Manage	HC .				Q		
Description	Video Training Course									
GENERAL SETTINGS	PRICE/COST INFORMATION VEN	IDOR L	ETAILS CRO	SS-REFE	RENGE	RELATE	DITEMS PA	SKAGING	GLACCOUNTS	ATTRIBUTES
Template ID			UNIT OF MEASU	RE	_	_		-		
ITEM DEFAULTS			Base Unit:		EA	20	Divisible U	nit		
Item Class	TRAINING - Customer Trainings and (00	+ Sales Unit		HOUR	po	Divisible U	tit		
Туре	Service		* Purchase Unit:		HOUR	20	Divisible U	nit		
* Tax Category	TAXABLE - Taxable Goods and Servic	00	ė +	×						
	Process Item via Receipt									
Close PO Line	By Amount	•	From	Multiply/E	Divid	Conve	actor			
			> HOUR	Multiply		1.00	0000 EA			

Figure: Process Item via Receipt check box for a non-stock item

The non-stock items with the **Process Item via Receipt** check box selected on the *Non-Stock Items* form can be added to a purchase receipt directly on the *Purchase Receipts* (PO302000) form or if the user clicks **Action > Enter PO Receipt** on the *Purchase Orders* (PO301000) form.

Upgrade Notes

If any stock items were added to the system before the *Purchase Receipts Without Inventory* feature was enabled, these stock items can be added to purchase orders on the *Purchase Orders* (PO301000) form or purchase receipts on the *Purchase Receipts* (PO302000) form along with non-stock items. If the user releases such documents, the documents will be processed according to **Release IN Documents automatically** check box state on the *Purchase Orders Preferences* (PO101000) form and the user will not be able to see the link to the IN receipt on the **Other** tab of the *Purchase Receipts* form. We recommend that users do not add stock items to purchase orders and purchase receipts when the *Purchase Receipts Without Inventory* feature is enabled. We also recommend to completely process all purchase orders and receipts that include stock items before the *Purchase Receipts Without Inventory* feature is enabled. The information about the statuses of purchase orders and receipts can be found on the following forms: *Purchase Order Details by Inventory Item* (PO611500) and *Purchase Receipt Summary* (PO620500) forms.

Posting Rules for Non-Stock Items with the Process Item via Receipt Check Box Selected

When a purchase receipt has non-stock items with the **Process Item via Receipt** check box selected on the *Non-Stock Items* (IN202000) form and then the purchase receipt is released, the system does not post any GL transactions. The transactions are posted on release of the corresponding AP bill. The GL accounts for transactions are derived from the settings of the non-stock items.

If the **Accrue Cost** check box is selected on the **Price/Cost Information** tab of the *Non-Stock Items* form for a nonstock item that also has the **Process Item via Receipt** check box selected on the **General Settings** tab, the posting rules will be the same as those for non-stock items with the **Accrue Cost** check box selected when the *Inventory* feature is enabled.

Processing of Purchase Returns for Non-Stock Items with the Process Item via Receipt Check Box Selected

When the *Purchase Receipts Without Inventory* feature is enabled, users can process purchase returns on the *Purchase Receipts* (PO302000) form that include non-stock items with the **Process Item via Receipt** check box selected on the *Non-Stock Items* (IN202000) form. If a purchase return is processed for lines of a purchase receipt, the value of the **Unit Cost** column for the purchase return line is derived from the **Unit Cost** value of the original purchase receipt line.

If a non-stock item with the **Process Item via Receipt** check box selected on the *Non-Stock Items* form is added directly to the purchase return on the *Purchase Receipts* form, the value of the **Unit Cost** column in the purchase return line will be derived from the value of the **Last Vendor Price** column on the **Vendor Details** tab of the *Non-Stock Items* form. If there is no value in the **Last Vendor Price** column, the system instead uses the value of the **Current Cost** box on the **Price/Cost Information** tab (the **Standard Cost** section).

Inheritance of Non-Stock Item Settings

For a non-stock item that was created when the *Inventory* feature was enabled on the *Enable/Disable Features* (CS100000) form, the state of the **Require Receipt** check box on the *Non-Stock Items* (IN202000) form is inherited by the **Process Item via Receipt** check box on the *Non-Stock Items* form if the *Purchase Receipts Without Inventory* feature is instead enabled.

For a non-stock item created when the *Purchase Receipts Without Inventory* feature is enabled, the **Process Item via Receipt** check box is cleared by default. If the *Inventory* feature is then enabled instead, the **Require Receipt** check box does not inherit the value of the **Process Item via Receipt** check box.

If the *Purchase Receipts Without Inventory* feature is enabled, if any documents with non-stock items for which the **Process Item via Receipt** check box is selected on the *Non-Stock Items* form are created, if you instead enable the *Inventory* feature, these documents will be processed as documents with non-stock items of the *Service* type.

The Purchase Receipt Unbilled Summary Report

The new *Purchase Receipt Unbilled Summary* (PO631020) report has been added. On this report form, a user can generate a report displaying items that have already been received but not billed yet or billed partially. The user specifies the date range and any of the following parameters: receipt number, vendor ID, and inventory ID.

The Purchase Receipt Unbilled Summary report is available only if the Purchase Receipts Without Inventory feature is enabled on the Enable/Disable Features (CS100000) form.

Order Management: UI Changes in Inventory and Order Management Forms

In Acumatica ERP 2021 R1, multiple UI changes and enhancements have been introduced to provide a better experience for users.

Changes on the Sales Orders Form

Various changes have been made to the *Sales Orders* (SO301000) form. The tabs of this form have been renamed as follows.

Old Name	New Name
Document Details	Details
Tax Details	Taxes
Financial Settings	Financial
Shipping Settings	Shipping
Discount Details	Discounts

The **Contact** box has been added to the Summary area of the Sales Orders form (see the following screenshot).

Sales Orders SO - USA Bar	tending	Scho	ol				D NOTES	ACTIVITIES	FILES CU:	STOMIZATION	TOOLS -
< 2 B	0	+	D D . K	< > >I	CREATE SHIPMENT	HOLD ACTIONS -	REPORTS -				
+ Order Type	so	Q	* Customer	ABARTENDE - USA	Bartending Schox D	Ordered Qty	0.00				
Order Nbr	<new></new>	,o	* Location'	MAIN - Primary Loca	Q, note	Discount Total	0.00				
Status	Open		Contact:	Sam Malone	0 0	VAT Exempt T	0.00				
* Date.	1/21/2021		Gurrency	USD ,0 1.00	 VIEW BASE 	VAT Taxable T	0.00				
· Requested On:	1/21/2021		Project	X - Non-Project Cod	e. 20	Tax Total	0.00				
Gustomer Ord						Order Total	10.00				
External Refer			Description								
DETAILS T	KES (COMM	ISSIONS FINANC	AL SHIPPING	ADDRESSES DISC	OUNTS SHIPMENTS	PAYMENTS T	OTALS			
0 + 0	×	ADD I	TEMS ADD MATE	X ITEMS	LINE DETAILS	POLINK ITEM AVAI		t I			
B D Branch		* Inver	tory ID Free Item	Warehouse	Line Description	+UOM	Quantity.	Qty. On Shipments	Open Qty.	Unit Price	Manual Price
	HOLE	AACO	OMPUTO1	WHOLESALE	Acer Laptop Computer	EA	2.00	0.00	0.00	500.00	ri.

Figure: The Contact box on the Sales Orders form

In the **Contact** box, the user can select or add a contact person for the current customer. If a contact is specified, when the user selects **Actions > Email Sales Order/Quote** on the *Sales Orders* form, the system automatically inserts the selected contact as the recipient of the email.

If the user creates a sales order on the *Sales Orders* form, the **Contact** box is empty by default. If the user generates a sales order from the *Opportunities* (CR304000) or *Sales Quotes* (CR304500) forms by selecting the **Create Sales Order** action on the form toolbar of one of these forms, the system copies the value of the **Contact** box (if any value is specified) to the sales order.

The following changes have been implemented related to the buttons on the table toolbar of the **Details** tab of the *Sales Orders* form:

• The Add Stock Item button has been renamed to Add Items.

- The Add Matrix Item button has been renamed to Add Matrix Items.
- The Allocations button has been renamed to Line Details.
- The order of the buttons on the table toolbar has been changed to the following: Add Items, Add Matrix Items, Add Invoice, Line Details, PO Link, and Item Availability.
- The Inventory Summary button has been removed.
- When a user clicks a sales order line on the tab and then clicks the **Item Availability** button, the system now opens the *Inventory Allocation Details* (IN402000) form in a new browser tab. In the **Inventory ID** and **Warehouse** boxes of this form, the system inserts the values from the **Inventory ID** and **Warehouse** columns, respectively of the **Details** tab of the selected sales order line of the *Sales Orders* form.

Also, a new **Addresses** tab (see the following screenshot) has been added to the *Sales Orders* form. The tab contains the **Ship-To Contact** and **Ship-To Address** sections (which were formerly on the **Shipping** tab), as well as the **Bill-To Contact** and **Bill-To Address** sections (which were previously on the **Financial** tab).

O 000066 - - 🕄 🖾	GoodF ා	O boo +	ne Re	estaura D. ▼	nt I<	<	>	Я	PREPARE	E INVOIO		ACTIONS -	REPORTS -
Order Type:	SO	Q		Custome	r.	G00	DFOOD	- Good	IFood One Re	staurar	O	Ordered Qty.:	20.00
Order Nbr.:	000066	Q		Location:		MAIN	I - Prima	iry Loca	ition			Discount Total:	0.00
Status:	Comple	ted		Contact:							Ø	VAT Exempt T	0.00
)ate:	1/20/20	21		Project:		X - N	on-Proje	ect Cod	θ.		O	VAT Taxable T	0.00
Requested On:	1/20/20	21										Tax Total:	4.44
Customer Ord												Order Total:	54.44
xternal Refer				Descriptio	on:	fsdfso	ł						
SHIP-TO CONT	АСТ	Over	ride Co	ntact				BILL	-TO CONTAC	т		Override Contact	
Company Nam	e:	GoodF	Food Or	e Restau	rant			Co	mpany Name		Go	oodFood One Restau	urant
Attention:								Att	tention:				
Phone 1:		+1 321	1 459 24	110				Ph	ione 1:		+1	321 459 2410	
Email:		client(@goodfo	od.com				En	nail:		clie	ent@goodfood.com	
HIP-TO ADDRE	ESS							BILL	-TO ADDRES	SS			
		Over	ride Ad	dress								Override Address	
Address Line 1		111 E	36th St					Ad	Idress Line 1:		11	1 E 36th St	
Address Line 2	1							Ad	Idress Line 2:				
City:		New Y	′ork					Cit	ty:		Ne	ew York	
Country:		US - U	Inited S	tates of A	merica	1		Co	ountry:		US	S - United States of A	America
State:		NY - N	IEW YC	RK				Sta	ate:		NY	Y - NEW YORK	
Postal Code:		10016						Po	stal Code:		10	016	

Figure: The Addresses tab on the Sales Orders form

The Financial tab (see the following screenshot) of the Sales Orders form has been changed as follows:

- The arrangement of sections has been changed.
- A new **Ownership** section has been added, which contains the **Workgroup** and **Owner** boxes (previously in the **Financial Information** section).
- A new Other Information section has been added to the Financial tab (shown in the following screenshot). It contains the Orig. Order Type and Orig. Order Nbr. boxes and the Emailed check box, which were previously in the Financial Information section.

Sales Orders			_													
SO 000066 - G	oodFoo	d One ⊥ ో	Rest	aurant	t IZ		\$	М	PRF		NVOICE		ACTIONS -	REPOR	215 -	
	- /			8	IN .	`	·	~			TREESE		Nonono	INEI OI		
* Order Type: S	50	Q	Cu	stomer:		GOOD	FOOD	- Good	Food O	ne Resta	aurar 🧷		Ordered Qty.:		20.00	
Order Nbr.: 0	000066	Q	Loc	cation:		MAIN	- Prima	ry Locat	tion				Discount Total:		0.00	
Status: C	Completed		Co	ntact:							0		VAT Exempt T		0.00	
Date: 1	1/20/2021		Pro	ject:		X - No	n-Proje	ct Code	e.		0		VAT Taxable T		0.00	
Requested On: 1	1/20/2021												Tax Total:		4.44	
Customer Ord													Order Total:		54.44	
External Refer			Des	scription		fsdfsd										
DETAILS TAXI	ES FI	NANCIAL		SHIPPIN	IG	ADDF	RESSES	6 S	SHIPME	ENTS	PAYME	ENT	TS TOTALS			
DETAILS TAXI	es Fi	NANCIAL		SHIPPIN	IG	ADDF	RESSES	s s Payn	SHIPME	ents Nform	Payme Ation —	ENT	TS TOTALS			_
DETAILS TAXI FINANCIAL INFORM Branch:	es fi Mation – H		ICE - S	SHIPPIN	IG e Hea	ADDF d Office	RESSES	S S PAYN Pay	SHIPME MENT II yment N	ENTS NFORM Vlethod:	Payme AtionC	ENT	TS TOTALS	nent		_
DETAILS TAXI FINANCIAL INFORM Branch:	es Fi Mation – H	NANCIAL IEADOFF Override	ICE - S	SHIPPIN SweetLif	IG e Hea	ADDF	RESSES	S S PAYN Pay Car	SHIPME	NFORM NFORM Vethod: punt Nbr.:	PAYME	CHE	TS TOTALS	nent		-
DETAILS TAXI FINANCIAL INFORM Branch: Customer Tax Zon	MATION - H	NANCIAL IEADOFF Override IYSTATE	ICE - S Tax Zo - NY S	SHIPPIN SweetLif	IG e Hea	ADDF	RESSES	S S PAYN Pay Car Car	SHIPME MENT II yment N rd/Acco sh Accc	ENTS NFORM Method: bunt Nbr. bunt:	PAYME	ENT	TS TOTALS ECK - Check Paym 200WH - Wholesale	nent e Checkir	ng	-
DETAILS TAXI FINANCIAL INFORM Branch: Customer Tax Zon	MATION - H ne: N	NANCIAL EADOFF Override IYSTATE Bill Sepa	ICE - S Tax Zo - NY S rately	SHIPPIN SweetLif	IG e Hea	ADDF d Office	RESSES	S S PAYN Pay Car Car Cas	MENT II wment N rd/Acco sh Accco	NFORM Wethod: bunt Nbr. bunt:	PAYME	ENT	TS TOTALS ECK - Check Payn 200WH - Wholesale	nent e Checkir	ng	-
DETAILS TAXI FINANCIAL INFORM Branch: Customer Tax Zon Invoice Nbr.:	IES FI	EADOFF Override IYSTATE Bill Sepa	ICE - S Tax Zo - NY S rately	SHIPPIN SweetLife one state Tax	IG e Hea	ADDF d Office	at	S S PAYN Pay Car Cas OWN Wo	SHIPME MENT II yment N rd/Acco sh Acco sh Acco NERSHI orkgroup	NFORM Vethod: bunt Nbr. bunt: IP	PAYME	CHE	ECK - Check Payn	nent e Checkir	ng	-
DETAILS TAXI FINANCIAL INFORM Branch: Customer Tax Zon Invoice Nbr.: Invoice Date:	MATION - H ne: N	NANCIAL EADOFF Override YSTATE Bill Sepa	ICE - S Tax Zo - NY S rately	SHIPPIN SweetLif	IG e Hea	ADDF	a	S S PAYN Pay Car Car OWN Wo OW	SHIPME MENT II yment N rd/Acco sh Acco NERSHI orkgroup	NFORM Method: Jount Nbr. Jount: IP D:	PAYME	CHE	TS TOTALS ECK - Check Payn 200WH - Wholesale	nent e Checkir	ng	-
DETAILS TAXI FINANCIAL INFORM Branch: Customer Tax Zon Invoice Nbr.: Invoice Date: Terms:	IES FI	NANCIAL IEADOFF Override IYSTATE Bill Sepa	ICE - S Tax Zo - NY S rately ays	SHIPPIN SweetLif	IG e Hea	ADDF d Office	ar	S S PAYN Pay Car Car Car OWN Wo OWN Wo OW	SHIPME MENT II yment N rd/Acco sh Acco NERSHI prkgroup mer:	NFORM Wethod: bunt Nbr. bunt: IP p: CORMAT	PAYME ATIONC : 1	CHE	ECK - Check Payn	nent e Checkir	ng	
DETAILS TAXI FINANCIAL INFORM Branch: Customer Tax Zon Invoice Nbr.: Invoice Date: Terms: Due Date:	MATION _ H	NANCIAL EADOFF Override YSTATE Bill Sepa	ICE - S Tax Zo - NY S rately	SHIPPIN SweetLifo ne state Tax	IG e Hea	ADDF d Office	a	S S PAYN Pay Car Car Car OWN Wo Own OWN Wo Own	MENT II yment N rd/Acco sh Acco NERSHI orkgroup yner: ER INF g. Orde	NFORM Wethod: bunt Nbr. bunt: IP p: CORMAT	PAYME ATIONC 1		ECK - Check Payn	nent e Checkir	ng	
DETAILS TAXI FINANCIAL INFORM Branch: Customer Tax Zon Invoice Nbr.: Invoice Date: Terms: Due Date: Cash Discount Da	IES FI MATION	NANCIAL IEADOFF Override IYSTATE Bill Sepa	ICE - S Tax Zo - NY S rately ays	SHIPPIN SweetLife ane	IG	ADDF d Office	RESSES ar	S S PAYN Pay Car Car Car Car Car Car Car Car OWN Wo OWN OTH Orig	SHIPME MENT II yment N rd/Acco sh Acco NERSHI orkgroup mer: IER INF g. Orde g. Orde	NFORM Wethod: ount Nbr: ount: IP o: ORMATI er Type: er Nbr.:	PAYME ATIONC 1		ECK - Check Payn	nent e Checkir	ng	

Figure: The Financial tab on the Sales Orders form

Changes have also been made to the **Shipping** tab (see the following screenshot) of the **Sales Orders** form, including the addition of the **Delivery Settings** and **Order Shipping Settings** sections. These two new sections hold the UI elements of the now-removed **Shipping Information** section.

••••	ν + n	¢∙ K	<	> >	PREPARE INVO	ICE	ACTIONS -	REPORTS -
• Order Type:	SO ,O	Customer:	GOODF	OOD - G	oodFood One Restaurar	Ø	Ordered Qty.:	20.00
Order Nbr.:	000066 ,0	Location:	MAIN -	Primary L	ocation		Discount Total:	0.00
Status:	Completed	Contact:				0	VAT Exempt T	0.00
Date:	1/20/2021	Project:	X - Non	-Project C	ode.	0	VAT Taxable T	0.00
Requested On:	1/20/2021						Tax Total:	4.44
Customer Ord							Order Total:	54.44
External Refer		Description:	fsdfsd					
			ADDRE	ESSES	SHIPMENTS PA	YMEN	ITS TOTALS	
DELIVERY SETT	TINGS		ADDRE	ESSES	SHIPMENTS PA	INGS	NTS TOTALS	
DELIVERY SETT Ship Via:	TINGS	SHOP FOF	ADDRE		SHIPMENTS PA RDER SHIPPING SETT Sched. Shipment:	TINGS	NTS TOTALS	
DELIVERY SETT Ship Via:	TINGS	SHOP FOR	ADDRE		SHIPMENTS PA		NTS TOTALS	
DELIVERY SETT Ship Via: FOB Point:	TINGS	SHOP FOF	ADDRE		SHIPMENTS PA RDER SHIPPING SETT Sched. Shipment: Shipping Rule:	INGS	TOTALS	
DELIVERY SETT Ship Via: FOB Point: Priority:	TINGS	SHOP FOF	ADDRE		SHIPMENTS PA RDER SHIPPING SETT Sched. Shipment: Shipping Rule: Cancel By:	YMEN 1/2 5 5 1/2	ITS TOTALS	Canceled
DELIVERY SETT Ship Via: FOB Point: Priority: Shipping Terms	TINGS Will Call	SHOP FOF	ADDRE	C	SHIPMENTS PA RDER SHIPPING SETT Sched. Shipment: Shipping Rule: Cancel By: Preferred Warehouse IE	YMEN 1/2 1/2 5 5 1/2 0:	ITS TOTALS	Canceled
DELIVERY SETT Ship Via: FOB Point: Priority: Shipping Terms Shipping Zone:	Will Call		ADDRE	=SSES	SHIPMENTS PA RDER SHIPPING SETT Sched. Shipment: Shipping Rule: Cancel By: Preferred Warehouse IE	TINGS 1/2 5 5 1/2 5 1/2 0:	ITS TOTALS	Canceled
DELIVERY SETT Ship Via: FOB Point: Priority: Shipping Terms Shipping Zone:	TINGS Will Call	0 al Delivery	ADDRE		SHIPMENTS PA RDER SHIPPING SETT Sched. Shipment: Shipping Rule: Cancel By: Preferred Warehouse IE	TINGS 1/: 5 5 1/: 0:	ITS TOTALS	Canceled
DELIVERY SETT Ship Via: FOB Point: Priority: Shipping Terms Shipping Zone:	TINGS Will Call	0 al Delivery Delivery	ADDRE	==sses	SHIPMENTS PA RDER SHIPPING SETT Sched. Shipment: Shipping Rule: Cancel By: Preferred Warehouse IE	1// 1// \$ \$ 1// \$ \$ 1// 2010	ITS TOTALS	Canceled
DELIVERY SETT Ship Via: FOB Point: Priority: Shipping Terms Shipping Zone:	TINGS	0 al Delivery Delivery	ADDRE	=======	SHIPMENTS PA RDER SHIPPING SETT Sched. Shipment: Shipping Rule: Cancel By: Preferred Warehouse IC	1// 1// \$ \$ \$ 1//):	ITS TOTALS	Canceled

Figure: The Shipping tab on the Sales Orders form

Finally, on the **Totals** tab of the *Sales Orders* form, the column widths has been adjusted to match the column widths on the **Financial** tab.

Changes on the Invoices Form

The tabs on the Invoices (SO303000) form have been renamed as follows.

Old Name	New Name
Document Details	Details
Tax Details	Taxes
Freight Details	Freight
Address Details	Addresses

The **Assigned To** section on the **Financial** tab has been renamed to **Ownership** (see the following screenshot).

	5	+ 🗊	¢. K	<	>	X	ACTIONS -	REPO	DRTS -	
īype:	Invoice	•	Customer:	COFFE	ESHOR	- Four	Star Coffee&Sweet	0	Detail Total:	92.00
Reference Nbr.:	000004	Q	Location:	MAIN -	Primary	y Locatio	on		Discount Total:	0.00
Status:	Open		Terms:	30D - 3	30 Days				VAT Taxable T	0.00
Date:	1/29/2020		* Due Date:	2/28/20	020 -	·			VAT Exempt T	0.00
ost Period:	01-2020		* Cash Discount	2/28/20	020 -	·			Tax Total:	5.98
Customer Ord									Write-Off Total:	0.00
roject/Contract:	X - Non-Pr	oject Code						Ø	Balance:	97.98
)escription:	Fresh fruit	s							Amount:	97.98
IETAILS TA	AXES F	REIGHT	FINANCIAL	ADDRE	ESSES	AP	PLICATIONS		Cash Discount:	0.00
DETAILS TA	AXES F	REIGHT	FINANCIAL	ADDRE	ESSES	AP PAYM Payr	PLICATIONS)N	Cash Discount:	0.00
DETAILS T/ INK TO GL Batch Nbr.: Branch:	AXES F	REIGHT		ADDRE ead Office	ESSES	AP PAYM Payr Carr	PLICATIONS ENT INFORMATIC ment Method:)N	Cash Discount:	0.00
DETAILS T/ INK TO GL Batch Nbr.: Branch: AR Account:	AXES F	REIGHT AR000005 HEADOFFI 11000 - Acc	FINANCIAL CE - SweetLife H	ADDRE ead Office	aı	AP PAYM Payr Caro Cast	PLICATIONS ENT INFORMATIC ment Method: d/Account Nbr.: h Account:	0N	Cash Discount:	0.00
DETAILS T/ INK TO GL Batch Nbr.: Branch: AR Account: Original Docum	AXES F	REIGHT AR000005 HEADOFFI 11000 - Acc	FINANCIAL CE - SweetLife H ounts Receivable	ADDRE ead Office	ar	AP PAYM Payr Carc Cast	PLICATIONS ENT INFORMATIC ment Method: d/Account Nbr.: h Account: NFO	0N	Cash Discount:	0.00
DETAILS T/ INK TO GL Batch Nbr.: Branch: AR Account: Original Docum WNERSHIP	AXES F	REIGHT AR000005 HEADOFFI 11000 - Acc	FINANCIAL CE - SweetLife H ounts Receivable	ADDRE ead Office	ar	AP PAYM Payr Carc Cast TAX IN Cust	PLICATIONS ENT INFORMATIC ment Method: d/Account Nbr.: h Account: NFO	0N 10 N	Cash Discount:	0.00
DETAILS T/ INK TO GL Batch Nbr.: Branch: AR Account: Original Docum WNERSHIP Workgroup ID:	AXES F	REIGHT AR000005 HEADOFFI 11000 - Acc	FINANCIAL CE - SweetLife H ounts Receivable	ADDRE ead Office	ar	AP Paym Carc Cash TAX IN Cust	PLICATIONS ENT INFORMATIC ment Method: d/Account Nbr.: h Account: NFO tomer Tax Zone:	0N 10 	Cash Discount:	0.00
DETAILS T/ INK TO GL Batch Nbr.: Branch: AR Account: Original Docum WNERSHIP Workgroup ID: Owner:	AXES F	REIGHT AR000005 HEADOFFI 11000 - Acc	FINANCIAL CE - SweetLife H ounts Receivable	ADDRE ead Office	aı	AP Payr Carc Cast TAX IN Cust	PLICATIONS ENT INFORMATIC ment Method: d/Account Nbr.: h Account: NFO tomer Tax Zone:	0N [C]10	Cash Discount:	0.00
DETAILS T/ INK TO GL Batch Nbr.: Branch: AR Account: Original Docum DWNERSHIP Workgroup ID: Owner: PRINT AND EMA	AXES F	REIGHT AR000005 HEADOFFI 11000 - Acc Anna Johns S	FINANCIAL CE - SweetLife H ounts Receivable	ADDRE ead Office	aı	AP Paym Payr Carc Cash TAX IN Cust	PLICATIONS ENT INFORMATIC ment Method: d/Account Nbr.: h Account: NFO tomer Tax Zone:	0N 1C	Cash Discount:	0.00
DETAILS T/ INK TO GL Batch Nbr.: Branch: AR Account: Original Docum WNERSHIP Workgroup ID: Owner: PRINT AND EMA Cont Print	AXES F	AR000005 HEADOFFI 11000 - Acc Anna Johns S Printed	FINANCIAL CE - SweetLife H ounts Receivable	ADDRE ead Office	aı	AP Paym Payr Carc Cash TAX II Cust	PLICATIONS ENT INFORMATIC ment Method: d/Account Nbr.: h Account: NFO tomer Tax Zone:		Cash Discount:	0.00

Figure: The Financial tab on the Invoices form

Changes on the Purchase Orders Form

The tabs on the *Purchase Orders* (PO301000) form have been renamed as follows.

Old Name	New Name
Document Details	Details
Tax Details	Taxes

Old Name	New Name
Shipping Instructions	Shipping
Approval Details	Approvals
Discount Details	Discounts
Other Information	Other

The following changes have been implemented on the **Details** tab of the *Purchase Orders* form, as shown in the following screenshot:

- The Add Item button has been renamed to Add Items.
- The Add Matrix Item button has been renamed to Add Matrix Items.
- The order of the buttons on the table toolbar is now the following: Add Items, Add Matrix Items, Add Project Item, Add Blanket PO, Add Blanket PO Line

Purchase Orders Normal 00003	6 - All Fruits Mall	0 • K		NI AC		EPOPTS			NOTES	ACTIVITIES	FILES	CUS	STOMIZATION
Type	Normal	Vendor	ALLERUITS	- All Fruits Ma	ul	0 Lin	e Total	45.80					
Order Nbr.	000036 ,0	Location:	MAIN - Prima	ary Location		Dis	count Total:	0.00					
Status	Completed	Owner:				VA	Exempt T.	0.00					
Date:	1/19/2021	Currency.	USD 1	- 00	VIEW BASE	VA	Taxable T.	0.00					
Promised On:	1/19/2021	Vendor Ref.				Tax	Total	0.00					
Description	purchase of apples					Ord	for Total	45.80					
DETAILS	XES SHIPPING	VENDOR INFO	PO HIST	TORY PR	REPAYMENTS	CHAN	BE ORDERS	OTHER	COMPLIANCE				
0 + 0	ABC. ITEM	S ADDIMATRO	CTENIS A	No medied	THEM ADD	I BLANKE	ADS	SLANKET CLA	VIEW SC	DEMAND	н	x .	L
8 B D Branch	Inventory II	Line T	ype	Warehous	Line	Description	i .	Order Oty.	Unit Cos	st C Re	ty. On UC	M	Ext. Cost
	FFICE APPLES	Good	s for IN	WHOLES	SALE Free	h apples 1	ю	20.00	2.2900	0	20.00 LE	3	45.80

Figure: The Details tab on the Purchase Orders form

Other Changes in the Inventory and Order Management Forms

Tabs have been renamed on other inventory and order management forms, as detailed in the following table.

Old Name	New Name
Shipments (SO302000)	
Document Details	Details
Shipping Settings	Shipping
Picking Worksheets (SO302500)	
Document Details	Details
Purchase Receipts (PO302000)	
Document Details	Details
Purchase Orders	Orders

Old Name	New Name
Put Away History	Put Away
PR History	History
Billing History	Billing
Other Information	Other
Landed Costs (PO303000)	<u></u>
Document Details	Details
Tax Details	Taxes
Financial Details	Financial
Requests (RQ301000) and Requisitions (RQ302000)	
Document Details	Details
Shipping Instructions	Shipping
Approval Details	Approvals
Budget Details	Budget
Other Information	Other
Receipts (IN301000), Issues (IN302000), and Adjustments	(IN303000)
Transaction Details	Details
Financial Details	Financial
Manufacturing Details	Manufacturing
Transfers (IN304000)	<u></u>
Transaction Details	Details
Financial Details	Financial
Kit Assembly (IN307000)	<u></u>
Kit Allocations	Kit Line Details
Financial Details	Financial
Stock Items (IN202500) and Non-Stock Items (IN202000)	L
General Settings	General
Price/Cost Info	Price/Cost

Old Name	New Name
Warehouse Details	Warehouses
Vendor Details	Vendors
Replenishment Info	Replenishment
Deferral Settings	Deferral
Item Warehouse Details (IN204500)	
General Settings	General
Replenishment Info	Replenishment
Price/Cost Information	Price/Cost
Warehouses (IN204000)	
Receiving Location	Locations
Address Information	Address
Warehouse Buildings (IN204010)	
Address Information	Address
Template Items (IN203000)	
General Settings	General
Price/Cost Info	Price/Cost
Vendor Details	Vendors
Attribute Configuration	Configuration
Create Matrix Items	Item Creation

Also, on the following forms, the **Allocation** button on the table toolbar of the **Details** tab and the **Allocations** dialog box have been renamed to **Line Details**, as shown in the following screenshot:

- Issues (IN302000)
- Kit Assembly (IN307000)
- Picking Worksheets (SO302500)
- Purchase Receipts (PO302000)
- Receipts (IN301000)
- Receive and Put Away (PO302020)
- Sales Orders (SO301000)
- Shipments (SO302000)
- Transfers (IN304000)

Sales Orders SO - GoodFo	od One Re	staurant								OTES ACTIVIT	ies file	s cust	OMIZATION	TOOLS .
← 3 8	n +	П 0• к	< > >I	CREATE	SHIPMENT	HOLD ACTIO	ONS . REF	PORTS +						
• Cirder Type	SO	Ø • Caestomer	GOODFOOD - Good	Food One Re	star, D Ø	Dedered Qry.	90.00							^
Order Nbr	<new></new>	O + Location	MAIN - Primary Loca	tion	Q	Discount Total	0.00							
Status	Open	Contact			20	VAT Exempt T.	0.00							
• Date	1/21/2021	* Project	X - Non-Project Code	5	p 0	VAT Taxable T	0.00							
· Requested On	1/21/2021					Tax Total	36.58							
Customer Ord						Order Total	448.78							
External Refer		Description	Envits apples nears											
OFTALS	TAXES F	INANCIAL SHIPPING	ADDRIESBES	SHIPMENT	S PAYME	NIS TOTALS	AVAILABILITY		T					
B Branch		nventory ID Free Item	Line Details											× Price
			0 + x	HX	2					A	ctive		• 7	1
6 D HEADO	FFICE A	PPLES E	E Ship On	Allocated	Alloc. Ware	house Comple	ted	Quantity	Qty. On	Qty. Received	NOM	Mark for	Related	5000
> D HEADO	FFICE	EARS	-						shipments			PO	Documer	1800
			> 1/21/2021		WHOLESA	LE		40.00	0.00	0.00	LB			
														A 100
On Mand 0.00 LB,	Available -12.0	DO LB, Available for Shippi												121

Figure: The Line Details dialog box on the Sales Orders form

The **Release from Hold**, **Put on Hold**, **Put on Credit Hold**, and **Remove from Credit Hold** actions (and buttons, when applicable) have been renamed to **Remove Hold** (see the screenshot below), **Hold**, **Credit Hold**, and **Remove Credit Hold**, respectively, on the following forms:

- Invoices (SO303000)
- Landed Costs (PO303000)
- Purchase Orders (PO301000)
- Purchase Receipts (PO302000)
- *Requests* (RQ301000)
- *Requisitions* (RQ302000)
- Sales Orders (SO301000)
- Shipments (SO302000)

Purchase Order Normal 000	039 - Glory F	ruit Case	< >	>I REMOVE	HOLD	ACTIONS - REPORTS -	C) NOTES ACTIVITIE	S FI	LES	CUSTOM	ZATION
Туре	Normal	* Vendor	GLORYFRU	JIT - Glory Fruit Case	20	Remove Hold						
Order Nbr	000039	 Location 	MAIN - Prim	hary Location	Q	E III						
Status	On Hold	Owner			P							
Date:	1/21/2021	Currency	USD	1.00 - VIEW	BASE.							
Promised On:	1/21/2021 -	Vendor Ref.										
Description	purchase of fre	esh fruits #632										
DETAILS	TAXES SHIF	PPING VENDOR INF	O POHIS	TORY PREPAYM	ENTS		COM	IPLIANCE				
0 +	0 X AD	DITEMS ADD MATE	IX ITEMS	ADD PROJECT ITEM	ADD I	Recalculate Prices	INE	VIEW SO DEMAND		x	t	
田 D D Bran	ch Inv	entory ID Line	Туре	Warehouse	Line De	In Brown was	ty.	Unit Cost	Qty. On Réceipts	Non		Ext. Cost
& D HEAL	DOFFICE AF	PLES Go	ods for IN	RETAIL	Fresh	La M	0	2.2900	0.00	LB		103.05
> & D HEAD		NANAS Go	ods for IN	RETAIL	Bananas	110	60.00	0.5000	0.00	LB		30.00
& D HEAL	DOFFICE OF	RANGES Go	ods for IN	RETAIL	Fresh or	anges 1 ib	40.00	1.8500	0.00	LB		74.00

Figure: The Remove Hold action on the Purchase Orders form

Payroll: Additional Information about Tax Settings

Starting in Acumatica ERP 2021 R1, additional information about tax settings can be obtained from the Tax Symmetry engine or added manually by an administrator. As a result, an administrator can properly configure necessary tax codes without having to guess the impact that each tax setting has on the payroll calculation.

The following changes have been made in the system to support this capability.

Information from the Tax Symmetry Engine

The new elements that have been added to the system to display additional information about tax settings are described in the table below.

Element	Added To	Description
Additional Informa- tion	 Tax Settings table on the Tax Codes tab of the Tax Maintenance (PR208000) form Company Tax Settings tab of the Tax Maintenance form Tax Settings tab of the Employee Payroll Settings (PR203000) form Tax Settings table on the Taxes tab of the Employee Payroll Settings form 	Additional information about a tax attribute that is downloaded from the Tax Symmetry engine when the user clicks Update Taxes on the form toolbar of the <i>Tax Mainte-</i> <i>nance</i> form.
Used for Tax Calcula- tion	 Company Tax Settings tab of the Tax Maintenance form Tax Settings tab of the Employee Payroll Settings form 	A read-only check box that indi- cates whether an attribute is used for tax calculation by the tax en- gine.
Used for Government Reporting	 Company Tax Settings tab of the Tax Maintenance form Tax Settings tab of the Employee Payroll Settings form 	A read-only check box that indi- cates whether an attribute is used for government reporting.
Form/Box	 Tax Settings table on the Tax Codes tab of the Tax Maintenance form Company Tax Settings tab of the Tax Maintenance form Tax Settings tab of the Employee Payroll Settings form Tax Settings table on the Taxes tab of the Employee Payroll Settings form 	The tax form and box that an at- tribute affects.
Company Notes	Tax Settings tab of the <i>Employee Payroll Set</i> - <i>tings</i> form	The note added for the attribute through the Notes column on the Company Tax Settings tab of the <i>Tax Maintenance</i> form.

Element	Added To	Description
	Tax Settings table on the Taxes tab of the <i>Employee Payroll Settings</i> form	The note added for the attribute through the Notes column of the Tax Settings table on the Tax Codes tab of the <i>Tax Maintenance</i> form.

The new elements are shown in the following screenshots.

Tax I	Ma	aintenance	KES ASSIGN TAXES TO	EMPLO	YEES							CUS	TOMIZATION TO
TAX	co	DES COMPAN	IV TAX SETTINGS										
ax Co	des	5					Tax S	ettings					
0	V	VIEW TAX DETAILS	⊷ X				0	⊨ x					
6 1	D	* Code	• Name	Tax State	Tax Category	Vendor	80	Name	Additional Information	Allow Employee	Value	Required	Form/Box
0	D	ER FICA	Employer FICA Tax	FED	Employer Tax	IRSGC		-		Overrice		-	
0	D	ER FUTA	Federal Unemployment Tax	FED	Employer Tax	IRSGC	1 4	Rate	Specify the rate as a percentage (if yo		1.2500		
0	D	ER MEDI	Employer Medicare Tax	FED	Employer Tax	IRSGC	D	Override Wage Bas	e Override the wage limit after which th		7,000.00		
0	D	FICA	FICA	FED	Employee Withholding	IRSGC	D	Is Exempted				Y	
0	D	FIT	Federal Income Tax	FED	Employee Withholding	IRSGC							
0	D	MEDI	Medicare	FED	Employee Withholding	IRSGC							

Figure: The Tax Codes tab of the Tax Maintenance form

Тах	Maintenance の UPDATE TAXES ASSIGN TAXES TO	EMPLOYEES							CUSTOMIZATION	TOOLS .
TĂ	X CODES COMPANY TAX SETTINGS									
OS	now Altributes Only for States That Have Tax Codes Set I	Up								
0										
BD	Name	Additional Information	State	Allow Employee Override	Value	Required	Used for Tax Calculation	Used for Government Reporting	Form/Box.	
2 0	Occupational Code	Enter the Alaska Occupation Code - format	AK					2	Form AK TQ01G	-
D	How state withholding is to be rounded	Select if the amount is to be rounded to the	AK		Default	R	2			
D	Geographic Code	Enter the Alaska Geographic Code	AK				0	9	Form AK TQ01C	
D	Employer has nexus relationship with the state	Nexus is typically created for income tax pu The requirements vary from state to state.	AK	ū		Ø				
D	State Nonresident Certificate on file for this employee	Employees can provide a Certificate of No	AK		0	2	R			
D	Employee is a resident of the state or location	Select if the employee's home address is lo	AK		0	2	2			
D	Employee is exempt from state withholding	Select if you want the State Income tax to	AK		El	2	2			
D	Additional state withholding amount	Enter the amount of additional state withhol	AK		0.00	2				
D	Calculation method for regular wages	Annualized: Use the amount from the curre Cumulative: Add the wages you've paid the Daily: Calculate the taxes for each day. None: Don't calculate tax.	AK		Annualized	Ø	P			

Figure: The Company Tax Settings tab of the Tax Maintenance form

Employee Payroll Settings HANSONJOE - Joe Hanson						D NOTES	FILES CUSTOMIZATION TOOLS
Employee ID: HANSONJOE Employee Name: Joe Hanson	- Joe Hanson ,p Z Active						
GENERAL INFO	TAXES COMPENSATION DEDUCTIONS AND BENEFITS	PAID TH	ME OFF PAYMEN	T SETTINGS	LACCOUNTS		
0 11 12							
8 D Name	Additional Information Company Notes	State	Value	Use Default	Used for Tax, Calculation	Used for Government Reporting	Form/Box
D Social Security Number	Enter the nine-digit Social Security Number	FED	474-80-6666		0	2	
P D Filing status		FED	Single		2	2	Form W-4 Step 1 Box (c)
D Total Allowances	Enter the total number of allowances	FED	0		E	12	Form W-4 Line 5
Additional federal withholding amount	Enter the amount of additional federal with	FED	0.00		E		
D Is Seasonal Employee	Select if the employee is considered seaso	FED			125	2	1094/1095-C series ACA forms
D Employment Code	Enter the employment code, which corresp	FED			0	N	Form W-3
D Ethnicity		FED	Caucasian		- C.	2	
Consents to Electronic ACA Forms	Select if the employee has consented to an	FED			100	2	
ACA Policy Origin Code	Type of coverage offered by the company i	FED			- m	2	1094/1095-C series ACA forms
ACA Self-Insured Employee	A self-insured plan is a health plan where t	FED	0		0	12	1094/1095-C series ACA forms
D Multiple Jobs or Spouse Works	Select if the employee is working multiple j	FED			12		Form W-4 Step 2 Box (c)
D Use 2020 W-4 Settings	Select if the employee wants to fill the 202	FED			2		Form W-4
Claim Dependents	Enter the number of dependents claimed b	FED	0.00				Form W-4 Step 3
D Other Income	Other income from W-4 Step 4 Box (a)	FED	0.00		Ø		Form W-4 Step 4 Box (a)
D Deductions	Enter the amount of dedctions, other than t	FED	0.00		B		Form W-4 Step 4 Box (b)

Figure: The Tax Settings tab of the Employee Payroll Settings form

• Employee ID: Employee Name: • Employee ID: Employee Name: • Employee ID: Employee Name: • Employee FICA Tax • Employee FICA Tax • Employee FICA Tax • Employee FICA Tax • Employee FICA Tax • Employeer FICA Tax		
• Employee ID: Employee Name: HANSONJOE - Joe Hanson O I Active GENERAL INFO TAX SETTINGS TAXES COMPENSATION DEDUCTIONS AND BENEFITS PAID_TIME OFF PAYMENT SETTINGS GL ACCOUNTS MPORT TAXES H Image: Compensation of the set		
GENERAL INFO TAX SETTINGS TAXES COMPENSATION DEDUCTIONS AND BENEFITS PAID TIME OFF PAYMENT SETTINGS GL ADCOUNTS IMPORT TAXES H IM Image: Company Notes Image: Company Notes Image: Company Notes Value ER FICA Employer FICA Tax Image: Company Notes Image: Company Notes Value Value Value ER FICA Federal Unemployment Tax Image: Company Notes Value Value 0.6000		
O IMPORT TAXES IN IN Tax Sociel Name Active O IH ERFICA Employer FICA Tax IN Name Additional information Company Notes Value > ERFUTA Federal Unemployment Tax > Rate Specify the rate as a percentage (if you wa 0.6000		
Tax Code Name Active Image: Constraint of the second s		
ER.FICA Employer FICA Tax B Name Additional Information Company Notes Value > ER.FUTA Federal Unemployment Tax > D Rate Specify the rate as a percentage (if you wa 0.6000		
ERFUTA Federal Unemployment Tax P Rate Specify the rate as a percentage (if you wa 0.6000	Use Default	Form/Box
ER MEDI Employer Medicare Tax D Override Wage Base Override the wage limit after which the tax i 7,000.00		
EICA FICA 🖸 🗋 is Exempted		
EII Federal Income Tax		
MED Medicare		
MED/2 Additional Medicare 🗹		
WAERFLI Washington Paid Family & Medical Leave		
WAER.SDI Washington Industrial Insurance - Employer		
WAERSUTA Washington State Unemployment Tax		
WAERSUTASC Washington Rate Class 1 Thru 40 Employ		
WAELI Washington Paid Family & Medical Leave 🗹		
WA.SDI Washington Industrial Insurance		

Figure: The Taxes tab of the Employee Payroll Settings form

Custom Notes

Starting in Acumatica ERP 2021 R1, a user can use custom text notes to record a piece of information about a tax code or tax attribute and to share this information with other users.

Each of the following tables now has the standard Note column, which a user can use to attach a custom text note to a particular line:

- The Tax Codes table on the Tax Codes tab of the Tax Maintenance (PR208000) form
- The Tax Settings table on the Tax Codes tab of the Tax Maintenance form. A note added through this table
 is displayed for the same tax attribute in the Company Notes column of the Tax Settings table on the Taxes
 tab of the Employee Payroll Settings (PR203000) form

- The table on the **Company Tax Settings** tab of the *Tax Maintenance* form. A note added through this table is displayed for the same tax attribute in the **Company Notes** column of the table on the **Tax Settings** tab of the *Employee Payroll Settings* form
- The table on the **Tax Settings** tab of the *Employee Payroll Settings* form
- The Tax Settings table on the Taxes tab of the Employee Payroll Settings form

Payroll: Annual Reports

In Acumatica ERP 2021 R1, the following new reports have been added to the system:

- *Earnings by Employee* (PR641065): Displays quarterly and YTD hours and amounts earned by each employee within the specified year broken down by earning type.
- *Deductions and Benefits by Employee* (PR641066): Displays information about employee deductions and benefits payed during the specified year broken down by employee and deduction and benefit code.
- *Taxes by Employee* (PR641067): Displays calculated quarterly and YTD tax amounts for each employee within the specified year broken down by tax code.

By default, these reports are included in the **Annual Reports** category of the **Payroll** workspace, as shown in the following screenshot.

Payroll			Ę
+ New Payroll Batch + New Paycheck			
Transactions	Inquiries	Reports	Preferences
Payroll Batches	Pay Stubs	Payroll Check Register	Payroll Preferences
Payment Batch	Employment History	Payroll Time Details by Paycheck	Earning Type Codes
Paychecks and Adjustments	Employee Pay Rates and Earnings	Deductions and Benefits by Pay	Deduction & Benefit Codes
Profiles	Employee Deductions and Benefits	Workers' Compensation by Code	Overtime Rules
PTO Banks	Employee Taxes	Paid Time Off Details by Employee	Employee Class
Pay Periods		Deduction, Benefit and Tax Details	Union Locals
Employee Payroll Settings		Taxes by Paycheck	Pay Groups
ACA Reporting		Union Hours & Rates by Labor It	Workers' Compensation Codes
Processes		Union Deductions & Benefits by	Certified Projects
Process Payroll Documents		Certified Project Fringe Benefits	Payroll Calendar
Create Liabilities Bill		Annual Reports	Work Locations
Government Reporting		Earnings by Employee	Tax Maintenance
Create Payroll Payment		Deductions and Benefits by Emp Taxes by Employee	

Figure: Annual Reports category

Payroll: Copying and Pasting Paychecks

In Acumatica ERP 2021 R1, on the *Paychecks and Adjustments* (PR302000) form, the **Clipboard** menu has been added to the form toolbar, as shown in the following screenshot. This menu contains the standard copy-and-paste options.

Paychecks and Adjustments Regular 000048 - Pat	Farrall						🗋 NOTES 🛛 F
6 2 2 A	+ 🖻 K	< > > >	O - ACTIONS				
Туре:	Regular	Employee:	Copy	LIPAT - Pa	t Farrall	Gross Pay:	960.00
Reference Nbr.:	000048	Ø • Payment M	P Save as Templa	K - Check	Q	Deductions:	97.92
Status:	Pending Payment	+ Cash Accou	land an internation	Company	Checking Account ,0	Taxes:	189.43
C	Hold	Period Star	t;	12/20/2020		Net Pay:	672.65
Pay Group:	CSTRWEEKLY - Con	str Period End		12/26/2020			
Pay Period:	53-2020	Transaction	Date:	12/31/2020			
Posting Period:	12-2020	P Description					
EARNING DETAILS EA	RNING SUMMARY	DEDUCTIONS	TAXES PAID TI	ME OFF WORK	ERS' COMPENSATION	UNION CERTIFIED F	PROJECT FINANCIAL DETAILS
О + х сору	SELECTED ENTRY	OVERTIME RULES	s H X				
Branch *Date	Code Description	on Location	Hours	Units Unit Type	Rate Manual Rate	Amount Account	Subaccount Project
PRODWH 12/20/2020	RG Regular	Hours BELLEVUE	8.00	Hour	30.00 🔲	240.00 69500	000-000
PRODWH 12/20/2020	DT Double T	ime BELLEVUE	12.00	Hour	60.00	720.00 69500	000-000

Figure: Clipboard menu

By using these options, a user can create a copy of any paycheck of the *Regular*, *Special*, or *Adjustment* type regardless of its status. The copied document can be pasted to a new paycheck of any type. The new document is assigned the *Needs Calculation* status.

The following information is copied from the original document to the target document:

- In the Summary area: All settings are copied if the user has not specified an employee in the target document. If an employee is already specified in the target document, the system copies all settings except the employee and pay group. If an employee and pay period are already specified in the target document, the system copies all settings except the employee, pay period, and pay group.
- On the **Earning Details** tab: The system copies all settings, including the overtime rules. If the pay period has been changed for the target document, the system adds the difference between the start date of the copied pay period and the start date of the new pay period to the earning detail record.
- On the **Deductions** and **Paid Time Off** tabs: The system copies all settings related to deductions and benefits and PTO banks. If any of the copied settings is no longer used for the specified employee, the system marks it as inactive in the target document.
- On the **Financial Details** tab: The system copies all editable settings, such as the branch, the regular amount to be paid (if applicable), and the state of the **Salary Non-Exempt** check box.

These settings can be also copied through the use of a document template, which a user can create by using the **Save as Template** option on the **Clipboard** menu.

Payroll: Improved Payroll Payment Workflow

In Acumatica ERP 2021 R1, the workflow of payroll payments has been improved. Now users can create payment batches for paychecks as well as for direct deposit payments. Also, users can correct errors in a paycheck that is associated with a payment even if the payment batch has already been created, as well as add or remove paychecks from a payment batch.

Changes to the Paychecks and Adjustments Form

On the **Financial Details** tab of the *Paychecks and Adjustments* (PR302000) form, the following changes have been introduced:

- In the **Link to GL** section, the **Payment Batch Nbr.** box (shown in the following screenshot) has been added. In this box, the number of the payment batch associated with the paycheck is displayed (if applicable).
- In the Additional Details section, the Reprint Reason box has been removed.

Paychecks and Adjustme Regular 000043 -	nts Michael Andrews										NOTES	FILES
+ ? S ?	о + к	<	> >	0.	ACTIONS	•						
Type:	Regular		Employee	r.		EP00000	0001 - Michael Andrews	Gross P	ay: 1	,068.40		
Reference Nbr.:	000043	,p	Payment	Method:		FEDWIR	E - Fedwire	Deducti	ons:	99.45		
Status	Released		Cash Aco	ount		10200 -	Company Checking Account	Taxes:		152.63		
	Hold		Period Sta	art:		11/1/202	0	Net Pay		816.32		
Pay Group:	MONTHLY - Monthly	Pa	Period En	id;		11/30/20	20					
Pay Period:	11-2020		Transactio	on Date:		11/1/202	0					
Posting Period:	11-2020		Descriptio	'n		Paychec	k for Michael Andrews - 11-2020					
EARNING DETAILS	EARNING SUMMARY	DE	DUCTIONS	TAXES	PAID TIN	IE OFF	WORKERS' COMPENSATION	N UNION	CERTIFIED PROJECT	FINA	NCIAL DETAIL	5
LINK TO GL												
Batch Nbr.:	PR000043											
Branch:	PRODWHOLE - All F	Fruits Ma	aî.									
Original Document:												
Payment Batch Nbr.:	000048											
ADDITIONAL DETAILS Void Reason: Payment Ref.:	VIEW DIRECT DEP	OSIT SP	LITS									
	Salaried Non-Exern	ipt										

Figure: The Financial Details tab of the Paychecks and Adjustments form

The statuses of a paycheck have been modified as follows:

- The Pending Print/Payment status has been renamed to Pending Payment.
- The *Payment Batch Created* status has been introduced. This status indicates that the paycheck has been processed and an associated payment batch has been created.
- The *Printed/Paid* status has been renamed to *Paid*. A paycheck is assigned this status after the associated payment batch has been paid. For this paycheck, the **Release** action is available and only the accounts and subaccounts specified on the **Earning Details** tab can be modified.

The actions available on the Actions menu on the form toolbar have been modified as follows:

- The Cancel Print action has been removed.
- The Print Check action has been renamed to Process Payment.

A user still can make changes to a paycheck with the *Payment Batch Created* status. After these changes are saved, the status of the paycheck changes to *Needs Calculation*. After the calculation, the information is correspondingly updated in the associated payment batch and the status of the paycheck changes again to *Payment Batch Created*.

In a paycheck with the *Payment Batch Created* status, a user cannot change the specified payment method and cash account.

Changes to the Create Payroll Payment Form

On the *Create Payroll Payment* (PR505000) form, whose title was *Print Check* in previous versions of Acumatica ERP, the **Payment Batch** box has been added to the Summary area, as shown in the following screenshot.

0	reate Payroll Pay	ment PRO	CESS ALL	ତ • ୮୦	X Y				
	Payment Method:	CHECK		Q	Available Balance:	68,367,639.37			
	Cash Account:	10200 -	Company Che	cking # ,0	Selection Total:	0.00			
	Currency:	USD			Number of Payments:	0			
	Next Check Number:	1724							
	Payment Batch:	000051		Q					
-	🕼 🗋 🗌 Reference N	br.	Transaction Date	Туре	Employee	Employee Name	Pay Group	Pay Period	Net Pay
>	0 D D 000048		12/31/2020	Regular	FARRALLPAT	Pat Farrall	CSTRWEEKLY	53-2020	672.65

Figure: Create Payroll Payment form

In this box, a user can select a payment batch with the *Ready for Export* or *Waiting Paycheck Calculation* status. Only payment batches with the specified payment method and cash account are available for selection. If the user selects a payment batch and then processes the paychecks selected in the table on this form, the system includes these paychecks in the payment batch and updates the statistical values in the Summary area. If the user does not select a payment batch but processes the selected paychecks, the system creates a new payment batch for the processed paychecks.

Changes to the Payment Batch Form

On the *Payment Batch* (PR305000) form, whose title was *Direct Deposit Batch* in previous versions of Acumatica ERP, the following changes have been introduced.

The Hold check box and the On Hold status have been removed.

Now a payment batch may have one of the following statuses:

- Ready for Export (default): All the associated paychecks have the Payment Batch Created status. The Export, Export as Prenote, Display Pay Stubs, and Confirm Payment actions are available on the form toolbar for a batch with this status. If the Automatically Release on Payment check box is selected on the Payroll Preferences (PR101000) form, the Confirm Payment and Release action is also available.
- *Waiting Paycheck Calculation*: At least one of the associated paychecks has a status that differs from *Payment Batch Created*. Paychecks can still be added to a batch with this status.
- *Paid*: The associated paycheck has the *Paid* status. The **Cancel Payment** and **Display Pay Stubs** actions are available on the form toolbar for a batch with this status.
- *Closed*: One of the associated paychecks has been released and has the *Released*, *Liability Partially Paid*, or *Closed* status.

A user can delete a payment batch that has the Waiting Paycheck Calculation or Ready for Export status.

The following actions have been introduced and grouped under the **Actions** menu on the form toolbar (shown in the first screenshot below):

• **Export**: Exports the batch of payments to an ACH file, which is automatically attached to the batch record. This action is available for a batch with the *Ready for Export*, *Paid*, or *Closed* status This action is not available for a batch with the *Check* payment method specified. When exporting a batch, the user needs to enter an export reason in the **Export Reason** dialog box. During the very first export, *Initial Export* is automatically specified as the export reason.

- **Export as Prenote**: Exports the batch of payments as a prenote, which is an ACH file with a zero net pay amount specified for each transaction in the batch details. A prenote can be used for the validation of the payment information by the bank before the release of the payment. This action is available for a batch with the *Ready for Export*, *Paid*, or *Closed* status. This action is not available for a batch with the *Check* payment method specified.
- Confirm Payment: Changes the statuses of the paycheck and the batch to Paid.
- **Confirm Payment and Release**: Changes the status of the paychecks in the batch to *Released* and the status of the batch to *Closed*.

This action is available for a batch with the *Ready for Export* status and only if the **Automatically Release on Payment** check box is selected on the *Payroll Preferences* form.

- **Release**: Changes the status of the paychecks in the batch to *Released* and the status of the batch to *Closed*. This action is available for a batch with the *Paid* status.
- **Cancel Payment**: Changes the status of the batch to *Ready for Export* if none of the paychecks has been released. Also, this action changes the statuses of the associated paychecks to *Payment Batch Created*.
- **Display Pay Stubs**: Opens the *Pay Stubs* report populated with the information of the related pay stubs.
- **Print Checks**: Opens the **Print Checks** dialog box (shown in the second screenshot below) that displays the paychecks to be printed. This action is available only for payment batches that contain paychecks. This action is not available for a batch with the *Direct Deposit* payment method specified. In the dialog box, when printing or reprinting paychecks, a user needs to specify the check number that will be printed on the physical check and one of the following reasons for printing: *Printer Issue, Lost, Damaged, Stolen, Corrected, Added Paycheck*, or *Other*.

Payment Batch 000079 - Fedwire	- 3/2/2021					
← ■) 🗊 K <)	N N	ACTIONS -			
Reference Nbr.:	000079	Q	Export Export as Prenote	10200 - Company Checking #	Batch Total:	5,633.14
Status:	Ready for Export		Confirm Payment	FEDWIRE		
Batch Date:	3/2/2021 -					
BATCH DETAILS	EXPORT HISTORY		Carriel Payment Display Pay Stubs			
0 + × +			Print Ghecks	1		
Doc. Reference N	lbr. Status	Des	cription	Employee Pay Gro	sup Pay Period	Amount

EP0000003

EP0000003

MONTHLY

MONTHLY

02-2021

02-2021

563.31

5,069.83

Figure: Actions menu

000464

000464

Payment Batch Cr..

Payment Batch Cr ...

REG

REG

Prin	t Ch	eck	s									×
Pr	int Re	asor teaso	n:- 201:	Printe	r Issue	•						
Ne	ext Ch	neck	Number:	1723								
0	ŀ	-	x									
80	D	0	Туре		Reference Nbr.	Status	Description	* Employee	Employee Name	*Pay Group	Pay Period	Net Pay
> 6	0		Regular		000046	Payment Batch Cr	test	EP00000003	Layla Beauvoir	MONTHLY	12-2020	373.79
6	D		Regular		000047	Payment Batch Cr		EP000000C1	Jane Doe	WEEKLY	53-2020	672.46
											lo 2	3- XI
												OK

Figure: Print Checks dialog box

Also, the **Export History** tab (shown in the following screenshot) has been added to the form. On this tab, the system maintains the history of all export and printing attempts and logs the name of the user who ran the export, as well as the export date, time, reason, and batch total. Each time a prenote is created, the system inserts a log record with *Prenote Export* specified in the **Reason** column and *0* specified in the **Batch Total** column.

Payment Batch 000050 - Compa	any Checking Account				
← ○ ○	м 🖻 К < >	>I ACTIONS +	20mm)).		
Reference Nbr Status: • Batten Date:	000050 Ready for Export 12/1/2020 -	D Cash Account: + Payment Mathod: Export Time: Description:	10200 - Company Checking Å FEDWIRE 1/18/2021 4:13 PM	Baten Totan	0,00
BATCH DETAILS	EXPORT HISTORY				
C EXPORT DE	TAILS HI 🔝				
Display Name	Export Time	Reason	Batch Total		
Michael Andrews	1/18/2021 4:13 PM	Prenote Export	0.00		

Figure: Export History tab

If the user selects an entry on the **Export History** tab and clicks **Export Details** on the table toolbar, the **Export Details** dialog box (shown in the following screenshot) opens showing the user name, log time, and reason, along with a list of the paychecks included in the export.

Export Details									×
Display Name: Export Time: Reason:	Michael Andrews 1/18/2021 4:13:36 PM Prenote Export								
Type Reference	e Nbr Description	Employee	Employee Name	Pay Group	Pay Period	Net Amount	Check Nbr.		
> REG 000045		EP00000003	Layla Beauvoir	MONTHLY	202011	0.00			
							- 10	$\mathcal{K} \to \mathcal{K}$	
									OK

Figure: Export Details dialog box

Other Changes

On the **Payment Settings** tab of the *Employee Payroll Settings* (PR203000) form, if a user changes the settings while open paychecks are available in the system, the changes will be applied to the paychecks only if the paychecks are calculated.

On the *Process Payroll Documents* (PR501000) form, paychecks with the *Payment Batch Created* and *Pending Payment* statuses are listed in the table if *Recalculate* is selected in the **Action** box, and paychecks with the *Paid* status are listed in the table if *Release* is selected in the **Action** box.

Upgrade Notes

During an upgrade to Acumatica ERP 2021 R1, the following changes will be made:

- For a paycheck, the *Pending Print/Payment* status will be changed to *Pending Payment*.
- For a paycheck associated with a direct deposit batch, if the batch is not yet released, the *Printed/Paid* status will be changed to *Payment Batch Created*.
- For a paycheck associated with a direct deposit batch, if the batch is released, the *Printed/Paid* status will be changed to *Paid*.
- For a paycheck that is not associated with a direct deposit batch, the *Printed/Paid* status will be changed to *Paid*.

Payroll: Improvements to Payroll Batches

Starting in Acumatica ERP 2021 R1, a user can enter employee earning details or upload worked hours from an Excel file directly to a payroll batch without having to use time cards. To support these improvements, multiple changes have been made to the *Payroll Batches* (PR301000) form.

Earning Details Tab

The **Earning Details** tab, which is shown in the following screenshot, has been added to the *Payroll Batches* (PR301000) form. On this tab, earning details are displayed for each employee included in the payroll batch.

Payroll Batches 000007 - Mon	thly Paygroup										D NOT	ES FILES
⊳ ∽ +		> > REL	EASE									
Batch ID:	000007 ,0	Pay Period: 02	-2020		Num	ber of Employee	is:	3				
Status:	Balanced	Period Start: 2/	/2020		Total	Hour Qty:		480.00				
	Hold	Period End: 2/	29/2020		Total	Earnings:	3	7,948.72				
Payroll Type:	Regular ·	Transaction D 2/	/2020									
Pay Group:	MONTHLY - Mc	Description: Fe	bruary Monthly F	Pay Run								
EMPLOYEE SUM	MMARY EARNING	DETAILS DEDUCT	TONS AND BEN	EFITS OVERT	ME RULES							
0 + ×	COPY SELECTED	ENTRY ↔ I	±									
Employee	Employee Name	•Branch •Date	*Code	Description	*Location	Hours	Units Uni Typ	e Rate	Manual Rate	Amount	Account	Subaccount
> EP00000001	Michael Andrews	PRODWH 2/29	2020 RG	Regular Hours	BELLEVUE	160.00	Ho	ur 106.84		17,094.02	69500	000-000
EP00000002	Maxwell Baker	PRODWH 2/29	2020 RG	Regular Hours	BELLEVUE	160.00	Ho	ur 85.47		13,675.21	69500	000-000
EP0000003	Layla Beauvoir	PRODWH 2/29	2020 RG	Regular Hours	BELLEVUE	160.00	Но	ur 44.87		7,179.49	69500	000-000

Figure: Earning Details tab

By using this tab, a user can review, edit, remove, or enter earning records directly to the payroll batch. A user can also add an employee to the payroll batch; this employee will also be added to the list on the **Employee Summary** tab of the form. The user can add only an employee that belongs to the selected pay group and has no paycheck created for the selected pay period.

By using the **Load Records from File** button on the table toolbar, a user can import earned hours from an Excel spreadsheet. Only records related to employees who belong to the selected pay group and records whose date is within the specified pay period can be imported.

Other Changes

The **Actions** menu, which included only the **Release** menu command, has been removed from the form toolbar, and the **Release** button has been added instead, as shown in the following screenshot.

Pa O(yroll Batches 00007 - Mor	thly Paygrour	0				
Ē	v +	⊡ K	< > >	RELEASE			
	Batch ID:	000007 ,0	Pay Period;	02-2020		Number of Employees:	3
	Status:	Balanced	Period Start:	2/1/2020		Total Hour Qty:	480.00
		Hold	Period End:	2/29/2020		Total Earnings:	37,948.72
	Payroll Type:	Regular -	Transaction D	. 2/1/2020			
	Pay Group:	MONTHLY - Mc	Description:	February Monthly Pa	y Run		
0	EMPLOYEE SUI	MARY EAR	NING DETAILS DE	DUCTIONS AND BENEI	TTS OVERTI	ME RULES	
C) X AD	D BULK EMPLOY	EES EMPLOYEE E	ARNING DETAILS	- X		
	Employee	Employee Nam	ie	Hours	Rate	Amount Paycheck Ref	
>	EP00000001	Michael Andre	ews	160.00	106.84	17,094.02	
6	EP00000002	Maxwell Baker	r	160.00	85.47	13,675.21	
	EP00000003	Layla Beauvoi	in	160.00	44.87	7,179.49	

Figure: Release button

The **Document Details** tab has been renamed to **Employee Summary**, which is shown in the following screenshot. The **Add Employees** and **Earning Details** actions on the table toolbar of that tab have been renamed to **Add Bulk Employees** and **Employee Earning Details**, respectively.

F	Payroll Batches 000007 - Mol	nthly Pay	/group										
	≤ ∽ +	- 🗇	к	<	>	×	RELEASE						
	Batch ID:	000007	p	F	ay P	eriod;	02-2020				Nu	mber of Employees:	3
	Status:	Balance	d	F	eriod	d Start:	2/1/2020)			Tot	al Hour Qty:	480.00
		Hold		P	erior	d End:	2/29/202	20			Tot	al Earnings:	37,948.72
	Payroll Type:	Regular	5 C¥	Т	rans	action D	2/1/2020)					
	Pay Group:	MONTH	ILY - Mc	C	lescr	iption:	February	y Monthly	Pay Ru	n			
E	EMPLOYEE SU	IMMARY	EARN	ING DET	AILS	S DEI	DUCTIONS	AND BE	NEFITS	OVERT	IME RULES		
	ð × Al	DD BULK E	MPLOYE	ES	EMP	LOYEE E	ARNING DI	ETAILS	⊷	x			
	Employee	Employ	ree Name	ř.				Hour	s	Rate	Amoun	t Paycheck Ref	
>	EP00000001	Micha	el Andrev	vs				160.00)	106.84	17,094.02		
	EP00000002	Maxwe	ell Baker					160.00	0	85.47	13,675.21		
	EP0000003	Layla	Beauvoir					160.00	C	44.87	7,179.49		

Figure: Employee Summary tab

Payroll: Improvements to PTO Banks

Starting in Acumatica ERP 2021 R1, if a payroll administrator wants the same PTO bank to have different accrual rates over the course of time, he or she can add this PTO bank to the settings on the *Employee Class* (PR202000) or *Employee Payroll Settings* (PR203000) form multiple times, but each entry with a different accrual rate must have a different effective date, as shown in the following screenshot.

Employee HANSC	Payroll Se DNJOE -	ttings Joe Hai	nson										D	NOTES FI	ILES	CUSTOMIZATION
÷ 2		5		<	>	>I EI	DIT EMPLOY	EE RECOR	D							
Employ Employ	vee ID: vee Name:	Hy Jo	ANSONJOE - Jo e Hanson	e Hansor	1	Q	Z Ac	tive								
GENER	AL INFO	TAX SE	TTINGS TA	XES	COMPEN	SATION	DEDUCT	ONS AND BE	NEFITS	PAID TIME OFF	PAYMENT SETTINGS	GLACCOUNTS				
⊡Use O +	PTO Bank	s from Emp	loyee Class													
B PTO Bank	Active	Use Class Defaul Values	Description				Accrual %	Accrual Limit	Effective Date	Carryover Type	Carryover Amount	Front Loading Amount	Hours Accrued	Hours Use	d	Hours Available
> SKD	V		Sick Days			1	1.000000	27.00	1/1/2019	Partial	18.00	0.00	0.00	0.00	D	0.00
SKD			Sick Days			4	2.000000	27.00	1/1/2020	Partial	18.00	0.00	0.00	0.00	D	0.00
SKD			Sick Days			1	3.000000	27.00	1/1/2021	Partial	18.00	0.00	0.00	0.00	D	0.00
VLM	V		Vacation				4.000000		1/1/2019	Total	0.00	0.00	0.00	0.0	D	0.00

Figure: The Paid Time Off tab of the Employee Payroll Settings form

When the transaction date of a paycheck is past the effective date of a PTO bank, the system will automatically insert the appropriate PTO bank on the **Paid Time Off** tab of the *Paychecks and Adjustments* (PR302000) form.

On the *PTO Banks* (PR204000) form, the start date now consists of only a month and a day, as shown in the following screenshot. The system uses the specified day and month to determine when to front load and carryover the bank, which applies to each payroll employee who uses the PTO bank regardless of the effective date specified at the employee level.

PTO Banks SKD - Sick Davs							
⊷ ອີອັກ	+ 0 0) • K	<	> >I			
* Bank ID:	SKD - Sick Days	p			Active		
Default Accrual %;	1.000000				Accrue on Cert	tified Job Only	
Accrual Limit:	27.00				Allow Negative	Balance	
* Disbursing Earning Type:	SK - Sick Day	Q			Can Only Disb	urse from Carryover	
Description:	Sick Days						
* Start Date:	January -	1					
GENERAL SETTINGS							
CARRYOVER RULES	_		_	FRONT LO	ADING RULES		
Carryover Type:	Partial		*	Front Load	ding Amount:	0.00	
Carryover Amount:		18.00					
Pay Carryover after (Mont	hs):	0					

Figure: PTO Banks form

Payroll: New Inquiry Forms

In Acumatica ERP 2021 R1, the following new inquiry forms have been added to the system:

• *Employee Pay Rates and Earnings* (PR4030P2): Displays employee information about active pay rates combined with earning hours and amounts summarized by quarter. This information provides the user with an overview of the money spent on employees for regular wages, overtime, and time off during a year, as well as allows the user to verify the amount paid for each employee in each jurisdiction the company is working in.

This inquiry form is shown in the following screenshot.

Corr	pany/Branch.	PRODWHOLE -	Products	u + Vian		20	120		2 Inclus	in Cryslemost F	Nychmiks							
ALL	RECORDS W	WGE PIECEWO	198	AMOUNT BASED	OVERTIME	TIM	E OFF											
Emplo	yee Name; All +	Code: All +													Y	8		A
	Employee ID	Employee Name	Code	Description	Active Pate	Unit of Pay	Ethictive From	Work Location	Q1 Hrs	Q1 Amount	02 Hrs	Q2 Amount	Q3 Hrs	@3 Amount	Q4 Hrs	Q4 Amount	YTD Hits	VTD Amou
0 1	EP00000001	Michael Andrews	RG	Regular Hours	250,000.00	Year	1/1/2019	BELLEVUE, WA	520.00	62.499.99	520.00	62,499,99	528.00	82.499.99	528.00	62.499.99	2.096.00	249.999.9
	EP0000001	Michael Andrews	BN	Bonus				BELLEVUE, WA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.000.00	0.00	10.000.00
0 0	EP0000002	Maxwell Baker	RG	Regular Hours	200,000.00	Year	1/1/2019	BELLEVUE, WA	520.00	50.000.01	520.00	50.000.01	528.00	50.000.01	528.00	50.000.01	2.096.00	200.000.04
0 [EP0000002	Maxwell Baker	BN	Bonus				BELLEVUE, WA	0.00	0.00	0.00	0.00	0.00	0.00	0.02	8.000.00	0.00	8.000.0
0 1	EARRALLPAT	Pat Farrall	RG	Regular Hours	30.00	Hour	11/1/2019	BELLEVUE, WA	520.00	15.600.00	520.00	15.600.00	520.00	15.600.00	560.00	16.800.00	2.120.00	63.600.00
	GIMMETHANN	Hanna Gimmet	RG	Regular Hours	45.00	Hour	3/1/2018	BELLEVUE, WA	520.00	23.400.00	520.00	23 400.00	520.00	23,400.00	560.00	25,200.00	2.120.00	95,400.00
0 0	GIMMETHANN	Hanna Gimmet	OI	Overtime				BELLEVUE, WA	0.00	0.00	0.00	0.00	0.00	0.00	130.07	8.779.77	130.07	8.779.7
0 [HANSONJOE	Joe Hanson	RG	Regular Hours	30.00	Hour	1/1/2019	BELLEVUE, WA	520.00	23,400.00	520.00	23,400.00	520.00	23,400.00	560.00	25,200.00	2.120.00	95,400.0
0 1	HANSONJOE	Joe Hanson	OI	Overtame				BELLEVUE, WA	0.00	0.00	0.00	0.00	127.00	8.572.53	50,00	3.375.00	177.00	11.947.5
0 1	KINLEARJOR	Jordan Kinlear	BG	Regular Hours	100,000.00	Year	5/1/2018	BELLEVUE, WA	520.00	25.001.60	520.00	25.001.60	518.00	24.905.44	560.00	26.924.80	2.118.00	101.833.4
0 (KINLEARJOR	Jordan Kinlear	OI	Overtime				BELLEVUE, WA	0.00	0.00	0.00	0.00	32,00	2.307.84	135,00	9.736.20	167.00	12.044.0
0 0	PANGERVICT	Victor Panger	RG	Regular Hours	48.00	Hour	2/25/2018	BELLEVUE, WA	520.00	24.960.00	520.00	24.960.00	520.00	24.960.00	560.00	26.880.00	2.120.00	101.760.00
0 0	PANGERVICT	Victor Panger	01	Overtime				BELLEVUE, WA	0.00	9.00	0.00	0.00	0.00	0.00	133.00	9.576.00	133.00	9,576.0
0 [REINSTEINT	Terry Reinstein	RG	Regular Hours	30.00	Hour	12/25/2019	BELLEVUE, WA	520.00	15.600.00	520.00	15 600.00	516.00	16.080.00	557.00	16.710.00	2.113.00	63.990.00

Figure: Employee Pay Rates and Earnings inquiry form

 Employee Deductions and Benefits (PR4030P4): Displays employee information about deductions and benefits for the selected year summarized by quarter. This information helps the user have a better understanding of how much money the company is paying in addition to salary and validate the amount paid to the supplier for deductions and benefits.

This inquiry form is shown in the following screenshot.

0		o H a	X											
E	omp	any/Branch	PRODWHOLE -	Products *	* Year	2020		C Include Unreline	sed Paychecks					
1	UL R	ECORDS	GARNISHMENTS	PAYAULE BENEFIT	ts									
En	ploye	e ID: Al 🔹	Deduction Code: All	Source: All	• Vendor: All •							7 🛱		5
a 0	D	Employee (D	Employee Name	Deduction Code	Description	Source	Wendlar	G1 Deduction Amount	Q1 Contribution Amount	Q2 Deduction Amount	92 Contribution Amount	Q3 Deduction Amount	G3 Contribution Amount	Q4 Deduction Amount
> 0		EP00000001	Michael Andrews	401K	401(k) retirement plan	Employee Settings	BANKAMERIC	2.499.99	1.250.01	2.499.99	1.250,01	2.499.99	1.250.01	2.899.99
0		EP00000001	Michael Andrews	HEALTHINS	Health Insurance	Employee Settings	EBLUECROSS	1.562.49	937.50	1.502.49	937.50	1.562.49	937.50	1.812.49
8	D	EP0000001	Michael Andrews	LIFEINS	Life Insurance	Employee Settings	BANKAMERIC	90.00	0.00	90.00	0.00	90.00	0.00	120.00
0	D	EP00000001	Michael Andrews	CHILDCARE	Childcare Benefits	Employee Settings	BANKAMERIC	0.00	75.00	0,00	75.00	0.00	75.00	0.00
6	D	EP00000001	Michael Andrews	HSA	Health Saving Account	Employee Settings	EBLUECROSS	0.00	75.00	0.00	75.00	0.00	75.00	0.00
0	0	EP0000002	Maxwell Baker	4016	401(k) retirement plan	Employee Settings	BANKAMERIC	2.000.01	999.99	2.000.01	999.99	2.000.01	999.99	2.320.01
8		EP0000002	Maxwell Baker	HEALTHINS	Health Insurance	Employee Settings	EBLUECROSS	1 250.01	750.00	1,250.01	750.00	1.250.01	750.00	1.450.01
0	D	EP0000002	Maxwell Baker	CELLPHONE	Cell Phone	Employee Settings		0.00	75.00	0.00	75,00	0.00	75.00	0.00
8	D	EP0000002	Manwell Baker	HSA	Health Saving Account	Employee Settings	EBLUECROSS	0.00	75.00	0.00	75.00	0.00	75.00	0.00
0	0	FARRALLPAT	Pat Farrall	HEALTHINS	Health Insurance	Employee Settings	EBLUECROSS	390.00	234.00	390.00	234,00	390.00	234.00	420.00
8	D	EARBALLPAT	Pat Farrall	HEALTHINSU	Health Insurance	Union	EBLUECROSS	312.00	312.00	312.00	312.00	312.00	312.00	335.00
0	D	EARRALLPAT	Pat Farral	WANC	Washington Workers",	Work Class Comp	TAXWASHST	260.00	250.00	260.00	260.00	250.00	260.00	280.00
Ó		EARRALLPAT	Pat Farrall	DUES	Union Dues	Union	WIDEL	405.60	0.00	405.60	0.00	405.60	0.00	430.80
0		FARRALLPA	Pat Farral	LIFEINS	Life Insurance	Employee Settings	BANKAMERIC	390.00	0.00	390.00	0.00	390.00	0.00	420.00
0		EARRALLPW	Pat Farrall	401P	401P Pension Plan	Certified Project	BANKAMERIC	0.00	0.00	0.00	0.00	0.00	82.00	0.00
	-							_						
								Sum: 26.358.84	Sum: 13,305.13	Sum: 26.356.84	Sum: 13,305.13	Sum: 29.077.44	Sum: 15.550.54	Sum: 34,907.89

Figure: Employee Deductions and Benefits inquiry form

• *Employee Taxes* (PR4030P3): Displays employee information about tax exemption, tax applicable wages, tax amounts, and tax gross amounts summarized by quarter. This information helps the user reconcile the tax

information shown in the government report and allows for a better understanding of the additional cost associated with the employees.

This inquiry form is shown in the following screenshot.

Employee Ta	axes													CUSTO	MIZATION ·	· TOOLS ·
Company/Bran • Year:	ch: PRODWH 2020	IOLE - Product		• Taa Coder	ER FUTA - I	Federal Unemp reliesed Payo	loy ,0 hecks									
Employee Name	All . is Exempt	ed From Tax: Al											Y D			Q.
B Employee ID	Employee Name	Hi Exempted From Tax	Tax Code	Q1 Tax Hours	Q1 Tax Gross Amount	Q1 Appl. Weges	Q1 Tax Amount	Q2 Tax Hours	Q2 Tax Gross Amount	Q2 Appl. Waget	Q2 Tits Amount	Q3 Tax Hours	Q3 Tax Gross Amount	QS Appl. Wapes	Q3 Tax Amoun	Q4 Tax Hours
EP0000001	Michael Andrews		EREUTA	520.00	62,499,99	2.000.00	161.00	520.00	62.499.99	0.00	0.00	528.00	62.499.99	0.00	0.00	528.00
EP00000002	Maxwell Baker		ERFUTA	520.00	50.075.01	7.000.00	161.00	520.00	50 075.01	0.00	0.00	528.00	50.075.01	0.00	0.00	528.00
HANSON/OE	Joe Hanson	11	ERFUTA	520.00	23.400.00	7.000.00	42.00	520.00	23.400.00	0.00	0.00	647.00	31.972.53	0.00	0.00	610.00
GIMMETHANN	Hanna Gimmet		ERFUTA	520.00	23,400.00	7.000.00	42.00	520.00	23 400 00	0.00	0.00	520.00	23 400.00	0.00	0.00	690.07
SANCHEZALE	Alex Sanchez		ERFUTA	520.00	24,960.00	7.000.00	42.00	520.00	24.900.00	0.00	0.00	520.00	24.984.00	0.00	0.00	627.00
REINSTEINT	Terry Reinstein		ERFUTA	520.00	15.600.00	7.000.00	42.00	520.00	15.600.00	0.00	0.00	585.00	19.185.00	0.00	0.00	673.00
								_	_	_						
				Slum: 5.260.05	Sum: 283,696.60	Sum: 70,000.00	Sum: 658.00	Sum: 5.200.00	Sum: 283,695.60	\$um: 0.00	Sum: 0.00	Sum: 5,542.00	\$um: 303,549.83	Sum: 0.00	Sum: 0.07	Sum: 6,215.07

Figure: Employee Taxes inquiry form

For each quarterly amount displayed on these forms, a user can view relevant details at the paycheck level. By default, these inquiry forms are included in the **Inquiries** category of the **Payroll** workspace.

Payroll: Sources for Workers' Compensation Codes

Starting in Acumatica ERP 2021 R1, an administrator can specify the sources for the workers' compensation codes that the system inserts by default when a paycheck or a time activity is created.

To support this capability, the **Sources** pane has been added to the *Workers' Compensation Codes* (PR209800) form, which is shown in the following screenshot, and to the *Workers' Compensation Codes* (PM209800) form, which is available only if the *Construction* feature is enabled on the *Enable/Disable Features* (CS100000) form.

	4	S									
vcc	Cod	le			Rate						
O	4	+ ×	i⊷i 🕅		0 +	- ⊷ X					
ŋ.	D	Active	*WCC Code	Description	Active	* Deduction	Benefit Calculation	State	Benefit	* Effective Date	
0			5606	Project Manager	> □	Lode	Remont of Cross	1/6	A ECODOD	8/7/2020	
0	D		5637	Carpentry - Installation of Cabinet Work/Tri		VANC	Percent of Gross	VA	0.500000	8/1/2020	
0	۵		5645	Carpentry - not exceeding three stories		WAWC	Percent of Gross	WA	0.500000	6/1/2020	
0	D		6217	Excavation							
0	D		8292	Warehousing							
0	D		8810	Clerical Office							
0	D		9999	Exempt							
					Sources	CT TASKS LA	BOR ITEMS COST C	ODES			
					0 4	Y H	1				
					er Project	Project	с тавж				
					PBUDGE	TBYM 01					

Figure: Sources pane

This pane contains the following tabs:

- **Project Tasks**: On this tab, an administrator can select a project or a project task to be used as the source of the default WCC code. If a project is selected but no specific project task is specified, the system will use the WCC code from the project for all project tasks related to that project.
- Labor Items: On this tab, an administrator can select a labor item to be used as the source of the default WCC code.
- **Cost Codes**: On this tab, an administrator can select the cost codes to be used as the source of the default WCC code. This tab appears only if the *Cost Codes* feature is enabled on the *Enable/Disable Features* form.

One cost code, project, project task, or labor item cannot be assigned to multiple workers' compensation codes.

The system inserts the appropriate workers' compensation code as the default setting into the **WCC Code** column of an earning detail line when a user creates a paycheck by using the *Paychecks and Adjustments* (PR302000) or *Payroll Batches* (PR301000) form, and into the **WCC Code** column of a time activity detail line when a user enters a time activity by using the *Employee Time Activities* (EP307000), *Employee Time Card* (EP305000), or *Weekly Crew Time Entry* (EP307100) form.

If multiple sources are specified for a workers' compensation code, the system checks the availability of the following sources and populates the **WCC Code** column with the first value it finds, in the specified order of priority:

- 1. Project task
- 2. Project
- 3. Labor item
- 4. Cost code
- 5. Employee payroll settings

Platform: Improvements in the Configuration of Business Events and Notifications

In Acumatica ERP 2021 R1, the **Business Events** and **Notifications** menu commands have been added to the **Tools** menu of the form title bar of entry forms—for example, *Invoices and Memos* (AR301000), *Customers* (AR303000), and *Sales Orders* (SO301000)—and generic inquiry forms. For the entry or generic inquiry form you are viewing, a customizer can now view the notifications and business events that trigger them.

Also, the **Send by Events** tab has been added to the *Notification Templates* (SM204003) and *Mobile Notifications* (SM204004) forms. On the tab, the customizer can view the business events that trigger each notification.

Updated Tools Menu

The following screenshot shows the updated **Tools** menu of the form title bar of the *Invoices and Memos* (AR301000) form.

Invoices and	Memos							🗅 NOTES	ACTIVITIES	FILES	CUSTO	IZATION	TOOLS -
← 🗍 🗎	∽ +		< >	>I PAY	ACTIC	NS •	INQUIRIES -	REPORTS -		G	reen ID et Link	CST.AR.	30.10.00
Type:	Invoice *	Customer:	ABCSTUDIOS	- ABC Studi	os Inc	0	Detail Total:	137,790.00		W	eb Serv	ce	
Reference Nbr.:	AR008984 🔎	Location:	MAIN - Primary	Location			Discount Total:	0.00		N	tificatio	ns	
Status:	Open	Currency:	USD 1.00) –	VIEW BASI	E	VAT Taxable T	0.00		В	Isiness	Events	
Date:	10/1/2020	Terms:	30D - 30 Days				VAT Exempt T	0.00			dit Lint.	200	
Post Period:	10-2020	* Due Date:	10/31/2020 -				Tax Total:	0.00				n y	
Customer Ord	ABCSTUDIOS:	* Cash Discou	nt 10/31/2020 -	🗌 Pay b	y Line		Balance:	137,790.00		A	cess Ri	gnts	
		Project/Contr	act: X - Non-Project	Code.		0	Amount:	137,790.00		5	iare Col	umn Contig	uration
Description:	Electronics - Dro	op Shipped Order					Cash Discount:	0.00		Ir	ace		
DOCUMENT DE	TAILS FINAI	NCIAL DETAILS	ADDRESS DETAILS	G TAX E	DETAILS	SALESI	PERSON COMMIS	SION APPF	ROVAL DETAILS	DISCO	OUNT D	ETAILS	ŷ
Ö + 0	× VIEV	V DEFERRALS +	· X 1										
🖹 🖟 🗋 *Branch	Inver	ntory ID Trans	action Descr.		Quantity	MON	Unit Price	Ext. Pric	e Discount Percent	t C	iscount Amount	Manual Discount	Discount
> 0 D PRODV	VHOLE ELE	KINDLE Kind	le Fire 8.9" Tablet HD)	210.00	EA	299.00	62,790.00	0.000000		0.00		
PRODV	VHOLE AAC	COMPUT01 Acer	Laptop Computer		150.00	EA	500.00	75,000.00	0.000000		0.00		

Figure: Tools menu with the added items

Viewing of Notifications

To view the notifications that are specified for the selected data entry or generic inquiry form, the customizer clicks **Tools > Notifications** on the form title bar. In the **Notifications** dialog box, which opens, the customizer can view the notifications that are configured for the form (see the following screenshot).

Notifications		$\square \times$						
CREATE -								
O H								
🖻 Туре								
> EMail	Invoice Approval							
EMail	AR Invoice							
EMail	Project AR Invoice Notification							
		0.0.00.00						

Figure: Notifications dialog box

Depending on the type of the selected notification, the customizer can click the link in the **Description** column of the **Notifications** dialog box to open the *Notification Templates* (SM204003) or *Mobile Notifications* (SM204004) form (shown in the following screenshots).

Notification Templates \Rightarrow						FILES	CUSTOMIZATION	TOOLS -			
← [] []	∽ + ı́⊔ K < >	×									
Notification ID: * Description: From: To: CC: BCC: Subject:	Invoice Approval Invoice Approval admin Invoice Awaiting Approval	م م م	* Screen Name: Screen ID: Link to Contact: Link to Account:	Invoices and P AR301000 Attach Activity	م م م			^			
MESSAGE ATTACHED REPORTS SEND BY EVENTS VISUAL ▼ 𝒫 𝔅 Paragraph ▼ B I U ▼ ▲ ▼ ∠ ▼ Ξ Ξ 𝔅 INSERT LAYOUT TABLES											
Dear Sales or Accounting Manager,											
An AR invoice is awaiting your approval. To see invoice ((Document RefNbr)), click the link below.											
URL: http://localhost/revisiontwo/Main.aspx?ScreenId=AR301000&DocType=((Document.DocType))&RefNbr=((Document.RefNbr)) - Amount: ((Document.CuryOrigDocAmt)) - Customer: ((Document.CustomerID.AcctName))											
Thank you for your attention to this matter.											
Regards, Acumatica Cloud ERP											

Figure: Notification Templates form
Platform: Improvements in the Configuration of Business Events and Notifications | 217

Mobile Notificat	tions									🗅 NOTES	FILES	CUSTOMIZATION	TOOLS -
← 🕄 🗒	\$	+	Ū I	< <	>	×							
Notification ID:	Oppor	tunity as	signed to	salesper	son	Q	* Delivery Method:	Push	*				
* Screen:	DB Op	portunit	ies			Q	Screen ID:	GI000026					
* Description:	Oppor	tunity as	signed to	salesper	son								
* To:	((CRO	pportuni	ity_owne	ID!PKID));				Q				
Title:	Oppor	tunity as	signed to	salesper	son				Q				
Destination Scre	en ID:	Oppo	rtunities			Q							
Destination Entit	y ID:	((CRC	Opportuni	ty_noteID))	Q							
MESSAGE SE	ND BY E	EVENTS											
INSERT DATA FIELD) INS	ERT PF	EVIOUS	DATA FI	ELD								
Opportunity ((CROppo Prospect ((BAccount_	ortunity_ acctNam	opportun ie))	ityID)) as	signed to	you								
swipe to open													

Figure: Mobile Notifications form

The customizer can also create new notifications by clicking **Create** in the **Notifications** dialog box and selecting the needed type: *Email Notification, Push Notification*, or *SMS Notification*. For details on creating notifications, see *Notification Templates, Business Events: Push Notifications*, and *Business Events: SMS Notifications*.

Viewing of Business Events

To view the business events that are specified for the selected data entry or generic inquiry form, the customizer clicks **Tools > Business Events** on the form title bar. The **Business Events** dialog box, which opens, is shown in the following screenshot.



Figure: Business Events dialog box

The customizer can click the link in the **Event ID** column in the **Business Events** dialog box to open the *Business Events* (SM302050) form for the selected event (see the following screenshot).

Business Events ☆		🗅 NOTES	FILES CUSTOMIZ	ATION TOOLS -
	> > VIEW SCREEN VIE	W HISTORY		
* Event ID: Back order created		een Name:	Sales Orders	^
* Type: Trigger by Record Change	- Sci	een ID:	SO301000	
Raise Event: For Each Record	-			
Description: Back order created				
TRIGGER CONDITIONS SUBSCRIBERS				
$ \mathbf{Z} \mapsto \mathbf{V} + \mathbf{V} + \mathbf{V} $				
B Active Brackel Operation Table Name	Field Name Conditio	n Value 1	Value 2	Bracket Opera
> 🖸 (Field Changed Document	Status (Status)			- Or
C - Record Inserted) And
☑ (New Field Value Document	Status (Status) Equals	Back Order) And

Figure: Business Events form

The customizer can also create new business events by clicking **Create Business Event** in the **Business Events** dialog box. For details on business events, see *Using Business Events*.

Send By Events Tab on the Notification Templates Form

The **Send by Events** tab of the *Notification Templates* (SM204003) form, which a customizer uses to view business events that trigger the selected email notification, is shown in the following screenshot.

Notification Te	mplates ☆	🗅 NOTES	FILES	CUSTOMIZATION	TOOLS -			
← 『 『	ら + 団 K < >	>I						
Notification ID:	Opportunities assigned today	Q	* Screen Name:	DB Opportu 🔎				^
* Description:	Opportunities assigned today		Screen ID:	GI000026				
From:	admin	Q	Link to Entity:		Q			
To:	((CROpportunity_ownerID!EMail))	Q	Link to Contact:		Q			
CC:		Q	Link to Account:		Q			
BCC:		Q						
Subject:	Your daily sales opportunities				Q			
MESSAGE A	TTACHED REPORTS SEND BY EVENT	s						
ٽ + ×	CREATE BUSINESS EVENT ↔ (X						
🖹 🕕 🗅 *Event ID	Descri	ption			Active	Туре		
> O D Opportun	ity 2 - daily sales opportunities as Notify	sales of c	opportunities assigned	o them each day	False	Trigger b	by Schedule	

Figure: Notification Templates form: Send by Events tab

If the customizer clicks the link in the **Event ID** column on the tab, the system opens the *Business Events* (SM302050) form for the selected event. The customizer can also create an event by clicking **Create Business Event** on the table toolbar, or add a link to an existing event by clicking **Add Row** on the table toolbar.

Send By Events Tab on the Mobile Notifications Form

The **Send by Events** tab of the *Mobile Notifications* (SM204004) form, which a customizer uses to view business events that trigger the selected push or SMS notification, is shown in the following screenshot.

Mobile Notificat	Abbile Notifications							
← 🕄 🗎	∽ + ≞ к < >	>>						
Notification ID:	Opportunity assigned to salesperson	Q	* Delivery Method	Push	- Destin	ation Screen ID:	Opportunities	Q
* Screen:	DB Opportunities	ر م	Screen ID:	GI000026	Destin	ation Entity ID:	((CROpportunity_noteID))	Q
* Description:	Opportunity assigned to salesperson							
* To:	((CROpportunity_ownerID!PKID));				0			
Title:	Opportunity assigned to salesperson				0			
MESSAGE SE	ND BY EVENTS							
ٽ + ×	CREATE BUSINESS EVENT ↔	x						
🖹 🕕 🗅 *Event ID		Description	1			Active	Туре	
> 0 D Opportunity	<u>y 1 - salesperson assigned</u>	Send push	notification when oppor	tunity assigned	to salesperson	False	Trigger by Record Change	

Figure: Mobile Notifications form: Send by Events tab

If the customizer clicks the link in the **Event ID** column on the tab, the system also opens the *Business Events* (SM302050) form for the selected event.

Platform: Business Events Triggered by an Action

In Acumatica ERP 2021 R1, a new type of business events that are triggered by an action has been introduced. An event of this type can be set up if a generic inquiry is used as a source for data monitoring.

With a business event of this type configured for a generic inquiry, a user will be able to launch the event for the list of all, selected, or filtered records of the inquiry. For example, a sales manager might filter pending invoices by using a corresponding generic inquiry and initiate the sending of reminders to customers about the invoices.

Ir	vo	ice	s an	d Memo	5					CUSTOMIZ	ATION - TOOLS -
ć	5	-		+ 0	ACTIONS . HI						
1	AL	LRE	COR	DS GNB	Email Invoice Reminder Email Invoice Reminder (Al						
1	ype.	All	÷	Status: All	Dale All	_				Y 🖾	م
	9	D	3	Type	Reference Nor.	Status	Date	Poet. Period	Custonwy	Customer Name	Description
ż.	0	D		Invoice	AR009100	Balanced	11/30/2020	11-2020	SWEET	SweetLife Fruits & Jams	Fresh apples an
	6	D		Invoice	AR009099	Open	11/2/2020	11-2020	ITALIANCO	The Italian Company	Invoice for Italiaa
	0	D	U.	Invoice	AR009098	Open	11/2/2020	11-2020	ITALIANCO	The Italian Company	Involce for Italian

Figure: Actions configured for the inquiry by using the business event functionality

Configuration of an Event Triggered by an Action

A system administrator uses the *Business Events* (SM302050) form to configure business events. The new *Trigger by Action* option has been added to the **Type** drop-down list in the Summary area of the form. The option is available only if a generic inquiry is selected in the **Screen Name** box on the form.

With this option selected, the new **Action Name** box becomes available on the form. In this box, the system administrator specifies an action name, which will be displayed in two commands on the **Actions** menu on the form toolbar of the generic inquiry: **Action Name>** and **Action Name>** (All). The actions are used similarly to the actions available on the mass processing forms. For example, a user might click **ActionsEmail Invoice Reminder** to send reminders of only the selected records of an inquiry or the user can click **ActionsEmail Invoice Reminder** (**All**) to email reminders for all records returned by the inquiry.

As the last step of the configuration, the system administrator needs to configure the event subscribers to be processed when a user clicks the action on the inquiry toolbar. All types of event subscribers are available for this type of business event.

The following screenshot demonstrates the configuration of a business event to be used to send invoice reminders to customers from the Invoices and Memo (AR3010PL) form, which is a generic inquiry that lists invoices.

Busness Events InvoiceReminder	+ 8 D. K	< >	> VIEW SCREEN	VIEW HISTORY	D NOTES FILES	CUSTOMIZATION	TOOLS -
Event ID: Type: Action Name Raise Event Group Recorde By	InvoiceReminder 5 Trigger by Action - Email Invoice Reminder For Group of Records - BAccountR.AcctCD 5	O Active		Screen Name Screen ID:	Invoices and Memos AR3010PL	P	*
Descripilien: SUBSCRIBER8 O + × ↑	Remind customer about invoice	я• Н	×				
I Active Type			Subscriber ID			Slay	an Error
Email Notificatio	20.		AR Invoice Notification				

Figure: Configuration of a business event triggered by an action

Additional Information

For more information on configuring business events triggered by an action, see *Business Events: User-Triggered Processing of Subscribers*.

Platform: Key Performance Indicator (KPI) Widget and Other Enhancements

In Acumatica ERP, users can add different types of widgets to their dashboards. By using these widgets, users can present information on dashboards in various formats, such as trends, key performance indicators (KPIs), tables, or even embedded content.

With Acumatica ERP 2021 R1, the following enhancements have been implemented in widgets:

- The Link widget has been introduced. For more information, see Platform: Link Widgets for Dashboards.
- The Key Performance Indicator (KPI) widget has been introduced with the Scorecard and Meter visualization types.
- The former *Scorecard KPI* widget is now the *Scorecard* visualization of the *Key Performance Indicator (KPI)* widget.
- For the *Key Performance Indicator (KPI)* widget, the **Normal Level Type** and **Alarm Level Type** boxes have been added.
- For *Key Performance Indicator (KPI)* widget, the following options have been added to the **Normal Level Type** and **Alarm Level Type** boxes:
 - Absolute Value
 - Percent Value
 - Inquiry Field

Key Performance Indicator Widgets

KPI widgets are used to monitor data that is critical for particular business processes in the organization. With the new KPI widget in Acumatica ERP, the user defining each KPI widget specifies what data will be displayed: the inquiry form which the data is extracted from and the particular field on that form (that is, the column of the inquiry form whose data is used). The user also selects one of the following types of visualization for the KPI widget:

• Scorecard: Data is presented in the form of a card with a single parameter (that is, a single value of the selected field of the specified inquiry form) displayed, such as YTD sales. The color of the card corresponds to the color the user has selected for the specific level—normal, warning, or alarm. Users can also add names and icons to these cards. The following screenshot shows an example of this type of visualization showing year-to-date (YTD) sales.



Figure: A Scorecard type of visualization

 Meter: Data is presented in the form of a gauge, where dashboard users can view all levels of the data (normal, warning, and alarm), with the colors and values that the user designing the widget has assigned to each level. The name that is specified for the widget is presented as the widget header.

The system builds the view of each widget automatically, based on the properties specified for the widget in the **Widget Properties** dialog box. If the numbers defining the ranges of the normal, warning, and alarm levels (for the selected field of the specified form) are positive, then the starting point of the gauge is 0; if

any number defining the levels is negative, then the starting point of the gauge is a negative number. See the following screenshot for an example of this type of visualization; the labeled items are described below.

 YTD SALES
 1



Figure: A Meter type of visualization

- a. Widget header: The text that is specified in the Caption box of the Widget Properties dialog box
- b. Alarm level: The alarm range of the widget, whose lower bound is specified in the **Alarm Level** box of the **Widget Properties** dialog box
- c. Warning level: The warning range, which is automatically calculated by the system based on the values the user designing the widget has specified in the **Alarm Level** and **Normal Level** boxes of the **Widget Properties** dialog box.
- d. Normal level: The normal range of the widget, an upper bound of which is specified in the **Normal Level** box of the **Widget Properties** dialog box.
- e. Current value: The current value of the parameter whose data is displayed, which is determined by the options selected in the **Field to Aggregate** and **Aggregate Function** boxes of the **Widget Properties** dialog box. These values indicate, respectively, the field from the selected inquiry whose data is displayed on the widget, and the function that is used to aggregate the values of the selected inquiry column (which can be the average, count, maximum, minimum, or sum of the values in the column).

The system uses the default colors for the level, but a dashboard designer can easily override these default settings when needed.

The Key Performance Indicator (KPI) Widget Properties

When the user designing a dashboard selects **Key Performance Indicator (KPI)** in the **Add Widget** dialog box, the system opens the **Widget Properties** dialog box for this type of widget. In this dialog box (shown in the following screenshot), the user can specify the properties of the KPI widget.

Widget Properties

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- 3		Ε.		
.1				
1	2	٩.		

Specify the widget properties
* Inquiry Screen:
INQUIRY PARAMETERS
Shared Filter to Apply: All Records
FILTER SETTINGS
Refresh Data: Every 5 Min
* Field to Aggregate:
Aggregate Function: Count All
Normal Level Type: Absolute Value
Normal Level: 0
Alarm Level Type: Absolute Value
Alarm Level: 0
Normal Color: Teal -
Warning Color: Yellow
Alarm Color: Pink -
Visualization Type: The Scorecard The Score Card The Score
Icon: Scorecard
Caption: @ Meter
CANCEL

Figure: The Widget Properties dialog box for a KPI widget

The set of parameters for the new *Key Performance Indicator (KPI)* widget is similar to those for the old *Scorecard KPI* widget. In the new widget, the following boxes have been introduced:

- Normal Level Type: The type of the value for the normal level.
- Alarm Level Type: The type of the value for the alarm level.
- **Visualization Type**: The type of the KPI widget to be displayed on the dashboard. The following two widgets are available: *Scorecard* or *Meter*.

In the **Normal Level Type** and **Alarm Level Type** boxes, the user designing the dashboard can select one of the following options:

• *Absolute Value*: The value to be specified for the level is any positive or negative integer or decimal number. If this option is selected in the **Normal Level Type** or **Alarm Level Type** box (or both boxes), then the user needs to specify the number in the **Normal Level** or **Alarm Level** box (or both boxes), respectively.

- Inquiry Field: The value to be specified for the level is any inquiry field (that is, a field represented by a column in the inquiry form selected in the Inquiry Screen box) that contains numeric values. If this option is selected in the Normal Level Type or Alarm Level Type box (or both boxes), then the user needs to select the field to be used in the Normal Level Field or Alarm Level Field box (or both boxes), respectively. In the Normal Level Field and Alarm Level Field boxes, the system will display only those fields whose data is represented numerically, such as amounts or totals. The system will sum the values of the selected field (that is, the field values shown in the corresponding inquiry column) and display the result in the widget.
- *Percent Value*: The value to be specified for the level is any positive or negative integer or fractional number that represents the percent value (without %). If this option is selected in the **Normal Level Type** or **Alarm Level Type** box, then the user needs to specify the number in the **Normal Level** or **Alarm Level** box respectively. The user can select the *Percent Value* option in only one of the levels. So if user has selected the *Percent Value* option in the **Normal Level Type** box, the user can select only the *Absolute Value* or *Inquiry Field* option.

Previously, users could specify absolute values only. If business priorities changed and the normal and alarm levels changed, users had to change them manually. Moreover, it could happen that some values (like annual sales quota or number of processed cases) can be specific for a particular person, customer, or vendor, so having a fixed number for all of them was not acceptable. With the newly added options in the **Normal Level Type** and **Alarm Level Type** boxes, users can now build widgets with greater flexibility: Instead of manually calculating what the alarm level is, they can specify the percent value or the field value from the inquiry.

Applicable Scenarios of Using the Inquiry Field Option in the Widget Properties

As mentioned above, for the **Normal Level Type** and **Alarm Level Type** boxes of the *Key Performance Indicator* (*KPI*) widget, a user can select *Inquiry Field*. If a user selects this option, then the inquiry form selected in the **Inquiry Screen** box must contain columns with numeric values, such as amount or totals.

For instance, suppose that a company has multiple salespersons. Each salesperson has an annual sales quota that must be reached by the end of the year. The inquiry that will be used in the KPI widget must have columns with the annual quota and the current sales volume by salesperson. So for the **Field to Aggregate** box, the user can select the field that contains the current sales volume, and in the **Normal Level Field** box, the user can select the field that holds the annual quota. In the **Alarm Level Type** box, user can select either of the available options and then specify the **Alarm Level**. After the user saves the changes, the system will calculate the levels and display the result with associated color for the level.

Platform: Link Widgets for Dashboards

In previous versions of Acumatica ERP as well as the current version, a user designs a dashboard to provide dashboard users with a view of key information in Acumatica ERP as well as a single point of navigation to Acumatica ERP items. By adding different types of widgets on a dashboard, the dashboard designer can display data and configure navigation that is especially useful for users with a particular type of job or user role.

In previous versions of Acumatica ERP, a dashboard designer could not give dashboard users the ability to navigate with one click from a dashboard to an Acumatica ERP form or another dashboard. Starting in Acumatica ERP 2021 R1, a user designing a dashboard can add a new type of widget—a link widget—to dashboards with links to Acumatica ERP forms and dashboards.

Changes in the Add Widget Wizard

In the Add Widget wizard, which is opened when a user switches to design mode of a dashboard, a new type of widget named **Link** has been added, as the following screenshot demonstrates.

Controller 🕸		PROPERTIES EDIT LAYOUT	REFRESH ALL TOOLS -
/ 0	00 00		1 🗈
CASH CILHAVO CAS	Add Widget	×	
	Select the widget you want to add to dashboard	1	
1 0	Bisplays the chart using data from a particu	ular view.	
CAS	Data Table Displays the table with data from a particul	ar view	
	Embedded Page		
	Header	et,	· · · ·
	Shows just a title.		
/ 1	Displays a link to a workspace item or a for	m.	2020 - Feb 2020 - AUG
OVERDUE	Displays the pivot table using data from a p	particular view	2 =
CUSTOMERS	Power BI Tile Displays embedded Power BI tile.		
	Scorecard KPI Displays the total of the selected column fro	om the inquiry as a scorecard.	
	Trend Card KPI	alus from the inquiry over the time period	
OVERDUE PAYMENTS			
		NEAT	
Deen statisticity		GoodFood One Restaurant	
bere or		Candyy Cafe	
add a new widget.		0 2,000	4,000 6,000 8,000

Figure: Ability to add a Link widget to a dashboard

Adding of a Link Widget to a Dashboard

The user designing a dashboard selects the **Link** type widget and then specifies the following properties in the **Widget Properties** dialog box (as shown in the screenshot below):

- Icon: The icon that is displayed left of the widget's caption. This property is required.
- *Form*: The name of the Acumatica ERP form that can be selected from the list of forms. This property is required.
- *Parameters*: The parameters that are applied to the specified form when it is opened. This property is specified exactly the same way as the properties of the workspace tiles in the UI are. To find the parameter that corresponds to a box in the Summary area of a form, the user designing a dashboard should open the

form, select the value in the box, and look at the form URL. The parameter follows the form number. The user can add multiple parameters, with each separated by an ampersand (&). If a dashboard is specified in the *Form* property, the *Parameters* property is not applicable.

- Description: A description of the widget.
- *Caption*: The caption to be used for the widget.

The following screenshot demonstrates the properties specified for the **Link** widget type.

Widget Properties	\times
Specify the widget properties	

* Icon:	pen frame	•		
* Form:	Invoices and Memos	Q		
Parameters:	&DocType=INV&RefNbr= <n< th=""><th>IEW></th><th></th><th></th></n<>	IEW>		
Description:	To Create New Invoice			
Caption:	New Invoice			
		CANCEL	PREV	FINISH

Figure: Link widget properties

The following screenshot shows the **AR Clerk** dashboard with the **New Invoice** link widget. In view mode of the dashboard, when a user clicks the link with the pen frame icon and the *New Invoice* description, the system opens *Invoices and Memos* (AR301000) form for the user to add a new record with the *Invoice* type.



Figure: New Invoice link widget on the AR Clerk dashboard

Additional Information

For more information about link widgets, see *Link Widgets* and *Personalizing Dashboards: General Information*.

Platform: Changing of the Title of a Generic Inquiry

Acumatica ERP 2021 R1 introduces the capability to change a generic inquiry title on the *Generic Inquiry* (SM208000) form for both predefined generic inquiries (those provided with Acumatica ERP) and custom generic inquiries (those developed within your company).

In previous versions of Acumatica ERP, a user could not change a generic inquiry title, which is specified in the **Inquiry Title** box of the Summary area of the *Generic Inquiry* form. Starting in Acumatica ERP 2021 R1, a user can change the title of a generic inquiry directly on the *Generic Inquiry* form while designing the generic inquiry or modifying its design. This ability can be useful when the user wants to do the following:

- Organize generic inquiries by categories. For example, predefined generic inquiries related to the accounts receivable category have names that start with *AR*, such as *AR-Invoices and Memos*, *AR-Customers*, and *AR-Salespersons*.
- Assign more precise names to the generic inquiries that are exposed by using OData.

Changes on the Generic Inquiry (SM208000) Form

To implement the ability to change a title of a generic inquiry, on the form toolbar of the *Generic Inquiry* form, the following changes have been made:

- The **Export as Report** and **Change Screen ID** buttons have been removed, with these actions becoming menu commands on the **Actions** menu.
- The Actions menu has been added with the Change Inquiry Title, Export as Report, and Change Screen ID menu commands (as shown in the following screenshot).

Generic inquiry 🛱			_				
🖹 🗸 🕂 🗓	ĵ.• K <	> >	VIEW INQUIRY	ACTIONS -			
				Change Inquiry Title	e		
* Inquiry Title:	AR-Invoices and Memo	os ,O	🗹 Make Visible on t	Export as Report	ge Parameters in:	3	columns
Site Map Title:	Invoices and Memos		Show Deleted R	Change Screen ID	: Top:	0	records
Workspace:		Q	🗌 Expose via OData	-	Record s per Page:	0	
Category:		Q	Expose to the Mol	pile Application	Export Top:	0	Records
Screen ID:	AR3010PL						
TABLES RELATIONS	PARAMETERS	CONDITIONS	GROUPING	SORT ORDER RE	SULTS GRID ENTR	Y POINT NA	VIGATION
° + ∕ ×	ADD RELATED TABLE	E ↔ <u>X</u>					
🖻 🕕 🗅 *Table Name		Description		*Alias			
> 0 D PX.Objects.AR.AR	Invoice	Represents the	Accounts Receivable i	ARInvoice			
PX.Objects.AR.AR	Invoice	Represents the	Accounts Receivable i	Correction			
PX.Objects.AR.Cu	stomer			BAccountR			

Figure: Actions menu on the Generic Inquiry form

Change of the Generic Inquiry Title

. .

In previous versions of Acumatica ERP as well as the current version, the user who creates a generic inquiry on the *Generic Inquiry* (SM208000) form assigns a title to the generic inquiry. Previously, this title could not be changed. To change the title of a generic inquiry, a user can now click the **Change Inquiry Title** menu command on the **Actions** menu of the form toolbar of the *Generic Inquiry* form. In the dialog box that opens (see the following screenshot), the user enters the new title for the generic inquiry and clicks **OK**. If the specified title is not unique, the system displays an error and prompts the user to enter another title. After the user saves the generic inquiry form, the new title is inserted in the **Inquiry Title** box.

Gen	eric Inquiry 🕏	ζ.				🗅 NOTES	FILES C	USTOMIZATION	TOOLS -
8	∽ + ®		> >	VIEW INQUIRY	ACTIONS -				
* Inq	quiry Title:	SO-Invoice	Q	✓ Make Visible on th	e UI	Arrange Parameters in:		3 columns	^
Sit	e Map Title:	Invoices		Show Deleted Rec	ords	Select Top:		0 records	
Wo	orkspace:		Q	🗌 Expose via OData		Records per Page:		0	
Ca	itegory:		Q	Expose to the Mot	oile Application	Export Top:		0 Records	
Sc	reen ID:	SO3030PL	Cha	inge Inquiry Title		×			
TAB	BLES RELATIO	NS PARAMETERS	CO + Ir	aguiny Title:) ENT	RY POINT	NAVIGATION	
0	+ 0 ×	ADD RELATED TAE	BLE	invoices					
- -	D *Table Name		Dosc		OK	CANCEL			
			Dest		4.51	_			
> U	PX.Objects.AF	(ARINVOICE	Represents	s the Accounts Receivable I.	ARInvoice				
Q	PX.Objects.AF	R.ARInvoice	Represents	s the Accounts Receivable i.	Correction				
0	D PX.Objects.AF	R.Customer			Customer				
0	D PX.Objects.CF	R.BAccountR			BAccountR				
0	D PX.Objects.GL	Branch	Represents	s a Branch of the company	Branch				
0	D PX.Objects.SC	0.SOInvoice			SOInvoice				

Figure: Change Inquiry Title dialog box

Additional Information

For more information about generic inquiry titles, see *Creating a Generic Inquiry: General Information*.

Platform: Ability to Configure Navigation from a Generic Inquiry to an External URI

In previous versions of Acumatica ERP, on the *Generic Inquiry* (SM208000) form, the user creating or modifying the generic inquiry could configure navigation from the generic inquiry form to another Acumatica ERP form. Starting in Acumatica ERP 2021 R1, on the **Navigation** tab of the *Generic Inquiry* form, a user can configure navigation from the generic inquiry form to an external uniform resource identifier (URI) with dynamic parameters from multiple columns in a row of the generic inquiry results. This ability can be very useful, for example, in e-commerce solutions to monitor items whose state can change.

Changes on the Generic Inquiry (SM208000) form

To implement the ability to navigate to an external URI, on the *Generic Inquiry* (SM208000) form, on the **Navigation** tab, the **Screens** pane has been renamed to **Navigation Targets**, as shown in the following screenshot.

Generic Inquiry 😒			C NOTES FILES CUSTOMIZA	TION TOOLS -
E v + Ō	© • K < > >I	VIEW INQUIRY ACTIONS -		
* Inquiry Title: Site Map Title: Workspace: Category: Screen ID:	SO-Packages Packages Data Views Inquiries GI640096	Make Visible on the UI Show Deleted Records Expose via OData Expose to the Mobile Application Arrange Parameters in: Select Top: Records per Page:	3 columns 0 records 0	^
TABLES RELATIONS	PARAMETERS CONDITIONS	GROUPING SORT ORDER	Records RESULTS GRID NAVIGATIO	N >>>
Navigation Targets C + × https://www.fedex.com/apps/f	iedextrack/?action=track&trackingnumb	Window Mode: Pop-Up Wi Navigation Parameters \circlearrowright + ×	ndow •	
		*Field *Par ((TrackingNumber)) SOF	rameter PackageDetail.TrackNumber	From Schema

Figure: The Navigation tab of the Generic Inquiry form

The screenshot shows how the *Generic Inquiry* form is used to configure navigation for the *SO-Packages* generic inquiry (which has the *Packages* site map title) to a page on the site of the FedEx delivery services company. In the **Navigation Targets** pane, the external URI is specified. In the **Navigation Parameters** table, the **Field** column contains the parameter corresponding to the tracking number from the URI, and the **Parameter** column of the row contains the field of the data access class specified on the **Tables** tab.

Navigation Target for an External URI

A user designing a generic inquiry needs to construct the template of the URI that a user can open by clicking the links in a column of the resulting generic inquiry form. To do this, in the original URI of the target resource, the designer of the generic inquiry surrounds the parameter with double parentheses, and when the user clicks the link, the parameter is replaced by its actual value in the row. Returning to the FedEx example from the previous section, the user designing the generic inquiry enters https://www.fedex.com/apps/fedextrack/? action=track&trackingnumber=((TrackingNumber)) in the Navigation Target pane. When the user clicks the link with the 398305336614 delivery item identifier, the system navigates to the https://www.fedex.com/

apps/fedextrack/?action=track&trackingnumber=398305336614 URI. The following screenshot shows the resulting generic inquiry form with the tracking numbers that are links. As you can see in the screenshot, when a user clicks the link in the generic inquiry results, the system opens the window with the FedEx tracking information based on the tracking number.

Dra	g col	lumn header here to	o cont	igure filter			Υ Ξ
B 0	D	Shipment Nbr.	t	Customer	Shipment Date	Tracking Number	Description
đ		002667		CONSTPLAZA	9/23/2019	1Z84E0R60392401	🖤 Track your package or shipment with FedEx Tracking - Google Chrome 🛛 🚽 🗙
đ		002667		CONSTPLAZA	9/23/2019	1Z84E0R60390626	🗎 fedex.com/apps/fedextrack/?action=track&trackingnumber=398305336614 🛛 🔯 🔍 🗞
0		002698		NAAAPASSOC	9/26/2019	794647358001	Facility Same
đ		002990		CONSTPLAZA	3/2/2020	794688177023	Loren Bilo Tiam - Mansaa My Account - Cleasms Tools -
Ø		002998		ELITEANSW	3/2/2020	Sample Label-(2ab	TRACK AND HER SHITNER)
đ		003025		BESTYPEIMG	3/10/2020	1Z84E0R60391727	
> @		003026		DIGITECHPR	3/10/2020	398305336614	Pending
Û		003028		ETELLIGENT	3/10/2020	390989937340	The delivery date may be updated when FedEx receives the package.
Ø		003029		ABARTENDE	4/1/2020	391559726144	0
đ		003115		AACUSTOMER	4/17/2020	391980351997	LARE DREATED
Ø		003116		ABCSTUDIOS	5/1/2020	392439202123	Shipment information sent to FedEx
đ		003137		AACUSTOMER	5/1/2020	392441546050	GET STATUS UPDATES
Ø		003172		AACUSTOMER	5/1/2020	1Z84E0R60330669	FROM TO SEATTLE, VIA US, LITTLE RALLS, MULIS
đ		003233		AACUSTOMER	7/1/2020	394396146630	Travel History Shipment Facts
i a		003234		ANTUNSWEST	7/1/2020	394396185557	

Figure: The resulting generic inquiry form with the page of the external URI

Additional Information

For more information about navigation from generic inquiry forms to Acumatica ERP forms and webpages, see *Enabling Navigation: General Information*.

Platform: Improvements Related to a Side Panel of a Generic Inquiry Form

Starting in Acumatica ERP 2021 R1, a number of improvements have been made that affect the design and display of generic inquiries with a side panel. These improvements are described in detail in the following sections.

Changes on the Generic Inquiry (SM208000) Form

Various changes have been made to the *Generic Inquiry* (SM208000) form related to the functionality of side panels of generic inquiries that have been developed on the form. On the **Navigation** tab, the **Screens** pane has been renamed to **Navigation Targets**. The table in this pane has the following columns:

- Active: A check box that is used to activate (when it is selected) or deactivate (when it is cleared) navigation to the navigation target specified in the **Link** column of this row).
- Link: The navigation target, which is either the ID and name of the form (which can be a dashboard), or the URI of the page to be shown.
- **Window Mode**: The navigation mode for the form, dashboard, or URI specified in the **Link** column of this row. If *Side Panel* is selected in this column, the selected form or dashboard can be viewed in the side panel of the resulting generic inquiry form.



If the **Navigation Targets** pane contains multiple active rows with the *Side Panel* window mode, each of these rows is represented as a tab on the side panel.

In all the columns, the user designing the generic inquiry can filter and sort values. The user can click any column header to open the Sorting and Filtering Settings dialog box and sort or filter rows by this column.

In the right pane of the **Navigation** tab, settings can be specified for the row selected in the Navigation Targets pane. This pane contains the **Icon** box, where the designer can select the icon that the user can click on the side panel of the generic inquiry form to view the form or dashboard. The pane also contains the following tabs, where settings can be specified for the row selected in the **Navigation Targets** pane:

- **Navigation Parameters**: This tab contains the same table with navigation parameters as was shown on the **Navigation** tab in previous versions of Acumatica ERP.
- Visibility Conditions: This tab, which is displayed only if Window Mode is set to *Side Panel* for the selected navigation target, can be used to specify conditions for the specification of the side panel or side panel tab.

Deactivation of a Side Panel or Side Panel Tab

A user designing a generic inquiry may need to deactivate a side panel tab temporarily—for example, while editing its settings. Starting in Acumatica ERP2021 R1, this user can easily deactivate a side panel or side panel tab that has been configured.

To do this, on the **Navigation** tab of the *Generic Inquiry* (SM208000) form, in the **Navigation Targets** pane, the user designing the generic inquiry clears the check box in the **Active** column of the row whose side panel tab should be deactivated. This check box is available only for the navigation targets for which **Window Mode** is set to *Side Panel*. Once the generic inquiry designer saves these changes to the generic inquiry, when a user opens the resulting generic inquiry form, the side panel is no longer displayed (if there are no other active rows with the *Side Panel* window mode in the **Navigation Targets** pane) or the icon corresponding to the now-deactivated side panel tab is not displayed (if there are other active rows with the *Side Panel* window mode). Thus, the user cannot view the corresponding navigation target in the side panel.

The following screenshot demonstrates the cleared **Active** check box to deactivate the side panel; in this example, the side panel that displays the *Invoices* (SO303000) form is deactivated for the generic inquiry with the *AR-Invoices*

and Memos title and the *Invoices and Memos* site map title. The generic inquiry designer can later select the check box to quickly reactivate the side panel.

Generic Inquiry AR-Invoices and Mer 🖺 い 十 🛍	mos D; ▼ I< <		ACTIONS -	🗋 NOTES	FILES	CUSTOMIZATION TO)OLS 🗸
* Inquiry Title: Site Map Title: Workspace: Category: Screen ID:	AR-Invoices and Memo Invoices and Memo AR3010PL	amos	e UI Arrange Parameters in: ords Select Top: Records per Page: le Application Export Top: Attach Notes To:	3 0 0 0	columns records Records		^
TABLES RELATIONS	PARAMETERS	CONDITIONS GROUPING S	ORT ORDER RESULTS GRID ENTI		VIGATION		
Navigation Targets Č + × Activ *Link	Window	Icon: 🙀 shopping cart	• IBILITY CONDITIONS				
AR301000 - Invoice:	Mode s a Inline	с + х					
SO303000 - Invoice	s Side Panel	🖹 * Field	* Parameter			From Schema	
		> DocType	Correction.DocType				
		RefNbr	Correction.RefNbr				

Figure: Deactivated side panel for the AR-Invoices and Memos generic inquiry

Reordering of Icons on a Side Panel

As mentioned previously, during the design of a generic inquiry, the designer can specify the icon for each tab to be shown on the side panel to be displayed if the icons are clicked. A user of the generic inquiry form can click any icon to view the tab with the form or dashboard to which navigation has been defined. The icons in the side panel have tooltips with the names of the forms to be displayed if the icons are clicked; the tooltips help the user to navigate to the targets.

Starting in Acumatica ERP 2021 R1, a user designing a generic inquiry can quickly reorder the icons for the tabs in the side panel if multiple navigation targets have been configured to be displayed there. Thus, the generic inquiry designer can easily display the icons for the navigation targets in the order that corresponds to the order in which users usually work with the navigation targets, based on the company's business processes.

To reorder icons in the side panel, on the **Navigation** tab of the *Generic Inquiry* (SM208000) form, in the **Navigation Targets** pane, the user designing the generic inquiry drags the rows in the list to the needed place; the user then saves the generic inquiry. In the resulting generic inquiry form, the icons in the side panel are displayed in the order that corresponds to the order of the navigation targets in the table on the **Navigation Targets** pane.

Visibility Conditions of a Side Panel

Starting in Acumatica ERP 2021 R1, a user designing a generic inquiry can specify the conditions that must be met for a side panel to be visible.

In the **Navigation Targets** pane on the **Navigation** tab of the *Generic Inquiry* (SM208000) form, the generic inquiry designer can click any row with *Side Panel* selected in the **Window Mode** column, which makes the **Visibility Conditions** tab available in the right pane. On this tab, this user can specify a condition or a set of conditions that must be met for the side panel to be visible for users. The table on the **Visibility Conditions** tab has the same structure as the table on the **Conditions** tab of the same form. That is, the table has the following columns:

- Active: A check box that the generic inquiry designer selects to activate the condition in the row or clears to deactivate the condition. By default, the check box is selected.
- **Brackets**: An optional open parenthesis to enclose a complex condition that is specified in more than one row of the table.
- **Data Field**: The data field (from the data access classes specified for the generic inquiry) to which the condition is applied.

- **Condition**: The logical condition that is applied to the specified data field and a value from the **Value** column (or values from the **Value** and **Value 2** columns). Values do not need to be specified for some logical conditions, such as *Is Empty* and *Is Not Empty*, do not need values.
- From Schema: A check box that the generic inquiry designer can select to select a predefined value of the specified data field in the Value and Value 2 columns.
- Value: The value to be used in the condition, which can be entered or selected (if the check box in the From Schema column is selected).
- **Value 2**: The second value to be used in the condition, if the logical operator requires two values for the condition.
- **Brackets**: An optional closing parenthesis if this is a complex condition.
- **Operation**: The logical operator to be used to join conditions if this is a complex condition specified in more than one row of the table.

For example, consider the *CR-BAccounts* generic inquiry (which has the *Business Accounts* site map title), which is defined on the *Generic Inquiry* form and has two side panels defined on the **Navigation Targets** pane of the **Navigation** tab. One side panel is designed to display the *Vendors* (AP303000) form if in the grid of the generic inquiry form, a user clicks a business account of the vendor type. The second panel is designed to display *Customers* (AR303000) form if in the grid of the resulting generic inquiry form, a user clicks a business account of the resulting generic inquiry form, a user clicks a business account of the resulting generic inquiry form, a user clicks a business account of the customer type. Different icons are specified to display these forms in the side panel. The following screenshot demonstrates an example of the configuration of a visibility condition for the first side panel listed in the **Navigation Targets** pane.

Generic Inquiry CR-BAccounts				🗋 NOTES	FILES CUS	TOMIZATION TOOLS -
🖹 🗤 🕂 🟛	〕	> VIEW INQUIRY ACTIONS -				
* Inquiny Title:	CP BAccounts	O Alex Visible on the III	Arrange Parameters in:	3 0	olumns	^
Site Man Title:	Rusianas Assounts		Salast Tap:	J (oordo	
Site Map Title.	Business Accounts			0 10	corus	
vvorkspace:	Data Views	Expose via OData	Records per Page:	0		
Category:	Inquiries 3	Expose to the Mobile Application	Export Top:	0 R	lecords	
Screen ID:	GI640102		Attach Notes To:	Not applicable	*	
TABLES RELATIONS	PARAMETERS COND	ITIONS GROUPING SORT ORDER I	RESULTS GRID ENTR'	Y POINT NAVIO	GATION	
Navigation Targets						
ک + ×		Icon:				
Active *Link	Window Mode	NAVIGATION PARAMETERS VISIBILITY	CONDITIONS			
AP303000 - Vend	ors Side Panel	с + х				
AR303000 - Custo	omers Side Panel	🖹 Activ Bracke Data Field	Condition From	Value	Value 2	Brackets Operator
			Scher	r		
		> 🖸 BAccount.Type	Equals 🗹	Vendor		And

Figure: The visibility condition for the side panel with information about a vendor

The following screenshot shows the resulting generic inquiry form. In the list of business accounts, a user has clicked the *Frontsrc* business account of the *Vendor* type. As a result, only one icon, which corresponds to the *Vendors* form, is displayed; when the user clicks the icon, in the side panel, the *Vendors* form is displayed with information about the *Frontsrc* business account.

E	Business Acco	unts ☆ customiz#	TION - TOOLS -	>	Vendors Frontsource Ltd.		\square	0	- 7 - J
	ပံ က +				a a ∽ +	ACTIONS · INQUIRIES · REPORTS ·			•
	Type: All 🔹 Cla	ss: All 🔹 🖓 🖺	Q	<u> </u>	Vendor ID:	EPONISPO			^
	Customer Status: All	•			Vendor Status:	Active			
8	Business	Business Account Name	Туре		* Vendor Class:	DEFAULT - Default Vendor Class 🖉 🧷			
	Account				Balance:	215.00			
	FOODCLVR	Food Clever	Customer		Prepayment Balance:	0.00			
>	FRONTSRC	Frontsource Ltd.	Vendor		Retained Balance:	0.00			
	GLORYFRUIT	Glory Fruit Case	Vendor				UDUTEO		
	GOODFOOD	GoodFood One Restaurant	Customer		GENERAL FINANCI	AL PAYMENT PURCHASE SETTINGS ATTR	GBUTES		Ş
	GOODFRUITS	Good Fruits More	Vendor		ACCOUNT INFO				
	GREENCAFE	Cuisine Green Cafe	Customer		* Account Name:	Frontsource Ltd.			
	GREENEX	Greenex Cafe	Business Account		ACCOUNT ADDRESS				
	GREENTRUCK	Big Green Trucks Ltd.	Vendor			VIEW ON MAP			
	GROCERIEX	Groceriex	Customer		Address Line 1:	2309 Oak Street			
	HARDCO	Standard Hardware Company	Vendor		Address Line 2:				
	HARMINT	Harmon Installation	Vendor		City:	Old Forge			
	HMBAKERY	HM's Bakery & Cafe	Customer		State:	NY - NEW YORK			
	HOMEDEP	Bellevue Home Depot	Vendor		Postal Code:	13420			
4			4		* Country:	US - United States of America 🔎			
	14-26 of 55 records	s IK K 2 of 5	pages > >		ADDITIONAL ACCOUNT I	INFO			-

Figure: The list of business accounts and the Vendors form in the side panel

Additional Information

For more information about a side panel on a generic inquiry form, see *Enabling Navigation: General Information*.

Platform: Selection of the Table to Which Notes and Files Are Attached

While working with a list of records on a generic inquiry form, a user can attach a file, such as a scanned document with a signature, and a note, such as important information for colleagues about a customer, to a record (that is, to a particular row of the grid). In previous versions of Acumatica ERP, in some scenarios, the files and notes were attached to a record of a different internal table instead of the record that the user expected.

To prevent misplaced attachments, starting in Acumatica ERP 2021 R1, on the *Generic Inquiry* (SM208000) form, the user designing or modifying a generic inquiry can select the table to which notes and files will be attached if a user attaches these to a record in the resulting generic inquiry form.

Changes on the Generic Inquiry (SM208000) form

Starting in Acumatica ERP 2021 R1, in the Summary area of the *Generic Inquiry* (SM208000) form, the **Attach Notes To** drop-down list has been added. In this list, a user designing or modifying a generic inquiry can select the table to which files and notes should be attached in the resulting generic inquiry form; the designer can instead disable any attachments by selecting the *Not Applicable* option. In addition to *Not Applicable*, this drop-down list includes only the tables listed on the **Relations** tab of the *Generic Inquiry* form, as shown in the following screenshot.

Generic Inquiry AR-Invoices and Memos ≅ ∽ + 亩 ♀ K < > >I VIE		🗋 NOTES FILE	S CUSTOMIZATION TOOLS -
Inquiry Title: AR-Invoices and Memos Site Map Title: Invoices and Memos Green ID: AR3010PL TABLES RELATIONS PARAMETERS CONDITIONS Table Relations C +	Make Visible on the UI Arr Show Deleted Records Sel Expose via OData Re Expose to the Mobile Application Exp Attr GROUPING SORT ORDER ● RE	ange Parameters in: 3 lect Top: 0 cords per Page: 0 port Top: 0 ach Notes To: ARInvoice ISULTS GRID EN ARInvoice BAccountR Correction	columns records Records
C Active Parent Table	Join Type	Child Table	
> 0 D ARInvoice	Left	BAccountR	
0 D 🗹 ARInvoice	Left	Correction	
Data Field Links For Active Relation			
	Condition	Child Field	Brackete Operator
> 0 D customeriD	Equals	bAccountID	And

Figure: Selection of the table to which files and notes are attached

The screenshot shows the selection of the *ARInvoice* table for attachments and the drop-down list formed by the system based on the tables listed on the **Relations** tab. In the resulting generic inquiry, when a user attaches a note or file to any record on the grid, the record will be selected in the *ARInvoice* table.

Attachment of Files and Notes on the Generic Inquiry Form

After the generic inquiry has been designed and saved, a user who is working with the grid of a generic inquiry form can attach a file or note to any of the listed records, and the file or note will be attached to the correct record of the expected table. To attach the file or note, the user can do the following:

- Click the paperclip icon in a row of the grid; then in the **Files** dialog box, the user attaches a file to the record of the table that is selected on the *Generic Inquiry* form.
- Click the note icon in a row of the grid; then in the **Enter Record Note** dialog box, the user attaches a note to the record of the table that is selected on the *Generic Inquiry* form.

The following screenshot demonstrates the attachment of a file to a record on the Invoices and Memos (AR3010PL) form, whose settings on the *Generic Inquiry* form were shown earlier in the topic. The file will be attached to a record in the *ARInvoice* table, based on the settings of the generic inquiry.

Generic Inquiry		>	laws	bices a	and Memos		[3
AR-Invoices and Me	mos		0	0	+ 0	H X Y	Q
INDIES FILES	TOOLS .	•	a 0.	0	Туре	Reference Nbr. Status Date Post Customer Customer Name	-1
⊠ v + ®	0• к		0	0	Invoice	Files ×	fe
< > >I VIEV	WINQUIRY		0	D	Invoice	IMG_20201204_105047 jpg × Browse Upload	ife
ACTIONS -			30	D	Credit Memo	O 🛃 ADD LINK REMOVE LINK 🛏 UPLOAD USING MOBILE APP	Sweets Shop
			0	0	Credit Memo	Fije name Comment Last Date	fe
 Inquiry Title: 	AR-Invoices and Mem		Ø.	0	Credit Memo		
Site Map Title:	Invoices and Memos		0		Involce		Sweets Shop
Workspace			0	D	Invoice		estaurant
Category			0	D	Invoice		Sweets Shop
Screen ID:	AR3010PL			D	Invoice		Sweets Shop
Make Visible on the U	1		6	D	Invoice		estaurant
Show Deleted Record	5		0	D	Invoice		to
Expose via OData				0	Invoice		te
Expose to the Mobile /	Application				Invoice		astaurant
Arrange Parameters in:	3 colui			0	Involce		instantion in the second se
Select Top:	0 10001			-	invoice		ie .
Records per Page:	0			1	Invoice		estaurant
Export Top:	0 Recr		0	D	Invoice		10
Attach Notes To:	ARInvoice		6	D	Invoice		estaurant
			0		Invoice		ife
TABLES RELATIONS	S 22		-		_		
Table Relations			1-1	8 of 93	3 records		1 of 6 pages > >1

Figure: Attaching a file to the ARInvoice table in a row of a generic inquiry form

Additional Information

For more information about attachment of files and notes to tables used in the generic inquiry, see *Modifying Inquiry Results: General Information*.

Platform: Expanded Search of System Entities and Recently Viewed Records

In Acumatica ERP, a user can perform a search within the system by using the **Search** box on the top pane of the Acumatica ERP screen. In Acumatica ERP 2021 R1, the following entities can be searched in addition to those previously available for searching:

- Generic inquiries
- Pivot tables
- Business events
- Dashboards
- Filters
- Report definitions including column sets, row sets, and unit sets
- Email accounts
- Notifications
- Users
- Customization projects

The **Recently Viewed** workspace has also been expanded to include more information about these entities. Also, a user cannot now delete an entity from the list above if it is already used somewhere else in the system. For details, see *Platform API: Improvements in Platform DACs*.

Platform: Improvements in Request Profiler

A system administrator or developer can use the *Request Profiler* (SM205070) form to troubleshoot performancerelated issues in Acumatica ERP. In Acumatica ERP 2021 R1, the functionality of this form has been greatly extended and redesigned, as described in the following sections.

Default Monitoring

By default, only expensive requests and important exceptions are monitored in the system—that is, the **Default Logging (Expensive Requests and Requests with Important Exceptions)** check box is selected on the *Request Profiler* (SM205070) form. The system administrator may choose not to perform manual tuning of requirements and to leave this check box selected on the *Request Profiler* form, as shown in the following screenshot.

Re	equest Profiler	est Profiler																CUSTO	DMIZAT	TION	тоо	LS .
RE	FRESH RESULTS	CLEAR LO	G EXPORT	IMPORT																		
1	Default Logging (Expension)	ensive Reque	sts and Requests wi	ith Important Exce	eptions)																	
RI	EQUEST LOGGING -											_										
1	Log Requests (Apply I	Filter)	Server Time Th	reshold		URL																
			SQL Count The	eshold.		Usernam	e.															
s						_	_		_			_										
(Log SQL (Apply Filter))	Row Count Thr	reshold.		Executed	i by Me	sthod														
			SQL Time Thre	shold		Includ	o Cach	ied SQL	Results													
E	CEPTIONS LOGGING																					
1	Log Exceptions																					
E	VENT LOGGING			_																		
(Dog Events (Apply Filt	er) L	og Level:																			
		C	ategory																			
R	EQUESTS SOL	EXCEPTIO	ONS EVENTIL			1											II Dec	orde				D
0	VIEN	WOUL V	EW EVENT LOG	OPENORL	Pinotivena (P-1											-	ui reec	loius				8
	Request Usernar Start Time	URL	Screen	Request Type	S ¹ Command Target	Comma Name	C Ti	Serv Time ms	SQL Time ms	CPU ms	S, C	L Si C	R	C	LEC	E C	LEC	Man- Mem	MB	P. M B	Wait	Se
	13 Jan 11 3 admin	-/frames		UI				273.53	30.53	234.38	5	5	2	1	1	3	٥	541.27	541:	0	8.62	
	13 Jan 11.3 admin	-/wiki/sh	ShowWiki	UI		HTML		383.33	107.24	312.50	60	60	26	1	1	2	Q	504.55	504!	3566	0.00	T
	13 Jan 11.5 admin	-/frames		UI				2,046.7	12.90	15.63	5	5	2	1	1	3	۵	477.61	4776	0	2.018.2	T

Figure: Default monitoring settings

If the **Default Logging (Expensive Requests and Requests with Important Exceptions)** check box is selected, the system logs only the following requests and exceptions:

- The requests that comply with either of the following criteria:
 - The request type is *Screen*, *UI*, *UI-GI*, or *UI-Reports*, and the request has a server time of more than 20 seconds.
 - The request is of any type with a server time of more than 60 seconds.
- The following exceptions:
 - NullReferenceException
 - ThreadAbortException
 - ArgumentNullException
 - ArgumentOutOfRangeException
 - IndexOutOfRangeException

For default logging, the logged information is displayed on the **Requests**, **SQL**, and **Exceptions** tabs; the **Event Log** tab remains empty. These four tabs replace the table that displayed the list of logged requests in previous versions of Acumatica ERP.

With the improved filtering in the Summary area of the *Request Profiler* form, the system administrator or developer can configure logging requirements more precisely.

Troubleshooting of a Particular Process

If a particular process, such as the release of a document or the import of a document, takes more time than usual, the system administrator or developer can troubleshoot the process by turning on the logging of URL requests, SQL queries, exceptions, and warnings and errors; this is done directly on the form where the process is initiated.

To turn on the logging, the system administrator or developer clicks **Tools > Profiler** on the form title bar and clicks **Start Logging** in the **Profiler** dialog box, as shown in the following screenshot. The Request Profiler starts logging URL requests, SQL queries, exceptions, and warnings and errors.

A	LLR	ECORDS DUE D	ATE									
Гур	a: All	- Status All -	Date: All 👻							V B	o	
0	D	Туре	Reference Nbr.	Status		Date	Post Period	Customer	Customer Name		Description	
0	0	Invoice	AR009100	Bala	Profiler				×	Jams	Fresh apples and oranges	
0		Invoice	AR009099	Ope						any	Invoice for Italian Restaurant - T	
۵	۵	Invoice	AR009098	Ope	Turn on the reques and can be viewed	t profiler 1 or exporte	The subsequed later.	uent requests will be	any	Invoice for Italian Restaurant - T		
0		Invoice	AR009097	Ope	START LOGGING			Investors	Invoice for The Beach Hotel and			
0		Invoice	AR009096	Ope		-	Investors	Invoice for The Beach Hotel and				
0		Invoice	AR009095	Ope	Export last request	s for the c	urrent user's	s session even if the	request	1.	Invoice for Eastgate Strip Mall -	
0		Invoice	AR009094	Ope	profiler was not en	abled befo	re			ures	Invoice for MEP Restaurant - MI	
0		Invoice	AR009093	Clos	EXPORT LAST					Investors	Invoice for The Beach Hotel and	
0		Invoice	AR009092	Clos	Design Destine						Contract Billing 38SUPPORTP	
Ô		Overdue Charge	AR009091	Ope	Request Promer						Overdue Charge	
0		Overdue Charge	AR009090	Open	11	/30/2020	11-2020	SNOSHORT	Shortstop Sports		Overdue Charge	
Ō		Invoice	AR009069	Open	1	1/2/2020	11-2020	ABCSTUDIOS	ABC Studios Inc		Electronics - Drop Shipped Orde	
0		Invoice	AR009088	Open	11	/30/2020	11-2020	WESTINGALL	Westin Galleria I	fouston	Professional services work	
0		Invoice	AR009067	Open	11	/30/2020	11-2020	WIDGETCC	Widget Credit Ca	ird	Professional services work	
0	D	Invoice	AR009086	Open	11	/12/2020	11-2020	WIDPARENT	Widget Consolid	ated Holdings	Widget order - no shipping	

Figure: The start of the Request profiler on a form

The system administrator reproduces the issue and clicks **Stop and Export** in the **Profiler** dialog box, as shown in the following screenshot. The Request Profiler returns to the default monitoring and exports a ZIP archive with the log files that contain information in JSON format about the performed URL requests, SQL requests, and stack trace.

Invoices and Mem Invoice AR00	os 19099 - The Italia い +	an Company D + K	< > >I PAY A			NOTES	ACTIVITIES	FILES C	USTOMIZATION	TOOLS .
Туре:	Invoice -	Gustomer	ITALIANCO - The Italian Company	Ø Detail Total	3,605.55					^
Reference Nbr	AR009099 ,P	Location	MAIN - Primary Location	Discount Total	0.00					
Status.	Open	Currency:	USD 1.00 - VIEW	BASE VAT Taxable T	0.00					
Date	11/2/2020	Terms.	30D - 30 Days	VAT Exempt T	0.00					
Post Period.	11-2020	Due Date	12/2/2020 * 🖾 Retainage Do	ocument Tax Total	0.00					
Customer Ord.	PF00035	Cash Discount Project/Contract	12/2/2 Profiler		×					
	ETAILS FINANCIA	INTERNALS AD	g Examp Started Requests Logged STOP AND EXPORT DRESS	1/14/2021 10 56:35 AM		STAILS	DISCOUN	IT DETAILS	APPLICATION	8
B 0 D Branch	Lin Nb	e Inventory ID r.	Trans			ie	Ext. Price	Discount Percent	Discourt Amount	Manual Manual Discount
	WHOLE	CSTRMATS	Retainage for Invoice AR008758	0.00	C	00 00	169.63	0.000000	0,00	
	WHOLE 2	CSTRMATS	Retainage for Invoice AR008758	0.00	0	0.00	2,695.43	0.000000	0.00	
PRODU	WHOLE	S CSIRMATS	Retainage for Invoice AR008758	0.00	0	00	740.49	0.000000	0 00	R
										,

Figure: The stopping of the Request Profiler on a form

The system administrator or developer can import the ZIP archive to another Acumatica ERP instance by clicking **Import** on the form toolbar of the *Request Profiler* (SM205070) form and review the logged information.

For an issue that has just occurred, the system administrator can click **Export Last** in the **Profiler** dialog box to export the most recent requests for the current user's session even if the Request Profiler was not enabled before the issue occurred.

Analysis of URL Requests

In the **Request Logging** section of the *Request Profiler* (SM205070) form, the system administrator or developer can turn on the monitoring of all URL requests by selecting the **Log Requests (Apply Filter)** check box. If only specific URL requests should be monitored, the system administrator can specify additional filtering criteria by using the settings of this section. The system displays the list of the logged requests on the **Requests** tab of the *Request Profiler* form.

The system administrator or developer can work with logged requests on this tab as follows:

- Review detailed information about the SQL queries within the particular URL request that is currently selected in the table (by selecting a request on this tab and then clicking **View SQL** on the table toolbar).
- Review detailed information about the events that occurred within the particular URL request that is currently selected in the table (by selecting a request on this tab and then clicking **View Event Log** on the table toolbar).
- Open the Acumatica ERP form specified in the **URL** column of the selected request (by selecting a particular request on this tab and then clicking **Open URL** on the table toolbar).
- Pin particular requests to keep them for further review (by selecting a request to be pinned on this tab and then clicking **Pin/Unpin** on the table toolbar). If the system administrator or developer clears the log by clicking **Clear Log** on the form toolbar, the pinned requests remain in the list.
- Export all requests from the **Requests** tab to an Excel file (by clicking **Export to Excel** on the table toolbar).

On the **Requests** tab, the system administrator or developer can see only the completed requests. To view the requests that are currently executing, the system administrator can open the **Requests in Progress** tab of the *System Monitor* (SM201530) form. For the requests in progress, the same information is available as the information for the completed request on the **Requests** tab of the *Request Profiler* form.

Analysis of SQL Queries

If on the *Request Profiler* form, the monitoring of URL requests is turned on, then in the **SQL Logging** section of the Summary area of the form, the system administrator or developer can also turn on the monitoring of SQL queries within the monitored URL requests by selecting the **Log SQL (Apply Filter)** check box.

If only specific SQL queries should be monitored, the system administrator or developer can specify additional requirements by using the filtering settings of this section. For example, if the **Include Cached SQL Results** check box is selected, the system will include SQL queries that obtain results from a query cache (that is, not from the database) in the log. If a keyword (such as a method name) is specified in the **Executed by Method** box, the system will include in the log only the SQL queries for which the stack trace includes the specified keyword.

The system displays the list of the logged SQL queries on the **SQL** tab of the form. On this tab, the system administrator or developer can review the logged SQL queries that comply with the specified filters. The same SQL query may be triggered by multiple URL requests with different parameters. The table displays aggregated information for each query.

When the system administrator or developer clicks a link in the **Statement ID** column for an SQL query, the system opens the **SQL Details** dialog box with detailed information about each execution of the SQL query, as the following screenshot demonstrates.

Request Profiler	SQL Details							×
REFRESH RESULTS CLEAR LOG	Statement (D)	2010102747	Executions	14068				
Default Logging (Expensive Requests REQUEST LOGGING	Total SQL Time, ms.	222796.7154 ⊷ 🖾	Total Rows					
Log Requests (Apply Filter)	E Start Time	Params	SQL	Time, Rov ms Cour	r URL t	Command Target	Command Nan	ne
	> 11 Jan 13 38:29	declare @P0 as int = 3105, @	P1 as n	5.39	~/pages/cr/cr503400.aspx	LongRun	ProcessAll	
IQLLOGGING	11 Jan 13:38:29	declare @P0 as int = 3105, @	P1 as n 2	2.89	~/pages/cr/cr503400.aspx	LongRun	ProcessAll	
Log SQL (Apply Filter)	11 Jan 13:38:29	declare @P0 as int = 3105, @	Ptasn 2	8.34	~/pages/cr/cr503400.aspx	LongRun	ProcessAll	
	11 Jan 13 38 29	declare @P0 as int = 3105, @	P1 as n	9.12	~/pages/cr/cr503400.aspx	LongRun	ProcessAll	
	11 Jan 13:38:29	declare @P0 as int = 3105, @	P1 as n	3.48	~/pages/cr/cr503400.aspx	LongRun	ProcessAll	
ADDITIONS SHE DIGODEFICING	11 Jan 13:38:29	declare @P0 as int = 3105, @	P1 as n 1	0.00	~/pages/cr/cr503400.aspx	LongRun	ProcessAll	
Statement Tables	1		_			R.	> >	,
2010102747 INSERT CRGrams	DECLARE @P0 AS	NT = 3105, @P1 AS NVARCHAR	R (60) = 'FullName', @F	2 AS NVARCHA	R (60) = 'revision', @P3 AS DECIMAL =	= 0.9722, @P4 AS NVARCHAR (2)	= 'LA';	1
732514978 INPlanType,FSSODet	INSERT CRGrams ((CRGrams] [CompanyID] [entityII	D], [fieldName], [fieldVa	lue], [score], [va	idationType])			1
223368476 UPDATE Contact	VALUES (3, @P	0, @P1, @P2, @P3, @P4);						
954548264 Location PRBranchLocatio	" CR 50 34 00 */							
161906521 WikiPage,WikiDescriptor	A Clack Trace							
959525754 CRGrams	T Stack Trace	Charles Carpinal Transformer 1990	Northern Basters	and The last a				
2108620154 CSAnswers, BAccount	at PX. SM.PXPerfor	manceinfo AddSqlSample(String	cmdText, String param	eedFile(nto) eterDeclaration,	Boolean queryCache)			1
1540006571 WikiDescriptorExt,WikiDes	at PX Data PXData at PX Data PXData at PX Data PXData at PX Data PXData at PX Data PXData	baseProviderBase ExecuteNonQ baseProviderBase insert(Type tal baseProviderBase Insert(Type tal base Insert[Table](PXDataFieldA base Insert[Table](PXDataFieldA	luery(IDbCommand con ble, PXDataFieldAssign ble, PXDataFieldAssign ssign[] pars) ssign[] pars)	nmand) [] pars, String co [] pars)	mmandText, Boolean switchAllowed, co	ompanySetting setting)		

Figure: Detailed information about an execution of a particular SQL query

The system administrator or developer can export all SQL requests from the **SQL** tab to an Excel file (by clicking **Export to Excel** on the table toolbar).

The system administrator or developer can analyze SQL queries in depth on the *SQL Analysis (SM405000)* inquiry form. The system administrator or developer can use this form to review all information about executed SQL queries, export data to an Excel file, and build pivot tables and diagrams based on this data. The **All Records** tab of the form displays all information about executed SQL queries. For each record in the table, the system administrator or developer can view SQL details and stack traces on the side panels, as shown in the following screenshot.

SQL Analysis	0	CUSTOMIZATION + TOOLS +	>	SQL	Analysis S	tack. I 🗵 🍸	2
ALL RECORDS PIVOT			Ξŝ	8	SQL Time, ms	Stack Trace	
				2	828.82	at PX.Common PXStackTrace.GetStackTrace(Int32 skipFrames.	
Command Name Air • Command Target Air •	Y G	Q			547.88	at PX.Common.PXStackTrace.GetStackTrace(Int32 skipFrames	
B D URL	Command Name	Command Target			35.01	at PX.Common.PXStackTrace.GetStackTrace(Int32 skipFrames	
					30.54	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames	
2 8 D (respective to 200200 server	Caus	HOOPabDCCDVI as Astas			24 03	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames	
C //pages/ts/ts/300/200 aspx	Save	ctiousphDSSPXLogAction			16.84	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames.	
C -/pages/is/is/300/200 aspx	Save	ctiousphDSsPXLogAction			11 00	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames.	
Compages/is/is/300200 aspx	Save	ctiousphDSSPXLogAction			9.51	at PX.Common.PXStackTrace.GetStackTrace(Int32 skipFrames	
Compages is its 300200 aspx	Save	cliousphDSSPALogAction			7.42	at PX.Common.PXStackTrace.GetStackTrace(Int32 skipFrames	
-/pages/fs/fs300200.aspx	Save	ctiousphUSSPXLogAction			6.63	at PX Common PXStackTrace.GetStackTrace(Int32 skipFrames	
~/pages/is/is/300200.aspx	Save	ctivusphDSsPXLogAction			6.32	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames	
-/pages/ts/ts300200.aspx	Save	ctiousphDSSPXLogAction			3.40	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames	
~/pages/ts/ts300200.aspx	Save	ctiousphDSSPXLogAction			3,34	at PX Common.PXStackTrace.GetStackTrace(Int32 skipFrames	
-/pages/ts/ts300200.aspx	Save	ctiousphDSSPXLogAction			3 32	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames.	
li □ -/pages/ts/ts300200.aspx	Save	cti00sphDSSPXLogAction			3.17	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames.	
pages/ts/ts300200.aspx	Save	cti00SphDSSPXLogAction			3,16	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames.	
⊌ □ ~/pages/ts/ts300200.aspx	Save	cti00SphDSSPXLogAction			3.09	at PX Common PXStackTrace GetStackTrace(Int32 skipFrames.	
Images/fs/fs300200.aspx	Save	cti00\$phDS\$PXLogAction			3.06	at PX.Common.PXStackTrace.GetStackTrace(Int32 skipFrames	
III ~/pages/fs/fs300200.aspx	Save	cti005phDS\$PXLogAction			3.06	at PX.Common.PXStackTrace.GetStackTrace(Int32 skipFrames	
×		,					
1-14 of 5795 records		1 of 414 pages > >		1-1	9 of 36 recor	ds 1 of 2 pages >	Я

Figure: SQL Analysis form

On the **Pivot** tab of the form, for each URL request, the system administrator or developer can review the detailed information about execution of SQL requests, such as the following:

- The total number of SQL requests
- The text of SQL requests
- The number of executions of each SQL request
- The percentage of time that the execution of SQL request takes

Analysis of Exceptions

By selecting the **Log Exceptions** check box in the **Exceptions Logging** section, the system administrator or developer can turn on the logging of exceptions. The system displays the list of the logged exceptions on the **Exceptions** tab of the form. By using this tab, the system administrator or developer can review the list of exceptions that have occurred during the processing of requests.

When the system administrator or developer selects a particular exception on this tab and then clicks **View Exception Details** on the table toolbar, the system opens the **View Exception Details** dialog box with detailed information about the selected exception, as the following screenshot demonstrates.

🗹 Default Lo	gging (Expensi	ive Requests and Req	puests with Importa	nt Exceptions)							
REQUEST LO	GGING		The second second		-			EXCEPTION	VS LOGGING		-
Log Réqu	ests (Apply Fille	er) Server	Time Threshold		URL			Log Ex	ceptions		
		SQLO	ount Threshold	View Exception Details						1	
SQLLOGGIN	3			0 + × H	x					Log Level	
L Log SQL (Apply Eitter)	Row C SQL T	ount Threshold. me Threshold	Start Screen	URL	Command Target	Command Name	Stack Trace		Category	
		CHCEDTIONE IN	minian.	> 13 Jan 11:21	~/frames/			at PX.Data.PXFirstCha	nceExceptionL		
REQUESTS	SUL	EXCEPTIONS E	VENICEOIS	13 Jan 11:21	~/frames/			at PX.Data.PXFirstCha	nceExceptionL		
0	VIEW E	EXCEPTION DETAILS		13 Jan 11:21	~/frames/			at PX Data PXFirstCha	nceExceptionL		
Tenant	Exception	Exception Message	Count	13 Jan 11.21	~/frames/			at PX.Data PXFirstCha	nceExceptionL		
	туре			13 Jan 11:21	~/frames/			at PX.Data.PXFirstCha	nceExceptionL		
	PX Data	You are not current	lly. 98	13 Jan 11:21	~/frames/			at PX.Data.PXFirstCha	nceExceptionL		
U100	PX Data	You are not current	lly 17	13 Jan 11:21	~/frames/			at PX Data PXFirstCha	nceExceptionL		
	PX Data	Error. You are not	cu	13 Jan 11:21	~/frames/, _			at PX.Data.PXFirstCha	nceExceptionL		
U100	PX Data	Error: You are not o	cu. 2	13 Jan 11:21	~/frames/			at PX Data PXFirstCha	nceExceptionL		
U100	System A	Value cannot be nu	1								
11100	System.I	Could not load file	or 1								
0100											

Figure: Detailed information about a particular exception

The system administrator or developer can export all exceptions from the **Exceptions** tab to an Excel file (by clicking **Export to Excel** on the table toolbar).

Analysis of Events

In previous versions of Acumatica ERP, the system administrator or developer could turn on the monitoring of events by adding a specific parameter to the web.config file, which required restarting of the application. In Acumatica ERP 2021 R1, the ability to turn on the monitoring of events and to review logged information has been added to the *Request Profiler* (SM205070) form.

With the settings of the **Event Logging** section of the Summary area of the *Request Profiler* form, the system administrator or developer can also turn on the logging of events with a specific severity level by selecting the level in the **Log Level** box. The system administrator or developer can filter the events that the system should log by category by selecting one option or multiple options in the **Category** box. The system displays the list of the logged events on the **Event Log** tab of the form. By using this tab, the system administrator or developer can review the list of events that occurred during request processing.

When the system administrator or developer clicks an event on the tab and then clicks **View Event Details** on the table toolbar, the system opens the **View Event Details** dialog box with detailed information about the selected event, as shown in the following screenshot.

REFRESH RESULTS CLEAR LOG EXPORT IMPO	ortant Exceptions)					
Log Requests (Apply Filter) Server Time Threshold	i:	URL				
SQL Count Threshold	View Event Details					
Discolutions Final Part Court Through	Start Time:	1/15/2021 8:17:01 AM	Event Type	Warning	-	
SQL Time Threshold EXCEPTIONS LOGGING Log Exceptions EVENT LOGGING Log Events (Apply Filler) Category REQUESTS SQL EXCEPTIONS EVENT LOG		subcategory (@Subcategory) [[Length"16,"PropertyName" bional false, "StartIndex"19/J, ("Length"14, PropertyName" onal false, "StartIndex"19/J, cotbicd15edf57, "Workspacell ("Value" "PX Wob UI Framese	D) found in the workspac ubcategory "StartIndox "Subcategory1D" "Destri "Subcategory1D" "Destri "WorkspaceID" "Destruc "Properties" ("Subcatego D" ("Value" "75/769371-18 at Services SiteMapRepc	e (@WorkspaceiD)", "Tokens O), cituring" 2, "Format'i nulli "Alig d in the workspace ", "Startin turing" 2, Format" nulli "Alig ruling" (Valuer "13343435-c5a 1-4305-884-05413699fdes sitory")), "Exception" nulli)	nment":null,"IsPosi Jax" 35). ment" null,"IsPositi c-bba3-ate5-), "SourceContext"	
A MEW EVENT DETAILS IN T						
						Comment
The law 00:17:04 Watering admin	Stack Trace					Command
Bullion					-	

Figure: Detailed information about a particular event

The system administrator or developer can export all events from the **Event Log** tab to an Excel file (by clicking **Export to Excel** on the table toolbar).

Platform: Enhanced Creation of Business Events from an Inquiry Form

In Acumatica ERP 2021 R1, for generic inquiry forms, the **Business Events** menu command has been added to the **Tools** menu of the form title bar. By clicking the command, a customizer can view existing business events based on the generic inquiry being viewed and create new business events; for a new business event, the system inserts the generic inquiry identifier and name into the respective boxes on the *Business Events* (SM302050) form.

Also, for a generic inquiry that has shared filters saved as tabs, when a customizer creates a business event from the generic inquiry, the system fills in the **Shared Filter to Apply** box on the *Business Events* (SM302050) form with the active shared filter (that is, the filter tab the customizer was viewing before clicking the menu command).

Creation of a Business Event Based on a Shared Filter

If a particular generic inquiry has any shared filter as a filter tab, a customizer can create a business event based on the shared filter if its conditions meet the requirements of the business event. To create the business event, the customizer opens the tab and then clicks **Tools > Business Events** on the form title bar (see the following screenshot).

Ir	vo	ice	s and M	emos 🏠							
	AL		> +								Screen ID CST.AR.30.10.PL Get Link Web Service
	Туре	e = 1	nvoice +	Status: = Open - Date: A	n +				Y	13	Notifications
8	0	D	Туре	T Reference Nbr.	Status	τ.	Date	Post	Customer	Gus	Business Events
>	0	D	Invoice	000001	Open		11/28/2019	11-2019	COFFEESHOP	Fol	Access Rights Share Column Configuration
	0		Invoice	000002	Open		12/5/2019	12-2019	GOODFOOD	Go	Trace
	0	D	Invoice	000004	Open		1/29/2020	01-2020	COFFEESHOP	Foi	About
	0	D	Invoice	000005	Open		1/25/2020	01-2020	GOODFOOD	Good	Food One Restaurant
	0	D	Invoice	000066	Open		1/8/2020	01-2020	COFFEESHOP	FourS	Star Coffee&Sweets Shop
	0		Invoice	000067	Open		1/15/2020	01-2020	COFFEESHOP	FourS	Star Coffee&Sweets Shop

Figure: The Tools > Business Events menu command

In the **Business Events** dialog box, which the system opens, the customizer clicks **Create Business Event** on the toolbar. The system opens the **Create Business Event** dialog box, where the user enters a name for the new business event and clicks **OK** (see the following screenshot).

ð		records	Vemos V OPEI								CUSTOMIZ	ATION - TOOLS
Тур	De: 4	= Invoice -	Statu	s:=Open +	Date: All +					Ŷ	a	
0	0	🗅 Туре		T Reference	NBr. Statu	10.	۲	Date	Post Period	Customer	Customer Name	
0	E	Invoice		000001	Ope	π		11/28/2019	11-2019	COFFEESHOP	FourStar Coffee&Sv	weets Shop
0	1	Invoice		000002	Ope	n		12/5/2019	12-2019	GOODFOOD	GoodFood One Res	staurant
0) Invoice		000004	Ope	n		1/29/2020	01-2020	COFFEESHOP	FourStar Coffee&Sv	weets Shop
		 Invoice Invoice Invoice Invoice Invoice Invoice 	Busir උ ම බ	CREATE E	USINESS EVEN	T H	'Event ID				⊐ ×	urant ets Shop ets Shop
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0	1) Invoice									S 1	

Figure: Entry of the name for the new business event

The system opens the *Business Events* (SM302050) form with the **Screen Name** and **Screen ID** boxes populated with the values of the generic inquiry for which the business event has been created. Also, the **Shared Filter to Apply** box is populated with the name of the shared filter that was active when the user created the event (see the following screenshot).

• Type: Trigge	r by Record Change -	-			
and the second s	a sy i teesta enange		Screen	AR30	10PL
Raise Event: For Ea	ich Record T				0
Group Records By:			Shared	Filter to Apply: Open	Invoices ,Q
Description:					

Figure: The system-populated settings for the new business event

The customizer may now proceed to configuring the business event.

Additional Information

For more information on creating business events based on a generic inquiry, see *Business Events: Generic Inquiry* as *Source*.

Platform: Feature Reorganization

In Acumatica ERP 2021 R1, the check boxes corresponding to features on the *Enable/Disable Features* (CS100000) form have been reorganized.

Feature Switches under the Platform Section

The new **Platform** section has been added to the *Enable/Disable Features* (CS100000) form (see the following screenshot). The following check boxes for features are now grouped under this section:

- Monitoring and Automation, including its nested check boxes
- Image Recognition for Expense Receipts
- Document Recognition Service
- Advanced Authentication, including its nested check boxes

Enable/Disable Features 🏦

MODIFY ENABLE



Figure: New Platform section

Other Changes

The **Commerce Integration** check box (including its nested check boxes) has been moved under the **Third-Party Integrations** section.

Platform: Improvements to AP Document Recognition

In Acumatica ERP 2021 R1, the recognition of an AP document, which was introduced in the previous release, has been further improved.

The system now searches for the identifier of an inventory item by its alternate identifier if the corresponding crossreference has been added for the inventory item on the **Cross-Reference** tab of the *Stock Items* (IN202500) or *Non-Stock Items* (IN202000) form. (For details, see *Managing Item Cross-References*.)

Also, if a user has manually specified both an alternate identifier and an inventory identifier for an item, during the validation of a recognized document, the system adds the cross-reference for the inventory item when the user saves the recognized AP document.

Ability to Search for an Inventory ID by Its Alternate ID

The new **Alternate ID** column has been added to the table in the Details area of the *Incoming Documents* (AP301100) form, which is used for the recognition of AP documents.

If any setting in the Summary area or any document line in the Details area has not been properly recognized by the document recognition service, a user can map the recognized values with the settings in the Summary area, add document lines manually, and map values to the cells in the Details area.

When the user maps the vendor's identifier of an inventory item to the **Alternate ID** column for the corresponding record, the system searches for the inventory item by the alternate ID and adds the item's identifier to the **Inventory ID** column if the item is found. In the following screenshot, the system has added the *APPLES* inventory ID to the **Inventory ID** column for the record with the *APP01* alternate ID (which is maintained by the vendor), because the corresponding cross-reference has been added for the inventory item.

		× .	> 1/1 - + 184	%n								
Status	Recognized						5100	Rems				
Typia	Bil	-									D C	- 11
• Vendor:	ALLFRUITS - All Fruits Mail	p ø			S	tock Items	PINOTES ACTIV	THES FILES CL	STOMIZATION	TOOLS .	10	- 11
• Location:	MAIN - Primary Location	0			- C							- 11
Currency:	USD .0 1.00 -	VIEW BASE			Fru	v +	D. O K	< > >	ACTIONS			- 11
Termo	30D - 30 Days	.0				NQUIRIES -						- 11
· · Diełin	11/30/2020				Ma							- 11
 Poll Pendu. 	11-2020	P				Inventory ID:	APPLES - Fresh applet	16 .0				- 11
Viendor Reit -	AR009100					utem Status	Active -					- 11
Daucription		1000				Prontuce Warkgroup:		,Ö,				- 11
Detail Tolai		810.60	All Fruits Mall			Primitics Manager		,p				- 11
Amount		810.60	3340 Deans L New York, NY	ane, Arlington , 12603		Description	Fresh apples 1 lb					
			Phone: 206-5 Web: www.fru	55-1212 itmall.in		GENERÁL SETTINOS	PRICE/CONTINEN	CHOSS REFERENC	Æ	1.0		
			BILL TO:		-	0 + × H	X					- 1
			SweetLife Fru	its & Jams	9	Assessments Type *Y	And	mate (D	NDM	Description		- 11
			3950 Hoffman New York NY	11003		Barcode	AP1	B	_			
			United States	of America		Giobal	APP	001				
			CUSTOMER RE	F. NBR.	TERMS	_	CONTACT	_				
					30 Days							- 1
			ITEM ID	ITEM		QTY. U	OM U	NIT PRICE	DISC.	EXTENDE	DPRICE	- 1
			OBG001	Fresh overv	sillo esillo	234.00 11	3	2.50	0%		503.10	- 1
									1.55			
0 + × 1	H 🕅											
O + × I	H (X)	Transaction Descr.				Quantility 3	UOM	Unit Cost		Ext. Goel		Amount
O + × I Alternate ID APP001	H IS muchory ID -	Trainscillon Over				Quantity 1 123.00	LB	Uoli Cost 2.5000		Ext. Goel 307.50		Amount 307.60

Figure: The system-added inventory ID associated with the alternate ID

Automatic Creation of a New Cross-Reference

When a user enters an alternate ID into a row of the *Incoming Documents* (AP301100) form, if the system cannot find an inventory ID associated with the specified alternate ID, the user can manually select the correct inventory

ID for the record. The following screenshot shows an example in which the user has selected the inventory ID that corresponds to the alternate ID, because a cross-reference between these identifiers had not been defined for the item.

Status	Recognized						vik Jams			
Typn:	Bei			-	A DECISION OF TAXABLE PARTY.	34	ALC SHOT	-	-	
Vendor:	ALLFRUITS - All Fruits Mail	P 8		Fri	Olarda Maria					
Localion:	MAIN - Primary Location	a,			Stock Items	I NOTES AC	TIVITIES FILES CUST	IOMIZATION 1	TOOLS +	
Currency:	USD 0 1.00 - 0	VIEW BASE		IVIO	11 日 2 +	D. 0 14	())I	ACTIONS .		
Terms	30D - 30 Days	9			INQUIRIES .					
Date:	11/30/2020	1.1								
Post Panar:	11-2020	.0			4 Inventory (D	ORANGES - Fresh	oranges 1 lb		~	
Vendor Ref.	AR009100		All Fruits Mall		New Status	Active =				
Description.			3340 Deans La	ne, Arlington	Protect Workgroup:		٩			
Denni Tosai		810.60	Phone: 206-55	5-1212	Product Manager		2			
Amoulor		810.60	Web: www.fruit	mall.in	Concreten	Fresh oranges 1 lb				
						The stanges the				
			Sweetlije Enuit	e & Jame	GENERAL SETTINGS	PRICE COST INFO	CROSS-REFERENCE		10	
			3950 Hoffman	Avenue, Elmont	A + Y H	187	-	-		
			New York NY 1	1003	U I A II					
			United States c	America	az Azentute Type	- Vendor/Gaston	Adomate ID	.00		
					i liarcode		ORILB			
			CUSTOMED DES							
			CONTONIENTAL	30 Dr						
			ITEM ID	ITEM	QTY. U	OM	UNIT PRICE	DISC, E	XTENDED PRICE	
			APP001	Fresh applea 1 lb	123.00 LE	5	2.50	0%	307.50	
			ORG001	Fresh oranges 1 lb	234.00 LE	5	2.15	0%	503.10	- H
+ × 1										
turnan tu	inventory its	Trunkinglium Ophpr			Desiring	UDM	Unit Cost		INE COST	Am
APP001	APPLES	Fresh apples 1 lb			123.00	LB	2.5000		307.50	30
A DECEMBER OF THE REAL PROPERTY OF THE REAL PROPERT		2 / F F F F F F F F F F F F F F F F F F								

Figure: Manual selection of the inventory ID for the alternate ID

In this scenario with a manually entered inventory ID for an alternate ID, when the recognized document has all the details needed for the AP bill creation specified, the user can click **Save and Continue** on the form toolbar to convert the recognized document into an AP document of the specified type. As a result, the *Bills and Adjustments* (AP301000) form opens with the settings filled with the values from the recognized document. (See the screenshot below.) When the user saves the document, for the item whose inventory ID was selected manually, the system adds a record for the alternate ID on the **Cross-Reference** tab of the *Stock Items* (IN202500) or *Non-Stock Items* (IN202000) form. The cross-reference is added with the *Vendor Part Number* type and the corresponding vendor identifier (also shown in the following screenshot).

Type:	Bill	*	Vendor:	ALLFRUITS - A	II Fruits Mall		STOCK	Titems		-
Reference Nbr.: Status:	000062 On Hold	,p	Location: Currency: Terms:	MAIN - Primary USD 1.00	Location VIEW BA	Stock Items	⊡ NOTES ACTIV ロ・面 K	ITIES FILES C	CUSTOMIZATION TO)ols +
Date: Post Period:	11/30/2020 11-2020	* 0	Due Date: Cash Discount	12/30/2020 - 12/30/2020 -	Apply Retainage Pay by Line					
Vendor Ref.:	AR009100			Joint Payees		 Inventory ID: 	ORANGES - Fresh ora	inges 1 lb 🔎		0
Description:	DETAILS	TINIANU	CIAL DETAILS 1	AVDETALLE	ADDUCATIONS	Item Status: Product Workgroup: Product Manager:	Active -	م م		
DOCOMENT		FINMIN	UNAL DETAILS	AA DE IAILS	AFFLIGATIONS	Description:	Fresh oranges 1 lb			
0 + 0	×	VIEW DE	FERRALS ADD	PO RECEIPT	ADD PO RECEIPT L	GENERAL SETTINGS	PRICE/COST INFO	CROSS-REFEREN	ICE	\$
	FFICE		Free	apples 1 lb		0 + × ⊢	X			
	FFICE	ORANG	ES ¹ Fresh	oranges 1 lb		 Alternate Type Barcode 	*Vendor/Customer	*Alternate ID OR1LB	UOM C	K I
						Vendor Part Number	ALLERUITS	ORG001	1	

Figure: The system-added cross-reference with the alternate ID for the inventory item
Link to a Purchase Order and Receipt

On the *Incoming Documents* (AP301100) form, the lines of a recognized bill can now be linked to a corresponding purchase order or purchase order and receipt, depending on the billing configuration of the vendor, which is controlled by the **Allow AP Bill Before Receipt** check box on the *Vendors* (AP303000) form.

The system will automatically link the recognized bill line to the related purchase order line and purchase receipt line (if applicable) in the following cases:

- If the purchase order number has been recognized in the document, the corresponding order exists in the system, and a single corresponding purchase receipt exists in the system if the billing is based on purchase receipts
- If the purchase order number has not been recognized, but only one order or purchase order-receipt pair corresponds to the bill line

If the system has linked the line automatically, it adds the purchase order number (and receipt number, if applicable) to the **PO Number** and **PO Receipt Nbr.** columns of the table (as shown on the following screenshot).

L	Recognized								
	Bill				c .	-	INVOI	CE	
	ALLFRUITS - All Fruits Mall	20	1		Fru		Reference Abr. Date:	A/0502100 30-Nov-2020	
	MAIN - Primary Location	Q			(Contraction of the second		Customer D: Currency:	sylves 1 USD	
	USD ,0 1.00 * VIEV	W BASE		All Fruits Mail					
4	30D - 30 Days	Q		3340 Deans La New York, NY, Phone: 206-55	nie, Arlington 12603 5-1212				
3	11/30/2020			Web: www.frui BILL TO:	maillin		ap to:		
3	11-2020	Q		SweetLife Frui 3950 Hoffman New York NY	ts & Jams Avenue: Elmont 11003	S 31 N	weelLife Fruits & Jams 350 Hoffman Avenue, Elmo ew York NY 11003	int	
	12/30/2020			United States	of America.	U	nited States of America		
3	AR009100			CUSTOMER REP	. Nan. TERMS 30 Depa		CONTACT		_
				APPOD1	WEM Produce the	017, UOM 123.00 LB	UNIT PRICE	DISC. EXTENDED	eticE R2,50
		810.60							
		810.60							
LINK L entory ID	INE ↔ 🗷 Transaction Descr.		Quantity	UOM	Unit Cost	Ext. Cost	Amount	PO Number	PO Recei
PLES	Fresh apples 1 lb 0%		123.00	LB	2.5000	307.50	307.50	000031	
				10	0.4500	502 10	502 10	000024	
	LINK L entory ID PLES	ALLFRUITS - All Fruits Mall MAIN - Primary Location USD 0 1.00 • VIEN 30D - 30 Days 11/30/2020 11-2020 12/30/2020 AR009100 LINK LINE → IS entory ID Transaction Descr. PLES Fresh apples 1 lb 0%	ALLFRUITS - All Fruits Mall	ALLFRUITS - All Fruits Mall MAIN - Primary Location USD 0 1.00 VIEW BASE 30D - 30 Days 11/30/2020 - 11-2020 0 12/30/2020 - AR009100 - 810.60 810.60 810.60 810.60 - B10.60 - 810.60 - 810 -	ALLFRUITS - All Fruits Mall P MAIN - Primary Location P USD 1.00 VIEW BASE 30D - 30 Days P 11/2020 P 11/2020 P 12/30/2020 P AR009100 810.60 810.60 810.60 810.60 810.60 ELINK LINE Imit Self Entory ID Transaction Descr. Quantity UOM PLES Fresh apples 1 lb 0% 123.00 LB	ALLFRUITS - All Fruits Mall Image: Control of the state of the	ALLFRUITS - All Fruits Mall All Fruits Mall MAIN - Primary Location All Fruits Mall USD 1.00 VIEW BASE 30D - 30 Days All Fruits Mall 11/30/2020 All Fruits Mall 11/2020 All Fruits Mall 12/30/2020 All Fruits Mall AR009100 Bit No.60 810.60 810.60 810.60 810.60 Bit No.60 Bit No.60 Bit No.60 Bit No.60	ALLERUITS - All Fruits Mall All Fruits Mall All ALLERUITS - All Fruits Mall All ALLERUITS - A	ALLFRUITS - All Fruits Mall Image: Constraint of the second of the s

Figure: The system-added purchase order number for the recognized lines

If the system did not link the line automatically to a purchase order line (for example, if multiple options for linking are available), a user can link the line by clicking the line and then clicking the **Link Line** button on the table toolbar. When the user clicks this button, the **Link Line** dialog box opens with a list of purchase orders (for vendors that bill based on purchase orders) or a list of purchase orders and the corresponding purchase receipts (for vendors that bill based on receipts), as the following screenshot demonstrates.

	(Territoria)	<	>1/1-+	80%			
Status:	Recognized				Contract of		
lype:	Bill	•	c	w the	INVOIC	E	
/endor.	ALLFRUITS - All Fruits Mall	20			Reference Nor.: Date: Date: Date:	A00209100 30-New-2000 30-Dae-2000	
Link Line				×	Customer ID: Currenty;	SWEET LHS)	
order Nbr.:	م	1					
Inventory ID:	ORANGES - Fresh oranges 1 lb	1					
UOM:	LB				SWEETLITE Fruits & Jams 3950 Holfman Avenue, Elmon	1	
					United States of America		
	N.						
0 14	X			-	CONTACT		
Ö ⊷	IX Order Typi Vend Ware Cu Nbr. Ref.	Orc Ext U Qty Cor Q	ni Uni Line Descr ty Am	ription	CONTACT	DISC: EXTEN UN UN	350 WHICE 307 50 -500 10
O ⊢ Selected	S Order Typi Vend Ware Cu Nbr. Ref. 000031 No WH U 2	Orc Ext U Qty Cor Q 34.0I 432.9I 234	nl Uni Line Descr ty Am .0/ 432.9/ Fresh ora	ription nges 1 lb	CCNYACT 2007 - UNIX TRUC 2008 2009 2009	DHC: EXTEN UN UN	RECE WHILE Story Sto Story 10
C ⊢ Selected	Order Typi Vend Ware Cu Ref. 000031 No WH U 2	Oric Ext U Qity Cor Q 34.0I 432.9I 234	ni Uni Line Descr ty Am .0i 432.9i Fresh ora	nges 1 lb	CONTACT 30	Der: Exten Ve Ve	200 919(12) 207 30 200 10
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C H Selected > ☑ + × [ternate Invente PP001 APPL	Image: Second system Vend Ware Cu Nbr. Typi Vend Ware Cu 0000031 No WH U 2	Orc Ext U Qty Cor Q 34.01 432.91 234	uni Uni Line Descr ty Am .0i 432.9i Fresh ora is save Save UOM Unit Co LB 2.500	ription nges 1 lb CANCEL est Ext. Cost 0 307.50	convact or very wice and and and and and and and and and and	PO Number 000031	PO Rec.

Figure: The Link Line dialog box opened for the recognized line

When the user clicks **Save and Continue** for the recognized bill, the system creates an AP bill and opens the *Bills* and *Adjustments* (AP301000) form with it; a bill line is added to the **Document Details** tab, where it copies the purchase order and receipt numbers to the **PO Number** and **PO Receipt Nbr.** columns, respectively. If the vendor bills based on purchase receipts, the system will not copy the purchase order number if the receipt number is not specified.

The bill can still be created and saved without a link to the purchasing document. In this case, the user will have to link the bill to the purchasing document on the *Bills and Adjustments* form.

If billing is based on receipts for a vendor, currently, it is possible to link only non-stock items and stock items that require receipt—that is, items for which the **Require Receipt** check box is selected on the *Non-Stock Items* (IN202000) or *Stock Items* (IN202500) form, respectively.

Additional Information

For more information on AP document recognition, see AP Documents from PDFs: General Info.

Projects: Account Groups

In Acumatica ERP, the ability to make an account group inactive has been implemented. Inactive account groups cannot be selected on data entry forms, and the system cannot generate project transactions or create project budget lines with inactive account groups.

To make an account group inactive, for the account group, a user clears the **Active** check box in the Summary area of the *Account Groups* (PM201000) form, as shown in the following screenshot. The account group can be inactivated if it has no associated accounts on the **Accounts** tab.

Account Groups				
← SAVE & CLOSE	8 🖌	> + ıı́ ¢	• K < > >I	
* Account Group ID:	WIP	٥	Active	
Туре:	Asset	• [efault Revenue Account Group:	
* Description:	Work in Pr	ogress		
ACCOUNTS ATTRIB	UTES			
Ò + × ↔	X			
Account Type		Account Class	Description	Default

Figure: An inactive account group

As a result of the upgrade to Acumatica ERP 2021 R1, all the existing accounts groups become active—that is, for all the account groups, the **Active** check box is selected on the *Account Groups* form.

Projects: Closing of Commitments

The logic related to the closing of commitments has been reviewed, and in Acumatica ERP 2021 R1, a consistent solution has been implemented. The solution covers all of the identified scenarios, including partial billing, receiving, and closing the corresponding line by quantity or by amount.

Changes to the User Interface

On the *Commitments* (PM306000) form, the following columns have been added to the table (see the screenshot below):

- Status: The status of the commitment, which depends on the status of the Closed check box of the corresponding purchase order line or subcontract line on the Document Details tab of the *Purchase Orders* (PO301000) or *Subcontracts* (SC301000) form, respectively. The status can be one of the following options:
 - Open: The Closed check box is cleared in the corresponding purchase order line or subcontract line.
 - Closed: The Closed check box is selected in the corresponding purchase order line or subcontract line.
- Committed Variance Quantity: The difference between the values in the Committed Revised Quantity and Committed Invoiced Quantity columns.
- Committed Variance Amount: The difference between the values in the Committed Revised Amount and Committed Invoiced Amount columns.

Commitments A																CU	STOMIZATION	TOOLS -
O O CREATE EX	CTERNAL COM	MITMENT	1-1 (2	0 7														0,
Project	ITALIAN2 - C	onstruction pr	oject (time)	D Revised C	iom.	0.00	Con	mitted Receive	dQ.	0.00								^
Account Group			į	D Revised C	om	59,755.00	Con	mitted Invoiced	Qu	0.00								
Project Task.			į.	D Committee	t Op	0.00	Con	mitted Invoiced	A 4	3,878.00								
Cost Code			ز	D Committee	i Op.	11,877.00	1											
Inventory ID	PROJMATER	IAL - Purchas	e of materi	0														
Related Document Type:	All Commitme	ents																
ALL RECORDS CO	ST COMMITME	INTS																
⊕ ⊕ D Related Document	*Project	Account Group	* Project Task	*layentory ID	Cost Code	UOM	Original Committed Quantity	Original Committed Amount	Revised Committed Quantity	Revised Committed Amount	Committed Open Quantity	Committed Open Amount	Committed Received Quantity	Committed Invoiced Quantity	Committed Invoiced Amount	Status	Committed Variance Guantity	Committed Variance Amount
> 0 D Normal 000028	ITALIAN2	MATERIAL	04	PROJMATERIAL	04-700	EA	0.00	12,878.00	0.00	12,878.00	0.00	0.00	0.00	0.00	13,878.00	Closed	0.00	-1,000.00
6 D Normal 000028	ITALIAN2	MATERIAL	04	PROJMATERIAL	04-220	EA	0.00	46,877.00	0.00	46,877.00	0.00	11,877.00	0.00	0.00	35,000.00	Open	0.00	11,877.00

Figure: New columns on the Commitments form

Changes to the Calculation of Committed Values

The calculation of the following columns in the table of the *Commitments* (PM306000) form has been changed (with the descriptions reflecting the current calculation of the committed values):

- **Committed Received Quantity**: The received quantity of the corresponding purchase order line or subcontract line.
- **Committed Invoiced Quantity**: The billed quantity of the corresponding purchase order line or subcontract line.
- **Committed Invoiced Amount**: The billed amount of the corresponding purchase order line or subcontract line.

For multicurrency accounting, when the project currency and the billing currency differ, the committed invoiced amount equals the sum of the amounts of all the related AP document lines multiplied by the rate, where the rate is the conversion rate from the currency of the purchase order or subcontract from which the commitment originates to the project currency.

- Committed Open Quantity: The lowest value of the following differences:
 - Committed Revised Quantity Committed Received Quantity
 - Committed Revised Quantity Committed Invoiced Quantity

The committed open quantity becomes zero when the commitment is assigned the Closed status.

 Committed Open Amount: A value whose calculation for non-stock items is based on the option selected in the Close PO Line box on the General Settings tab of the Non-Stock Items (IN202000) form for the inventory item of the purchase order line or subcontract line from which the commitment originates.

For stock items and for the non-stock items with the *By Quantity* option selected in the **Close PO Line** box, the committed open amount is calculated as follows:

• Committed Revised Amount / Committed Revised Quantity * Committed Open Quantity if the committed revised quantity is greater than zero

The Committed Received Amount is the unit cost multiplied by the received quantity of the corresponding purchase order line or subcontract line.

 Committed Revised Amount - Committed Invoiced Amount if the committed revised quantity equals zero

For the non-stock items with the *By Amount* option selected in the **Close PO Line** box, the committed open amount equals the lowest value of the following differences:

- Committed Revised Amount Committed Received Amount
- Committed Revised Amount Committed Invoiced Amount

The committed open amount becomes zero when the commitment is assigned the Closed status.

If the received and billed quantity and amount are greater than the ordered ones, then the release of the change order that increases the original ordered values of the corresponding purchase order or subcontract does not lead to the closing of the document line, and the commitment status remains *Open* even if the **Committed Revised Quantity** and **Committed Revised Amount** equal the **Committed Invoiced Quantity** and **Committed Invoiced Amount**, respectively, on the *Commitments* form. The purchase order line or the subcontract line can be closed manually if a user puts the purchase order or subcontract on hold, selects the **Closed** check box for the line, and then takes the purchase order or subcontract off hold.

Changes to the Validation of the Original Values

On the **Document Details** tab of the *Purchase Orders* (PO301000), if the inventory item of a purchase order line from which a commitment originates has the *By Quantity* option selected in the **Close PO Line** box and the **Require Receipt** check box cleared on the **General Settings** tab of the *Non-Stock Items* (IN202000) form, the value in the **Order Qty.** column of the purchase order line must be greater than zero.

On the **Document Details** tab of the *Subcontracts* (SC301000) form, the same validation is implemented for the subcontract lines from which commitments originate.

Upgrade Notes

After the upgrade to Acumatica ERP 2021 R1, if users want to apply the new calculation logic to existing commitments of particular projects, they should select these projects on the *Recalculate Project Balances* (PM504000) form, select the **Rebuild Commitments** check box in the Selection area, and click **Process** on the form toolbar.

For the selected projects, the system recalculates values displayed in the **Committed Received Quantity**, **Committed Invoiced Quantity**, **Committed Invoiced Amount**, **Committed Open Quantity**, and **Committed Open Amount** columns in the table of the *Commitments* (PM306000) form. The values in the **Committed Variance Quantity** and **Committed Variance Amount** columns are calculated and the value in the **Status** column is retrieved for a commitment each time the commitments is displayed on the *Commitments* form.

Projects: Default Accounts and Subaccounts

In Acumatica ERP 2020 R2 and earlier versions, projects and project tasks had a default account and default subaccount that could be used as a source of accounts and subaccounts for documents related to both the project income and project costs. In Acumatica ERP 2021 R1, the default account and subaccount have been replaced with separate default accounts and subaccounts for sales and costs.

Defining Sales and Cost Accounts and Subaccounts

On the **Settings** tab of the *Projects* (PM301000) form, instead of the **Default Account** and **Default Subaccount** boxes, the following boxes have been added (see the screenshot below):

- Default Sales Account
- Default Sales Subaccount
- Default Cost Account
- Default Cost Subaccount

Projects				D NOTES FILES	CUSTOMIZATION TOOLS -
	+ 🕮 🛛 🕹	> >	RUN PROJECT BILLING	ACTIONS - INQU	JIRIES - REPORTS -
* Project ID:	FIXEDP01		A * Status:	Completed *	*
Customer:	BRASSKEY - Bras	s Key Bar	P 0	Hold	
SUMMARY TASKS	REVENUE BUDGET	COST BUDGET	BALANCES COMM	IITMENTS INVOICES	SETTINGS »
DEFAULT VALUES					
Default Sales Account:	40000 - Sales Revenue	Q			
* Default Sales Subacco	000-000 - Default				
Default Cost Account:	51400 - COGS - Other	Q			
Default Cost Subaccount	000-000 - Default				
Accrual Account:		Q			
Accrual Subaccount:					
Time Activity Approver:		Q			

Figure: Default accounts and subaccounts of a project

On the **Summary** tab of the *Project Tasks* (PM302000) form, instead of the **Default Account** and **Default Subaccount** boxes, the **Default Sales Account**, **Default Sales Subaccount**, **Default Cost Account**, and **Default Cost Subaccount** boxes have also been added (see the following screenshot).

Project Tas	sks									NOTES	FILES	CUSTOMIZATION	TOOLS -
t i	S	+	Ū	۰ ۵	K	<	>	Я	🗖 ADD EVEN	IT			
* Project ID:			FIXED	P01 - Fi	ked Price	e projec	t for Bra	<i>م</i>					~
* Task ID. SUMMARY	RE	ECURRI	NG BIL	LING		/ITY HI	STORY	A	TRIBUTES				
TASK PROP	ERTIE	s							DEFAULT VAL	UES			
Planned St	art Date	e:	7/1/20	13					Default Sales	Account:	40000 - Sal	es Revenue	Q
Planned Er	nd Date								Default Sales	Subacco	000-000 - D	efault	
Start Date:			7/1/20	13					Default Cost /	Account:	40000 - Sal	es Revenue	Q
End Date:			7/15/2	013					Default Cost	Subaccount:	000-000 - D	efault	
* Completion	Metho	d:	Manua	al				-	Accrual Acco	unt:			Q
Completed	(%):			100.00					Accrual Suba	ccount:			
Approver:									Tax Category				

Figure: Default accounts and subaccounts of a project task

On the **Settings** tab of the *Project Templates* (PM208000) form and on the **Summary** tab of the *Project Template Tasks* (PM208010) and *Common Tasks* (PM208030) forms, the **Default Account** and **Default Subaccount** boxes have also been replaced with the **Default Sales Account**, **Default Sales Subaccount**, **Default Cost Account**, and **Default Cost Subaccount** boxes.

If the *Subaccounts* feature is enabled on the *Enable/Disable Features* (CS100000) form, a user must specify the default sales subaccount for a project and each project task. If the default cost account is selected for a project or project task, a user must also specify the default cost subaccount.

Using Sales Accounts and Subaccounts in Project Billing

When a project is billed, the system uses the sales account and subaccount based on the settings of the corresponding step of the billing rule specified in the right pane of the *Billing Rules* (PM207000) form (see the screenshot below).

The sales account the system uses is determined by the option selected in the **Use Sales Account From** box, which is one of the following:

- *Project*: The default sales account of the project
- Task: The default sales account of the project task

The segment of the sales subaccount the system uses is determined by the option specified in the **Sales Subaccount Mask** box, which is one of the following:

- PPP: The default sales subaccount of the project
- *TTT*: The default sales subaccount of the project task

Billing Rules				
₽ □ ₽	+ 🛈 🗘	- < < > >		
* Billing Rule ID: Description:	FIXEDPRICE Fixed Price			
Č + × I↔	X scription	Billing Type:	Progress Billing	
> ☑ 30 Mi	lestone Billing	Invoice Description Formula:	='Milestone billing for project'	م
		Line Description Formula: * Use Destination Branch from: * Use Sales Account from: * Sales Subaccount Mask:	Current Branch Destination Branch: Project PPP-PPP Sales Subaccount: Provide Comparison of Compari	م م

Figure: Sales account and subaccount for project billing

Using Sales and Cost Subaccounts in Project Allocations

When a project is allocated, for the created allocation transaction that is posted to the general ledger, the system uses the debit and credit subaccounts that are combined based on the following options specified in the **Subaccount** box in the **Debit Transaction** and **Credit Transaction** sections, respectively, on the **Allocation Settings** tab in the right pane of the *Allocation Rules* (PM207500) form (see the screenshot below):

- CCC: The default cost subaccount of the project
- DDD: The default cost subaccount of the project task
- PPP: The default sales subaccount of the project
- *TTT*: The default sales subaccount of the project task

0 +凬 - 1 ĸ < > > ← * Allocation Rule TMR - Time & Material Q Description: Time & Material Ò +↔ × » CALCULATION RULES ALLOCATION SETTINGS f Step ID Description TRANSACTION OPTIONS 10 Calculate billable labor Post Transaction to GL Create Transaction with Zero Qty. Calculate billable material 20 Reverse Allocation: Create Transaction with Zero Amount On AR Invoice Release -30 Re-invoice travel expenses Date Source: Allocate Non-Billable Transactions **Original Transaction** -40 Invoice subcontractor Can be used as source in another allocation. TRANSACTION BRANCH Filter: None Branch: -Use Source DEBIT TRANSACTION Project: Use Source -Task: Use Source * Account Group: From Account Account Origin: 11500 - Project unbilled AR Q Replace -PPP-PPP 000-000 - Default Subaccount: CREDIT TRANSACTION Account Group: From Account Account Origin: -Q Replace 23100 - Unrecognized revenue 000-000 - Default Subaccount: PPP-PPP

Figure: Debit and credit subaccounts for project allocations

Allocation Rules

Using Cost Accounts and Subaccounts in Time Activities

When project transactions are created on release of time activities and time cards, the system uses the expense account and subaccount based on the settings specified on the **General Settings** tab of the *Projects Preferences* (PM101000) form, as shown in the screenshot below.

The expense account the system uses is determined by the option selected in the **Expense Account Source** box, which is one of the following:

- Project: The default cost account of the project
- Task: The default cost account of the project task
- Labor: The default account associated with the labor item specified on the time card.
- Employee: The default account associated with the employee.

The segment of the sales subaccount the system uses is determined by the option specified in the **Expense Sub. Source** box, which is one of the following:

- PPP: The default cost subaccount of the project
- TTT: The default cost subaccount of the project task

Projects Preferences 😒									
GENERAL SETTINGS MAILING SETTINGS									
NUMBERING SEQUENCE			VISIBILITY SETTINGS						
* Transaction Numbering Sequence:	PMTRAN - PM Transaction Numbering P	0		🗹 GL	Z AP	Z AR	S0	PO	
* Batch Numbering Sequence:	BATCH - Batch - Other 🖉	Ø		🗹 IN	CA 🔽	CRM			
* Pro Forma Numbering Sequence:	PROFORMA - PM Pro Forma Invoice Numberi 🔎	0		🛃 Tim	e Entries	🗹 Expe	nses		
* Change Order Numbering Sequence:	CHANGEORD - PM Change Order Numbering $ \mathcal{P} $	0	Restrict Project Selection:	Custo	omer Proje	cts			•
* Change Request Numbering Sequence:	CHANGERST - PM Change Request Numberir P	0	ACCOUNT SETTINGS						
* Quote Numbering Sequence:	PMQUOTE - Quotes in Project O	0	* Expense Account Source:	Task					*
GENERAL SETTINGS		-	* Expense Sub. Source:	TTT-1	TT				
* Non-Project Code:	х		* Expense Accrual Account Source:	Labo	Item Acc	rual			•
* Empty Item Code:	<n a=""></n>		* Expense Accrual Sub. Source:	10-01					

Figure: Expense account and subaccount for time activities

Using Cost Subaccounts in Accounts Payable Documents

When a non-stock item is selected on data entry forms for accounts payable entities and documents, the way the system combines the expense subaccount is based on the option specified in the **Combine Expense Sub. From** box on the **General Settings** tab the *Accounts Payable Preferences* (AP101000) form, which is one of the following (see the screenshot below):

- PPP: The default cost subaccount of the project
- TTT: The default cost subaccount of the project task

Accounts Payable Preferences 🔅

GENERAL SETTINGS	PRICE/DISC	OUNT SETTINGS	APPR	OVAL	. 1099 SETTINGS REPORTIN	IG SETTING	S		
NUMBERING SETTINGS _					DATA ENTRY SETTINGS				
* Batch Numbering Sequence	ce: BAT	CHAP - AP Batch	Q	0	Default Vendor Class ID:		ز	Q	Ø
* Bill Numbering Sequence:	APB	ILL - AP Bill	Q	0	* Combine Expense Sub. From:	PPP-F	РРР		
* Debit Adjustment Numberi	ng Se APB	ILL - AP Bill	Q	0	Use Intercompany Expense Account F	From: Invent	tory Item	•	



Using Sales and Cost Subaccounts in Expense Claims

For an expense claim, the way the system combines subaccounts is based on the settings specified on the **General Settings** tab of the *Time and Expenses Preferences* (EP101000) form, as shown in the screenshot below.

The segment of the sales subaccount the system uses is determined by the option specified in the **Combine Sales Sub. From** box, which is one of the following:

- PPP: The default sales subaccount of the project
- TTT: The default sales subaccount of the project task

The segment of the expense subaccount the system uses is determined by the option specified in the **Combine Expense Sub. From** box, which is one of the following:

- PPP: The default cost subaccount of the project
- *TTT*: The default cost subaccount of the project task

Time & Expenses Preferences 🛱			
Ë \$			
GENERAL SETTINGS			
NUMBERING SETTINGS		EXPENSE CLAIM SETTINGS	
* Expense Claim Numbering Sequence:	EPCLAIM - EP Expence Clair 🔎 🧷	* Combine Sales Sub. From:	PPP-PPP
* Expense Receipt Numbering Sequence:	EPRECEIPT - EP Expence R 🔎 🧷	* Combine Expense Sub. From:	TTT-TTT
* Time Card Numbering Sequence:	TIMECARD - Timecard \wp \mathscr{O}	Non-Taxable Tip Item:	D Q
* Equipment Time Card Numbering Sequence:	EQTIMECARD - Equipment T 🖉 🧷		Use Receipt Accounts for Tips

Figure: Sales and expense subaccounts for expense claims

Upgrade Notes

As a result of the upgrade to Acumatica ERP 2021 R1, for each project, project template, project task, project template task, and common task, the value in the **Default Account** box (which has been removed, as described previously) is copied to the **Default Sales Account** and **Default Cost Account** boxes on the **Settings** tab of the *Projects* (PM301000) and *Project Templates* (PM208000) forms and on the **Summary** tab of the *Project Tasks* (PM302000), *Project Template Tasks* (PM208010), and *Common Tasks* (PM208030) forms, respectively.

Also, for each project, project template, project task, project template task, and common task, the value from the **Default Subaccount** box (which has also been removed, as described previously) is copied to the **Default Sales Subaccount** and **Default Cost Subaccount** boxes on the **Settings** tab of the *Projects* and *Project Templates* forms and on the **Summary** tab of the *Project Tasks*, *Project Template Tasks*, and *Common Tasks* forms, respectively.

Projects: New Workflow Support on Entry Forms

In Acumatica ERP 2021 R1, multiple forms that used automation steps—including those related to projects, construction, and time and expenses—have been redesigned to support the new workflow engine. The processes that are performed on these forms work as they did in the previous version. The UI on these forms has been enhanced to support the functionality of the new workflow engine.

Because the implementation of the new workflow engine entails changes to data access classes (DACs) and business logic, it may affect custom generic inquiries, customization projects, import and export scenarios, and API integrations. For the complete list of changes, see *Release Notes for Developers*.

UI Enhancements

On multiple forms related to projects, construction, and time and expenses, the buttons representing the actions that are most relevant to the current status of the document opened on the form are displayed as buttons on the form toolbar, in addition to being included as menu commands on the **Actions** menu.

The **Hold** check box has been removed from the Summary area of these forms and replaced by the **Hold** and **Remove Hold** actions, which can be clicked on the form toolbar as well as on the **Actions** menu.

With the new workflow, the value in the **Status** box of the Summary area cannot be selected manually. The system changes it automatically as users perform the corresponding actions, which have been included as menu commands on the **Actions** menu and can be also clicked on the form toolbar.

The order of commands on the **Actions** menu has been rearranged. Now the commands related to the document workflow are located at the top of the menu, and the commands not related to the workflow have been moved to the bottom of the menu. Also, the **Put on Hold** and **Re-open** actions have been renamed to **Hold** and **Reopen**, respectively.

The following table summarizes the UI enhancements that have been introduced on the forms.

|--|

Form	Hold check box	Status box	Existing actions
Projects (PM301000)	Removed	Updated	Updated
Project Tasks (PM302000)		Updated	
Pro Forma Invoices (PM307000)	Removed		
Change Orders (PM308000)	Removed		
Change Requests (PM308500)	Removed		
Project Templates (PM208000)		Updated	
Subcontracts (SC301000)	Removed		Updated
Cost Projections (PM305000)	Removed		
Request for Information (PJ301000)		Updated	Updated
Project Issue (PJ302000)		Updated	

Form	Hold check box	Status box	Existing actions
Daily Field Report (PJ304000)	Removed		
Expense Claim (EP301000)			Updated
Expense Receipt (EP301020)			Updated
Employee Time Card (EP305000)			Updated
Equipment Time Card (EP308000)			Updated

Example of the UI Changes to the Projects Form

On the *Projects* (PM301000) form, the following changes have been introduced:

Similar UI changes, which support the new workflow, have been made on the other forms, as listed in the previous section.

- The Hold check box has been removed from the Summary area.
- The Status box in the Summary area has become read-only.
- The Activate Project, Complete Project, Suspend Project, Cancel Project, and Hold menu commands have been added to the Actions menu.
- The **Run Project Billing** menu command, which duplicates the functionality of the button with the same name, has been added to the **Actions** menu.
- The **Create Change Order** and **Create Change Request** buttons have been removed from the form toolbar, and the menu commands with the same name have been added to the **Actions** menu.

The following screenshot shows an example of a project with the *Active* status on the *Projects* form. The **Complete Project** and **Run Project Billing** buttons are displayed on the form toolbar, and the corresponding menu commands are included on the **Actions** menu. Other menu commands that can be invoked for the project with this status are available for selection on the menu.

Projects FIXEDP03 - Fixed pri	ice for	Caribb	ean C	Online					D NO	DTES	FILES	CUSTOMIZATION	TOOLS -
	+	Î I	K ($\langle \rangle$	×	COMPLETE PRO	DJECT RUN	PROJECT BILLING	ACTIONS -	INQ	UIRIES -	REPORTS -	
* Project ID:		FIXEDP0	3 - Fixed	l price for	Caribbean	P Status:	Active	Actua	Activate Pr	oject Proiect			^
Customer:		CARIBBE	EAN - Ca	ribbean S	Secretary O	0		Actua	Suspend P	roject			
Template:		FIXEDPR	RICE - Fi	xed Price	Project - mi	les 🧷		Margi	in: Cancel Pro	iect			0.00
* Description:		Fixed pric	e for Ca	ribbean C)nline				Hold	Joor			
Currency Rate for Budget:		USD	1.00	*	VIEW BAS	SE			Dup Broker	t Dilling			
									Run Projec	a billing			
SUMMARY TASKS	REVE	ENUE BUI	DGET	COST	BUDGET	BALANCES	COMMITMENT	S INVOICES	Lock Comr	nitment	s		ş
						PPOI			Unlock Col	mmitme			
	T 1					1100	LOTADDICESS -		Copy Proje	ect			
Revenue Budget Level:	lask ar	nd Item			-	Add	ress Line 1:		Create Ten	nplate			
Cost Budget Level:	Task ar	nd Item			-	City			Change ID				
* Start Date:	11/18/2	2015 -				Cou	ntry:		Create Cha	ange Re			
End Date:		•				State	e:		Create Cha	ange Or	der		
Project Manager:					Q	Post	tal Code:		N Run Alloca	tion			
Last Revenue Change						Latit	ude:		Recalculat	e Projec	t Balance		
* Project Currency:	USD	Q	SET R	ATES		Long	gitude:		Auto-Budg	et Time	and Materi	al Revenue	
Currency Rate Type:	SPOT	Q	0			BILL-1	то		Lock Budg	et			
	Chan	ge Order	Workflow	v				Override Contac	unlock Bue	daet			
	🗸 Restr	ict Employ	yees			Com	npany Name:	Caribbean Secret	ary onme				

Figure: Project with the Active status on the Projects form

Automation Changes

If the organization uses automation steps, import scenarios, or export scenarios for the forms listed above, users who work on customizations will need to redesign the automation of the processes related to the applicable forms by using the new workflow engine. For more information, see the *Creating Workflows* chapter in the Acumatica ERP Customization Guide.

Users can still import documents with one of their possible initial statuses (such as *In Planning* and *On Hold*) on the following forms where the **Hold** check box has been removed:

- Projects (PM301000)
- Pro Forma Invoices (PM307000)
- Change Orders (PM308000)
- Change Requests (PM308500)
- Subcontracts (SC301000)
- Cost Projections (PM305000)
- Daily Field Report (PJ304000)

On the following forms, to support the import of documents with a particular status except the status of an initially created document (such as *In Planning* or *On Hold*), the existing import scenarios should be updated to use the functionality of the corresponding actions:

- Projects (PM301000)
- Subcontracts (SC301000)
- Project Tasks (PM302000)
- Project Templates (PM208000)
- Request for Information (PJ301000)
- Project Issue (PJ302000)

Services: Customization Improvements to Calendar Boards

In Acumatica ERP 2021 R1, the ability to customize the functionality for forms with calendar boards—*Calendar Board* (FS300300), *Staff Calendar Board* (FS300400), and *Room Calendar Board* (FS300700) forms—has been improved and extended.

The new *Calendar Preferences* (FS100500) form has been designed. The *Calendar Preferences* (FS100200) form, which had the same name but less functionality related to customizing the calendar board forms, has been removed.

On the new *Calendar Preferences* form, a user sets up the color layout of the appointment boxes that the system shows on dashboards on the calendar board forms — that is, the boxes representing appointments and showing when they occur. The user also specifies the visibility of the appointment boxes for each appointment status.

On this form, a user can also add or delete the columns to be displayed on the **Service Orders** and **Unassigned Appointments** tabs of the calendar board forms. The user can add custom columns, specify the order of these columns, and define the column visibility options.

The form is shown and described in more detail in the following section.

The New Calendar Preferences Form

The new *Calendar Preferences* (FS100500) form has been designed to give the user control over the columns displayed on the **Service Orders** and **Unassigned Appointments** tabs of the calendar board forms. A user can add custom columns to the table, and hide or show any column. The user also specifies the desired order of these columns.

On this form, a user can define the background and text colors of the appointment boxes for each appointment status. The user can also modify the visibility of the appointment box (that is, whether it is visible or hidden in the calendar) for each appointment status. Additionally, the user customizes the information to be shown on appointment boxes, specifying the fields whose values will be displayed in each appointment box. For each field, the user specifies an appropriate field name and adds a custom icon.

(Cale	endai	[.] Prefe	erence	es					
	Ē	\$								
	STA	TUS C	OLOR	APP	OINTMENT	вох	SERVICE ORD	ER UNAS	SIGNED APPO	DINTMENT
	SEL	ECTED	STATU	s						
	* Ba	ckgrou	nd C [#c8c8c8			
	* Tex	d Colo	:				#6d6d6d			
	Q	+	×	⊷	X					
8	ID		* Status				*Background Color	*Text Color	Visible	
>	в		Billed				#c8c8c8	#6d6d6d		
	С		Comple	eted			#c8c8c8	#6d6d6d		
	н		On Hol	d			#e2e495	#6d6d6d	\checkmark	
	М		Test				#f339e4	#eaff80		
	Ν		Not Sta	rted			#c5e3b1	#008a33	V	
	Р		In Proc	ess			#b2cfea	#247ab2		
	U		Paused	ł			#e2e495	#6d6d6d	V	
	W		Awaitin	g			#fbb909	#6d6d6d	V	
	х		Cancel	ed			#ebb6bf	#b1505a		
	Z		Closed				#c8c8c8	#6d6d6d	2	

Figure: The Calendar Preferences form

The user specifies the needed settings on the following tabs of the Calendar Preferences form:

• **Status Color**: On this tab, the user, specifies the background and text colors of the appointment boxes that the system shows on the calendar dashboard so that the colors are based on the predefined statuses. The user selects a row with the status in the table; then in the Summary area of the tab, the user selects a color in the **Background Color** box or the **Text Color** box (or both boxes).

A user can also specify the background and text color for appointment boxes for new statuses that can be defined in the system through customization, if applicable. In this case, the user adds new rows to the table on the *Calendar Preferences* form and then specifies the custom colors for appointment boxes for each of these statuses.

- **Appointment Box**: On this tab, the user modifies the fields that will be displayed in the appointment boxes on the dashboard on the calendar board forms. The user adds any number of custom fields (by adding each row to this table, selecting the object reference and entering field name, and defining an appropriate icon for this field). Also, the user can change the default order of the fields to be displayed by moving the rows up or down in this table.
- Service Order: On this tab, the user specifies the columns to be displayed on the Service Orders tab of the calendar board forms. To add a column, the user adds a row to this table and selects the object reference and column name for each row. The user specifies whether each column is visible or hidden by selecting or clearing the Visible check box. Also, the user can change the default order of the columns to be displayed by moving the rows up or down in this table.
- Unassigned Appointment: On this tab, the user specifies the columns to be displayed on the Unassigned Appointment tab of the calendar board forms. To add a column, the user adds each row to this table and

selecting the object reference and column name for the row, and specifies whether a column is visible or hidden by selecting or clearing the **Visible** check box. Also, the user can change the default order of the columns to be displayed by moving the rows up or down in this table.

Services: Addition of AP Bills to Appointments and Service Orders

In Acumatica ERP 2021 R1, it is now possible to add an accounts payable bill to an appointment or a service order. A user can do this in two ways:

- On the *Appointments* (FS300200) or *Service Orders* (FS300100) form, the user initiates the creation of an AP bill so that this bill will be linked to an appointment or a service order.
- On the *Bills and Adjustments* (AP301000) form, the user creates an AP bill and links an item or multiple items of the bill to an appointment or a service order.

To perform these operations, improvements have been made on the *Appointments*, *Service Orders*, and *Bills and Adjustments* forms.

Ability to Create an Accounts Payable Bill from an Appointment or a Service Order

On the *Appointments* (FS300200) and *Service Orders* (FS300100) forms, a user can now initiate the creation of an AP bill related to the appointment or service order, respectively. For this purpose, the **Create Bill** button has been added to the table toolbar of the **Details** tab on both forms. (The following screenshot shows this button on the *Appointments* f orm.)

Appointments	\$													D	NOTES	ACTIVITIES	FILES	TOOLS
6 2 2	n +	0 · K	< > >I ACT	IONS . REP	ORTS . PAUSE	RESUME QU	CK PROCES	8										
• Service Order	MRO - Main P	Customer	GOODFOOD - GoodFood O	ne Restaurar 🥒	Estimated Ser	1 h 00 m												
Appointment N .	000009-2 P	Location	MAIN - Primary Location	1	Actual Service	5 h 00 m												
Service Order	000009 🦿	Branch Location	WEST BRIGHTON - Office is	n West Bright 🥖	Tax Total	0.00												
Status:	Closed	Service Contract		1	Appointment T	15.00												
Workflow Stage		Project	X - Non-Project Code.	1	Cost Total	0.00												
	Hold				Profit (%)	0.00												
Scheduled Sta	1/28/2020					Walking for Purchase	t Néms											
Actual Start D	1/28/2020	Description	Training on juicer usage (at e	customer's place)														
SETTINGS	DETAILS TAX DE	TAILS STAFF	RESOURCE EQUIPMEN	t LOG	FINANCIAL SETTIN	GS PROFITABILIT	ATTRIB	UTES	PREPAYMENT	s TOTAL	S OTH	ER INFORMATION						
0 + 0	ALL ALL ALL	LOT/SERIAL	NBRS	ACTIONS - C	REATE EXPENSE R		цн	×							A	a Records		•
9 9 D Ref. Nor.	Line Status Line	Type inve	entory ID Billing Rule	Description	Equi	omenit Target Equips	ent E	Model quipme Ref. Nbr.	Component ID	Componen Ref. Nbr.	Staff Member ID	Warehouse	Locate	NOM	Estimate	d Estim Quant	Uni Price	Manual Price
9 D 0001	Completed Se		EANING Time	Service on clean	ing of juicers N/A	6					-SPLIT>	EQUIPHOUSE	MAIN	HOUR	1 h 00 m	m 1.00	15:00	

Figure: The Create Bill Button on the Appointments form

When the user clicks this button, the system opens the *Bills and Adjustments* (AP301000) form. The user specifies the details of the bill and saves it. In the **Related Svc. Doc. Type** and **Related Svc. Doc. Nbr.** columns of the **Document Details** tab of a bill, the user can see the document type and reference number, respectively, of the appointment or service order associated with each line of the bill. (In the following screenshot, these columns are populated with *Appointment* and the reference number of the appointment related to this line of the bill.)

Bills and Adjustr	ments	р• к	< >	>I PA	Y AC	TIONS .	INQUIR	IES -	REPORTS .							NOTES	ACTIVITIES	FILES
Type: BP		Vendor:	CONCRESUP	- Concrete	Supply Co	1	Detail To	tat	5	0.00								
Reference Nbr : 00	0054 ,9	Location	MAIN - Primar	Location			Discount	Total	-	0.00								
Status Op	pen	Terms:	300 - 30 Days				VAT Tax	able Total	10	0.00								
		Due Date:	11/20/2020 .				VAT Exe	mpt Total		0.00								
Date: 10	/21/2020 .	Cash Discount	11/20/2020 -	Pay	by Line		Tax Total		1	0.00								
Post Period. 10	-2020		Joint Payees				With Ta:	c		0.00								
Vendor Ref							Balance		5	0.00								
							Amount		.6	0.00								
Description							Cash Di	scount		0.00								
DOCUMENT DETAIL	LS FINANCIAL D	ETAILS TAX	DETAILS	APPLICAT	ONS	COMPLIAN	VCE											
0 + 0	VIEW DEFE	RRALS											NG I					
R D Inventory	Transaction Descr.	Quan	ity UOM	Unit Cost	Ext. Cost	Discos Amoui	Amour	Balance	Account	Description	* Project	Project Task	Non Billa	Start Date	Term End Date	Related Svc. Doc. Type	Related Svc. Doo	ć. Nbr.
D CABLE	Electric cable (20	met 13	D PIECE	50.0000	50,00	0.00	50.00	0.00	50000	COGS - Inventory	х		11			Appointment	MRO . 000011-	1

Figure: The Related Svc. Doc. Type and Related Svc. Doc. Nbr. columns on the Bills and Adjustments form

If a user clicks the reference number link, the system opens the corresponding appointment document, in which the **Details** tab contains a new line for an item from the bill.

When an AP bill is saved, the system always creates a new line in the service order or appointment, regardless of whether the same item has already been added to the document.

Ability to Link an Accounts Payable Bill to an Appointment or a Service Order

A user can now associate an accounts payable bill with an appointment or a service order. To do so, while creating an AP bill on the *Bills and Adjustments* (AP301000) form, for each line of the bill on the **Document Details** tab, the user selects the field service document (*Appointment* or *Service Order*) with which the AP bill will be associated in the **Related Svc. Doc. Type** column, and then selects the document's reference number from the list in the **Related Svc. Doc. Nbr** column. The user then saves the bill.

Bills	and Adju	istments										NOTES	ACTIVITIES	FILES	TOOLS .
÷	r 8	v +	- 0 •	IK K	> >I RE	EMOVE HOLD	ACTIONS - INQUI	RIES - REPO	ORTS -						
Туре		Bill	 Vendor: 	COMPU	INK - Compulink a	and Co 🥖	Detail Total:	45.00							^
Refer	ence Nbr.:	<new></new>	A * Location	MAIN - F	rimary Location	Q	Discount Total:	0.00							
Statu	s:	On Hold	Currency	USD	1.00 *	VIEW BASE	VAT Taxable Total:	0.00							
			* Terms:	30D - 30	Days	Q	VAT Exempt Total:	0.00							
* Date:		10/28/2020	 * Due Date 	e: 11/27/20	20 · Apply	Retainage	Tax Total:	0.00							
* Post	Period:	10-2020	A * Cash Dis	scount 11/27/20	20 🔹 🗆 Pay b	y Line	With. Tax:	0.00							
Vend	or Ref.:			🗆 Joint Pa	iyees		Balance:	45.00							
							Cash Discount:	0.00							
Desc	ription:														
DOC	UMENT DE	TAILS FIN	NANCIAL DETAILS	TAX DETAILS	APPLICATIO	ONS COMPLI	ANCE								
Ç	+ 0	' × '	IEW DEFERRALS	ADD PO REC	EIPT ADD PO	RECEIPT LINE	ADD PO ADD SUB	CONTRACT	ADD PO LINE	ADD S	UBCONTRACT L	INE ADD L	C LINK	LINE ↔	ŝ
scount mount	Amount	Balance	*Account	Description	* Projec	t Project Ta	isk	Non Billable	Term Start Date	Term End Date	Tax Category	Related Svc. I	Doc. Nbr.	Related Svc.	Doc. Type
0.00	45.00	0.00	61000	Advertising Expe	nse X						EXEMPT			Service Orde	er v
														Service Orde	r in the second s
													L	Appointment	

Figure: The Related Svc. Doc. Type column on the Bills and Adjustments form

When the bill is saved, the system adds the line with the non-stock item from the AP bill to the appointment or service order details on the **Details** tab of the *Appointments* (FS300200) or *Service Orders* (FS300100) form.

Synchronization Between an AP Bill and the Related Appointment or Service Order

A user will not be able to change the details of any AP bill item on the *Appointments* (FS300200) or *Service Orders* (FS300100) form. To change the details, the user has to open the bill on the *Bills and Adjustments* (AP301000) form and make the necessary corrections there. When the changes to the bill are saved, the system updates the applicable lines of the related appointment or service order with the changes made to these lines of the bill.

It is possible to add a bill to an appointment or a service order with the *Closed* or *Completed* status. In this case, the item or items of the bill affects the cost of the appointment or service order but is not reflected in the billing document.

Changes in the Mobile App

In the mobile app, on the **Details** tab of the *Appointments* screen, the **Create Bill** action has been added to the **Actions** menu to give users the ability to create the bills related to an appointment or a service order.

Services: Ability to Make Corrections in a Field Service Document

In Acumatica ERP 2021 R1, a user can now correct data in field service documents—appointments, service orders, and service contracts—even if billing documents (sales orders, SO invoices, AR invoices, or AP bills) have already been generated from the corresponding field service document and released. Additionally, improvements have been made to the process of correcting a field service document that has a billing document generated from this service document but not yet released.

The options of correcting field service documents are described in the next several sections of this topic.

Updating of a Service Document if an AR Invoice Has Been Generated and Released

Once an AR invoice has been generated from a service document (for example, an appointment) and released, a user may decide that some corrections should be made to the service document; in this case, an AR invoice should be generated again with the new information and released. Corrections may be the following: changing stock items or non-stock items, updating some values (such as a quantity or a price), adding or removing detail lines, or changing tax information.

In Acumatica ERP 2021 R1, the process of making these corrections to a field service document is the following: For an AR invoice that has been generated for a service document, the user creates an AR credit memo by using the *Reverse and Apply to Memo* action on the **Actions** menu on the *Invoices and Memos* (AR301000), and releases this credit memo.

Then in the previously generated invoice on the *Invoices and Memos* form, the user clicks the link in the new **Related Svc. Doc. Nbr.** column of any line of the **Document Details** tab (shown in the following screenshot). The system opens the document on the *Appointments* (FS300200), *Service Orders* (FS300100), or *Service Contracts* (FS305700) form. The user makes needed corrections to the service document and then generates a new AR invoice.

Type: Invo	ce •	Customer	HMBAKERY - HM's Bakery & Cafe	1	Detail Total	400.00							
Reference Nbr. 0001	05 ,0	Location.	MAIN - Primary Location		Discount Total	0.00							
Status: Ope	n	Currency:	USD 1.00 - VIEW BAS	ē.	VAT Taxable T.	0.00							
Date: 1/10	/2020	Terms:	30D - 30 Days		VAT Exempt T.	0.00							
Post Period: 01-2	020	+ Due Date:	2/9/2020 -		Tax Total.	0.00							
Customer Ord.		Cash Discount	2/9/2020 - Pay by Line		Balance	400 00							
		Project/Contract	X - Non-Project Code.	1	Rounding Diff	0.00							
Description Train	ning services				Amount	400.00							
DOCUMENT DETAILS	FINANCIAL	DETAILS ADD	DRESS DETAILS TAX DETAILS	APPR	QVAL DETAILS	APPLICATIONS	COMPLIANCE						
DOCUMENT DETAILS	FINANCIAL VIEW DE Related Svc. D	DETAILS ADD FERRALS H	DRESS DETAILS TAX DETAILS	APPR	QUAL DETAILS	APPLICATIONS Unit Price	COMPLIANCE Ext. Price	Discount Percent	Discount Amount	Amount	*Account	Description	Pro
DOCUMENT DETAILS	FINANCIAL VIEW DE Related Svc. D TRN. 000051	DETAILS ADD FERRALS I	DRESS DETAILS TAX DETAILS S T Section Descr. Seart Installation	APPR	Quantity UOM 2.00 HOUR	Unit Price	COMPLIANCE Ext. Price 400.00	Oiscount Percent 0.000000	Oiscount Amount 0.00	Amount 400.00	* Account 40000	Description Sales Revenue	Pro

Figure: New Related Svc. Doc. Nbr. column on the Invoices and Memos form

Updating of a Service Document if an SO Invoice Has Been Generated and Released

Once an SO invoice has been generated from a service document (for example, an appointment) and released, a user may decide that some corrections should be made to the service document; in this case, an SO invoice should be generated again with the new information and released. Corrections may be the following: changing stock

items or non-stock items, updating some values (such as a quantity or a price), adding or removing detail lines, or changing tax information.

In Acumatica ERP 2021 R1, when corrections must be made to a field service document after an SO invoice has been generated and released, the process has been changed. Nowon the *Invoices* (SO303000) form, a user should create a document of the *Credit Memo* type, and manually enter all the details from the original invoice that has been generated for a service document in the Summary area. On the **Details** tab of the form, the user adds the detail lines by clicking the **Add Return Line** button on the table toolbar (which opens a dialog box where the user can select the lines of the needed SO invoice). Once the information is entered, a user saves and releases this SO credit memo.

Then in the original invoice, on the *Invoices* form, the user clicks the link in the new **Related Svc. Doc. Nbr.** column of any line of the **Details** tab (shown in the following screenshot) to open the service document on the appropriate form. The user makes needed corrections to the service document and then generates a new SO invoice.

Invoice	e 0000	62 - GoodFood	One Restauran	t												D	NOTES ACT	VITIES FILE	TOOLS
*		n +	0 · K	< >	>I AC	CTIONS -	REPO	RTS .											
Type		Invoice -	Customer;	GOODFOOD -	GoodFood (One Restaurar	0	Detail Total:	6,7	00.00									
Refera	nce Nbr.:	000052 P	Location	MAIN - Primary	Location			Discourt Total		0.00									
Status		Closed	Currency:	USD 1.00) ÷	VIEW BASE		VAT Taxable T		0.00									
Date		1/15/2020	Terms	300 - 30 Days				VAT Exempt T		0.00									
Post P	5619	01-2020	Due Date	2/14/2020				Tax Total		0.00									
Custor	ner Ord.		Cash Discount	2/14/2020				Wille-Off Total		0.00									
Proved	Contract	X - Non-Project Cod					1	Balance:		0.00									
Descrip	ption:	Installation of equips	nent at the customer	rs' place				Amount Cash Discount	6.7	0.00									
C	-	· · · · · · · · · · · · · · · · · · ·	THANCAS	ADDRESSE		VIEW DE	FERRA	LS RESET ORD	ER	HE									
8 0 D	Yean. Type	Reference Not.	Line Si Nor.	homent Nbr.	Order Type	Order Nbr		Inventory ID		Suspensed Target Equipment ID	EquipmentAction	Target Ecoloment ID	Model Equipment Line Nbr.	Component ID	Composi Line Nitr.	Related Svc. Doc. Nbr.	Transaction (lenci.	
> 0 0	INV -	000062	3 2	NEW+	114	000001		INSTALL			NIA					INST 000003-1	Installation of	f equipment at th	+ customers
	INV	000062	1 -	NEW>	IN	000051		JUICER15			Selling Model Equi					INST.000003-1	Commercial	juicer with a pro-	uction rate o
9 L																			

Figure: New Related Svc. Doc. Nbr. column on the Invoices form

Updating of a Service Document if a Time Activity Has Been Generated and Released

Once a time activity has been generated from the *Appointments* (FS300200) form and then released, a user can make the following corrections to the appointment on the **Log** tab of the *Appointments* form: reducing or increasing the duration of the service tracked in the log lines, or changing any value in a log line (for example, the values specified in the **Earning Type**, **Start Time**, and **End Time** columns).

To make these corrections, the user identifies the number of the appointment associated with the released time activity on the *Employee Time Activities* (EP307000) form in the **Appointment Nbr.** column. Then on the *Appointments* form, the user makes the needed corrections in the appointment on the **Log** tab (in Acumatica ERP 2021 R1, the user can now add a negative value in the **Duration** column of the log line), save the appointment, and release new time activities.

Updating of a Service Document if Project Documents Have Been Generated but Not Released

This section is applicable only if the *Projects* feature is enabled on the *Enable/Disable Features* (CS100000) form in Acumatica ERP.

In Acumatica ERP 2021 R1, some improvements have been made to the process of correcting a service document (such as an appointment) if a project transaction (and an inventory issue, if applicable) is generated from the service document but not released. Now a user deletes the project transaction (and any inventory issue); the user can then can make the required corrections to the related service document. The system reallocates any stock items from the deleted project transaction to the initial service document (the system also saves serial numbers if the serialized stock items have been used), so that they can be used in when another project transaction is generated.

Updating of a Service Document if Project Documents Have Been Generated and Released

This sections is applicable only if the *Projects* feature is enabled on the *Enable/Disable Features* (CS100000) form in Acumatica ERP.

After a project transaction (and an inventory issue, if any) has been generated from a service document and released, a user might decide that some corrections should be made to the service document, and the new project transaction (and any inventory issue) should be generated and released.

In this case, in Acumatica ERP 2021 R1, a user needs to use the new actions that are available on the **Actions** menu of the form toolbar of the *Appointments* (FS300200) and *Service Orders* (FS300100) forms — **Run Appointment Bill Reversal** and **Run Service Order Bill Reversal**, respectively. For the released project transaction associated with the service document for which you have selected one of these actions, the system generates one reversed project transaction (a project transaction with similar settings but a negative amount and quantity) and releases the transaction. For the released inventory issue associated with the service document, the system generates a credit memo issue and releases it.

After that, the user makes the needed corrections to the service document and runs the billing process, which causes the system to create the new project transaction (and inventory issue, if applicable).

Updating of a Service Document if a Billing Document Has Been Generated but Not Released

In Acumatica ERP 2021 R1, some improvements have been made to the process of correcting a service document if the billing document (sales order, SO invoice, AR invoice, or AP bill) generated from this service document is not released. Now when a user deletes an unreleased billing document that contains stock items with unique serial numbers, the system reallocates these stock items to the initial service document, so that the serial numbers are saved and can be used when another billing document is generated.

Once a user has deleted a billing document, the user can find the service document related to the deleted billing document by using the new *Service Billing History* (FS405000) form (shown in the following screenshot). This form shows the list of billing documents that have been generated from the field service documents, including deleted billing documents.

\$	Service Billing	g History						
	O ACTIONS	• ↔ <u>x</u> γ						
8	Svc. Doc. Type	Svc. Ref. Nbr.	Doc. Туре	Doc. Date	Referen ↑ Nbr.	Doc. Status	Amount	Service Contract Billing Period
	Appointment	INST, 006291-1	SO Invoice	8/27/2019	<u>INV, AR00</u>	Closed		
	Appointment	MRO, 006292-1	SO Invoice	8/27/2019	INV, AR00	Closed		
	Appointment	MRO, 006293-1	SO Invoice	8/29/2019	INV, AR00	Closed		
>	Appointment	MRO, 006294-6	SO Invoice	1/11/2021	INV, AR00	Open		

Figure: The new Service Billing History form

Modified UI Elements on Some Acumatica ERP Forms

The following changes have been made on the **Document Details** or **Details** tab of the *Invoices and Memos* (AR301000), *Invoices* (SO303000), *Bills and Adjustments* (AP301000), and *Sales Orders* (SO301000) forms:

• The Appointment Nbr., Service Order Nbr., Location, and Service Appointment Date columns have been removed.

• The **Related Svc. Doc. Nbr.** column has been added. When a billing document is generated from a service document, the system inserts the related appointment, service order, or service contract document number in this column; the user can later click the link to navigate to the appropriate form and view the service document quickly.

The following changes have been made on the *Appointments* (FS300200), *Service Orders* (FS300100), and *Service Contracts* (FS305700) forms:

• The new **Billing Documents** tab has been added (as shown in the following screenshot). The tab displays the list of all billing documents related to the appointment, service order, or service contract, respectively.

		-									
Service Order	MRO - Main P d	Customer;	ABARTENDE - USA Bartending School	0	Estimated Ser	1 h 00 m					
Appointment N	006294-6 ,0	Location.	MAIN - Primary Location	0	Actual Service	0 h 17 m					
Service Order	006294 0	Currency	USD 1.00 - VIEW BAS		Tax Total	0.00					
Status.	Billed	Branch Location	BRONX - Bronx Location	0	Appointment T.	25.00					
Vorkflow Stage	SHIPPED	Service Contract		1	Cost Total	9.73					
Scheduled Sta	1/22/2021	Project:	X - Non-Project Code.	1	Profit (%)	156.94					
RETTINGS	DETAILS TAX DET	Description ALS STAFF	Services RESOURCE EQUIPMENT LOC		FINANCIAL SETTING	S PROFITABILITY A	TRIBUTES	PREPAYMENTS	TOTALS	BILLING DOCUMENTS	OTHER INFORMATIO
	Reference Nbr.	Description	Date	5	latus						
Doc. Type											

Figure: The new Billing Documents tab on the Appointments form

• The Billing Info section has been removed from the Other Information tab.

On the *Service Orders* (FS300100) form, the **Allocation** button on the table toolbar of the **Details** tab and the **Allocations** dialog box have been renamed to **Line Details**. (See the renamed button in the following screenshot.)

Service Orders INST 004877										🗋 NOTES
← [] []	∽ +	î ĵ∙ K	< > >I	HOLD COMP	PLETE SCHEDULI	E ACTIONS -	REPORTS -			
* Service Order	INST - Instal ,0	Customer:	ABARTENDE - USA B	artending School	Appointment D	1 h 00 m				
Service Order	004877 ,O	* Location:	CHICAGO - Chicago	Q	Ø Estimated Dur	1 h 00 m				
Status:	Open	Currency:	USD 1.00	 VIEW BASE 	Tax Total:	0.00				
Workflow Stage:	PROCESSII ,0	Branch Location:	BRONX - Bronx Locati	on	Ø Service Order	0.00				
* Date:	8/16/2020 *	Project:	X - Non-Project Code.		Ø Billable Total:	0.00				
Customer Order:						Waiting for Purchas	sed Items			
External Refer						Appointments Need	ded			
		Description:	Internal installation of e	quipment						
SETTINGS	DETAILS TAX		ITMENTS FINANC	IAL SETTINGS	DEFAULT STAFE		EPAYMENTS T	OTALS OTHER INFOR	MATION	
0 + 0	X ADD	ITEMS ADD STAFF	LINE DETAILS	CREATE EXPENSE	E RECEIPT CREAT	E AP BILL ⊷	<u>x</u> <u>r</u>			
🖹 🖟 🗋 *Branch	Ref. Nbr.	Line Status	Line Type	Inventory ID	Billing Rule	Description		Equipment Action	Target Equipment ID	Model Equipment Ref. Nbr.
> 🕼 🗅 PRODV	VHOLE 0001	Requiring Schedu	li Service	INST INTRN	None	Internal installation o	fequipment	N/A		

Figure: The renamed Line Details button on the Service Orders form

Changes to the Mobile App

The following changes have been made to the *Appointments* screen in the Acumatica mobile app:

• On the Other Information tab, the Billing Info section has been removed.

• On the **Additional** tab, the new **Billing Documents** section has been added, as shown in the following screenshot.

× A	ppointme	nts	0		
App. Nbr.: 00 Status: Not Workflow Sta	00018-1 Started ge:	Est. Durat Act. Durat Appointm	ion: 0 h tion: 0 h ent Total: (00 m 00 m 0.00	
SUMMARY	DETAILS	STAFF	LOG	TO	TALS
SOURCE I	NFO				~
SIGNATUR	RE				×
BILLING D	OCUMENTS	S			>
RESOURC	E EQUIPME	NT			>
ATTRIBUT	ES				>

Figure: New Billing Documents section in the mobile app

Services: Integration with Workflow Engine

In Acumatica ERP 2021 R1, the processing of service orders and appointments has been redesigned to use the improved Acumatica workflow engine. New automated service order and appointment workflows have been developed based on this workflow engine.

With the new workflow, the state of a service order or an appointment—which is reflected in the **Status** box of the *Service Orders* (FS300100) or *Appointments* (FS300200) form, respectively—is automatically changed by the system based on the actions a user clicks. These actions may be buttons on the form toolbar or menu commands in the **Actions** menu.

The set of actions available on the **Actions** menu of the *Service Orders* and *Appointments* forms has also been updated, and the system dynamically displays the most relevant actions as buttons on the toolbar, in addition to showing them on the **Actions** menu.

For the processing of service orders and appointments, the system provides default workflow types, each of which provides a particular set of statuses to dynamically update the state of each service order or appointment. These workflow types are based on the user-selected behavior of the service order type associated with a particular service order or appointments; the behavior is a category that determines how service orders and appointments of the service order type are processed.

Default Workflow Types

As mentioned, the system provides default workflow types, which in turn provide particular service order and appointment workflows.

On the **Preferences** tab (**General Settings** section) of the *Service Order Types* (FS202300) form, the system inserts a workflow type in the **Service Order Workflow Type** and **Appointment Workflow Type** boxes depending on the behavior that a user selects in the **Behavior** box. If the user selects the *Regular*, *Route*, or *Internal* behavior, the system inserts *Simple* in both the **Service Order Workflow Type** box and the **Appointment Workflow Type** box. (Because the *Simple* workflow type is associated with different statuses in service orders than in appointments, we will describe these workflow types separately.) If the user selects *Quote* in the **Behavior** box, the system inserts *Quote* in only the **Service Order Workflow Type** box.

Thus, the following workflow types are available by default, based on the settings specified for the service order type on the *Service Order Types* form:

- Service Order Workflow Type is set to *Simple* for the service order type: During the processing of a service order of the service order type, the system may assign the following statuses, which are predefined for the workflow type, to the service order: *Open, On Hold, Awaiting, Completed, Closed,* and *Canceled.* The *Awaiting* status is new in Acumatica ERP 2021 R1.
- **Appointment Workflow Type** is set to *Simple* for the service order type: During the processing of an appointment of the service order type, the system may assign the following statuses, which are predefined for the workflow type, to the appointment: *Not Started*, *On Hold*, *Awaiting*, *In Process*, *Paused*, *Completed*, *Closed*, *Billed*, and *Canceled*. The *Awaiting* and *Billed* statuses are new in Acumatica ERP 2021 R1.

The following screenshot shows a service order type for which *Simple* is specified as the **Service Order Workflow Type** and as the **Appointment Workflow Type**.

	AVIOR QUICK PROCESS SETTINGS	PROBLEM CODES ATTRIBUTES	MAILING SETTINGS		
GENERAL SETTINGS		BILLING SETTINGS		-	
* Numbering Sequence:	FSSO - Service Orders	Ø Generated Billing Documents:	Sales Orders *		
Behavior:	Regular		Allow Quick Process		
Service Order Workflow Type:	Simple	* Order Type for Billing:	IN - Invoice ,0	0	
Appointment Workflow Type:	Simple	* Order Type for Negative Balanc	CM - Credit Memo	0	
	Complete Service Order When Its Ap	* Order Type for Allocation:	SO - Sales Order 🔎	0	
	Close Service Orders When Its Appoi	* Default Terms for AR and SO:	7D - 7 Days ,0	0	
	Require Contact	Use Sales Account From:	Customer/Vendor Location *		
	Require Customer Signature on Mobil		Bill Only Closed Appointments		
	Copy Notes From Customer	IN LEGRATING WITH TIME & EXP	PENSES		
	Copy Attachments From Customer		Require Time Approval to Close Appoi		
	Copy Notes From Customer Location		Automatically Create Time Activities fr		
	Copy Attachments From Customer Lo	- Default Earning Type:	KG D		
	Copy Attachmente To Appointent				
	Copy Attachments To Appointent				
	Copy Line Attachments To Invoice				
	Start Appointment When Travel is Co				
DEFAULT SETTINGS	Count Appointment when travel is Co				
Take Address and Contact Infor	Business Account				
Cost Code:	٩	1			
Salesperson ID:	م				
	Commissionable				
Default Travel Item:	٩	0			
	Conv Lot/Serial Nhrs. to Appointment				

Figure: Service Order Workflow Type and Appointment Workflow Type set to Simple

• Service Order Workflow Type is set to *Quote* for the service order type: During the processing of a service order of the service order type, the system may assign the following statuses, which are predefined for the workflow type, to the service order: *Open, Confirmed, Copied,* and *Canceled*. The *Confirmed* and *Copied* statuses are new in Acumatica ERP 2021 R1.

The following screenshot shows a service order type for which *Quote* is specified as the **Service Order Workflow Type**.

Service Order Types	
* Service Order Type:	✓ Active
Description: Quote	
	VIOR PROBLEM CODES ATTRIBUTES MAILING SETTINGS
GENERAL SETTINGS	
* Numbering Sequence:	FSSO - FS Service Order
Behavior:	Quote
Service Order Workflow Type:	Quote
	Complete Service Order When Its Ap
	Close Service Orders When Its Appoi
	Require Contact
	Require Customer Signature on Mobil
	Copy Notes From Customer
	Copy Attachments From Customer
	Copy Notes From Customer Location
	Copy Attachments From Customer Lo
	Copy Notes To Appoinment
	Copy Attachments To Appoinment
	Copy Line Notes To Invoice
	Copy Line Attachments To Invoice
	Start Appointment When Travel is Co
DEFAULT SETTINGS	
Take Address and Contact Infor	Business Account
Cost Code:	
Salesperson ID:	
Default Travel Item:	LABORTRVL - Labor - Travel

Figure: Service Order Workflow Type set to Quote

Note that a customizer can modify these sets of statuses and create new workflow types for service orders and appointments through the customizations process.

Status-Based Colors of Appointment Boxes

A user can specify the background and text colors of the appointment boxes that the system shows on the calendar dashboard so that the colors are based on the predefined statuses. To do this, on the **Status Color** tab of the *Calendar Preferences* (FS100500) form, the user selects a row with the status in the table; then in the Summary area of the tab, the user selects a color in the **Background Color** box or the **Text Color** box (or both boxes).

0	Calendar	^r Preferences							
(ä ∽								
[STATUS C	OLOR APPOINTMENT BOX	SERVICE ORDE	R UNASS	IGNED APPO	NTMENT			
	* Backgroui	nd C	#c8c8c8						
	* Text Color	r.	#6d6d6d						
	с +	× ⊢ ×							
3	ID	* Status	*Background Color	*Text Color	Visible				
>	в	Billed	#c8c8c8	#6d6d6d					
	С	Completed	#c8c8c8	#6d6d6d					
	н	On Hold	#e2e495	#6d6d6d					
	Ν	Not Started	#c5e3b1	#008a33					
	Р	In Process	#b2cfea	#247ab2					
	U	Paused	#e2e495	#6d6d6d					
	W	Awaiting	#fbb909	#6d6d6d					
	Х	Canceled	#ebb6bf	#b1505a					

Figure: The new Status Color tab

A user can also specify the background and text color for appointment boxes for new statuses that have been defined in the system through customization, if applicable. In this case, the user adds new rows to the table on the *Calendar Preferences* form and then specifies the custom colors for appointment boxes for each of these statuses.

To improve and ease the process of customizing the calendar board forms, especially modification of the appointment boxes on dashboards, the new *Calendar Preferences* (FS100500) form was designed. The *Calendar Preferences* (FS100200) form, which had the same name but less functionality related to customizing the calendar board forms, has been removed.

Control of the Workflow Stage Functionality

Because of the development of the new automated workflow functionality, which allows users to define an expanded set of statuses, the previous functionality of workflow stages now can be turned off (and turned on again, if needed) in the system. To control this functionality, the user can select or clear the new **Enable Workflow Stages** check box on the *Service Management Preferences* (FS100100) form.

Service Management Preference	ces		
Ω Ω			
GENERAL SETTINGS CALENDARS A	ND MAPS MAILING SETTINGS		
NUMBERING SETTINGS		APPOINTMENT VALIDATION SE	TTINGS
* Batch Numbering Sequence:	FSPOST P	Skills:	Do Not Validate -
* Staff Schedule Numbering Sequence:	FSSTAFFSCH - FS Staff Sch 🔎 🖉	Service Areas:	Do Not Validate *
Equipment Numbering Sequence:	FSEQUIPMNT - FS Equipmer 🔎 🧷	Licenses:	Do Not Validate *
License Numbering Sequence:	FSLICENSE - FS License 🛛 🖉	Overlapping Appointments:	Do Not Validate 🔹
GENERAL SETTINGS		SCHEDULE OPTIMIZATION SET	ITTINGS
Enable Time & Expenses Integration		WorkWave API URL:	https://demo.wwre.workwave.coi
Enable Rooms		License Key:	
Enable Default Staff in Service Orders		Lunch Break Duration:	1 h 00 m
Enable Default Resource Equipment in S	Service Orders	Lunch Break Start Time:	12:00 PM *
Enable Workflow Stages		Lunch Break End Time:	3:00 PM *
Manage Multiple Billing Options per Cus	tomer		
✓ Alert About Open Appointments Before S	Service Orders Are Closed		
Require Manual Filtering on Billing Form	IS		
Track Start and Completion Appointment	t Locations		
DEFAULT SETTINGS			
Default Service Order Type:	MRO - Maintenance, repair al 🔎 🧷		
Default Service Order Type for Sales Ord	MRO - Maintenance, repair al 🔎 🧷		
Default Service Order Type for Cases:	MRO - Maintenance, repair al 🔎 🧷		

Figure: The Enable Workflow Stages check box

Once the check box is cleared and the settings on the form are saved, the workflow stages functionality is disabled in the system, and the **Workflow Stages** box disappears from the Summary area of the *Service Orders* (FS300100) form and the *Appointments* (FS300200) form.

Note that with the workflow stages functionality enabled (that is, if the **Enable Workflow Stages** check box is selected), the settings specified for the workflow stages on the *Workflow Stages* (FS202100) form (such as **Allow Complete**, **Allow Cancel**, **Allow Reopen**, **Allow Close**, **Allow Update**, and **Allow Delete**) will no longer be supported. The configuration of these settings will be available on the form to support users in migrating to the new workflow.

UI Enhancements On Service Orders and Appointments Forms

The processes that are performed on the *Appointments* (FS300200) and *Service Orders* (FS300100) forms work as they did in the previous version. The UI on these forms has been enhanced to support the functionality of the new workflow engine.

The buttons representing the actions that are most relevant to the current status of the document opened on the form are displayed as buttons on the form toolbar, in addition to being included as menu commands on the **Actions** menu.

The **Hold** check box has been removed from the Summary area of these forms and replaced by the **Hold** and **Remove Hold** actions, which can be clicked on the form toolbar (when they appear there as buttons) as well as on the **Actions** menu.

With the new workflow, the value in the **Status** box of the Summary area is changed automatically by the system as users click actions, which have been included as menu commands on the **Actions** menu and can be also clicked on the form toolbar.

The order of commands on the **Actions** menu has been rearranged. Also, most of the names of commands in the **Actions** menu were renamed or shortened.

The following screenshot shows a service order with the *Open* status on the *Service Orders* form. It illustrates the buttons that appear on the form toolbar for this status, and the corresponding menu commands included on the **Actions** menu.

Search	<mark><</mark>					
Service Orders RTE 000017 ← 🕄 🛱 🖍	+ 🗉 🖸 • 🔟 <	> > HOLD COMPL	.ETE SCHEDULE ALLOW BI	LLING ACTIONS - REPORTS -		
Service Order RTE - R Service Order 000en Status: Open Date: 2/1/2020 Customer Order: External Refer SETTINGS DETAILS	Customer: COFF Customer: MAIN * Branch Location: WEST Service Contract * Project: X - No Description: Deliver TAX DETAILS APPOINTMENT	EESHOP - FourStar Coffee&Sweet Primary Location P BRIGHTON - Office in West Bin P n-Project Code P ry of Fruits FIS FINANCIAL SETTINGS []	Appointment D 0 h 0 0 m Estimated Dur 0 h 0 1 m Tax Total: 0 00 Service Order 30.00 Billable Total: 30.00 DeFAULT STAFF DEFAULT RESOL	Hold Remove Hold Reopen Cancel Complete Close Unclose Schedule URCE EQ Purchase	3 BILLING DOCUMENTS	OTHER I
Override CONTACT		SERVICE ORDER SETTING	•	Allow Billing Schedule on Staff Calendar Schedule on Calendar		
Contact: Company Name: Attention:	FourStar Coffee & Sweets Shop	P Severity: Priority: Supervisor:	Medium Medium	Run Service Order Bill Reversal	1	
Business 1 Email: ADDRESS	+1 661 347 1920 salesperson@fourstars.com	Problem:				
Address Line 1: Address Line 2: City: * Country: State: Postal Code:	VIEW ON MAP 1167 Williams Avenue, Brooklyn New York US - United States of America NV - NEW YORK 11236	P 0 P				

Figure: New toolbar buttons and updated Actions menu

The following tables summarize the renamed actions on the *Appointments* and *Service Orders* forms.

Table: Actions renamed on the Service Orders form

Previous action name	Action name in 2021 R1
Put on Hold	Hold
Complete Order	Complete
Cancel Order	Cancel
Reopen Order	Reopen
Close Order	Close
Unclose Order	Unclose
Run Service Order Billing	Run Billing
Copy to Service Order	Сору
Create Purchase Order	Purchase
Schedule Appointment	Schedule
Schedule on Calendar Board	Schedule on Calendar

Previous action name	Action name in 2021 R1
Schedule on Staff Calendar Board	Schedule on Staff Calendar

Table: Actions renamed on the Appointments form

Previous action name	Action name in 2021 R1
Put on Hold	Hold
Start Travel	Depart
Complete Travel	Arrive
Start Appointment	Start
Pause Appointment	Pause
Resume Appointment	Resume
Complete Appointment	Complete
Cancel Appointment	Cancel
Reopen Appointment	Reopen
Close Appointment	Close
Unclose Appointment	Unclose
Clone Appointment	Clone
Run Appointment Billing	Run Billing
Create Purchase Order	Purchase
Schedule on Calendar Board	Schedule on Calendar
Schedule on Staff Calendar Board	Schedule on Staff Calendar
Send Email with Signed Appointment	Email Signed Appointment
Send Email Confirmation to Customer	Email Confirmation to Customer
Send Email Confirmation to Staff Member	Email Confirmation to Staff
Send Email Notification to Service Area Staff	Email Notification to Service Area Staff

System Administration: Other Improvements

In Acumatica ERP 2021 R1 the following enhancements have been made to the functionality related to system administration:

- Additional system constraints have been added to the License Monitoring Console (SM604000) form.
- The new Delete Outdated Recognition Results (AP501100) mass processing form provides the ability to clean up any number of recognition results.
- The configuration of access rights to file attachments has been improved on the File Maintenance (SM202510) form.

The following sections provide more details about each enhancement.

Additional System Constraints

A system administrator uses the License Monitoring Console (SM604000) form to view the limits for the system resources specified in the Acumatica ERP license and applied to the instance.

In Acumatica ERP 2021 R1, the system will display additional constraints in the System Constraints section of the form as follows (see the following screenshot) if the corresponding features are included in the license and enabled on the Enable/Disable Features (CS100000) form:

- The Maximum Number of Expense Receipts Recognized per Month (pages) value is displayed if the Image Recognition for Expense Receipts feature is enabled.
- The Maximum Number of Business Cards Recognized per Month value is displayed if the Image Recognition for Business Cards feature is enabled.
- The Maximum Number of AP Documents Recognized per Month (pages) value is displayed if the AP Document Recognition Service feature is enabled.

CUSTOMIZATION TOOLS -

License Monitoring Console		CUSTOMIZATION	TOOLS
LICENSE STATISTICS WARNINGS CONSTR	RAINT HISTORY		
Liennse Status	Valid		
* License Tier:	E Series, Tier 5		
LICENSE DETAILS		SYSTEM CONSTRAINTS	-
Monthly Number of Commercial Transactions:	500000	Maximum Number of Web Services API Users:	50
Monthly Number of ERP Transactions:	10000000	Maximum Number of Concurrent Web Services API Requests	20
Database Storage Included (GB):	999	Maximum Number of Web Services API Requests per Minute:	500
RECOMMENDED MAXIMUMS		Maximum Number of Fixed Assets:	20000
Daily Commercial Transactions	25000	Maximum Number of Inventory Items:	300000
Daily ERP Transactions:	500000	Maximum Number of Business Accounts:	300000
Concurrent Users.	1000	Maximum Number of Lines per Transaction	3000
		Maximum Number of Serial Numbers per Document:	10000
		Maximum Number of Employees Paid by Month:	250
		Maximum Number of Expense Receipts Recognized per Month-	1000
		Maximum Number of AP Documents Recognized per Month (pages)	1000
		Maximum Number of Business Cards Recognized per Month:	1000

Figure: New system constraints

If the monthly limit is exceeded, the system adds a warning record to the Warnings tab of the form. Also, the system displays a warning on the **Constraint History** tab for the date when the limit violation occurred.

Also, on the **Constraint History** tab, an administrator can view the current number of recognized AP documents, expense receipts, and business cards on a date, as the following screenshot demonstrates.

Licer	nse Monitori	ng Console						CUSTOMIZAT	TON TOOLS +
LICE	NSE STATIS	STICS WARN		STRAINT HISTOP	RY				
Per	Tenant		-						
H-I	RECOG	INITION HISTORY					-		
B Date	Fixed Assets (% of Limit)	Inventory Items (% of Limit)	Business Accounts (% of Limit)	Employees Paid by Month (% of Limit)	Staff and Vehicles (% of Limit)	Appointment by Month (% of Limit)	AP Documents Recognized by Month (% of Limit)	Expense Receipts Recognized by Month (% of Limit)	Business Cards Recognized by Month (% of Limit)
> 2/25	/20 13 (0%)	477 (0%)	330 (0%)	0 (0%)	41 (14%)	4 (0%)	0 (0%)	0 (0%)	0 (0%)
2/24	/20 13 (0%)	607 (0%)	386 (0%)	0 (0%)	48 (12%)	7 (0%)	1 (0%)	0 (0%)	0 (0%)

Figure: Number of recognized documents on a date

If the administrator clicks **Recognition History** on the table toolbar, the system navigates to the *Recognition History* (SM604015) inquiry form with the time period filled by the system (see the following screenshot). On this form, the administrator can review the history of the recognized operations.

1	Red	cogn	ition Histo	ory									CUSTOMIZATIO	N + TOOLS +
	C	5	→ 🗵											
	* Fr	rom:		2/1/2021 12 -	EntityType			All						
	* Tc	ic:		2/28/2021 1 -										
1	Drag	colun	nn headar here	e to configure lilter							Y	8 .	4	Q
8	0	D	Created Date	Туре	Status	t Doc	ument k		Pages	Summary			Created By	Owner
2	0		2/12/2021	Business Card	In Progress	-			1	Uploaded	2021021	2T204	Kimberly Gibbs	Kimberly Gibbs
	۵	D	2/11/2021	AP Document	Processed	000	0054		1	All_Fruits_	Invoice_	Inv_ID	Kimberly Gibbs	Kimberly Gibbs
	0	D	2/11/2021	Business Card	Processed	100	0912		1	Uploaded	2021021	1T162	Kimberly Gibbs	Kimberly Gibbs

Figure: History of recognized operations

Cleanup of Recognition Results

If a company has enabled the *Image Recognition for Expense Receipts*, *Business Card Recognition Service*, or *AP Document Recognition Service* feature—or any combination of these features—on the *Enable/Disable Features* (CS100000) form and uses the related functionality, the administrator may need to clean the system database by deleting outdated recognition results.

The new *Delete Outdated Recognition Results* (AP501100) mass processing form (see the following screenshot) has been introduced for this purpose. By using this form, a system administrator can view and remove recognition results of any type of recognized documents (such as expense receipts, business cards, and AP documents).

D	elete C	outdated Reco	ognition Resu	lts			c	USTOMIZATION	TOOLS +
d	2 0	PROCESS	PROCESS ALL	0. 14	X				
-	Created	Before: 1/15/2021	• 🖬 St	how Unprocessed	Records				
1	0.0	Entity Type	Status	Document Link	Created Date	Prom.	Summary		Owner
		AP Document	Recognized		11/30/2020		Al_Fruits_Invoice_Inv_ID,pdf		
x		AP Document	Processed	INV-000062	11/30/2020		Af_Finititi_InVolce_InV_ID.pdf		

Figure: The Delete Outdated Recognition Results form

By default, the system displays only records with the *Processed* status that have been processed before the current business date—that is, records for which a corresponding entity (a document or contact) was created in the system. For these records, the system will delete only the recognition results. A PDF document or an image used for recognition will remain attached to the corresponding linked entity.

To view all the recognition records, a system administrator can select the **Show Unprocessed Records** check box in the Selection area of the form. With the check box selected, the system will display records with statuses other

than *Processed*. For these records, the system will delete both the recognition results and the corresponding PDF documents or images.

File Security Enhancements

In previous versions of Acumatica ERP, the system calculated access rights to a file attachment by combining the access rights a user has to a form (which was used when a file was uploaded) and to the entities linked to the file—for example, a file was uploaded by using the *Sales Orders* (SO301000) form and then linked to a purchase order on the *Purchase Orders* (PO301000) form. In this case, users will have access to the file if they have access to at least one of the mentioned forms.

To make the configuration of file access more strict, the **Inherit Access Rights from Entities** check box has been added to the **Access Rights** tab of the *File Maintenance* (SM202510) form (see the following screenshot). The check box is selected by default to preserve the previous system behavior.

							[] NOTES	FILES	CUSTOMIZATION	TOOLS
0	11 (CHECK OUT	 1.001 	UPLOAD N	IEW VERSION	GET LATEST VI	ERSION	SYNCH		
-Tay		Appointments (12	8cb69b-9b34-eb1	1-6839-00155	The Hidden	External Link:	http://msk-	app-001/tw-	2021R1/(W(10020))/F	rame
Chucked Out By						Wiki Link: [[up]Appr		aintments (128cb69b-9b34-eb11-b839-00		39-00
Dwalt Out Communi						WebI3AV Link.				
easons (a)	C) E a		ESS RIGHTS	รางความเวล	parinte					
		Is Public (the Sile ignores	nocess rights and	t is winible to ex-	aryba					
Viki:		indent secces i regina vio	The states	ø						
dmary Page				p						
mary Screen:		ppointments		.0						
Access Rights	62	"Role Name	Access Rights							
	- 2	Accountant	Revoked							
		AcumaticaSupport	View Only							
		Administrator	View Only							
		Anonymous	Revoked							
		AP Admin	Revoked							
		AP Clerk	Revoked							
		AP Viewer	Revoked							
		AR Admin	Revoked							
		AR Clerk	Revoked							
		AR Viewer	Revoked							
		Audit History Access	Revoked							
		Bi	Revoked							

Figure: The Inherit Access Rights from Entities check box

If a system administrator clears the check box for a file, then users will have access to the file only if they have access to the form specified for the file in the **Primary Screen** box on this tab.

Enhancements Related to the Deletion of Attachments

In Acumatica ERP, a user can attach multiple files to multiple entities and their details in the system. When an entity is deleted or some of its details are deleted, the entity's attached files remain in the database taking up space.

Starting 2021 R1, the system will remove attached files and all their versions along with the entity they were attached to if there are no other links for these files in the system. If an attachment has links to other entities in the system, then the system deletes only the link to the entity that is to be deleted.

For example, suppose that the ABC.png file was uploaded and attached to a sales order by using the *Sales Orders* (SO301000) form, and the same file was then linked to a purchase order. The system displays both entities the file is linked to on the **Entities** tab of the *File Maintenance* (SM202510) form, as shown in the following screenshot.



Figure: The list of linked entities for a file

Further suppose that a user deletes the sales order. The system deletes the link to the sales order for the ABC.png file, but keeps the file in the system because it is linked to the purchase order. If a user deletes the purchase order, then the system deletes the link for the file, verifies that the file has no other links on the **Entities** tab, and then deletes the file from the database.
User Interface: Form Subtitles

In Acumatica ERP2021 R1, on the form title bar of some forms, users can now view a form subtitle under the form title. A form subtitle provides users with additional information about the entity they work with. For instance, upon opening any vendor record, a user will see the vendor ID and account name divided by a hyphen.

UI Changes to the Form Titles

A form subtitle represents the record ID and name, description, or additional information. A subtitle is located under the form title on the form title bar and is shown for all data entry forms, as shown in the screenshot below. Depending on the form, a subtitle may consist of two or more parts.

Payments and App Payment 003	lications 294 - Wie	dget Cr	redit Card						
(1)	2	+ 3	0.	к	<	>	×	VOID	ACTIONS -
Туре:	Payment		Customer:		WIDG	ETCC -	Widget	Credit Card	0
Reference Nbr.:	003294	Q	Location:		MAIN - Primary Location				

Figure: Sample subtitle on the Payments and Applications form

- 1. Record type, which is shown if the type is a key element for the type of record
- 2. Record ID
- 3. Additional information about the record

For a new record, the system may display **New Record** as the subtitle. If the required form boxes are not empty when the form is opened, the system will display the limited record details. For example, if you initiate the creation of a AP bill on the *Bills and Adjustments* (AP301000) form, the system will display **Bill** as the form subtitle because the required **Type** box is filled by default with the *Bill* option. If you change the value of the **Type** box to *Credit Adj.*, the system will change the subtitle to **Credit Adj.** However, if you initiate the creation of a task on the *Task* (CR306020) form, the system will display **New Record** in the form subtitle because all required elements needed for creating a caption are empty by default.

Creation Logic for the Form Subtitle

To create the form subtitle, the system searches for the record information based on predetermined logic that is tailored to the particular record and displays the parts of the subtitle as follows:

- The key information of the record, which is presented on the Summary area of the form, such as the record type if it is a key element for the record, the record number or ID, or both of these. Key information can be taken from one element or multiple elements, depending on the form. Key information is followed by a hyphen.
- The record description, or additional information, which is selected from the elements development has deemed most important to users.

Examples of Form Subtitles

Depending on the form, the system may construct the subtitle from one setting or multiple settings. See the following examples of form subtitles:

• *Bills and Adjustments* (AP301000): Because the **Type** and **Reference Nbr.** settings are both key elements, both of these settings are used before the hyphen (*Bill 002608* in the example). For the description part

Bills and Adjustm	ents	an Dhun Chinid				D NO	TES ACTIVITIES	FILES CUSTOMIZATIO	ON TOOLS -
←	empire BideCro		< >	Я	PAY	ACTIONS -		REPORTS +	
Type:	Bill +	Vendor:	EBLUECR	OSS E	mpire Blue	Cross Blues	Detail Total:	136,600.00	^
Reference Nbr.:	002608 ,0	Location:	MAIN - Prir	mary Lo	cation		Discount Total:	0.00	
Status:	Open	Currency;	USD	1.00		VIEW BASE	VAT Taxable Total:	0.00	
		Terms:	30D - 30 D	ays			VAT Exempt Total:	0.00	
Date:	12/31/2020	• Due Date:	1/30/2021				Tax Total:	0.00	
Post Period:	12-2020	* Cash Discount	1/30/2021		Pay by	Line	With. Tax:	0.00	
Vendor Ref.:	MED2020-12						Balance:	136,600.00	
							Amount:	136,600.00	
Description:	Employee health be	nefits					Cash Discount:	0.00	

of the subtitle, the vendor name (*Empire BlueCross BlueShield*) is used because it was determined to be important information for a user.

Figure: A subtitle on the Bills and Adjustments form

• *Customers* (AR303000): The key element of the customer record is the customer ID (*ASBLBAR* in the example) which is used for the first part of the subtitle, before the hyphen. For the additional info that goes after the hyphen, the system uses the account name (*Nautilus Bar SABL*).

Customers ASBI BAR - Nautil	us Bar SABL			CUSTOMIZATION	TOOLS -
) + @ Ø + K DRTS +	<	VIEW ACCOUNT	ACTIONS -	
* Customer ID:		р в	alance:	0.00	^
Customer Status:	Active	P	repayment Balance:	0.00	
* Customer Class:	INTLEU - European Customers	20 F	etained Balance:	0.00	
GENERAL FINAN	CIAL BILLING SHIPPING	LOCATIONS	PAYMENT METHODS	CONTACTS	ş
ACCOUNT INFO					
* Account Name:	Nautilus Bar SABL				
ACCOUNT ADDRESS .					

Figure: A subtitle on the Customers form

• *Warehouses* (IN204000): The key element of the record on this form is the warehouse ID (*RETAIL* in the example), which is placed; the additional information for this type of record is the description of the selected warehouse (*Retail Warehouse*).

Warehouses RETAIL - Retail Ware	ehouse		NOTES ACTIVITIES (1)
< < = p	+ 🖻 🗘 - K	< > > AC	CTIONS - REPORTS -
* Warehouse ID:	RETAIL ,0	Location Entry:	Allow On-the-Fly Entry
* Branch:	PRODRETAIL - Prod P	Avg. Default Returns C	Average -
Replenishment Class:	PURCHASE - Purcha	FIFO Default Returns C	Average -
	Active		
Description:	Retail Warehouse		

Figure: A subtitle on the Warehouses form

• *Contacts* (CR302000): Because the only key information of a record on the *Contacts* form is the contact ID, the system uses it as the form subtitle.

Contacts Adam Wils ← 🕄	son	+	Ē	D •	к	<	>	Я	ACTIONS	•			C) NOTES
Contact ID:		Adam	Wilson				Q	Busi	ness Account:				Q	0
Status:							•	Own	er:		Grace Norman		Q	
DETAILS	ACTIVITIE	S (CRM INF	0	ATTRIBL	JTES	REL	ATIONS	LEADS	0	PPORTUNITIES	CASES	CAMPAIG	GNS N

Figure: A subtitle on the Contacts form

Customization: Ability to Customize Forms of the Self-Service Portal

A developer can now customize Acumatica Self-Service Portal by using the Customization Project Editor. To open the Customization Project Editor and start customizing a form, a developer should open the editor from the *Customization Projects* (SM204505) form or by using the Element Inspector. The Customization Project Editor for the Acumatica Self-Service Portal looks as shown in the following screenshot.

Figure: Customization Project Editor

Customization Project	Editor	<u>Back</u>	Reload
File Publish Extension Libra	y Source Control		
SalesDemoDashboards	Portal Map		
Screens Data Access	ひ 🖹 🗠 × 🕂 RELOAD FROM DATABASE MANAGE POP	RTAL MAP	
Code	B Object Name Description Last Modified By	Last Modified On	
Files	> Salesperson Sales admin admin	10/30/2020	-
Generic Inquiries (70)	Field Service Technician admin	10/30/2020	
Reports (5) Dashboards (25)	DB Project Employee T admin admin	10/30/2020	
Portal Map (101)	Project Consultant admin admin	10/30/2020	
Database Scripts	DB Sales Activities admin admin	10/30/2020	
System Locales	DB Vendor Performanc admin admin	10/30/2020	
Shared Filters (131) Access Rights	DB Service Orders admin admin	10/30/2020	
Wikis (1)	DB GL History admin admin	10/30/2020	
Business Events	DB Replenishment admin admin	10/30/2020	
User-Defined Fields	DB Cash By Period admin admin	10/30/2020	
	Engineering Change R admin admin	10/30/2020	
	DB Opportunities admin admin	10/30/2020	
	DB Request Items admin admin	10/30/2020	
	BI-Creation Date admin admin	10/30/2020	

Developers can customize the forms of the Acumatica Self-Service Portal using the same techniques as they use for Acumatica ERP, which are described in the *Customization Guide*.

The following items can be customized and added to a customization project in the Customization Project Editor for the Self-Service Portal:

- Forms
- Data access classes
- Code items
- Custom files
- Generic inquiries
- Reports
- Dashboards
- Elements of the portal map
- System locales
- Shared filters
- Access rights

- Wiki pages
- Business events
- User-defined fields

Only items related to forms used on the portal are available in the Customization Project Editor for the Self-Service Portal. That is, a developer can customize only the forms and system entities that are added to the Portal Map page of the Customization Project Editor or related to forms added to the Portal Map page.

The following entities are not available for customization in the Customization Project Editor for the Self-Service Portal:

- Import and export scenarios
- Mobile site map
- Web service endpoints
- Push notifications
- Analytical reports
- Webhooks

Customization: Default Values of User-Defined Fields

Starting in Acumatica ERP 2021 R1, for each form that has user-defined fields configured, a customizer can specify the default value for each user-defined field. Also, the **Visibility** tab of the *Edit User Defined Fields* (CS205020) form has been renamed to **Properties**.

Specifying the Default Values

To specify the default values of user-defined fields, the customizer opens a form where user-defined fields are available (see *User-Defined Fields*) and then selects **Customization > Manage User-Defined Fields** on the form title toolbar. On the *Edit User Defined Fields* (CS205020) form, which opens, the customizer opens the **Properties** tab (shown in the screenshot below).

In the **Document** box, the customizer selects the document type to which the settings should be applied. In the table, the customizer specifies the default values of the required attributes in the **Default** column. These values will be displayed on the form when the user edits the user-defined fields.

The following screenshot shows the **Properties** tab with the *Invoice* document type selected and the default values specified in the **Default** column specified for the **Contract type** and **Workgroup ID** attributes.

Edit User Defined Fields: Invoices and Memos		🗅 NOTES	FILES	CUSTOMIZATION	TOOLS -					
← ADD USER-DEFINED FIELD MANAGE ATTRIBUTES										
USER DEFINED FIELDS PROPERTIES										
Document: Invoice -										
Č → X	\circlearrowright \vdash \blacksquare									
User-Defined Attribute	Required	Hidden	Default							
Number of Employees										
Contract type			Subscriptio	n						
Operation System										
> Workgroup ID			Sales							

Figure: Edit User Defined Fields form: Properties tab

After the customizer has specified the appropriate settings for the form and document types on the *Edit User Defined Fields* form, the customizer then clicks the Back arrow button on the form toolbar to save the changes and go back to the form that supports user-defined fields.

Displaying the User-Defined Fields of the Document

On the **User-Defined Fields** tab of the form to which the customizer returns, the fields for which the customizer has specified the **Default** values now contain these values. The following screenshot shows the default values specified for **Contract type** and **Workgroup ID** on the **User-Defined Fields** tab of the *Invoices and Memos* (AR301000) form. When a user is specifying values on this tab for a particular invoice or memo, the user can change the default values, if needed.

Invoices and Memos NOTES ACTIVITIES FILES BUSINESS EVENTS CUSTOMIZATION TOOLS -← SAVE & CLOSE 🖺 め 🕂 📋 🗘 • I< < > >I RELEASE ACTIONS • INQUIRIES • REPORTS • DOCUMENT USER-DEFINED FIELDS ~ Operation System: * Contract type: Subscription • * Workgroup ID: Sales -DOCUMENT DETAILS FINANCIAL DETAILS ADDRESS DETAILS TAX DETAILS SALESPERSON COMMISSION APPROVAL DETAILS APPLICATIONS \circlearrowright + \checkmark × VIEW SCHEDULE $|\mapsto|$ X \pm 🗟 🖟 🗅 *Branch Inventory ID Transaction Descr. Quantity UOM Unit Ext. Discount Discount Price Price Percent Amount Amount *Account

 >
 ©
 SOFT
 AR Invoice INV000002 line
 0.00
 0.0000
 540.00
 0.00000
 0.00
 540.00
 999999

Figure: User-Defined Fields: Displayed fields

Customization: Improvements in Workflows

Starting in Acumatica ERP 2021 R1, improvements have been made to the workflow engine. These improvements are described in detail in the sections below.

Mapping Workflow Actions

When a customizer creates a new action of the *Workflow* type on the Actions page of the Customization Project Editor, the **Rights to Enable Action** box of the **Action Properties** dialog box is populated with *Update* by default. (This dialog box, which is shown in the screenshot below, can be invoked on the Actions page.) This means that for the action to be available on the form, a user should have the access rights to edit the form.

Action Properties				
* Action Name:		Action Type:	Workflow	-
Display Name:		Toolbar Folder:	Top Level	-
Disabled:	-	Rights to Enable Action:	Update	*
Hidden:	-	Rights to View Action:		*
Dialog Box:	-		Expose to Mobile	
Processing Screen:	۵,	2		
	Batch Mode			
FIELD UPDATE				
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Active *Field	• 11 🗠	From Now Vol		Statua
Active Fleiu		Schema	le	Status
	No records f	ound.		
	Try to modify pa	arameters above to see records ne	are.	
				OK CANCEL

Figure: The Action Properties dialog box

Disabling Legacy Automation Steps

If a workflow that uses the new workflow engine is configured for a form, automation steps are disabled and cannot be used, even if the new workflow has been published as code customization. If a customizer tries to use the old automation steps on such a form, the following warning is displayed on the *Automation Steps* (SM205000) form for the **Screen ID** box: *This screen uses the new workflow engine. All automation steps will be ignored*.

Prohibiting the Customization of Some of the Workflows

For some of the workflows, customization may be prohibited by Acumatica developers. In this case, for the **State Identifier** box of the Workflows page of the Customization Project Editor, the following message is displayed: *The predefined workflow for this screen cannot be customized*.

Exposing Actions to the Mobile App

In the **Action Properties** dialog box of the Customization Project Editor, the **Expose to Mobile** check box has been added (shown in the screenshot below). If a customizer selects this check box, the selected action becomes available on the corresponding mobile screen. The check box is cleared by default.

To expose certain actions on the mobile screen, the customizer needs to make sure the **Expose to Mobile** check box is selected for each of these actions.

A	ction Propert	ties								
	Action Name: Display Name: Disabled: Hidden: Dialog Box: Processing Scr FIELD UPDATI	een: (Open Open Details(FormOper CR503220 - Upda Batch Mode	ı) -	Action Type: Toolbar Folder: Rights to Enable Rights to View A	e Action: Action:	Workflow Actions Update	*		
(ి + ు	× ↑	↓ +	X						
8	Active	* Field			From Schema	New Valu	e			Status
>		Active								Inherited
	\checkmark	Reason				[FormOp	oen.Reason]			Inherited
	\checkmark	Owner				[FormOp	oen.Owner]			Inherited
	\checkmark	Closing D)ate		\checkmark					Inherited
									OK	CANCEL

Figure: The Expose to Mobile check box

Customization: Upgraded Automated Warehouse Operations Engine

Starting in Acumatica ERP 2021 R1, developers can use the upgraded automated warehouse operations engine. This section describes the steps a developer should perform to enable the engine.

Acumatica will switch to the new automated warehouse operations engine in future versions. To make the customization packages related to the warehouse management system (WMS) compatible with the new engine, the developers will need to rework them if the packages were based on the old engine.

The upgraded engine provides the following features:

- Improved customization capabilities
- More structured, modular code that is easier to read and write

The current version of Acumatica ERP uses the old engine, and the new engine is switched off by default. Customization projects based on the old engine will publish successfully in the current version. We recommend that independent software vendors (ISVs) and partners who have customized screens related to automated warehouse operations enable the new engine and rework their customization packages within the current version.

To enable the new automated warehouse operations engine, a developer should perform the following steps:

- 1. Open the aspx file of any screen related to automated warehouse operations.
- 2. Locate the code that is similar to the following code.

```
<pr:PXDataSource ID="ds" runat="server" Visible="True" Width="100%"
TypeName="PX.Objects.SO.PickPackShipHost" PrimaryView="HeaderView">
<%--<pr:PXDataSource ID="ds" runat="server" Visible="True" Width="100%"
TypeName="PX.Objects.SO.WMS.PickPackShip+Host" PrimaryView="HeaderView">--%>
```

3. Delete the first <px: PXDataSource> tag from this code block.



Commenting out the tag is not enough; a developer should delete it completely.

4. Remove comments from the second <px:PXDataSource> tag.

The resulting code block should look as follows.

```
<pr:PXDataSource ID="ds" runat="server" Visible="True" Width="100%"
TypeName="PX.Objects.SO.WMS.PickPackShip+Host" PrimaryView="HeaderView">
```

5. Refresh the page.

Mobile Development: Mapping of Smart Panels to the Mobile App

In Acumatica ERP 2021 R1, a customizer can map smart panels to the Acumatica mobile app by using MSDL. (A smart panel is a complex dialog box, as described in *Dialog Box (PXSmartPanel*).)

In the Acumatica mobile app, smart panels are displayed as common screens. An example of a smart panel is presented in the following screenshot.

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	ELEEASTCOM East CO	M Electronic Supplies
	AACOMPUT01	0
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-	0.00	RETAIL
	CONSUMER -300-TOYS	
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Figure: The Inventory smart panel

For the mapping of smart panels, the following changes in MSDL have been made to Acumatica ERP 2021 R1:

- A new object named dialog has been introduced. A customizer should add this object inside the screen object to map a smart panel. Inside the dialog object, a customizer can map container and dialogAction objects.
- A new object named dialogAction has been introduced. A customizer should add this object inside the dialog object to map an action of a smart panel.
- The container object has been extended with theBoolean includeDialogActions property, which indicates whether a container includes an action of a smart panel.
- The recordAction, containerAction, selectionAction, and listAction objects have been extended with the redirectToDialog property. A customizer should assign the property the name of the dialog box that the action should open.

Example: Adding a Smart Panel on the Sales Orders (SO301000) Form

The following code demonstrates how to map the **Inventory Lookup** smart panel, which is implemented in the **Details** tab of the *Sales Orders* (SO301000) form. For details on creating a mapping of a form in a customization project, see *To Update a Screen of a Mobile App* and *To Add a Screen to the Mobile Site Map*.

```
update screen SO301000 {
 update container "OrderSummary" {
   formActionsToExpand = 3
   add recordAction "AddInvBySite" {
     displayName = "Add Stock Item"
     redirect = true
     redirectToDialog = "SO301000D1"
   }
  }
  add dialog SO301000D1 {
   type = FilterListScreen
   openAs = List
   add dialogAction "Ok" {
     DisplayName = "Add&Close"
     DialogResult = "OK"
     closeDialog = true
    }
    add dialogAction "Cancel" {
     DisplayName = "Cancel"
     DialogResult = "Cancel"
     closeDialog = true
    }
    add dialogAction "AddInvSelBySite"
    {
     DisplayName = "Add"
     closeDialog = false
    }
    add container "InventoryLookupInventory"
    {
     add field "Inventory"
      . . .
     add field "HistoryDate"
    }
    add container "InventoryLookup" {
      type = SelectionActionList
     includeDialogActions = true
      add field "QtySelected"
      add field "Selected" {
       special = "ListSelection"
      }
      add field "Warehouse"
      . . .
     add field "AlternateDescription"
      add listAction "AddInvSelBySite" {
       DisplayName = "Add"
      }
      add containerAction "Cancel" {
```

```
displayName = "Cancel"
}
add listAction "Ok"
{
    DisplayName = "Add&close"
    after = Close
    }
}
```

The resulting smart panel looks as shown in the following screenshots. The first screenshot shows the mapped **Add Stock Item** action on the Sales Order screen menu. The second screenshot shows the **Inventory** smart panel with two stock items selected. The third screenshot shows the stock items added to the **Details** tab of the Sales Order screen.

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Figure: Using the Inventory smart panel

Integration Development: Creation of Custom Subscriber Types for Business Events

In Acumatica ERP, to configure the system to monitor a business process, on the *Business Events* (SM302050) form, the system administrator can define a *business event* that relates to this business process and that causes the system to perform an action or multiple actions in the system. To define the actions that the system should perform in the system once the business event has occurred, the system administrator specifies the *subscribers* of this business event on the **Subscribers** tab of the *Business Events* form. For more information on business events, see *Business Events: General Information*.

In Acumatica ERP 2021 R1, a developer can implement custom subscribers, as briefly described in this topic, in addition to the subscribers that are available in the system. For details about implementation, see *To Define a Custom Subscriber Type for Business Events*.

Creation of a Custom Subscriber Type

The developer can define a custom subscriber type for business events in an Acumatica ERP extension library as follows:

1. Define a class that implements the

PX.BusinessProcess.Subscribers.ActionHandlers.IEventAction interface, which is a subscriber that the system executes once the business event has occurred. The following code shows a sample implementation of a custom subscriber that writes notification data to a text file.

```
//The custom subscriber that the system executes once
             //the business event has occurred
public class CustomEventAction : IEventAction
    //The GUID that identifies a subscriber
    public Guid Id { get; set; }
    //The name of the subscriber of the custom type
    public string Name { get; protected set; }
    //The notification template
    private readonly Notification notificationTemplate;
    //The method that writes the body of the notification to a text file
    //once the business event has occurred
    public void Process(MatchedRow[] eventRows, CancellationToken cancellation)
    {
        using (StreamWriter file = new StreamWriter(@"C:\tmp\EventRows.txt"))
        {
            var graph = PXGenericInqGrph.CreateInstance(
              notificationTemplate.ScreenID);
            var parameters = @eventRows.Select(r =>
             Tuple.Create<IDictionary<string, object>,
             IDictionary<string, object>>(
            r.NewRow?.ToDictionary(c => c.Key.FieldName, c => c.Value),
            r.OldRow?.ToDictionary(c => c.Key.FieldName, c =>
              (c.Value as ValueWithInternal)?.ExternalValue ?? c.Value))).
             ToArray();
            var body = PXTemplateContentParser.ScriptInstance.Process(
              notificationTemplate.Body, parameters, graph, null);
            file.WriteLine(body);
```

```
}
}
//The CustomEventAction constructor
public CustomEventAction(Guid id, Notification notification)
{
    Id = id;
    Name = notification.Name;
    __notificationTemplate = notification;
}
```

2. Define a class that implements the

i

PX.BusinessProcess.Subscribers.Factories.IBPSubscriberActionHandlerFactory interface, which creates and executes the subscriber, as the following example shows.

If you want an action to be displayed in the **Create Subscriber** menu on the toolbar of the **Subscribers** tab of the *Business Events* (SM302050) form, instead of implementing the IBPSubscriberActionHandlerFactory interface, implement the IBPSubscriberActionHandlerFactoryWithCreateAction interface, which also provides methods and properties that define the creation action.

```
//The class that creates and executes the custom subscriber
class CustomSubscriberHandlerFactory :
 IBPSubscriberActionHandlerFactoryWithCreateAction
    //The method that creates a subscriber with the specified ID
    public IEventAction CreateActionHandler(Guid handlerId, bool stopOnError,
      IEventDefinitionsProvider eventDefinitionsProvider)
    {
       var graph = PXGraph.CreateInstance<PXGraph>();
       Notification notification = PXSelect<Notification,
          Where<Notification.noteID,
          Equal<Required<Notification.noteID>>>>
            .Select(graph, handlerId).AsEnumerable().SingleOrDefault();
        return new CustomEventAction (handlerId, notification);
    }
    //The method that retrieves the list of subscribers of the custom type
    public IEnumerable<BPHandler> GetHandlers(PXGraph graph)
    {
        return PXSelect<Notification, Where<Notification.screenID,
         Equal<Current<BPEvent.screenID>>,
          Or<Current<BPEvent.screenID>, IsNull>>>
            .Select(graph).FirstTableItems.Where(c => c != null)
            .Select(c => new BPHandler { Id = c.NoteID, Name = c.Name,
             Type = LocalizableMessages.CustomNotification });
    }
    //The method that performs redirection to the subscriber
    public void RedirectToHandler(Guid? handlerId)
    {
       var notificationMaint =
          PXGraph.CreateInstance<SMNotificationMaint>();
       notificationMaint.Message.Current =
```

```
notificationMaint.Notifications.Search<Notification.noteID>(
        handlerId);
    PXRedirectHelper.TryRedirect(notificationMaint,
      PXRedirectHelper.WindowMode.New);
}
//A string identifier of the subscriber type
//that is exactly four characters long
public string Type
{
   get { return "CTTP"; }
}
//A string label of the subscriber type
public string TypeName
{
   get { return LocalizableMessages.CustomNotification; }
}
//A string identifier of the action that creates a subscriber
//of the custom type
public string CreateActionName
{
   get { return "NewCustomNotification"; }
}
//A string label of the button that creates a subscriber of the custom type
public string CreateActionLabel
{
   get { return LocalizableMessages.CreateCustomNotification; }
}
//The delegate for the action that creates a subscriber of the custom type
public Tuple<PXButtonDelegate, PXEventSubscriberAttribute[]>
  getCreateActionDelegate (BusinessProcessEventMaint maintGraph)
{
    PXButtonDelegate handler = (PXAdapter adapter) =>
    {
        if (maintGraph.Events?.Current?.ScreenID == null)
           return adapter.Get();
        var graph = PXGraph.CreateInstance<SMNotificationMaint>();
        var cache = graph.Caches<Notification>();
        var notification = (Notification)cache.CreateInstance();
        var row = cache.InitNewRow(notification);
        row.ScreenID = maintGraph.Events.Current.ScreenID;
        cache.Insert(row);
        var subscriber = new BPEventSubscriber();
        var subscriberRow = maintGraph.Subscribers.Cache.InitNewRow(
         subscriber);
        subscriberRow.Type = Type;
        subscriberRow.HandlerID = row.NoteID;
        graph.Caches[typeof(BPEventSubscriber)].Insert(subscriberRow);
        PXRedirectHelper.TryRedirect(graph,
          PXRedirectHelper.WindowMode.NewWindow);
```

- 3. Compile the Acumatica ERP extension library with the implementation of the classes.
- 4. Open Acumatica ERP and test the new subscriber type.

Platform API: Support for Multiple Base Currencies

In Acumatica ERP 2021 R1, several changes have been made as prerequisites for the multiple base currencies functionality, which will be implemented in a future version of Acumatica ERP. This article describes the code changes that have been made. For information on the related UI changes, see *Other UI Improvements* in the General Release Notes.



The content below is applicable if the *Multiple Base Currencies* feature is enabled. In Acumatica ERP 2021 R1, the feature is hidden by default.

Changes to DACs

The BaseCuryID field has been added to the following DACs:

- PX.Data.PXAccess.Organization The BaseCuryID field of this DAC represents the base currency of the corresponding Organization entity.
- PX.Data.PXAccess.MasterCollection.Branch

The BaseCuryID field of this DAC represents the base currency of the corresponding Branch entity.

PX.Data.AccessInfo

The BaseCuryID field of this DAC should be used to get the default base currency of the current branch.

• PX.Objects.GL.Company

The BaseCuryID field of this DAC remains the same; when the *Multiple Base Currencies* feature is disabled, the field can be used as a source for the base currency for different kinds of documents.

• PX.Objects.GL.Branch and PX.Objects.GL.Organization

If the *Multiple Base Currencies* feature is disabled, the corresponding value from <code>Company.BaseCuryID</code> is copied to these fields.

If the *Multiple Base Currencies* feature is enabled, the user has to manually set the value in the **Base Currency ID** box on the *Companies* (CS101500) form.

• PX.Objects.CR.BAccount

The value is used for customer and vendor accounts.

• PX.Objects.AR.ARDunningSetup

The BaseCuryID fields has been added to this DAC as a key field. If the *Multiple Base Currencies* feature is enabled, the dunning letter setup depends on the branch to which the user is logged in.

• PX.Objects.CA.CashAccount

To support multiple base currencies, a customizer needs to update the generic inquiries and reports that use the DACs from this list. In order to get the base currency for generic inquiries and reports, the customizer needs to retrieve it from the PX.Objects.GL.Branch DAC.

To populate the default values of newly created documents, the customizer needs to retrieve the currency value from the PX.Data.AccessInfo DAC, which contains the base currency of the currently selected branch.

To provide the ability to support separate costs for non-stock items in different currencies, the InventoryItemCurySettings DAC has been implemented.

New Attributes

The PX.Objects.CM.CurrencyInfoAttribute attribute has been modified to set the proper BaseCuryID value for the CurrencyInfo entity.

The PX.Objects.CM.CurySymbolAttribute attribute has been developed, which allows a customizer to add a currency symbol to the UI box label. An example from the *Vendors* (AP303000) form is the following. In the PX.Objects.AP.VendorMaint.VendorBalanceSummary DAC, the Balance field has been modified to the following.

```
[CurySymbol(curyID: typeof(Vendor.baseCuryID))]
[PXBaseCury()]
[PXUIField(DisplayName = "Balance", Visible = true, Enabled = false)]
public virtual Decimal? Balance
```

In the AP303000.aspx file, the **Balance** box label has been modified to the following.

```
<pr:PXTextEdit ID="edBalanceLabel" runat="server" DataField="Balance_Label"
SuppressLabel="true" Enabled="false" IsClientControl="false" />
<pr:PXNumberEdit ID="edBBalance" runat="server" DataField="Balance" SuppressLabel="true" />
```

Restrictions Related to Different Base Currencies

Because of restrictions that occur when the *Multiple Base Currencies* feature is enabled, users cannot use different base currencies in one document or related entities. All restrictions are implemented as graph and cache extensions with the MultipleBaseCurrenciesRestriction suffix.

Rounding Limits

Rounding limits can be defined for each currency, in addition to the base currency. The rounding limit setup implemented by the Rounding Limit field has been removed from the *General Ledger Preferences* (GL102000) form and added to the *Currencies* (CM202000) form.

Related Links

- Finance: Currency Settings on the Currencies Form
- Finance: Other Improvements

Platform API: Improvements in Platform DACs

In Acumatica ERP 2021 R1, data access classes (DACs) defined in the PX. Data namespace have been improved as follows:

- The PXSearchable attribute has been added to select DACs of the PX. Data namepsace. As a result, these DACs can now be displayed in the results of the search in an instance of Acumatica ERP, and a user can now search for system entities that use these DACs by using the **Search** box. The **Recently Viewed** workspace has also been expanded to show records of these entities in addition to those that could previously be viewed on the workspace. For the complete list of entities, see *Platform: Expanded Search of System Entities and Recently Viewed Records*.
- Referential integrity checks have been added to select DACs of the PX. Data namepsace. As the result, data consistency has been improved.
- Classes defining primary and foreign keys have been added to selected DACs of the PX.Data and PX.Objects namespaces to improve implementation of relationships between DACs.
- The Forced field has been added to the PXDBScalarAttribute class. This field indicates whether the DAC field marked with PXDBScalar is a subquery and must be used as is.

Platform API: Moved Functionality

In Acumatica ERP 2021 R1, some functionality has been moved as follows:

- The PXLogin class of the PX. Data namespace has been marked with the PXInternalUseOnly attribute, which means that this class is not intended for use by developers. Two services have been introduced that provide some of the functionality of the PXLogin class:
 - The service that implements the ILoginUiService interface: This service can be used from a customized login page to interact with the platform.
 - The service that implements the ILegacyCompanyService interface: With this service, developers can use some company-related methods that were previously available via the PXLogin class.
- Many members of the PXAccess class (which belongs to the PX.Data namespace) have been marked with the PXInternalUseOnly attribute, which means that they are not intended for use by developers. The service that implements the ICurrentUserInformationProvider interface has been introduced. This service provides the developers with some of the functionality of the PXAccess class.



Some members of ICurrentUserInformationProvider are also marked with the PXInternalUseOnly attribute.

Fixes and Enhancements

You can find fixes and minor enhancements introduced in Acumatica ERP 2021 R1 in the following document: *Acumatica ERP 2021 R1 Release Notes: Fixes and Enhancements*.