



Acumatica

The Cloud ERP

S150 Report Designer (Part 2)

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Timing and Agenda

September 16, 2024 - 10:00-11:30 AM PT

Day 1

Lesson 5: Filling a Report with Content

September 17, 2024 - 10:00-11:30 AM PT

Day 2

Lesson 6: Using Variables and Expressions



Day 1

Acumatica

Mutual
of Omaha

Jessica Korda

Acumatica Sponsored Professional Golfer

Company Structure

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

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

Operational Activity

The company has been operating starting in the 01-2023 financial period. In November 2023, the company started using Acumatica ERP as an ERP and CRM system and migrated all data of the main office and retail store to Acumatica ERP. The equipment center has begun its operations in 01-2024 in response to the company's growth.

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

SweetLife Company Sales and Services

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

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

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

Muffins & Cakes Company Sales and Services

The Muffins & Cakes branches have the following business processes:

- **Muffins Head Office & Wholesale Center:** In this branch, baked goods and products for baking are sold to wholesale customers, such as restaurants and cafes. The company also conducts baking classes at customer locations.
- **Muffins Store:** In the store, small retail customers purchase baked goods, or pick the goods ordered on the website.

Company Purchases

The company purchases fruits and spices from large fruit vendors for sale and for jam production. For producing jams and packing jams and fruits, the company purchases jars, labels, and paper bags from various vendors. For the internal needs of the main office and store, the company purchases stationery (printing paper, pens, and pencils), computers, and computer accessories from various vendors. The company also purchases juicers and juicer parts from large juicer vendors and either purchases the installation service for the juicers or provides the installation service on its own, depending on the complexity of the installation.

The Muffins & Cakes company also purchases stationery (printing paper, pens, and pencils) and advertising services

Lesson 5: Filling a Report with Content

Learning Objectives

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

- Add, delete, and move elements in the report layout
- Specify the properties of the elements added to the report layout

Report Content: To Add QR Codes to a Report

Story

Suppose that you are a technical specialist in your company who is working on simple customizations. A sales manager has requested a report that displays the details of a particular invoice or memo, including the QR codes of the included items. You have decided to use the predefined Invoice/Memo (AR641000) report as a base and modify it by adding the QR code of each item.

Figure: The S150 Invoice/Memo (AR6410C2) report with the QR codes of items



Invoice

Reference Nbr.: 000058
 Date: 07-Jan-2024
 Due Date: 06-Feb-2024
 Customer ID: TOMYUM
 Currency: USD

Service and Equipment Sales Center
 218 Oakwood Ave
 New York, NY, 10007
 Phone: +1 212 667 1506

BILL TO:	SHIP TO:
Thai Food Restaurant 341 E 138th St New York NY 10454 United States of America	341 E 138th St New York NY 10454 United States of America

CUSTOMER REF. NBR.	TERMS	CONTACT	
	30 Days	Nenad Pasic	

NO.	ITEM	QTY.	UOM	UNIT PRICE	DISC.	EXTENDED PRICE
2	JUICER20C: Commercial citrus juicer with a production rate of 2 litres per minute	1.00	PIECE	4,000.0000	0%	4,000.00
						
1	INSTALL: Installation of equipment at the customers' place	1.00	HOUR	100.0000	0%	100.00
						

NOTE:

Sales Total:	4,100.00
Less Discount:	0.00
Tax Total:	0.00
Total (USD):	4,100.00
Cash Discount:	0.00

Page: 1 of 1

Report Content: To Embed an Image in a Report

Story

Suppose that you are a technical specialist in your company who is working on simple customizations. A sales manager has requested that you add an image of his signature to a report that displays the details of an invoice or memo. You have decided to use the predefined Invoice/Memo (AR641000) report as a base and modify it by adding the image of the signature, which the sales manager has sent to you as a PNG file.

Figure: The embedded image in the Embedded Images dialog box

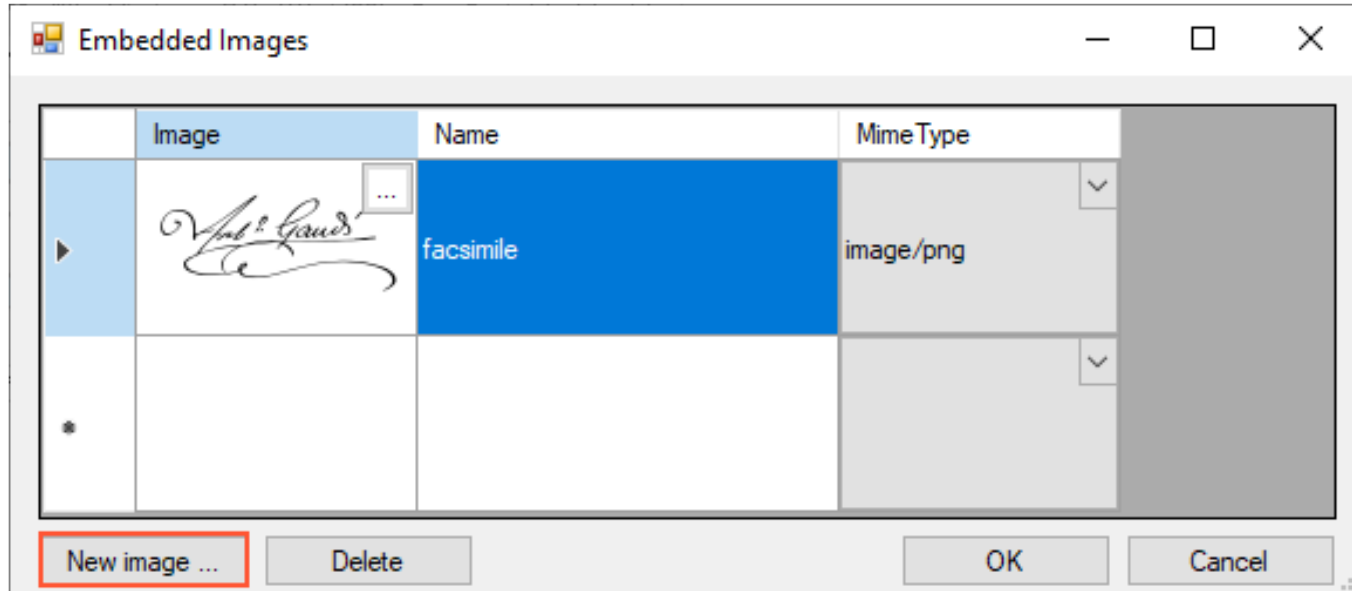



Figure: The Invoice/Memo (IN6410C2) report with the image added



SweetLife

Invoice

Reference Nbr.: 000058
 Date: 07-Jan-2024
 Due Date: 06-Feb-2024
 Customer ID: TOMYUM
 Currency: USD

Service and Equipment Sales Center
 218 Oakwood Ave
 New York, NY, 10007
 Phone: +1 212 667 1506

BILL TO:	SHIP TO:
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CUSTOMER REF. NBR.	TERMS	CONTACT
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NO.	ITEM	QTY.	UOM	UNIT PRICE	DISC.	EXTENDED PRICE
2	JUICER20C: Commercial citrus juicer with a production rate of 2 litres per minute	1.00	PIECE	4,000.0000	0%	4,000.00
1	INSTALL: Installation of equipment at the customers' place	1.00	HOUR	100.0000	0%	100.00

NOTE:

Sales Total:	4,100.00
Less Discount:	0.00
Tax Total:	0.00
Total (USD):	4,100.00
Cash Discount:	0.00

Page: 1 of 1

Report Content: To Add a Subreport

Story

Suppose that you are a technical specialist in your company who is working on simple customizations. A project manager has requested a report that displays project profitability by project manager. The project manager has also asked you to display the list of change orders for each project. You have looked through the reports in Acumatica ERP and decided to use a copy of the Project Profitability (PM624000) report and make modifications to it.

Figure: The subreport that lists the change orders of the specified project

groupHeaderSection1 (Header of group1)	
...	Change Order Reference Number
detailSection1	
...	[=[PMChangeOrder.RefNbr]]
groupFooterSection1 (Footer of group1)	

Figure: The report with the subreport

pageHeaderSection1

Company: . . .	[=Report.GetDefUI('AccessInfo.CompanyName')]	Page: . . .	[=PageOf]
User:	[=Report.GetDefUI('RowAccessIn	Date: . . .	[=Now()]


Project Profitability

Project	Description	Project Manager	Customer	Project Status	Currency	Income	Expense	Margin
---------	-------------	-----------------	----------	----------------	----------	--------	---------	--------

groupHeaderSection2 (Header of CurrencyGroup)

groupHeaderSection1 (Header of ProjectGroup)

[=PMPProject.Cont	[=PMPProject.Description]	[=PMPProject.Approve	[=PMPProject.Customer	[=PMPProject.Statu	[=PMPProj	[=SUM(IF([PMAccount	[=SUM(IF([PMAccount	[=SUM(IF([PMAccount
-------------------	---------------------------	----------------------	-----------------------	--------------------	-----------	---------------------	---------------------	---------------------

 subReport1

detailSection1

groupFooterSection1 (Footer of ProjectGroup)

groupFooterSection2 (Footer of CurrencyGroup)

[='Total C' + [PMP	[=SUM(IF([PMAccount	[=SUM(IF([PMAccount	[=SUM(IF([PMAccount
--------------------	---------------------	---------------------	---------------------

pageFooterSection1

Figure: The Project Profitability (PM6240C1) report with change orders

Company:	U100	Page:	1 of 1					
User:	Kimberly Gibbs	Date:	4/5/2024 7:43 AM					
Project Profitability								
Project	Description	Project Manager	Customer	Project Status	Currency	Income	Expense	Margin
HMSTRAIN	A training for employees	EP00000001	HMBAKERY	Completed	USD	1,725.00	500.00	1,225.00
Change Order Reference								
000001								
000002								
Total (USD):						1,725.00	500.00	1,225.00



Day 2

Lesson 6: Using Variables and Expressions

Learning Objectives

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

- Create a variable
- Specify an expression

Figure: The Expression Editor

The screenshot shows the Expression Editor window with the following components:

- 1**: A tree view on the left containing a list of fields such as APHistory, APLatestHistory, BAccount, Contact, Location, Vendor, AcctCD, AcctName, AcctReferenceNbr, AllowOverrideCury, AllowOverrideRate, BAccountID, BaseRemitContactID, Box1099, and CasesCount.
- 2**: A tree view in the middle showing categories like Globals, Parameters, Variables, Operators (Arithmetic, Logical, Comparison, Other), Functions (Conversion, Aggregates, Text, Math, DateTime), Program Shortcuts, and Application.
- 3**: A list of functions on the right, including If(expr, truePart, falsePart), IsNull(value, nullValue), Switch(expr1, value1, expr2, value2, ...), NullIf(value1, value2), Assign('\$name', expr), and Assign('\$name', expr, resetExpr).
- 4**: A text area at the bottom containing the expression: `=IIF([@SupressZeroBal]=True AND Sum([APHistory.FinYtdBalance]) = 0, False, True) AND IIF([@SupressInactiveVendors]=True AND (Vendor.Status) = 'I', False, True)`

At the bottom of the window, there is a note: "Use /* commented line */ to comment the text in the formula." and buttons for "Validate", "Ok", and "Cancel".

Figure: Selection of a language on the Sign-In page of Acumatica ERP



 **Acumatica**
The Cloud ERP

English

Select a tenant

U100

Enter credentials

Username

Password

Sign In

[Forgot your credentials?](#)

Figure: Available languages in the system

System Locales CUSTOMIZATION TOOLS ▾

🔄 📄 ↶ + ✕ LOCALE PREFERENCES SET UP LANGUAGES |🔍

* Locale Name	English Name	* Locale Name in Locale Language	Description	Sequence	Active
> en-US	English (United States)	English	English	1	<input checked="" type="checkbox"/>
fr-FR	French (France)	Français	French	2	<input checked="" type="checkbox"/>
it-IT	Italian (Italy)	Italiano	Italian	3	<input checked="" type="checkbox"/>

Variables and Expressions: To Add a Variable and an Expression

Story

Suppose that you are a technical specialist in your company who is working on simple customizations. A sales manager of your company has requested a report that displays data about vendors, so that vendors are grouped by vendor class. In each class, vendors should be numbered sequentially. You know that a colleague has created such a report, but without numbering. You decide to change the report that your colleague has created.

Figure: Variables in the ReportVariables Collection Editor

The screenshot shows the 'ReportVariable Collection Editor' dialog box. It is divided into two main sections: 'Members' and 'Num properties'.

Members: A list box containing two items: '0 IsGroup1Visible' and '1 Num'. The 'Num' item is selected. Below the list are 'Add' and 'Remove' buttons.

Num properties: A table showing properties for the selected 'Num' variable. The table has two columns: Property Name and Value. The 'ValueExpr' property is highlighted.

Behavior	
Localizable	True
Misc	
Name	Num
ProcessOrder	WhileRead
ResetExpr	
ResetGroup	NewGroup
ValueExpr	= \$Num + IIF(\$IsGroup1Visible, 1, 0) ...

At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

Figure: Report in design mode

The image shows a screenshot of a report design tool interface. The interface is organized into several sections, each with a collapse/expand icon on the left:

- pageHeaderSection1**: Contains fields for "Vendor Summary", "Company" (with value `[=Report.GetDefUlt(AccessInfo.Co`), "Suppress Zero Balances", "Suppress Inactive Vendors", "Page" (with value `[=PageOf]`), "Date" (with value `[=Now()]`), and "User" (with value `[=Report.GetDefUlt]`).
- pageHeaderSection2**: A header row with fields: "Vendor", "Vendor Name", "Status", "Terms", "Currency", "Tax Zone", "Phone", "FAX", and "Current Balance".
- groupHeaderSection2 (Header of NewGroup)**: A field for "Class" with value `[=Vendor.Vend`.
- groupHeaderSection1 (Header of group1)**: A row of fields including `[=$Num]`, `[=BAccount.AcctC`, `[=Vendor.AcctName]`, `[=Vendor.S`, `[=Vendor.TermsID`, `[=Vendor.`, `[Location.VTax`, `[Contact.Phone1]`, `[Contact.Fax]`, and `[sum([APHistory.FinYtd`. This section is highlighted with a red border.
- detailSection1**: A section for detailed data rows.
- groupFooterSection1 (Footer of group1)**: A footer section.
- groupFooterSection2 (Footer of NewGroup)**: A footer section with a "Total" field and value `[=sum([APHistory.FinYtd`.
- pageFooterSection1**: A final footer section.

Figure: The Vendor Summary (AP6550C6) report with vendors numbered in each vendor class

Vendor Summary		Suppress Zero Balances		Page: 1 of 2				
Company: U100		Suppress Inactive Vendors		Date: 4/5/2024 7:45 AM				
				User: Kimberly Gibbs				
Vendor	Vendor Name	Status	Terms	Currency	Tax Zone	Phone	FAX	Current Balance
Class		DEFAULT						
1	ALLFRUITS	All Fruits Mall	Prospect	30D	USD	+1-212-555-0119		1,139.10
2	ARCINS	Arc Insurance	Prospect	30D	USD	+1-212-555-0124		1,024,698.72
3	BLUELINE	Blueline Advertisement	Prospect	30D	USD	+1-212-555-0161		19,004.73
4	COMPULINK	Compulink and Co	Prospect	30D	USD	+1-212-555-0112		12,253.00
5	FRONTSRC	Frontsource Ltd.	Prospect	30D	USD NYSTATE	+1-315-555-0128		7,318.00
6	PRINTICO	Wingman Printing Company	Prospect	30D	USD	+1-212-555-0103		4,123.00
7	SQUEEZO	Squeezeo Inc.	Prospect	30D	USD	+1-212-555-0107		3,950.00
8	TEACOMPANY	Tea Company Syndicate	Prospect	30D	USD	+1-914-555-0193		1,949.10
							Total:	1,074,435.65
Class		EMPHOURLY						
							Total:	0.00
Class		INTLCA						
1	CARTRIDGE	Cartridge World Inc.	Prospect	30D	USD	+1-212-555-0182		5,771.73
							Total:	5,771.73
Class		PRODUCT						
1	HOMEDEP	Bellevue Home Depot	Prospect	30D	USD	+1-212-555-0153		10,394,820.00
2	JARCO	Jar Co.	Prospect	30D	USD	+1-917-555-0121		11,643.00
3	OFFICEUP	OfficeUp Original	Prospect	30D	USD	+1-212-555-0197		4,591.00
4	STATOFFICE	Spectra Stationery Office	Prospect	30D	USD	+1-212-555-0139		619.00
							Total:	10,411,673.00
Class		SALARIED						
							Total:	0.00
Class		SERVICE						
1	KADESIGN	Kam Design Inc.	Prospect	30D	USD	+1-212-555-0136		42,000.00
							Total:	42,000.00
Class		SUBCON						
1	GRITIN	Grit Industries	Prospect	30D	USD	+1-212-555-0201		843,120.00
2	HARDCO	Standard Hardware Company	Prospect	30D	USD	+1-212-555-0155		15,477,000.00
3	HARMINT	Harmon Installation	Prospect	30D	USD	+1-212-555-0166		11,578,160.00



Thank you!

Johans Saavedra