Acumatica
The Cloud ERP

S150 Report Designer (Part 1)

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Timing and Agenda

August 19, 2024 - 10:00-11:30 AM PT

Day 1

Lesson 1: Getting Started with the Report Designer

Lesson 2: Discovering DACs

Lesson 3: Creating a Report

August 20, 2024 - 10:00-11:30 AM PT

Day 2

Lesson 4: Getting Data from Multiple DACs

Day 1

Scott McLaughlin
Acumatica Sponsored Professional Race Car Driver

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 1: Getting Started with the Report Designer

Learning Objectives

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

- Install the Acumatica Report Designer
- Start the Acumatica Report Designer and explore its interface

Figure: The Acumatica ERP Installer wizard

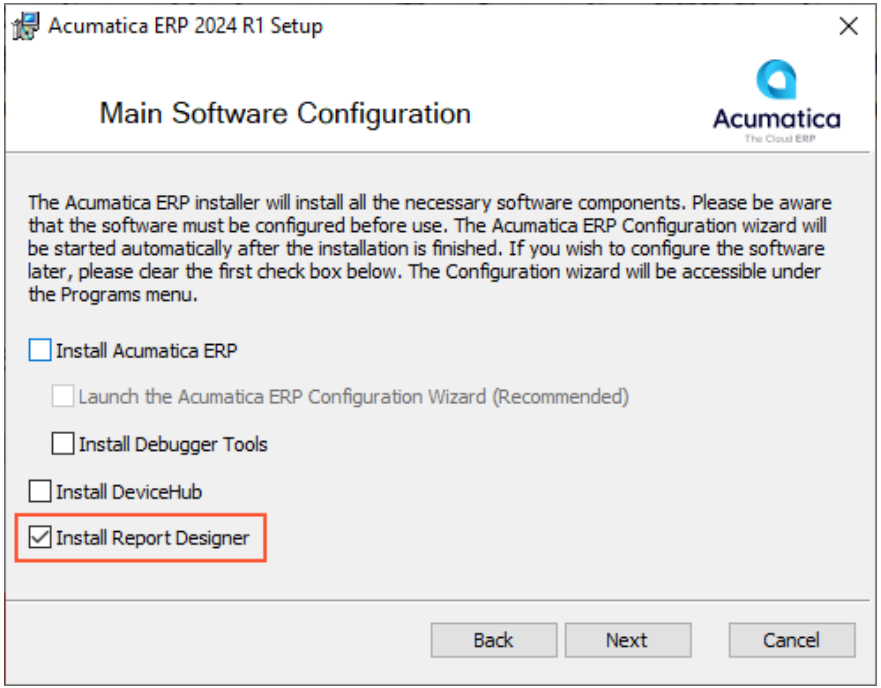
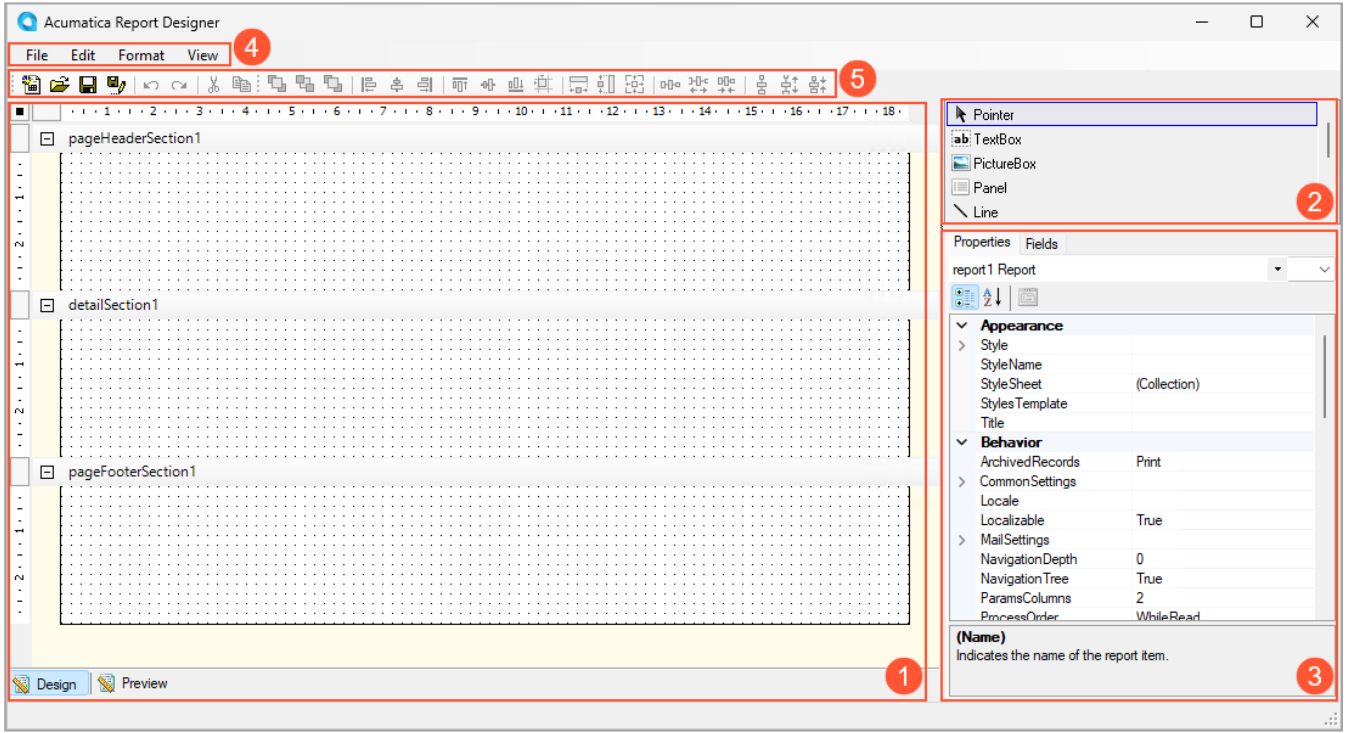


Figure: The main window of the Report Designer



Report Designer: To Install the Acumatica Report Designer

Story

Suppose that you are a technical specialist in your company who is working on customizations. An accountant of the company has requested a number of reports that are not among the predefined reports. To develop reports based on the data of Acumatica ERP, you have decided to use the Acumatica Report Designer, which is included in the Acumatica ERP installation package.

Lesson 2: Discovering DACs

Learning Objectives

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

- Inspect UI elements to find the underlying data fields.

DAC Discovery: General Information

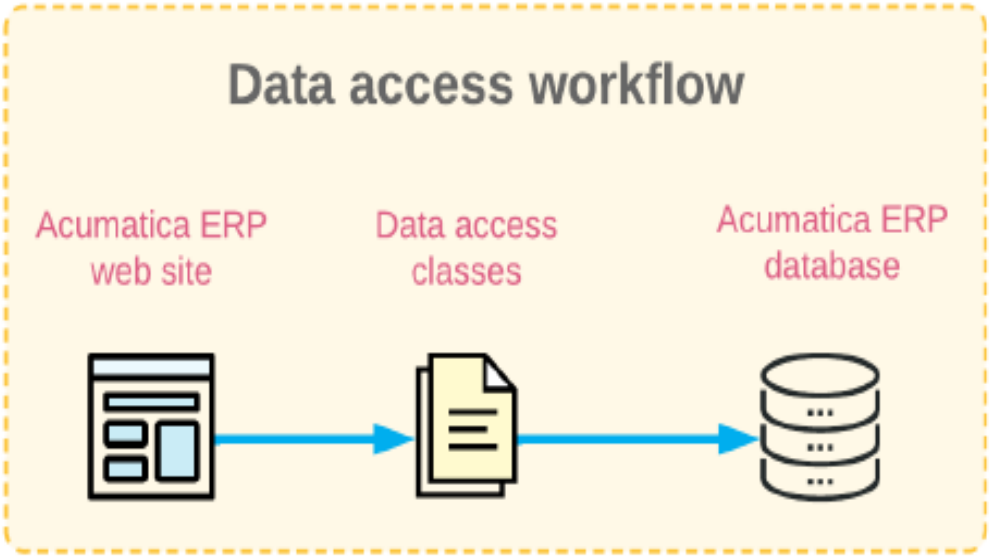


Figure: Form element inspection

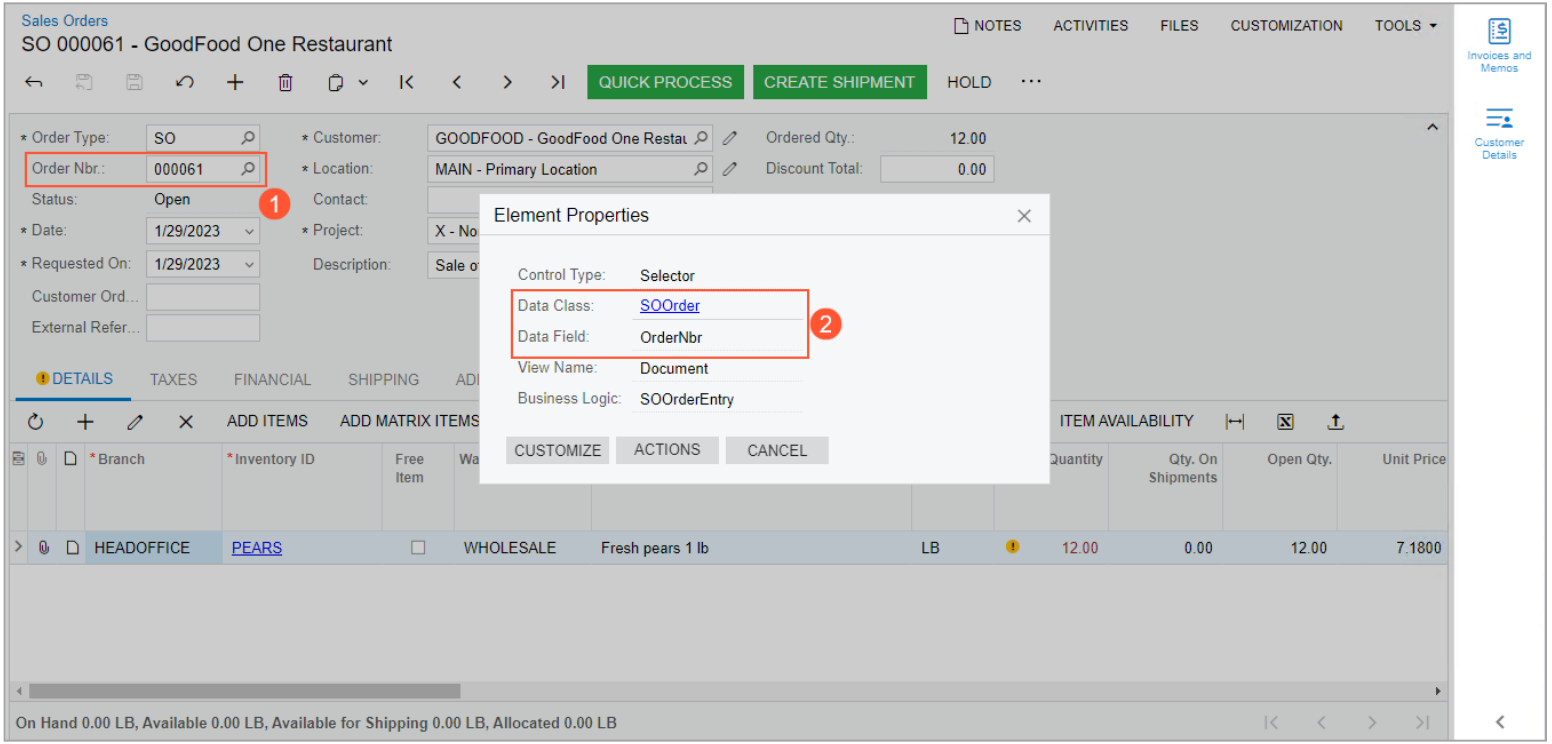


Figure: Inspection of a form element with a drop-down control

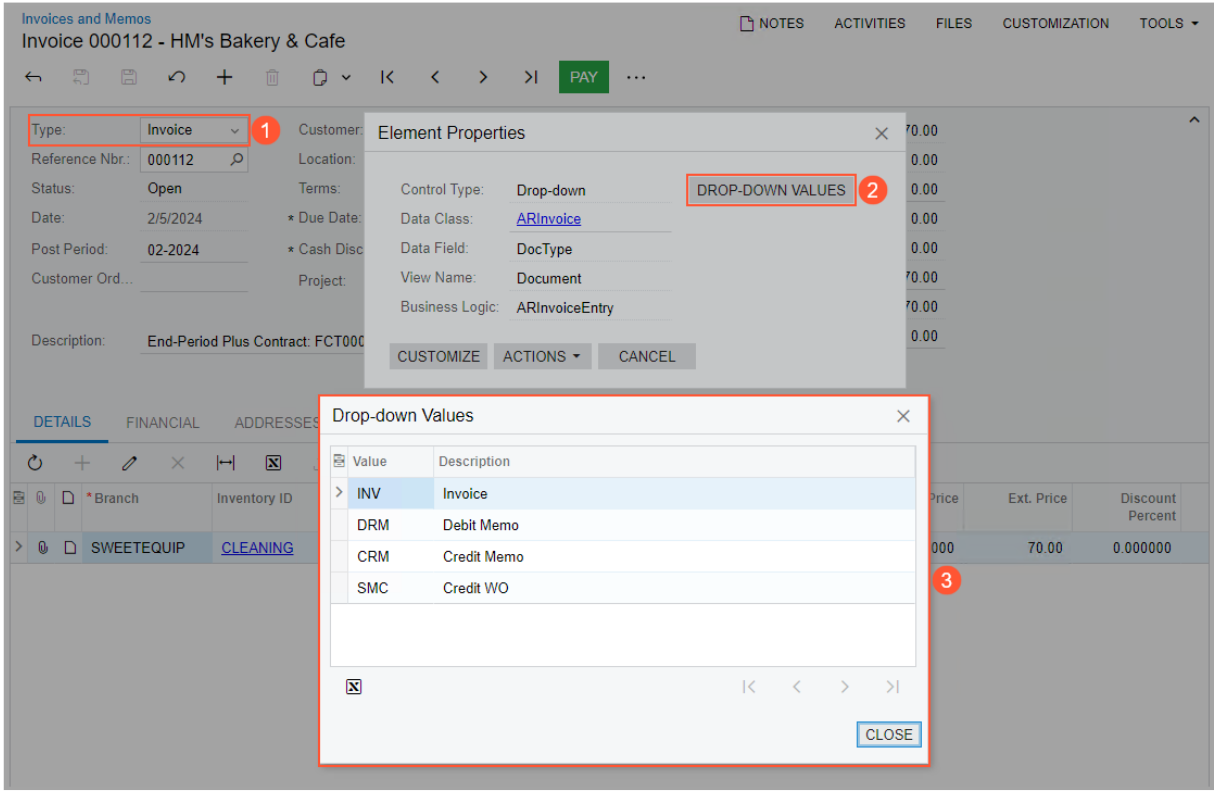


Figure: Form element inspection

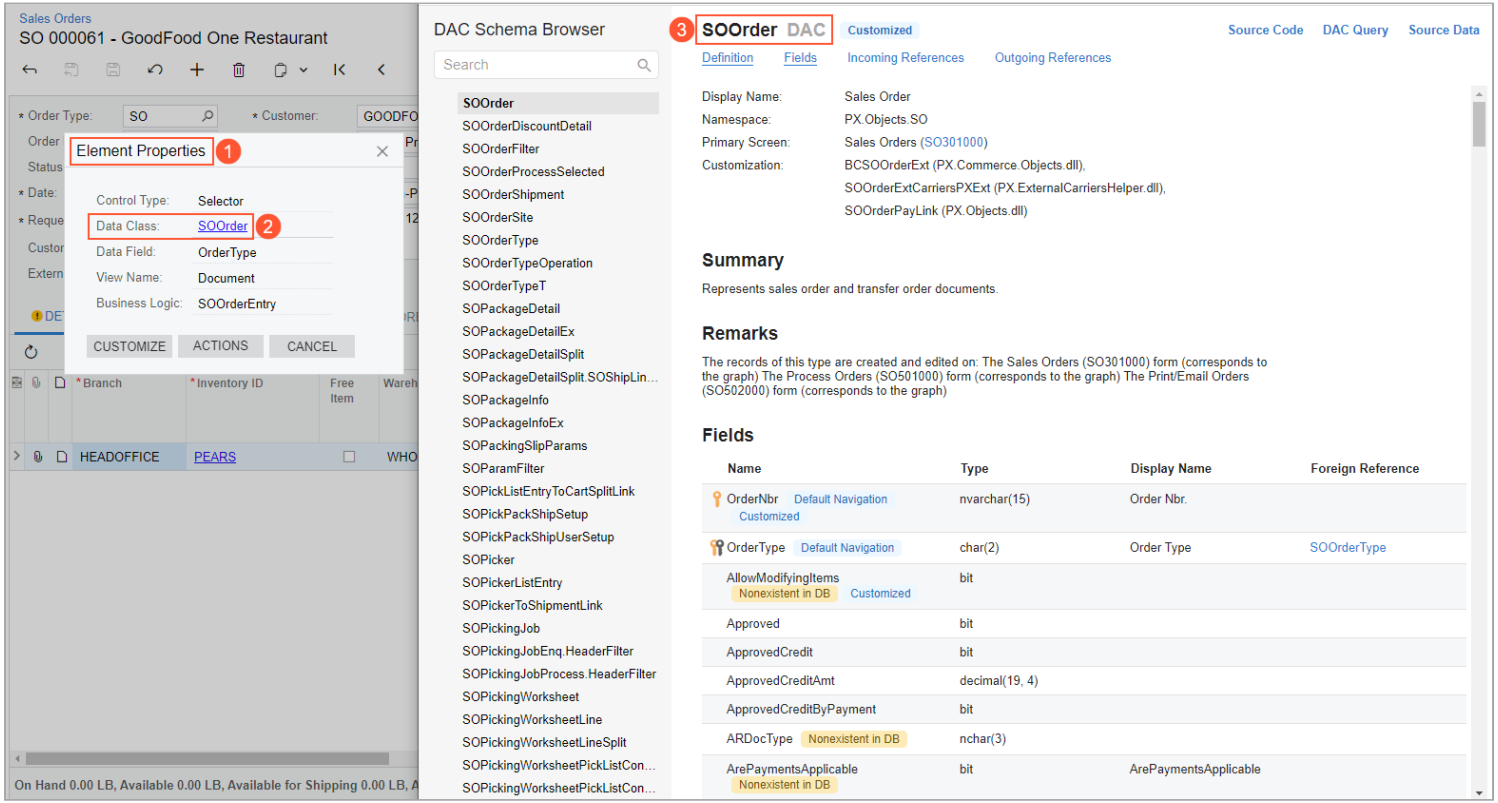


Figure: Form element inspection

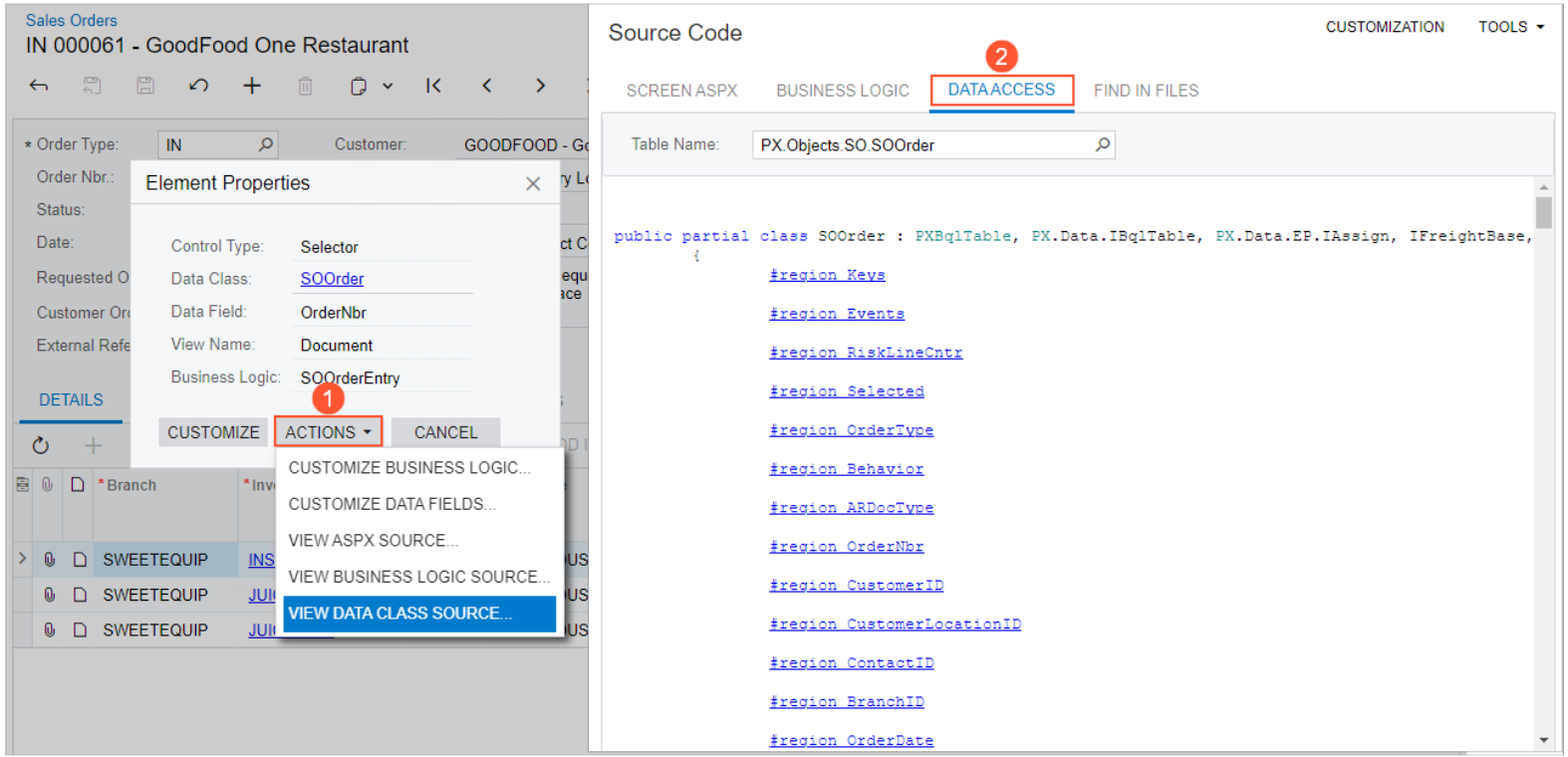


Figure: The list of data access classes and their aliases

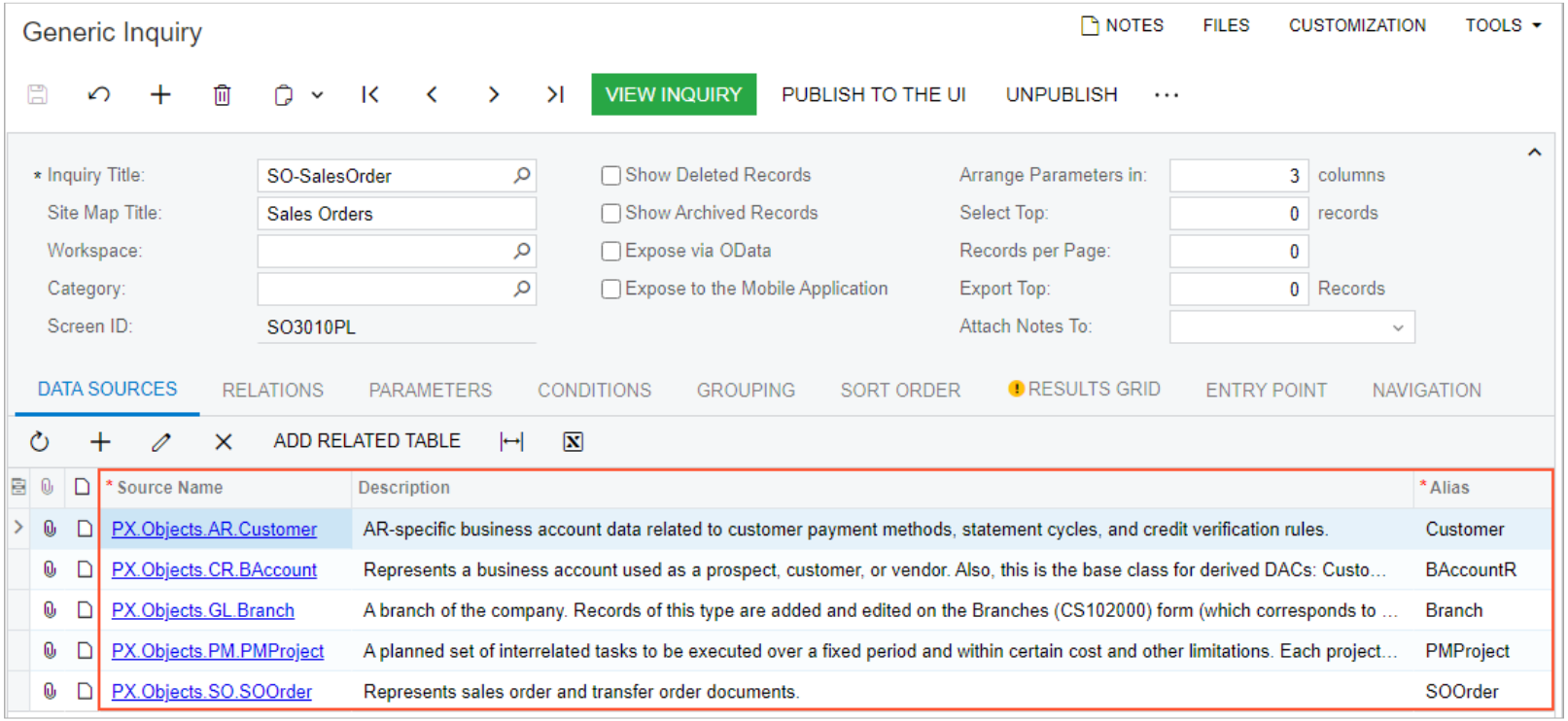
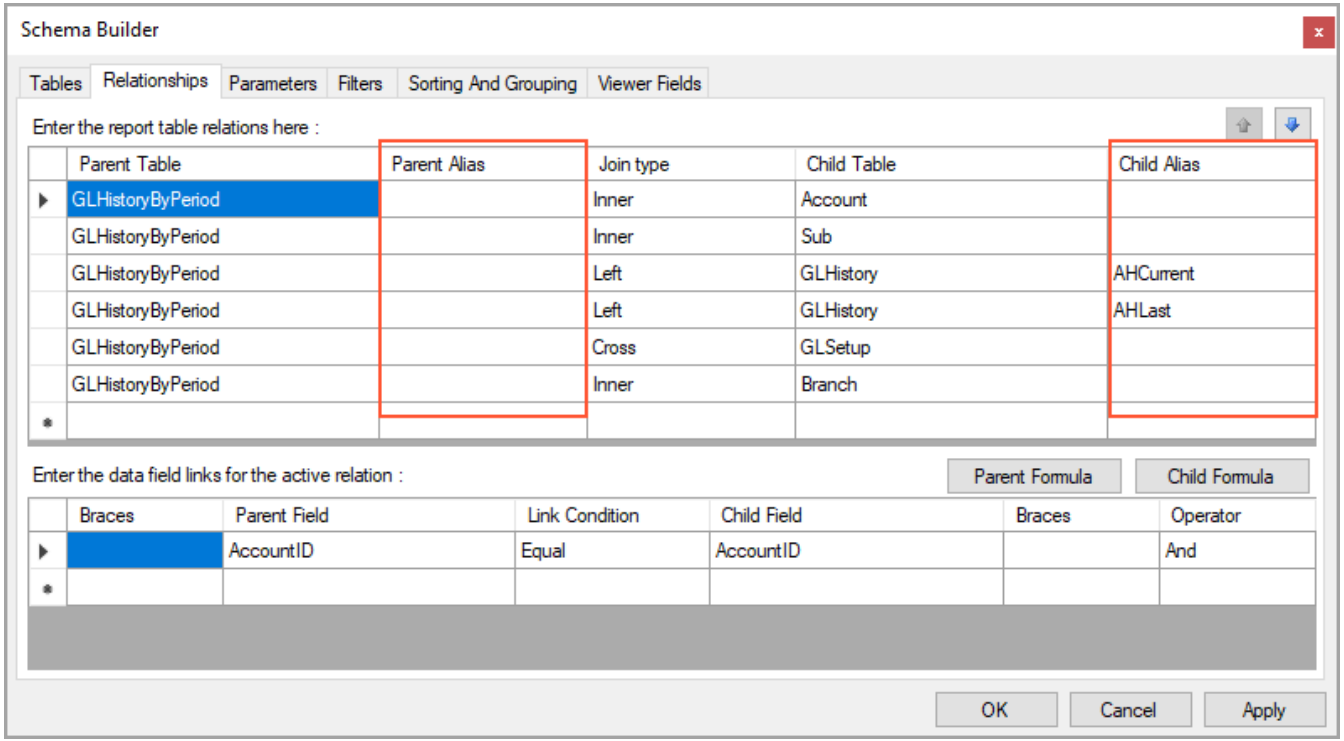


Figure: Aliases in the Schema Builder of the Report Designer



DAC Discovery: To Inspect UI Elements

Story

Suppose that you are a technical specialist in your company who is working on simple customizations. A sales representative has requested that you create a generic inquiry that lists sales orders. The inquiry should include the following data for each listed sales order: the sales order number, the order type, the status, the date, and the customer's name.

To get started in this effort, you need to inspect the relevant user interface elements on the Sales Orders (SO301000) form and the Customers (AR303000) form—the data entry forms on which sales orders and customers are created—in order to figure out which data access classes and data fields are related to them. (In this activity, you will only inspect the UI elements. You will not develop the generic inquiry.)

Lesson 3: Creating a Report

Learning Objectives

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

- Open and view an existing report
- Copy an existing report
- Create a report from scratch
- Update the database schema for reports
- Publish and view a report

Figure: Loading of the schema of the data access classes

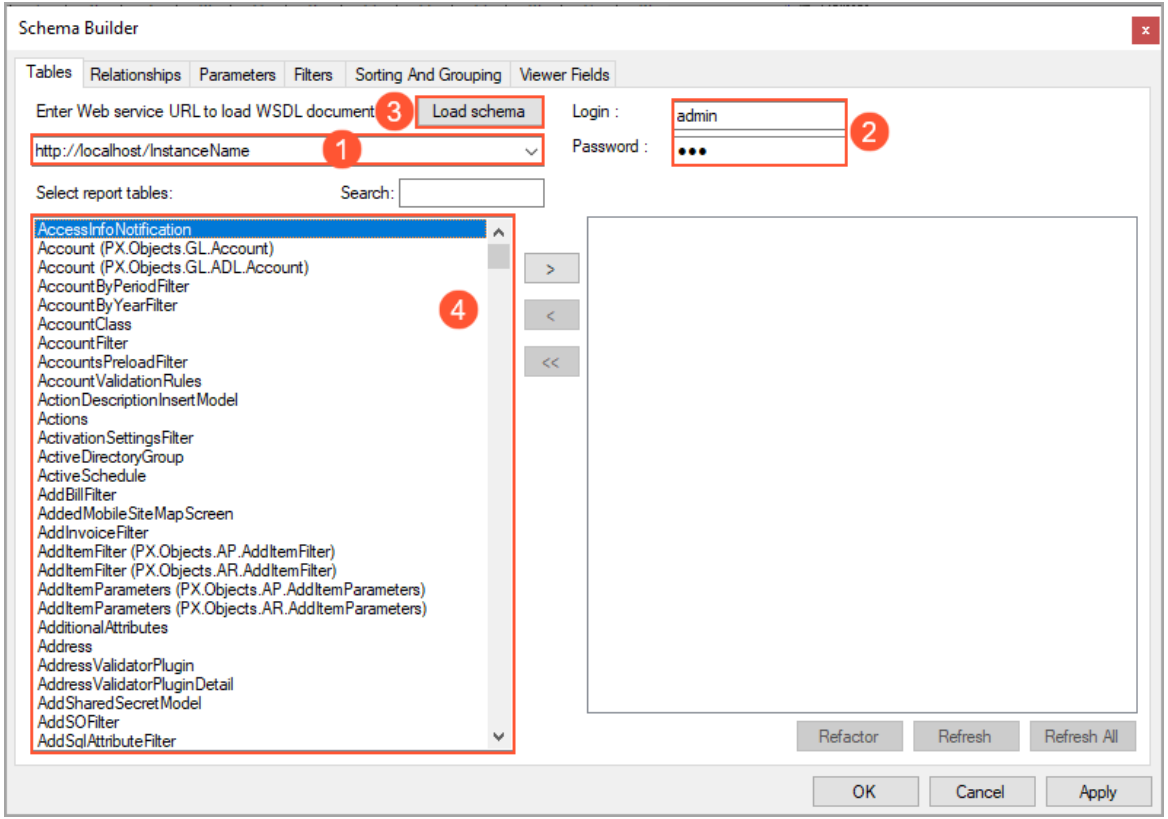


Figure: The Save Report on Server dialog box

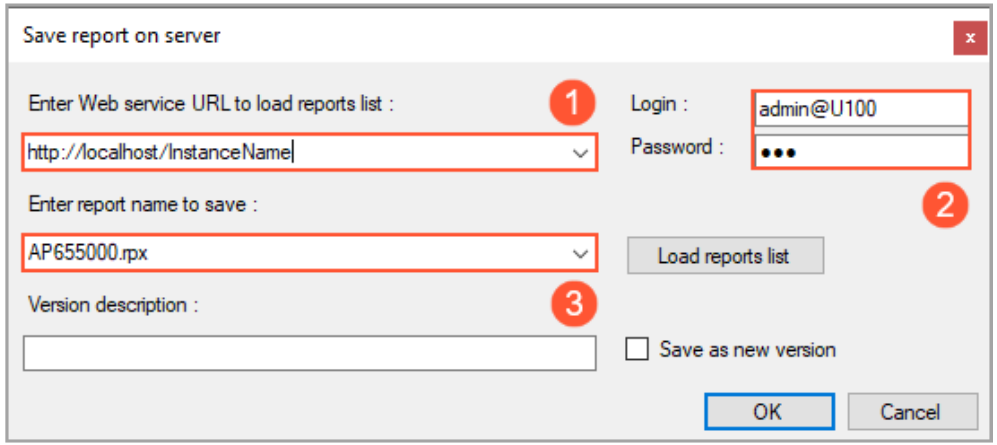


Figure: Sections of a report layout

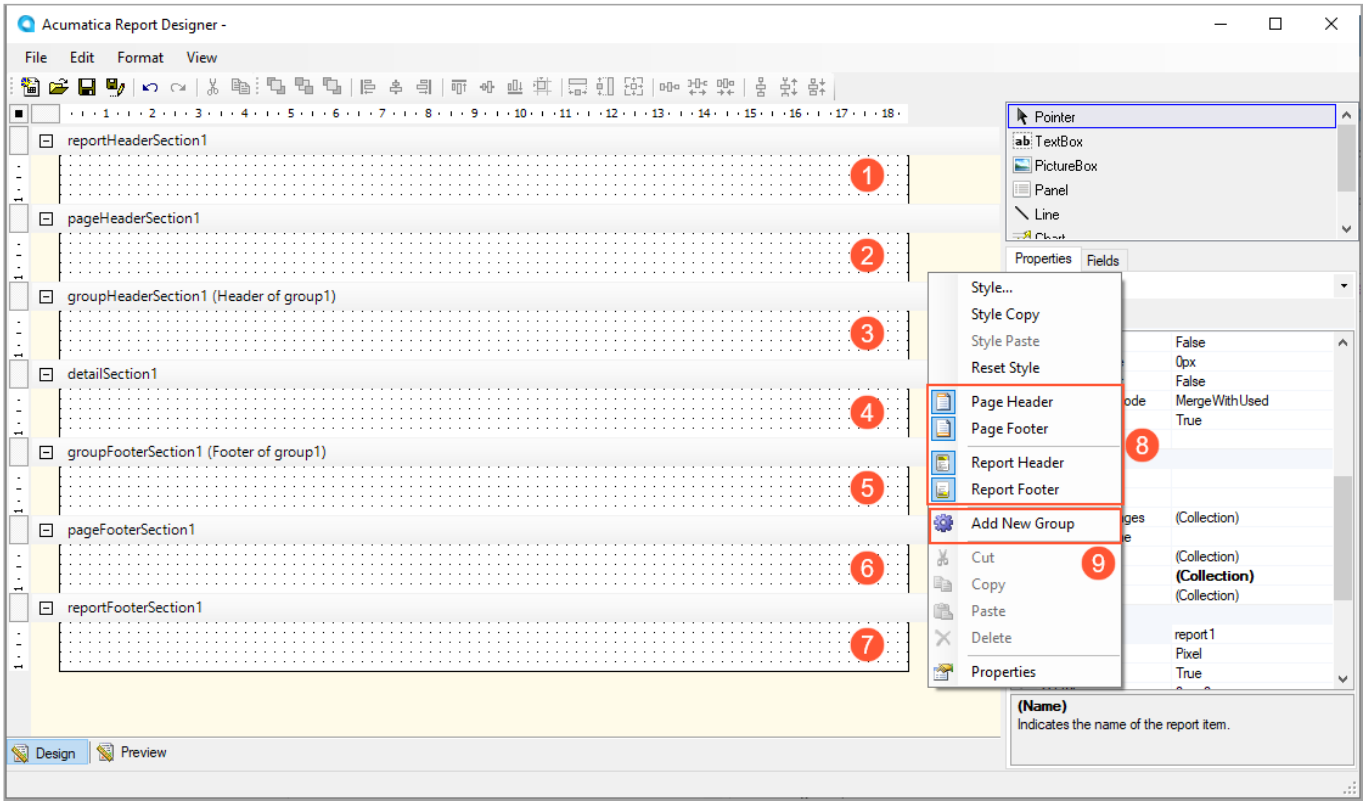


Figure: Deletion of a section

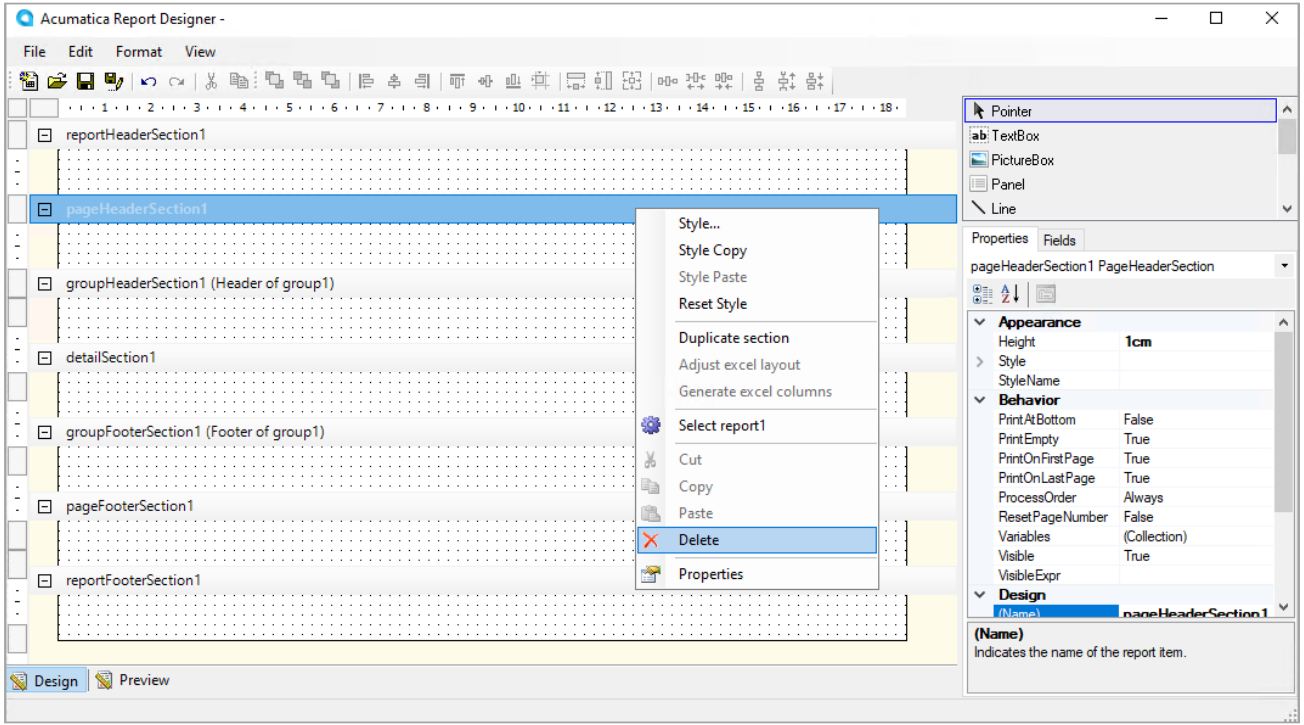


Figure: The buttons to update the database schema for a report

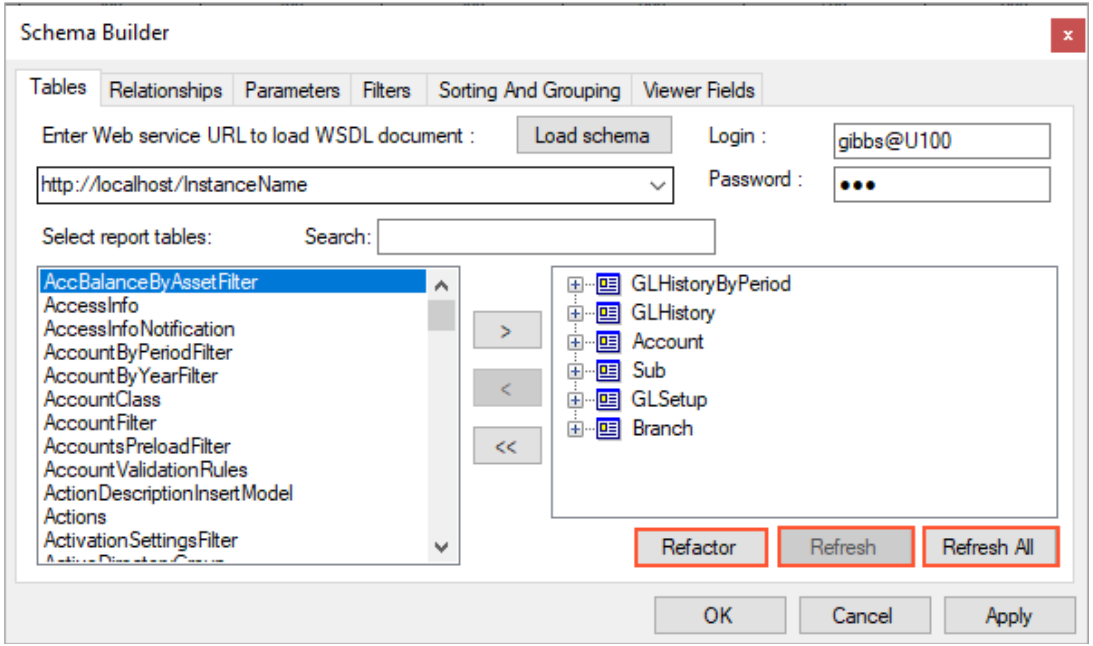


Figure: The ReportUpdater help information

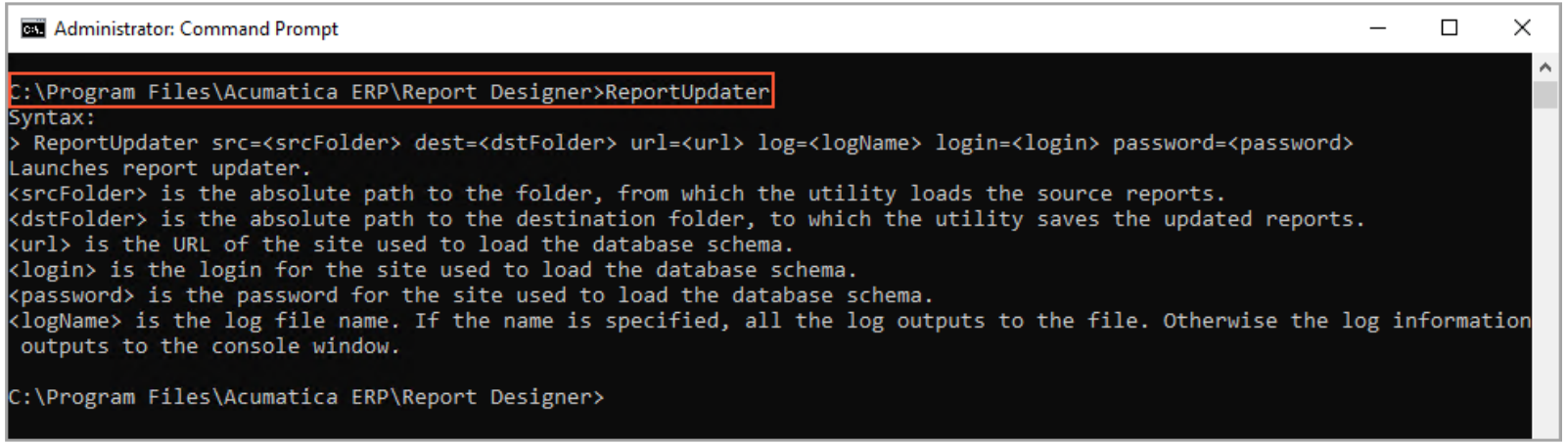
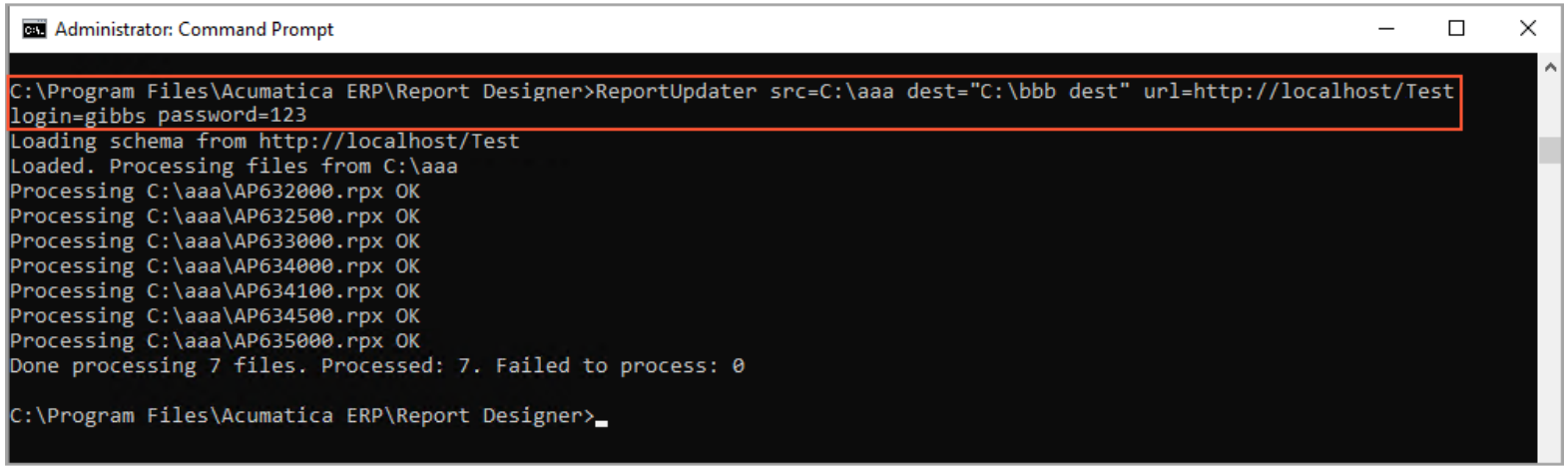


Figure: The ReportUpdater utility in use



Report Creation: To Copy an Existing Report

Story

Suppose that you are a technical specialist in your company, and you are working on customizations. An accountant of the company has requested a report that displays the AR register. You have offered the accountant to use the AR Register (AR621500) report, which is a predefined report in Acumatica ERP, but the accountant has asked for modifications to the report. You have decided to make a copy of the report and change the copy in the Report Designer rather than directly modifying the predefined report. As a first step, you will create and save the copy of the report.


Day 2
U.S. LBM
Acumatica
Mutual of Omaha
Jessica Korda
Acumatica Sponsored Professional Golfer

Report Creation: To Create a Report Based on One DAC

Story

Suppose that you are a technical specialist in your company who is working on simple customizations. An accountant of your company has requested a report that collects data about invoices and memos. The accountant wants a simple report that displays columns with the document type, the invoice reference number, and the balance of the invoice with that number.

Figure: The report designed to display data about invoices and memos

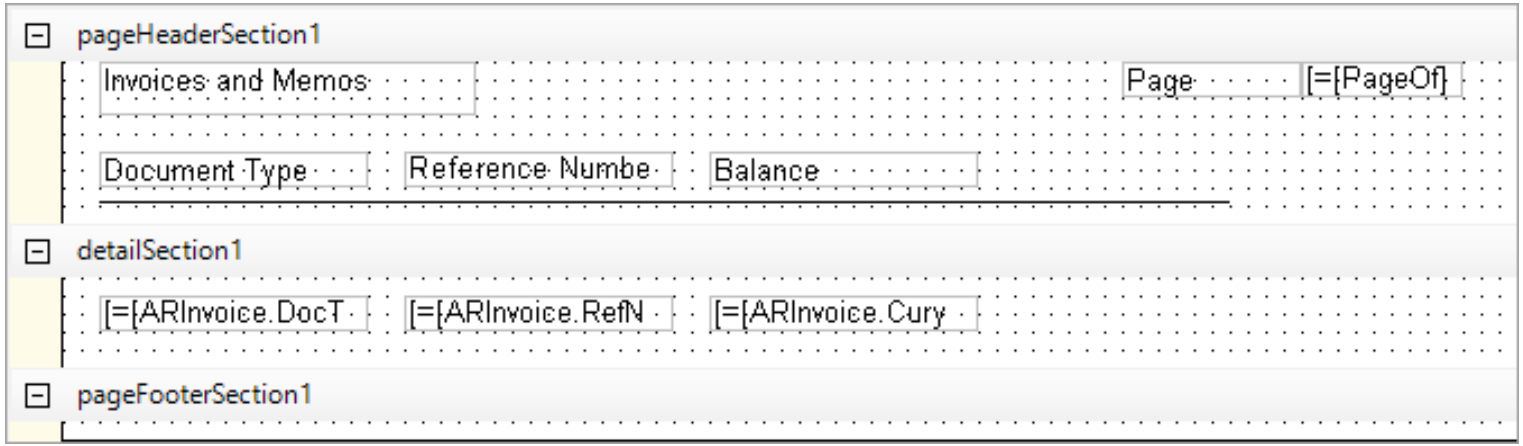


Figure: The resulting report displaying information about invoices and memos

Invoices and Memos Page 1 of 6

Document Type	Reference	Balance
Credit Memo	000000039	33.93
Credit Memo	000068	60.00
Credit Memo	000071	43.00
Credit Memo	000081	110.00
Invoice	000000001	0.00
Invoice	000000002	0.00
Invoice	000000003	0.00
Invoice	000000004	0.00
Invoice	000000005	0.00
Invoice	000000006	0.00
Invoice	000000007	0.00
Invoice	000000008	0.00
Invoice	000000009	0.00
Invoice	000000010	0.00
Invoice	000000011	0.00
Invoice	000000012	0.00
Invoice	000000013	0.00
Invoice	000000014	0.00
Invoice	000000015	0.00
Invoice	000000016	0.00
Invoice	000000017	0.00
Invoice	000000018	0.00
Invoice	000000019	0.00
Invoice	000000020	0.00
Invoice	000000021	0.00
Invoice	000000022	0.00

Lesson 4: Getting Data from Multiple DACs

Learning Objectives

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

- Construct a data request to retrieve data from multiple data access classes.

Figure: Data combined from two tables

SOOrder DAC

OrderType	OrderNbr	OrderDate	CustomerID	OrderQty	OrderTotal	Status
SO	000029	1/29/2019	20	20.00	56.45	Open
IN	000063	1/18/2019	19	1.00	4,100.00	Open
IN	000061	1/15/2019	17	2.00	6,700.00	Invoiced
IN	000059	1/9/2019	16	1.00	2,600.00	Open
IN	000057	1/7/2019	21	1.00	4,100.00	Open
SO	000028	1/24/2019	16	135.00	327.01	Invoiced
SO	000027	1/21/2019	17	92.00	210.66	Completed
SO	000026	1/17/2019	16	57.00	151.76	Completed
SO	000025	1/14/2019	17	157.00	382.23	Open
SO	000024	1/10/2019	16	129.00	316.25	Invoiced

Customer DAC

BAccountID	AcctCD	AcctName	Status	CustomerClassID	CreditLimit
19	COFFEESHOP	FourStar	Active	DEFAULT	0
17	GOODFOOD	GoodFood One	Active	DEFAULT	0
16	HMBAKERY	HM's Bakery &	Active	DEFAULT	0
18	LAKECAFE	Lake Cafe	Active	INTLCA	0
48	MORNINGCAF	Morning Cafe	Active	DEFAULT	0
20	RETSALE	Individual Client	Active	DEFAULT	0
21	TOMYUM	Thai Food	Active	DEFAULT	0

Combined Data From Both Tables

OrderType	OrderNbr	OrderDate	CustomerID	OrderQty	OrderTotal	Status	BAccountID	AcctCD	AcctName	Status	CustomerClassID	CreditLimit
SO	000029	1/29/2019	20	20.00	56.45	Open	20	RETSALE	Individual Client	Active	DEFAULT	0
IN	000063	1/18/2019	19	1.00	4,100.00	Open	19	COFFEESHOP	FourStar	Active	DEFAULT	0
IN	000061	1/15/2019	17	2.00	6,700.00	Invoiced	17	GOODFOOD	GoodFood One	Active	DEFAULT	0
IN	000059	1/9/2019	16	1.00	2,600.00	Open	16	HMBAKERY	HM's Bakery &	Active	DEFAULT	0
IN	000057	1/7/2019	21	1.00	4,100.00	Open	21	TOMYUM	Thai Food	Active	DEFAULT	0
SO	000028	1/24/2019	16	135.00	327.01	Invoiced	16	HMBAKERY	HM's Bakery &	Active	DEFAULT	0
SO	000027	1/21/2019	17	92.00	210.66	Completed	17	GOODFOOD	GoodFood One	Active	DEFAULT	0
SO	000026	1/17/2019	16	57.00	151.76	Completed	16	HMBAKERY	HM's Bakery &	Active	DEFAULT	0
SO	000025	1/14/2019	17	157.00	382.23	Open	17	GOODFOOD	GoodFood One	Active	DEFAULT	0
SO	000024	1/10/2019	16	129.00	316.25	Invoiced	16	HMBAKERY	HM's Bakery &	Active	DEFAULT	0

Figure: Details of the BranchID field

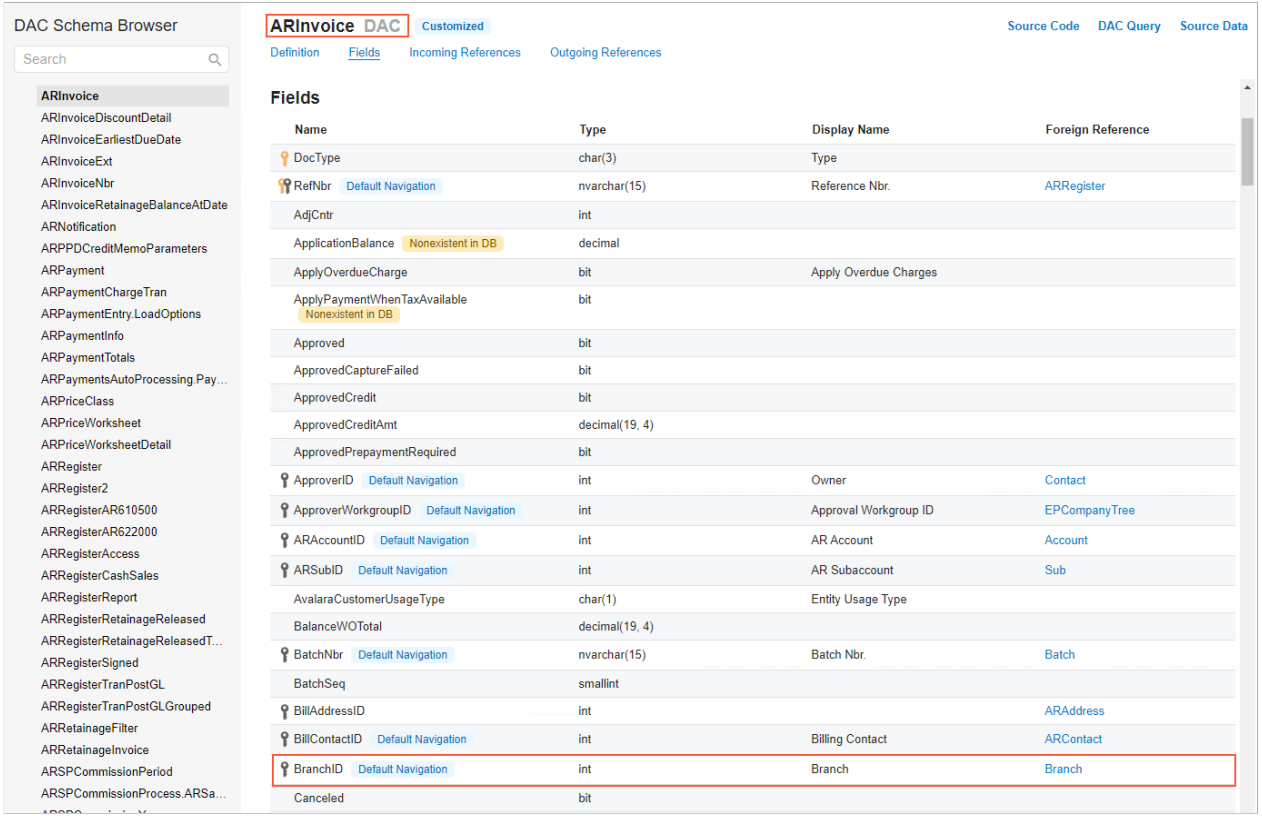


Figure: The information about the Branch DAC and its key field

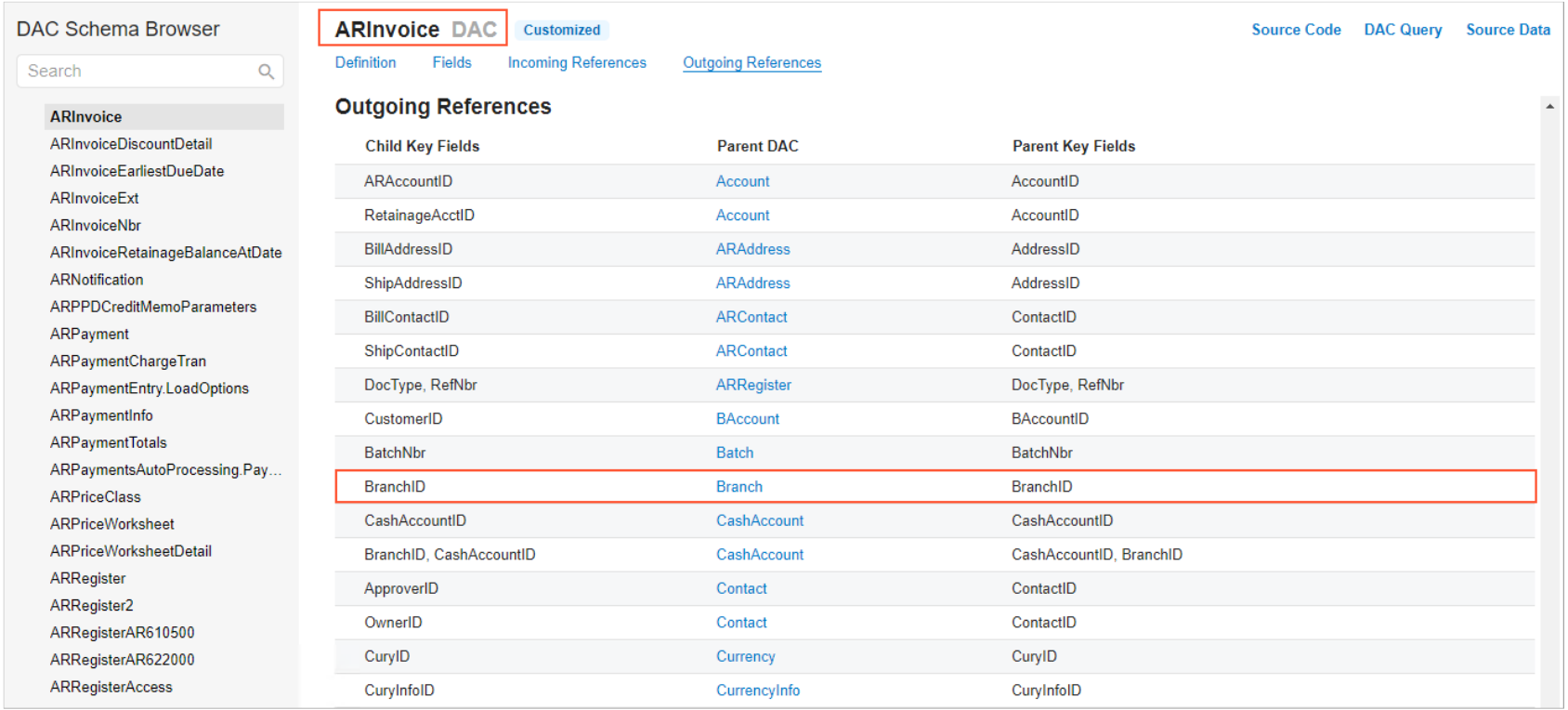


Figure: The information about BAccount DAC and its key field

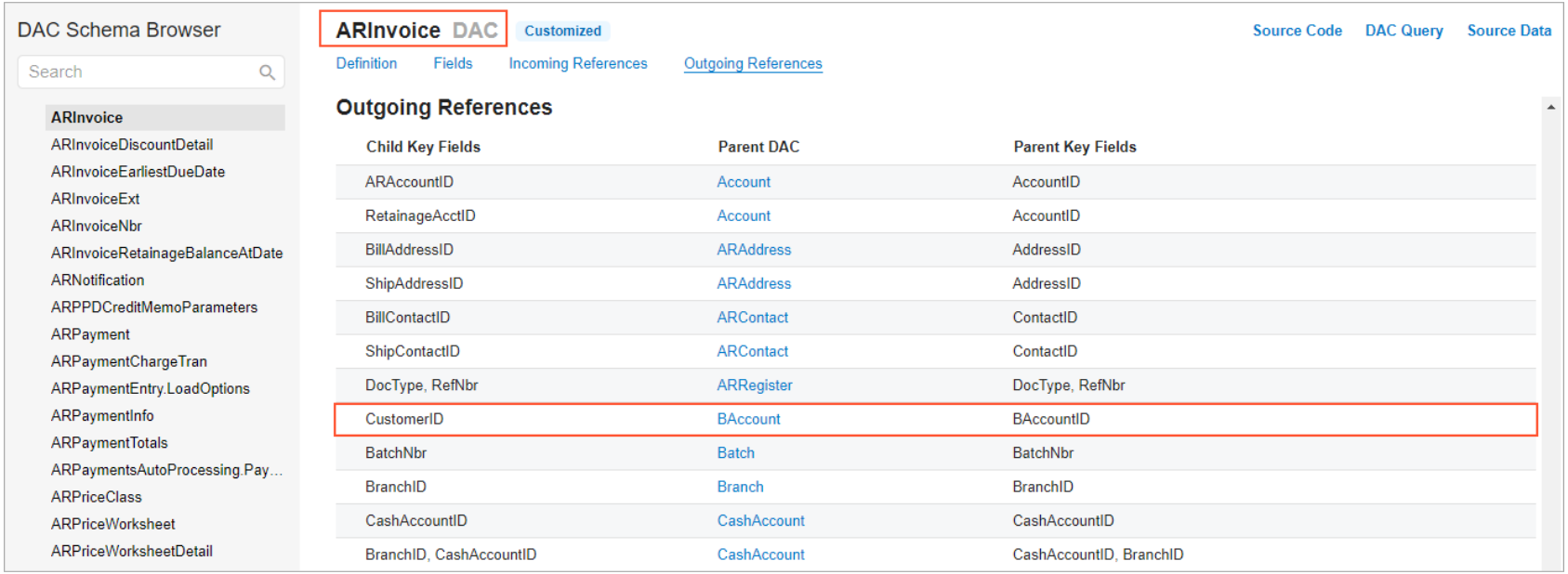
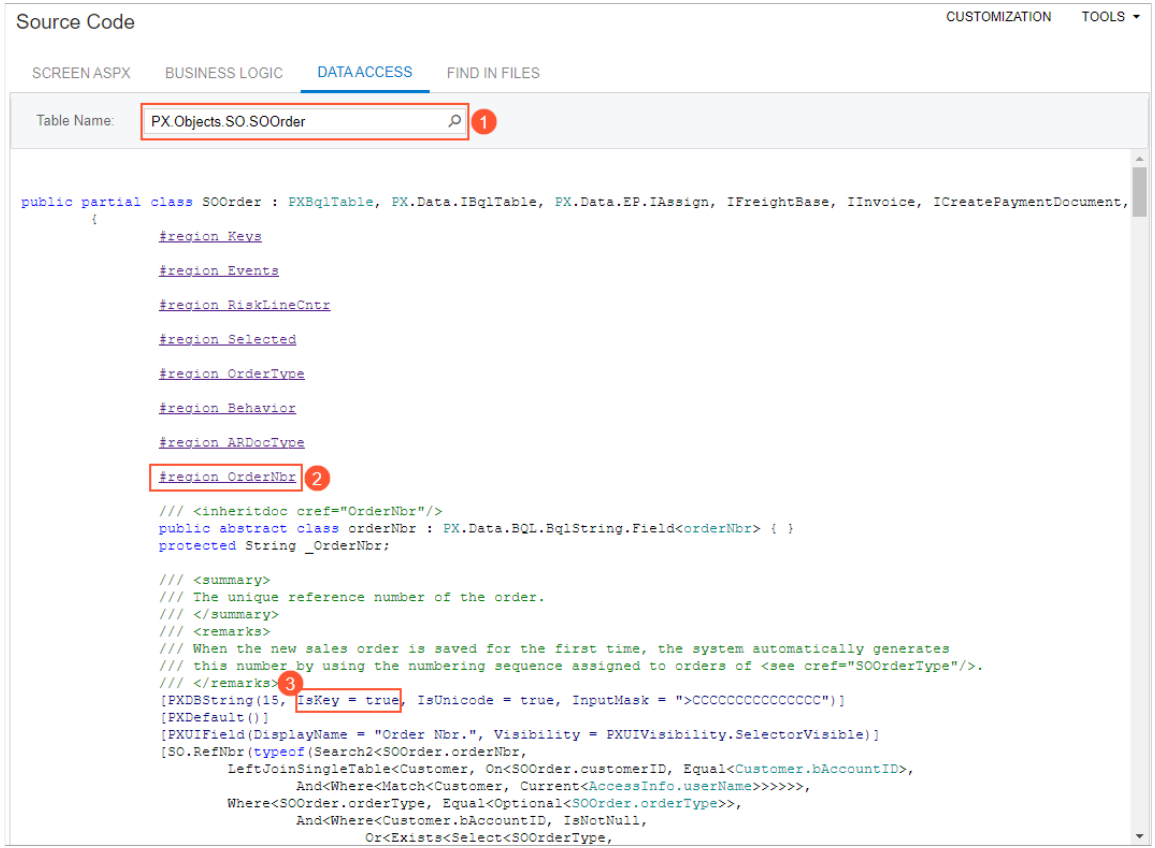


Figure: Exploration of a data access class on the Source Code form



Thank you!

Johans Saavedra