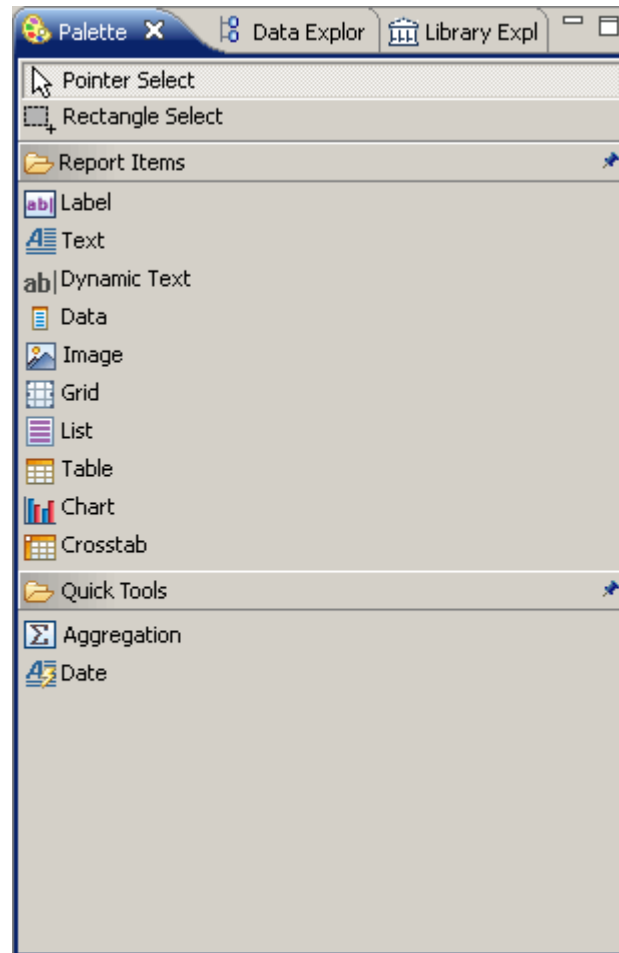


# Aggregation Builder

Scenario 1: Drag n Drop from Palette

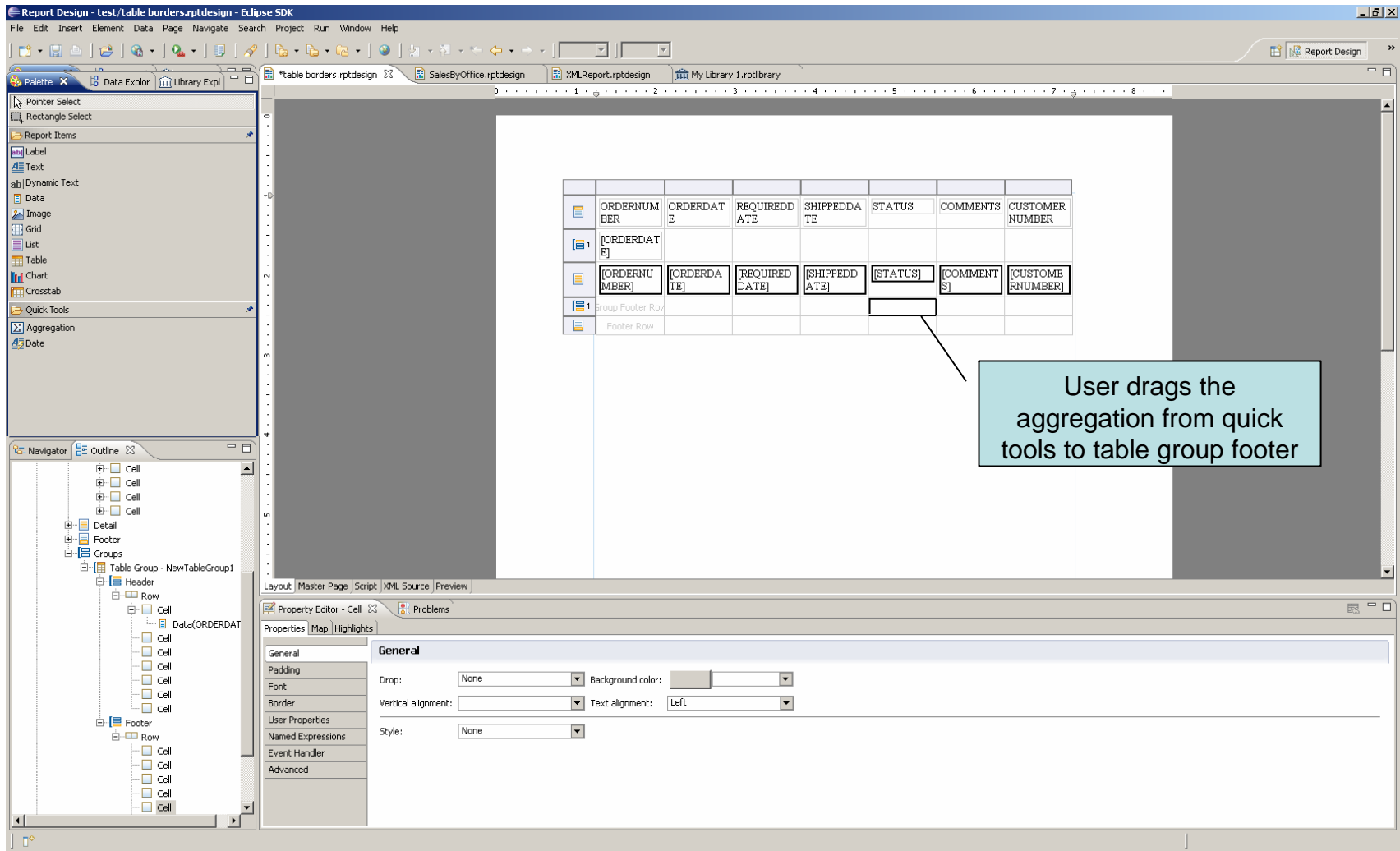
## Palette with Quick Tools



Note:

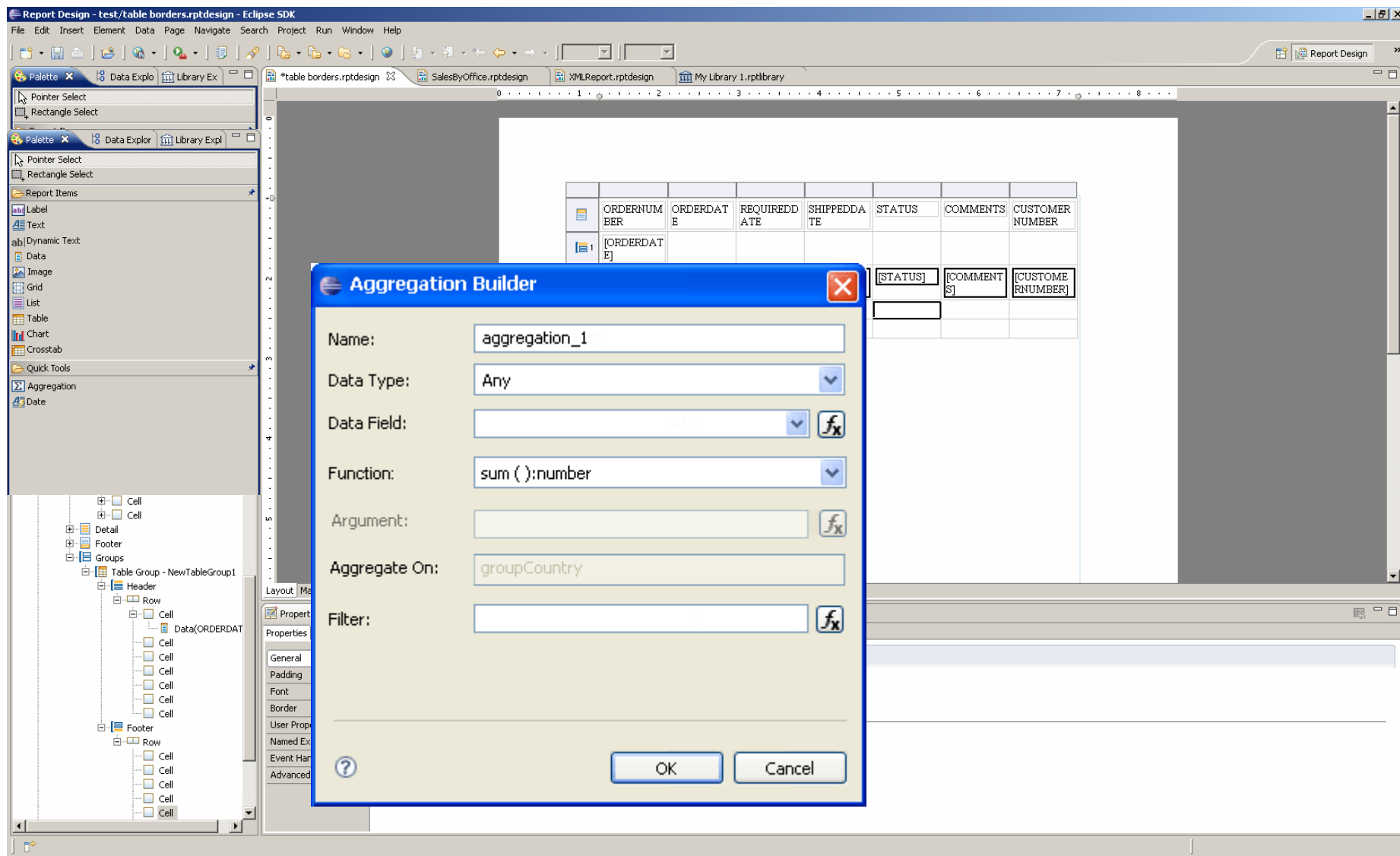
1. Quick Tools section is proposed in palette that will list quick functions.
2. Aggregation and Date are proposed functions under Quick tools.

# Dragging Aggregation from Quick Tools to Table Group “groupCountry” header



Note:

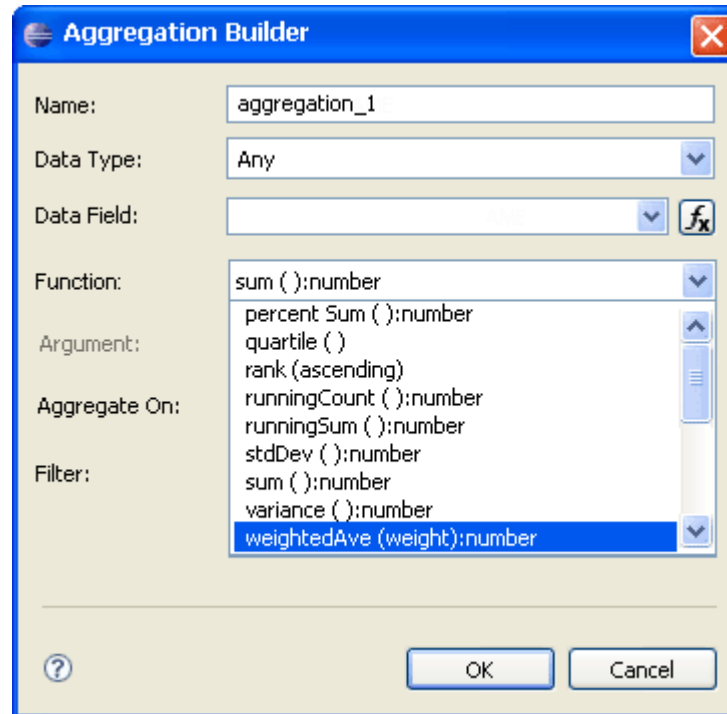
1. User Drags the Aggregation to Table group footer.



Note:

1. Aggregation dialog pops up.
2. Aggregate on is read only field as user drops the aggregation at a particular desired cell.
3. Default function is 'SUM' as it is most common used function.
4. As 'SUM' does not take any argument, 'Argument' fields will be disabled.

# Choosing function



The screenshot shows a dialog box titled "Aggregation Builder" with a blue header bar and a red close button. The dialog contains several fields and a list of functions:

- Name:** A text box containing "aggregation\_1".
- Data Type:** A dropdown menu showing "Any".
- Data Field:** A dropdown menu (currently empty) and a button with a function icon (fx).
- Function:** A dropdown menu showing "sum ( ):number".
- Argument:** A text box (currently empty).
- Aggregate On:** A text box (currently empty).
- Filter:** A text box (currently empty).

A list of functions is displayed in a scrollable area, with "weightedAve (weight):number" selected and highlighted in blue. The list includes:

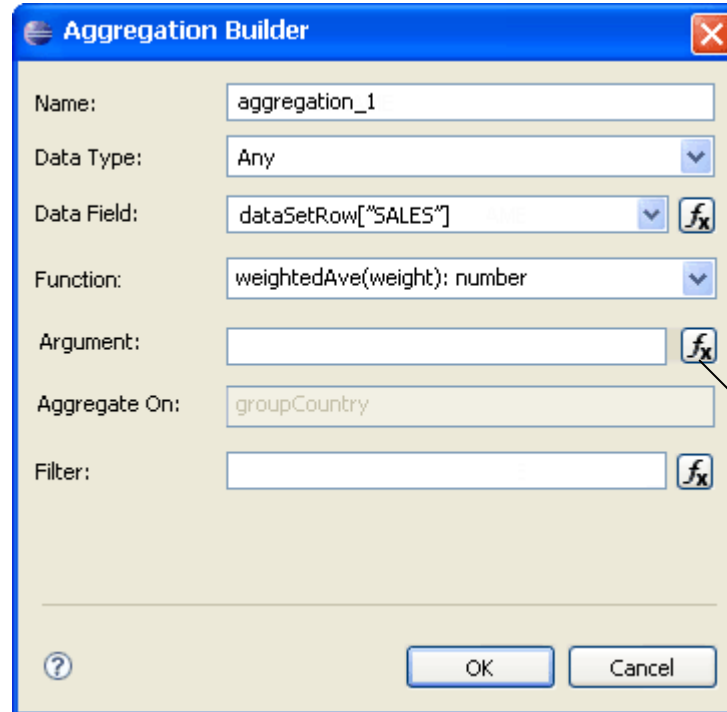
- sum ( ):number
- percent Sum ( ):number
- quartile ( )
- rank (ascending)
- runningCount ( ):number
- runningSum ( ):number
- stdDev ( ):number
- sum ( ):number
- variance ( ):number
- weightedAve (weight):number

At the bottom of the dialog, there is a help button (question mark icon), an "OK" button, and a "Cancel" button.

Note:

1. Function Drop Down will list all the available functions from BIRT Functions: Totals

# Argument



The screenshot shows the 'Aggregation Builder' dialog box with the following fields and values:

- Name: aggregation\_1
- Data Type: Any
- Data Field: dataSetRow["SALES"]
- Function: weightedAve(weight): number
- Argument: (empty field)
- Aggregate On: groupCountry
- Filter: (empty field)

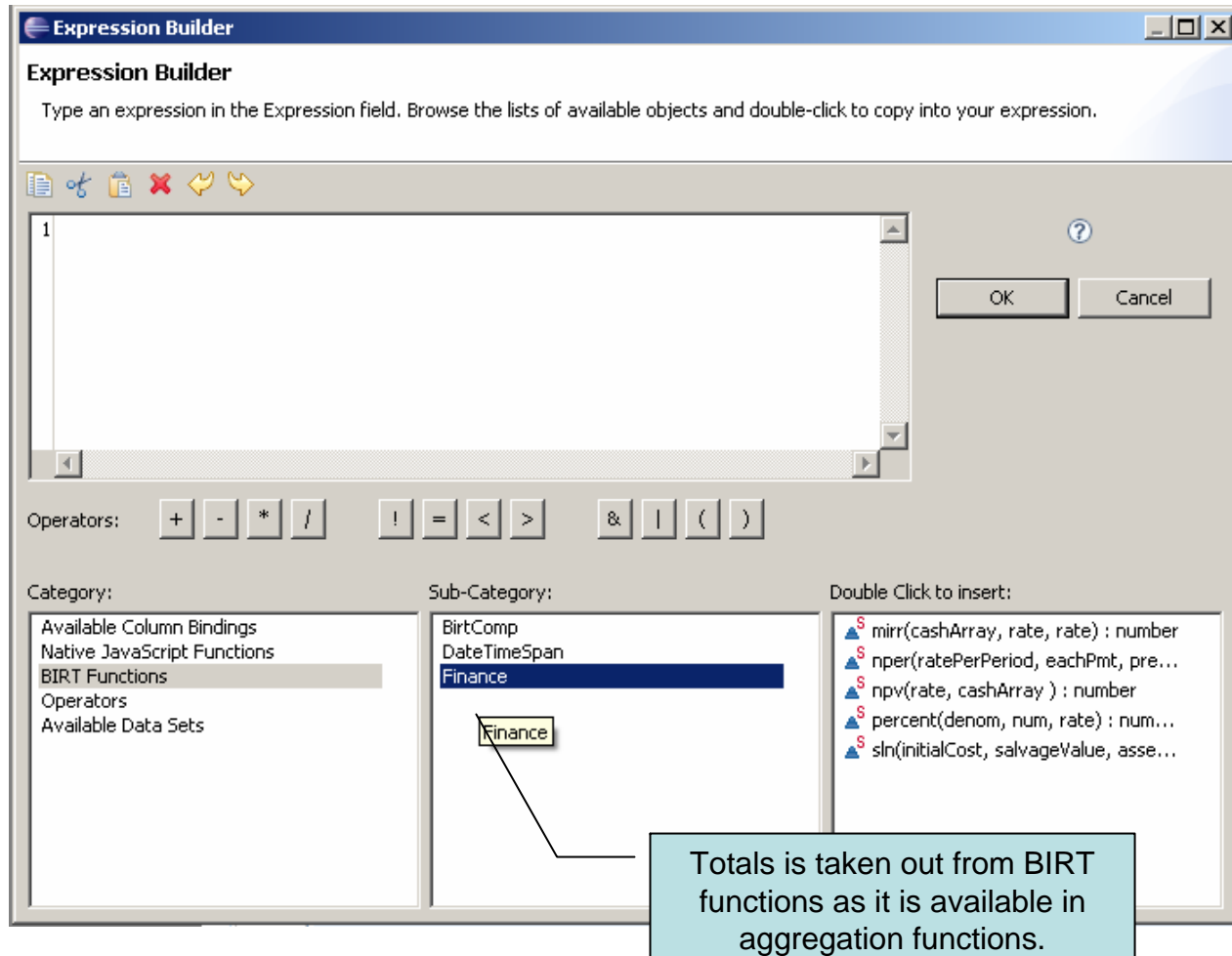
Each field has a small 'fx' button to its right. The 'Argument' field's 'fx' button is highlighted with a callout box.

Clicking on "fx" button will open expression builder to give argument if applicable

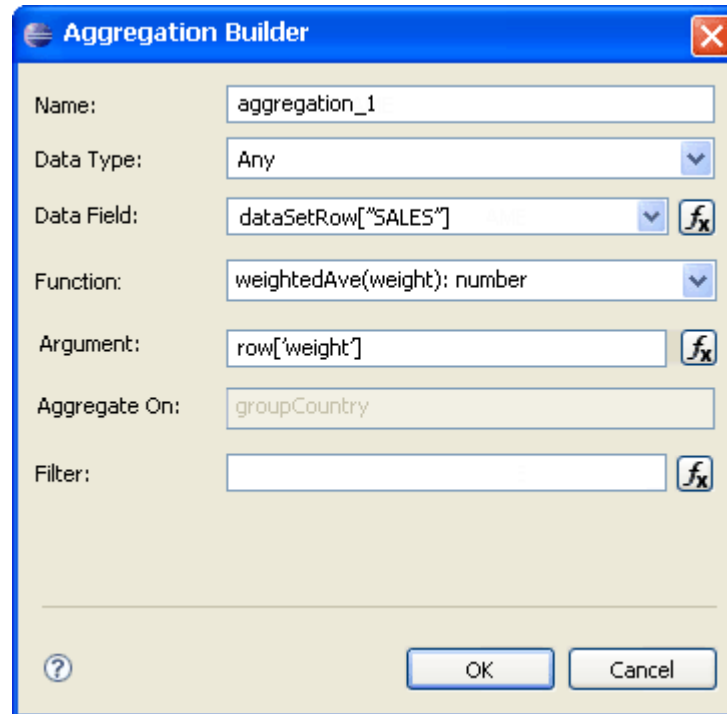
Note:

1. If the selected functions can have an argument, 'Argument' field will be available.

# Expression Builder



## Dialog having the argument



The image shows a software dialog box titled "Aggregation Builder". It contains several input fields for configuring an aggregation. The fields are: "Name" with the value "aggregation\_1"; "Data Type" with a dropdown menu showing "Any"; "Data Field" with a dropdown menu showing "dataSetRow['SALES']" and a function icon; "Function" with a dropdown menu showing "weightedAve(weight): number"; "Argument" with a text field containing "row['weight']" and a function icon; "Aggregate On" with a text field containing "groupCountry"; and "Filter" with an empty text field and a function icon. At the bottom, there is a help icon (question mark), an "OK" button, and a "Cancel" button.

Name:	aggregation_1
Data Type:	Any
Data Field:	dataSetRow["SALES"]
Function:	weightedAve(weight): number
Argument:	row['weight']
Aggregate On:	groupCountry
Filter:	

Buttons: ? OK Cancel



## Sample Report Design after Aggregation

The screenshot shows a report design tool interface with a table design. The table has 8 columns: ORDERNUMBER, ORDERDATE, REQUIREDDATE, SHIPPEDDATE, STATUS, COMMENTS, and CUSTOMER NUMBER. The design includes a header row, a group footer row, and a footer row. The group footer row contains aggregation symbols (Σ) for the STATUS, COMMENTS, and CUSTOMER NUMBER columns, with the label 'Aggreg' next to the first symbol. A callout box points to this label with the text: 'Aggregation defined is represented by the symbol and given name'.

	ORDERNUMBER	ORDERDATE	REQUIREDDATE	SHIPPEDDATE	STATUS	COMMENTS	CUSTOMER NUMBER
	[ORDERDATE]						
	[ORDERNUMBER]	[ORDERDATE]	[REQUIREDDATE]	[SHIPPEDDATE]	[STATUS]	[COMMENTS]	[CUSTOMER NUMBER]
Group Footer Row					Σ Aggreg		
Footer Row							

Aggregation defined is represented by the symbol and given name

## Scenario 2: Editing Aggregation

table borders.rptdesign   SalesbyOffice.rptdesign   JMLReport.rptdesign   My Library 1.rptlibrary

0 1 2 3 4 5 6 7 8

	ORDERNUM BER	ORDERDAT E	REQUIRED ATE	SHEPPEDDA TE	STATUS	COMMENTS	CUSTOMER NUMBER
	[ORDERDAT E]						
	[ORDERNU MBER]	[ORDERDA TE]	[REQUIRED DATE]	[SHIPPEDD ATE]	[STATUS]	[COMMENT S]	[CUSTOME RNUMBER]
	Group Footer Row				Σ Aggreg		
	Footer Row						

Layout   Master Page   Script   JML Source   Preview

Double clicking the cell will open the aggregation dialog

table borders.rptdesign SalesbyOffice.rptdesign JMLReport.rptdesign My Library 1.rptlibrary

0 1 2 3 4 5 6 7 8

	ORDERNUM BER	ORDERDAT E	REQUIRED ATE	SHEFFEDDA TE	STATUS	COMMENTS	CUSTOMER NUMBER
	[ORDERDAT E]						
	[ORDERNU BER]	[ORDERDA TE]	[REQUIRED ATE]	[SHEPDED DATE]	[STATUS]	[COMMENT S]	[CUSTOME RNUMBER]
					Σ Aggreg		

Layout Master Page Script 100% Source

**Aggregation Builder**

Name: aggregation\_1

Data Type: Any

Data Field: dataSetRow["SALES"]

Function: weightedAve(weight): number

Argument: row['weight']

Aggregate On: groupCountry

Filter:

OK Cancel

### Scenario 3: Enhancements to Data Binding UI

# Property Editor - Binding

Property Editor - Table x Problems

Properties Binding Sorting Groups Map Highlights Filters

Data Set: Data Set Dataset Parameter Binding...

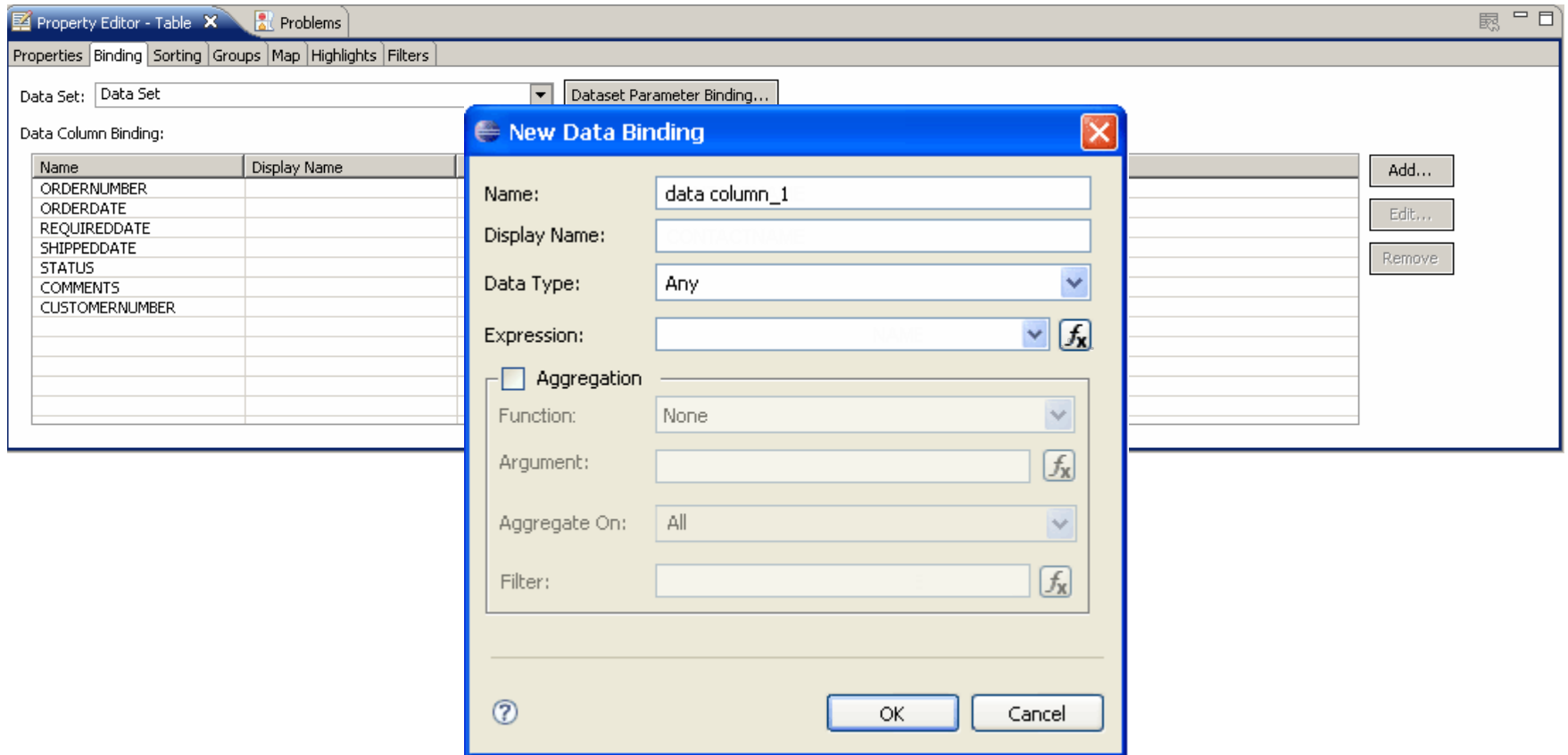
Data Column Binding:

Name	Display Name	Data Type	Expression	Aggregate On
ORDERNUMBER		Integer	dataSetRow["ORDERNUM...	N/A
ORDERDATE		Date	dataSetRow["ORDERDATE"]	N/A
REQUIREDDATE		Date	dataSetRow["REQUIREDD...	N/A
SHIPPEDDATE		Date	dataSetRow["SHIPPEDDA...	N/A
STATUS		String	dataSetRow["STATUS"]	N/A
COMMENTS		String	dataSetRow["COMMENTS"]	N/A
CUSTOMERNUMBER		Integer	dataSetRow["CUSTOMER...	N/A

Add... Edit... Remove

Clicking on Add will open Data Binding dialog

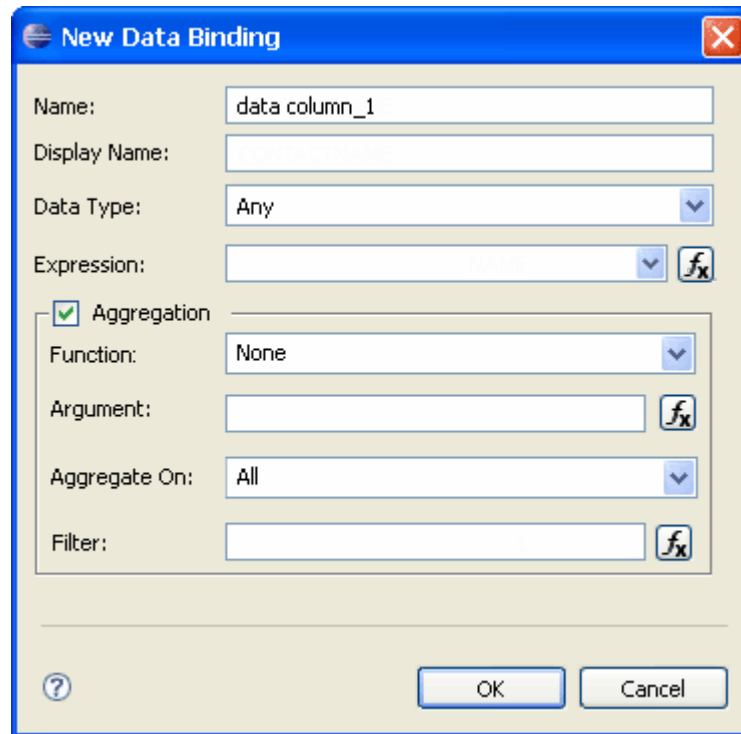
# Data Binding Dialog



## Note:

1. When clicked on 'Add' at data binding properties, the dialog will also have a display name in addition to aggregation dialog.
2. All Aggregation related fields are under 'Aggregation' checkbox, and disabled by default.
3. Default value for function=none; Aggregate On=All

## Select Aggregation



The image shows a 'New Data Binding' dialog box with a blue title bar and a close button. It contains several input fields and a section for aggregation. The 'Name' field is set to 'data column\_1'. The 'Data Type' is set to 'Any'. The 'Expression' field is empty with a function icon. The 'Aggregation' section is checked, and the 'Function' is set to 'None'. The 'Argument' and 'Filter' fields are empty with function icons. The 'Aggregate On' dropdown is set to 'All'. At the bottom, there is a help icon, 'OK', and 'Cancel' buttons.

**New Data Binding**

Name: data column\_1

Display Name:

Data Type: Any

Expression:

☒ Aggregation

Function: None

Argument:

Aggregate On: All

Filter:

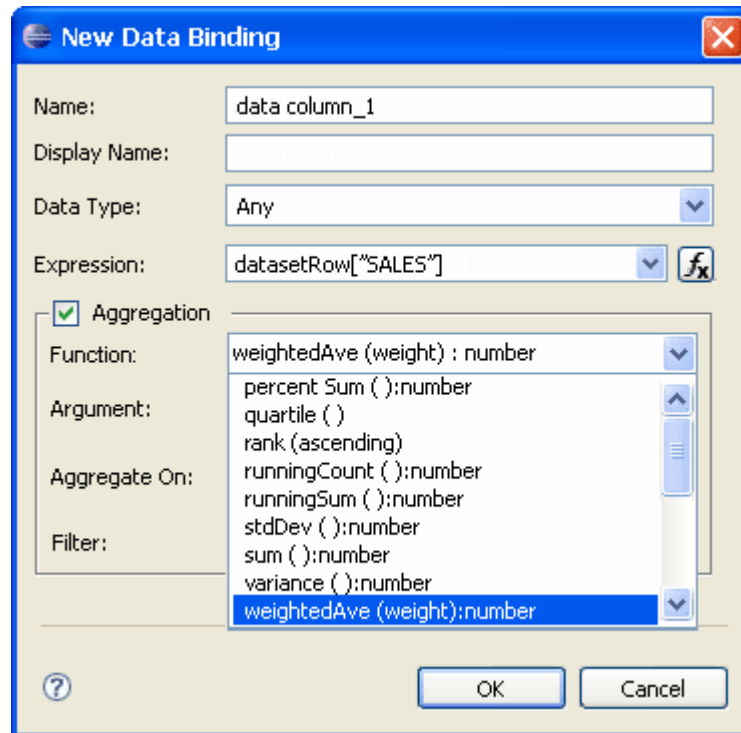
OK Cancel

Note:

1. To define aggregation under data binding, user has to check the aggregation



# Select Function



The image shows a 'New Data Binding' dialog box with a blue title bar and a close button. It contains several input fields and a list of aggregation functions.

**Name:** data column\_1

**Display Name:**

**Data Type:** Any

**Expression:** datasetRow["SALES"]

☒ Aggregation

**Function:** weightedAve (weight) : number

**Argument:** percent Sum ( ):number  
quartile ( )  
rank (ascending)

**Aggregate On:** runningCount ( ):number  
runningSum ( ):number  
stdDev ( ):number  
sum ( ):number  
variance ( ):number  
weightedAve (weight):number

**Filter:**

Buttons: ? OK Cancel

## Giving an Argument

**New Data Binding**

Name: data column\_1

Display Name:

Data Type: Any

Expression: datasetRow["SALES"]

☒ Aggregation

Function: weightedAve (weight) : number

Argument:

Aggregate On: All

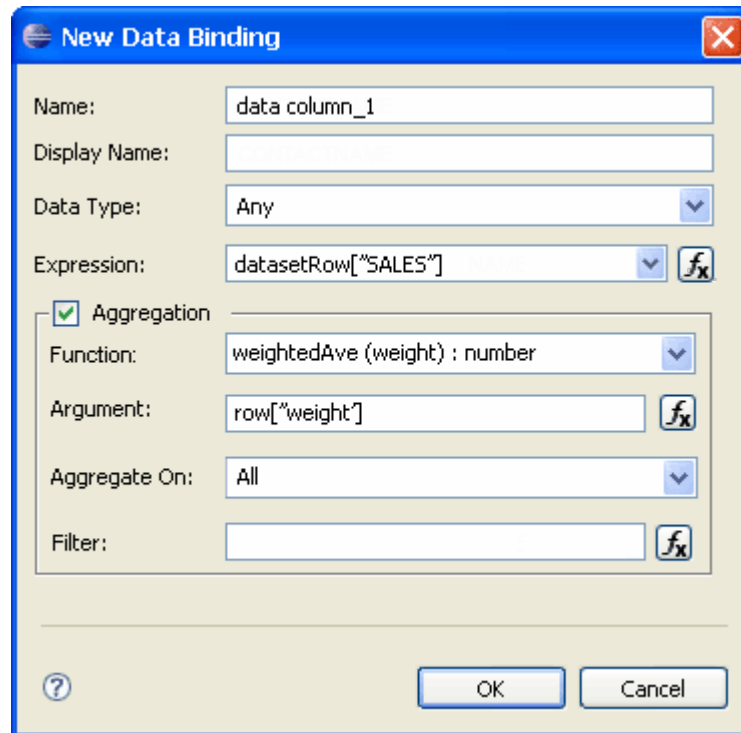
Filter:

OK Cancel

An argument can  
also be typed in  
directly

Clicking on "fx"  
will open  
expression builder

## Argument related to function



The image shows a 'New Data Binding' dialog box with a blue title bar and a close button. It contains several input fields and a section for aggregation. The 'Name' field is 'data column\_1', 'Display Name' is empty, 'Data Type' is 'Any', and 'Expression' is 'datasetRow["SALES"]'. The 'Aggregation' section is checked, with 'Function' set to 'weightedAve (weight) : number', 'Argument' set to 'row["weight"]', 'Aggregate On' set to 'All', and 'Filter' is empty. There are function icons next to the expression, argument, and filter fields. At the bottom are 'OK' and 'Cancel' buttons, and a help icon.

**New Data Binding**

Name: data column\_1

Display Name:

Data Type: Any

Expression: datasetRow["SALES"]

☒ Aggregation

Function: weightedAve (weight) : number

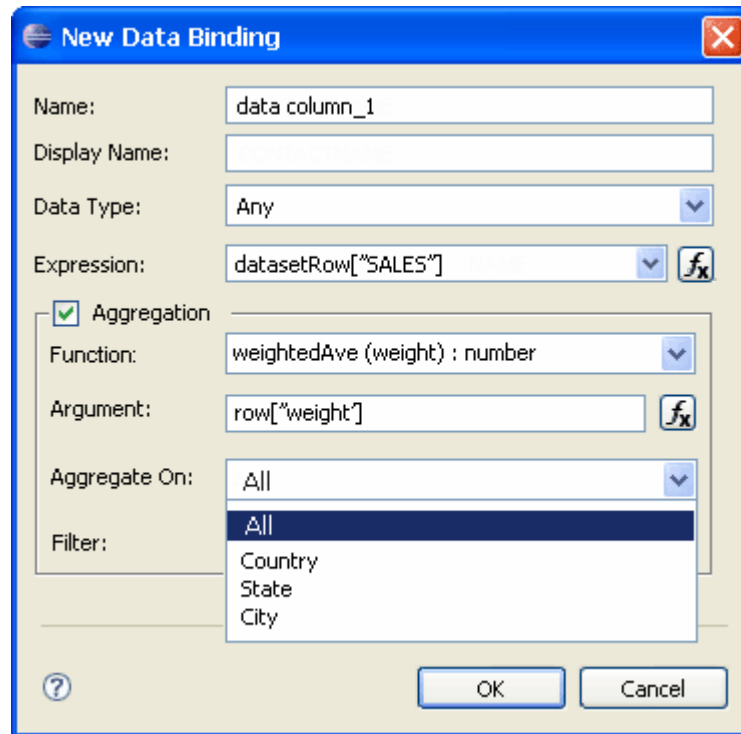
Argument: row["weight"]

Aggregate On: All

Filter:

OK Cancel

# Aggregate On Options



The image shows a 'New Data Binding' dialog box with the following fields and options:

- Name:** data column\_1
- Display Name:** (empty)
- Data Type:** Any
- Expression:** datasetRow["SALES"]
- ☒ **Aggregation**
  - Function:** weightedAve (weight) : number
  - Argument:** row["weight"]
  - Aggregate On:** All (dropdown menu is open showing: All, Country, State, City)
  - Filter:** (empty)

Buttons: ? (help), OK, Cancel

Note:

1. 'Aggregate On' drop down field will have all the available columns from the table