Osprey Approach: Creating Calculated Fields

This help guide was last updated on
Jan 24th, 2023

The latest version is always online at
https://support.ospreyapproach.com/?p=31342

Osprey
Approach™

When designing your own reports, you may wish to merge together one or more fields, or create a value based on other values in your report data set. This guide will show you how. For example, given the client title, forename and surname as separate fields you may wish to make a "Client Name" field which shows just the company name if a company, but the Title, Forename and Surname in one field if an individual.

# Create a new Calculated Field

To create a new calculated field, in the report designer, right click on the Field List in the top right hand corner, then click Add Calculated Field.
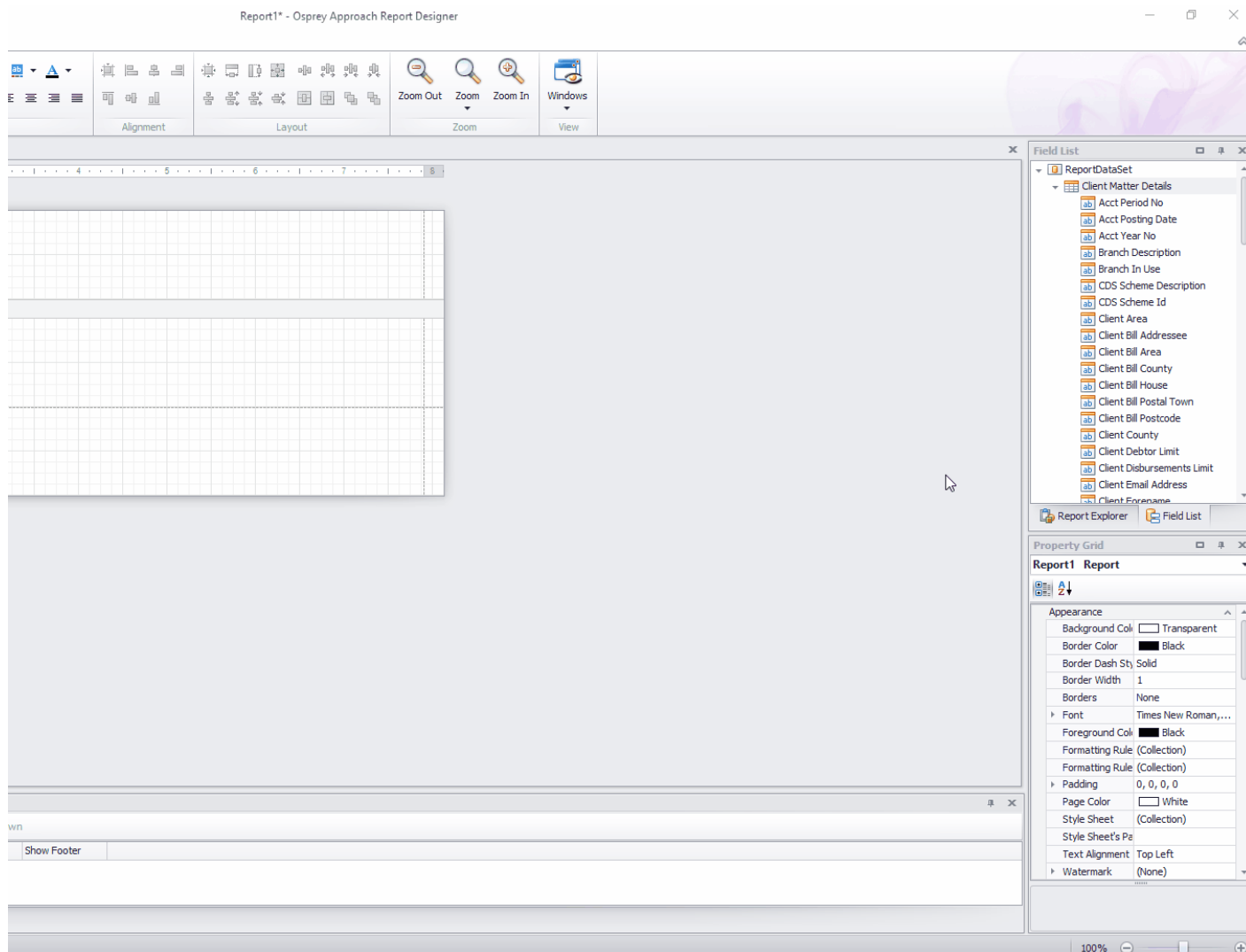
Give the new field a name which can be used to identify it - this must be different to any of the other field names which already exist in your view, and cannot contain any spaces.
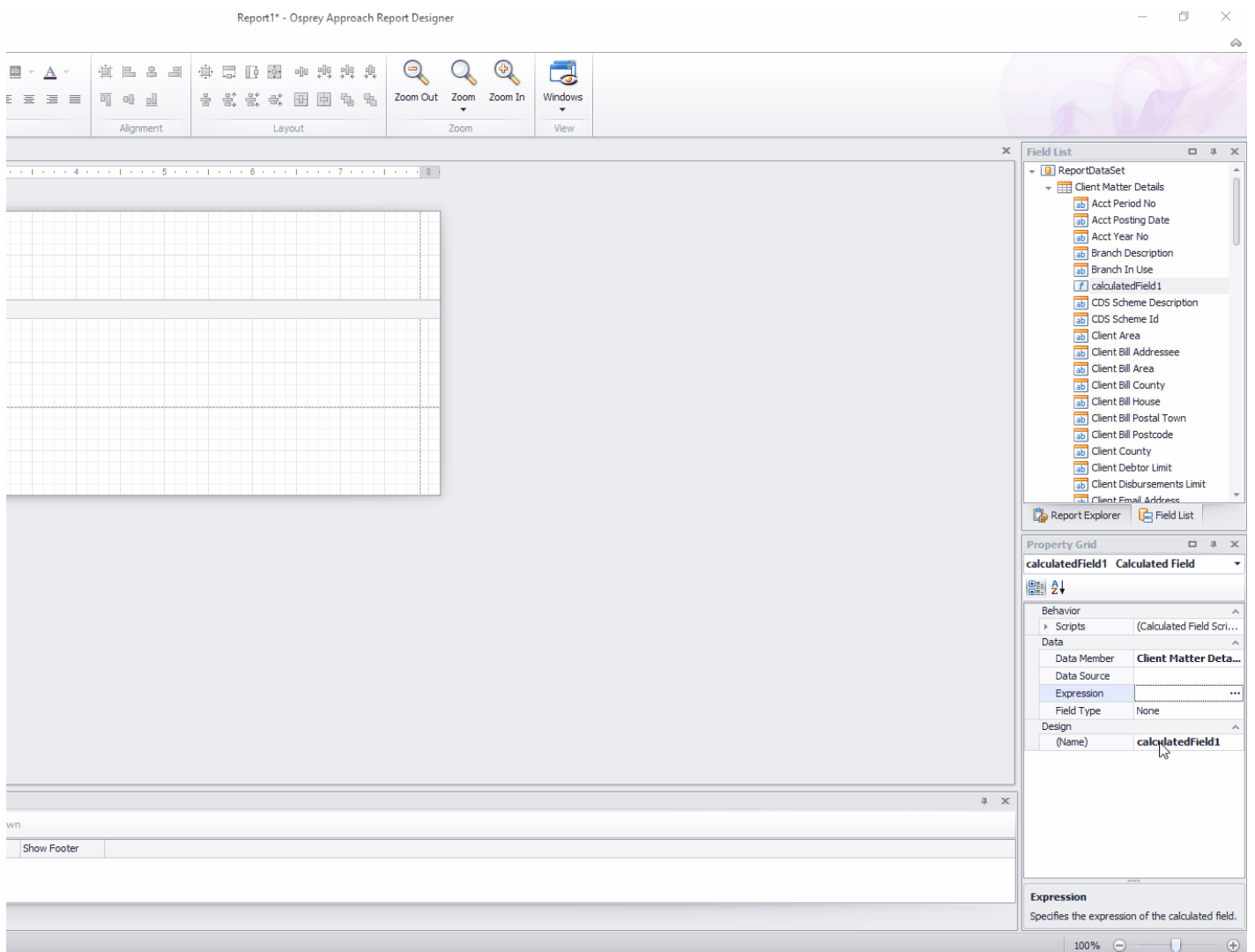
Click into the Expression box, and click the ellipsis button (...)
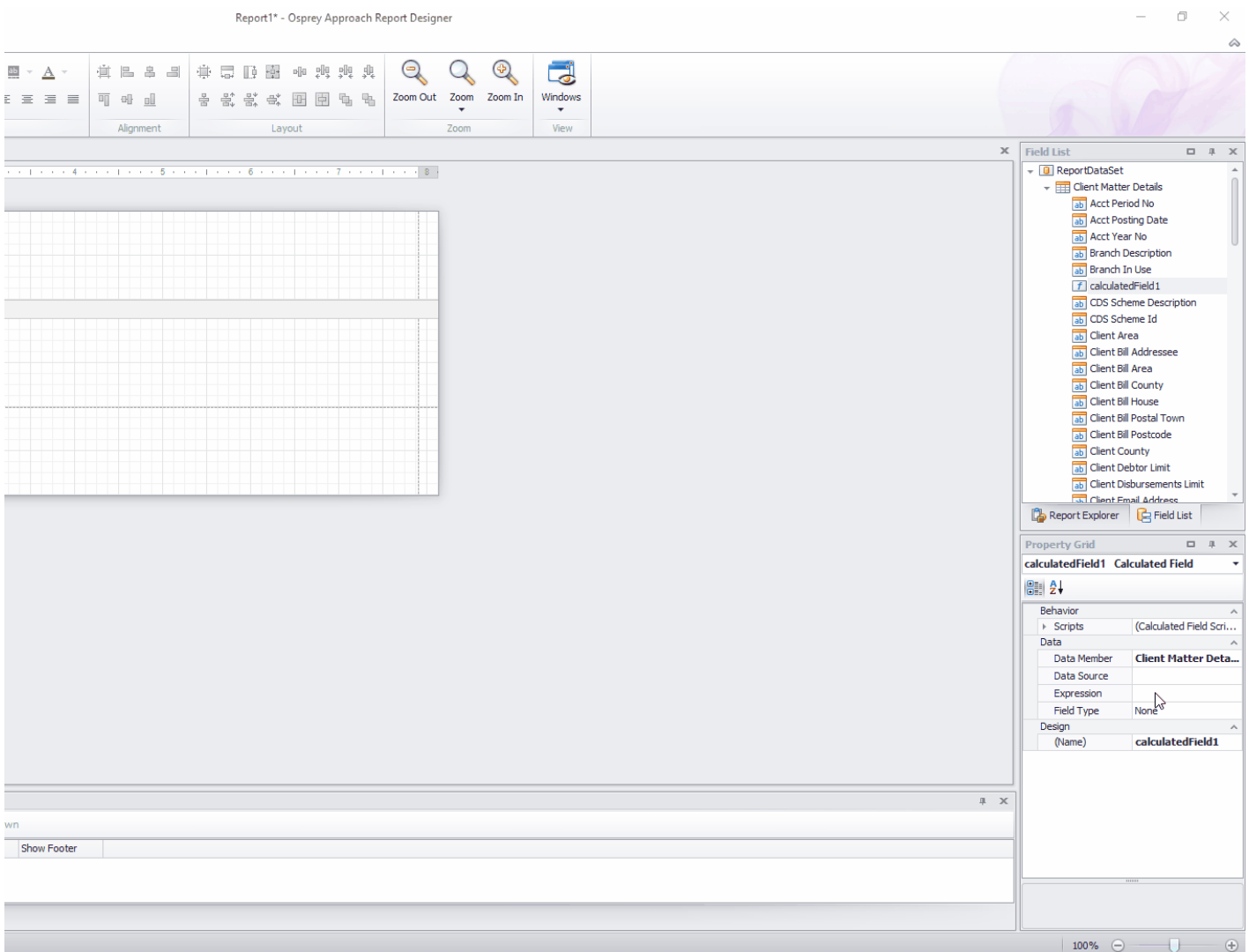
The Expression Editor will now open for you to create your new field.

Using the Expression Editor – Functions pane

Functions can be used to manipulate data in the same way as Excel formulae. Select the Functions option in the leftmost panel, you can then break the functions down by type, and then double click to add the function to the expression editor box. Selecting a function with a single click will display a description of its' usage in the rightmost panel.
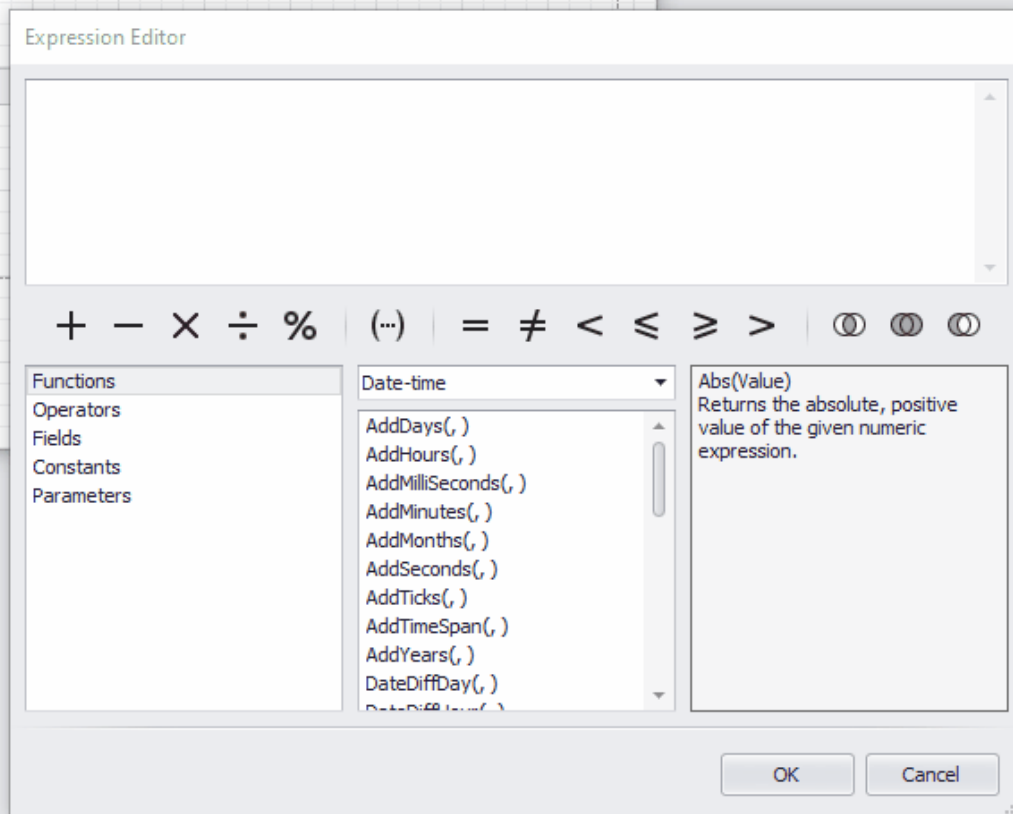
Using the Expression Editor - Fields pane

Selecting the Fields pane allows you to select any of the fields available in your data set. Selecting a field with a single click will display its' data type in the rightmost panel.
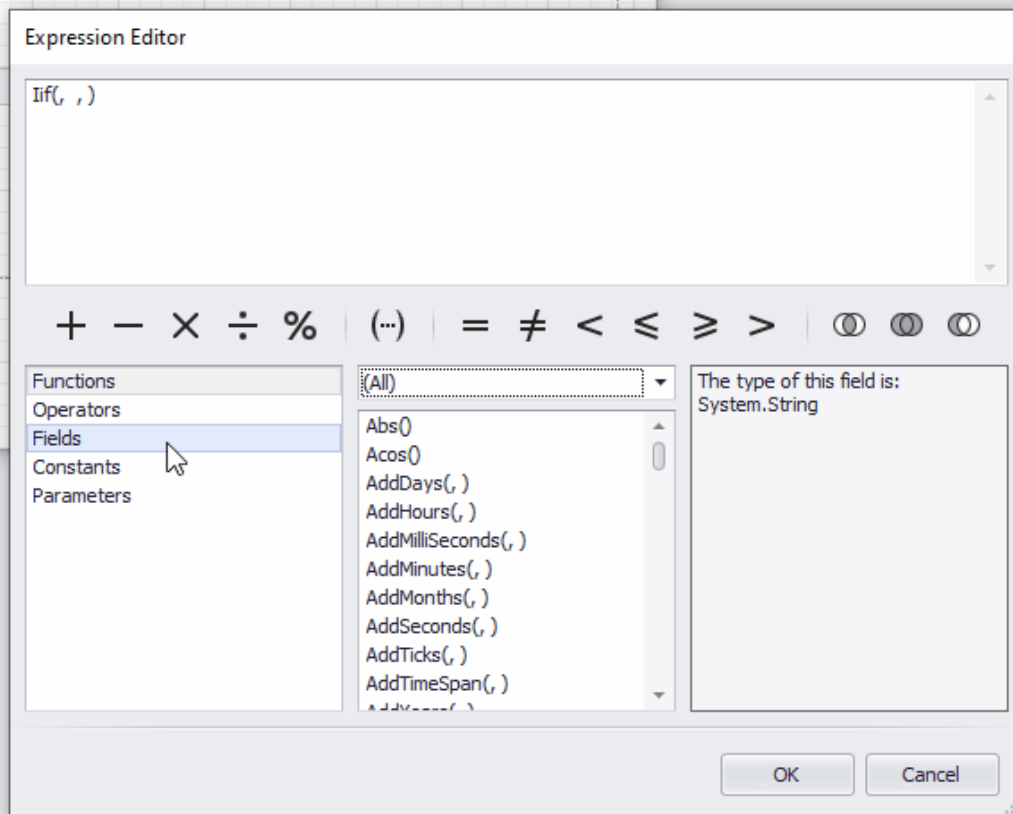
Using the Expression Editor - Constants pane

Constants available are True, False and ? - these can be used for comparing True/False/Empty field values.
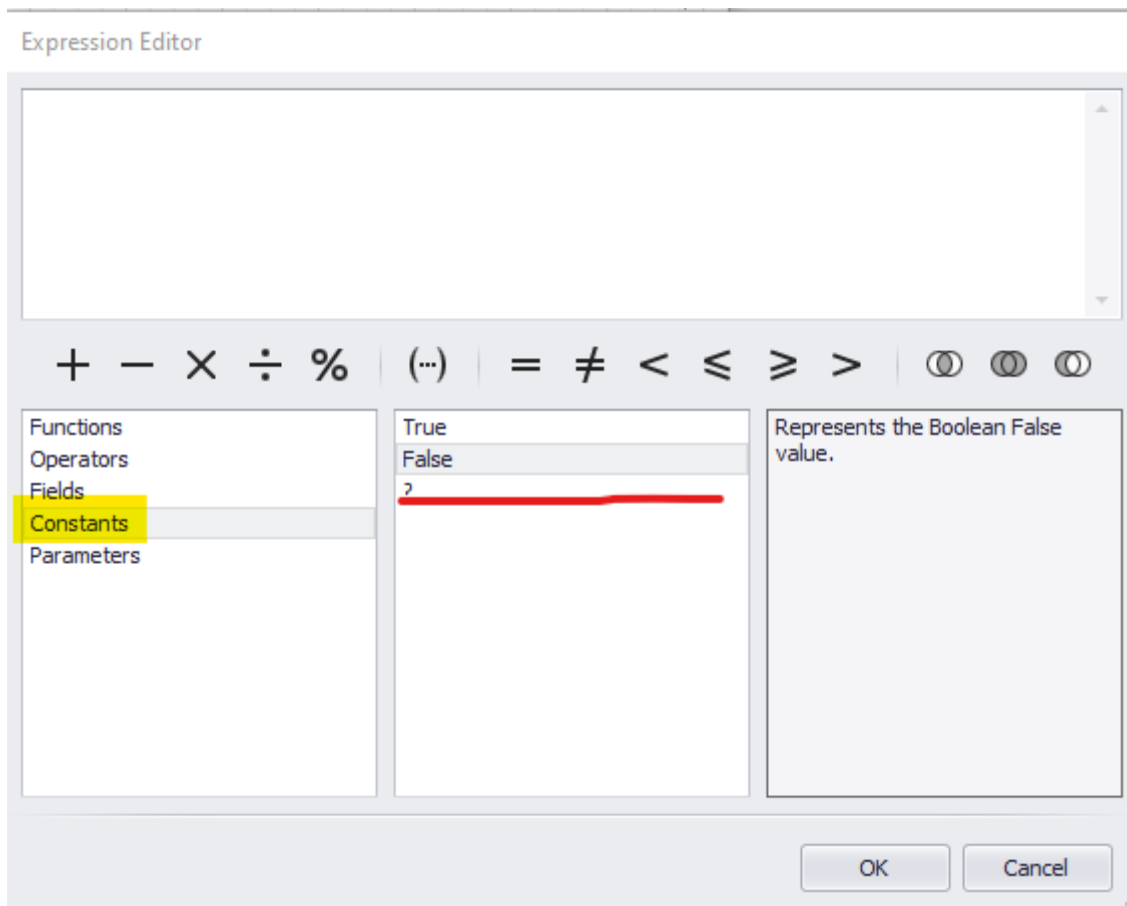
Using the Expression Editor – Parameters pane

This section allows you to work with any parameters you may have added.

Building a Calculated Field Expression - Example 1 - Client Full Name, Client and Matter No

Osprey stores your client name as separate fields Client Title, Client Forename, Client Initials, Client Surname. If your report data set contains these fields, but you want to join them together, you can use a calculated field to do this.

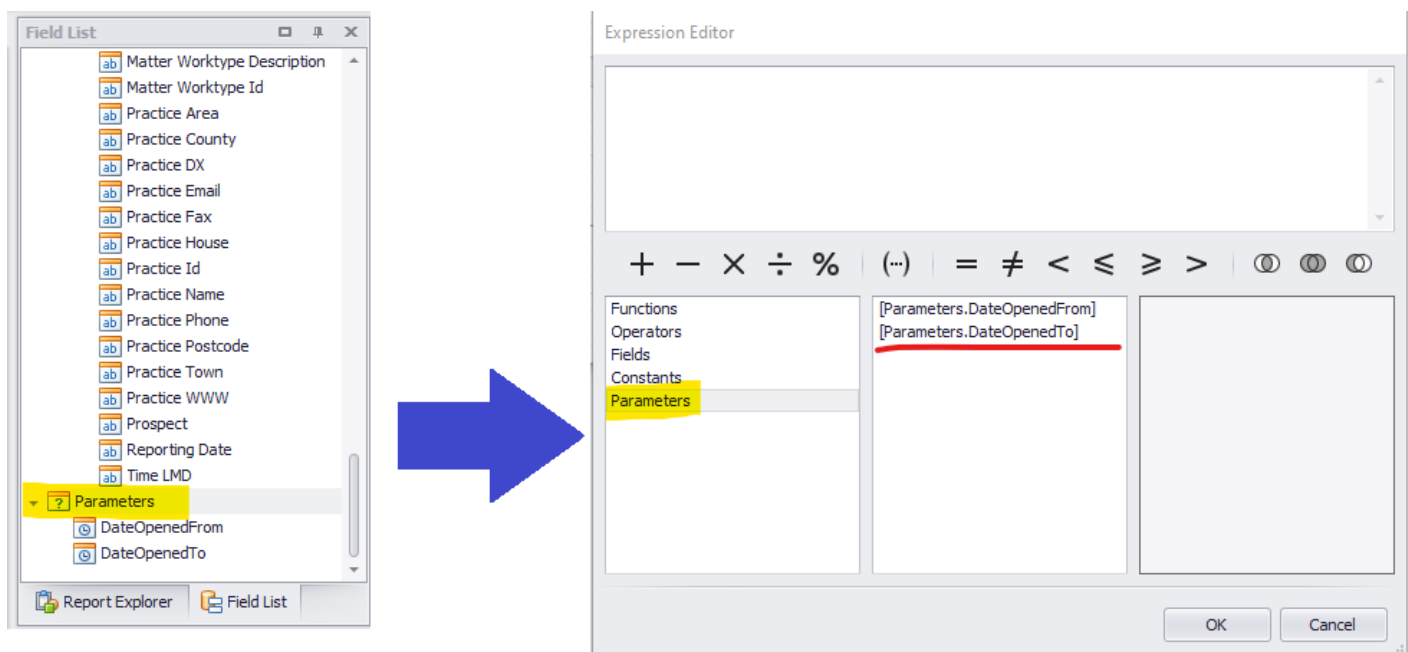In the Expression Editor for this calculated field, you can follow the steps below to link the name fields together.
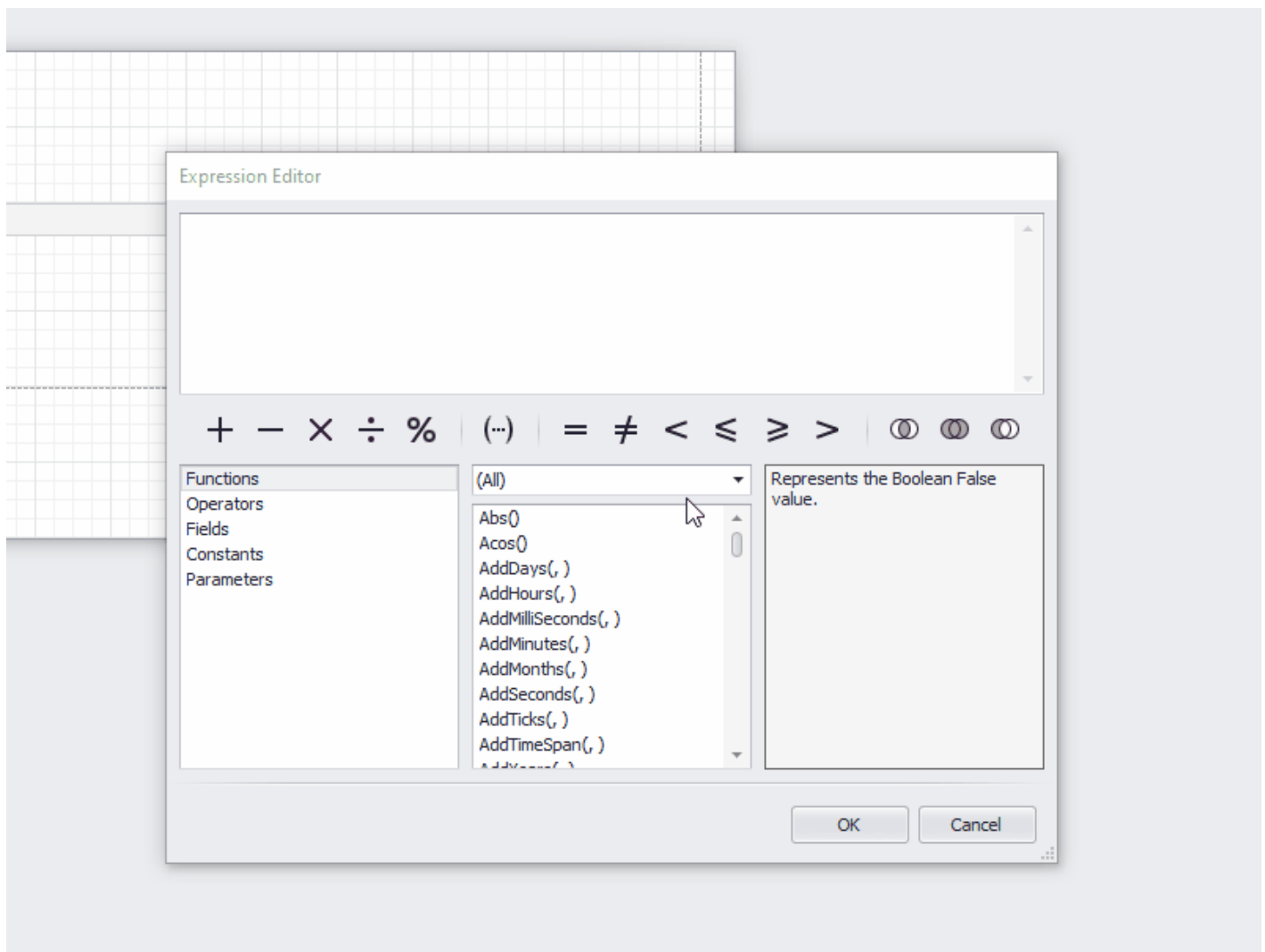
This translates as:

IF the client forename field is blank, THEN just display the client surname, ELSE display the client title plus a space plus the client forename plus a space plus the client surname.

This ensures that where you have company clients, no spaces are inserted prior to the surname/company name in your report. To add any other text (even spaces!) into a calculated field we need to surround it with the single quote - ' - character.

Another example below shows a simple calculated field to join the client and matter numbers together with a / in between (Client No field PLUS a / plus Matter No field):

Expression Editor

```
[Client No] +'/' + [Matter No]
```

| + | − | × | ÷ | % | (···) | = | ≠ | < | ≤ | ≥ | > | ◑ | ◑ | ◑ |

		The type of this field is:
Functions	ab Matter Email Address	System.String
Operators	ab Matter Exec Code	
Fields	ab Matter Fee Earner...	
Constants	ab Matter Fee Earner Id	
Parameters	ab Matter Franchise ...	
	ab Matter Franchise ...	
	ab Matter Franchise ...	
	ab Matter Is Archived	
	ab Matter LMD	
	ab Matter No	
	ab Matter Private or La	

OK   Cancel

The results of these custom fields are shown below:

▼ ⬛ PageHeader [one band per page]

Client / Matter No	Client's Full Name / Company Name

▼ ▤ Detail

[ClientAndMatter]	[ClientFullName]

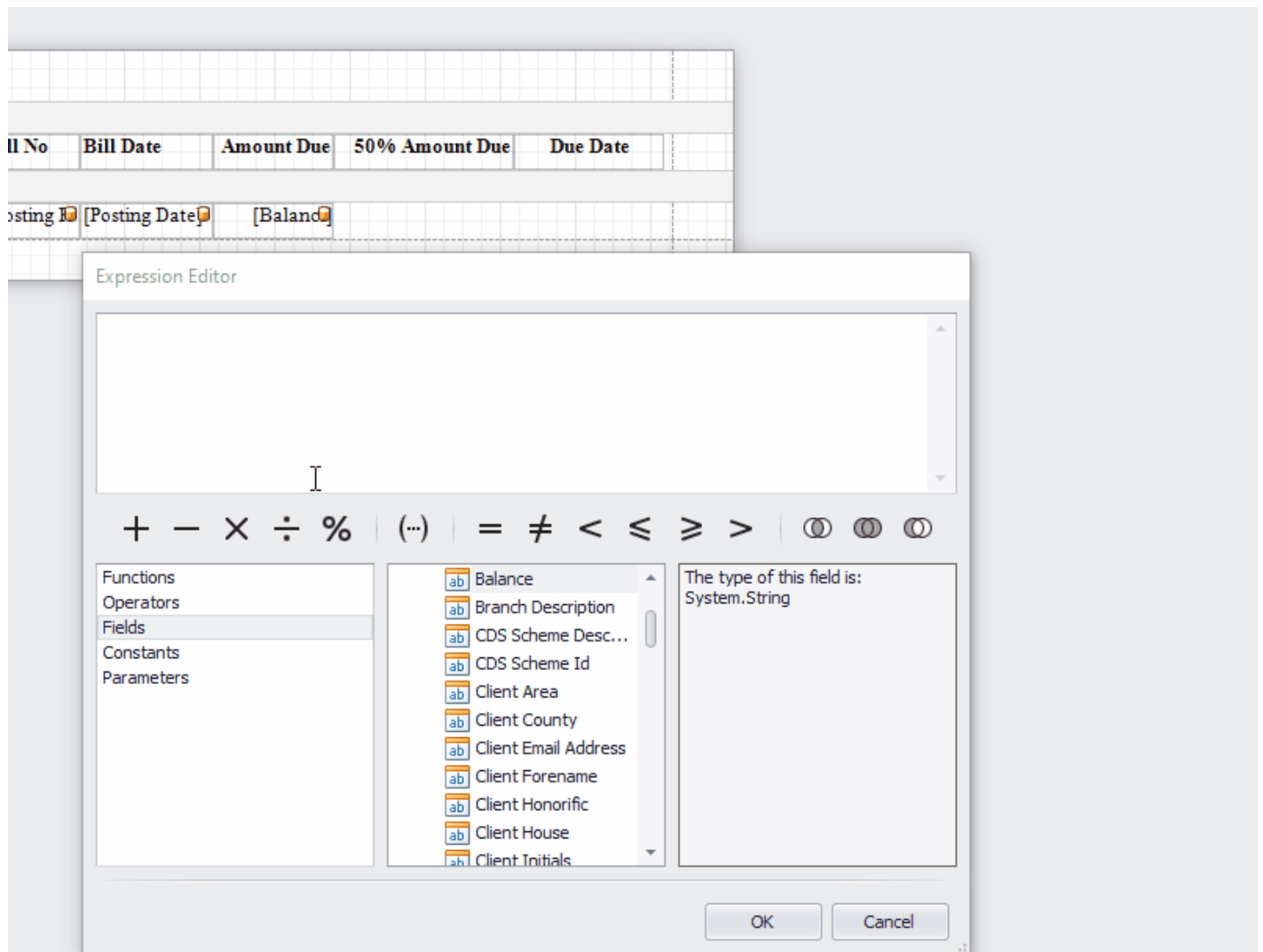| Client / Matter No	Client's Full Name / Company Name	
A00001/1	Admin	Company clients
BO0001/1	Bosworth Industries	
BR0001/1	Miss Lily Broom	
BR0001/2	Miss Lily Broom	Individual clients
BR0002/1	Mr Connor Broom	
BR0002/2	Mr Connor Broom	
CL0001/1	CLIENT SUSPENSE	
CL0001/2	CLIENT SUSPENSE	

Building a Calculated Field Expression - Example 2 - 50% of an amount, 1 month in future from date

In this example we have created a very simple report of bills outstanding including the bill number, bill date and amount remaining. We want to work out what 50% of the remainder is, and the due date which we will set as 14 days from the date of the bill.

Client/Matter	Client Name	Bill No	Bill Date	Amount Due	50% Amount Due	Due Date
BR0002/2	Mr Connor Broom	28	26/11/2020	£1800.00		
CL0001/1	CLIENT SUSPENSE	16	16/11/2020	£900.00		
L00001/1	Mr Stanley Lynch	29	30/11/2020	£1420.51		
N00001/1	Mr Hiro Nakamura	3	01/11/2020	£840.00		
N00001/1	Mr Hiro Nakamura	43	30/11/2020	£600.00		
N00001/1	Mr Hiro Nakamura	6	01/12/2020	£108.00		
N00001/1	Mr Hiro Nakamura	7	01/12/2020	£288.00		
S00002/1	Mr Edward Sylar	49	01/01/2021	£1000.00		
TH0001/1	Mrs Delilah Thompson	21	16/11/2020	£855.00		
TH0001/1	Mrs Delilah Thompson	22	16/11/2020	£160.50		

We will need to add 2 new calculated fields, Percent50Due and DueDate.

For the 50% due field, we can simply multiply the balance remaining field by 0.5 - although there are many other mathematical formulae you could apply here to get the same result!

ll No	Bill Date	Amount Due	50% Amount Due	Due Date

osting ID [Posting Date] [Balance]

Expression Editor

```
+  −  ✕  ÷  %   (⋯)   =  ≠  <  ≤  ≥  >   ◎  ◎  ◎
```

Functions		The type of this field is:
Operators	ab Balance	System.String
Fields	ab Branch Description	
Constants	ab CDS Scheme Desc...	
Parameters	ab CDS Scheme Id	
	ab Client Area	
	ab Client County	
	ab Client Email Address	
	ab Client Forename	
	ab Client Honorific	
	ab Client House	
	ab Client Initials	

OK   Cancel

For the Due Date, we'll use the AddDays() function to work out 14 days from the bill date:

l No	Bill Date	Amount Due	50% Amount Due	Due Date

osting ID [Posting D

Expression Editor

+ − × ÷ % (···) = ≠ < ≤ ≥ > ◑ ◑ ◑

Functions | (All) | ▼ | AddDays(DateTime, DaysCount)
Operators | | | Returns a date-time value that is
Fields | Abs() | | the specified number of days away
Constants | Acos() | | from the specified DateTime.
Parameters | AddDays(,) |
 | AddHours(,) |
 | AddMilliSeconds(,) |
 | AddMinutes(,) |
 | AddMonths(,) |
 | AddSeconds(,) |
 | AddTicks(,) |
 | AddTimeSpan(,) |

OK   Cancel

The result:

PageHeader [one band per page]

Client/Matter	Client Name	Bill No	Bill Date	Amount Due	50% Amount Due	Due Date

Detail

[ClientAndMatter]	[ClientFullName]	[Posting I	[Posting Date	[Balance	[Percent50Du	[DueDate]

Client/Matter	Client Name	Bill No	Bill Date	Amount Due	50% Amount Due	Due Date
BR0002/2	Mr Connor Broom	28	26/11/2020	£1800.00	£900.00	10/12/2020
CL0001/1	CLIENT SUSPENSE	16	16/11/2020	£900.00	£450.00	30/11/2020
L00001/1	Mr Stanley Lynch	29	30/11/2020	£1420.51	£710.26	14/12/2020
N00001/1	Mr Hiro Nakamura	3	01/11/2020	£840.00	£420.00	15/11/2020
N00001/1	Mr Hiro Nakamura	43	30/11/2020	£600.00	£300.00	14/12/2020
N00001/1	Mr Hiro Nakamura	6	01/12/2020	£108.00	£54.00	15/12/2020
N00001/1	Mr Hiro Nakamura	7	01/12/2020	£288.00	£144.00	15/12/2020
S00002/1	Mr Edward Sylar	49	01/01/2021	£1000.00	£500.00	15/01/2021
TH0001/1	Mrs Delilah Thompson	21	16/11/2020	£855.00	£427.50	30/11/2020
TH0001/1	Mrs Delilah Thompson	22	16/11/2020	£160.50	£80.25	30/11/2020

More Report Writer Links