

Osprey Approach: Creating Calculated Fields

This help guide was last updated on Dec 19th, 2024

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

Click here for a printer-friendly version



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.

| Report1* - Osprey Approach Report De | signer | | – 0 × |
|---|------------------------------|---------|------------------|
| ■ · A · 賞 E & a a 读 录 匝 函 @ 微 微 ሲ E 표 표 ■ 可 @ u 合 값 값 값 团 面 强 强 Zoom (C Algnment Layout | Dut Zoom Zoom In Zoom Vie | ws w | * |
| | | x | Field List 🗖 🖡 🗙 |
| | | * × | |
| | | | 100% - + |

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.

Report1* - Osprey Approach Report Designer

| | | | A |
|---|-----------------------|---------|--|
| ■ - <u>A</u> - 首日キヨ (金目) 語 | | | |
| E = = = 可 = □ + 2 2 2 3 8 8 8 8 9 9 9 9 | Zoom Out Zoom Zoom In | Windows | |
| Alignment | Zoom | View | |
| | | | X Field List D # X |
| vn Show Footer | | | Property Grid A × A × A × Propesty Grid A × Propesty Grid A × |
| | | | Specifies the expression of the calculated field. |
| | | | 100% \ominus \oplus |

Click into the Expression box, and click the ellipsis button (...)

Report1* - Osprey Approach Report Designer

| | | | | | | | | | | | | | \diamond |
|--------------------------|-----------|---|------------|------|-------|--------|---------|---------|--------------|-----------|---|------------|--------------------|
| <u>∎ - A</u> - ₫ | L 4 . | - | . B | * • | 에요 및 | , 에도 네 | | Q | Q | | | | |
| | eit nii | - | 복 복 | t et | FFI F | 1 % % | Zoom Ou | it Zoom | Zoom In | Windows | | | |
| | Alignment | | U\$ 04 | | | | | • | | • Mour | | | |
| | Alignment | | | Layo | Jui | | | 20011 | | VIEW | Y | Gold List | |
| wn Show Footer | | | | | | | | | | | x | Field List | Calculated Field I |
| | | | | | | | | | | | | 100% 😑 | •••• |

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.

| Expression Editor | | | | |
|-------------------|---------|--------------|---|---|
| | | | | ÷ |
| + - × ÷ Š | (···) = | <i>≠</i> < ≤ | ≥ > ① ① ① Represents the Boolean False value. | |
| | | | OK Cancel | |

Using the Expression Editor - Parameters pane

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

| Field List 🗖 🕸 | × | | Expression Edi | tor | | | | | | | | | |
|-------------------------------|---|---|---------------------|-----|---|-------------|-----------|----------|-----|-----|-----|--------|----|
| Atter Worktype Description | * | | | | | | | | | | | | * |
| ab Practice Area | | | | | | | | | | | | | |
| ab Practice County | | | | | | | | | | | | | |
| ab Practice Email | | | | | | | | | | | | | |
| ab Practice Fax | | | | | | | | | | | | | ~ |
| ab Practice House | | | + - | ×÷ | % | () = | = ≠ | < : | ≤ ≥ | > > | O | 00 | D |
| ab Practice Name | | | Eunctions | | _ | Parameters | DateOper | nedEroml | | | | | _ |
| ab Practice Phone | | | Operators | | | [Parameters | .DateOper | nedTo] | | | | | |
| ab Practice Town | | | Fields Constants | | | | | | | | | | |
| ab Practice WWW | | | Parameters | | | | | | | | | | |
| ab Prospect | | | | | | | | | | | | | |
| ab Time LMD | | | | | | | | | | | | | |
| Parameters DateOpenedFrom | н | | | | | | | | | | | | |
| DateOpenedTo | U | | | | | | | | | | | | |
| Beport Explorer | | | | | | | | | | | | | |
| | _ |] | | | | | | | | 0 | <] | Cancel | |
| | | | | | | | | | | | | | .: |

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.

| $+ - \times \div \% (\cdot \cdot) = \neq < \leqslant \geqslant > (\cdot \cdot) = \Rightarrow < \\ $ | Expression Editor | | | |
|--|---|---|-----------------------|-------------------------|
| $+ - \times \div \% (\cdots) = \neq < \leqslant \geqslant > (\circ) (\circ) (\land $ | | | | |
| $\begin{array}{c c} + - \times \div \% & (\cdots) & = \neq < \leqslant \geqslant > & \textcircled{O} & \textcircled{O} & \textcircled{O} \\ \hline \\ Functions \\ Operators \\ Fields \\ Constants \\ Parameters \end{array} & \begin{array}{c c} (All) & & & \\ \hline Abs() & & & \\ Acos() & & & \\ AddDays(,) \\ AddDays(,) \\ AddHours(,) \\ AddHours(,) \\ AddMinutes(,) \\ AddMinutes(,) \\ AddMinutes(,) \\ AddSeconds(,) \\ AddSeconds(,) \\ AddTircks(,) \\ AddTirc$ | | | | - |
| Functions (All) Operators Fields Constants Parameters Abs() AddDays(,) AddHours(,) AddMinutes(,) AddMonths(,) AddMonths(,) AddTicks(,) AddTimeSpan(,) AddYsens() Represents the Boolean False value. | $+ - \times \div \%$ | (···) = ≠ < | < < > > | \odot \odot \odot |
| | Functions Operators Fields Constants Parameters | (All) Abs() Acos() AddDays(,) AddHours(,) AddMilliSeconds(,) AddMinutes(,) AddMonths(,) AddSeconds(,) AddSeconds(,) AddTicks(,) AddTicks(,) | Represents the value. | e Boolean False |

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] | | * |
| + - × ÷ % Functions Operators Fields Constants Parameters | (···) = ≠ < ≤ ab Matter Email Address ab Matter Exec Code ab Matter Fee Earner Id ab Matter Franchise ab Matter Franchise ab Matter Franchise ab Matter Is Archived ab Matter Is Archived ab Matter No ab Matter Private or La | > ⑦ ⑦ ⑦ The type of this field is: System.String |
| | | OK Cancel .: |

The results of these custom fields are shown below:



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!

| Posting Date 🏾 🕅 Balan | nd |
|--|--|
| | |
| Expression Editor | |
| | |
| | |
| | |
| | |
| | |
| | T |
| | I |
| $+ - \times \div$ | $I \qquad \qquad$ |
| $+ - \times \div$ | $ \begin{array}{c c} & & \\ & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & $ |
| + - × ÷ | $ \begin{array}{c} & & \\ & & $ |
| + - X ÷ | $ \begin{array}{c c} & & & \\ \hline \hline & & \\ \hline \hline & & \\ \hline & & \\ \hline \hline \\ \hline & & \\ \hline \hline \hline \\ \hline \hline \hline \\ \hline \hline \hline \\ \hline \hline \hline \hline \hline \\ \hline \hline$ |
| + - × ÷ Functions Operators Fields Constants | $ \begin{array}{c c} & & & \\ & & & \\ \hline & & \\ & $ |
| + - × ÷ Functions Operators Fields Constants Parameters | $ \begin{array}{c c} & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & $ |
| + - × ÷ Functions Operators Fields Constants Parameters | $ \begin{array}{c c} & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & $ |
| + - × ÷ Functions Operators Fields Constants Parameters | $ \begin{array}{c c} & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & $ |
| + - × ÷ Functions Operators Fields Constants Parameters | $ \begin{array}{c} & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & $ |
| + - × ÷ Functions Operators Fields Constants Parameters | $%$ (\cdots) $= \neq < \leqslant \geqslant >$ \bigcirc \bigcirc \bigcirc \bigcirc ab Balance ab Branch Description ab CDS Scheme Desc \bigcirc The type of this field is: System.String ab CDS Scheme Id ab Client Area \bigcirc \bigcirc ab Client County ab Client Email Address ab Client Forename |
| + - × ÷ Functions Operators Fields Constants Parameters | $ \begin{array}{c c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ $ |
| + - × ÷ Functions Operators Fields Constants Parameters | $ \begin{array}{c c} & & & \\ $ |

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



The result:

| Client/Matter | Client Name | Bill No | Bill Date | Amount Due | 50% Amount Due | Due Date |
|---|--|--|---|--|--|--|
| etail | | | | | | |
| [ClientAndMatter] 🔒 | [ClientFullName] | Centing I | Posting Date | [Balanc] | [Percent50Du] | [DueDate] 🕻 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | 1 | | |
| i | | | | | | |
| Client/Matter | Client Name | Bill No | Bill Date | Amount Due | 50% Amount Due | Due Date |
| Client/Matter BR0002/2 | Client Name Mr Connor Broom | Bill No 28 | Bill Date 26/11/2020 | Amount Due £1800.00 | 50% Amount Due £900.00 | Due Date 10/12/2020 |
| Client/Matter BR0002/2 CL0001/1 | Client Name Mr Connor Broom CLIENT SUSPENSE | Bill No 28 16 | Bill Date 26/11/2020 16/11/2020 | Amount Due £1800.00 £900.00 | 50% Amount Due £900.00 £450.00 | Due Date 10/12/2020 30/11/2020 |
| Client/Matter BR0002/2 CL0001/1 L00001/1 | Client Name Mr Connor Broom CLIENT SUSPENSE Mr Stanley Lynch | Bill No 28 16 29 | Bill Date 26/11/2020 16/11/2020 30/11/2020 | Amount Due £1800.00 £900.00 £1420.51 | 50% Amount Due £900.00 £450.00 £710.26 | Due Date 10/12/2020 30/11/2020 14/12/2020 |
| Client/Matter BR0002/2 CL0001/1 L00001/1 N00001/1 | Client Name Mr Connor Broom CLIENT SUSPENSE Mr Stanley Lynch Mr Hiro Nakamara | Bill No 28 16 29 3 | Bill Date 26/11/2020 16/11/2020 30/11/2020 01/11/2020 | Amount Due £1800.00 £900.00 £1420.51 £840.00 | 50% Amount Due £900.00 £450.00 £710.26 £420.00 | Due Date 10/12/2020 30/11/2020 14/12/2020 15/11/2020 |
| Client/Matter BR0002/2 CL0001/1 L00001/1 N00001/1 N00001/1 | Client Name Mr Connor Broom CLIENT SUSPENSE Mr Stanley Lynch Mr Hiro Nakamura Mr Hiro Nakamura | Bill No 28 16 29 3 43 | Bill Date 26/11/2020 16/11/2020 30/11/2020 01/11/2020 30/11/2020 | Amount Due £1800.00 £900.00 £1420.51 £840.00 £600.00 | 50% Amount Due £900.00 £450.00 £710.26 £420.00 £300.00 | Due Date 10/12/2020 30/11/2020 14/12/2020 15/11/2020 14/12/2020 |
| Client/Matter BR0002/2 CL0001/1 L00001/1 N00001/1 N00001/1 N00001/1 | Client Name Mr Connor Broom CLIENT SUSPENSE Mr Stanley Lynch Mr Hiro Nakamura Mr Hiro Nakamura Mr Hiro Nakamura | Bill No 28 16 29 3 43 6 | Bill Date 26/11/2020 16/11/2020 30/11/2020 01/11/2020 30/11/2020 01/12/2020 | Amount Due £1800.00 £900.00 £1420.51 £840.00 £600.00 £108.00 | 50% Amount Due £900.00 £450.00 £710.26 £420.00 £300.00 £54.00 | Due Date 10/12/2020 30/11/2020 14/12/2020 15/11/2020 14/12/2020 15/12/2020 |
| Client/Matter BR0002/2 CL0001/1 L00001/1 N00001/1 N00001/1 N00001/1 N00001/1 | Client Name Mr Connor Broom CLIENT SUSPENSE Mr Stanley Lynch Mr Hiro Nakamura Mr Hiro Nakamura Mr Hiro Nakamura Mr Hiro Nakamura | Bill No 28 16 29 3 43 6 7 | Bill Date 26/11/2020 16/11/2020 30/11/2020 01/11/2020 01/12/2020 01/12/2020 | Amount Due £1800.00 £900.00 £1420.51 £840.00 £600.00 £108.00 £288.00 | 50% Amount Due £900.00 £450.00 £710.26 £420.00 £300.00 £54.00 £144.00 | Due Date 10/12/2020 30/11/2020 14/12/2020 15/11/2020 14/12/2020 15/12/2020 15/12/2020 |
| Client/Matter BR0002/2 CL0001/1 L00001/1 N00001/1 N00001/1 N00001/1 N00001/1 S00002/1 | Client Name Mr Connor Broom CLIENT SUSPENSE Mr Stanley Lynch Mr Hiro Nakamara Mr Hiro Nakamara Mr Hiro Nakamara Mr Hiro Nakamara Mr Hiro Nakamara Mr Hiro Nakamara Mr Hiro Nakamara | Bill No 28 16 29 3 43 6 7 49 | Bill Date 26/11/2020 16/11/2020 30/11/2020 01/11/2020 01/12/2020 01/12/2020 01/01/2021 | Amount Due £1800.00 £900.00 £1420.51 £840.00 £600.00 £108.00 £288.00 £1000.00 | 50% Amount Due £900.00 £450.00 £710.26 £420.00 £300.00 £54.00 £144.00 £500.00 | Due Date 10/12/2020 30/11/2020 14/12/2020 15/11/2020 15/12/2020 15/12/2020 15/12/2020 15/01/2021 |
| Client/Matter BR0002/2 CL0001/1 L00001/1 N00001/1 N00001/1 N00001/1 N00001/1 S00002/1 TH0001/1 | Client Name Mr Connor Broom CLIENT SUSPENSE Mr Stanley Lynch Mr Hiro Nakamura Mr Hiro Nakamura Mr Hiro Nakamura Mr Hiro Nakamura Mr Hiro Nakamura Mr Edward Sylar Mrs Delilah Thompson | Bill No 28 16 29 3 43 6 7 49 21 | Bill Date 26/11/2020 16/11/2020 30/11/2020 01/11/2020 01/12/2020 01/12/2020 01/12/2020 01/01/2021 16/11/2020 | Amount Due £1800.00 £900.00 £1420.51 £840.00 £600.00 £108.00 £288.00 £1000.00 £855.00 | 50% Amount Due £900.00 £450.00 £710.26 £420.00 £300.00 £54.00 £144.00 £500.00 £427.50 | Due Date 10/12/2020 30/11/2020 14/12/2020 15/11/2020 15/12/2020 15/12/2020 15/12/2020 15/12/2020 15/01/2021 30/11/2020 |