Report Builder - User Guide

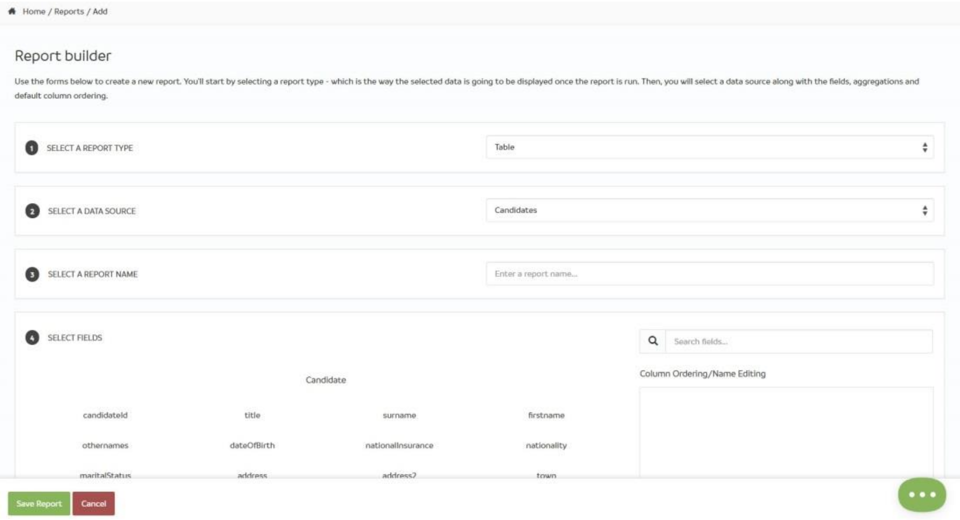
September 2018 - Version 1

Contents

Getting started

When you first access report builder you will need to click the "New report" button at the bottom left to start building your first report.

When you do so, you will see a screen like the below containing 8 sections:



Report type

Today we are only offering Tables as a report type but we have plans to add charts in the future.

Data source

This is the data on which you want to report – for example, employees, time off, training and so on.

When you select your data source the fields in Select fields will change accordingly.

Report name

Every report needs a name before it can be created so enter the name for the report here – if you do not enter a name you will not be able to save the report.

Select fields

This is the main area of report builder.

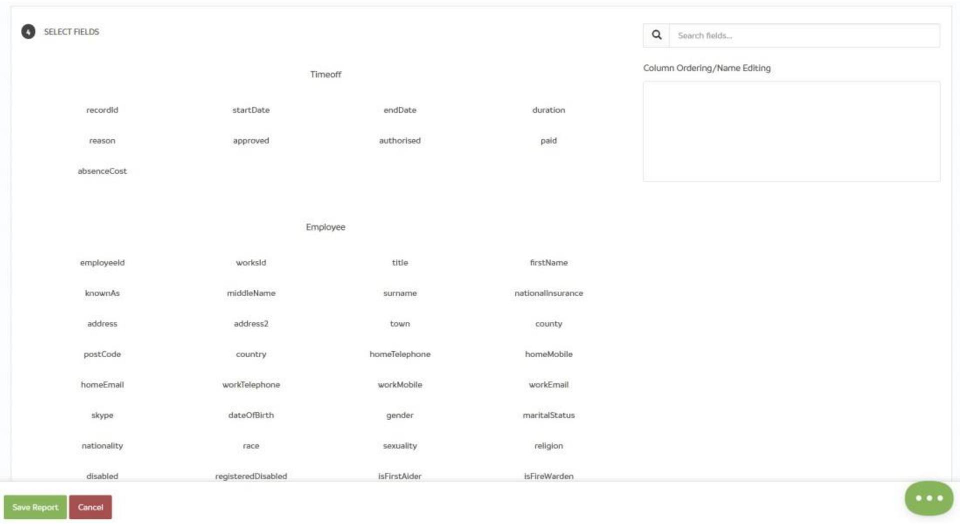
There are three main areas within this section: field list, search and selected fields.

Field list

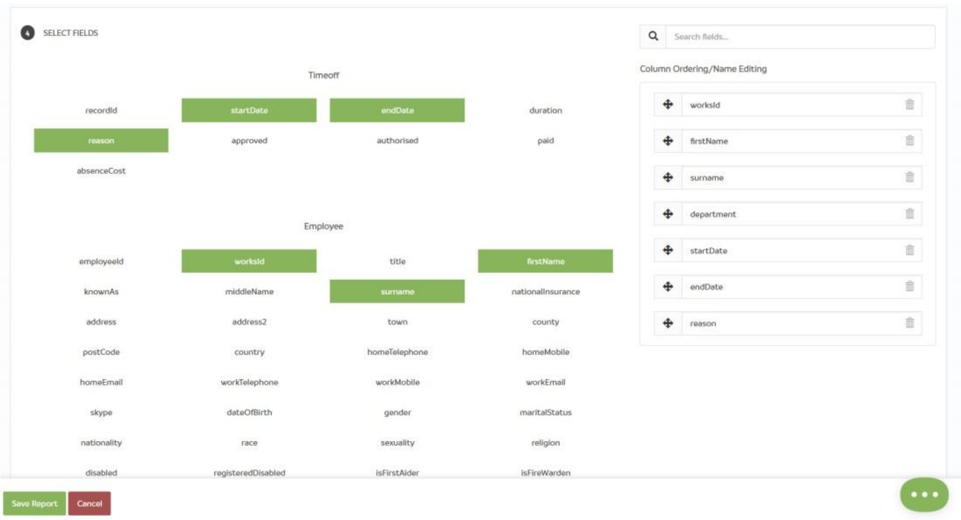
The field list is where you choose the fields you want to appear in your report.

In the below example, we have chosen Time off as our data source. This gives us access to the Time off fields but also to the employee fields which allows us to then filter and sort etc. based on the employee values as well as those of the time off record itself.

To choose a field you need to click the field in question and it will then appear in the right column under Column Ordering/Name Editing.



For example, if we wanted to choose the employee works ID, name, department, time off start date, end date and reason we would click each of these fields and it would then look like this:



Note: whilst there is no limit to the number of fields you can select, it is worth remembering that these fields will be displayed horizontally on your report and, the more fields you include, will mean that either the columns will get squashed or the report will scroll horizontally.

Search

Sometimes you may not be able to find the field you want to pick in the list. To help with this you can search all the field options to help you narrow down the results.

For example, if I wanted to include department but could not find the field I can start typing “dep” (without the quotes) into the search box and this would then narrow the field choice down to only show those fields which contain the letters dep as per below:

You can now choose department from the selection on the left and it will be added to the chosen field list.

To clear the search you can either remove the letters or click the x to the right of the search box and this will then make all fields visible again.

Selected fields

The final element of Select fields, are the fields you have currently chosen which are shown on the right under the heading “Column Ordering/Name Editing”.

When you select a new field it will automatically be added to the bottom of the currently selected fields.

Moving

If you need to move a field within the selected fields, you need to click the cross to the left of the field name and drag the field to the position you desire.

It is very hard to demonstrate this in a document but when you select the cross to the left you can then move the field up or down to its new position.

The positioning is important as the ordering of the selected fields will determine the order the columns are displayed in the end report.

Removing a selected field

To remove a selected field, you need to click the bin icon to the right hand side of the box containing the selected field and it will be removed from the list.

Renaming fields

Within Natural HR, we have got set labels for fields in Report builder.

Occasionally, you may not want to refer to the fields using those labels in your reports – perhaps your company has specific terminology it uses and you want that to be reflected in the created report.

To rename a selected field, all you have to do is move the cursor to the box where the label for the selected field is and enter a new name or update the current name. You do not then need to click save etc. to update the field as this gets changed as soon as you finish typing.

For example if we wanted to change works ID to Employee ID and change department to team it would then look like this:

Grouping

Grouping is the hardest part of reporting to understand. Simply grouping allows you to take a list of data and group rows together based on a common criteria.

For example, in the above report, with no group, we would see a list of all employees with their relevant time off.

By using grouping, we can then group the rows together by any of the selected fields – in this instance we might choose reason which would then show all records under each reason grouped together in a section with the reason highlighted above each section.

Without any grouping

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Employee ID	firstName	surname	team	startDate	endDate	reason
G7LQE7	Aimee	Hancock	Contracts and legal	22/05/2018	23/05/2018	Holiday
G7LQE7	Aimee	Hancock	Contracts and legal	14/05/2018	14/05/2018	Sickness
G7LQE7	Aimee	Hancock	Contracts and legal	07/05/2018	07/05/2018	Sickness
G7LQE7	Aimee	Hancock	Contracts and legal	30/04/2018	30/04/2018	Sickness
G7LQE7	Aimee	Hancock	Contracts and legal	23/04/2018	23/04/2018	Sickness
G7LQE7	Aimee	Hancock	Contracts and legal	16/04/2018	16/04/2018	Sickness
G7LQE7	Aimee	Hancock	Contracts and legal	09/04/2018	09/04/2018	Sickness
G7LQE7	Aimee	Hancock	Contracts and legal	02/04/2018	02/04/2018	Sickness
G7LQE7	Aimee	Hancock	Contracts and legal	26/03/2018	26/03/2018	Sickness
G7LQE7	Aimee	Hancock	Contracts and legal	18/03/2018	18/03/2018	Sickness

Showing 1 to 10 of 80 entries

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With a group on “reason”

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Employee ID	firstName	surname	team	startDate	endDate	reason
reason: Chest related						
WK009	Benjamin	Naylor	Sites	14/08/2018	17/08/2018	Chest related
reason: Discretionary timeoff						
B5XYPJ	Kieran	Richards	Sites	25/05/2018	30/05/2018	Discretionary timeoff
reason: Holiday						
	Employee	Nathan	IT	28/12/2018	28/12/2018	Holiday
BTDPKT	Maddison	Archer	Sites	28/12/2018	28/12/2018	Holiday
G7LQE7	Aimee	Hancock	Contracts and legal	22/05/2018	23/05/2018	Holiday
81B5WQ	Samantha	Tucker	Sites	27/12/2018	27/12/2018	Holiday
JIQ4B4	Leon	Bailey	Sites	03/07/2018	06/07/2018	Holiday
43QH2N	Kiera	King	Sites	28/12/2018	28/12/2018	Holiday
W1H3LP	Jodie	Stokes	Purchasing	20/08/2018	24/08/2018	Holiday

Aggregates

An aggregate is simply a value which is made up from calculations on other values.

The aggregates that we support are:

Count – this is the number of instances

Sum – this is the total of all the values

Average – this is the average or mean value

Minimum – this is the minimum value

Maximum – this is the minimum value

The last four aggregates are only visible if you are applying them against a non-text field – for example you cannot perform a sum against employee names but you can apply a count.

You can only apply an aggregate against a selected field in your report.

When the aggregate is chosen, it will then get displayed at the bottom of the chart as per below:

G7LQE7	Aimee	Hancock	Contracts and legal	16/04/2018	16/04/2018	Sickness	1.00
G7LQE7	Aimee	Hancock	Contracts and legal	09/04/2018	09/04/2018	Sickness	1.00
G7LQE7	Aimee	Hancock	Contracts and legal	02/04/2018	02/04/2018	Sickness	1.00
G7LQE7	Aimee	Hancock	Contracts and legal	26/03/2018	26/03/2018	Sickness	1.00
G7LQE7	Aimee	Hancock	Contracts and legal	18/03/2018	18/03/2018	Sickness	1.00

COUNT(firstName): 80

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Group and aggregates combined

Whilst you can, of course, use groups and aggregates on their own, they can also be used together and when you do so this will change the way they both work.

For example if you wanted to group by the reason and then show a count for your aggregate against the reason, you can do this and the output then changes to show the aggregate against the group rather than against the whole dataset:

Employee ID	firstName	surname	team	startDate	endDate	reason	duration
reason: Chest related							
WK009	Benjamin	Naylor	Sites	14/08/2018	17/08/2018	Chest related	4.00
						COUNT(reason): 1	
reason: Discretionary timeoff							
B5XYPJ	Kieran	Richards	Sites	25/05/2018	30/05/2018	Discretionary timeoff	4.00
						COUNT(reason): 1	
reason: Holiday							
	Employee	Nathan	IT	28/12/2018	28/12/2018	Holiday	1.00
BTDPKT	Maddison	Archer	Sites	28/12/2018	28/12/2018	Holiday	1.00
G7LQE7	Aimee	Hancock	Contracts and legal	22/05/2018	23/05/2018	Holiday	1.00
B1B5WQ	Samantha	Tucker	Sites	27/12/2018	27/12/2018	Holiday	1.00
JIQ4B4	Leon	Bailey	Sites	03/07/2018	06/07/2018	Holiday	22.50
43QH2N	Kiera	King	Sites	28/12/2018	28/12/2018	Holiday	1.00
W1H3LP	Jodie	Stokes	Purchasing	20/08/2018	24/08/2018	Holiday	5.00
EMP-220	Daniel	Parker	Corporate	27/12/2018	27/12/2018	Holiday	1.00
						COUNT(reason): 63	

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Here you can see that the groups are applied in the same way but the aggregate now shows against the groups rather than against the whole report.

You can add as many aggregates as you need to the report and they can each be different, so you could choose to show the total duration and the count of reasons to get two values from the same dataset.

Ordering

Ordering is simply the ability to control the sort order of the output data.

You can add up to three order elements to each report – the sequencing of these is important as, should a duplicate be detected in the first item (which will happen quite commonly when using things like names) the next selected ordering option will be used to determine which gets displayed next and so on.

Within ordering, you can choose to order either ascending or descending.

Ascending means going from 0 to 9, oldest to newest or A to Z whilst descending means going from 9 to 0, newest to oldest or Z to A.

Filtering

The final, and one of the most powerful parts of the report builder, is the ability to add filters to the output data. A filter is way of refining the result set based on criteria you choose.

For example, you might want to show all sickness for last month so you would add a filter for time off reason equals sickness and the start date of the time off in the last month. This allows you to then only see the records which match those criteria.

When adding filters, you can add as many filters and you like and the filters are NOT limited to the fields chosen on the report – for example, in the report from above we could choose to filter where the employee site was head office even though we had not actually chosen employee site as a selected field.

To add a new filter, click the plus icon within the “dotted” rectangle which then will display a drop down where you can search for the field in question.

Once you choose your field you then need to choose the type of filter you want to apply. The actual options will vary according to the field you choose but the options are:

All fields

Equals

Not equals

Text fields only

Begins with

Doesn’t begin with

Ends with

Doesn’t end with

Contains

Doesn’t contain

Is empty

Numbers and dates (absolute) only

Between

Greater than

Greater than or equal to

Less than

Less than or equal to

Is empty

Dates (relative) only

Next x days/weeks/months/years

Previous x days/weeks/months/years

Next day/week/month/year

Previous day/week/month/year

When you choose the filter type you will then be presented with a value box where you need to enter or choose the actual filter value.

For absolute date options, you will be shown a date picker which will allow you to choose your specific date or dates.

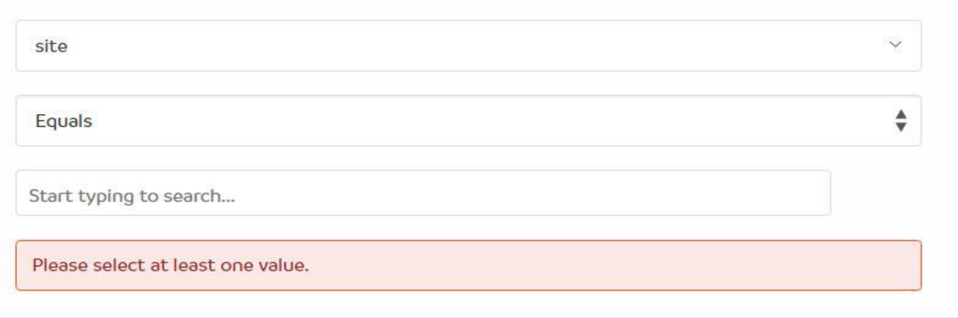
For relative dates, you will be asked to enter a number – for example, if you choose next x months then you will need to enter the value for x. The same applies for numbers – if you were to choose duration greater than you would then enter the value which you want to compare duration to.

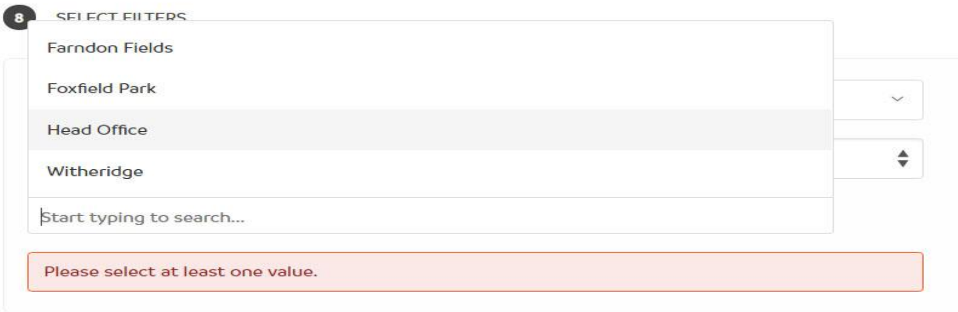
When selecting text fields, you can choose search within the actual data rather than matching the whole data value – so you could choose, for example, to show all employees whose surname contains the letters dow or all employees whose name begins with S and so on.

Finally, for all data types, you can choose equals to or not equals to.

For entered text fields (such as someone's name) and numbers you will be asked to enter the actual value you want to check for whilst for dates you will be shown the date picker to choose your date.

For other text fields (referred to as lookups) such as department, job title, manager and so on you will instead be given the chance to choose from the actual options in the system making it much easier to search without needing to remember all the possible options.





The process works exactly the same way when using does not equal for these fields.

Adding multiple filters

If you wish to add multiple filters to a report, you can do so by clicking the plus inside the dotted rectangle as many times as you need:

In the above example, the query would read like:

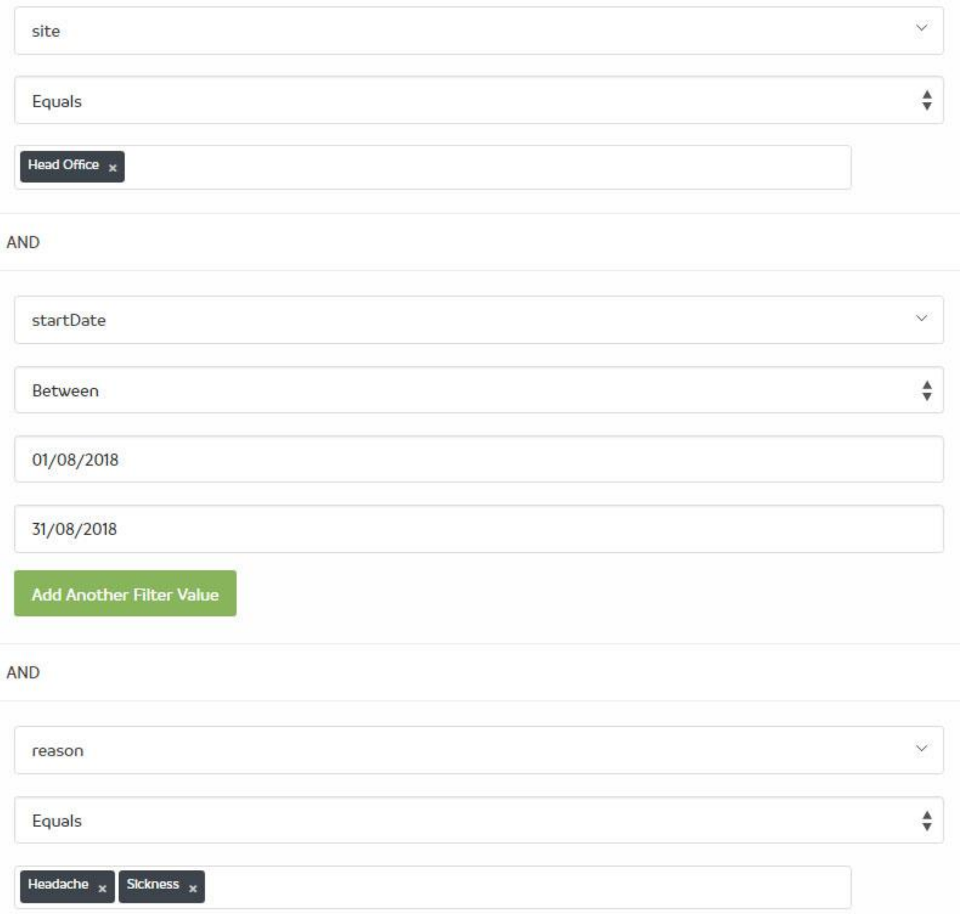
Show me all fields in time off where site equals Head office and start date is between 01/08/2018 and 31/08/2018 and reason equals sickness

Each time you add another new filter group it will add another AND to the query logic.

However sometimes, you may wish to use an OR instead of an AND. For example you might want to change the above to say

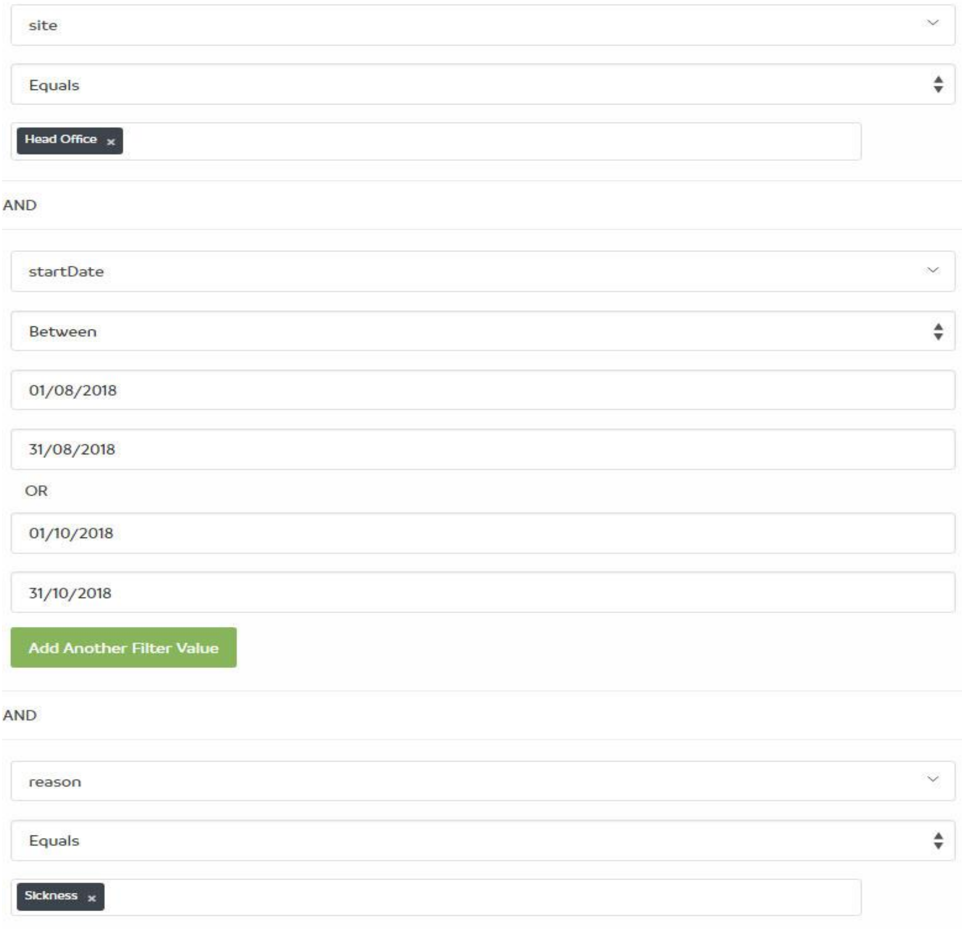
Show me all fields in time off where site equals Head office and start date is between 01/08/2018 and 31/08/2018 and (reason equals sickness OR reason equals headache)

In this instance you would click into the values box under reason and select headache additionally as another lookup value so it looks like:



Within a multiple select box for a lookup value, each of the values equate to an OR within that group.

For other data types such as text, numbers and dates there is an additional option below the value box for "Add Another Filter Value" – this works similarly to the multiple select box whereby each added filter value is treated like an OR. The below show an example of this:



In this instance the query would read like:

Show me all fields in time off where site equals Head office and (start date is between 01/08/2018 and 31/08/2018 OR start date is between 01/10/2018 and 31/10/2018) and (reason equals sickness OR reason equals headache)

You may note that, in the above query, I have placed brackets around the OR statements - these are quite important as it shows that the OR statements will get evaluated first and then the AND statements.

Invalid filters

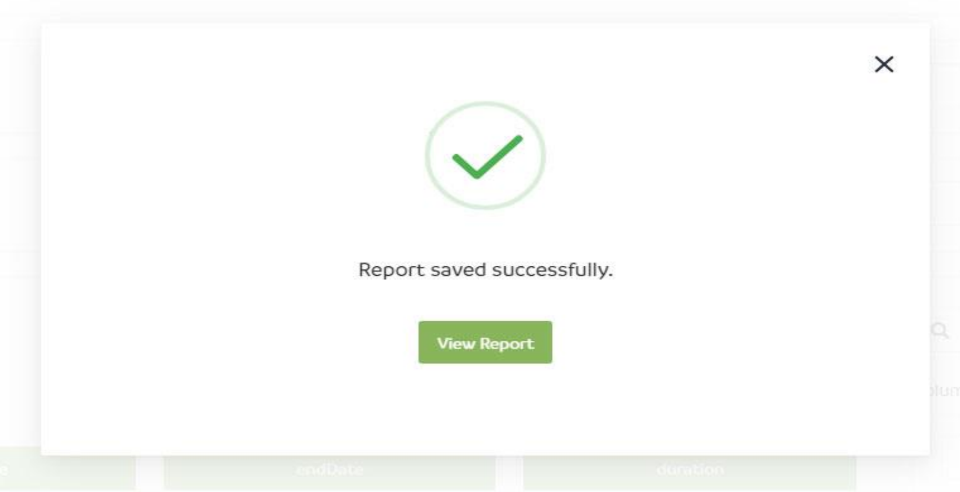
It is possible to create invalid filter combinations and this is something you should be cautious of.

The most commonly encountered invalid filter is where you have two AND filters applied where one makes the other no longer be valid. For example, if you had a time off type called sickness and it was unauthorised time off but you created a filter like the below it would be “invalid” as that filter could never be true:

Likewise if you choose to apply a filter against the same field twice this would also be invalid as it is not possible for time off record to have a reason of sickness and bereavement as it is a single value:

Saving

Once you have built your report and added your groups, filters and so on you need to then save the report by clicking the green Save report (or Edit report) button at the bottom left of the screen. If this is successful you will then see a popup which contains a button to allow you to view your data:



Pagination

Once you have built and saved your report, it will then be displayed to you.

When the report first loads it will load 10 rows per page. You can change this by clicking the dropdown to the top of the screen containing numbers so show 10, 25, 50, 100, 250, 500, 1000, 2000 and Show all.

Additionally if you want to simply jump to another page you can use the page numbering at the bottom right of the screen as well as the previous and next buttons.

Caution: If you have a very large report and you choose to use Show all or even 1000/2000 rows per page you will suffer a delay as your browser will need to draw all the rows on the screen. Depending on your computer, browser etc. this may even cause your browser to crash so use Show all with caution.

Exporting

When viewing your report, you can choose to export the data either to your clipboard (copy) or to CSV or PDF using the buttons at the top right.

Please note: exporting will only export the currently visible rows so you may need to change the number of displayed rows if you wish to export these all to one file.

Additionally, if you choose PDF and have a very wide report it may get cut off during the export as there is physically not enough space to fit all the columns into the page size.

Permissions

Within the report builder, as an administrator, you will have access to all data sources and all fields within those data sources. However, for other user groups you may not want them to have that same access.

To this end there are three main elements to consider:

1) If you go to **Administration > Company > Report builder permissions** (this is different to the legacy Report library permissions) you can choose which data sources you give each of your user groups access to
    a. For example, you may choose to only give Finance access to expenses reports or only choose to let Recruiters access the candidates report
2) When anyone from HR level down access a report (either as the builder or when shared with them), they will only ever see the employees they have permissions to see
    a. For example, if your HR manager in New York should only be able to see US employees then that is all they will see in report builder
3) When HR or manager level users access reporting (again either to build or share) they will not be able to access any fields which they do not have permissions to view
    a. For example, if your HR manager in New York is not allowed to see salary details or not allowed to view employee diversity information then these fields will not be accessible to them in report builder

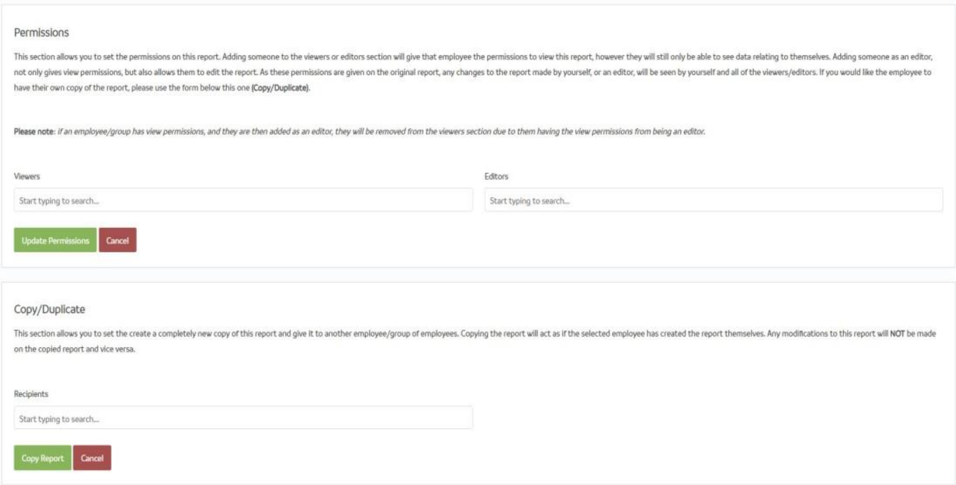
Sharing

When you create a new report in report builder, you are the only person who can access that report.

However, you can also choose to share your report with individuals or with user groups.

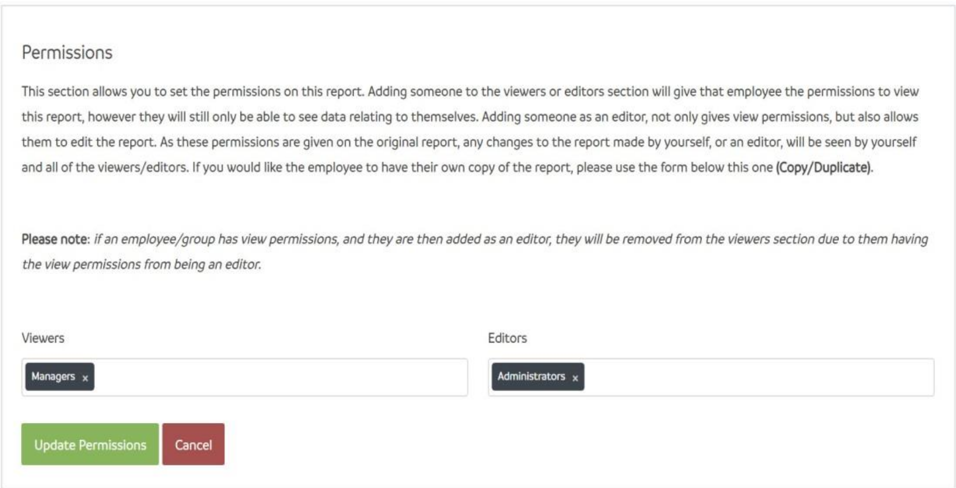
To do so you need to go to the main report screen and click the share icon next to the report name which is the third icon in the group of four:

Once you click the share icon, you will see the screen below:

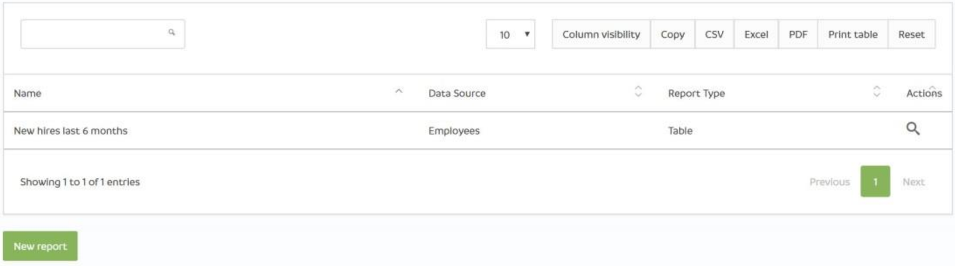


Within this screen there are two main elements – permissions and copy/duplicate.

Permissions (sharing) means you still keep just one copy of your report but multiple people can access the report. You can choose to give those people (or user groups) either view access or editor access or a combination of both. For example, you might want to allow your managers to view the report but then allow any administrator to edit the report:

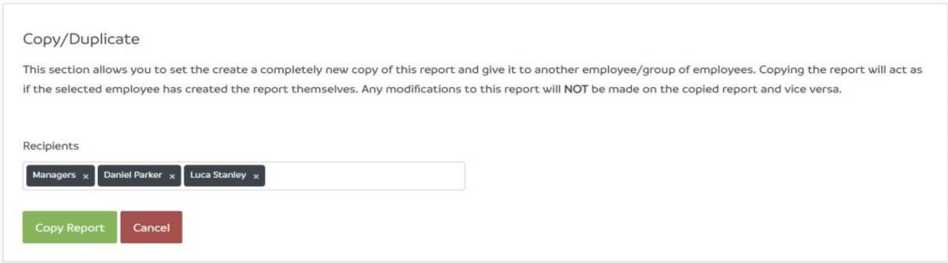


In this example, managers will be able to view your report but will not be able to edit, delete or share the report but administrators will be able to edit and delete and, any change they make, will then be reflected to allow those who are accessing that shared report. The manager would see something like the below with only the ability to view the report:



The other option for sharing is to copy or duplicate your report.

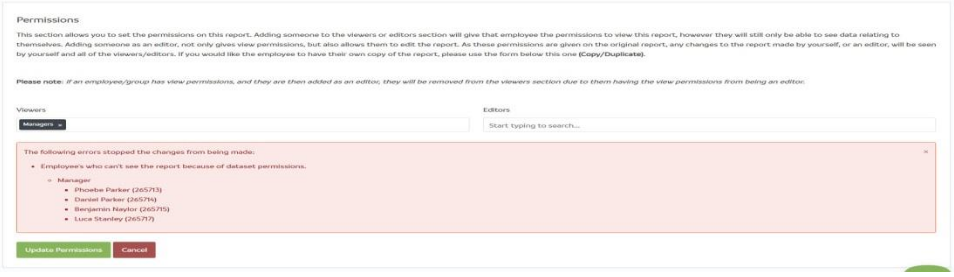
In this instance, your report gets copied in its entirety but it creates a new totally independent version of the report with no connection to the original so either user can make changes to their report without impacting the other users report:



Permissions when sharing

When you create a new report in report builder, you are the only person who can access that report.

If you try to share a report where any of the recipients are not allowed to view that dataset you will get an error as they would never be able to see that report:

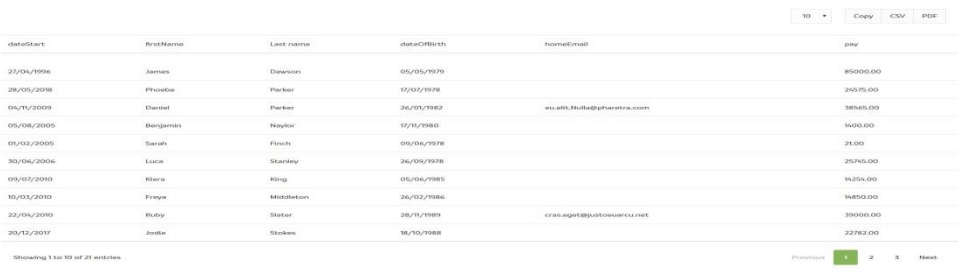


In this instance, we are trying to share the report to managers but managers do not have access to the dataset so this is prevented.

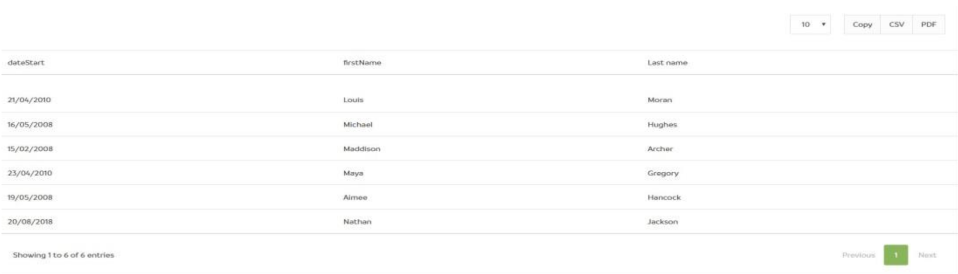
If the people you are sharing the report with have access to the dataset but field restrictions then how this is dealt with depends on the restricted field or fields are used within the report context.

For example, if you are sharing a report with managers and that report has the field salary included but managers are not able to view this, you will still be able to share the report but the manager will not see those restricted fields when they view the report.

Admin view



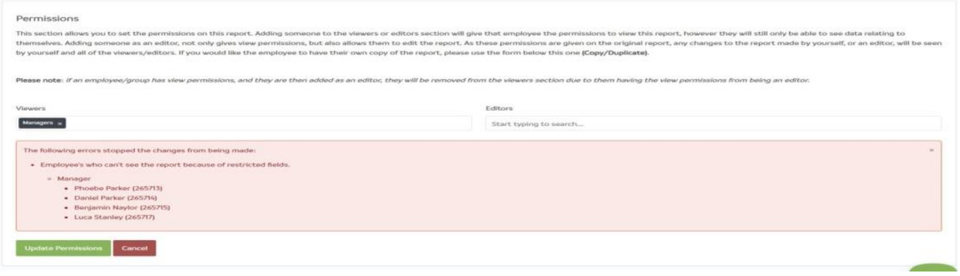
Manager view of same report



As well as being able to see that the manager cannot see the restricted fields (date of birth, home email and pay) this also shows that the manager is only seeing 6 rows where the admin is seeing 21 as the manager only sees those employees to whom they have permission to do so.

The other scenario when sharing reports with restricted fields is when the restricted field is used for a group, aggregate, sort or filter. In this instance, you will not be able to share the report at all as, doing so, would be meaningless as the report would lose all context.

For example, the same manager above who is not allowed to see salary – if you modified your report to add a filter where salary is greater than 20000 then you cannot share this as the report without the filter is not serving the original purpose. In this case, you will get an error when you come to share:



If the manager already had access to the report before you added the salary filter, when they come to try and view the report they will get an error in their copy of the report: