

# ESR Business Intelligence

## Filters

### Introduction

There are a number of ways a filter can be created and applied to an analysis in ESR BI in order to limit the data shown in the results. Filters can be applied directly to columns, created separately within an analysis or even created as standalone objects to be applied to multiple analyses. This guide will step through each type of filter allowing the user to develop and enhance analyses and dashboards.

### Adding a Filter

#### Adding a Filter to an Analysis

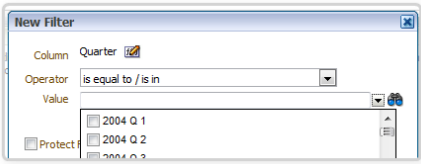
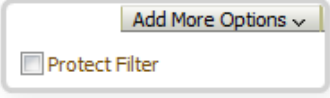
Within the criteria window of an analysis, the lower half of the screen is allocated to managing filters. To create a new filter:

Step No.	Screen	Description
1		Click the filter icon on the toolbar
2		Select one of the displayed columns or select 'More Columns' and select an item to base the filter on.

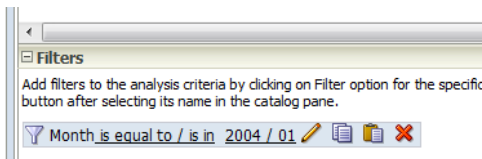


## Electronic Staff Record



3		<p>When setting up the filter you have the option to view or search all the values available.</p>
4		<p>A 'Protect Filter' option is available. Select this option to protect the filter's value from being overridden (by either a prompt value or when the user navigates to another analysis). When the user navigates from one analysis to another analysis, any prompt values that were specified in the first analysis transfer to the second analysis.</p>

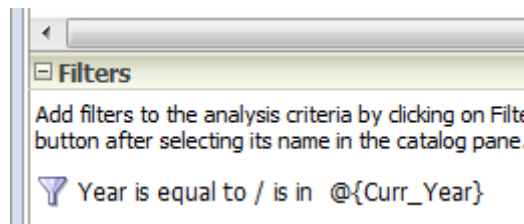
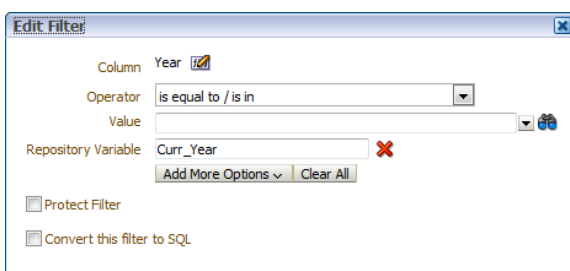
In the example below the filter is restricting records to where the Month equals Jan 2004. Notice hovering the mouse over the filter enables the user to Edit, Copy, Paste and Delete the filter.



## Variable Filters


In some cases it may be more appropriate to create a filter based on a variable rather than a fixed data item. For instance to filter on the current year, the user would not simply enter '2013' because it would require an update each year. In such cases a variable filter could be used.

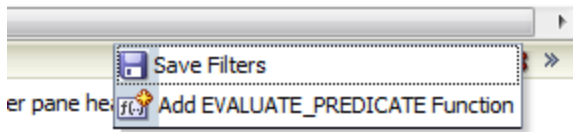
Select the type of variable to use from the 'Add More Options' drop down box (variables are covered in a separate document) and enter the variable name ensuring it is appropriate to the column chosen to filter on. In the example above the Repository Variable CURR\_YEAR could be used as shown below.



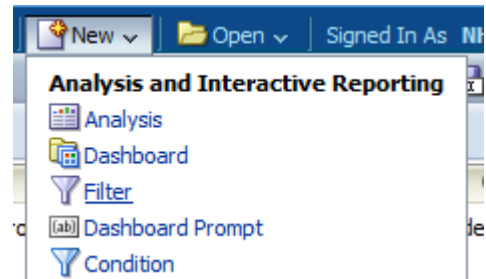
## Saved Filters

Filters can be saved and shared to encourage greater reuse of code and consistency across analyses. There are two ways to create a saved filter. Filters already created as

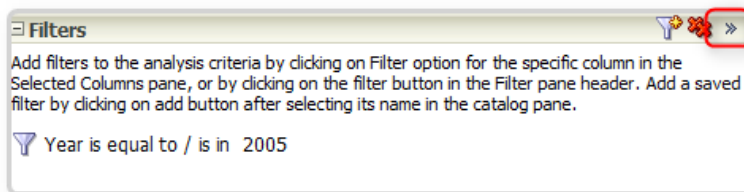
part of an analysis can be saved using the filters menu  to the top right of the filters window:



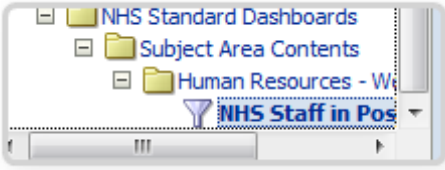
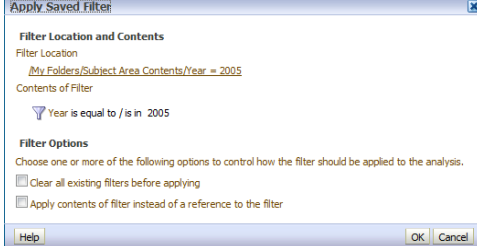
Alternatively a filter can be created under the 'New' menu in the toolbar.

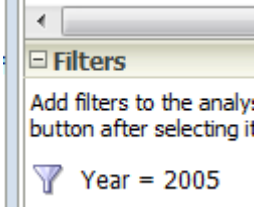



Once the subject area has been selected for the filter, the data item to be filtered should be selected from the Subject Areas window. In the example below the dimension 'Year' has been selected; the Operator 'is equal to / is in' used and the value '2005' selected to return a 'true' result.



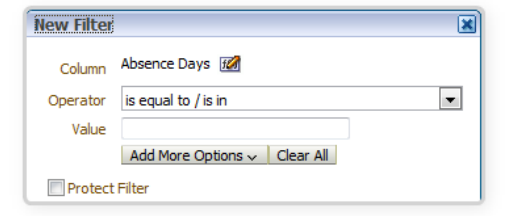
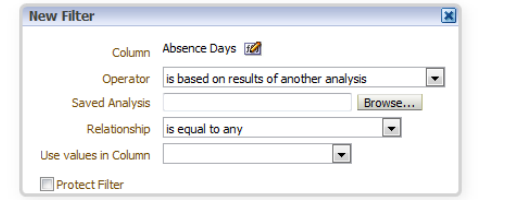
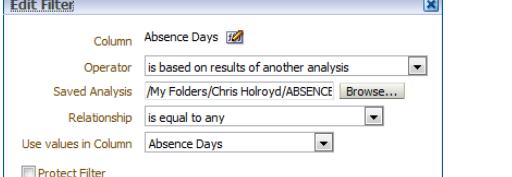
The filter can then be saved using the icon to the top right of the filters section.

Step No.	Screen	Description
1		Open the analysis in the criteria tab and find the filter in the catalog window towards the bottom left of the screen
2		Double click on the filter and apply by clicking OK

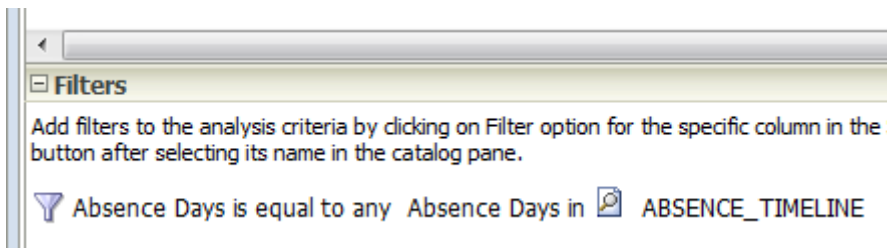
3		The filter will then be applied to the analysis.
4		Saved filters can be opened and edited as normal using the open menu on the toolbar and clicking on the edit icon

## Filters Based on another Analysis

When creating a filter an option exists to base a filter on the results of another analysis. For example a user may have an analysis that returns the top 10 organisations by total number of absence days. The user can then set up a filter in another analysis to only include organisations from that analysis (i.e. in the top 10).

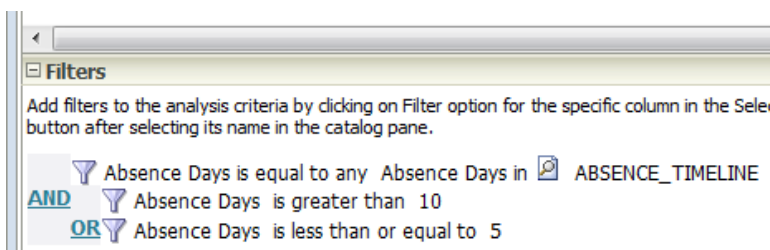
Step No.	Screen	Description
1		Select the column to place the filter against in the normal way
2		In the operator drop down box select 'is based on results of another analysis'
3		Select the Saved Analysis to base the filter on
4		Select the relationship to that analysis and the column from that analysis ensuring the column data is relevant to the column the filter is based on.

In the example shown below the column Absence Days has been filtered where the number of absence days is equal to any Absence Days in the analysis 'Absence Timeline'.

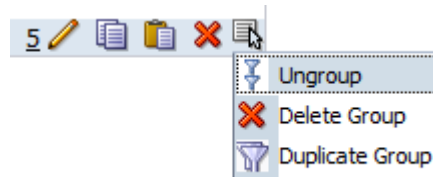


## Nested Filters

By default, where multiple filters are added to an analysis the default operator is AND, meaning both filters must return true to include data. The option exists to create more complex 'Nested' filters by changing the AND operator to OR. In the example below, by clicking on the AND condition for the third of the three filters, the operator has changed to OR.



In order to reverse a nested filter, the option to ungroup is available by hovering the mouse over the filter and selecting Ungroup from the filter options. Operators can be changed against all filters until the correct nesting is achieved. A



*Filters* view is available which shows a simple graphical version of how all the filters are acting on an analysis. This can be included as a view within the Results Tab.

