## **Headline?**

How to use gueries to find the data you need

How to use queries to find data in the stack

How to use queries effectively to find data

**Using queries effectively** 

Tips for effectively using queries

When you use queries, there is a standard set of text that you can enter to find data. In the CAFR Statement Builder (CSB), when you enter a query into a Search field, there are some rules that you should keep in mind. Searching can be done in multiple ways.

Learning how to use queries can help you to efficiently assign and analyze your data.

If you want to enter <u>search</u> criteria specific to <u>search</u> fields <u>inon</u> the form you are on, you can enter <u>the form's</u> column names in the search bar; this text will turn <u>green (see Figure 1 for an example)</u>. If the text does not turn green, check for spelling errors. You can optionally use quotes to find exact data<del>or choose to not use them</del>.

Learning how to use queries can help you to efficiently assign and analyze your data.



Figure 1: Fund Type Not equal to Enterprise funds

You can use an '\_' (underscore) as a wildcard to help you find similar account strings easily. Enter an ' 'for each number in the string where you want to enter a wildcard. For example, if my account strings are formatted: XXX-XXXX-XXXX and Lwant to find all account numbers in a single fund where the second to last segment begins with '4' and the last segment begins with a '6', 'I would enter: Account Number contains 101-\_\_\_-4\_\_-6\_\_\_. When the query is executed, account numbers in only fund 101 with any second segment, and with segments three and four beginning with 4 or 6, respectively, are returned.

Comment [JB1]: Maybe color the font green?

**Comment [JB2]:** What do you think of describing here the meaning of the blue text (comparers) and red text (logic terms) to make it a sort of 'color themed' section?

That might be a way to explain how you were able to add 'Not equal' to the example in your picture and why other text is colored differently in your examples further below. Or maybe comparers and logic terms are pretty well known to users and they don't need an explanation.

\*I see that you did include a 'comparer' table below. Maybe move up to here?

Comment [JB3]: I relocated to above.

Comment [JB4]: I like how you added a picture caption! I might add "figure" or "picture" so you could reference it in the blog text, if necessary.

Comment [JB5]: I feel like this is a rather obvious statement that I entered, but the underscores in your example are not split up into each wildcard segment (impossible to show this) so maybe it's worth keeping just in case (but then again, the difference in horizontal distance is visible and I liked how you showed the default format w/ 'X's in your example). I am fine with keeping or removing.

Comment [JB6]: Nice sentence!

## Account Maintenance Search | Account Number contains 101-\_ \_-4\_\_-6\_\_ More than 1,000 items found Account Number Description Entity Category 101-1211-411-6464 Oth Pur Svs/Train&Ed-Registr TEST Expenditures 101-1211-411-6521 City Sup Svs/Print Shop Chg Expenditures 101-1211-411-6701 Supplies&Mat/Ofc Supplies TEST Expenditures 101-1211-411-6708 Supplies&Mat/Misc TEST Expenditures 101-1211-411-6789 Supplies&Mat/Meals & Refreshments TEST Expenditures 101-1211-411-6795 Supplies&Mat/Oth Chgs-Other TEST Expenditures 101-2101-413-6001 Salaries&Wages/FT/Regular TEST Expenditures 101-2101-413-6002 Salaries&Wages/FT/Overtime TEST Expenditures 101-2101-413-6015 Salaries&Wages/Pay Adjustmts TEST Expenditures 101-2101-413-6021 Salaries&Wages/Addtl Paymts Expenditures TEST 101-2101-413-6101 Empl Bens/FICA/Medicare TEST Expenditures 101-2101-413-6111 Empl Bens/PERA TEST Expenditures 101-2101-413-6121 Empl Bens/Life Ins TEST Expenditures

<u>CUsing complex queries</u> are another way to further pare down the accounts you are working with. <u>AndJust</u> inserting <u>anthe '&'</u> (ampersand) in a complex query allows you to layer multiple search criteria.

Examples of complex queries in Account Maintenance:

- To view all accounts classified as either current or noncurrent assets : Category Contains asset
- To view all asset type accounts residing in Fund 001: 001-& asset
- To view all accounts with a string ending with <u>'530'</u> and belonging to any Category containing the word <u>'Revenue'</u>: Account Number ends with 530 & Category contains Revenue
- To view all 'Receivables' accounts with balances greater than or equal to \$1,000: Description contains Receivables & Ending Balance >= 1000

## Examples of complex queries in Account Groups:

- To view all accounts in fund 100: Account Number starts with 100-
- To view all accounts where the ending balance is \$500 or more, but \$1,000 or less: Ending Balance between 500 and 1000
- To view all accounts where the account Title contains the word 'Payables': Account Title contains payable

Additionally, ‡these are some of the allowable comparers or symbols you can use text for searching:

Equal to (or the symbol =)	Account type equal to L (Account Type = L)
Not equal to	Fund Type not equal to Enterprise funds
Less than (or the symbol	Ending Balance Less than 5000.00 (Ending Balance < 5000.00)
Less than equal to	Ending Balance Less than 5000.00
Greater than	Ending Balance > 5000.00

**Comment [JB7]:** Add a text caption for this picture too?

Comment [JB8]: I think that this table could be moved to under the 'Using complex queries' intro sentence but above the 'Examples of complex queries in Account Maintenance' sentence (in other words, before your examples) since you use green text in the examples.

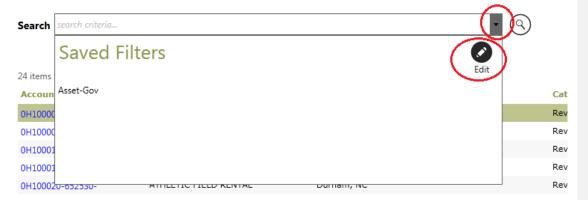
Greater than equal to	Ending Balance >= 5000.00
Between	Ending Balance between 5000.00 and 10000.00
In	Description In "Current Levy"
Starts with	Account Number starts with 101-5000
Ends with	Account Number ends with -1100
Contains	Account Title contains Cash
% and (underscore) are wildcards	Account Number contains -11%5 0-

There are two types of querying: one is "searching" and the other is "filtering." Whether you are searching or filtering is dependent on the form you are on. The table below lists the forms where you can filter or search. You could think of filtering as further paring down results of a search that the application automatically carries out when you open the form. One key difference is that withwill a Search field, you have the option to create and save your favorite queries (called a Filter).

Filter	
	Account Groups
	Equity Maintenance
Search	
	Agency & Entities
	Account Maintenance
	Fund Maintenance
	Adjustments > Budgets
	Adjustments > Cash Flow
	Classifications > Fund Balance
	Classifications > Fund Net Position

Follow these steps to save a Filter. First, celick on the Arrow at the End of the Search bar and select Edit.

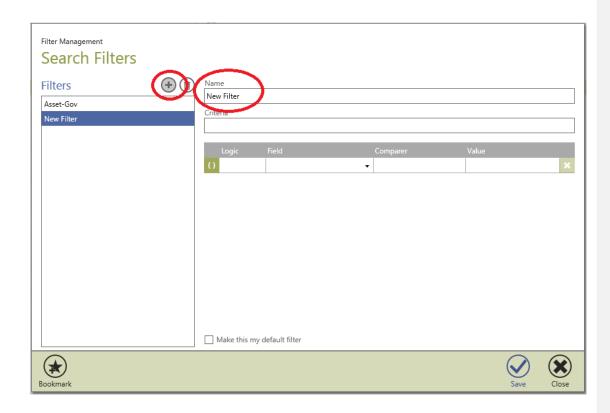
## Account Maintenance



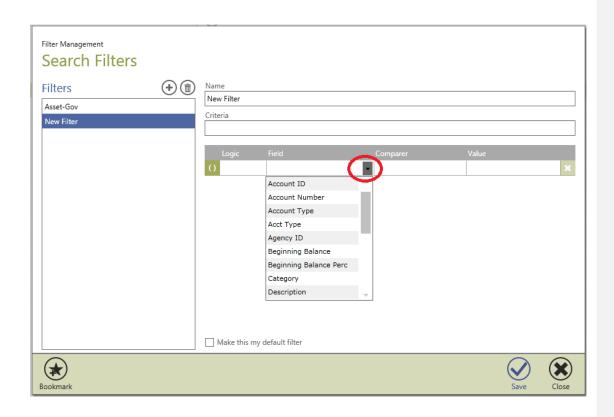
Next, Select the plus sign and enter a name for your search.

Comment [JB9]: Accurate?

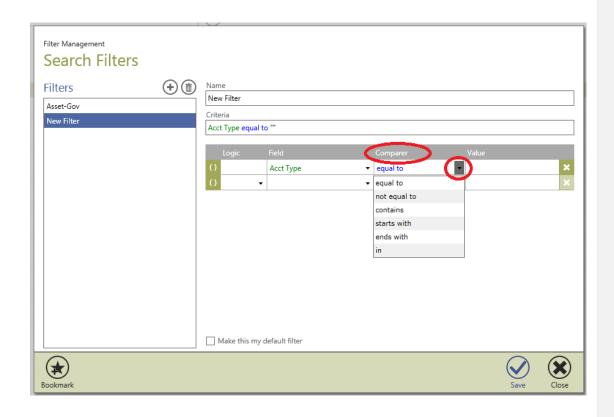
**Comment [JB10]:** Attempted to expain the distinction of a Filter (appearing in your screen shots), vs. filtering vs. searching.



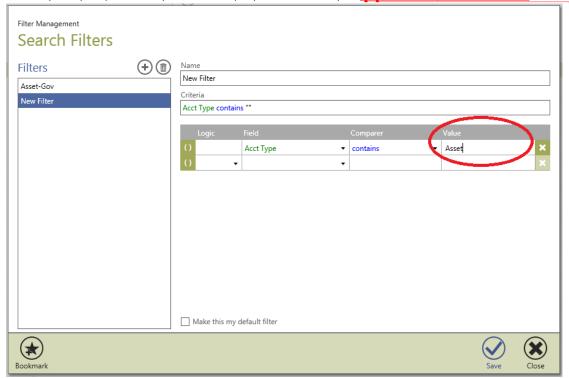
Click on the drop-down selection box for 'Field' to choose the first data element to query for. This will allow you to select more options than just the column names that appear on the form. Once you select a field, this will automatically fill into the Criteria field.



Next, select a comparer from the list to evaluate the data.



Finally, type in the value that you would like to filter on that appears in the field that you selected. Keep adding rows until you have completed your query and save. Optionally, you can select one of your queries to be the default filter so that every time you open the List you are on the query will automatically run <a href="Make this my default filter field">Make this my default filter field</a>).



An unlimited number of Search Filters can be created for each of the forms <u>and that</u> they are available for use <u>only on</u> <u>the respective form where they were created</u>. The filters do not transfer between forms; they are available only on the form that they were created for.

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