

Headline?

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

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

Account Groups

Account Groups Type: Government Wide Account

Account Groups: Add account group

- Group Name: Unassigned (0)
- Accounts payable and other current (111)
- Cash and cash equivalents (115)
- Accrued interest payable (1)
- Receivables (net) (137)
- Due from other funds (4)
- Due from primary government (0)
- Due to other governments (1)

Accounts

Finding an account group (ex Cash...) for the Governmental Activities column on the Government-Wide Statement of Net Position.

Search: Fund Type Not equal to Enterprise funds

Account Number	Account Title	Account Type	Consolidated Fund	Fund Type	Ending Balance
411-0000-101-0000	Cash&Invest/Cash in Pool	A	Capital Projects	Capital projects funds	\$1,612,029.82
411-0000-101-1010	Cash/ Unrealized Gains/Loss	A	Capital Projects	Capital projects funds	(\$12,860.06)
418-0000-101-0000	Cash&Invest/Cash in Pool	A	Capital Projects	Capital projects funds	\$99,878.15
418-0000-101-1010	Cash/ Unrealized Gains/Loss	A	Capital Projects	Capital projects funds	(\$846.31)
420-0000-101-0000	Cash&Invest/Cash in Pool	A	Capital Projects	Capital projects funds	\$5,315,032.21
420-0000-101-1010	Cash/ Unrealized Gains/Loss	A	Capital Projects	Capital projects funds	(\$33,947.49)
422-0000-101-0000	Cash&Invest/Cash in Pool	A	Capital Projects	Capital projects funds	\$697,485.91
422-0000-101-1010	Cash/ Unrealized Gains/Loss	A	Capital Projects	Capital projects funds	(\$5,910.37)
435-0000-101-0000	Cash&Invest/Cash in Pool	A	Capital Projects	Capital projects funds	\$24,291,934.18
435-0000-101-1001	Cash/ General Checking	A	Capital Projects	Capital projects funds	\$322,488.17

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-XXX-XXXX and I want 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

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	TEST	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 Adjustmnts	TEST	Expenditures
101-2101-413-6021	Salaries&Wages/Addtl Paymts	TEST	Expenditures
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

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

Using complex queries are another way to further pare down the accounts you are working with. And ~~just~~ inserting an the '&' (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 '530' and belonging to any Category containing the word 'Revenue': **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 [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 [with a Search field](#), you have the option to create and save your favorite queries (called a Filter).

Comment [JB9]: Accurate?

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

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, click on the Arrow at the End of the Search bar and select Edit.

Account Maintenance

Search

Saved Filters

24 items

Account	Cat
Asset-Gov	Rev
0H10000	Rev
0H10000	Rev
0H10001	Rev
0H10001	Rev
0H100020-652530-	Rev
ATHLETIC FIELD RENTAL	Rev
Durham, NC	Rev

Edit

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

Filter Management

Search Filters

Filters

- Asset-Gov
- New Filter**

Name
New Filter

Criteria

Logic	Field	Comparer	Value
()			

Make this my default filter

Bookmark Save Close

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.

Filter Management


Search Filters

Filters

- Asset-Gov
- New Filter

Name
New Filter

Criteria

Logic	Field	Comparer	Value
()			

- Account ID
- Account Number
- Account Type
- Acct Type
- Agency ID
- Beginning Balance
- Beginning Balance Perc
- Category
- Description

Make this my default filter

Bookmark Save Close

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

Search Filters

Filters



- Asset-Gov
- New Filter

Name
New Filter

Criteria
Acct Type equal to ""

Logic	Field	Comparer	Value	
()	Acct Type	equal to		x
()		equal to		x
		not equal to		
		contains		
		starts with		
		ends with		
		in		

Make this my default filter



Bookmark



Save



Close

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. (✓ **Make this my default filter field**).

Formatted: Font: Wingdings

Formatted: Font: Bold

The screenshot shows the 'Filter Management' window with the title 'Search Filters'. On the left, there is a 'Filters' list containing 'Asset-Gov' and 'New Filter'. The main area has a 'Name' field with 'New Filter', a 'Criteria' field with 'Acct Type contains ""', and a table with columns 'Logic', 'Field', 'Comparator', and 'Value'. The 'Value' column contains 'Asset' and is circled in red. Below the table is a checkbox 'Make this my default filter'. At the bottom, there are 'Bookmark', 'Save', and 'Close' buttons.

Logic	Field	Comparator	Value
()	Acct Type	contains	Asset
()			

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