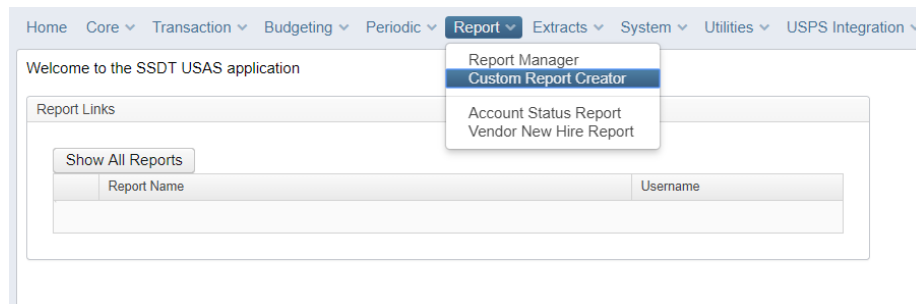


# Custom Report Creator Guide

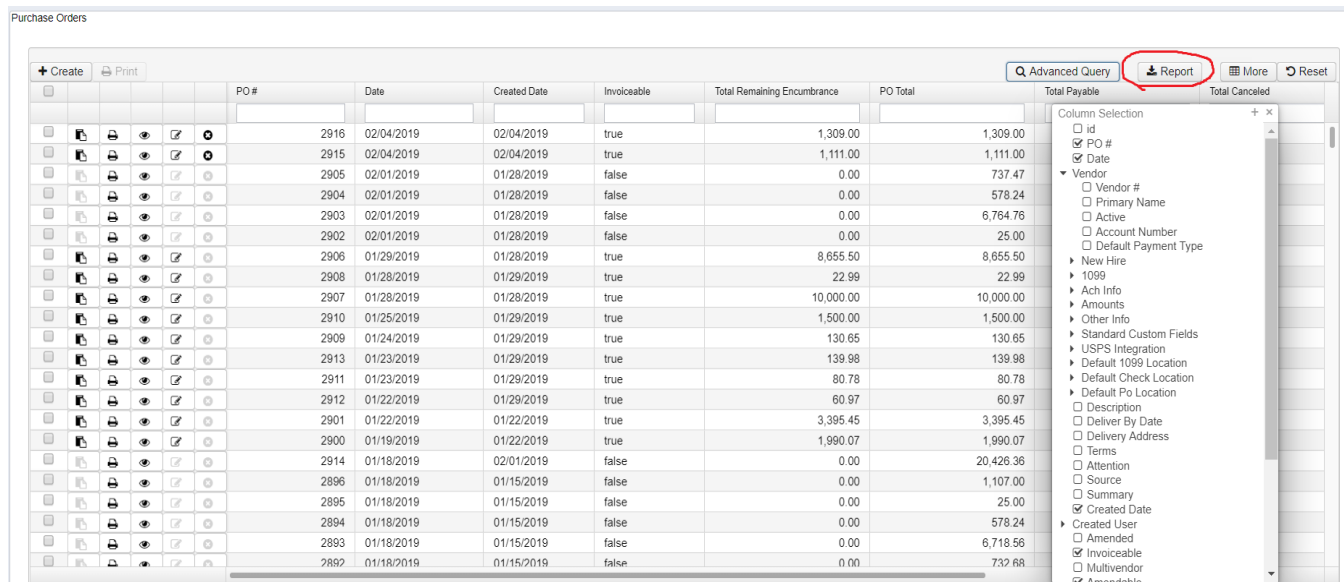
## How to start a new custom report:

There are two ways to start a brand new custom report:

- The first way is to start a new empty report by selecting Custom Report Creator under the Report tab.
  - Here you will select an Object that contains the properties you need.



- The second way is to create a report from a grid.
  - This will create a report using an Object based on what grid you used and will have the properties of that grid already selected.



- Once the Report icon is pressed, save the report and select it from the Report Manager grid.

- Using the Advanced Query to filter data will also apply filters in the Configure Filters tab to the custom report.
- **TIP: This is a good option if you don't know what Object to use, but know what information you need.**

### Properties Menu:

- To add items to the Select Properties tab, either double click the item or drag and drop the item into the Select Properties tab.
- Using your mouse to hover over a property will display the hierarchy it came from and what data type it is.
- **TIP: Some properties can be expanded to show more properties. It's best to minimize properties when your done with them to keep the menu easier to read.**

### Select Properties Tab:

This menu controls the order of the columns, how the columns are sorted, and what functions apply to each column.

- **Display Name:** Name of the property. Hovering over it shows the hierarchy it is from and what data type it is.
  - **Tip: If you have two or more properties of the same name, hovering over the name and seeing where the property came from is a good way to differentiate them.**
- **Sort Priority:** The order in which the report is sorted
  - Zero is the default value and has no sort priority.
  - The lower the value the higher the sort priority.
  - Multiple properties can have the same sort priority.
- **Sort Order:** Choose between ascending and descending order
- **Control Break:** Bolds the value and places it in a header position whenever the value changes.
  - A property must have a sort priority greater than zero to apply a control break.
- **Function:** Applies math functions to numerical data.
  - Options are sum, average, minimum, and maximum.
  - Subtotals get displayed at the end of a control break.
- **Extended Properties:** Contains more functions on how the data is displayed.

- **Remove:** Clicking the X removes the property from the report

### **Extended Properties:**

Contains properties on how the data will be displayed. The sort priority, sort order, control break, and function can be changed in this menu as well as in the Select Properties tab.

**Extended Properties Menu:**

Properties for: account.fullAccountCode + x

✓ Save Cancel

Display Name Full Account Code

☐ Suppressed

Sort Priority 0 ▼

Sort Order Ascending ▼

☐ Suppress Repeating

☐ Control Break

☐ Page Break

Function ▼

Alignment ▼

Column Title

☐ Control Footer Only

☐ Control Header Only

☐ Detail Header Only

Width 0

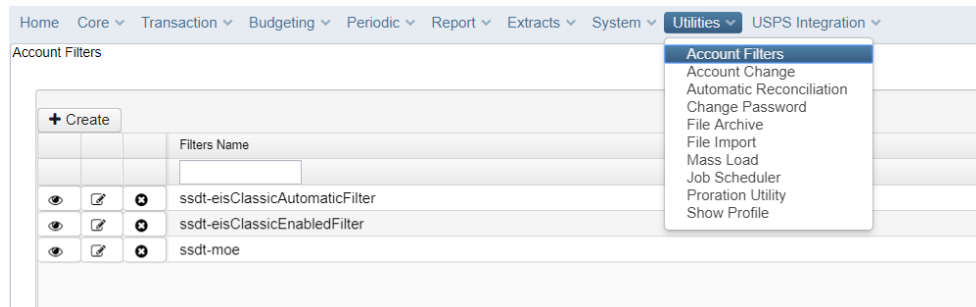
- **Suppressed:** The selected property will not appear in a column when the report is generated.
  - If a sort priority is applied and the property is suppressed, the sort priority will still apply to the report.
  - If a Control Break is applied and the value is suppressed, the control break will still appear in the report.
- **Suppress Repeating:** If a value repeats itself, it will not display anything in its column until it has a different value.
- **Page Break:** Has the same function as control break, but starts a new page when the property changes.
  - Page break and control break can both be checked to apply the same effect
- **Alignment:** changes the position of the data inside a column
  - Options are left, right, center, and justified. Justified automatically chooses a position based on the information around it
- **Column Title:** Edit this to change the columns name.
- **Control Footer Only:** Moves the property to a footer position in bold at the bottom of a control break property. Two criteria must be meant for this function to apply.
  - A control break must be in use. The property with control footer only marked will only appear at the end of another property that has control break marked. If no control break is present, then the data will not get displayed.
  - The property with the control footer only sort priority must equal the property's with the control break's sort priority.

- **Control Header Only:** Moves the value to a header position in bold next to the control break property. Similar to Control Footer Only. The same two criteria must be meant.
  - A control break must be in use. The property with control header only marked will only appear at the end of another property that has control break marked. If no control break is present, then the data will not get displayed.
  - The property with the control header only sort priority must equal the property's with the control break's sort priority.
- **Detail Header Only:** Moves the property to a header position in bold without the use of a control break
  - If a control break is used the property with detail header only marked will appear directly under the control break.
  - Having multiple detail header only marked will place them next to each other in a row.
- **Width:** The size of a column. If a column looks too small make its width larger. Zero is the default value.
  - **TIP: If a column appears like it is not getting larger, change the page orientation to landscape in the Generate Report tab to add more room.**

### Configure Filters Tab:

The Configure Filter tab works similar to the Advanced Query in a grid. This tab lets you filter specific information based on what you enter.

- **Account Filters and the Filter Property (USAS Only):** This is located in the properties menu.
  - 'Filter' is a property that an account filter can be entered in. Account filters are used to filter out TI codes, fund, function, receipt, object, scc, subject, opu, IL, and job codes. Account Filters are located under the Utilities menu.



### Filter Property Location

- **Operations:** The operation function determines what the filter value is looking for.
  - **Equals:** look for one specific value, only one value can be entered.
  - **One of:** look for multiple values; must be separated by commas
  - **Not Equals:** Exclude one specific value, only one value can be entered.
  - **Like:** look for data that begins with the entered value. Only one value can be entered
  - **Contains:** will search for the value anywhere in the field
  - **Between:** range of two values, values must be separated by commas

Display Name	Operation	Filter Value	Remove
Date	Greater or equal	param("startDate","p","Start Date")	X
Date	Less or equal	param("endDate","d","End Date")	X
Type	One of	Disb,Ref,Rec,Payroll,TA_In,TA_Out,Di	X
Filter	Equals	param("filter","Athletics","Filter")	X

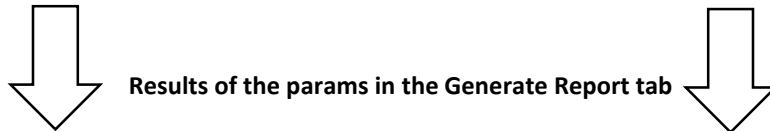
- **Is null:** is blank/empty or has no value in it
  - **Not null:** is not blank/empty and has a value in it
  - **Greater than**
  - **Greater than or equal**
  - **Less than**
  - **Less than or equal**
  - **Not One of:** Exclude a list of values; must be separated by commas
  - **Sort:** To place in order
  - **Type:** the class type
- **Filter Value:** The user has two options when using the Filter Value field. Enter a value directly or build a "param" that asks a user to input a value in the Generate Report tab.
  - Entering a value directly will use the value entered in the field with its assigned operation every time the report is generated

### Value entered in directly

Select Properties	Configure Filters	Generate Report
Display Name	Operation	Filter Value
Date	Greater or equal ▼	01/01/19
<div>Remove</div>		

- Building a param
  - A “param” has three parts to it. The field name, the default value, and the prompt the user will see.
  - Parameter format:
    - param(“fieldname” , “default value” , “user prompt”)
  - Examples:
    - param("startDate","01/01/19","Start Date:")
      - This will put the date “01/01/19” in the text field under the Generate Report tab.
    - param(“endDate”,“,“,“Enter End Date:”)
      - This will have no value in the text field under the Generate Report tab.

Select Properties	Configure Filters	Generate Report
Display Name	Operation	Filter Value
Date	Greater or equal ▼	param("startDate","01/01/19","Start Da
Date	Less or equal ▼	param("endDate",“,“,“End Date”)
Filter	Equals ▼	param("filter",“,“,“Filter”)



### Results of the params in the Generate Report tab

Select Object ActivityLedger ▼	Restore Findet_Sorted_By_Fund_and_SCC ▼	Import Report	Save As Findet_Sorted_By_Fund_and_SCC	Save Report	Report Manager
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Select Properties	Configure Filters	Generate Report
Orientation: Landscape ▼	Name: Principal High School Financial Det	<input type="checkbox"/> Summary Report
Start Date	01/01/19	
End Date		
Filter		

- Another option for the filter value field is to enter nothing at all. This only works on operations that require no input. These are “Is Null”, “Not Null”, and “Sort”.
- **Match Any of following:**
  - Properties in the Configure Filters tab use the logical ‘AND’ operator. This means all of the filters’ operations must be met to appear on the report.
  - The Match Any function uses the logical ‘OR’ operator. This means only one of the operations must be met to appear on the report.
  - To use the Match Any function, first click the Show Expert Query arrow to the right of the Remove column.

Custom Report Creator

Select Object: ActivityLedger | Restore: training report 1 | Import Report | Save As: training report 1 | Save Report | Report Manager

Properties: Account, Action, Amount, As Of Period, Cash Account, Active, All Amounts Zero, Code, Account Valid, Fund, Has Validation Messages, Id, Soc, Transaction Indicator, Version, Current Encumbrance, Current Fund Balance, Current Payables, Current Pre Encumbrance, Current Remaining Balance, Current Unencumbered Balance, Date Range

Display Name	Operation	Filter Value	Remove
Date	Greater or equal	01/01/19	✕
Date	Less or equal	01/31/19	✕
Fund	Equals	001	✕
Match Any of following :			✕

Load Saved Query | Enter Query Name | Save Query

- Next, type the following in the white space without the quotes: “matchAny{ }” and click the Hide Expert Query arrow.

Select Properties | Configure Filters | Generate Report

Display Name	Operation	Filter Value	Remove
Date	Greater or equal	01/01/19	✕
Date	Less or equal	01/31/19	✕
Fund	Equals	001	✕

date.ge 01/01/19  
date.le 01/31/19  
cashAccount.code.fund.eq 001  
matchAny()

Load Saved Query | Enter Query Name | Save Query

- The “Match Any of following:” will appear. Any property underneath the Match Any function will be placed inside the function and will use the ‘OR’ operator.

- Example: This filter will pull data that is from Fund 001 **AND** between the dates Jan. 1 2019 through Jan. 31 2019 **AND** has either MTD Expended **OR** YTD Expended greater than zero.

## Generate Report Tab:

The generate report tab has three sub tabs to choose from. The Report Options tab, Query Options tab, and the Sort Options tab. You can navigate between the tabs by clicking on them or clicking on the arrows above the Generate Report button.

- **Report Options Tab:**

- **Format:** The file type that gets created and downloaded when the report is generated
- **Page Size:** Options are Letter, legal, Halfletter, Note, and Ledger
- **Orientation:** Page layout can be either Portrait or Landscape
- **Name:** Title that appears in the top right corner of the report
- **Summary Report:** Collapses properties and displays the end total sum, average, min, or max function.
  - Example: A report listing all funds with all of their purchases with the summary option checked will instead list all funds with the total sum of all their purchases and not list each of their individual purchases.

		Initial Cash	MTD Received	FYTD Received
Full Account Code:	001-0000	\$ 2,711,626.09	\$ 0.00	\$ 2,860,406.17
Full Account Code:	001-9194	\$ 0.00	\$ 0.00	\$ 0.00
Full Account Code:	001-9214	\$ 0.00	\$ 0.00	\$ 0.00
Full Account Code:	001-9412	\$ 0.00	\$ 0.00	\$ 0.00
Full Account Code:	002-0000	\$ 33,156.00	\$ 0.00	\$ 6,031.32
Full Account Code:	002-9006	\$ 0.00	\$ 0.00	\$ 109,156.76
Full Account Code:	002-9007	\$ 47,635.62	\$ 0.00	\$ 49,158.57
Full Account Code:	003-0000	\$ 0.00	\$ 0.00	\$ 0.00
Full Account Code:	004-0000	\$ 0.00	\$ 0.00	\$ 0.00
Full Account Code:	004-9010	\$ 0.00	\$ 0.00	\$ 0.00

- **Show Report Options:** Enabling this will option will have the first page of a report list all options selected in the Report Options tab and what parameters were entered in the Query Parameters tab.
- **Query Options:** If a param was created in Configure Filters Tab, then this is where values get inputted by the user.



- **Sort Options:** This tab can change the sort order and enable/disable control breaks of properties on reports.
  - This option isn't that useful for creating custom reports because sort orders can be changed from the Select Properties tab. It is most useful when generating a report from the Report Manager Grid and you want to change the sorting of a report without opening and editing the entire report.
  - To change the sort order of a property, drag and drop a property in the Selected Properties menu.
    - Example: Dragging the Object Level property to the Selected Properties and enabling the control break will change this budget summary to now be sorted and subtotaled by cash account code and by object level.

Generate Report

SSDT Budget Summary

Save and Recall Most Recent

Report Options Query Options **Sort Options**

**Sort Options**

Sortable Properties		Selected Properties			
<input type="checkbox"/>	Label	<input type="checkbox"/>	Label		
<input type="checkbox"/>	Percent Expense	<input type="checkbox"/>	Full Account Code	<input checked="" type="checkbox"/> Ascending	<input checked="" type="checkbox"/> Control Break <input type="checkbox"/> Page Break
<input type="checkbox"/>	Fund	<input type="checkbox"/>	Full Account Code	<input checked="" type="checkbox"/> Ascending	<input type="checkbox"/> Control Break <input type="checkbox"/> Page Break
<input type="checkbox"/>	Func	<input type="checkbox"/>	Object One Digit ...	<input checked="" type="checkbox"/> Ascending	<input checked="" type="checkbox"/> Control Break <input type="checkbox"/> Page Break
<input type="checkbox"/>	Function One Digit L				
<input type="checkbox"/>	Function Two Digit L				
<input type="checkbox"/>	Object				
<input type="checkbox"/>	SCC				
<input type="checkbox"/>	Subject				
<input type="checkbox"/>	Subject Two Digit L				
<input type="checkbox"/>	OPU				
<input type="checkbox"/>	Opu One Digit Leve				
<input type="checkbox"/>	Job				
<input type="checkbox"/>	IL				

← →

Generate Report

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- If the Ascending box is not checked then it will sort in descending order.
- **Note: In order for a property to show up in the sortable properties menu, it must be added to the report in the Report Options tab.**
- You can save new sort options you have selected into the save and recall tool so they can be used again.