Cash Control Report / Header Formatting (Portrait) – Start to Finish

This section follows the standard approach to report design detailed in "Basic Concepts" to create a report showing Cash balances for daily cash control. Here is summary information (following the conventions detailed in "Basic Concepts":

Item	Name	Filters	Objects/Variables
Document	Accounting – Daily Cash Control		
Universe(s)	FIN-General Accounting		
Query(s)	FIN-GA Data	Department InList Prompt	Filter objects (& names)
		Fiscal Year = Prompt	Fund (/Name)
		Accounting Period <= Prompt	Closing Classification
		Fund Type NotInList	Cabinet (/Name)
		0100;0200;1100;1200	Posting Amount
		Closing Classification = 5	
		(Cash Carry Forward)	
Report(s)	Daily Cash	None	Prompt variables
	For Export		AMT-Cash measure

I. Query Design

A. **Name the report and Save it** – The best universe for a Cash report at this time is the FIN-General Accounting universe. Since we need a query with at least one object in it to save our initial report, the first step is to create a query against FIN-General Accounting.

1. Drag the [Department] and [Department Name] objects (from COA-Organization > Organization-Centralized view) to Result Objects. Rename your query tab to "FIN-GA Data".
2. Use the "Close" button to "Close and apply changes". (This takes you to the Report Panel.)
3. Click the "Save" button to save the report to your "My Favorites" folder with a meaningful name (such as "Accounting – Daily Cash Control).

PAUSE & REFLECT: Why did we save a query with only one object?

B. **FIN-General Accounting universe query –** Edit the FIN-GA query, pulling the following objects:

1. *Financial Reporting Periods–* Pull the following objects:

Description	Sub-Class	Objects
Accounting Period	Accounting Period	Accounting Period
Fiscal Year	Fiscal Year	Fiscal Year

2. *COA - Fund Accounting class* – Pull the following objects:

Description	Sub-Class	Objects
Fund	Fund	Fund
		Fund Name
Fund Type	Fund	Fund Type
	Fund Hierarchy	Fund Type Name

3. *COA – Organization class* – Pull the following objects:

Description	Sub-Class	Objects
Cabinet	Organization - Centralized view	Cabinet
		Cabinet Name
Department	Organization - Centralized view	Department
		Department Name

4. *Posting Attributes class* – Pull the following objects:

Description	Sub-Class	Objects
Closing Classification	Posting Code	Closing Classification

5. *Accounting Ledger Measures class* – Since our query only includes "Basic Accounting" objects, we can use the "Basic Accounting Ledger". Pull the following objects:

| Description	Sub-Class	Objects
Cash Amount	Accounting Ledger Measures	Posting Amount
	Basic Accounting Ledger	

6. *Query Filters* – Drag the following objects from Result Objects to Query Filters to create filters:

Object	Operator	Values	Optional?	Default Values
Department	InList	Prompt: Enter Department(s):	No	
Fiscal Year	Equal to	Prompt: Enter Fiscal Year:	No	2017 (or current FY)
Accounting Period	Less Than or Equal to	Prompt: Enter Accounting Period:	No	
Fund Type	NotInList	0100;0200;1100;1200		
Closing Classification	Equal to	5 (= Cash)		

7. *Prompt Order* – Open Query Properties and arrange the prompts in the order shown above.

PAUSE & REFLECT: *Why are other objects such as Function and Object not included?*

C. **Other universe queries and merging** – No other queries are required for a Daily Cash Control report.
D. **Save the report** – Once again, use the "Close" button and choose "Apply changes and close", then save the report with the "Save" button.
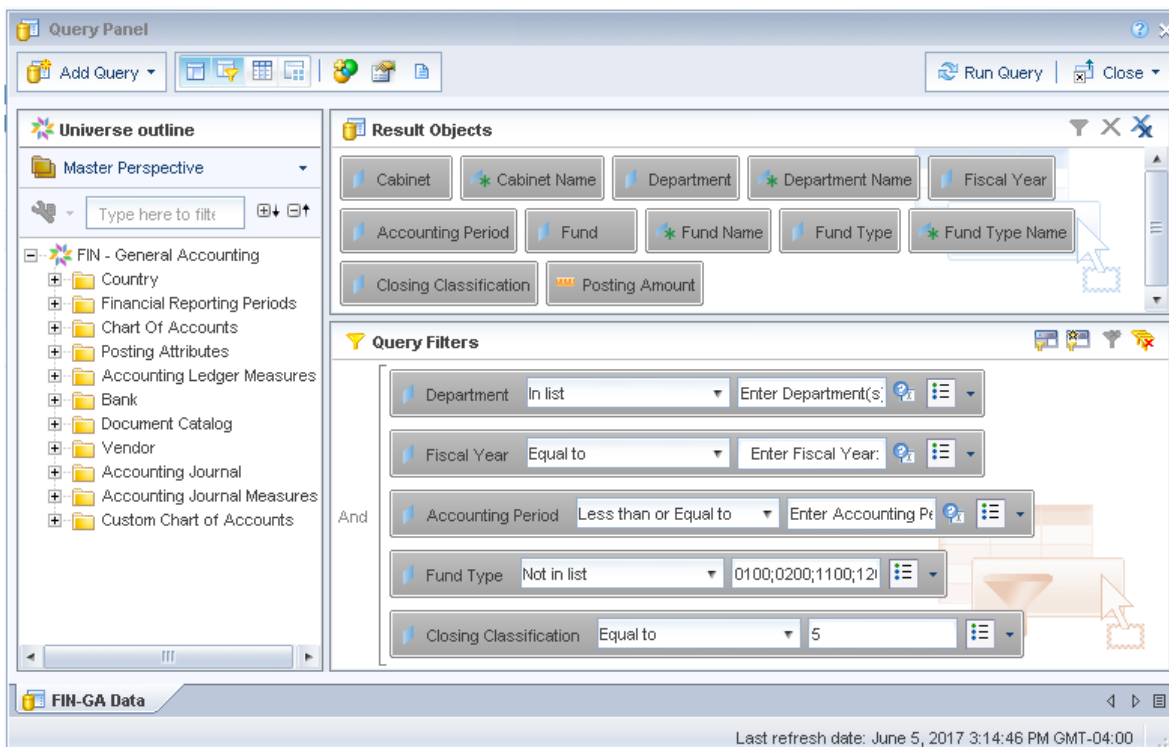
II. Report Design – Refresh the report as needed while you design your report.

A. **Default report design** – Make the following changes to the generated report:
   1. Delete the title box and the table block.
   2. Rename the report tab from "Report 1" to "For Export".
   3. Save the report.

B. **Add table block** – Add the table block back as follows:
   1. Hold your "Ctrl" key down while you select the following objects, then drag them into the report and arrange them in the following order (add "Name" objects as desired):

Objects for Table Block
Fund Type
Department
Fund
Posting Amount

   Tip: For reports having only one query, the table is automatically created with the objects in the order in which you select them.

   2. Format the table to set the position to the top of the page (i.e., Horizontal Position = 0, Vertical Position = 0).

C. **Report & Table filters** – All filtering for this report was accomplished by the query filters. There is no need for report or table filters.

D. **Report data & variables** – Make sure the data is complete and totals are correct. **Tip:** A quick way to compare amounts within the report is to duplicate it, then add breaks and column totals.
   1. To make the report easier to understand, create a measure variable named "AMT-Cash" and set it equal to [Posting Amount]. Replace [Posting Amount] in the table with [AMT-Cash], update the column heading, then save the report.
   2. If Java is available, with the [AMT-Cash] column selected, use the "Custom" button (in the "Numbers" section of the "Format" tab) to create a custom number format:
      a. Choose "Custom" from the list on the left.
      b. Click the "Custom" button (below the list).
      c. Enter the following values:

Positive	**= #,##0.00**
Negative	**= (#,##0.00)**
Equal to zero	**= 0.00**
Undefined	**= 0.00**

      d. Confirm that the "Sample" reads as follows:
         1,234.57; (1,234.57); 0.00; 0.00
      e. Click OK to apply this format to your [AMT-Cash].
   3. Spot-check the cash amounts in the table, comparing them with the Cash Balance amounts on the eMARS inquiry pages for Cash (CBALSQ and CBALDQ).
   4. Right-click the "For Export" report tab and choose "Duplicate Report". Rename the new copy "Daily Cash" and make it the first report tab.

PAUSE & REFLECT: Why is a Custom number format defined rather than using an existing one?

E. *(optional)* **Report headers and footers** – Follow these steps to create a header for your "Daily Cash" report tab:

1. *Set Page Orientation and Margins* – Follow these steps to set up your page:
   a. In the "Display" section of the "Page Setup" tab in the toolbars, choose the "Page" button.
   b. In the "Page" section of the "Page Setup" tab, choose "Portrait" as the orientation and set the paper size to "Letter".
   c. In the "Margins" section, set the margins to 0.25" (= 0.6 cm) on each side. **Tip:** When typing in changes to settings in the toolbars, the changes will not take effect until the "Return" key on the keyboard is pressed while the cursor is in the field.
   d. Hover over the Header area of the page, then drag the bottom of the Header box down to create enough space in which to work on the header.

2. *Left Table of Header* – Follow these steps to create the left table of the header:
   a. From the "Report Element" tab in the toolbars, under "Table", select the "Insert Horizontal Table" button.
   b. Click in the upper left corner of the header to create a new horizontal table.
   c. Right-click the edge of the table to select it, then choose "Format Table…".
   d. In the "Layout" section, set the Relative Position of the table to the upper left corner of the page: Horizontal Position = 0, Vertical Position = 0.
   e. Enter labels and format your table to appear as follows(there are two columns, but the second column is empty at this stage):

Report ID:	
Dept(s):	
FY:	
APD:	

3. *Right Table of Header* – Follow these steps to create the left table of the header:
   a. Select the left table, then click the "Copy" button (or right-click and choose "Copy").
   b. Right-click in the middle of the header and select "Paste" (or click the "Paste" button).
   c. Enter labels and format your table to appear as follows (there are two columns, but the second column is empty at this stage; the font is Ariel 9pt, bolded):

Page:	
Run Date:	
Run Time:	
Execution:	

   d. If necessary, drag the table inside the Header boundaries, then right-click it and select "Format Table…".
   e. In the "Layout" section, set the Relative Position of the table to the top center of the page: Horizontal Position = 3.25" (= 8.25 cm), Vertical Position = 0. (This will allow you to adjust the columns before setting the permanent Horizontal Position.)

4. *Formulas for Tables* – Follow these steps to populate the second column cells in each table:
    a. *Create* the following variables:

    HDR-Report ID = "CASH"
    PROMPT-Dept = UserResponse("Enter Department(s):")
    PROMPT-FY = FormatNumber(ToNumber(UserResponse("Enter Fiscal Year:"); "####"); "####")
    PROMPT-APD = UserResponse("Enter Accounting Period:")
    HDR-Pages = Page()+" of "+NumberOfPages()
    HDR-Run Date = FormatDate(LastExecutionDate();"MM/dd/yyyy")
    HDR-Run Time = FormatDate(LastExecutionDate();"hh:mm:ss A")
    HDR-Exec Time = FormatNumber(LastExecutionDuration();"###0.00")+" sec"

PAUSE & REFLECT: *What are advantages and disadvantages of using variables for header values?*

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    b. Drag each of the variables into the second column cell corresponding to its name.

Report ID:	CASH		Page:	1 of 1
Dept(s):	785		Run Date:	06/05/2017
FY:	2017		Run Time:	03:22:10 PM
APD:	8		Execution:	2.00 sec

5. *Set Column Widths* – In each table, use the "Size" section of the "Format" tab in the toolbars to set the height and width for the rows and columns. The rows should be 0.2" (= 0.55 cm). The first column of the first table should be 0.75" (= 1.9 cm). The second column of the first table should be 1.65" (= 4.2 cm). The first column of the second table should be 1" (= 2.6 cm). The second column of the second table should be 1.2" (= 3 cm). **Tip:** Right-justifying the columns of the second table will make your report more visually appealing.
6. *Position Second Table* – Now that the column widths are set, you can move the second table to its permanent position. In the "Layout" section, set the Relative Position of the table to the top right of the page: Horizontal Position = 5.6" (= 14.2 cm), Vertical Position = 0.
7. *Report Title Block* – Follow these steps to create a title for your report:
    a. From the "Report Element" tab in the toolbars, under "Table", select the "Insert Vertical Table" button.
    b. Click in the upper left corner of the header to create a new vertical table.
    c. Right-click the edge of the table to select it, then choose "Format Table…".
    d. In the "Layout" section, set the Relative Position of the table to the upper left corner of the page: Horizontal Position = 2.44" (= 6.2 cm), Vertical Position = 0.
    e. Enter labels and format your table to appear as follows(there is only one column in this table, and the font is Ariel 12pt, bolded):

Commonwealth of Kentucky
eMARS Financial System
Daily Cash Control Report

    f. Use the "Size" section of the "Format" tab in the toolbars to set the height of the rows to 0.25" (= 0.64 cm) and the width of the column to 3.15" (= 8 cm).

8. *Set Header Height* – In the "Header" section of the "Format" tab in the toolbars, set the Height for the header to 1" (= 2.54 cm).

F. **Sections** – Follow these steps to create sections on [Cabinet] and [Department]:
   1. Add [Cabinet] to your table (before [Department]).
   2. Right-click the Cabinet column and choose "Set as section".
   3. Replace the function in the Cabinet section cell with:

      =[Cabinet]+ " – "+ [Cabinet Name]
   4. Right-click the Department column and choose "Set as section".
   5. Replace the function in the Department section cell with:

      =[Department]+" – " +[Department Name]
   6. Format the cells for each section using Ariel 10pt black bold font, and adjust the widths. **Tip:** You can format both cells at once by holding down your "Ctrl" key while selecting them.
   7. Use the Document Structure and Filters tab in the left panel to navigate to the Document section. Right-click it and choose "Format section…".
   8. In the "Layout" section of the "Format Section" window, set Minimum Top Offset = 0 and Top Margin = 0.
   9. Repeat the previous two steps for the Fund Type section, the Department cell, and the Format Type cell. **Tip:** When setting the position of the cells, choose "Format cell…", go to the Layout section, and set the two Position settings to 0.

G. **Breaks** – Create a break on [Fund Type] by right-clicking the object column and choosing "Break > Add Break". Use the "Sum" button (under "Functions" on the "Analysis" tab) to add break totals. Use the "Numbers" options (on the "Format" tab) to format the totals consistently with the other numbers.
H. **Totals** – No additional totals are required for this report.
I. **Other reports** – No additional report tabs are required for this report.
J. **Save, review, correct, purge and publish**– Complete formatting of your report according to the standards and conventions for your organization. Normally, you would be designing this report for other users, so in addition to keeping a copy of the report in your "My Favorites" folder (or a sub-folder), you would want to put a purged copy in your Agency folder (or sub-folder). Remember, your Agency folder is under your cabinet number on the "Folders" tab under Public Folders > eMARS Financial > eMARS Agency Reports.

III. For Review and Discussion

    A. Why are Fund Types 0100, 0200, 1100 and 1200 not included in this Cash Control report?

    B. What are some explanations for discrepancies between the amounts shown in a Cash Control report and the amounts shown on the Cash Inquiry pages in eMARS?

    C. Why are the Cabinet and Department sections useful, when the Department prompt value is already included in the report header?

    D. How could the [AMT-Cash] values be formatted as described without defining a Custom format?