Mississippi Management and Reporting System

Department of Finance and Administration

MMRS MASH/Training Materials		
4103	MERLIN Building an Ad Hoc Report	Revision Date: 11/2011
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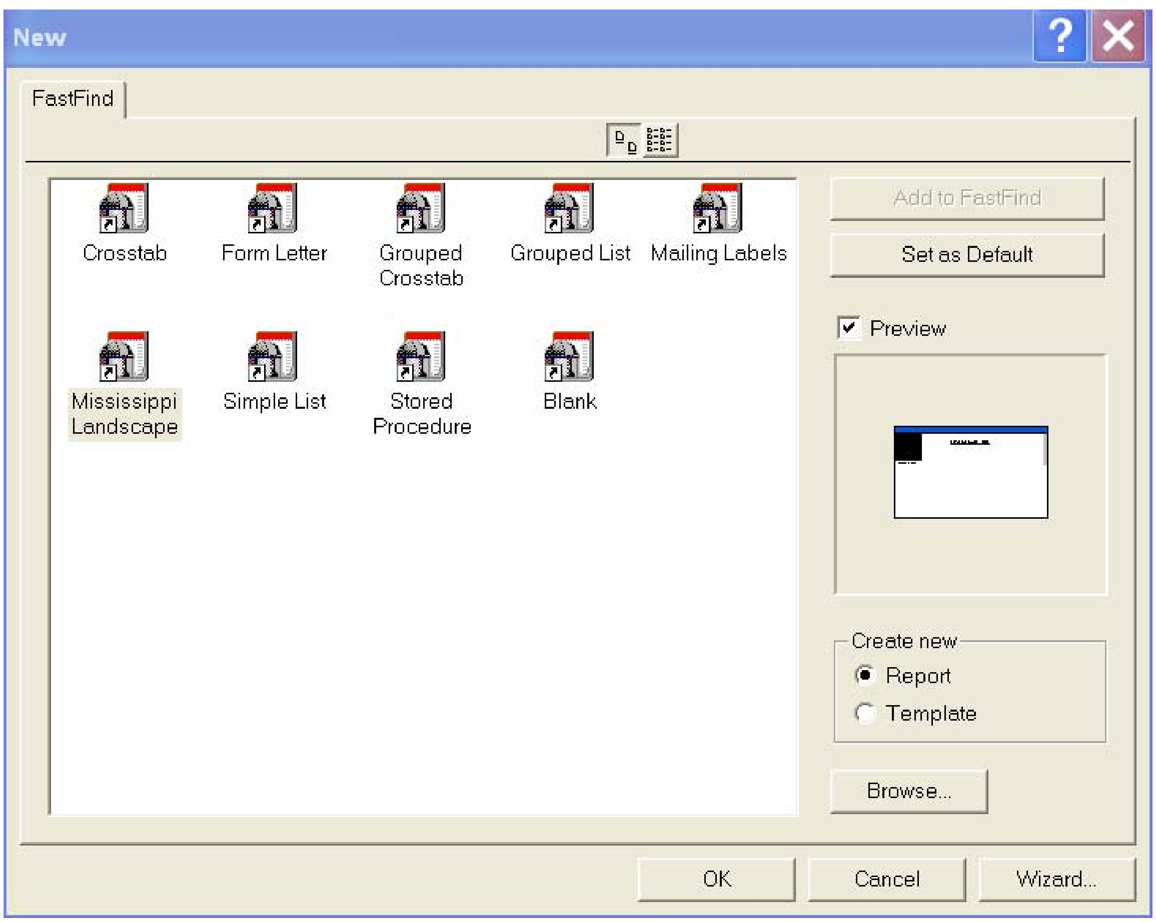
Building an Ad Hoc Report

There might be times when there is not a standard report that satisfies your reporting needs. In that case, you will need to build an ad hoc report. You will start by creating a new report and adding the columns of your choice from the catalog. You will then have the ability to set it up with your own groupings, filters, and format.

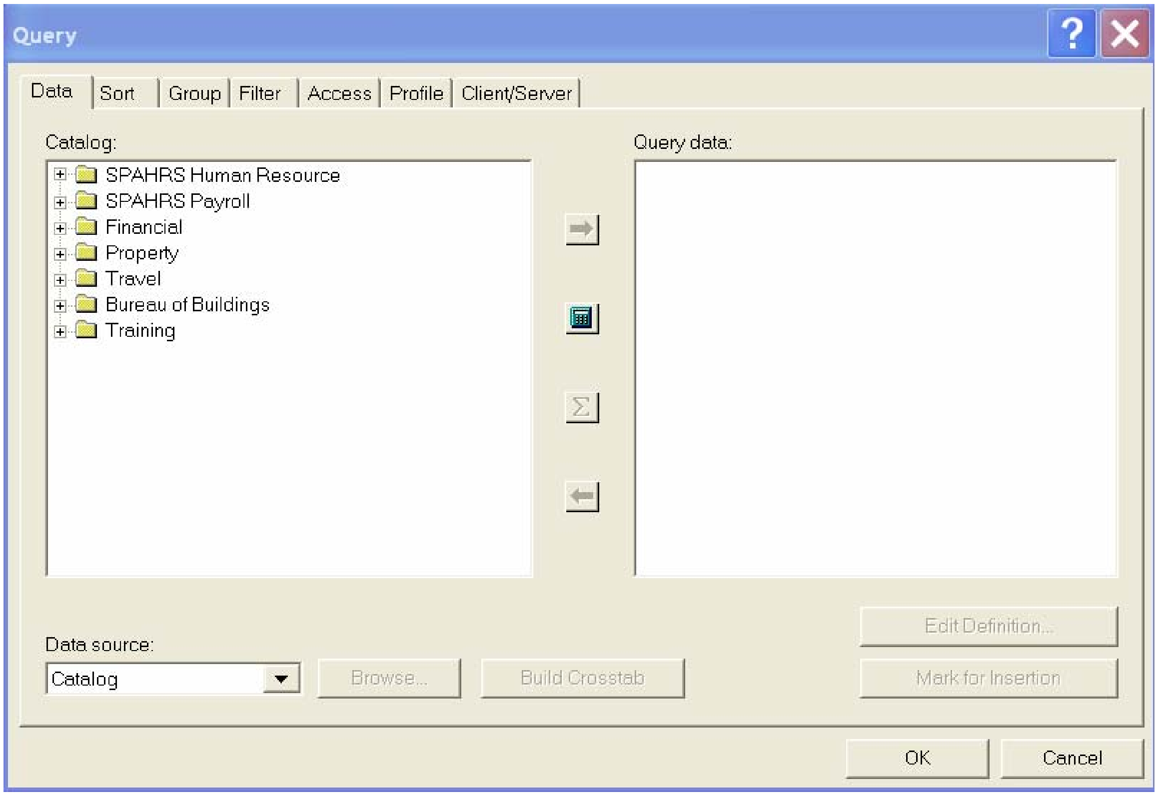
Creating a New List Report

A List report is a report made up of any number of columns. New reports can be created by clicking the *New* button on the PowerBar. It opens the default template which includes the State of Mississippi logo and is set up to print in landscape format

When a new report is created by selecting the *File/New* command, a Palette window opens showing six templates. Templates can provide a head start with both the contents and the layout of a report. With the Impromptu templates, a user can simply add the appropriate data to the template to create a report. Several basic templates have been designed specifically for the State of Mississippi. The default template on the palette is labeled *Mississippi Landscape*. The *Mississippi Portrait* template also contains the log, but defaults to a vertical orientation. The *List Report* template is blank (without a logo, header, or footers).

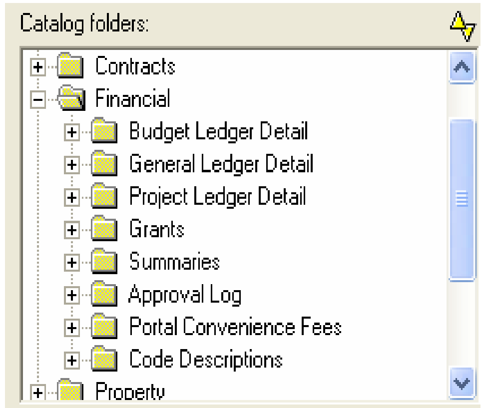


After creating a new report, the *Query* Dialog box opens automatically. The *Catalog* box below shows the highest-level folders contained within the catalog.

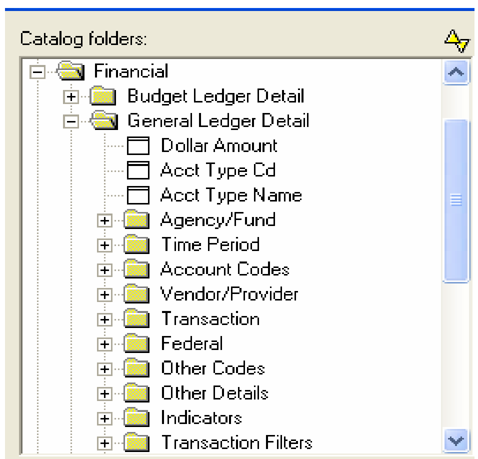


Users can now open many levels of embedded folders in the *Catalog* box to see the data items available for the report.

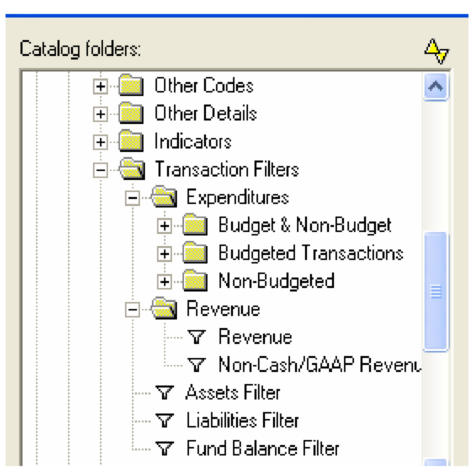
- **Folders**--meaningful groupings of information (e.g. Budget Ledger Details, General Ledger Details)



- **Columns** - individual items of information (e.g. Agency Name, Agency Number, Fund Name, Fund Number)



- **Conditions** - saved condition (e.g. Encumbrances) and calculation (e.g. Budgeted and Non-Budgeted Expenditures) specifications



The Training Catalog

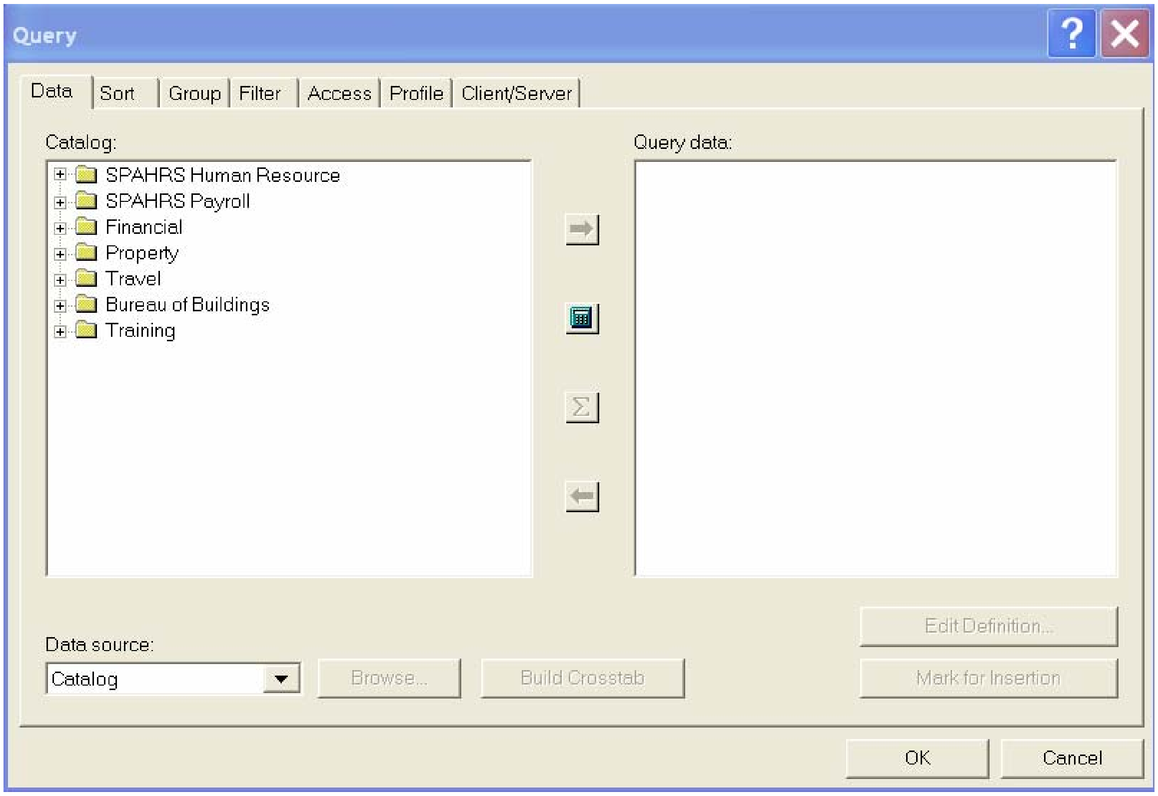
During your Impromptu training, we will focus on financial information in the *Training* section of the catalog. It is divided into three main folders-- *Fund/Object, Vendor/Fund/Major Object and Code Tables*. As you examine the hierarchy, you will see layers of folders and within those folders, columns you will want to use for your reports. Only columns at the very highest level are included in the following description.

- **Folder : Training**
  - **Folder** : Fund/Object
    - **Folder** : Agency/Fund
    - **Folder** : Time
    - **Folder** : Account Codes
    - Org Code
    - Activity Code
    - Bud Function Code
    - **Folder** : Dollar Amounts
      - **Folder:** Expenditures
      - **Folder:** Encumbrances
      - **Folder:** Pre Encumbrances
    - Data Source
  - **Folder** : Vendor/Fund/Major Object
    - **Folder** : Agency/Fund
    - **Folder** : Time
    - **Folder** : Account Codes
    - **Folder** : Vendor
      - **Folder:** Vendor Addtl Info
        - **Folder:** Vendor Minority Certifications
    - **Folder** : Dollar Amounts
      - **Folder:** Expenditures
      - **Folder:** Encumbrances
      - **Folder:** Pre Encumbrances
    - Data Source
  - **Folder :** Code Tables
    - **Folder :** Agency Info (SAAS)
      - **Folder :** Address
    - **Folder :** Provider Information

Choosing the Data

The *Data* tab in the Query Dialog box displays the contents of the catalog from which you can select the data items you want in your query. You can select data items in the *Catalog* box and add them to the *Query Data* box by:

- Dragging columns to the Query Data box
- Selecting columns and choosing the Add button, or
- Double-clicking a column in the Catalog box



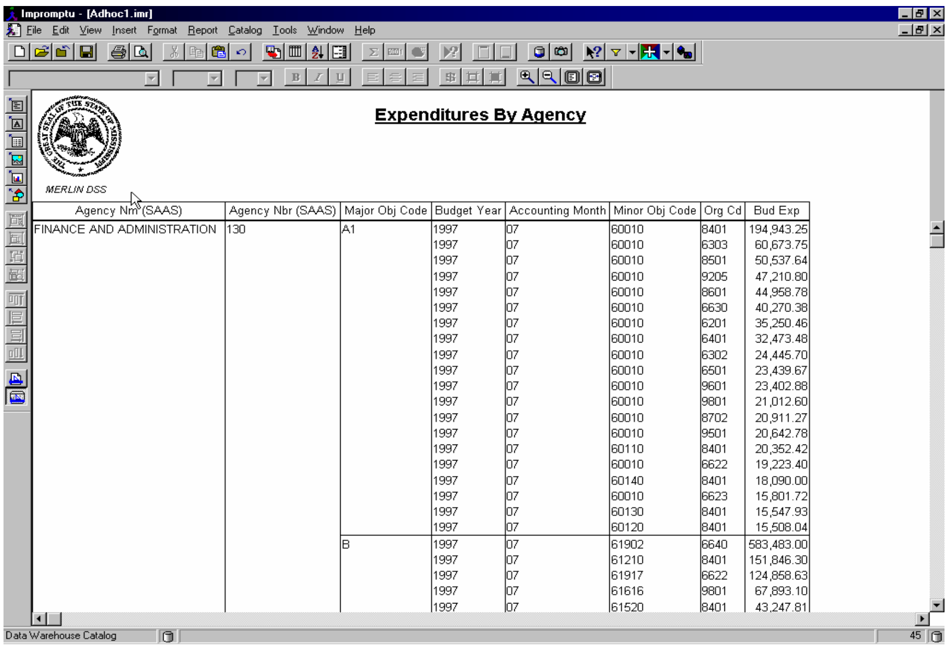
The order of the columns in the Query Data box determines the column order in the report. Columns can be moved and dragged to another location within the Query Data box. Columns can be removed from the query with the *Remove* button. Columns can also be added that do not display in the report by selecting the column and choosing the *Mark for Insertion* button to toggle the insertion status to off.

Exercise 1

The purpose of this first ad hoc report, is to create a report similar to the *Expenditures $* standard report. The report should reflect expenditures greater than $10,000 for January 1997. It should be sorted by Bud Exp Amt and grouped by Agency name as shown below.

1. Click the *New* button on the PowerBar

2. Add columns to your report



Agency Nm (SAAS)	Agency Nbr (SAAS)	Major Obj Code	Budget Year	Accounting Month	Minor Obj Code	Org Cd	Bud Exp
FINANCE AND ADMINISTRATION	130	A1	1997	07	60010	8401	194,943.25
			1997	07	60010	6303	60,673.75
			1997	07	60010	8501	50,537.64
			1997	07	60010	9205	47,210.80
			1997	07	60010	8601	44,958.78
			1997	07	60010	6630	40,270.38
			1997	07	60010	6201	35,250.46
			1997	07	60010	6401	32,473.48
			1997	07	60010	6302	24,445.70
			1997	07	60010	6501	23,439.67
			1997	07	60010	9601	23,402.88
			1997	07	60010	9801	21,012.60
			1997	07	60010	8702	20,911.27
			1997	07	60010	9501	20,642.78
			1997	07	60110	8401	20,352.42
			1997	07	60010	6622	19,223.40
			1997	07	60140	8401	18,090.00
			1997	07	60010	6623	15,801.72
			1997	07	60130	8401	15,547.93
			1997	07	60120	8401	15,508.04
		B	1997	07	61902	6640	583,483.00
			1997	07	61210	8401	151,846.30
			1997	07	61917	6622	124,858.63
			1997	07	61616	9801	67,893.10
			1997	07	61520	8401	43,247.81

- Double click the *Training* folder to open it
- Open the *Fund/Object* folder
- Open the *Agency/Fund* folder
- Double click *Agency Nm (SAAS)* and *Agency Nbr (SAAS)* to add them to the Query Data box
- Close the *Agency/Fund* folder
- Open the *Time Period* folder
- Double click *Budget Year, Accounting Month*, and *Allotment Period* to add them to the Query Data box
- Close the *Time* folder
- Open the *Account Codes* folder
- Double click *Minor Obj Code* and *Major Obj Code* to add them to the Query Data box
- Close the *Account Codes* folder
- Scroll below the *Account Codes* folder
- Double click *Org Cd, Activity Code*, and *Bud Function Code* to add them to the Query Data box
- Open the *Dollar Amounts* folder
- Open the *Expenditures* folder

- Double click *Bud Exp* to add it to the Query Data box

3. Sort the data by Budget Expenditure Amount in descending order

- Select the *Sort* tab in the Query dialog box
- Select *Bud Exp*
- Click the *Descending* button

4. Group the data by Agency and Major Object Code

- Select the *Group* tab in the Query dialog box
- Select *Agency Nm (SAAS*)
- Click the *Group* button
- Select *Agency Nbr (SAAS)*
- Click the *Associate* button
- Double click *Major Obj Code*

5. Filter the data to Budget Year 1997 and Accounting Month 07

- Select the *Filter* tab on the Query dialog box
- Double click the *Report Columns* icon
- Double click *Budget Year*
- Double click **=**
- Double click *string*
- Type **1997**
- Click on the **...**
- Double click *and*
- Double click *Report Columns*
- Double click *Agency Nbr (SAAS)*
- Double click **=**
- Double click *string*
- Type **130**
- Click on the **...**
- Double click *and*
- Double click *Report Columns*
- Double click *Accounting Month*
- Double click **=**
- Double click *string*
- Type **07**
- Click on the **...**
- Double click *and*
- Double click *Report Columns*
- Scroll down to *Bud Exp* and double click on it
- Double Click **>**
- Double click *number*
- Enter **10000**
- Choose *OK*

6. Modify the title in the List Header

- Click on *List Report Title*
- Double click on the text and delete the default text
- Enter title **Expenditures by Agency**

7. Save the report

- Click *File*
- Click *Save As* and type ***My First Report*** for the filename
- Click *OK*

Creating a SmartSummary

Summaries allow you to aggregate data at various levels within reports. When you create a *SmartSummary*, the value that is calculated will reflect the group it is associated with. Smart Summaries are dynamic and are calculated based on their position in the report. It will calculate a Monthly Total if you put it in the Monthly footer, and it will calculate the Annual Grand Total if you put it in the Grand Total footer. When you make a new SmartSummary, a special SmartSummary icon appears below the group that the SmartSummary is associated with in the *Group Order* box.

Adding Text Frames

A group footer is automatically added for each distinct group within the report when a SmartSummary is created. To label the footer, add a text frame to the footer. To create a text frame:

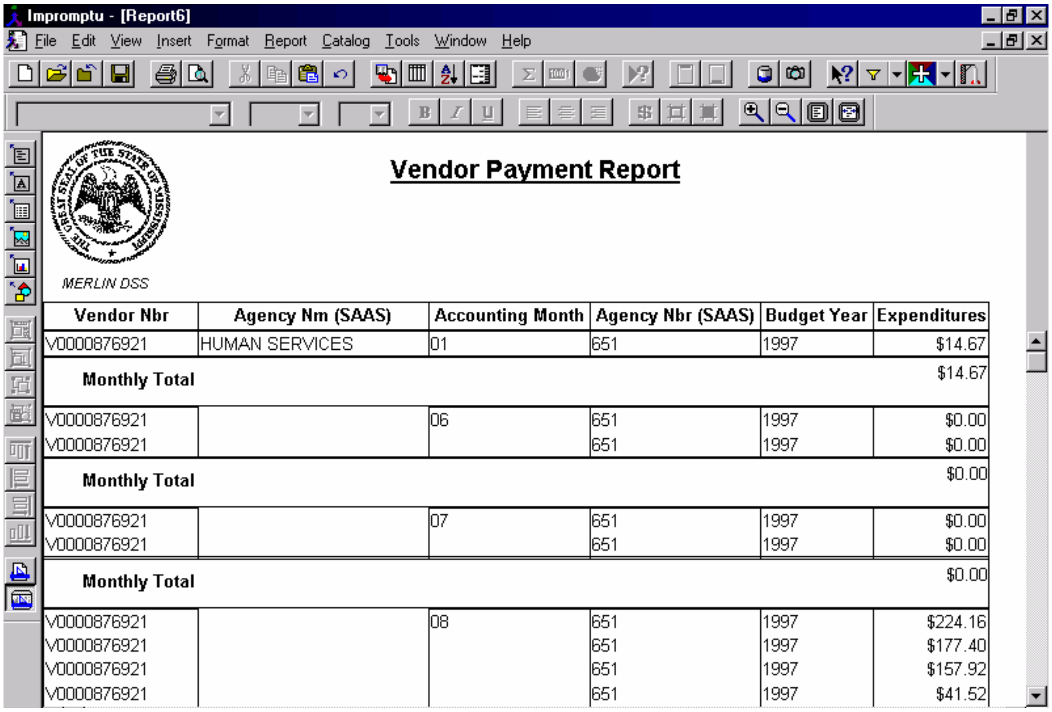
- Click the *Text Frame* button on the Layout PowerBar
- (The mouse pointer changes to a Text icon)
- Position the pointer where you want the upper-left corner of the text
- Drag the mouse diagonally until it is the size you want
- Release the mouse button

Exercise 2

Create the following vendor payment report for one vendor for all periods in Budget Year 1997. Create a Monthly Total and Grand Total using the Smart Summary feature, and add text frames to label the totals.

1. Click the *New* button on the PowerBar

2. Add columns to your report



Vendor Nbr	Agency Nm (SAAS)	Accounting Month	Agency Nbr (SAAS)	Budget Year	Expenditures
V0000876921	HUMAN SERVICES	01	651	1997	$14.67
Monthly Total					$14.67
V0000876921		06	651	1997	$0.00
V0000876921			651	1997	$0.00
Monthly Total					$0.00
V0000876921		07	651	1997	$0.00
V0000876921			651	1997	$0.00
Monthly Total					$0.00
V0000876921		08	651	1997	$224.16
V0000876921			651	1997	$177.40
V0000876921			651	1997	$157.92
V0000876921			651	1997	$41.52

- Open the *Training* folder
- Open *Vendor/Fund/Major Obj* folder
- Add these columns to the *Query Data* box

  Vendor Nbr
  Vendor Name
  Agency Nm (SAAS)
  Agency Nbr (SAAS)
  Budget Year
  Accounting Month
  Bud Exp

3. Sort, group and filter the data

- Sort the data by *Bud Exp* amount in descending order
- Group the data by *Agency Name* and *Accounting Month*
- Filter the data to the vendor name *OFFICE DEPOT - JACKSON, Budget Year 1997,* and *Agency number 651*
- Click *OK* to retrieve the data

4. Edit and format the report

- Delete the *Vendor Name* column
- Move the *Accounting Month* column next to the *Agency Name* column
- Rename the *Bud Exp Amt* column to **Expenditures**
- Make all column headings bold
    - Click on the first column and control click on the others to highlight
    - Click *Bold* on the PowerBar
    - Change the font to a larger size

5. Create a Smart Summary

- Select the *Expenditures* column
- Click the *Total* Power Button

6. Insert the words *Monthly Total* in the group footer

- Click the *Text Frame* button in the PowerBar
- Click in the footer
- Drag the text frame icon to make a rectangle
- Type **Monthly Total**
- Highlight *Monthly Total* and click *Bold* on the PowerBar
- Press the *[ESC]* key

7. Add text frames for an Agency Total and a Grand Total

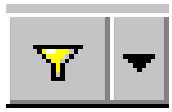
8. Modify the title

9. Save the report as *My Second Report* and close the report

Creating a Filter with the PowerButton

Use the filter button on the PowerBar to quickly perform simple filter operations such as showing Vendor Payment Hold indicated with a "Y". To create a basic filter using the PowerBar button:

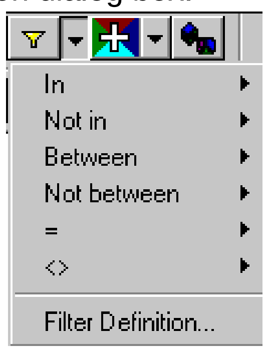
- Select a data item or CTRL + click to select multiple items
- Click the Filter button on the PowerBar



Impromptu retrieves records based on the data values you selected; all other data is filtered out of the query.

More Easy Ways to Create Filters using the PowerButton

The filter power includes a drop down button that allows you access to a variety of filter options from the filter definition dialog box.



- Select one or more values in a column.
- Click the Filter drop-down button. A drop-down menu appears.
- Select a filter operator from the drop-down menu.
    - To filter on the selected values, click In.
    - To filter out the selected values, click Not In.
    - To filter the selection on a given range, click Between.
    - To filter out the selection on a given range, click Not Between.
    - To filter the selection based on one or more values, click an operator such as =, <>, <, <=, >, >=.

Note: The contents of the Filter drop-down menu vary depending on the columns you select to filter on.

- Position the cursor over the arrow that appears at the right of the drop-down menu. A fly-out menu appears.

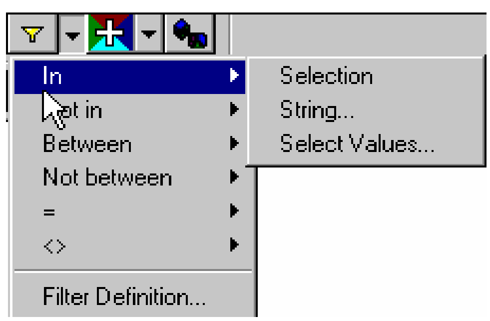
- From the fly-out menu that lists available options, do one of the following:

    - To filter a report on one or more data items currently highlighted, click Selection.
    - To enter one or more numbers upon which to filter, click Number.
    - To enter one or more text strings upon which to filter, click String.
    - To enter one or more dates upon which to filter, click Date.
    - To enter one or more times upon which to filter, click Time.
    - To enter a date and time variable upon which to filter, click Date-time.
    - To enter one or more intervals upon which to filter, click Interval.

Note: The contents of the Filter fly-out menu vary depending on the columns you select to filter on.

- If you chose

    - Selection, the filter is automatically applied to the report
    - String, the String dialog box appears, where you can enter or select the required item or items and click OK
    - Select Values, a Select Value dialog box appears, where you can select the required item from the list provided



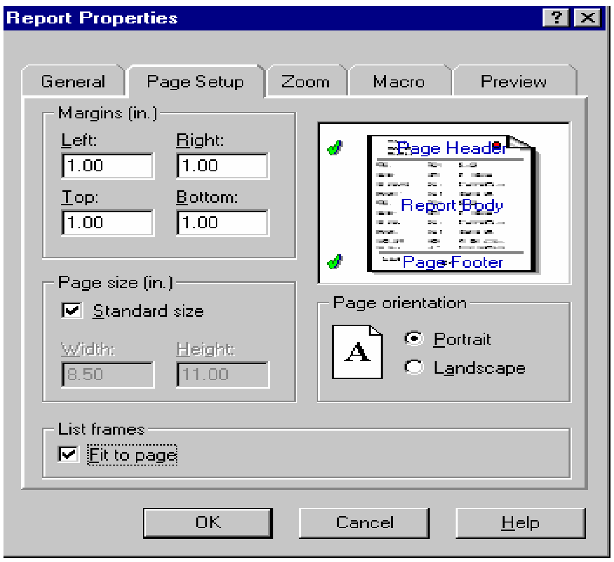
Creating a Calculation

A calculation is an expression that calculates a new data item based on existing data items. For example, you can define a calculation that creates a column summarizing Bud Exp Amt and Non Exp Amt. To create a calculation, select *Calculation* from the Insert menu and place the pointer at the new column location. A Dialog box opens with options for entering the Name and the calculation expression. Components you can use in the expression are listed in the *Options* box. Operators that you can use in the expression are below the *Expression* box as buttons. Use the Delete or Backspace key if you make a mistake.

Fit a Wide List Report to a Page

You can automatically scale down a wide list report by utilizing the fit to page option. Steps to Fit to Page:

- From the File menu, click ***Page Setup.***
- In the List Frames box, click the ***Fit to Page check box***.
- Click ***OK***.



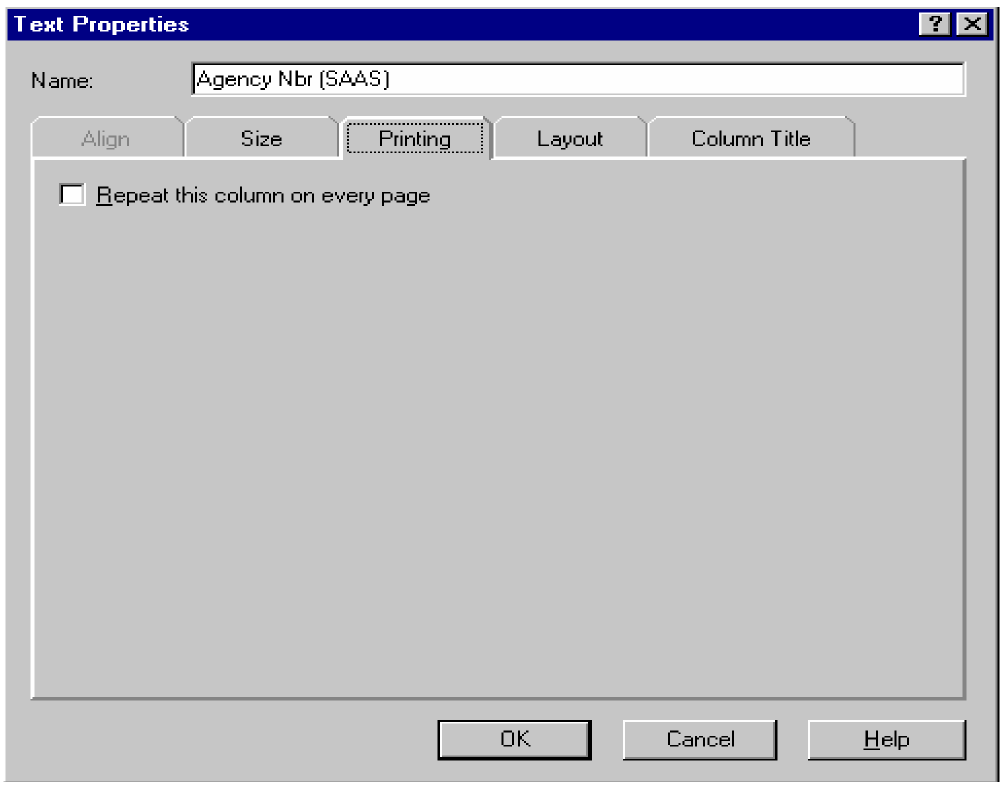
Helpful hints:

- Page Fit To Page does not affect the Page Layout view or Screen Layout view of a report.
- Fit To Page scales down a wide list report while maintaining the horizontal/vertical ratio.
- Fit To Page should not be used with the Repeat This Column on Every Page option.
- Fit To check box is available only when working with a list report.

Repeat Column Header on Each Page

If you allow a report to print over subsequent pages, the column information can lose its context. In such a case, you can repeat column heading on subsequent pages so that the data retains the desired context.

- Select one or more columns in your report.
- Select Properties from the Format menu, and click ***the Printing tab***.
- Click the ***Repeat This Column On Every Page check box.***
- Click ***OK.***



Insert a Report Header on Each Page

You can easily have a report header print on each page of the report when needed for a point of reference by following these steps:

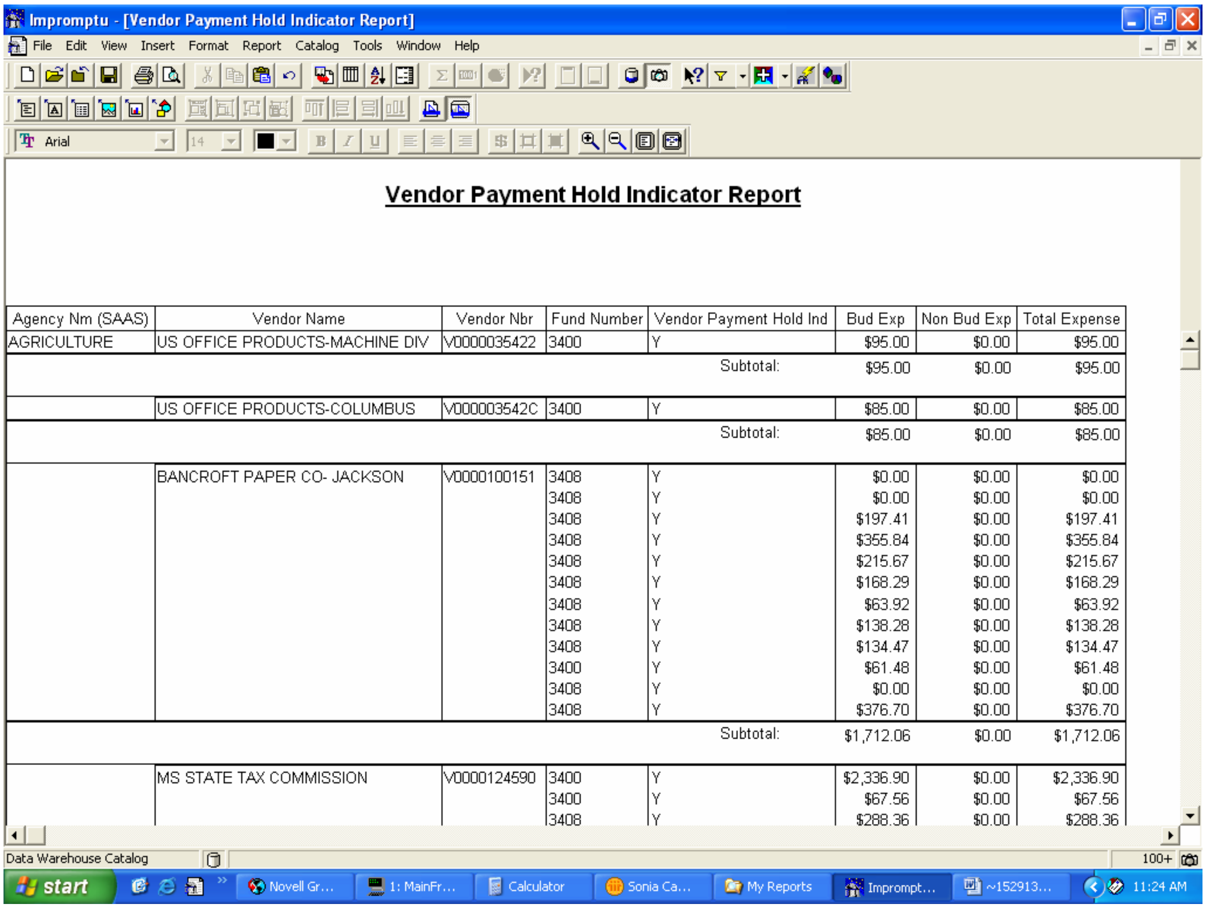
- Choose *Page Layout* from the View menu.
- Choose *Boundary Lines* from the View menu.
- Choose *Zoom* from the View menu, select *Whole Page.*
- Click *OK.*
- Choose *Page Setup* from the File menus, select *Page Header.*
- Click *OK.*
- Select the Header area of your report and click and drag to enlarge the Header area.
  - If your report does not have a text box with header information create a text box for you report header.
  - If your report already has a text box with header information, and you want the text box to appear in the header, simply select the text box and drag into the header area.
  - Other objects, such as the State of MS seal may also be added to the header by the selecting the item and dragging it to the header area.
  - Once you have moved items to the header, you may delete the box by:
    - Select the area where the report text box header information was moved from (this will highlight the area).
    - Depress the Delete key

Return report to its original layout:

- Choose *Screen Layout* from the View menu
- Choose *Boundary Lines* from the View menu
- Choose *Zoom* from the View menu, select *100%*

Exercise 3

Create a Vendor Report to show only vendors with a Payment Hold of Y for Fund Numbers 3400 and 3408. Include subtotals and totals of Budget Expenditure Amount and create a column for Total Expenditures. Your report should appear as shown below.



Vendor Payment Hold Indicator Report

Agency Nm (SAAS)	Vendor Name	Vendor Nbr	Fund Number	Vendor Payment Hold Ind	Bud Exp	Non Bud Exp	Total Expense
AGRICULTURE	US OFFICE PRODUCTS-MACHINE DIV	V0000035422	3400	Y	$95.00	$0.00	$95.00
				Subtotal:	$95.00	$0.00	$95.00
	US OFFICE PRODUCTS-COLUMBUS	V000003542C	3400	Y	$85.00	$0.00	$85.00
				Subtotal:	$85.00	$0.00	$85.00
	BANCROFT PAPER CO- JACKSON	V0000100151	3408	Y	$0.00	$0.00	$0.00
			3408	Y	$0.00	$0.00	$0.00
			3408	Y	$197.41	$0.00	$197.41
			3408	Y	$355.84	$0.00	$355.84
			3408	Y	$215.67	$0.00	$215.67
			3408	Y	$168.29	$0.00	$168.29
			3408	Y	$63.92	$0.00	$63.92
			3408	Y	$138.28	$0.00	$138.28
			3408	Y	$134.47	$0.00	$134.47
			3400	Y	$61.48	$0.00	$61.48
			3408	Y	$0.00	$0.00	$0.00
			3408	Y	$376.70	$0.00	$376.70
				Subtotal:	$1,712.06	$0.00	$1,712.06
	MS STATE TAX COMMISSION	V0000124590	3400	Y	$2,336.90	$0.00	$2,336.90
			3400	Y	$67.56	$0.00	$67.56
			3408	Y	$288.36	$0.00	$288.36

1. Click the *New* button on the PowerBar

2. Add columns to the report from the *Vendor/Fund/Major Obj* folder

Agency Nm (SAAS)
Agency Nbr (SAAS)
Fund Number
Budget Year
Vendor Name
Vendor Nbr
Vendor Payment Hold Ind
Bud Exp
Non Bud Exp

3. Group the report by:

Agency Nbr (SAAS), Associate Agency Nm (SAAS)
Vendor Nbr, Associate Vendor Name

4. Filter the report so that only vendors with a payment hold indicated by Y are reported for Budget Year 1997, Agency Number 401.

5. Click *OK* to retrieve the report

6. Filter the Fund Number for 3400 and 3408.
- Click *3400* in the *Fund Number* column
- Control Click to select *3408* in the *Fund Number* column.
- Click the *Filter* drop-down button. A drop-down menu appears.
- Select the filter operator from the drop-down menu, click *In*.
- From the fly-out menu that lists available options, click *Selection.*

7. Insert footer and create a subtotal by Vendor
- Click a value under *Vendor Number* column
- Click the Footer Power button
- Click a value on the *Bud Exp* column
- Click the *Total* button on the PowerBar

8. Add a text frame for the *Subtotal* footer

9. Create a calculated column to sum the Two Expenditures columns
- Choose *Calculation* from Insert menu
- Click to the right of *Non Bud Exp*
- Type **Total Expense** in the Name box
- Open *Report Columns*
- Double click *Bud Exp*
- Double click the *+ sign*
- Open *Functions*
- Double click *ifnull-numeric*
- Open *Report Columns*
- Double click *Non Bud Exp*
- Double click *number*
- Click *OK*

10. Delete columns and arrange the columns as shown in the example on the preceding page.

11. Add a Title as shown

12. Save report as *My Third Report* and close the report

Aligning Objects in a Report

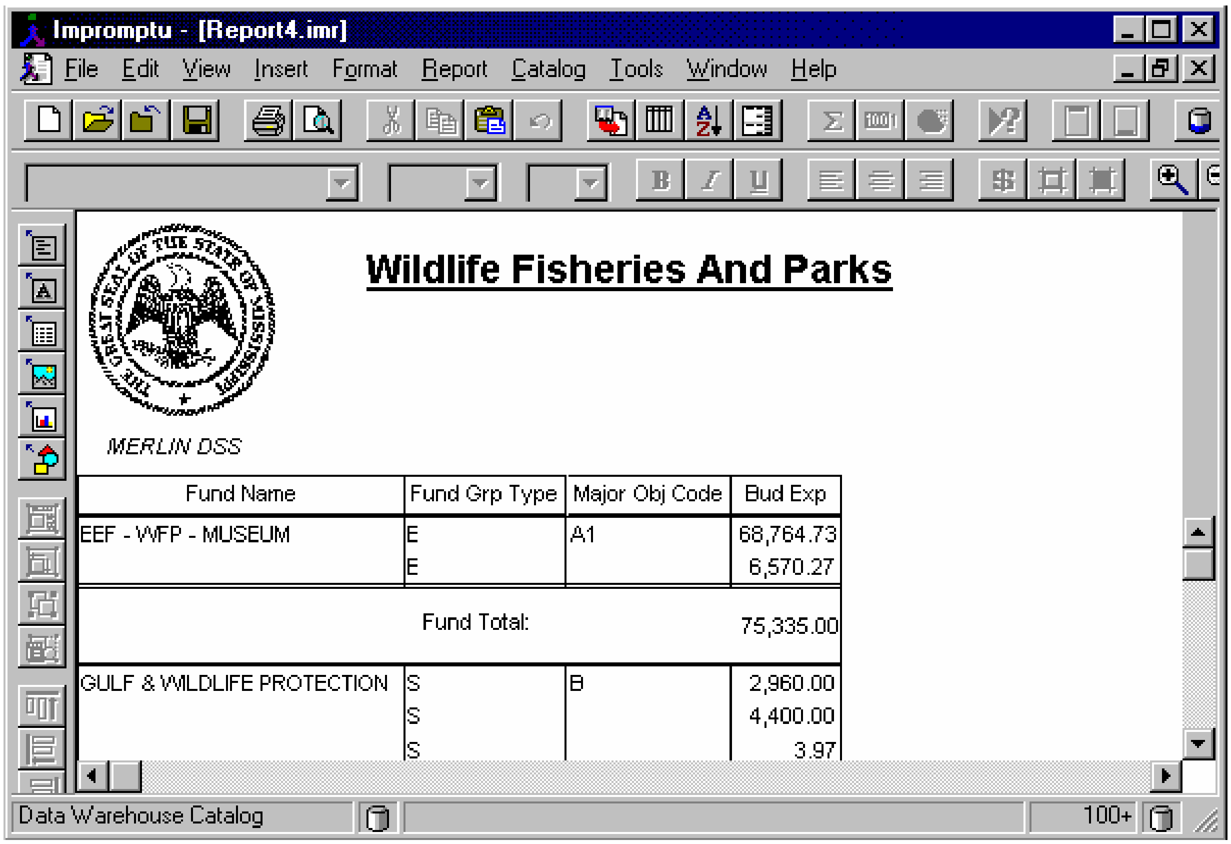
When footers are added to a report, there is an easy way to align data items. After choosing *Align* from the *Format* menu, a Dialog box opens. Select the *Align* tab. There is a Vertical box for setting the vertical alignment of the report objects and a Horizontal box to set the horizontal alignment of the report objects.

Exercise 4

Create a report for WILDLIFE FISHERIES AND PARKS showing expenditures grouped by funds for budget year 1997. Include totals only for each fund and a grand total. Your report should appear as shown below

Note: You will receive a warning on this exercise about exceeding the 10,000 rows limit. When you receive this warning, click Yes to continue.

1. Click the *New* button on the PowerBar



2. Add columns to the report from the Fund/Object folder.

Agency Nbr (SAAS)
Agency Nm (SAAS)
Fund Name
Fund Grp Type
Fund Number
Budget Year
Major Obj Code
Bud Exp
Non Bud Exp

3. Filter the report

Agency Number = **464**
Budget Year = **1997**

4. Group the report by Fund Name and by Major Object Code

- Click OK

5. Delete columns except for those shown in the above example.

6. Format the report

- Click a value under *Bud Exp*
- Choose Data from the format menu
- Choose #,##0.00 from the *Positive* drop down menu

7. Create a Total for each Fund

- Click on a value under *Fund Name*
- Click *Footer* on the PowerBar
- Click a value under *Bud Exp*
- Click the *Total* button on the PowerBar

8. Align the Total

- Highlight a *Total* value
- Choose *Align* from the Format Menu
- Click the first drop down menu in the *Horizontal Alignment* drop down box and review the selected alignment.
- Click *OK*

9. Make any other changes to the report so that it appears as shown in the above example.

10. Save and Close