**Cognos Training – Level II**

**Basic Report Writing in Financial Data Mart (FDM) -** **Crosstab Reports **

Crosstab reports summarize data in a table, much like a pivot table in Excel. The report has rows and columns, but the intersections of the rows and columns represent summary data.

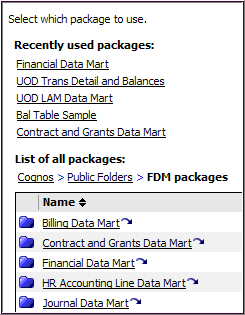
Cognos-DEV – <https://cognos-dev.udel.edu/cognos8>

Cognos (production) - <https://cognos.udel.edu/cognos8>

* Login with your **UDelNet ID** and **password**
* Under My Actions, choose  **Create professional reports (Report Studio)**



Navigate to the yellow content folder **FDM packages**, click on name



Two ways to open Financial Date Mart:

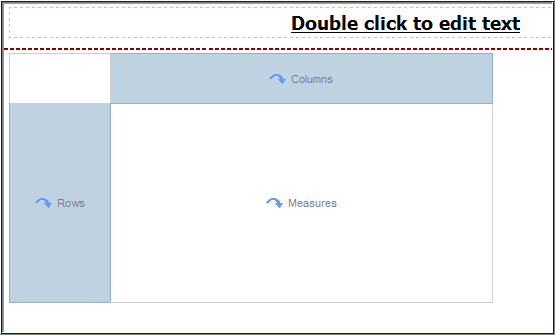
* **Recently used packages**
* **List of all packages**

This will launch **Report Studio**

Click on **Create a new report or template**

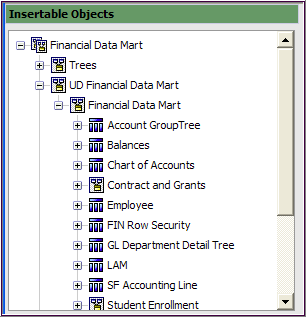
1. Double-click on the **Crosstab** icon 
2. There are three areas in a **Crosstab** report:

* **Columns** – data elements along the top
* **Rows** – data elements along the side
* **Measures** – the data (numbers) that get summarized

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**A. Create Crosstab Report**

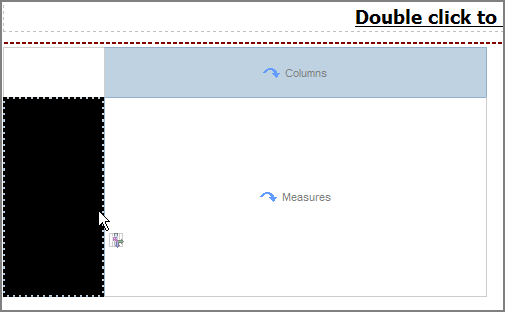
1. Create a crosstab report using transaction data
   1. In **Insertable Objects**, open **UD Financial Data Mart** and **Financial Data Mart**

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* 1. These 4 fields will be added to **Rows** in the Work Area:

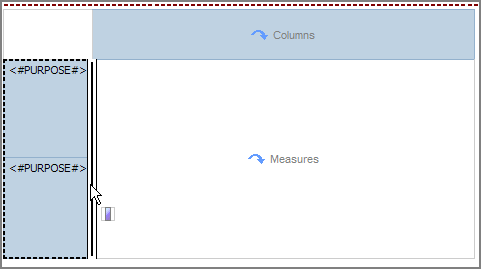
|  |  |  |
| --- | --- | --- |
| Field Name | Query Subject | Folder |
| PURPOSE | Chart of Accounts | Purpose |
| PURPOSE\_DESCR | Chart of Accounts | Purpose |
| FISCAL\_YEAR | Trans Detail | Dates |
| ACCOUNTING\_PERIOD | Trans Detail | Dates |

* + - Drag & drop **PURPOSE** to **Rows** in the work area

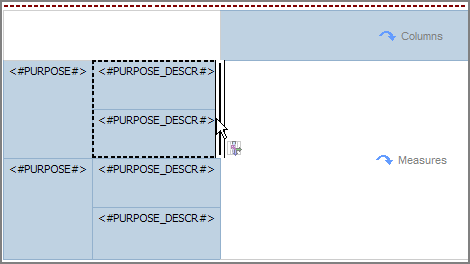


Note – Double-clicking for adding fields does not work with Crosstabs

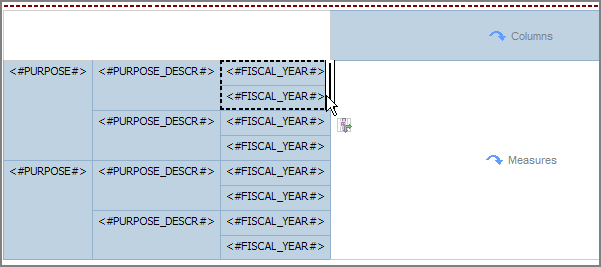
* + - Drag & drop **PURPOSE\_DESCR** next to PURPOSE (thin blinking line)



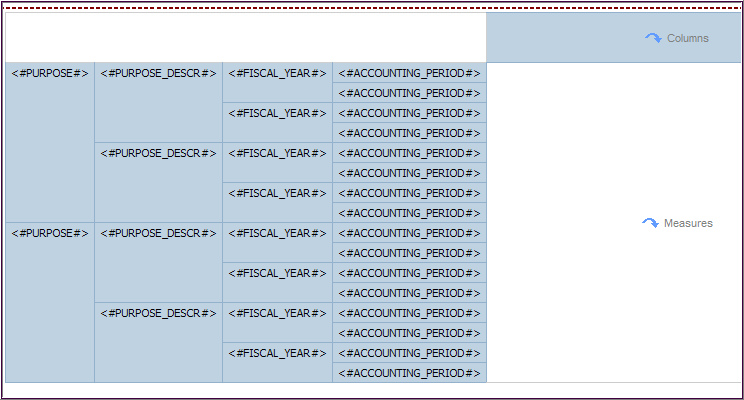
* + - The work area should look like below
    - Drag and drop FISCAL\_YEAR next to PURPOSE\_DESCR (thin blinking line)



* + - The work area should look like below
    - Drag & drop ACCOUNTING\_PERIOD next to FISCAL\_YEAR (thin blinking line)



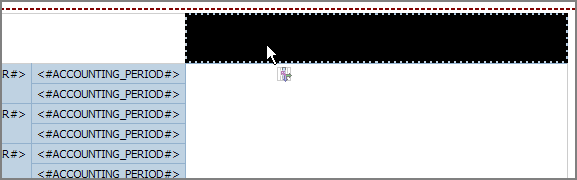
* + - The **Rows** in the work area should look like this:



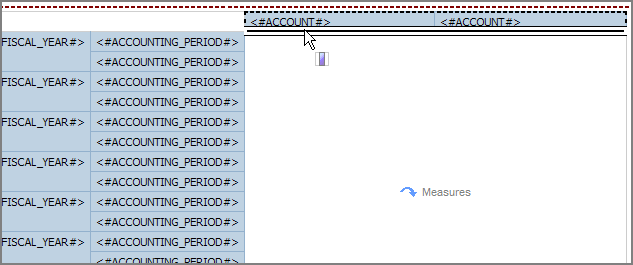
* 1. Add these 2 fields in **Columns**:

|  |  |  |
| --- | --- | --- |
| Field Name | Query Subject | Folder |
| ACCOUNT | Chart of Accounts | Account |
| ACCOUNT\_DESCR | Chart of Accounts | Account |

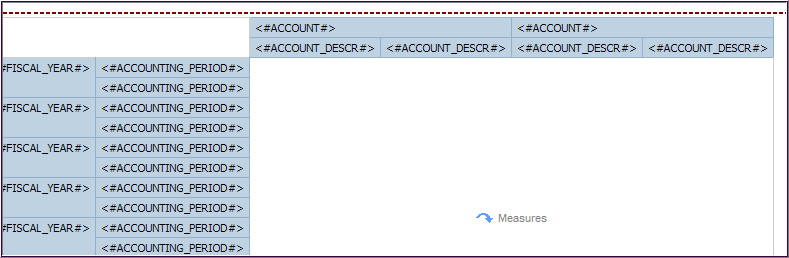
* + - Drag & drop **ACCOUNT** to **Columns** in the work area



* + - Drag and drop **ACCOUNT\_DESCR** under ACCOUNT (thin, blinking line)



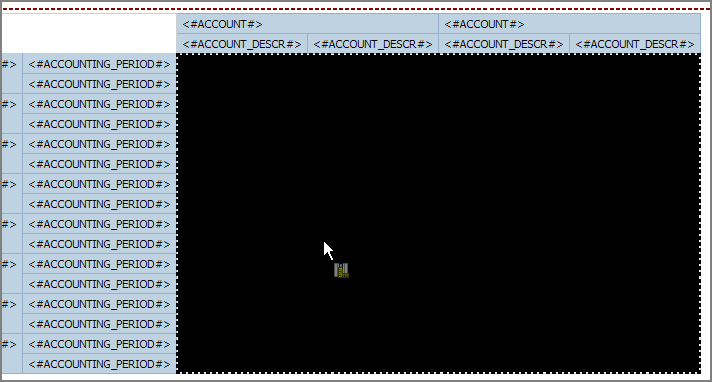
* + - The **Columns** in the work area should look like this:



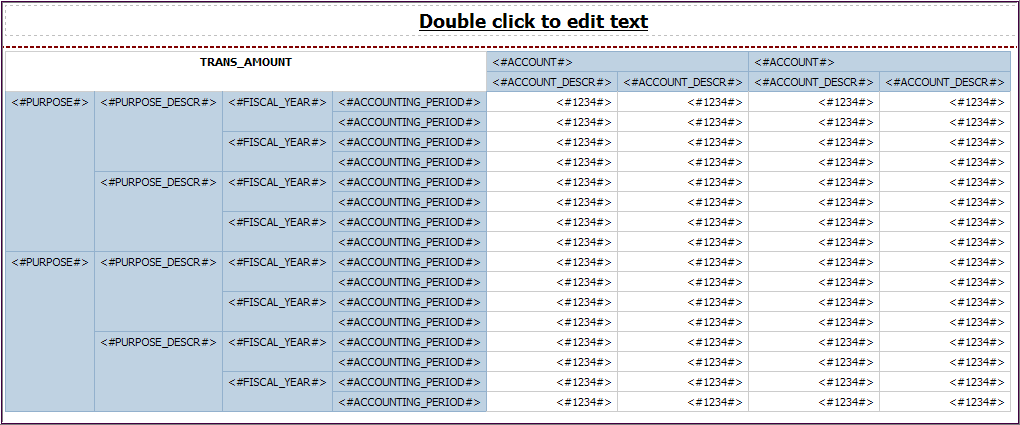
* 1. Add this field to the **Measures**:

|  |  |  |
| --- | --- | --- |
| Field Name | Query Subject | Folder |
| TRANS\_AMOUNT | Trans Detail |  |

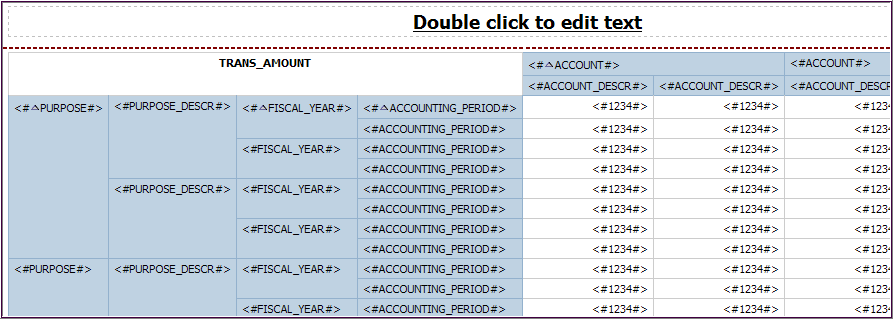
* + - Drag & drop **TRANS\_AMOUNT** to **Measures** in the work area



* + - The work area should look like this:



1. Click **Save**  and choose **My Folders**, name it ***BASIC Crosstab***
2. In the toolbar, use **Sort**  to sort following fields **Ascending**:
   1. Purpose
   2. Account
   3. Fiscal Year
   4. Accounting Period
3. Your work area should look like this (partial view):



1. Add two *pre-written* **Prompts** to your report from the **Prompts**  folder:

(Scroll to the bottom of **Insertable Objects**)

* **Purpose Prompt**
* **Between year and period Prompt**

1. Add three *pre-written* **Filters**  to your report from the **Filters**  folder:

(Scroll to the bottom of **Insertable Objects**)

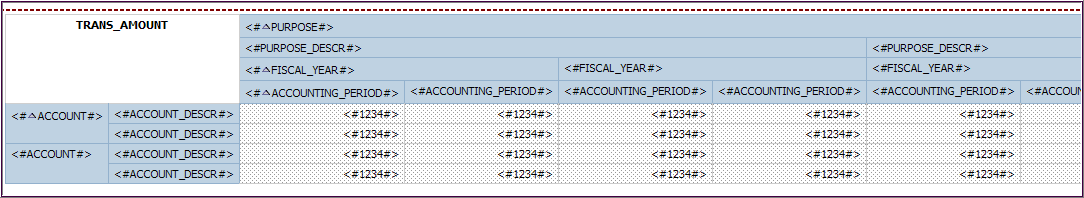
* **ACTUALS Ledger Filter**
* **Journal ID not blank Filter**
* **Statistics Code not ENP ENU Filter**

1. **Save**  your work
2. Make **Transaction Amount** two decimal places
   1. Click measures of the report where you see **<#1234#>** repeated
   2. Go to the **Properties** pane (lower left)
   3. In the **Data** section, click **Data Format**
   4. Click the **Ellipses**  to open the **Data Format** window
   5. In **Format type** dropdown, select **Number**
   6. In Properties, click **No. of Decimal Places**
   7. Using dropdown, select **2**
   8. Click **OK**

1. **Save**  your work
2. **Run** the report  with multiple Purpose codes
3. Switch the fields that are columns and rows
   1. Click anywhere on the report in the work area
   2. In the toolbar, click the **Swap Columns and Rows**  button



* 1. The work area will look like this (partial view):

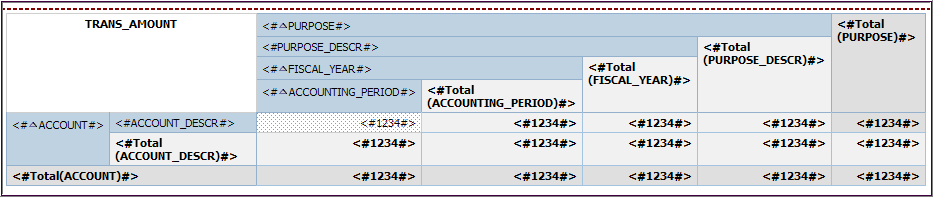


* 1. **Run** the report  with mutiple Purpose codes

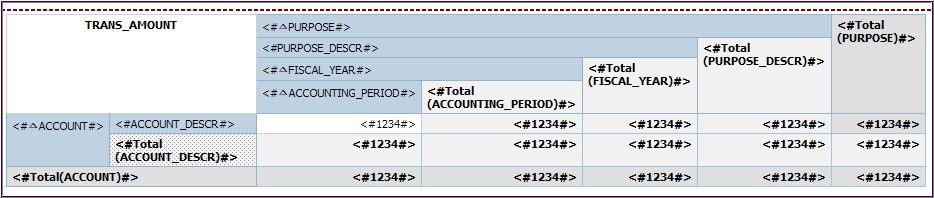
1. Add totals to your report:
   1. Click measures of the report where you see **<#1234#>** repeated
   2. In the toolbar, cick the **Aggregate**  button and choose **Total**

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* 1. The work area will look like this:



* 1. **Run** the report  with mutiple Purpose codes
* Notice there are a proliferation of new columns and rows with totals that are not useful
  1. **Delete**  the following 2 columns and 1 row with totals:
     + Click the box with the **<#Total (FIELD)#>** to highlight it and click 



**[delete]**

**[delete]**

**[delete]**

* 1. **Run** the report  with mutiple Purpose codes

1. Change the names of the *total columns* and *total row*
   1. Click the row title that says **<#Total(ACCOUNT)#>**
      * In the **Properties** pane, go to **Data Item**/**Name**
      * Delete **<#Total(ACCOUNT)#>** and type: **Total by Period**
   2. Click the column title **<#Total(ACCOUNTING\_PERIOD)#>**
      * In the **Properties** pane, go to **Data Item**/**Name**
      * Delete **<#Total(ACCOUNTING\_PERIOD )#>** and type: **Total by Account and Periods**
   3. Click the column title **<#Total(PURPOSE)#>**
      * In the **Properties** pane, go to **Data Item**/**Name**
      * Delete **<#Total(PURPOSE#>** and type: **Total by Account and Purposes**
   4. **Run** the report  with multiple Purpose codes
   5. **Save**  your work

B. **Modify an Existing List and Convert it to a Crosstab**

1. **Open**  an existing list report: **BASIC List - Trans Detail**
2. *Immediately* save it with a new name (File/Save As) – **List to Crosstab**
3. Cut  these 17 un-needed fields by click their column titles:
   * TRANS-DESCRIPTION
   * TRANS\_SOURCE
   * JOURNAL\_ID
   * VNDR\_NAME1
   * VOUCHER\_ID1
   * JRNL\_LN\_REF

**Cut**  vs. **Delete** 

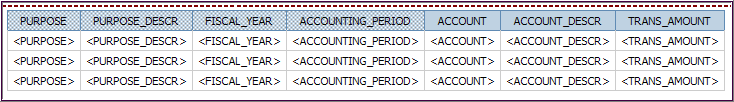
**Cut** removes the data item from the report layout but retains it in the query that Cognos uses to retrieve data from the source. To add it back, go to the **Data Items** tab.

**Delete** removes the data item from the report layout and the query.

* + ACCOUNTING\_DT
  + TRANSACTION\_DATE
  + DEPTID
  + ACCOUNT\_TYPE
  + CLASS\_FLD
  + FUND\_CODE
  + PROGRAM\_CODE
  + CHARTFIELD2
  + CHARTFIELD3
  + PROJECT\_ID
  + LEDGER

(Note – This will leave 7 fields: PURPOSE, PURPOSE\_DESCR, FISCAL\_YEAR, ACCOUNTING\_PERIOD, ACCOUNT, ACCOUNT\_DESCR and TRANS\_AMOUNT.)

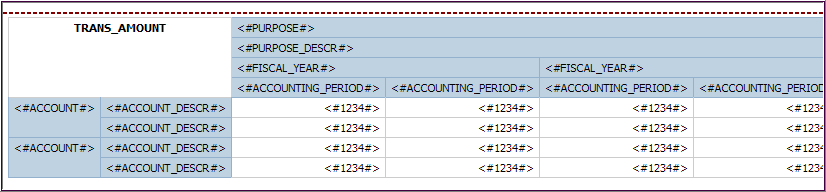
1. Choose the fields you want to become the columns in your crosstab
   1. Shift-click these four column titles to select multiple adjacent fields:
      * + PURPOSE
        + PURPOSE\_DESCR
        + FISCAL\_YEAR
        + ACCOUNTING\_PERIOD



1. Click **Pivot List to Crosstab** 



1. Your work area should look like this (partial view):

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1. **Save**  your work
2. **Run** the report 

**C. Create a Drill Through report**

You will be creating two reports:

* A **target report** with detailed data (child) – this will be a **List**
* A **source report** with high level data (parent) – this will be a **Crosstab**
* ACCOUNT will be the field you drill down through

1. Target report - create a **New**  List report and add these 16 fields:

|  |  |  |
| --- | --- | --- |
| Field Name | Query Subject | Folder |
| PURPOSE | Chart of Accounts | Purpose |
| PURPOSE DESCR | Chart of Accounts | Purpose |
| FISCAL\_YEAR | Trans Detail | Dates |
| ACCOUNTING\_PERIOD | Trans Detail | Dates |
| ACCOUNT | Chart of Accounts | Account |
| ACCOUNT\_DESCR | Chart of Accounts | Account |
| CLASS\_FLD | Chart of Accounts | Class |
| CHARTFIELD\_3 | Chart of Accounts | Chartfield3 |
| ACCOUNTING\_DT | Trans Detail |  |
| TRANSACTION\_DATE | Trans Detail |  |
| JOURNAL\_ID | Trans Detail |  |
| TRANS\_SOURCE | Trans Detail |  |
| JRNL\_LN\_REF | Trans Detail |  |
| TRANS\_DESCRIPTION | Trans Detail |  |
| VNDR\_NAME1 | Trans Detail |  |
| TRANS\_AMOUNT | Trans Detail |  |

1. Add 2 pre-written **Prompts** to your report by double-clicking them:

(Scroll to the bottom of the **Insertable Objects**)

* + **Purpose**
  + **Between year and period**

1. Add three *pre-written* **Filters** to your report by double-clicking them:

(Scroll to the bottom of **Insertable Objects**)

* + **ACTUALS Ledger Filter**
  + **Journal ID not blank Filter**
  + **Statistics Code not ENP ENU Filter**

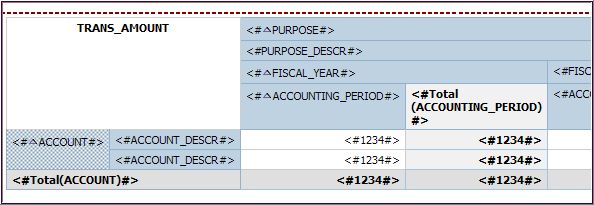
1. From the toolbar, add a **Filter**  to enable the drill-through for ACCOUNT
   1. Click **Add** 
   2. In **Available Components**, click **Data Items** tab
   3. Double-click **ACCOUNT** to add it to the expression
   4. Type: **=?ACCOUNT?**
   5. The expression should look like this



* 1. **Validate**  it and click **OK** twice

(Note – it doesn’t matter which Account you choose in the prompt page.)

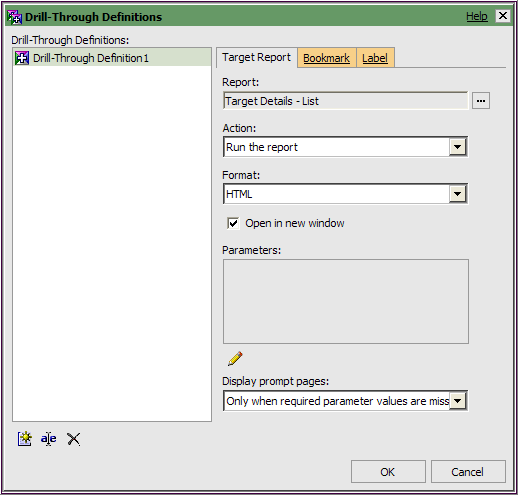
1. **Save**  the report in **My Folders** and name it **Target Details - List**
2. Source report – **Open**  existing report **Basic Crosstab**
3. *Immediately* save it in **My Folders** with new name **Source – Crosstab**
4. Click on Account row where it looks like: **<#ACCOUNT#>**



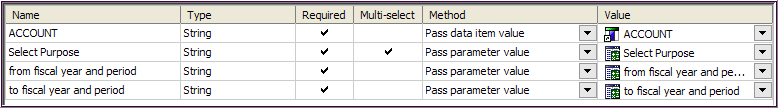
1. Click **Drill-Through Definitions** 



1. When the **Drill-Through Definitions** window appears, click **New** 



1. **Report**, click the **Ellipses**  and double-click **Target Details – List**
2. **Action**, choose **Run the report**
3. **Format**, choose **HTML**
4. Click the checkbox for **Open in new window**
5. In **Display prompt pages**, leave unchanged (**Only when required parameter values are missing**)
6. Click **Edit** 
7. Configure the **Parameters** to match the **Methods** and **Values** shown below:

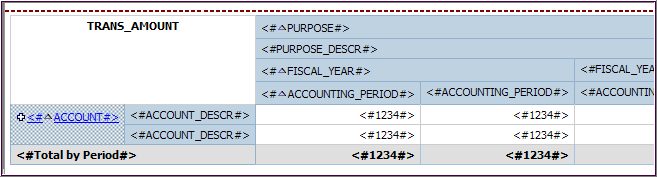


HINT – **Parameters settings - Method**

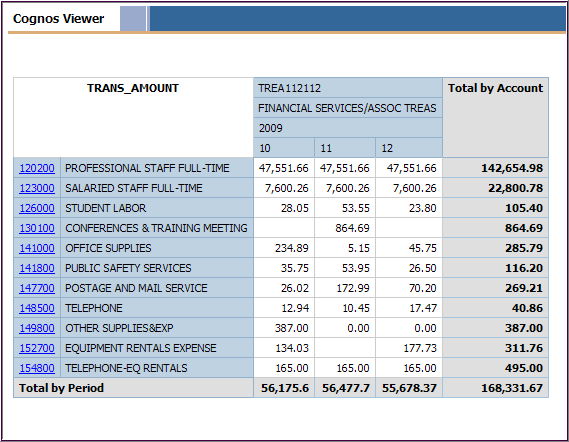
**Pass parameter value** will pass the value based on the prompt value.

**Pass data item value** will pass the value based on data in your source report. This is your drill-through data elelment.

1. Click **OK** twice
2. **Save**  your work
3. The ACCOUNT row title displays as a link to show the drill-through:



1. **Run** the report 
2. Click one of the Account links to see the drill-through in action



PURPOSE TITLE

XXXX110000