COMPOSING FINANCIAL QUERIES WITH DSS BUSINESS OBJECTS

INSTITUTIONAL RESEARCH & DECISION SUPPORT

OFFICE OF THE PRESIDENT AND PROVOST

Nov 2010

COURSE OUTLINE

- DSS Reporting

- Creating a Business Objects Query

- More on Conditions

- Summing Values

- Parent Orgs

- Pivoting
  - includes Copying to Excel on last page

UNIT I
DSS REPORTING

ReportMart
Vs
DSS Reporting

- ReportMart3
  - Web based only
  - Uses canned refreshable reports
  - Data updated daily
  - Uses Business Objects and WebIntelligence software

- DSS Reporting
  - Desktop and Web based access
  - Go through ReportMart3 web site to startup
  - Allows user to create own ad-hoc reports in Business Objects
  - Limited number of users
  - Data updated at each month end close
  - No current month data
  - No IOU or Commitment data

What is Business Objects/WebIntelligence?

- Reporting Tool
  - used to access university data
  - creates custom reports
  - creates charts, graphs

- Business Objects Universes
  - A group of reporting tables
  - Currently only financial, purchasing and SPO data available (1990 - present)
  - Only 6 of the universes have Oracle Financials data

Available Universes (for school user)

FY 1990 – FY 2003 (Legacy Data)

**FY 2004 – Current (Oracle Financials)**

- DMT — Shows monthly detail
- Fin_EZ — Legacy, no detail info
- Fin_CB — Consolidated Bdgt Legacy
- Fin_FundAcct — Fund Activity Repting Legacy
- Fin_Summary — Used by Controller's Office
- Spon_Fin — SPO merged w/SUFIN & Oracle
- Spon_Fin_Summary — SPO exps by fund/acct (Legacy)
- Spo_Data — Spiders data only
- Spon_Proj_Funds — SPO exps by fund (Legacy)
- OF Expenditures — Exps & Budgets from Oracle
- OF Exp Train — Expenditure training data
- OF GL Data — All GL data (Rev, Exp, Trf, Bal)
- OF Transfers Detail — Fund Transfer Detail
- OF_Variance — Bgt Officer Variance Reporting
- OF_Valid_PTAs — Valid PTA attributes

UNIT II
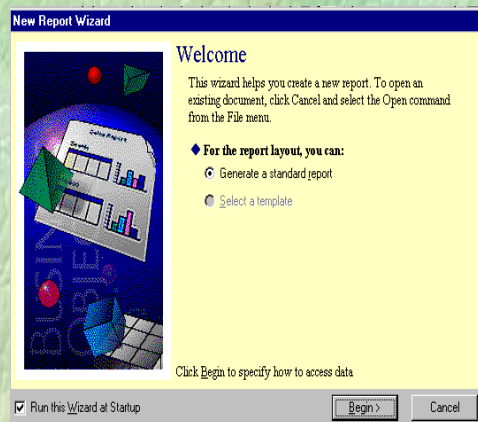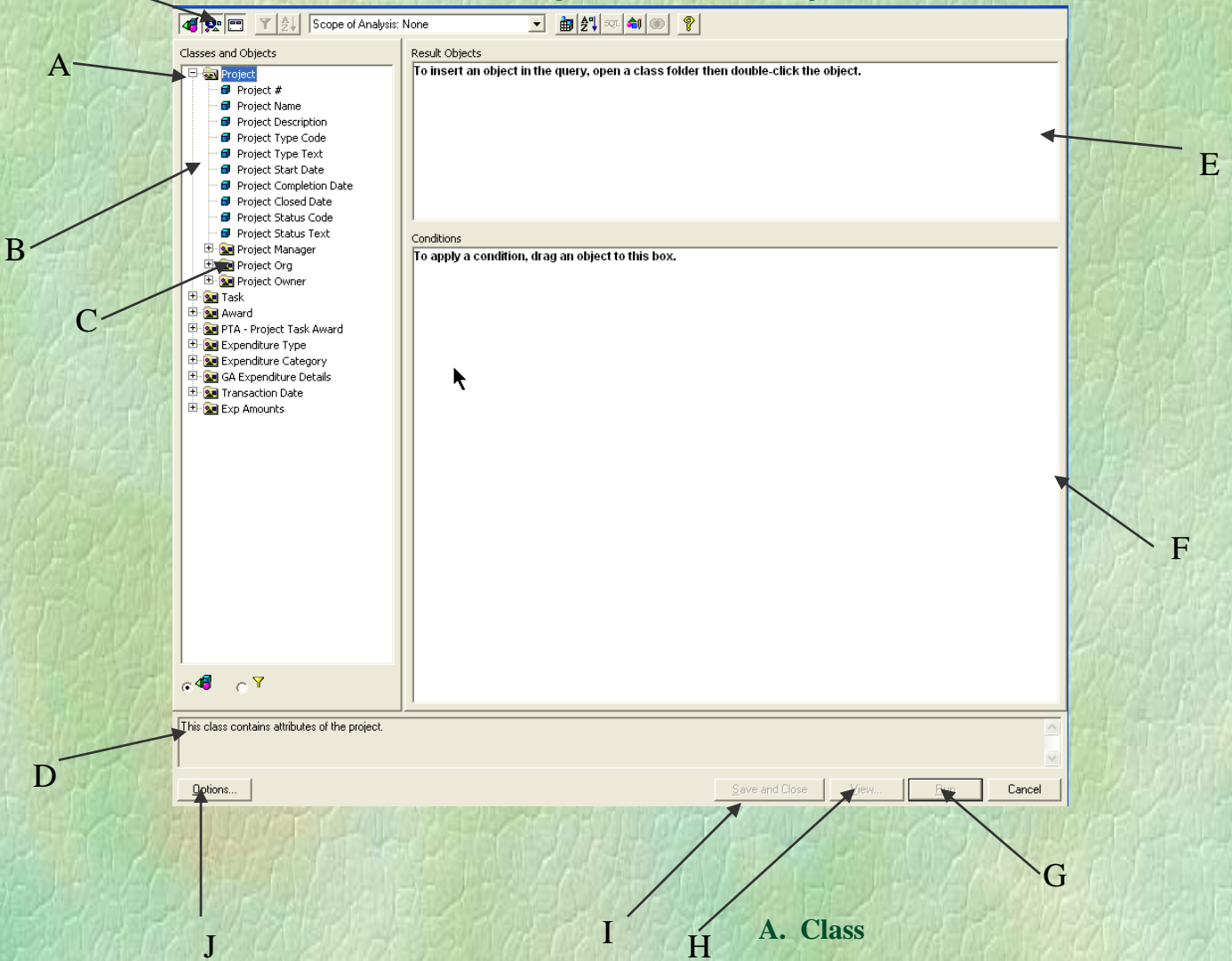# CREATING A
BUSINESS OBJECTS QUERY

Opening Business Objects

- Go to Reportmart 3: https://reportmart3.stanford.edu

- Click on New then Desktop Intelligence
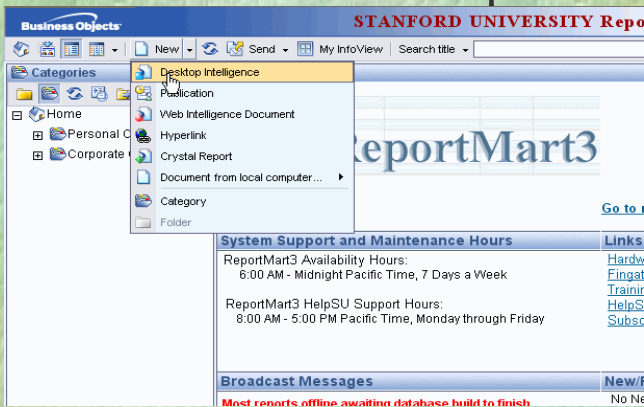
- It may take a few moments but you will get a New Report Wizard box (if nothing happens hold down your control key when clicking on Desktop Intelligence):
  - Click on the Begin button
  - Click on the next button on the next screen
  - Click on a Universe (OF Exp Train) then click Finish

The Business Objects Query Panel

K

A

B

C

D

J

Scope of Analysis: None

Classes and Objects
- Project
  - Project #
  - Project Name
  - Project Description
  - Project Type Code
  - Project Type Text
  - Project Start Date
  - Project Completion Date
  - Project Closed Date
  - Project Status Code
  - Project Status Text
  - Project Manager
  - Project Org
  - Project Owner
- Task
- Award
- PTA - Project Task Award
- Expenditure Type
- Expenditure Category
- GA Expenditure Details
- Transaction Date
- Exp Amounts

Result Objects
To insert an object in the query, open a class folder then double-click the object.

E

Conditions
To apply a condition, drag an object to this box.

F

This class contains attributes of the project.

Options...   Save and Close   View...   Run   Cancel

G

I

H

A. **Class**

B. **Object**

C. **Subclass**

D. **Help on class , objects, etc.**

E. **Results objects section**

F. **Condition section for limits**

G. **Run to process query**

H. **Views raw data results**

I. **Save and close file**

J. **Sets options (ex. No duplicates)**

K. **Opens up help descriptions**

Inserting Result Objects (Data you want to see)

- To find an object, double-click on a class folder

- Click and drag an object you want from the Classes and Objects section to the Result Objects section. Drag Fiscal Year from the Transaction Date class, PTA from the PTA class, Expenditure Type from the Expenditure Type class, and Expenditure Amount from the Exp Amounts class.   (Hint: just double click the object and it will appear on the Result Objects section)

- Continue with the clicking and dragging of objects until you have the desired data for your report.

Inserting Conditions (Defining the Report)

- Click and drag an object from the Classes and Objects section to the Conditions section. (Click and drag Fiscal Year) (double-clicking the object won't work here in Conditions)

- The Classes and Objects sub-panel will be replaced by the Operators sub-panel. Double-click on a conditional operator for your search, pick equal to
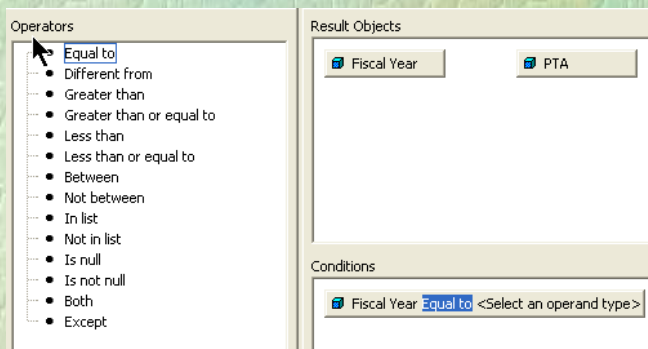
- The Operators sub-panel will be replaced by the Operands sub-panel; double-click on an Operand, pick **Type a new constant**

- Type in a fiscal year (must be in format YYYY)

- Continue with clicking and dragging of objects to the Conditions section until all limiting conditions have been defined (such as Fiscal Year = 2004, Project = 1001020)

- Click on Run to get results in the lower right hand corner

- You will be prompted to enter a '5' to see 5xxx expense types or a '0' to see all expense types including 1's, 2's.

- To edit your conditions after you clicked on Run, click the toolbar icon   or click on **Data → Edit Data Provider**.

UNIT 2: DEMO QUESTIONS

What were the actual amounts, by expenditure type for PTA 1001020-100-AKAAF in FY04?   Sort your results from lowest to highest amounts.

You will be prompted to enter a 5 for expense codes 5xxxx or a 0 for all codes from GA. Enter 5 because we only want expenses.

Note:This is a training database and will not return actual Stanford dollars

Answers to Demo Questions

2: You should get 93 rows

Fiscal Year	PTA	Expenditure Type	Expenditure Amount
2004	1001020-100-AKAAF	51565	-1,147,073.65
2004	1001020-100-AKAAF	50010	-967,352.83
2004	1001020-100-AKAAF	51555	-836,968.03
2004	1001020-100-AKAAF	51560	-258,871.64
2004	1001020-100-AKAAF	59435	-57.31
2004	1001020-100-AKAAF	56920	-0.00
2004	1001020-100-AKAAF	59460	273.96
2004	1001020-100-AKAAF	58325	318.95
2004	1001020-100-AKAAF	58060	410.01
2004	1001020-100-AKAAF	51535	850.72
2004	1001020-100-AKAAF	54310	992.59
2004	1001020-100-AKAAF	52920	995.64
2004	1001020-100-AKAAF	58350	1,058.76
2004	1001020-100-AKAAF	59499	1,548.44
2004	1001020-100-AKAAF	52245	1,588.15
2004	1001020-100-AKAAF	58450	1,741.67

Result Objects:
Fiscal year
PTA
Expenditure Type
Expenditure Amount

Conditions:
Fiscal Year = 2004
Project = 1001020
Task = 100
Award = AKAAF

To sort your amounts, highlight the column and click on the icon for sorting. (If you don't see the icon, you may need to **View → Toolbars** and put a checkbox on the **Sorts** toolbar.)

UNIT 3: MORE ON CONDITIONS

- What If you Only Want….

- Operators in Business Objects

- Help --- My Query Returns No Lines!

- Demo

What If….

- You only want salary expenses?
- If you want amounts for more than one PTA?
- What if you want expenses for org codes that begin with QA?

You can pick from a number of operators and operands to compose your condition:

Each condition has four parts:

1	2	3	4
<Object>	<Operator>	<Operand>	<Value>
Project	**Equal to**	**Type a constant**	1001020
Exp Type	**Matches Pattern**	**Type a prompt**	Enter E.Type:
Month Abbr	**In list**	**Show a list value**	Sep,Oct,Nov

Operators in Business Objects

There are 16 operators to choose from in Business Objects:

- **Equal to**   -equal to a specific value
- **Different from**   - not equal to
- **Less than**   - less than a specific value
- **Less or eq. To** - less than or equal to a specific value
- **Greater than**   - greater than a specific value
- **Greater or eq. To** - greater than or equal to a specific value
- **Between**   - between is inclusive of the two endpoint values
- **Not Between**   - are not between two values
- **Is null**   - when you want to search for missing values
- **Is not null**   - when you want to exclude blanks
- **Matches pattern**   - this operator requires a '%' symbol to indicate one
                          or more unknown characters; used as wildcard

- **Diff. From pattern -** uses the same wildcard (%) as matches pattern

- **In list**   - allows you to enter more than one value. Example:
                          Exp Type in list 54610,54427,54599

- **Not in list**   - values not in this list
- **Both**   - not covered (N/A)
- **Except**   - not covered (N/A)

Operands in Business Objects

Operands are used in conjunction with Operators in the Conditions Section. There are 8 operands to choose from in Business Objects:

- **Type a new constant** -a value must be typed in

- **Show a list of values** -Show from a list of values that you can select from*

- **Type a new prompt** -Type a question or a command which will prompt you for a value when the query runs

- **Show a list of prompts** -Show a list of prompts that are available (n/a – only available in complex reports)

- **Select an object** -equal to another object (ex: start date= end date)

- **Create a subquery (ANY)** -equal to any of the values returned from another query

- **Calculate** -equal to results of a calculation (ex: Actual amt = indirect amt + direct amt)

  - * Selecting from List of Values: Ctrl key – select random ones; Shift key – select contiguous range of values

Help - My Query Returns No Lines!

Fetching data...

No data to fetch.

OK
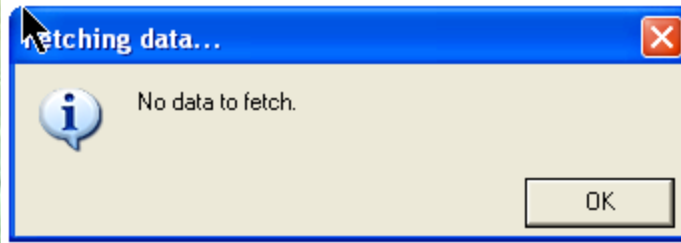
When you expect results and your query does not return any lines, the first place to look is the conditions. The most common condition pitfalls are listed below:

- The Award# must be in CAPS (the data is case-sensitive!)

- Be sure to Match the right object with the right condition (wrong: Fiscal year = ABCDE)

- The **wildcard (%)** must be used with **Matches pattern** or **Different from pattern**
  - **correct:** Award # Matches pattern BA%
  - incorrect: Award # equals BA%

- All text must be entered exactly as stored in the database, including upper/lower case. Use the Show List of Values Operand when it's available.
  - **correct:** School of Engineering
  - incorrect: Engineering or SoE

UNIT 3: Demo Questions

3.1 What were the Fringe Benefits (Exp Type 517XX) for PTA 1001020-100-AKAAF for FY04?

3.2 What were the travel related expenses (Exp Type 52420, 52410, 52445) on PTA 1001020-100-AKAAF for FY04?

3.3 Create a report showing all expenses for Project 1001020 for the months between September 2003 and December 2003. In the report show Project#, Exp Type, the Calendar Year Calendar Month and expense dollars.

Answers to Demo Questions

3.1

Fiscal Year	PTA	Expenditure Type	Expenditure Type Name	Expenditure Amount
2004	1001020-100-AKAAF	51710	VAC ACCRUAL EXEMPT	805,044.44
2004	1001020-100-AKAAF	51715	VAC ACCRUAL NON EXEMPT STAFF	266,879.46
2004	1001020-100-AKAAF	51720	VAC ACCRUAL BARGAINING UNIT	1,371,382.69
2004	1001020-100-AKAAF	51750	FRINGE BENEFITS RBE	12,991,137.32
2004	1001020-100-AKAAF	51755	FRINGE BENEFITS POST DOC	133,539.35
2004	1001020-100-AKAAF	51760	FRINGE BENEFITS CONTNGT	102,170.87

Result Objects	Conditions
Fiscal Year	Fiscal Year = 2004
PTA	Project = 1001020
Exp Type	Task = 100
Exp Type Name	Award = AKAAF
Exp Amt	Exp Type Matches Pattern 517%

3.2

Fiscal Year	PTA	Expenditure Type	Expenditure Type Name	Expenditure Amount
2004	1001020-100-AKAAF	52410	DOMESTIC TRAVEL ALLOW	325,703.20
2004	1001020-100-AKAAF	52420	FOREIGN TRAVEL ALLOW	32,403.87
2004	1001020-100-AKAAF	52445	TRAVEL NON SU EMPLOYEE	57,870.06

Result Objects	Conditions
Fiscal Year	Fiscal Year = 2004
PTA	Project = 1001020
Exp Type	Task = 100
Exp Type Name	Award = AKAAF
Exp Amt	Exp Type In list 52420,52410,52445

Answers to Demo Questions (continued)

3.3

Calendar Year C	Project #	Expenditure Typ	Expenditure Am
200309	1001020	50010	-7,070,511.75
200309	1001020	51115	123,193.01
200309	1001020	51155	405,515.61
200309	1001020	51210	46,872.28
200309	1001020	51310	504,315.10
200309	1001020	51515	390,686.70
200309	1001020	51525	291,375.56
200309	1001020	51530	1,474,207.64
200309	1001020	51535	266,500.56
200309	1001020	51575	57,706.87
200309	1001020	51710	77,417.66
200309	1001020	51715	21,707.48
200309	1001020	51720	129,682.76
200309	1001020	51750	1,068,549.24
200309	1001020	51755	8,765.12
200309	1001020	51760	5,251.33
200309	1001020	51910	595,898.58
200309	1001020	52240	1,253.58
200309	1001020	53445	13,683.86
200309	1001020	53510	277.93
200309	1001020	53520	167,153.56
200309	1001020	54230	11,612.66

Result Objects

Calendar Year Calendar Month
Project #
Exp Type
Exp Amt

Conditions

Calendar Year Calendar Month between 200309 and 200312

Project # = 1001020

UNIT 4: SUMMING VALUES

- What If You Want to Sum the Amount

- Requesting Sums in the Query

- Demo

What If You Want to Sum the Amount?

▪ What if you want a total by PTA for multiple expenditure types?

This:

Fiscal Year	PTA	Expenditure Amount
2004	1001020-100-AKAAF	35,825,326.93

Not this:

Fiscal Year	PTA	Expenditure Type	Expenditure Amount
2004	1001020-100-AKAAF	50010	-7,069,419.77
2004	1001020-100-AKAAF	51555	-140,849.89
2004	1001020-100-AKAAF	51565	-124,213.93
2004	1001020-100-AKAAF	51560	-33,818.11
2004	1001020-100-AKAAF	58350	132.35
2004	1001020-100-AKAAF	58325	318.95
2004	1001020-100-AKAAF	58450	476.44
2004	1001020-100-AKAAF	59130	480.68
2004	1001020-100-AKAAF	52245	529.38
2004	1001020-100-AKAAF	58320	536.00
2004	1001020-100-AKAAF	52920	661.60
2004	1001020-100-AKAAF	53530	2,142.94
2004	1001020-100-AKAAF	58510	2,574.12
2004	1001020-100-AKAAF	59140	2,646.91
2004	1001020-100-AKAAF	53420	2,667.56

Requesting Sums in the Query

- To get a summed total amount, you need to remove the detailed object from the Results section of the query panel.

- Example: Find total expenditures associated with PTA 1001020-100-AKAAF. My report would look like the previous picture if I included Exp Type in the Results (see previous page).

- **RESULT OBJECTS**   **CONDITIONS**
  Fiscal Year   Fiscal Year = 2004
  PTA   Project = 1001020
  Exp Type   Task = 100
  Exp Type Name   Award = AKAAF
  Exp Amt

- To get a total for that PTA, remove Exp Type and Exp Type Name from the Results:

Fiscal Year	PTA	Expenditure Amount
2004	1001020-100-AKAAF	35,825,326.93

- **RESULT OBJECTS**   **CONDITIONS**
  Fiscal Year   Fiscal Year = 2004
  PTA   Project = 1001020
  Exp Amt   Task = 100
          Award = AKAAF

Other Ways to Get A Sum

▪ Use the report formatting tools to add a sum for columns and rows (we'll see in demo on Unit 6).

2004	1001020-100-AKAAF	55130		15,298.35
2004	1001020-100-AKAAF	55135		1,508,344.71
2004	1001020-100-AKAAF	55140		71,957.57
2004	1001020-100-AKAAF	55210		2,490,376.77
2004	1001020-100-AKAAF	55230		42,543.26
2004	1001020-100-AKAAF	55240		94,610.75
2004	1001020-100-AKAAF	55320		21,403.05
2004	1001020-100-AKAAF	55410		8,684.78
2004	1001020-100-AKAAF	56920		82,470.74
2004	1001020-100-AKAAF	58015		136,177.30
2004	1001020-100-AKAAF	58210		146,506.20
2004	1001020-100-AKAAF	58220		21,381.08
2004	1001020-100-AKAAF	58320		694.81
2004	1001020-100-AKAAF	58325		318.95
2004	1001020-100-AKAAF	58350		264.69
2004	1001020-100-AKAAF	58380		37,117.62
2004	1001020-100-AKAAF	58450		635.26
2004	1001020-100-AKAAF	58510		3,738.76
2004	1001020-100-AKAAF	58540		2,382.22
2004	1001020-100-AKAAF	58560		303,305.45
2004	1001020-100-AKAAF	58610		16,933.87
2004	1001020-100-AKAAF	58630		653.65
2004	1001020-100-AKAAF	58710		24,695.27
2004	1001020-100-AKAAF	58720		106,413.86
2004	1001020-100-AKAAF	59130		480.68
2004	1001020-100-AKAAF	59140		2,646.91
2004	1001020-100-AKAAF	59295		30,309.90
			Sum:	35,825,326.93

UNIT 5: Parent Orgs

- How Do You Get a Report For Parent Orgs?

- Finding Your Parent Org Level

- Demo

How Do You Get Parent Orgs?

- There are many levels of parent orgs

- Currently we have ten levels of orgs

- The Org hierarchy is jagged, which means school and dept orgs are not all at the same level

- Parent orgs are available in three areas:
  - Project orgs
  - Task orgs
  - Award orgs

- You have to know in which level your parent org resides:
  - If you want department level expenses you have to request the parent org at it's correct level.

  - Example: PTA 1001020-100-AKAAF is owned by Comparative Medicine, (VXIW) which is under org level three.

Example of Current Org Structure
School of Medicine
Dept of Medicine

- **Level 1 Stanford University AAOO**

  - **Level 2 School Of Medicine (VAAA)**

    - **Level 3 Comparative Medicine (VXIW)**
      - Level 4 Comp. Med Operations (VXMQ)
      - Level 4 Veterinary Svc Center (VYBS)

    - **Level 3 Cardiothoracic Surgery (VWES)**
      - Level 4 Cardiothoracic Surgery Op (VWIM)
      - Level 4 Thoracic Surgery (VWQA)
      - Etc..

- **View Organizational Hierarchy:**
  - https://axess.stanford.edu
  - Click on Organizational Hierarchy link

Finding Your Parent Org Level

- Create a new temporary report using the same universe and drag in Lv10 Task Org Code and Task Org Node to the Results Object panel to find out at what "highest" level your parent org exists. The Task Org Code is located within the Task folder and under the Task Org sub folder.

- Click Run

- Make a note of the "Task Org Node…" #.

- Close the report or save it if you want.

Lv 10 Task Org	Task Org Node L
[-]	1.00
AA00	1.00
AAAA	2.00
AADW	4.00
AAHH	4.00
AAHS	4.00
AAMS	4.00
AAPK	3.00

UNIT 5: Demo Questions

5.1   At what level is org code XNVG?

5.2   Create a report showing total expenditures for the department, Comparative Medicine, (VXIW) by PTA for FY04.

UNIT 5: Answers to Demo Questions

- **5.1**   Level 3
Conditions
   Lv 10 Task Org Code = Show list of values

List of Values of Lv 10 Task Org Code

Tabular View   Hierarchical View

Lv 10 Task Org ...	Lv 10 Task Org Name	Task Org Nod
XNVG	Radiation Oncology	3
XOCU	RadOnc/Operations	4
XOKI	RadOnc/Radiation Bio...	4
XORW	RadOnc/Radiation Ph...	4
XOZK	RadOnc/Radiation Th...	4
XPDE	Radiology	3
XPGY	Rad/Operations	4
XQDO	Rad/Nuclear Medicine	4
XQHI	Diagnostic Radiology	4
XQLC	Rad/Diagnostic Radiol...	4
XQSQ	Abdominal Imaging Se...	5
XQYX	Diag Radiology Copy ...	4
XRAE	Musculoskeletal Section	5
XRHS	Mammography	5
XRMS	MRSIC (Lucas Center)	4

☐ Show Selected Only

Refresh   OK   Cancel   Help

- **5.2**

Fiscal Year	Lv 3 Task	PTA	Expenditure Am
2004	VXIW	1002-100-AKAAF	1,718,762.67
2004	VXIW	1019-100-AKAAF	992,139.55
2004	VXIW	1020-100-AKAAF	81,786,880.56
2004	VXIW	1035-100-AKAAF	2,252,490.37
2004	VXIW	1036-100-AKAAF	1,556,027.90
2004	VXIW	3857-100-EAGMX	16,864.65
2004	VXIW	6504-100-EAGAR	-111,056.57
2004	VXIW	9062-100-HAJPO	41,291.80
2004	VXIW	3187-104-PAGHU	318,962.66
2004	VXIW	8288-101-PAGAJ	623,326.86
2004	VXIW	8310-100-PAEZH	395,708.03
2004	VXIW	3312-100-PAGAM	3,177,267.08
2004	VXIW	3312-101-PAAHE	896,559.89
2004	VXIW	3313-101-PAGOG	5,618,015.06
2004	VXIW	3314-100-PAGAK	90,942.02
2004	VXIW	3314-101-PAAFW	918,012.45

- **Result Objects**
   Fiscal Year
   Lv 3 Task Org Code
   PTA
   Exp Amount

   Conditions
   Fiscal Year = 2004
   Lv 3 Task Org Code = VXIW

   (Because **VXIW** is defined at **L3**)

PIVOTING

Pivoting Reports

- Pivoting
  - creating a cross tab report
  - makes a column a header
  - creates a summary report

Fiscal Year	PTA	Month Abbreviation	Expenditure Amount
2004	1001020-100-AKAAF	Dec	6,573,073.26
2004	1001020-100-AKAAF	Feb	1,236,388.87
2004	1001020-100-AKAAF	Jan	15,179,412.78
2004	1001020-100-AKAAF	Nov	7,650,802.27
2004	1001020-100-AKAAF	Oct	6,226,387.59
2004	1001020-100-AKAAF	Sep	-1,040,737.85

		Sep	Oct	Nov	Dec	Jan	Feb	Sum:
2004	1001020-100-AKAAF	-1,040,737.85	6,226,387.59	7,650,802.27	6,573,073.26	15,179,412.78	1,236,388.87	35,825,326.93
	Sum:	-1,040,737.85	6,226,387.59	7,650,802.27	6,573,073.26	15,179,412.78	1,236,388.87	35,825,326.93

Unit 6: Demo Question

▪ Create a report showing expenditures by month for PTA 1001020-100-AKAAF for 2004.

Answer to Demo Question

Result Objects
 Fiscal year
 PTA
 Month Abbreviation
 Exp Type
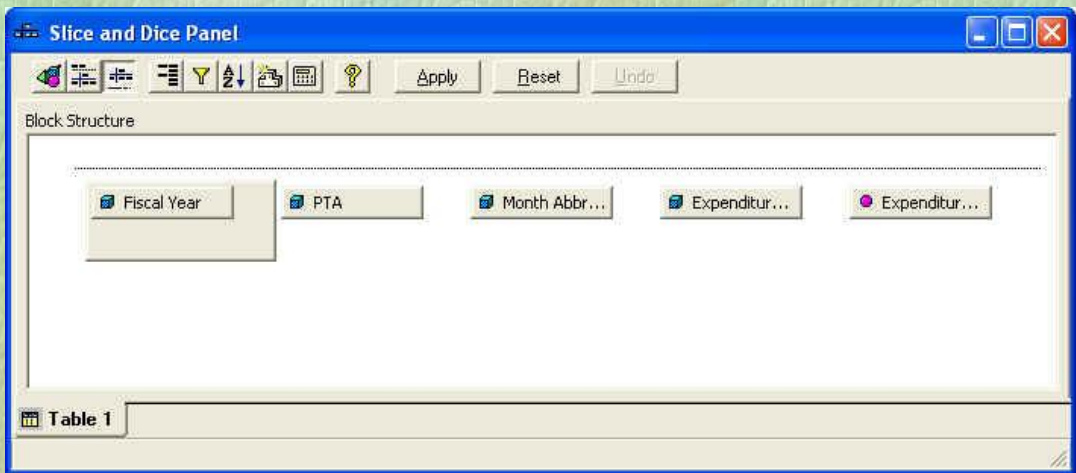 Exp Amt

Conditions
 Fiscal year = 2004
 Project = 1001020
 Task = 100
 Award = AKAAF

Fiscal Year	PTA	Month Ab	Expenditu	Expenditure Amount
2004	1001020-100-AKAAF	Apr	51115	123,193.01
2004	1001020-100-AKAAF	Apr	51155	609,101.24
2004	1001020-100-AKAAF	Apr	51210	60,658.44
2004	1001020-100-AKAAF	Apr	51310	417,857.76
2004	1001020-100-AKAAF	Apr	51515	392,237.12
2004	1001020-100-AKAAF	Apr	51525	303,593.56
2004	1001020-100-AKAAF	Apr	51527	11,647.07
2004	1001020-100-AKAAF	Apr	51530	1,709,067.70

1. Create and run query (see previous page)

2. Once you have the report on screen click on the Slice and Dice icon ⊣ to start pivoting. (A Pivot is called a Crosstab in BusinessObjects.)

   The slice and dice box looks like this:

3. Click & drag the Month Abbrev until it is above the Exp Amt box & the cursor changes to a symbol of a cross, then release the box.
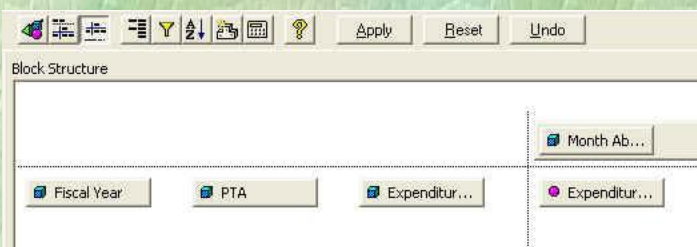
4. Click on the **Apply** button to see the pivot applied to your data. The Month should now be on top of the Exp Amount columns. Click the X on the top right corner of window to close.

5. To change the sort order of the months: Highlight the Months then click on **Format ➔ Sorts** from the toolbar. Under the **Across Edge** tab, click **Add**, then highlight **Month Abbrev**, then click on **OK**. Next click on the **Custom** radio button and then on **Values**. Highlight the month you want to move. Then click on the move up or move down buttons. When you have made all changes click OK, and then OK again.
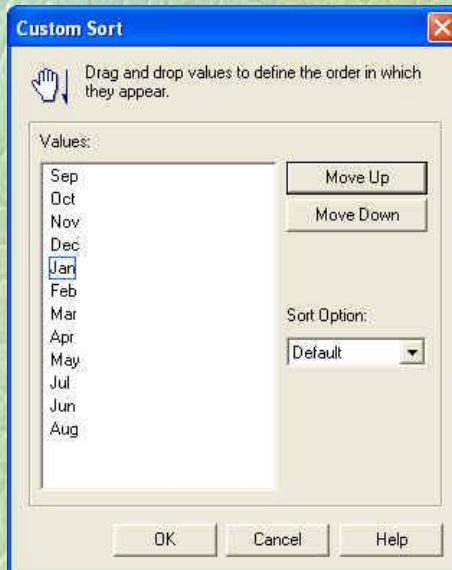
6. To add a total line: Go back into Slice and Dice. Then click on the Exp Amt. Next click on the calculator icon twice ⊞ (this will give you a total on the bottom and the side), then click Apply.   Now close this Slice-and-Dice window.

7. Your report should look like this:

			Sep	Oct	Nov	Dec	Ja		Jun	Aug	Sum:
2004	1001020-100-AKAAF	50010	-7,070,511.75			1,091.98					-967,352.83
2004	1001020-100-AKAAF	51115	123,193.01	123,192.49	123,192.49	123,192.49			123,193.01	123,191.96	1,478,312.20
2004	1001020-100-AKAAF	59499									1,548.44
		Sum:	-1,040,737.85	6,226,387.59	7,650,802.27	6,573,073.26			6,166,958.70	5,748,575.67	81,786,880.56

## To copy to Excel…. Several different ways…

8.   Copy Formatted Report – but this *can* be **slow**. To copy to Excel, click on **Edit** on the main menu, choose **Copy All.** This copies the data onto the clipboard. Open a blank Excel document then click **Edit → Paste**. This will paste the formatted report/data onto the Excel document. The next two are ways to copy the "raw" data – not the formatted report.

9.   Or, after you have created your report, click on **Data → View** / then click on the **Export** button at the bottom. Then click on the **Copy to DDE** radio button. This copies the data cube onto the clipboard. Then open Excel and paste the results. This option works the quickest, but copies the raw results from the data cube, not your report.

10.   A third way is to copy the unformatted data cube (like in the step above) directly to an Excel workbook. After you have created your report, click on **Data → View** / then click on the **Export** button at the bottom. **Change** the **format type** to **Excel** (rather than Text Files). Then – **this is important!** change your file location of where you want the file to be saved and rename it if you need to, and then click **Save**. Find where you saved the file and open it (be sure you pick a good location and name above!)

To copy to Excel…. Several different ways continued…

11. The data in our tables have a lot of beginning (") but no ending ("). This has caused problems in Excel. The only way to get around this problem is to save the report as a txt file. Click on **File**, **Save** then click on **Save as type: Text files (txt):**
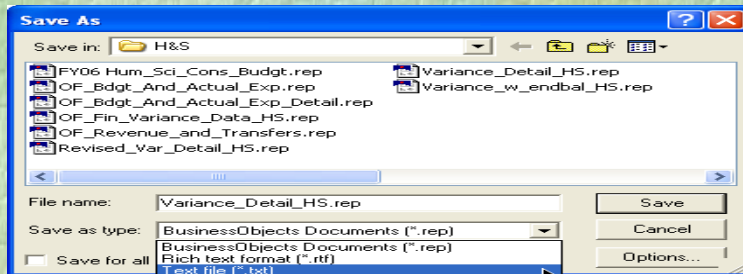
Then in Excel, click file open and navigate to the txt file you just saved. Excel will then import the txt file into Excel. In the Excel Text Import Wizard make sure Delimited is check off and then click next, then in the **Text qualifier window change " to {none}:**
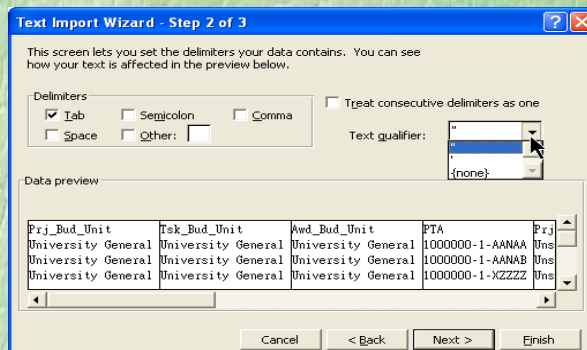
Then click next, then finish, and the file is now in Excel.