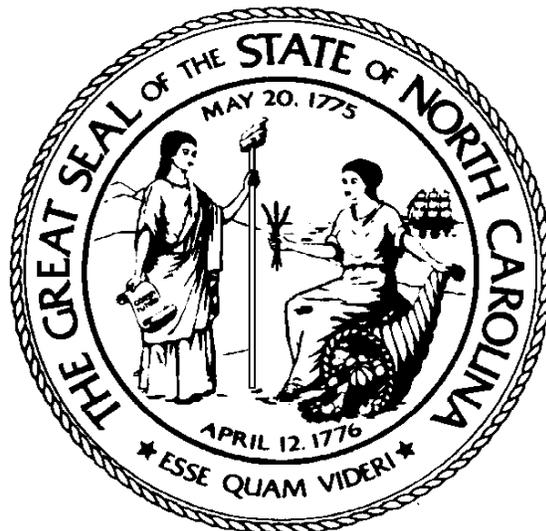


**BI400**

***Business Intelligence  
Workshop***

**TRAINING COURSE**



**State of North Carolina**

***Office of the State Controller***

***Updated: February 25, 2015***

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## Introduction

### ***Introduction***

- Lesson 1: Overview*
- Lesson 2: Variable Entry*
- Lesson 3: Formatting Reports*
- Lesson 4: Data Attributes*
- Lesson 5: Filtering*
- Lesson 6: "Jump" Reports*
- Lesson 7: "Swap" Axis*
- Lesson 8: Conditions and Exceptions*
- Lesson 9: Exporting Reports*
- Lesson 10: Course Review*

## Overview

Welcome to the OSC Business Intelligence (BI) training course. Business Intelligence (BI) reports help Human Resource staff and agency managers track and analyze business functions in their agencies.

The course introduction is an opportunity to get to know others who are attending class as well as to agree on classroom courtesy. The instructor will inform you about the building facilities and when breaks will occur.

## Strategy for Training

### **Tell Me (Concepts)**

- Instructor will discuss the process, responsibilities, and describe the transactions – LISTEN

### **Show Me (Demonstrations)**

- Instructor will demonstrate job-related tasks performed in the OSC HR/Payroll system – HANDS OFF.

### **Let Me (Exercises)**

- Student will complete the exercises which allows for hands-on practice in class – HANDS ON

### **Support Me (Availability)**

- Instructor will be available to answer questions while the students complete the exercises

---

# Course Map

You can see the Course Map of the class at the beginning of each lesson. The bold and larger text indicates which lesson you are beginning.

The lessons covered in this class include:

- Lesson 1: Overview and Objectives
- Lesson 2: Variable Entry
- Lesson 3: Formatting Reports
- Lesson 4: Data Attributes
- Lesson 5: Filtering
- Lesson 6: “Jump” Reports
- Lesson 7: “Swap” Axis
- Lesson 8: Conditions and Exceptions
- Lesson 9: Exporting Reports
- Lesson 10: Course Review

## Course Objectives

Upon completion of this course, you should be able to:

- Understand the definition of Business Intelligence
- Generate and Format BI Reports
- Understand concepts and functionality
- Understand “Jump” reports
- Export Reports

## Reference Materials

- Student Guide
- Training HELP website
  - Job Aids
  - Reports
  - Support Material Updates - “What’s New”
- Other Resources
  - Online help - from the SAP portal

## ***SUMMARY***

- This course is intended to give BI users an advanced understanding of the Business Intelligence reporting. This course will provide you with explanation and demonstration of advanced BI functionality.



## Overview

*Introduction*

***Lesson 1: Overview***

*Lesson 2: Variable Entry*

*Lesson 3: Formatting Reports*

*Lesson 4: Data Attributes*

*Lesson 5: Filtering*

*Lesson 6 "Jump" Reports*

*Lesson 7: "Swap" Axis*

*Lesson 8: Conditions and Exceptions*

*Lesson 9: Exporting Reports*

*Lesson 10 Course Review*

## Objectives

- Understand the definition of Business Intelligence
- Describe the two primary methods of Business Intelligence reporting
- Explain the basic navigation of the Business Intelligence's landing page

## BI Overview

Business Intelligence (BI) as defined by wikipedia.org is...

*"Business Intelligence is the process of analyzing large amounts of corporate data, usually stored in large databases such as the Data Warehouse, tracking business performance, detecting patterns and trends, and helping enterprise business users make better decisions."*

Business Intelligence (BI) is a reporting tool which helps Human Resource staff and agency managers track and analyze business functions in their agencies.

BI functions as a standalone system pulling data from SAP to create analysis, summary, trends, and other types of reports.

 If you experience technical issues with a BI report, you should contact BEST Shared Services.

 A request to change or create a new BI report must come from your Agency Change Liaison.

## Two Methods of Reporting

There are two primary methods of BI reporting; SAP ERP and SAP Business Intelligence. See the descriptions of each method in the table below

SAP ERP	SAP Business Intelligence
<ul style="list-style-type: none"> <li>• Primary function is to process transactions (Employee actions, payroll, etc).</li> <li>• System is designed to process transactions as efficiently as possible, not to support reporting.</li> <li>• Because reporting typically takes a large amount of system resources large report requests should not be processed at the same time transactions are being entered.</li> <li>• Data available immediately.</li> </ul>	<ul style="list-style-type: none"> <li>• Reporting is it's only function.</li> <li>• System is designed to read and present large volumes of data "On Demand".</li> <li>• Provides an analytical view of the data that is difficult to achieve on a transactional system.</li> <li>• Faster report development.</li> <li>• <b>Data refreshed overnight for next day access with the exception of quota related data. Quota related data is updated every Wednesday and Saturday nights due to the large volume.</b></li> </ul>

# SAP ERP

## Existing Jobs

Job

to

Search Term

Status
 All existing

Reporting period

All  
 Today  
 Current month  
 Current Year  
 Past  
 Future

### Existing objects

OT	Start date	End Date	S	Object name	Ext.obj ID
<input checked="" type="checkbox"/>	01/01/1900	12/31/9999	1	NOT AVAILABLE	30000000
<input type="checkbox"/>	01/01/1900	12/31/9999	1	SWITCHBOARD OPERATOR/RECEPTIONIST	30000001
<input type="checkbox"/>	01/01/1900	12/31/9999	1	TELEPHONE OPERATOR	30000002
<input type="checkbox"/>	01/01/1900	12/31/9999	1	TELEPHONE OPERATOR SUPERVISOR I	30000003
<input type="checkbox"/>	01/01/1900	12/31/9999	1	TELEPHONE OPERATOR SUPERVISOR II	30000004
<input type="checkbox"/>	01/01/1900	12/31/9999	1	COMMUNICATIONS CENTER OPERATOR	30000005
<input type="checkbox"/>	01/01/1900	12/31/9999	1	COMMUNICATIONS CENTER SUPERVISOR	30000006
<input type="checkbox"/>	01/01/1900	12/31/9999	1	COMMERCIAL SWITCHBOARD SUPERVISOR	30000007
<input type="checkbox"/>	01/01/1900	12/31/9999	1	COMMUNICATIONS CENTER ASST SUPV	30000008
<input type="checkbox"/>	01/01/1900	12/31/9999	1	MAIL CLERK I	30000009
<input type="checkbox"/>	01/01/1900	12/31/9999	1	MESSENGER	30000010
<input type="checkbox"/>	01/01/1900	12/31/9999	1	MAIL CLERK II	30000011
<input type="checkbox"/>	01/01/1900	12/31/9999	1	MAIL CENTER SUPERVISOR I	30000012
<input type="checkbox"/>	01/01/1900	12/31/9999	1	MAIL CENTER SUPERVISOR II	30000013
<input type="checkbox"/>	01/01/1900	12/31/9999	1	MAIL CENTER SUPERVISOR III	30000014
<input type="checkbox"/>	01/01/1900	12/31/9999	1	STATE COURIER MAIL SYSTEM MANAGER	30000015
<input type="checkbox"/>	01/01/1900	12/31/9999	1	PRINTING EQUIPMENT OPERATOR I	30000016
<input type="checkbox"/>	01/01/1900	12/31/9999	1	DUPLICATING EQUIPMENT OPERATOR TRAINEE	30000017
<input type="checkbox"/>	01/01/1900	12/31/9999	1	POSTAL WINDOW CLERK	30000018
<input type="checkbox"/>	01/01/1900	12/31/9999	1	PRINTING EQUIPMENT OPERATOR II	30000019
<input type="checkbox"/>	01/01/1900	12/31/9999	1	PRINTING EQUIPMENT OPERATOR III	30000020
<input type="checkbox"/>	01/01/1900	12/31/9999	1	MEDICAL CTR TELECOMMUNICATIONS SPEC I	30000021

The report above shows an example of an SAP ERP system report.

# SAP Business Intelligence

**Variable Entry**

Available Variants:  Save Save As... Delete

Variable	Current Selection	Description
OrgUnit(s) (Mandatory) (*)	<input type="text"/>	
Job(s) (Mandatory) (*)	<input type="text"/>	

OK Check

**B0165: Job Attributes** Last Data Update: 10/11/2007 15:22:43  
Last Refreshed 10/22/2007 13:24:34

Display As:  Information Print Version Export to Excel [Filter](#) [Settings](#)

						Number of Positions	Job Min Pay Lvl	Job Max Pay Lvl	Job Sal Ref
Organizational Unit	Job	Job Pay Type	Job Pay Area	Job Pay Group			\$	\$	\$
21000101 UAT Central HR Office	PERSONNEL ASSISTANT IV	Graded	Annual Salaries	GR59	10	0	0	0	
	PERSONNEL DIRECTOR I	Graded	Annual Salaries	GR78	2	0	0	0	
21000102 UAT Fiscal Office	ACCOUNTANT IV	Graded	Annual Salaries	GR79	2	0	0	0	
	CHIEF FINANCIAL OFFICER	10/Not assigned	10/Not assigned	10/Not assigned/	2	0	0	0	

The report above shows an example of a Business Intelligence report.

# Types of BI Reports

Report Type	Description of Data	Effective Date
B####	Only contains data since agency BEACON Go-Live date	Go-Live 1: Jan 1, 2008 Go-Live 2: Apr 1, 2008
P####	Only contains data from PMIS (no BEACON data)	Most data is available since the start of PMIS in 1975. Employee Headcount data starting at YR2000.
BP####	Contains both PMIS and BEACON data	

- ▶ EEO Planning
- ▼ Employee Details & Actions
  - B0004: Actions by Employee
  - B0032: Employee Appointed Exempt Designation
  - B0037: Employee Personal Data
  - B0044: Employees by Work Location
  - B0080: Last Employee Action in Effect as of Selected Date
  - B0081: Employee Distribution by Salary Range
  - B0095: Employees by Employee Group/Sub Group
  - B0095-1: Employees by Personnel Area
  - B0179: Employee Action Detail by Month
  - B0002: PA Actions Monitoring Report
  - B0005: Actions by Month
  - B0006: Actions by Type
  - BP005: Combined SAP & PMIS EE Actions by Month
  - BP006: Combined SAP & PMIS EE Actions by Type
  - B0036: Employee Asset Assignment
  - B0042-1: Employee Separations including Transfers
  - B0043-1: Employee Separations from State Government
  - B0099: Employee Deadline Dates

# Basic Navigation

To access reports...  
<https://mybeacon.nc.gov>

The screenshot shows the Business Intelligence Personnel Admin landing page. At the top is a navigation bar with tabs: Home, NCID Admin, My Data (ESS), My Staff (MSS), My Documents, OrgCharts, Home Page Admin, Browser Admin, Browser Admin, SAP GUI, Learning, and Reports. Below this is a sub-menu for Personnel Admin with items like Cost Center, Benefits, NC WORKS, Organization Mgmt, Agency Metrics, PMIS Data, and Time. On the left is a 'Detailed Navigation' sidebar with a tree view of folders such as Compensation, Cross Agency Verification, Disability, Disciplinary Actions, EEO Analysis, EEO Planning, Employee Details & Actions, Employee Headcount, Foreign Nationals, Labor, Longevity & Retirement, Performance Review, Qualifications, Temporary Employees, and Turnover. The main content area features a header with 'Business Intelligence' and 'Personnel Admin'. Below the header are several sections: 'Production Updates!' with a date and time, a message about 91 reports available, 'Report Descriptions' with a bar and pie chart, 'Technical Requirements Documentation' with a link, 'System and New Report Messages' with a link, 'FAQs' with a link, and a 'SaveAs User Guide' button. Red callout boxes provide additional context: 'Folders' points to the sidebar; 'Shows brief description of available reports.' points to the Report Descriptions section; 'NOTE: Payroll is out of scope.' is in a separate box; 'Tabs and Reports are security role based. User only sees what is granted by security.' points to the top navigation bar; 'System and New Report Messages' points to the corresponding link; and 'Lists the hardware and software versions required.' points to the Technical Requirements Documentation link.

The screen capture above shows the landing page for Business Intelligence.

## SUMMARY

In this lesson, you learned to:

- Understand the definition of Business Intelligence
- Describe the two primary methods of Business Intelligence reporting
- Explain the basic navigation of the Business Intelligence's landing page

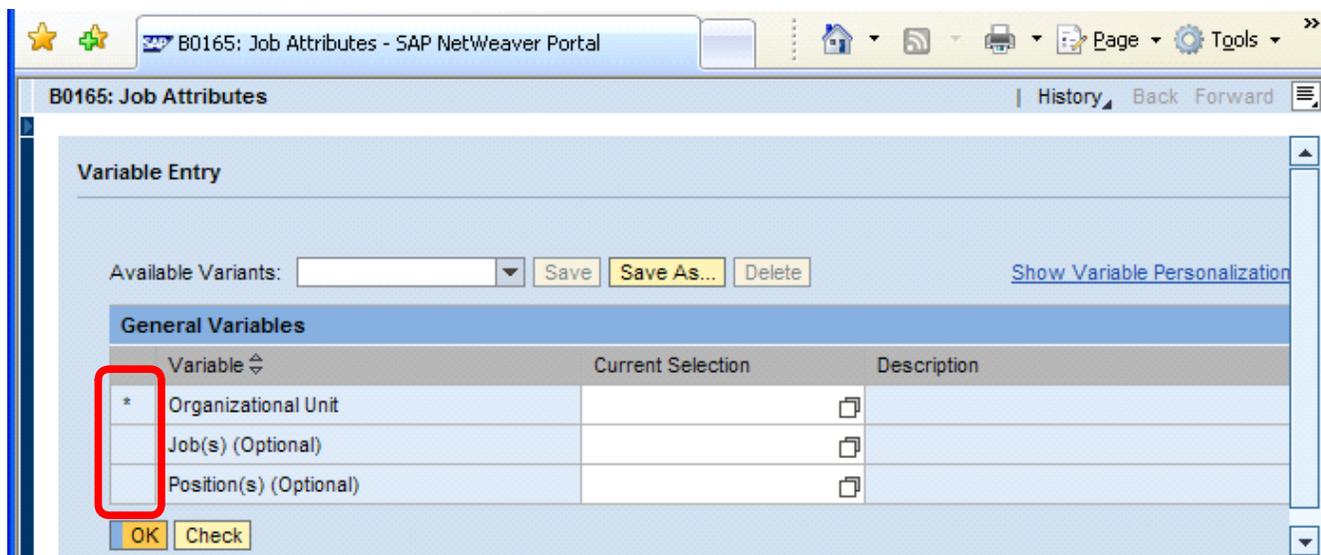
# Variable Entry

*Introduction*  
*Lesson 1: Overview*  
**Lesson 2: Variable Entry**  
*Lesson 3: Formatting Reports*  
*Lesson 4: Data Attributes*  
*Lesson 5: Filtering*  
*Lesson 6 "Jump" Reports*  
*Lesson 7: "Swap" Axis*  
*Lesson 8: Conditions and Exceptions*  
*Lesson 9: Exporting Reports*  
*Lesson 10 Course Review*

## Objectives

- Define Variables
- Return to the Variable Screen
- Key correct date entry format

## Variables



The first screen that displays after you launch a BI report is called Variable Entry.

Variables define the data which will be used in the report. Some variables are mandatory (a star in the left column denotes a mandatory variable) and some are optional.

 **NOTE:** Variables vary from report to report.

# Variable Entry Screen

## Selecting Organizational Units

B0165: Job Attributes

Variable Entry

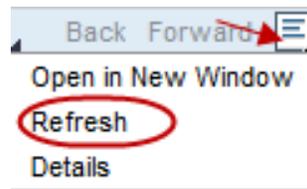
Available Variants:  Save Save As... Delete [Show Variable Personalization](#)

General Variables		
Variable**	Current Selection	Description
* Organizational Unit		
Job(s) (Optional)		
Position(s) (Optional)		

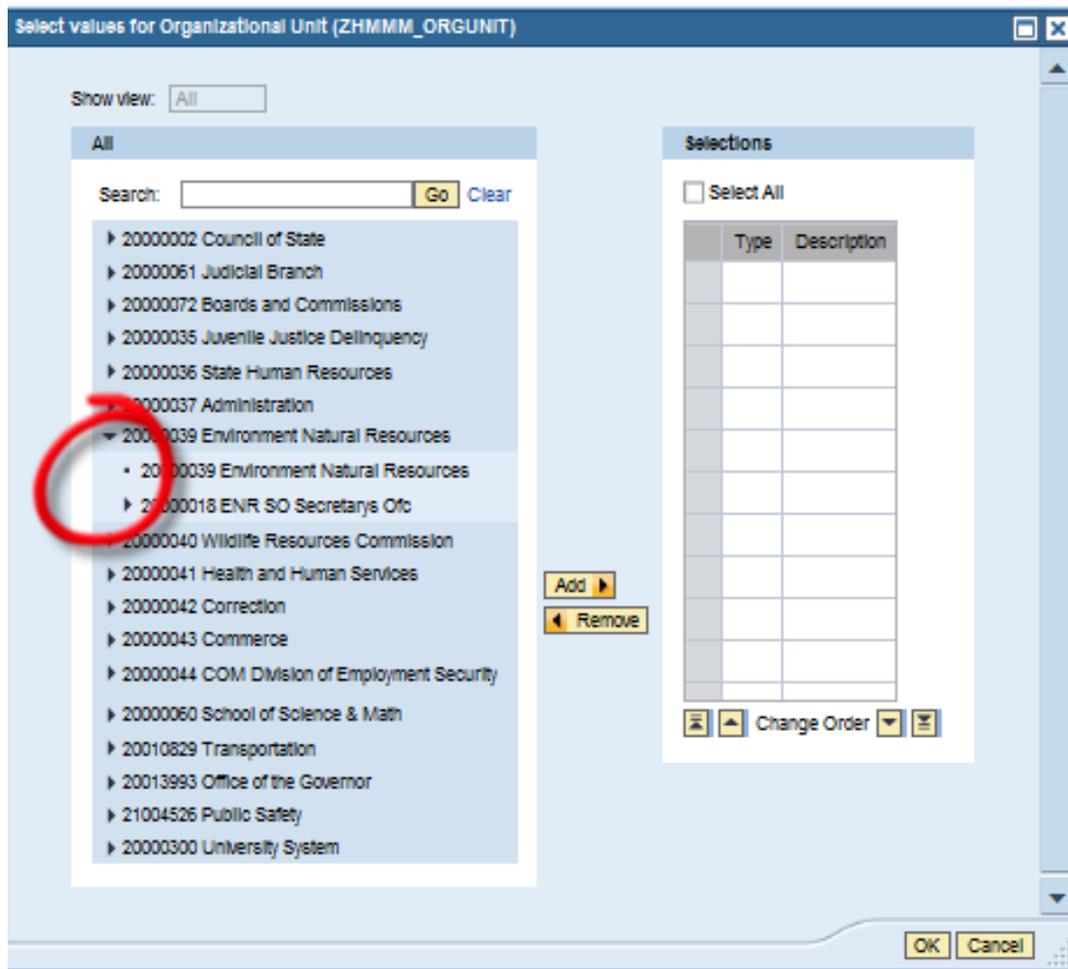
OK Check

**Click to Select Values**

 NOTE: If the Variable Entry screen does not populate, click Refresh

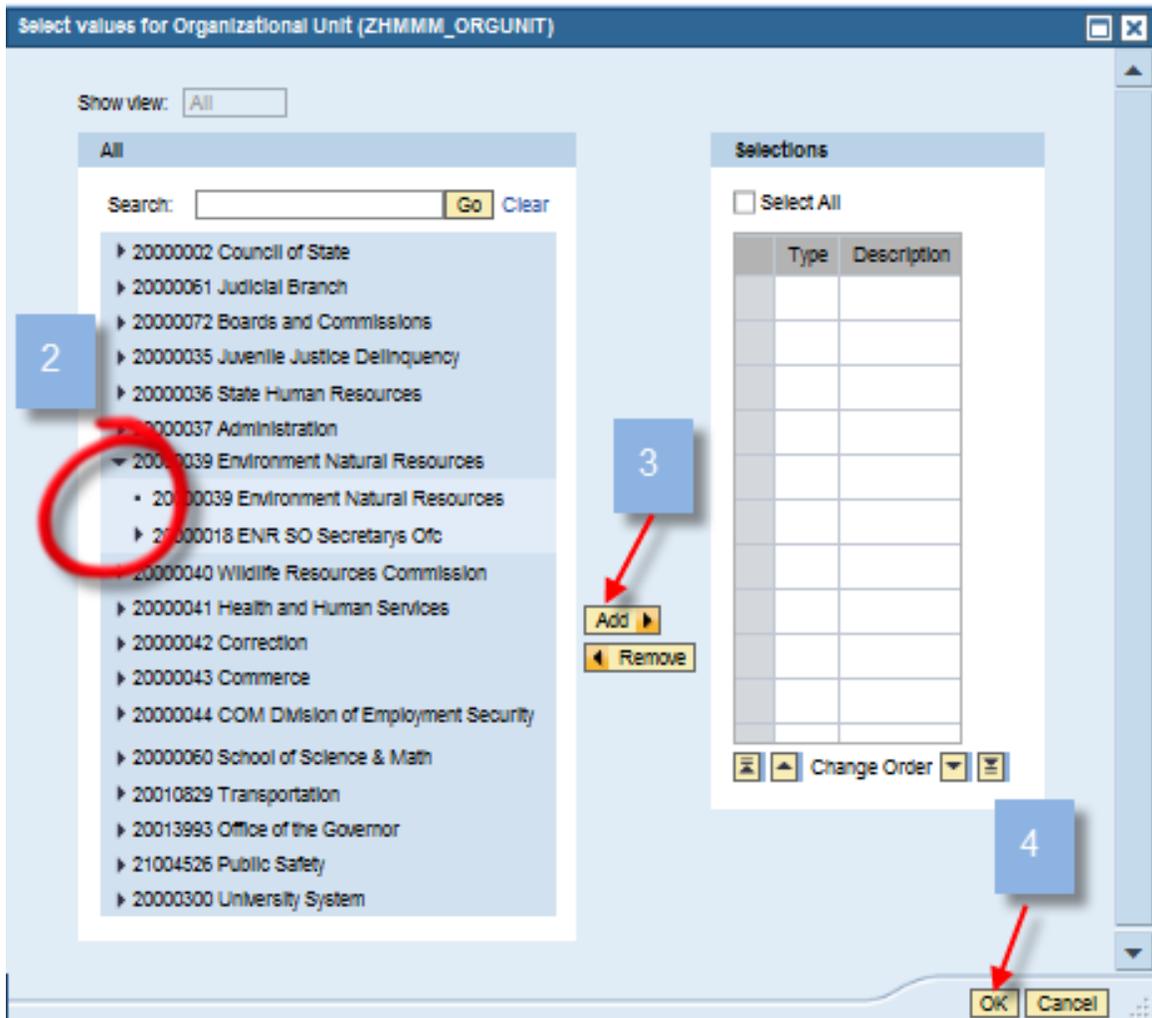


1. Click the matchcode icon to select values .



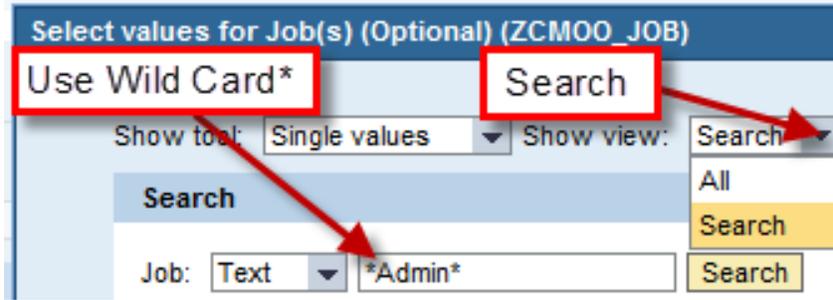
- 📁 If you select an organization unit with “■” in front of it, then you are selecting that organizational unit and nothing underneath it.
- 📁 If you select an organization unit with “▶” in front of it, then you are selecting that organizational unit and every organizational unit underneath it.
  - ❖ If you know the organizational unit number, you can just type it in on the variable screen., i.e. 20000049 for OSC

2. Select the Organizational Unit(s) from your search list
3. Click **Add**  to move selected item(s) to the Selections column.
4. Click the OK icon 



## Variable Entry Screen - Tips

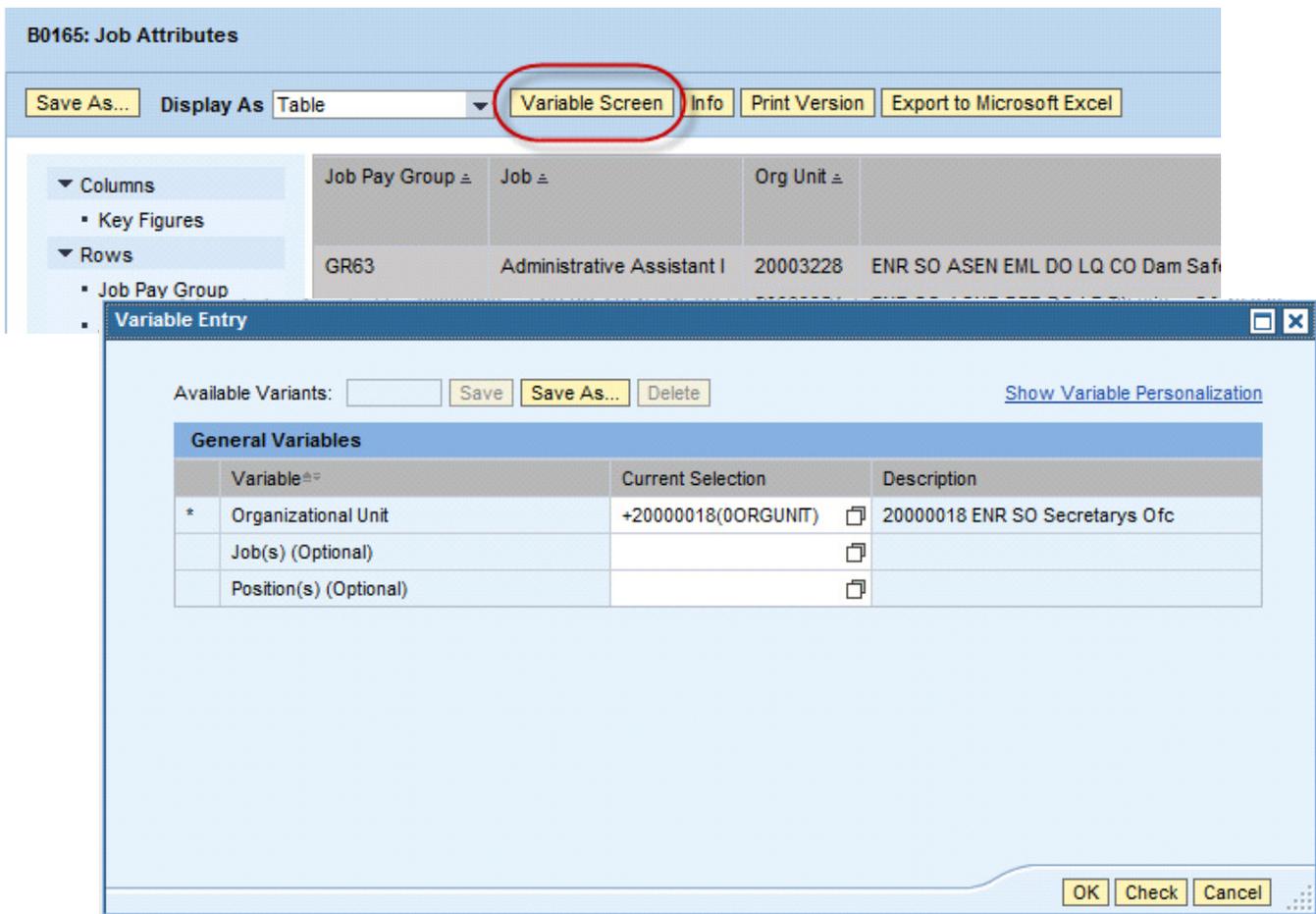
- Searching Values



If **Show View** is an option to select, you can change to “Search” using the drop-down arrow.

The search criteria is case sensitive and you can use wildcards (\*).

- **Returning to the Variable Entry Screen**

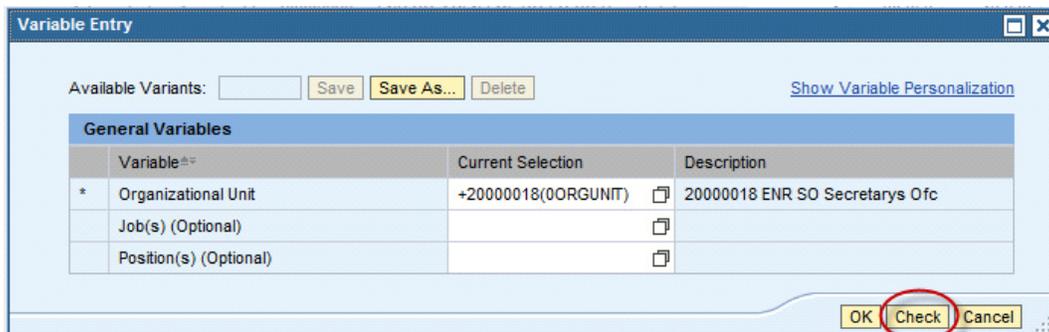


To return to the variable entry screen while in a report:

- Select the Variable Screen button
- 📁 The Variable Entry screen will display

- **Checking Selected Variables**

Once variables have been selected on the Variable Entry Screen, click the **Check** icon before clicking the **OK** icon to confirm the variables are valid.



## Date Entry Formats

B0117: Position Counts | History Back Forward

Variable Entry

Available Variants:  Save Save As... Delete

Variable	Current Selection
OrgUnit Hierarchy (Mandatory) (*)	<input type="text"/>
Employee Sub Group(s) (Optional)	<input type="text"/>
Calendar Month/Year (Single Value, Mandatory) (*)	0608

OK Check

Be sure to use the date formats identified as it will impact your ability to execute the report properly

### Month/Year Format

- 0613
- 06/13
- 06/2013

B0118: Monthly Position Counts

Variable Entry

Available Variants:  Save Save As... Delete

General Variables	
Variable	Current Selection
* Organizational Unit	<input type="text"/>
* Calendar Month/Year (Single Value, Mandato	0108 - 0508

### Month / Year (Range) Format

- 0113 - 0613
- 01/13 - 06/13
- 01/2013 - 06/2013 (Requires a space before and after the dash)

**B0080: Last Employee Action in Effect as of Selected Date**

**Variable Entry**

Available Variants:  Save Save As... Delete

General Variables	
Variable <sup>≠</sup>	Current Selection
* Organizational Unit	
* As of Day (Single Value, Mandatory)	02/25/2015
Actions by Type (Optional)	
Action Reason (Optional)	
Employee(s) PersNo. (Optional)	

OK Check

**Month / Day / Year**

- 051313 (will not take 51313)
- 5/13/13
- 5/13/2013
- 5/13/13 - 5/16/13 (Usually requires a space before and after the dash)

**EXERCISE: Selecting Variables #1****SCENARIO**

You want to select Variables using the *B0113 Positions Actions* report.

**Instructions**

1. Access the following reports:
  - OM > Vacant Position Data > B0113: Position Actions
2. On the variable entry screen:
  - Use this date range:
    - 81514
3. Click Check
4. On the variable entry screen
  - Use this date range:
    - 081514

5. Click Check
6. Click OK

## **EXERCISE: Selecting Variables and Using the Search Feature #2**

### **SCENARIO**

You want to select Variables using the *B0165: Job Attributes* report.

### **Instructions**

1. Access the following reports:
  - OM > Job Classification Data > B0165: Job Attributes
2. On the variable entry screen:
  - Select your Organizational Unit
3. On the variable entry screen:
  - Select Job and Search for Accountant Job(s)
4. Click Check
5. Click OK

## ***SUMMARY***

In this lesson, you learned to:

- Define Variables
- Return to the Variable Screen
- Key correct date entry format



## Formatting Reports

*Introduction*  
*Lesson 1: Overview*  
*Lesson 2: Variable Entry*  
**Lesson 3: Formatting Reports**  
*Lesson 4: Data Attributes*  
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*Lesson 6 "Jump" Reports*  
*Lesson 7: "Swap" Axis*  
*Lesson 8: Conditions and Exceptions*  
*Lesson 9: Exporting Reports*  
*Lesson 10 Course Review*

### Objectives

- Report Layout
- Report Formatting
- Save reports
- Change Data Format

Once your report has populated, it can be saved, printed or exported to Excel.

This lesson will cover report formatting tips and techniques to customize your reports to what you need.

### Report Layout

The screenshot shows a SAP report interface with several callouts:

- Report Title:** Points to the header 'B0165-1: Job Attributes w/o OrgUnit'.
- Shows date and time when the data was loaded from SAP:** Points to the status bar showing 'Last Data Update: 02/24/2015 02:45:00' and 'Last Refreshed: 02/24/2015 14:01:12'.
- Calendar Month and Year:** Points to the 'Calendar Year/Month' field showing 'FEB 2015'.
- Key Figures are the numbers:** Points to the 'Number of Positions' column in the table.
- Characteristics under "Rows" are in the gray area of your report:** Points to the 'Job' and 'Job Pay Type' columns in the table.

Job	Job Pay Type	Number of Positions	Job Max Pay Lvl	Job Sal Ref	Average Salary
Accountant	Flat Rate	1	350,000	0	47,830.67
Accountant	Graded	1	74,017	59,893	53,637.00
Accountant	Banded				

- Key Figures - actual value regarding a particular criteria group or characteristic providing that it is a numeric value.
- Rows generally represent characteristics. They are the gray area of the report and contain descriptions or defining data such as company code, employee, organization unit, etc.
- Free characteristics - additional field selections that can be dragged and/or dropped in and out of the report.

- Attributes - additional data available to add to report than what is displayed in the Free characteristics. Attributes can be specific to certain elements - dependent on other fields to be viewable.

## Report Formatting

### Adding Data - Drag/Drop Method

B0165-1: Job Attributes w/o OrgUnit

Save As... Display As Table Variable Screen Info Print Version Export to Microsoft Excel

Calendar Year/Month		FEB 2015			
Job	Job Pay Type	Number of Positions	Job Max Pay Lvl	Job Sal Ref	Average Salary
Accountant	Flat Rate	1	350,000	0	47,830.67
Accountant	Graded	1	74,017	59,893	53,637.00
Accountant	Graded	320	96,811	59,342	58,528.21

Columns: Calendar Year/Month, Key Figures

Rows: Job, Job Pay Type

Free characteristics: Country

#### Adding Free characteristics to a report using Drag/Drop Method.

1. Select the data element by left mouse clicking it, hold the mouse button.
2. Drag the mouse across the report until you see **dark vertical lines**.
3. Release the mouse-click at the vertical line where you want the data to reside.

 When adding data, the new characteristic will appear in front of the column you chose to place it.

## Adding Data - Using Left Column Manipulation

B0165-1: Job Attributes w/o OrgUnit

Save As... Display As Table Variable Screen Info Print Version Export to Microsoft Excel

Columns

- Calendar Year/Month
- Key Figures

Rows

- Job
- Job Pay Type

Free characteristics

- Country

Calendar Year/Month		FEB 2015			
Job	Job Pay Type	Number of Positions	Job Max Pay Lvl	Job Sal Ref	Average Salary
Accountant	Flat Rate	1	350,000	0	47,830.67
Accountant	Graded	1	74,017	59,893	53,637.00
Accountant	Banded	320	96,811	59,342	58,528.21

### Adding Free characteristic to a report using Left Column Manipulation

1. Select the data element by left mouse clicking it and holding the mouse button.
2. Drag the mouse up the left side to the *Rows* section until you start to see **dark horizontal lines**.
3. Release the mouse click at the horizontal line where you want the data to reside.

 The Free characteristics will vary by report. Only certain characteristics will be listed depending on the nature of the report.

## Deleting Data

B0165-1: Job Attributes w/o OrgUnit

Save As... Display As Table Variable Screen Info Print Version

Columns

- Calendar Year/Month
- Key Figures

Rows

- Job
- Job Family
- Job Pay Type

Free characteristics

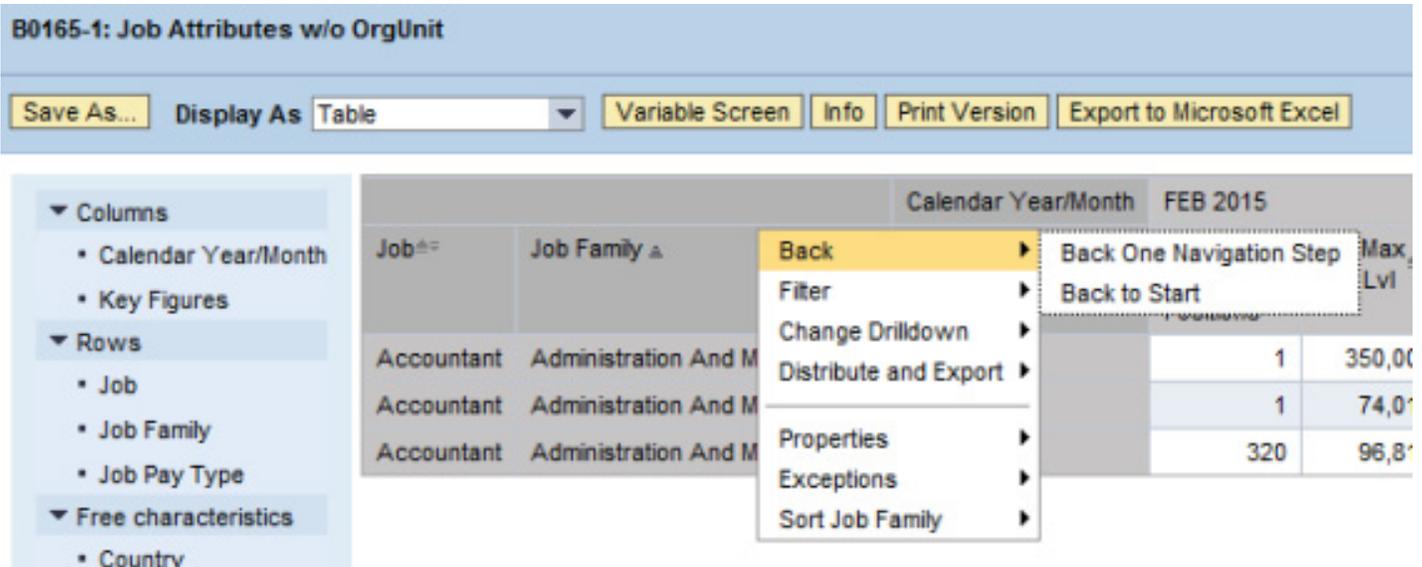
- Country
- Employee Group
- Employee Subgroup

Job	Job Family	Calendar Year	Job Pay Type
Accountant	Administration And Management	Flat Rate	
Accountant	Administration And Management	Graded	
Accountant	Administration And Management	Banded	

**Deleting/Removing a column from a report.**

1. Select (left mouse) the column header.
2. Drag the mouse up until an “X” displays.
3. Release the mouse.
4. The column will go back in the *Free characteristic* section on the left of the report.

**Undo**



If you decide that you want to undo your last action or return to the original report layout, you can right click in the gray section of the report and choose Back then Back One Navigation Step or Back to Start. The report will revert back to the way it was formatted before your last change or back to its original format.

Options you have include:

- Going Back One Navigation Step.
- Going Back to Start.

## Sorting/Rearranging Columns

B0165-1: Job Attributes w/o OrgUnit

Save As... Display As Table Variable Screen Info Print Version Export to Microsoft E

Calendar Year/Month	Job <sup>△</sup>	Job Family <sup>△</sup>	Job Pay Type <sup>△</sup>	Number of Positions <sup>△</sup>
FEB 2015	Accountant	Administration And Management	Flat Rate	1
	Accountant	Administration And Management	Graded	1
	Accountant	Administration And Management	Banded	320

Columns: Calendar Year/Month, Key Figures, Rows: Job, Job Family, Job Pay Type, Free characteristics: Country

All reports are sorted from left to right. Therefore, if you want to change the sort order, you will need to move the appropriate column to the first column in the report.

1. Select the Column header by using the left mouse.
2. Drag the cursor across the report to the first column.
3. When the **dark vertical line** displays, release the mouse button.

 Remember the report is always sorted by the 1st column of the report.

**CRITICAL!**

## Sorting Data

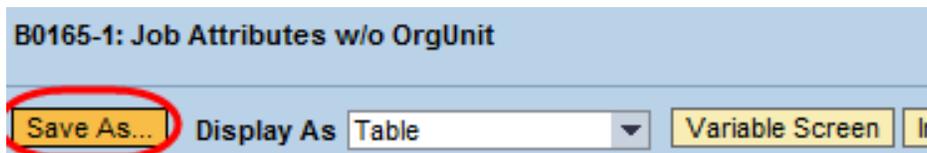
Employee Group ▾	Employee Subgroup ▲	Job Pay Type ▾	Job		
Supplemental Staff	Temp FT N-FLSAOT	Banded	Acc		
	Temp FT S-FLSAOT	Banded	Acc		
	Temp PT N-FLSAOT	Banded	Acc		
SPA Employees	Temp Sol FT N-FLSAOT		Calc		
	Temp Sol FT S-FLSAOT				
	Employee Group ▲	Employee Subgroup ▲	Job Pay Type ▾		
	Employee Group ▲	Employee Subgroup ▲	Job Pay Type ▾		
	Employee Group ▲	Employee Subgroup ▲	Job Pay Type ▾		
SPA Employees	FT N-FLSAOT Perm	SPA Employees	FT N-FLSAOT TL	Banded	Acc
	FT N-FLSAOT TL	Judicial Branch	FT N-FLSAOT Perm JBS	Graded	Acc
	FT S-FLSAOT Perm	SPA Bi-Weekly	FT N-FLSAOT Perm	Banded	Acc
	PT N-FLSAOT Perm	SPA Bi-Weekly Grant	FT N-FLSAOT Perm	Banded	Acc
	SPA Bi-Weekly Grant	SPA Employees	FT N-FLSAOT Perm	Banded	Acc
SPA Bi-Weekly Grant	FT N-FLSAOT Perm		FT N-FLSAOT TL	Banded	Acc
			FT S-FLSAOT Perm	Banded	Acc
SPA Bi-Weekly	FT N-FLSAOT Perm		FT S-FLSAOT Perm	Banded	Acc
Judicial Branch	FT N-FLSAOT Perm		PT N-FLSAOT Perm	Flat Rate	Acc
EPA Employees	FT N-FLSAOT TL	Supplemental Staff	Temp FT N-FLSAOT	Banded	Acc
			Temp FT S-FLSAOT	Banded	Acc
			Temp PT N-FLSAOT	Banded	Acc
			Temp Sol FT N-FLSAOT	Banded	Acc
			Temp Sol FT S-FLSAOT	Banded	Acc

## Changing Sort Order (Ascending vs. Descending)

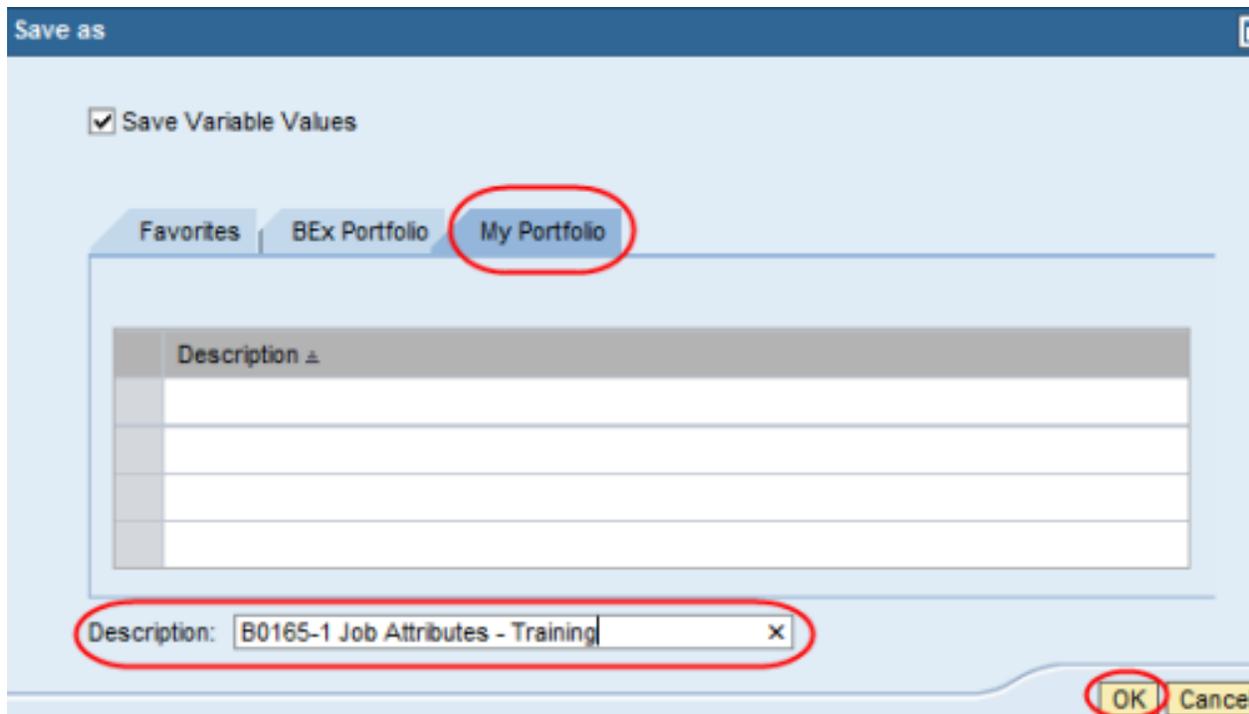
1. Use arrows next to the column name to change the sort order.

*Up arrow* is ascending order. *Down arrow* is descending order.

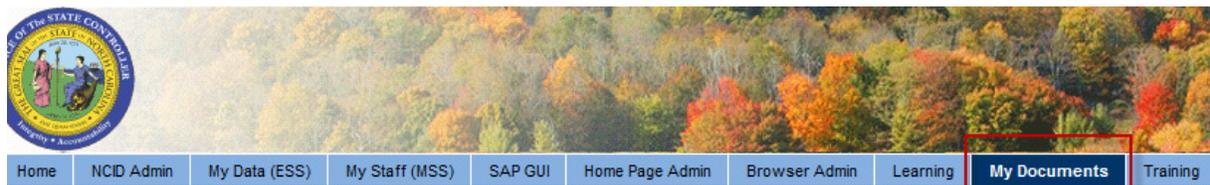
## Report Save As Feature



1. To save your report as you are working, click the  box at the top left portion of your screen



2. The Save As box populates. Click the *My Portfolio* tab in order to continue saving your report.
3. A description must be typed in the Description field.
4. Press the *OK* button



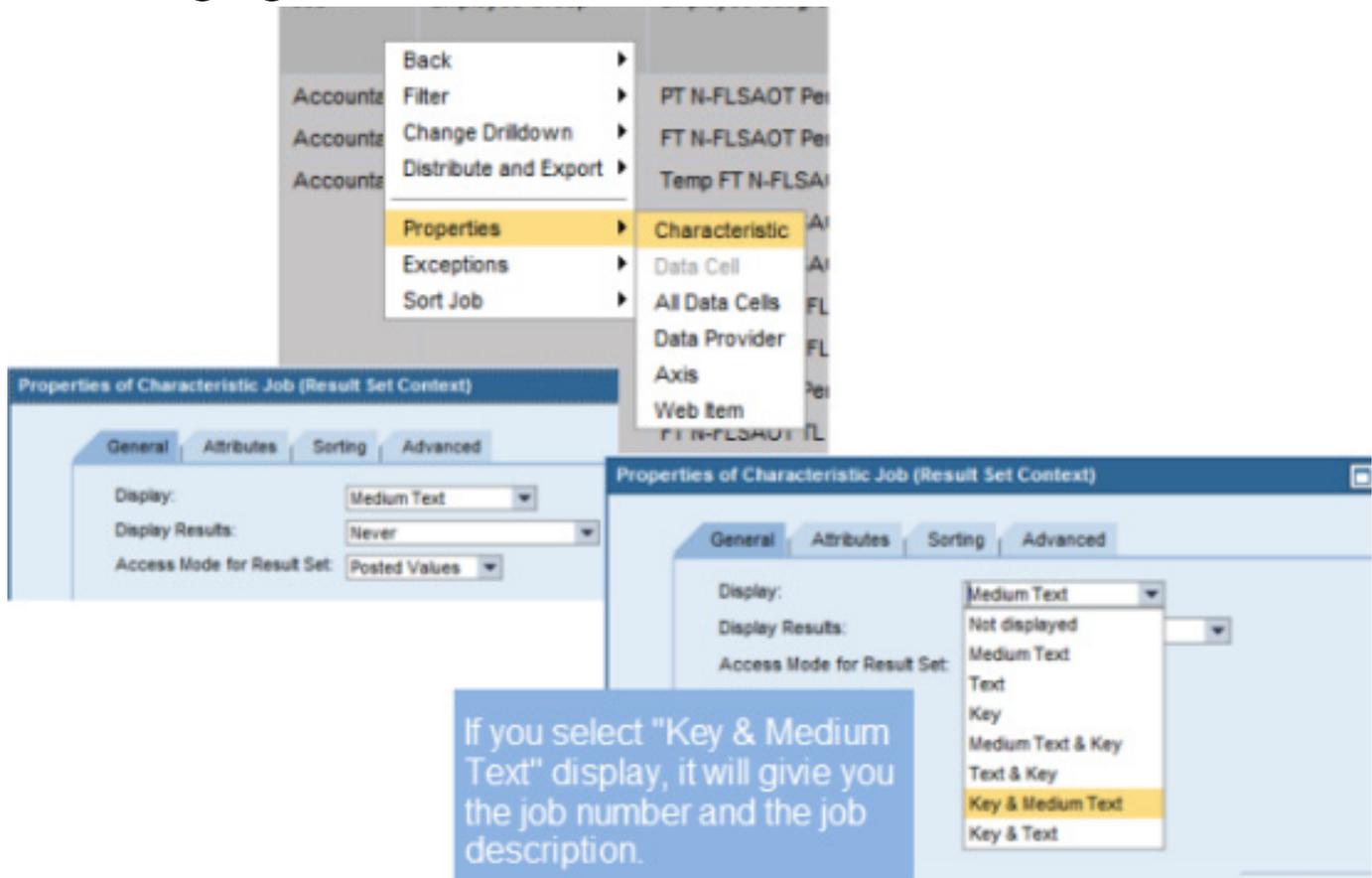
5. To see your saved report, switch back to the SAP Home screen where you can see your tabs.
6. Click *My Documents* from your tab list. The saved report should now show in your Portfolio list.

Name	Changed On
<a href="#">B0165-1 Job Attributes - Training</a> <a href="#">Rename</a>   <a href="#">Delete</a>	2/24/15 2:58:23 PM

## Saving Report Format Tips

- Saved reports can be renamed or deleted.
- Only the creator of the report can see it in the system; the report cannot be shared with other users.
- **REMEMBER:** You are saving the report format and the data on the variable entry screen but not the actual data; therefore, each time you run the saved report, it is looking at the data as it exists at the time you run the report.

## Changing Data Format



To change how data is viewed:

1. Right-click on column header.
2. Select **Properties > Characteristic** from the drop-down menu.

The Display row is where you change the data format. It is displaying “Medium Text” for the job which is the job description.

*Before (Medium text)*

Job 
Accountant
Accountant
Accountant

*After (Key & Medium text)*

Job 
30005459 Accountant
30012947 Accountant
31000025 Accountant

If you select the “Key & Medium Text”, it will give you the job number and the job description.

# Totaling

Report Total	FT N-FLSAOT TL	Banded	3	96,811	59,342	0.00	
	FT S-FLSAOT Perm	Banded	20	96,811	59,342	46,379.47	
	SPA Bi-Weekly Grant	FT N-FLSAOT Perm	Banded	1	96,811	59,342	55,148.00
	SPA Bi-Weekly	FT N-FLSAOT Perm	Banded	55	96,811	59,342	57,300.25
	EPA Employees	FT N-FLSAOT TL	Banded	1	96,811	59,342	0.00
<b>Overall Result</b>			<b>322</b>	<b>350,000</b>	<b>0</b>	<b>58,471.73</b>	

To get a total on your report:

1. Select the first column of the report.
  - 📁 This is the key to totaling.
2. Right-click on the column header **Properties > Characteristics**. A screen will display.
3. Select the drop-down option next to **Display Results**.
4. Select **Always**.
5. Select **OK**.

📁 To remove total, select **Never** from the drop-down option next to **Display Results**.

 Remember the report is always sorted by the 1st column of the report.

**CRITICAL!**

## Subtotaling

SPA Employees			Result	24	96,811	59,342	60,034.47
	FT N-FLSAOT Perm	Banded		216	96,811	59,342	59,860.82
	FT N-FLSAOT TL	Banded		3	96,811	59,342	0.00
	FT S-FLSAOT Perm	Banded		20	96,811	59,342	46,379.47
SPA Bi-Weekly Grant			Result	239	96,811	59,342	58,769.47
	FT N-FLSAOT Perm	Banded		1	96,811	59,342	55,148.00
SPA Bi-Weekly			Result	1	96,811	59,342	55,148.00
	FT N-FLSAOT Perm	Banded		55	96,811	59,342	57,300.25
EPA Employees			Result	55	96,811	59,342	57,300.25
	FT N-FLSAOT TL	Banded		1	96,811	59,342	0.00
Overall Result			Result	322	350,000	0	58,471.73

To get sub-totals on your report:

- Go to the column at the right of the one you want to subtotal.
  - This is key for subtotaling.
- Right-click on the column header and select **Properties > Characteristics**. A screen will display.
- Select the drop-down option to the right of *Display Results*.
- Click **Always**.
- Click **OK**.

Total and subtotals can be added or removed from the report.

📁 If you are exporting to Excel you may want to remove the totals and subtotals. Once exported to Excel, you can format your totals and subtotals.

## Graphing

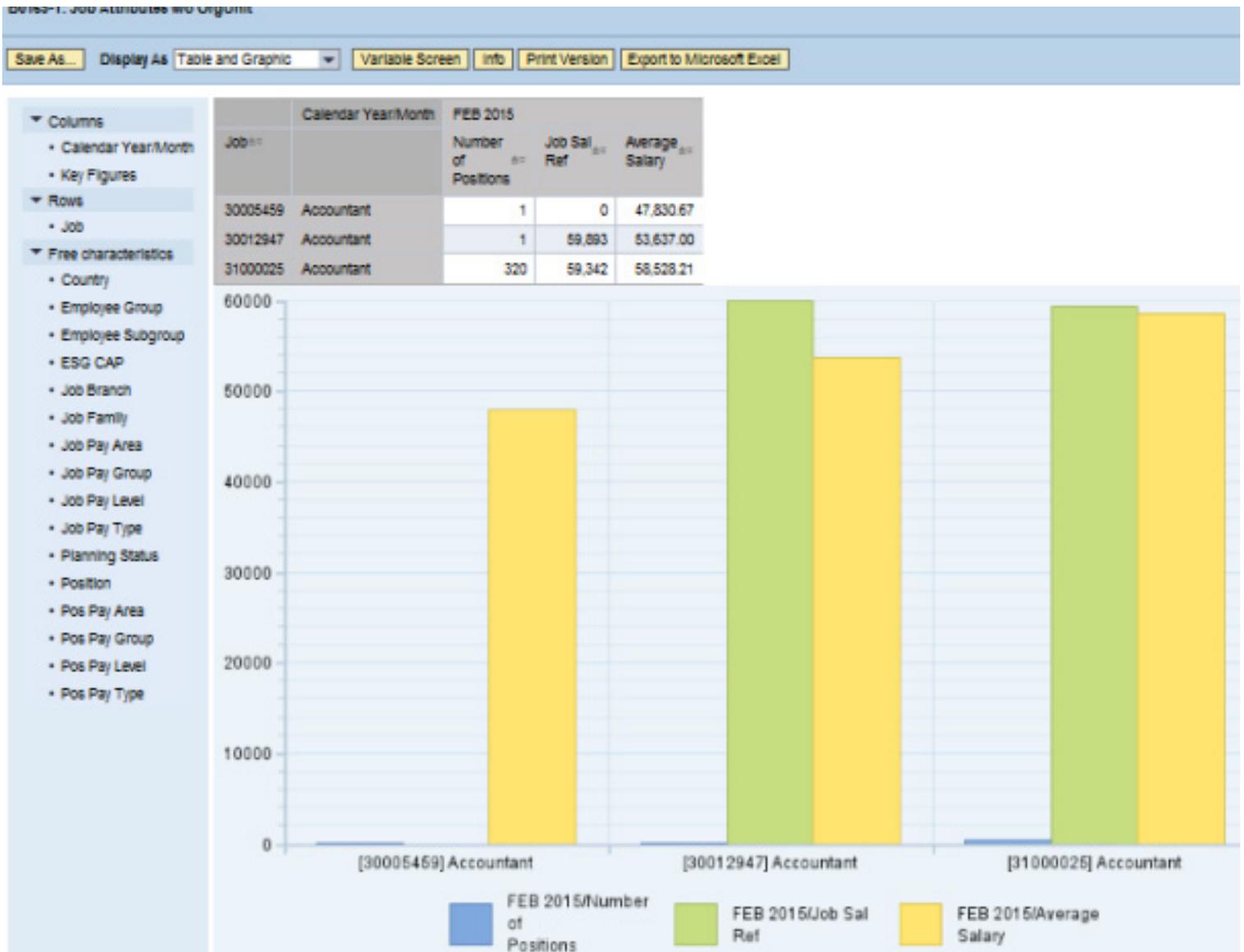
The screenshot shows a report titled "B0165-1: Job Attributes w/o OrgUnit". The interface includes a "Save As..." button, a "Display As" dropdown menu currently set to "Table", and buttons for "Variable Screen", "Info", and "Print Version". A sidebar on the left allows for column and row selection, including "Calendar Year/Month", "Key Figures", "Job", and "Country". The main table displays data for "FEB 2015" with columns for "Number of Positions", "Job Sal Ref", and "Av Sa".

		Calendar Year/Month	FEB 2015		
			Number of Positions	Job Sal Ref	Av Sa
30005459	Accountant		1	0	4
30012947	Accountant		1	59,893	5
31000025	Accountant		320	59,342	5

The default chart type is a bar graph.

All graph settings can be changed by going to the *Settings* link and then the *Graphics* tab.

📁 Must have “simple” table to perform graph function.



The **Display As** drop-down will allow the table to change into a table and graphic or just the chart

You may also want to display, print or export your report results in a chart or graphic format.

- 📁 The Table and Graphic display is a good option to display the detail as well as comparisons or trends if relevant.
- 📁 Remember that you can filter or re-sort the data in the table to narrow the scope of the report if the graphic displays are not useful or cannot be generated because of too much data.
- 📁 Advanced graphing is available under settings, graphic.

---

## EXERCISE: Formatting and Saving Report #1

### SCENARIO

You want to format and save report using the *B0077: Position Attributes* report.

### Instructions

1. Access the following reports:
  - OM > Position Data > B0077: Position Attributes
2. On the variable entry screen:
  - Select your Organizational Unit
  - Select Calendar Month/Year
    - 122014
3. Click Check
4. Click OK
5. Add the Free Characteristic Funding Source to report
6. Sort report by Funding Source
7. Change the Data Format - Display the Key and Medium Text for the Supv Position
8. You decide you do not want to display the Key for Supv Position. Remove this format.
9. Delete/Remove the Funding Source column.
10. Total your report by Org Unit
11. Subtotal your report by Employee Subgroup
12. Save your report.

## SUMMARY

In this lesson, you learned to:

- Layout Reports
- Format Reports
- Save reports
- Change Data Format

# Data Attributes

*Introduction*  
*Lesson 1: Overview and Objectives*  
*Lesson 2: Variable Entry*  
*Lesson 3: Formatting Reports*  
***Lesson 4: Data Attributes***  
*Lesson 5: Filtering*  
*Lesson 6 "Jump" Reports*  
*Lesson 7: "Swap" Axis*  
*Lesson 8: Conditions and Exceptions*  
*Lesson 9: Exporting Reports*  
*Lesson 10 Course Review*

## Objectives

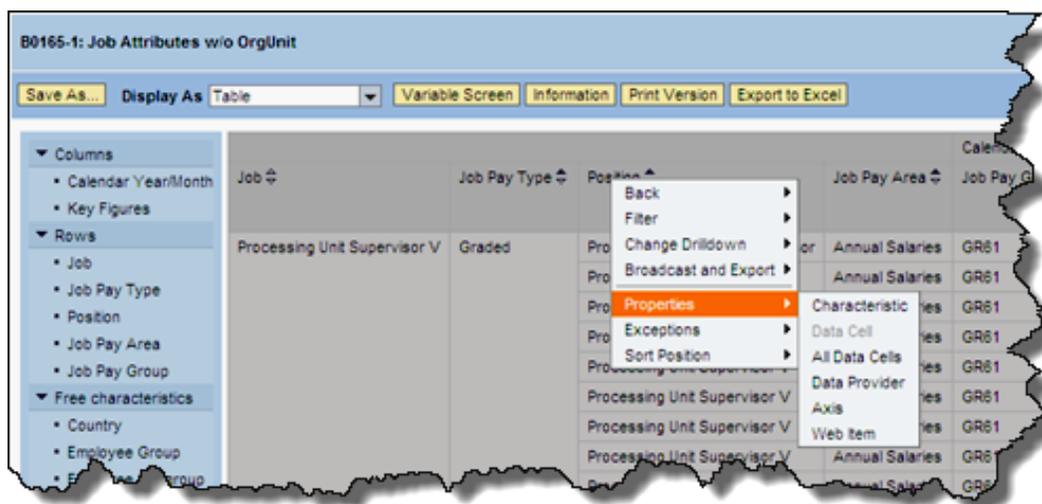
- Add Data Attributes

## Attribute defined

- An object closely associated with or belonging to a specific person or thing (data about data)
- Most data elements in the BI reports will have attributes which is other data associated with them that we can pull into the reports.

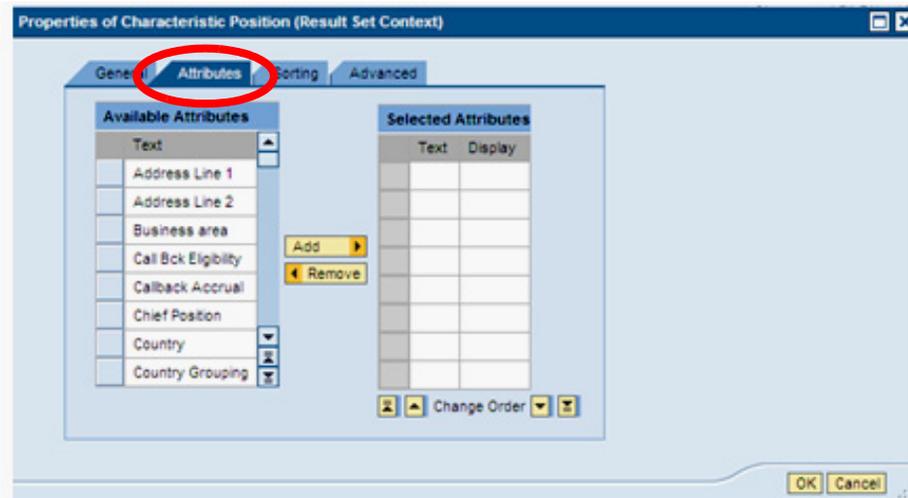
Example: the old schematic code is an attribute of the Job data element.

 Use an attribute when you need more data than what is available in the *Free Characteristics* Section. We refer to this additional data as attributes.

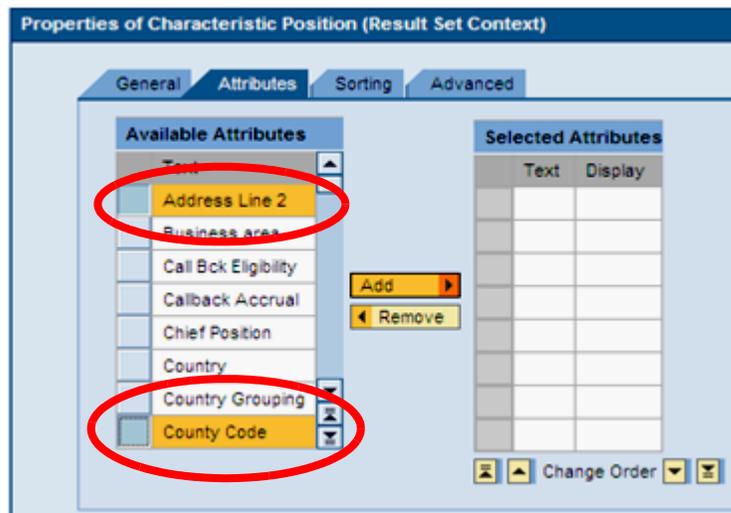


To see available attributes:

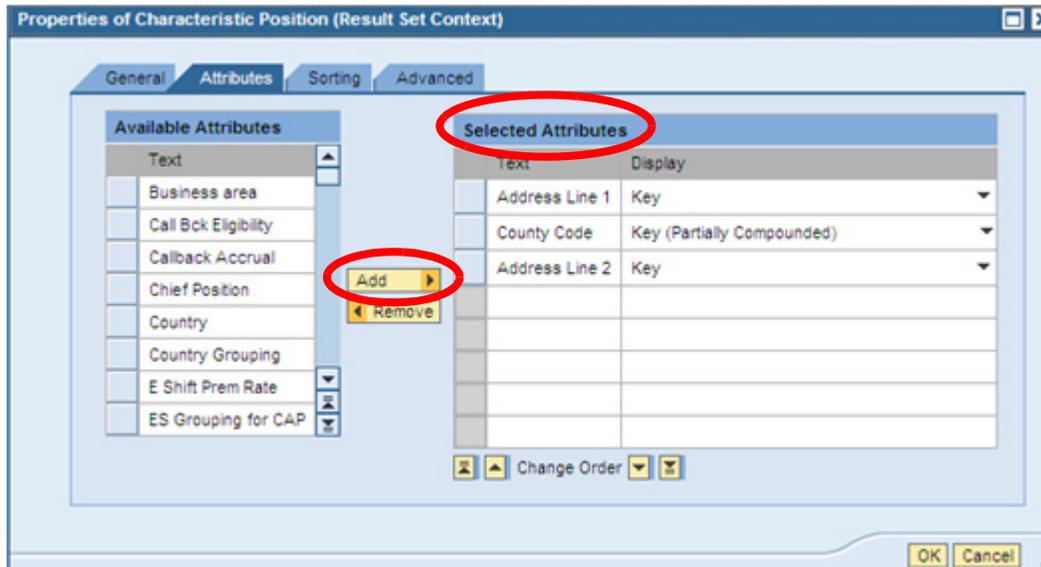
- Select column header of data element of which you wish to see the attributes
- Right click **Properties > Characteristics**. The Properties of Characteristic Position is displayed.



- Select the **Attributes** tab.



- Select the attributes (data elements) to be added to the report.



- Then click the **Add** button to move the attributes to the **Selected Attributes** box.
- Click the **OK** button at bottom of screen when you are ready to add attributes to the report

Job Pay Type	Position	Address Line 1	Address Line 2	County Code	Job Pay Area	Job Pay Group	Calendar Year/Month
Graded	Processing Assistant Supervisor	301 N. Wilmington St.	#	092	Annual Salaries	GR61	
	Processing Assistant V	1429 Rock Quarry Rd Ste 105	#	092	Annual Salaries	GR61	
	Processing Unit Supervisor V	New Bern Ave	#	092	Annual Salaries	GR61	

Notice the attributes will display in the report next to the main data element.

*Examples:*

- Schematic code is an attribute of *Job*
- PMIS number is an attribute of *Position*
- Salary is an attribute of *Employee*

Attributes are associated with the data elements.

- If you remove a column, then the attribute associated with that column also gets removed.
- If you relocate a column, then the attribute also gets relocated with it.

\*\*\*\*\*

## EXERCISE: Using Data Attributes

### SCENARIO

You want to add attributes for Organizational Unit.

### Instructions

1. Select one of the following reports:
    - *BN > Benefits > B0011: Participating Employees (select Plan = NC Flex Dental, add Org Unit in 1st column of report)*
    - *OM > Position Data > B0117: Active Position Counts*
    - *PA > Turnover > B0043: Employee Turnover from State Government*
    - *PA > Employee Details & Actions > B0095: Employees by Employee Group/Sub Group*
  2. Add attributes for Organizational Unit.
    - Add:
      - Agency
      - Division
      - Section – no branch
- OR**
- Agency
  - Division
  - Section with Branch
  - Branch

### Results

For agencies with “no branches”

Agency	Division	Section - no branch
--------	----------	---------------------

For agencies with “branches”

Agency	Division	Section with Branch	Branch
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## SUMMARY

In this lesson, you learned to:

- Add Data Attributes

# Filtering

*Introduction*  
*Lesson 1: Overview*  
*Lesson 2: Variable Entry*  
*Lesson 3: Formatting Reports*  
*Lesson 4: Data Attributes*  
***Lesson 5: Filtering***  
*Lesson 6 "Jump" Reports*  
*Lesson 7: "Swap" Axis*  
*Lesson 8: Conditions and Exceptions*  
*Lesson 9: Exporting Reports*  
*Lesson 10 Course Review*

## Objective

- Filter Reports

Filtering allows you to narrow down the results in your report and allows you to select specific data in your report.

## Filtering

B0165-1: Job Attributes w/o OrgUnit Last Data Update: 02/24/2015 02:45:00  
Last Refreshed 02/24/2015 19:02:57

Save As... Display As Table Variable Screen Info Print Version Export to Microsoft Excel Filter Settings

To adjust filter area, drag characteristics from navigation area into filter area

Calendar Year/Month: FEB 2015 Country: Show All Values Employee Group: Show All Values  
 Employee Subgroup: Contractor ESG CAP: Show All Values Job: Show All Values  
 Job Branch: Show All Values Job Family: Show All Values Job Pay Area: Show All Values  
 Job Pay Group: Show All Values Job Pay Level: Show All Values Job Pay Type: Edit  
 Key Figures: Number of Positions;... Planning Status: Show All Values Position: Show All Values  
 Pos Pay Area: Show All Values Pos Pay Group: Show All Values Pos Pay Level: Show All Values  
 Pos Pay Type: Show All Values

Close Variable Screen Display All Filter Values

Job	Job Pay Type	Job Pay Area	Job Pay Group	Calendar Year/Month	FEB 2015	Number of Positions	Job Min Pay Lvl	Average Salary
Accounting Clerk II	Graded	Annual Salaries	GR54			10	24,190	0.00
Accounting Clerk III	Graded	Annual Salaries	GR57			11	25,381	27,700.00
Accounting Clerk IV	Graded	Annual Salaries	GR59			93	27,013	32,233.81
Accounting Clerk Supervisor V	Graded	Annual Salaries	GR61			1	28,875	43,200.00
Accountant	Flat Rate	Flat Rate	FLATRATE			1	20,000	47,830.67
Accountant	Graded	Judicial	JB20			1	45,768	53,637.00
Accountant	Banded	Career Banding	31000025			320	37,012	58,528.21

- Select the **Filter** link in the upper right corner of report.

- Select the filter criteria drop-down menu
- Select **Edit**.

To adjust filter area, drag characteristics from navigation area into filter area

Calendar Year/Month: FEB 2015 Country: Show All Values Employee Group: Show All Values  
 Employee Subgroup: Contractor ESG CAP: Show All Values Job: Show All Values  
 Job Branch: Show All Values Job Family: Show All Values Job Pay Area: Show All Values  
 Job Pay Group: Show All Values Job Pay Level: Show All Values Job Pay Type: Show All Values  
 Key Figures: Number of Positions, ... Planning Status: Show All Values Position: Show All Values  
 Pos Pay Area: Number of Positions, ... Pos Pay Group: Show All Values Pos Pay Level: Show All Values  
 Pos Pay Type: Clear Edit

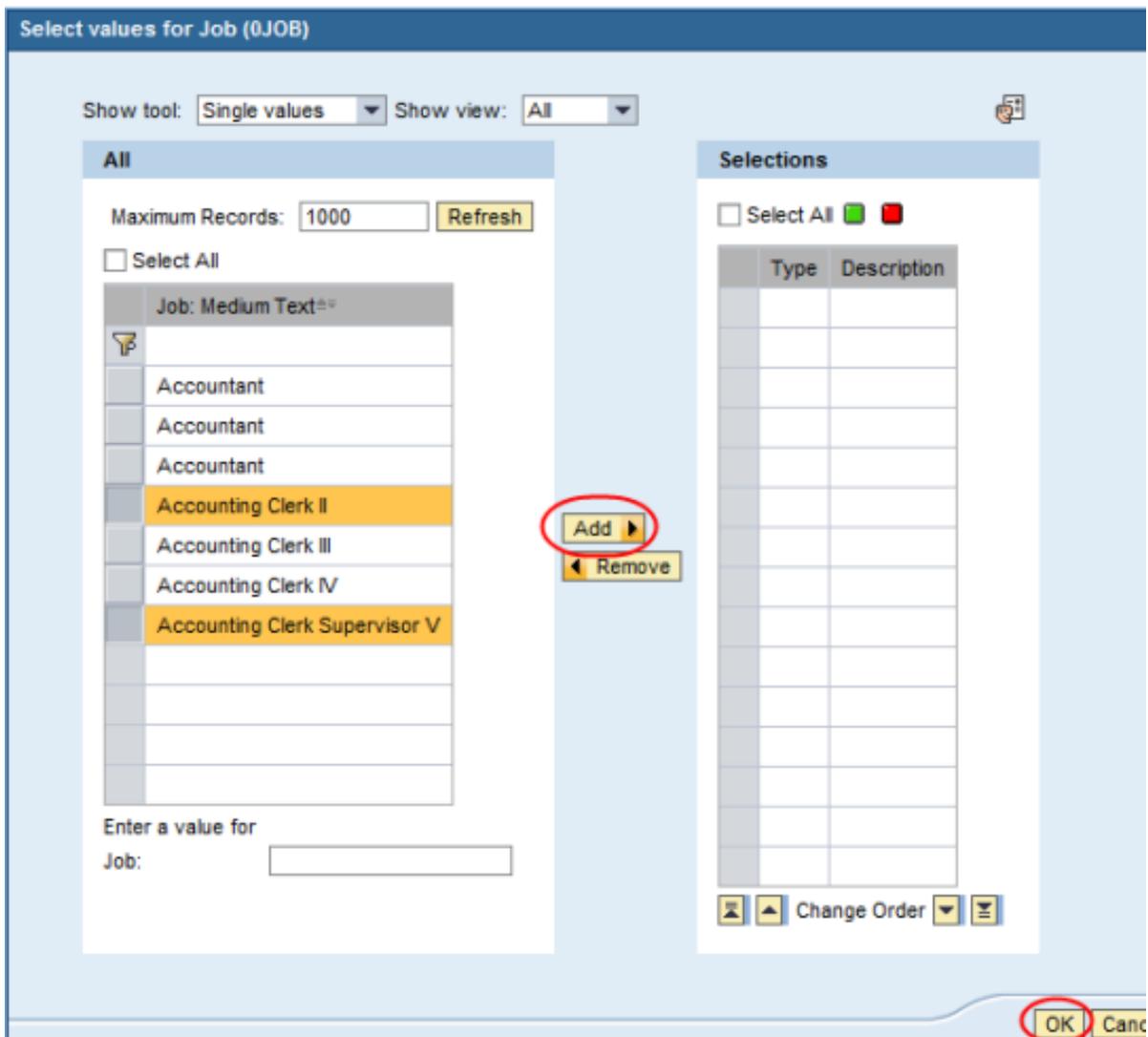
Columns: Calendar Year, Key Figures, Rows: Job, Job Pay Type

				Calendar Year/Month	FEB 2015	
Job Pay Type	Job Pay Area	Job Pay Group		Number of Positions	Job Min Pay Lvl	Average Salary
Graded	Annual Salaries	GR54		10	24,190	0.00
Graded	Annual Salaries	GR57	Accounting Clerk III	11	25,381	27,700.00

Users can always view the filter entitled Key Figures to see if additional Key Figures are available to add to the report.

**NOTE:** The ! symbol indicates that characteristic is excluded in filter area.

## Report Filtering - Include values



- Select the **criteria** to keep in the report.
- Select **Add**.
- Click **OK**.
- The report will automatically update.

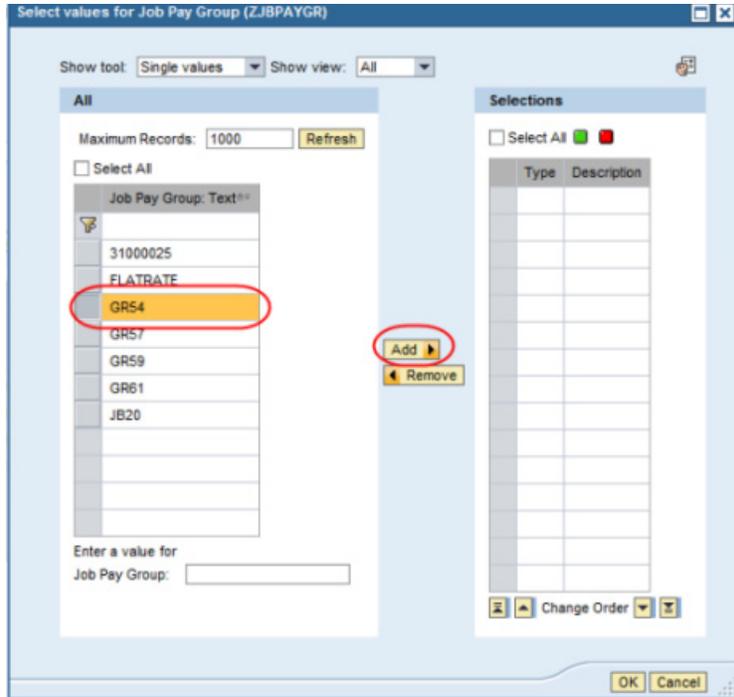
A filter will allow you to include values from the report.

In the Filter area of the report, you can see what key figures are available.

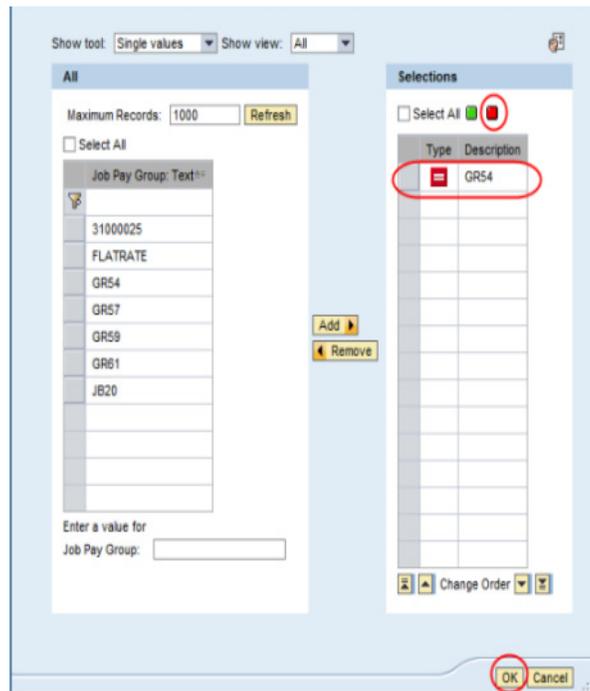
Most BI Reports default to exclude contractors from the report. You can add additional attributes to the report and move them in the order you would like to see them organized in you report.

## Report Filtering- Exclude Values

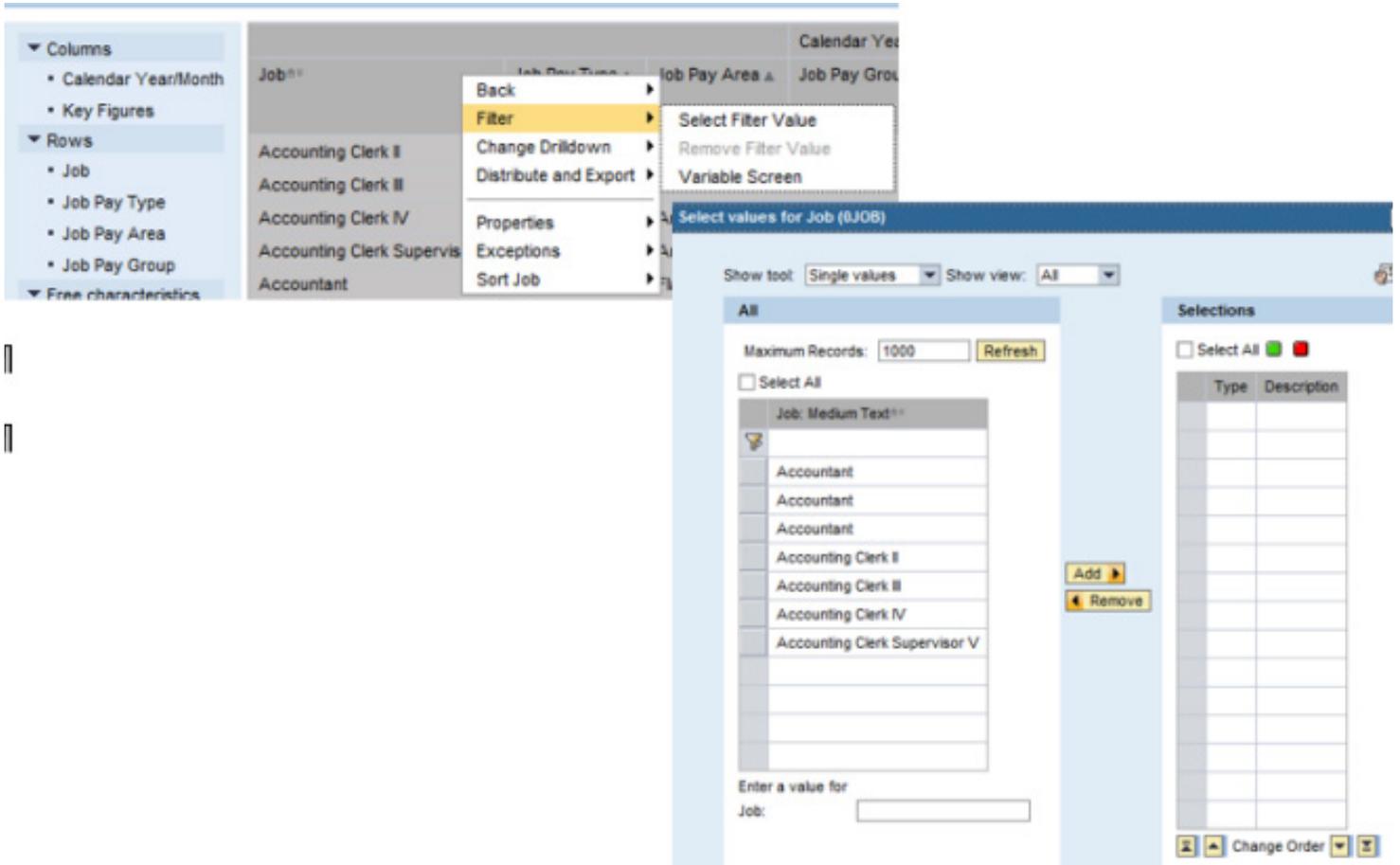
- Select the criteria to exclude from the report.
- Select **Add**.



- In the selections box, select the **criteria**,
- Click the **Red** button.
- Select OK
- The report will automatically update.

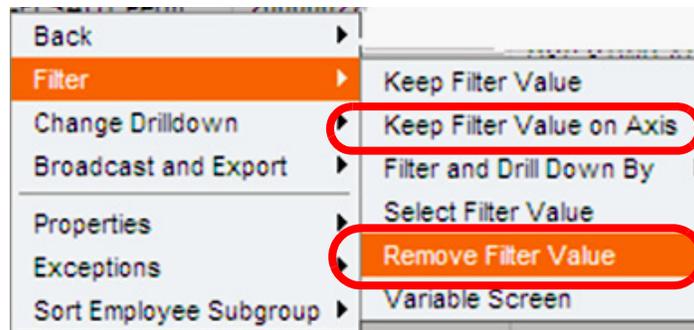


## Filter on a Column.

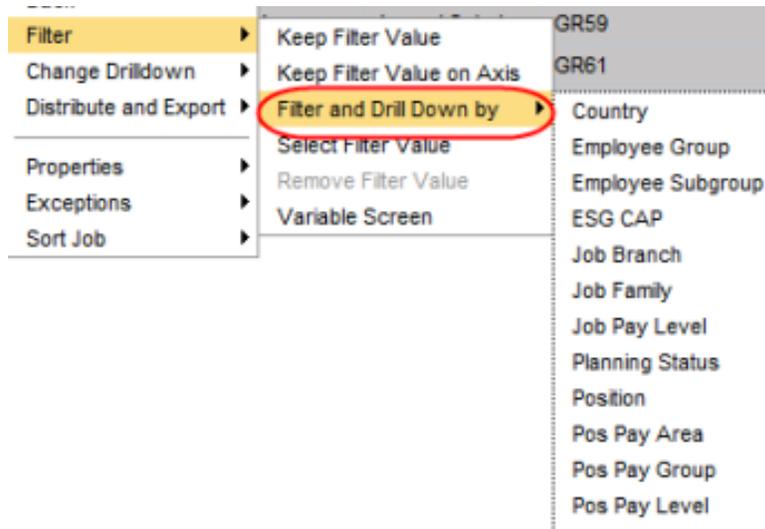


- Select the column header.
- Right-click.
- Choose **Select Filter Value**. The Select values for Job screen is displayed.

## Filter on a Row of Data

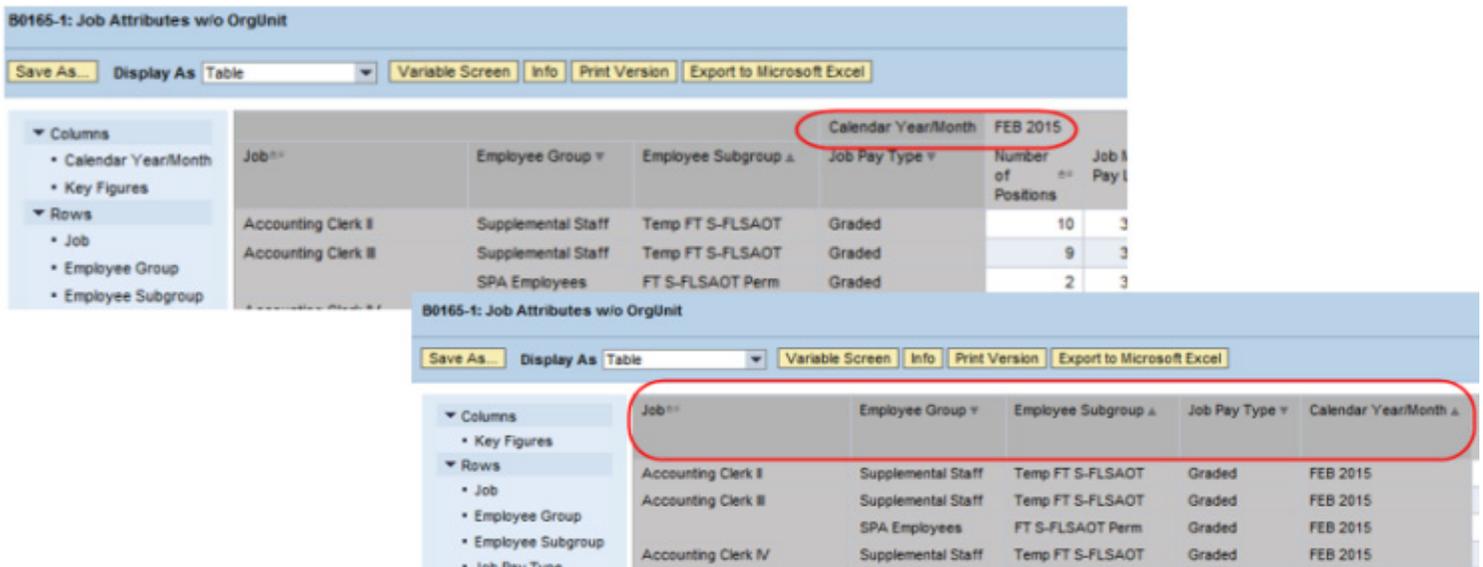


- **Keep Filter Value on Axis** will allow you to select a row of data to keep in the report and remove all other data.
- **Remove Filter Value** will remove the filter completely.



- **Filter and Drill Down by <Field>** will allow you to select a row of data to keep in the report and add an additional field (free characteristic) to the report.

## Filtering Tip



In order to summarize the key figures by month or age-range, do the following:

- Put your cursor on column header **Cal Mth/Yr** and select it.
- Drag the cursor upward until you see a horizontal black bar.
- Release the mouse.

## EXERCISE: Filtering #1

### SCENARIO

You want to set filters on the *B0161: Employee Headcount Over Time* report.

### Instructions

1. Access the following reports:
  - *PA > Employee Headcount > B0161: Employee Headcount Over Time*
2. On the variable entry screen:
  - Use this date range:
    - 10/12 - 11/12
3. Add **Age Range** as the first column of the report.
4. Filter on **Age Range**.
  - Select the following age ranges:
    - 30-39
    - 40-49

Question	Answer
1. Were there any filters already set on the report before you set a filter?	
2. Were there any additional key figures available for this report?	

Fill in the table below:

	Oct 2012	Nov 2012
# EE's 30-39 yrs old		
# EE's 40-49 yrs old		

## EXERCISE: Filtering #2

**SCENARIO**

You want to set filters on the *B0118: Monthly Position Counts* report.

### Instructions

1. Access the following reports:
  - *OM > Position Data > B0118: Monthly Position Counts*
2. On the variable entry screen:
  - Use this date:
    - 10/12
3. Add **Job** as the first column of the report.
4. Filter on **Job**.
  - Select the following jobs:
    - Personnel Analyst 1
    - Administrative Assistant 1

Question	Answer
1. Were there any filters already set on the report before you set a filter?	
2. Were there any additional key figures available for this report?	
Fill in the table below:	
# Personnel Analyst 1	Oct 2012
# Administrative Assistants 1	

## SUMMARY

In this lesson, you learned to:

Filter reports

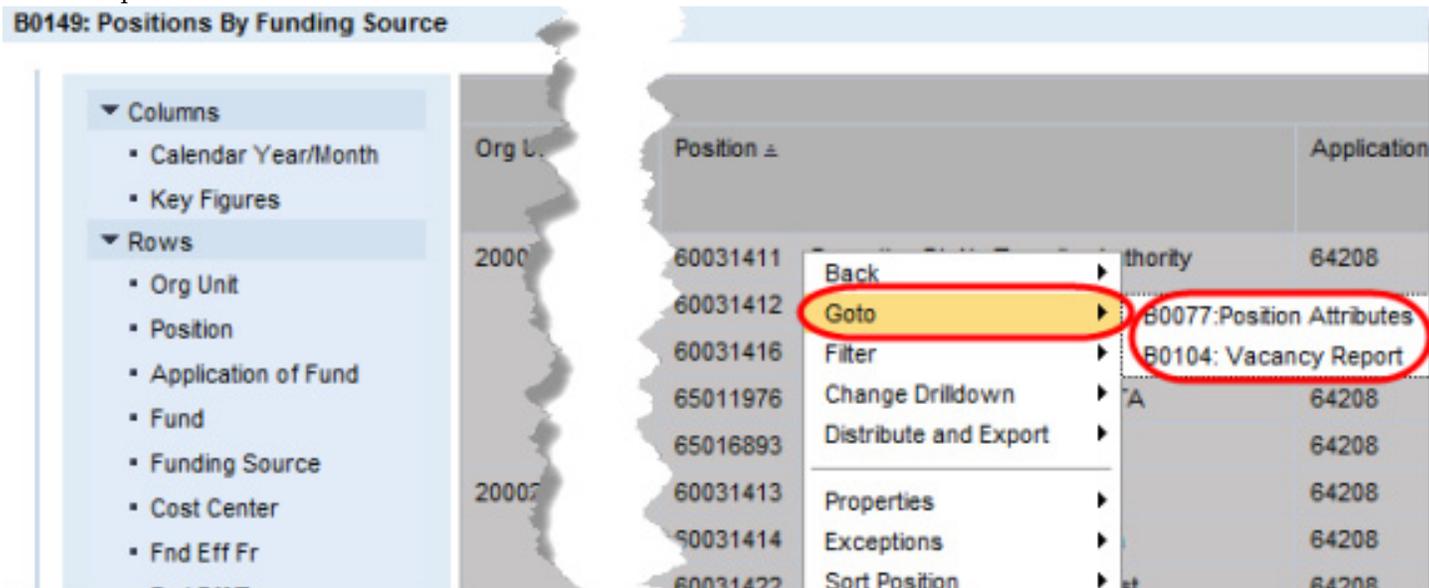
# "Jump" Reports

*Introduction*  
*Lesson 1: Overview*  
*Lesson 2: Variable Entry*  
*Lesson 3: Formatting Reports*  
*Lesson 4: Data Attributes*  
*Lesson 5: Filtering*  
**Lesson 6 "Jump" Reports**  
*Lesson 7: "Swap" Axis*  
*Lesson 8: Conditions and Exceptions*  
*Lesson 9: Exporting Reports*  
*Lesson 10 Course Review*

## Objectives

- "Jump" Reports

"Jump" functionality allows users to "goto" or "jump" to another report from within an existing report. The "jump" reports provide additional information about the row of data selected in the primary report.



- Select a **row** of data.
  - 📁 Select the end of the row so that the entire row of data gets sent to the "jump" report.
- **Right-click.**
- Select *Goto*.
- Select the **report** to which you wish to jump. They will be listed after you click on *Goto*.

## List of Personnel Administration "Jump" Reports

"Jump From" Report Name			"Jump To" Report Name	
B0004	Actions by Employee	<b>Jumps To</b>	B0037	Employee Personal Data
B0006	Actions by Type		B0004	Actions by Employee
B0012	Employee Range Revisions		B0037	Employee Personal Data
B0012	Employee Range Revisions		B0077	Position Attributes
B0015	Reallocations		B0037	Employee Personal Data
B0015	Reallocations		B0077	Position Attributes
B0018	Disability Dates		B0037	Employee Personal Data
B0020	RIF Verification		B0021	Employees Eligible for RIF Priority
B0041	Employee Time in Service		B0037	Employee Personal Data
B0042	Employee Turnover with Transfers		B0042-1	Employee Separations Including Transfers
B0043	Employee Turnover from State Government		B0043-1	Employee Separations from State Government
B0050	Grievance Data		B0037	Employee Personal Data
B0050	Grievance Data		B0022	Comments report
B0051	Disciplinary Warnings		B0022	Comments report
B0053	Performance Rating History		B0037	Employee Personal Data
B0064	Estimated Longevity Eligibility/ Length of Service		B0037	Employee Personal Data
B0066	Missed Employee Performance Review		B0037	Employee Personal Data
B0085	Residence Status		B0037	Employee Personal Data
B0088-1	Salary Comparative Analysis by Occupied Job		B0088-2	Employee Salary Comparative Analysis
B0099	Employee Deadline Dates		B0037	Employee Personal Data
B0110	Employees by Contract Type		B0037	Employee Personal Data
B0115	Employees Below Job Minimum		B0037	Employee Personal Data
B0115	Employees Below Job Minimum		B0149	Positions by Funding Source
B0119	Credential Verification		B0037	Employee Personal Data
B0150	BEACON Employee Lookup		BP007	Public Information - Individual Employee
B0157	Verify Employment		B0037	Employee Personal Data
B0164	I-9 Employment Eligibility Verification		B0085	Residence Status
B0164	I-9 Employment Eligibility Verification		B0037	Employee Personal Data
BP002	Employee History		B0037	Employee Personal Data

## List of Organizational Management "Jump" Reports

"Jump From" Report Name		Jumps To	"Jump To" Report Name	
B0063	Legislative Increase Summary		B0061	Legislative Increase
B0096	Supervisor /Employee Relationships		B0037	Employee Personal Data
B0096	Supervisor /Employee Relationships		B0077	Position Attributes
B0149	Positions By Funding Source		B0077	Position Attributes
B0149	Positions By Funding Source		B0104	Vacancy Position Report
B0149-1	Positions By Funding Source Summary		B0149	Positions by Funding Source
BP003	Position Lookup		BP001	Position History
BP003	Position Lookup		B0143	SAP Funding History
BP001	Position History		B0143	SAP Funding History
BP001	Position History	P0019	PMIS Budget Detail for Related Action	

## List of PMIS "Jump" Reports

"Jump From" Report Name		Jumps To	"Jump To" Report Name	
P0007	PMIS Position History		P0019	PMIS Budget Detail for Related Action
P0010	PMIS Employee Grievance Listing by Agency		P0020	PMIS Agency Actions for Selected Grievance
P0020	PMIS Agency Actions for Selected Grievance		P0023	PMIS Comments for Selected Grievance
P0150	PMIS Employee Lookup		BP007	Public Information - Individual Employee

## "Jump" Report Tips

- The user must have security access to the "jump-to" reports in order to run them.



**NOTE:** The "Jump-To" reports will show up on the menu but if the users do not have security access, then they will get an error message.

When a "jump-to" is performed, a new window will pop-up with the "jump-to" report. The "jump-from" report will also remain an active window.

## EXERCISE: "Jump" Report #1

### SCENARIO

While inside report *B0149 Position by Funding Source*, "Jump" to another report.

### Instructions

1. Access the following report:
  - OM > Position Budget Data > B0149 Position by Funding Source
2. Select **row of data** (at end of row).
3. **Right-click.**
4. Select **Goto.**
5. Select **report** to which you wish to "jump" from the drop-down list.

## EXERCISE: "Jump" Report #2

### SCENARIO

While inside report *B0149-1 Position by Funding Source Summary*, "Jump" to another report.

### Instructions

6. Access the following report:
  - OM > Position Budget Data > B0149-1 Position by Funding Source Summary
7. Select **row of data** (at end of row).
8. **Right-click.**
9. Select **Goto.**
10. Select **report** to which you wish to "jump" from the drop-down list.

## SUMMARY

In this lesson, you learned to:

- "Jump" Reports

## "Swap" Axis

*Introduction*

*Lesson 1: Overview*

*Lesson 2: Variable Entry*

*Lesson 3: Formatting Reports*

*Lesson 4: Data Attributes*

*Lesson 5: Filtering*

*Lesson 6 "Jump" Reports*

***Lesson 7: "Swap" Axis***

*Lesson 8: Conditions and Exceptions*

*Lesson 9: Exporting Reports*

*Lesson 10 Course Review*

## Objective

- "Swap" Axis

## Swap Axis

The "Swap" axis functionality allows users to "swap" or "flip" the columns and rows in a report. It works very well with EEO reports.

The screenshot shows a report interface for 'B0023: Payscale Distribution by Demographics'. The report is displayed as a table with columns for 'Cal Month/Year' (June 2012) and three 'GR' categories (GR 50-54, GR 55-59, GR 60-64). The rows are categorized by 'Personnel Area' (BM Pct, BF, BF Pct, HM, HM Pct, HF, HF Pct, ASM+, ASM+ Pct, etc.). A context menu is open over the 'State' column, with 'Swap Axes' highlighted. The menu options include Filter, Change Drilldown, Broadcast and Export, Properties, Exceptions, Sort Personnel Area, Drill Down By, Swap Personnel Area with, and Remove Drilldown.

- Select the **first** column.
- **Right-click.**
- Select *Change Drilldown > Swap Axis.*

**BEFORE SWAP**

Cal Month/Year		June 2012							
Personnel Area		GR 50-54	GR 55-59	GR 60-64	GR 65-69	GR 70-74	GR 75-79	GR 80-84	GR 85+
State Controller	WM+			3	2			1	
	WM+ Pct			27.50	8.25			100.00	
	WF+			3	14	4			
	WF+ Pct			27.50	43.75	66.67			
	BM				1				
	BM Pct				3.13				
	BF			1	15	1			
	BF Pct			12.50	46.88	16.67			
	HM								
	HM Pct								
	HF			1		1			
	HF Pct			12.50		16.67			
	ASM+								
	ASM+ Pct								
	ASF+								
	ASF+ Pct								
	AIM								
	AIM Pct								
	AIF								
	AIF Pct								
	Ethn Unk								
	Ethn Unk Pct								
	TOT			8	30	9		1	

**AFTER SWAP**

Personnel Area		State Controller													
Cal Month/Year		WM+	WM+ Pct	WF+	WF+ Pct	BM	BM Pct	BF	BF Pct	HM	HM Pct	HF	HF Pct	ASM+	ASM+ Pct
June 2012	GR 50-54														
	GR 55-59														
	GR 60-64	3	27.50	4	33.33	1	3.13	15	46.88	1	3.13	1	3.13		
	GR 65-69	2	16.67	14	116.67	1	3.13	15	46.88						
	GR 70-74			4	33.33			1	3.13						
	GR 75-79														
	GR 80-84	1	8.33												
	GR 85+														
	GR EG														
	GR MG														
	GR JB														
	T-Grade	3	27.50	14	116.67	1	3.13	15	46.88						
	X-Grade														
	Flat Rate														
	Rounded	8	66.67	46	375.00	9	72.73	30	243.00	1	8.33	1	8.33		

Notice that the rows are now columns and visa versa.

\*\*\*\*\*

---

## EXERCISE: "Swap Axis"

<p style="text-align: center;"><b>SCENARIO</b></p>
--

<p>You will perform a Swap axis function.</p>
---

### Instructions

1. Access one of the following reports.  
*PA > EEO Analysis > B0023: Payscale Distribution by Demographics*  
*PA > Turnover > B0043: Employee Turnover from State Government*
  - Add *Gender* to report in the first column.*Agency Metrics > B0098: Time to Process Separations Metrics*
  - User dates *10/1/12 - 12/31/12*.
  - Add *Action Type* to report in first column.
2. Perform a "Swap axis."
  - Select **first column**.
  - **Right-click**.
  - Select **Change Drilldown**.
  - Select **Swap Axis**.

\*\*\*\*\*

## ***SUMMARY***

In this lesson, you learned to:

- "Swap" Axis
- Select **Change Drilldown**.



## Conditions and Exceptions

*Introduction*  
*Lesson 1: Overview*  
*Lesson 2: Variable Entry*  
*Lesson 3: Formatting Reports*  
*Lesson 4: Data Attributes*  
*Lesson 5: Filtering*  
*Lesson 6 "Jump" Reports*  
*Lesson 7: "Swap" Axis*  
***Lesson 8: Conditions and Exceptions***  
*Lesson 9: Exporting Report*  
*Lesson 10 Course Review*

### Objective

- Use Conditions and Exceptions

Using conditions will allow filtering of the key figures. Using exceptions will allow highlighting of the key figures.

If a condition/exception is applied to a query, you are not changing any key figures; you are just filtering/highlighting the numbers. Conditions/Exceptions therefore have no effect on the values displayed in the results rows.

You can define multiple conditions for a query. Conditions are evaluated independently of each other. Multiple conditions are linked logically with **AND**.

### Using Conditions Example

Conditions are a way of filtering data.

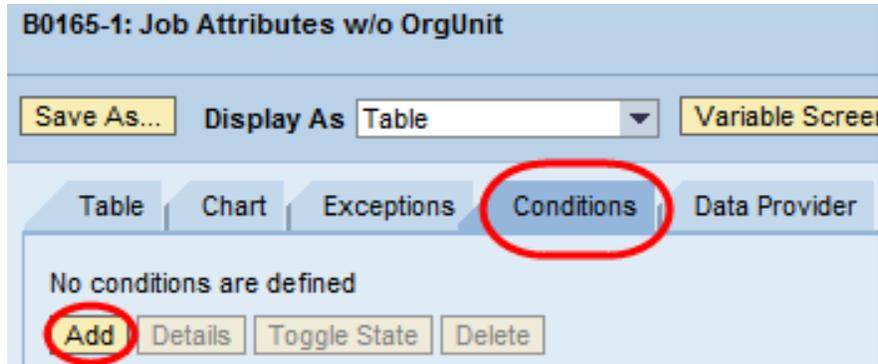
**What jobs have an average salary between \$30,000 and \$55,000?**

[Filter](#) [Settings](#)

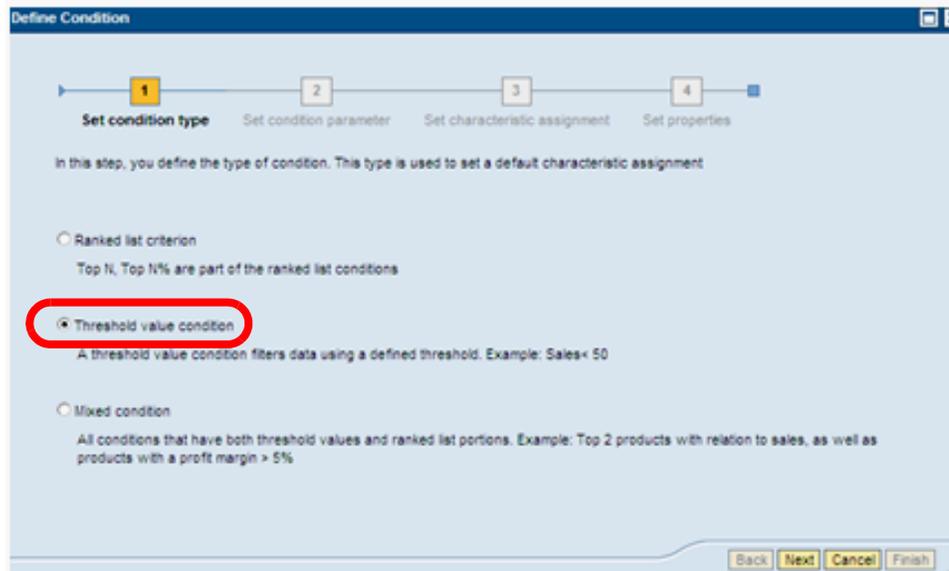
Calendar Year/Month	AUG 2014				
Job Pay Group $\Delta$	Number of Positions $\Delta$	Job Min Pay Lvl $\Delta$	Job Max Pay Lvl $\Delta$	Job Sal Ref $\Delta$	Average Salary $\Delta$

- Run *B00165-1: Job Attributes w/o OrgUnit*

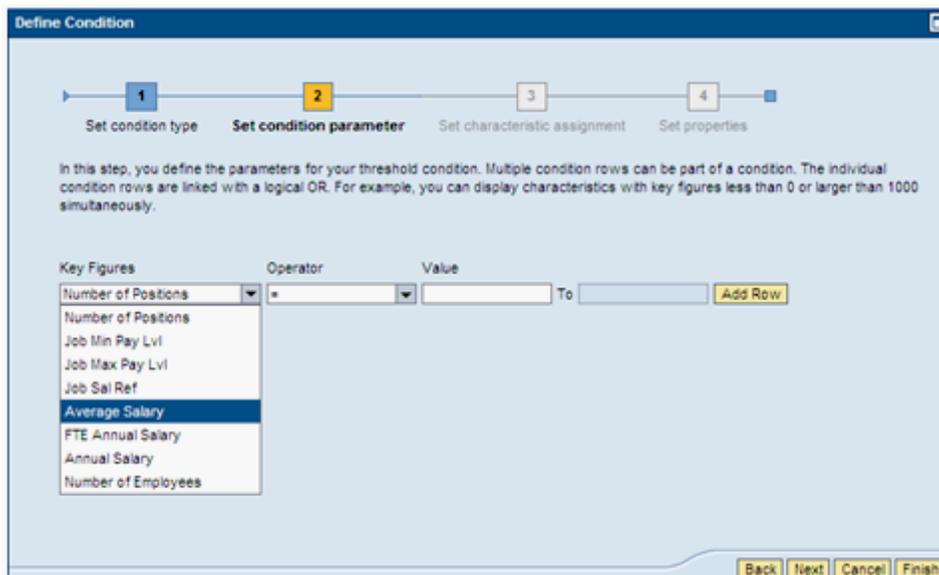
- Select **Settings** in upper right-hand corner of screen. The Settings folders displays at top of screen.



- Select the **Conditions** tab and the **Add** button.

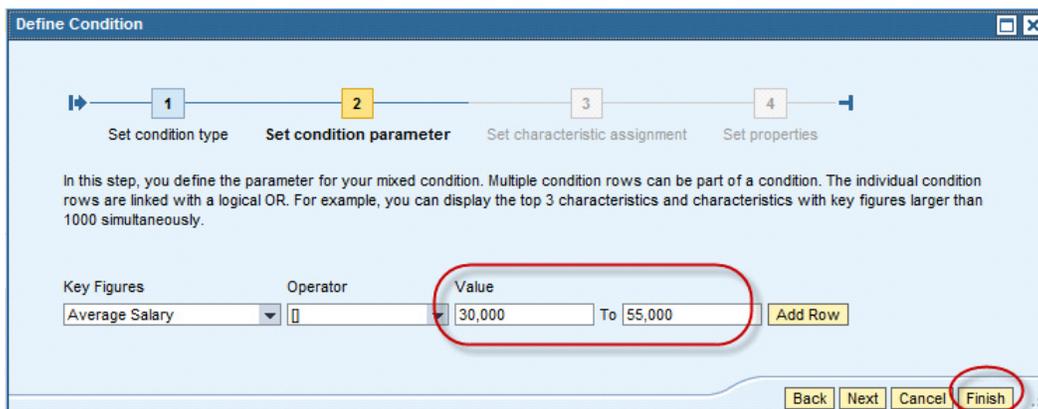


- In the *Define Condition* box, select **Threshold value condition**.
- Select the **Next** button at bottom of screen.



- Select *Average Salary* in the **Key Figures** box.

- Select **Operator** .



- Put the following **salary ranges** in the value fields:

- 30000
- 55000

- Click the **Finish** button at the bottom of the screen.

Condition	Status	Definition
Threshold value condition	Active	[30,000 .. 55,000]

- Now that the Condition is created, the user can do the following:

- **Add** – create additional conditions
- **Details** – edit the condition
- **Toggle State** – disable the condition
- **Delete** – remove the condition

 **NOTE:** If the user saves this report format, the condition will also be saved.

B0165-1: Job Attributes w/o OrgUnit

Save As... Display As Table Variable Screen Info Print Version Export to Microsoft Excel

					Calendar Year/Month FEB 2015				
Job	Job Pay Type	Job Pay Area	Job Pay Group	Number of Positions	Job Min Pay Lvl	Job Max Pay Lvl	Job Sal Ref	Average Salary	
Accounting Clerk Supervisor V	Graded	Annual Salaries	GR61	1	28,875	43,422	36,148	43,200.00	
Accountant	Flat Rate	Flat Rate	FLATRATE	1	20,000	350,000	0	47,830.67	
Accountant	Graded	Judicial	JB20	1	45,768	74,017	59,893	53,637.00	

## Using Exceptions Example

Exceptions highlight data within the report.

**Highlight jobs that have an average salary between \$30,000 and \$35,000**

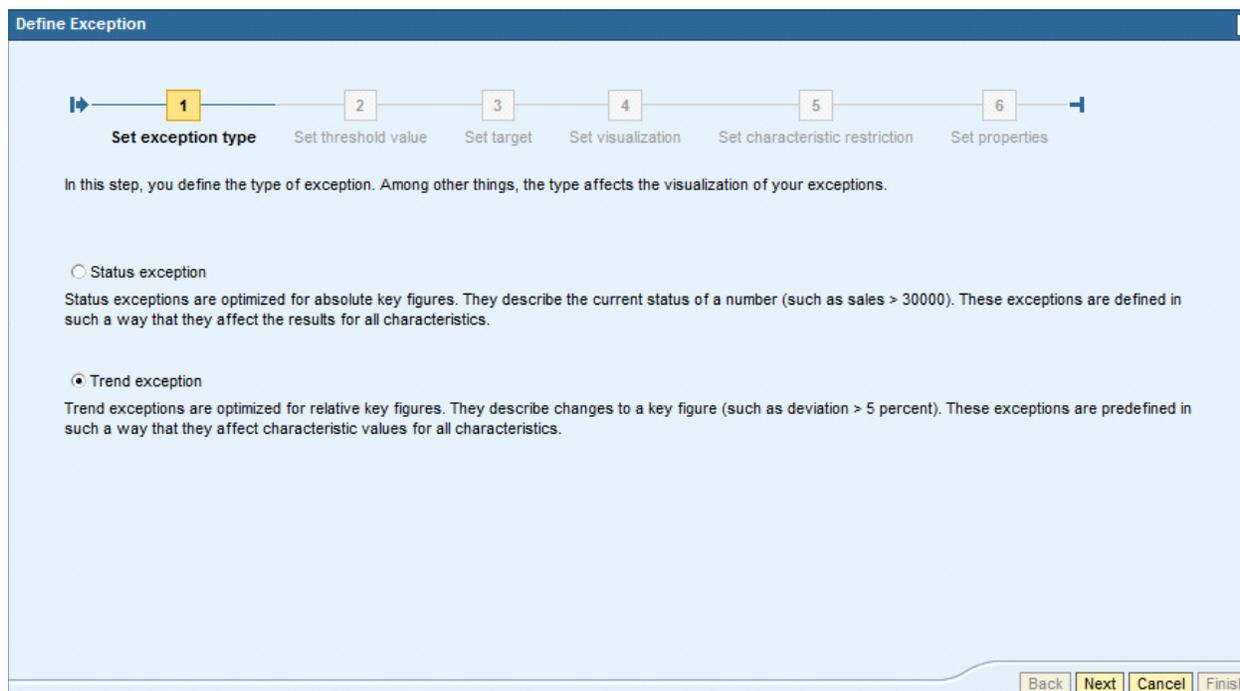
[Filter Settings](#)

Calendar Year/Month	AUG 2014				
Job Pay Group	Number of Positions	Job Min Pay Lvl	Job Max Pay Lvl	Job Sal Ref	Average Salary
Accounting Clerk Supervisor V	1	28,875	43,422	36,148	43,200.00
Accountant	1	20,000	350,000	0	47,830.67
Accountant	1	45,768	74,017	59,893	53,637.00

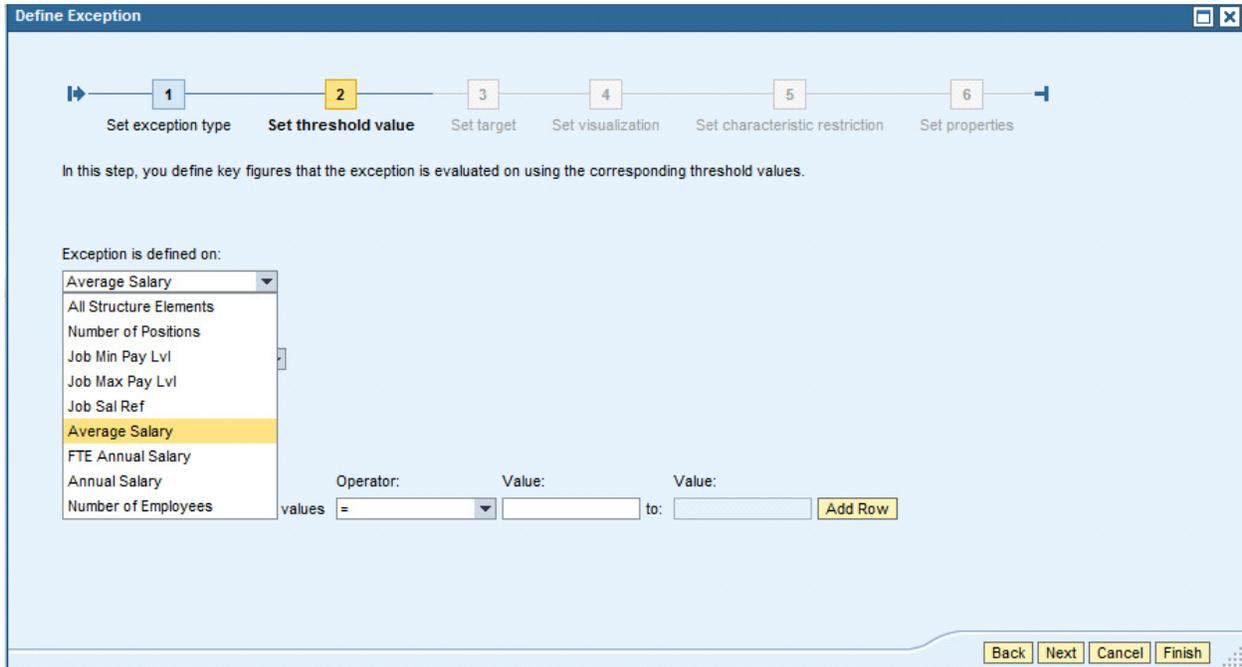
- Run *B00165-1: Job Attributes w/o OrgUnit*.
- Select **Settings** in upper right-hand corner of screen. The Settings folders displays at top of screen



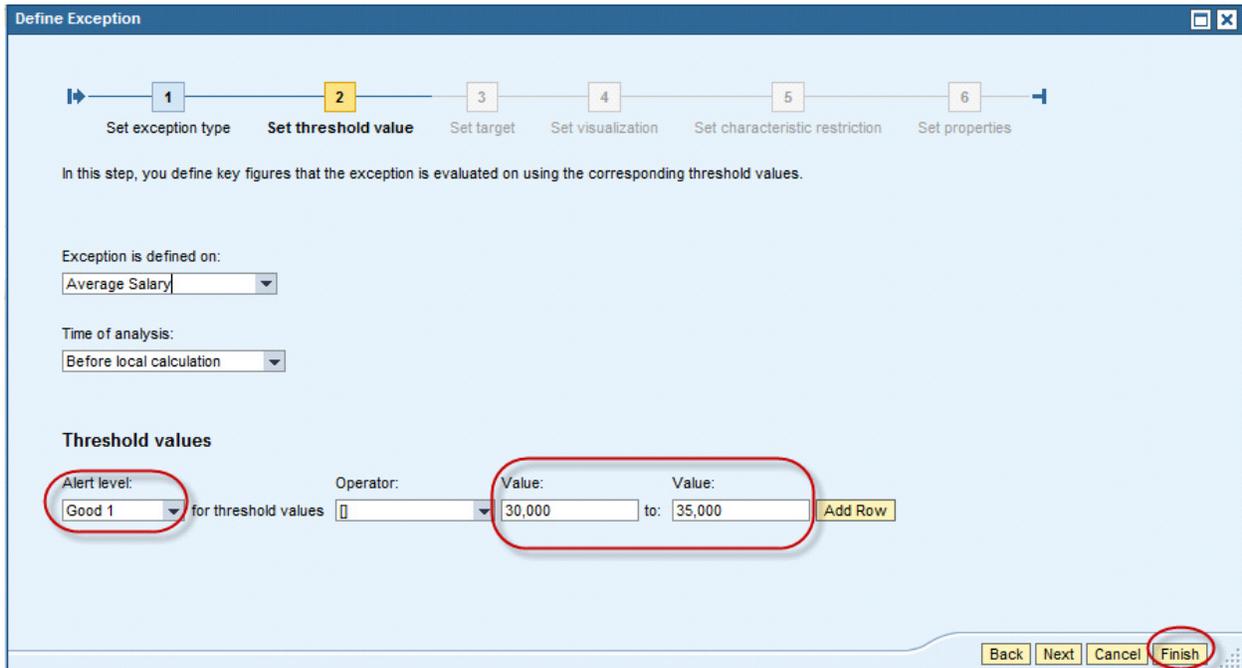
- Select the **Exceptions** tab and the **Add** button



- In the *Define Condition* box, select **Trend exception**
- Select the **Next** button at bottom of screen.

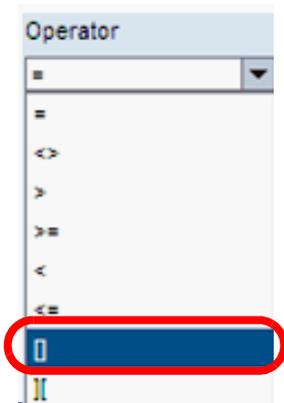


- Select *Average Salary* in the **Exception is defined on** drop-down menu.

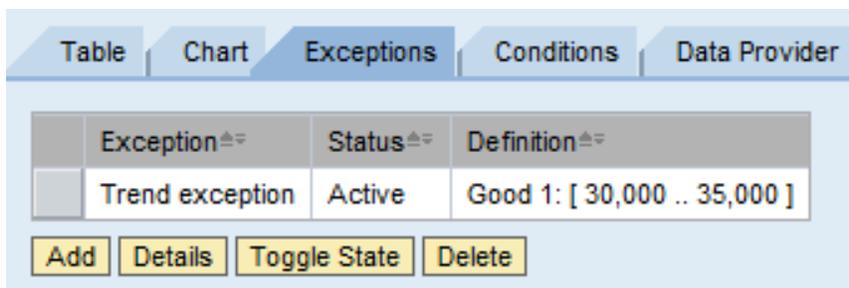


- Select *Good 1* as the **Alert level** for **Threshold values**. *Alert level defines the highlight color*

- Select **Operator**



- Put the following **salary ranges** in the value fields:  
30000  
35000
- Click the **Finish** button at the bottom of the screen



- Now that the Exception is created, the user can do the following:
  - **Add** – create additional exception
  - **Details** – edit the exception
  - **Toggle State** – disable the exception
  - **Delete** – remove the exception

 **NOTE:** If the user saves this report format, the exception will also be saved.

B0165-1: Job Attributes w/o OrgUnit

Save As... Display As Table Variable Screen Info Print Version Export to Microsoft Excel

					Calendar Year/Month	FEB 2015			
Job	Job Pay Type	Job Pay Area	Job Pay Group		Number of Positions	Job Min Pay Lvl	Job Max Pay Lvl	Job Sal Ref	Average Salary
Accounting Clerk II	Graded	Annual Salaries	GR54		10	24,190	33,687	28,938	0.00
Accounting Clerk II	Graded	Annual Salaries	GR57		11	25,381	37,412	31,396	27,700.00
Accounting Clerk IV	Graded	Annual Salaries	GR59		93	27,013	40,224	33,610	32,233.81
Accounting Clerk Supervisor V	Graded	Annual Salaries	GR61		1	28,875	43,422	36,148	43,200.00

## EXERCISE: Using Conditions to Filter Report #1

**SCENARIO**

You want to find what jobs have an average salary between \$20,000 to \$50,000 using the *B0165-1 Job Attributes w/o OrgUnit* report.

### Instructions

1. Access the following report:
  - OM > Job Classification Data > B0165-1: Job Attributes w/o OrgUnit
2. What jobs that have an average salary between \$20,000 to \$50,000.

\*\*\*\*\*

## EXERCISE: Using Exceptions to Filter Report #2

**SCENARIO**

You want to highlight what position have a budgeted amount between \$25,000 to \$55,000 using the *B0077 Position Attributes* report.

### Instructions

1. Access the following report:
  - OM > Position Data > B0077: Position Attributes
2. Highlight the positions that have a budgeted amount between \$25,000 to \$55,000.:

## SUMMARY

In this lesson, you learned to:

- Use Conditions and Exceptions

# Exporting Reports

*Introduction*  
*Lesson 1: Overview*  
*Lesson 2: Variable Entry*  
*Lesson 3: Formatting Reports*  
*Lesson 4: Data Attributes*  
*Lesson 5: Filtering*  
*Lesson 6 "Jump" Reports*  
*Lesson 7: "Swap" Axis*  
*Lesson 8: Conditions and Exceptions*  
***Lesson 9: Exporting Reports***  
*Lesson 10 Course Review*

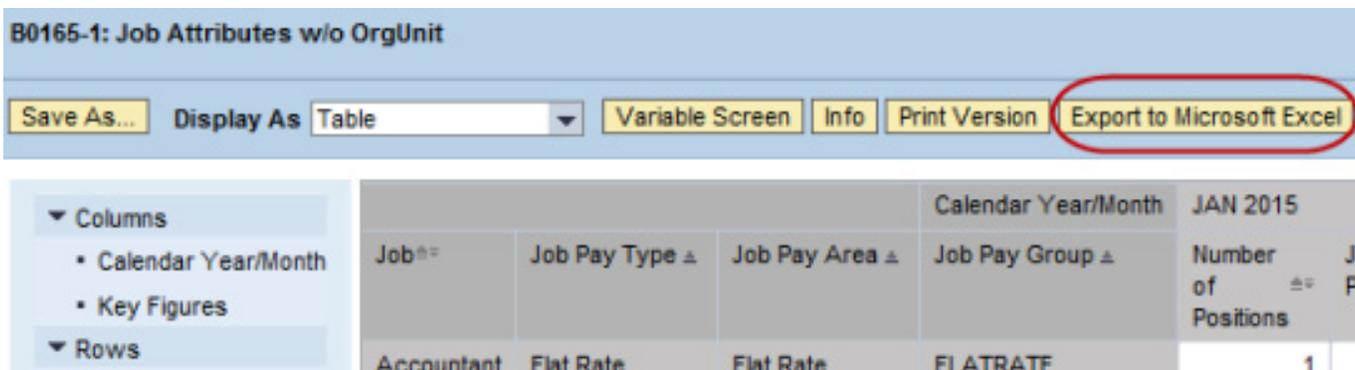
## Objective

- Exporting Reports
- Printing Reports

Your final report can be exported to Microsoft Excel or can be printed.

 **Note on Confidentiality:** Do not attach reports containing protected or sensitive data to emails.

## *Exporting Data to Excel*



- Select the Export to Microsoft Excel button
- The file gets converted to a Microsoft Excel file

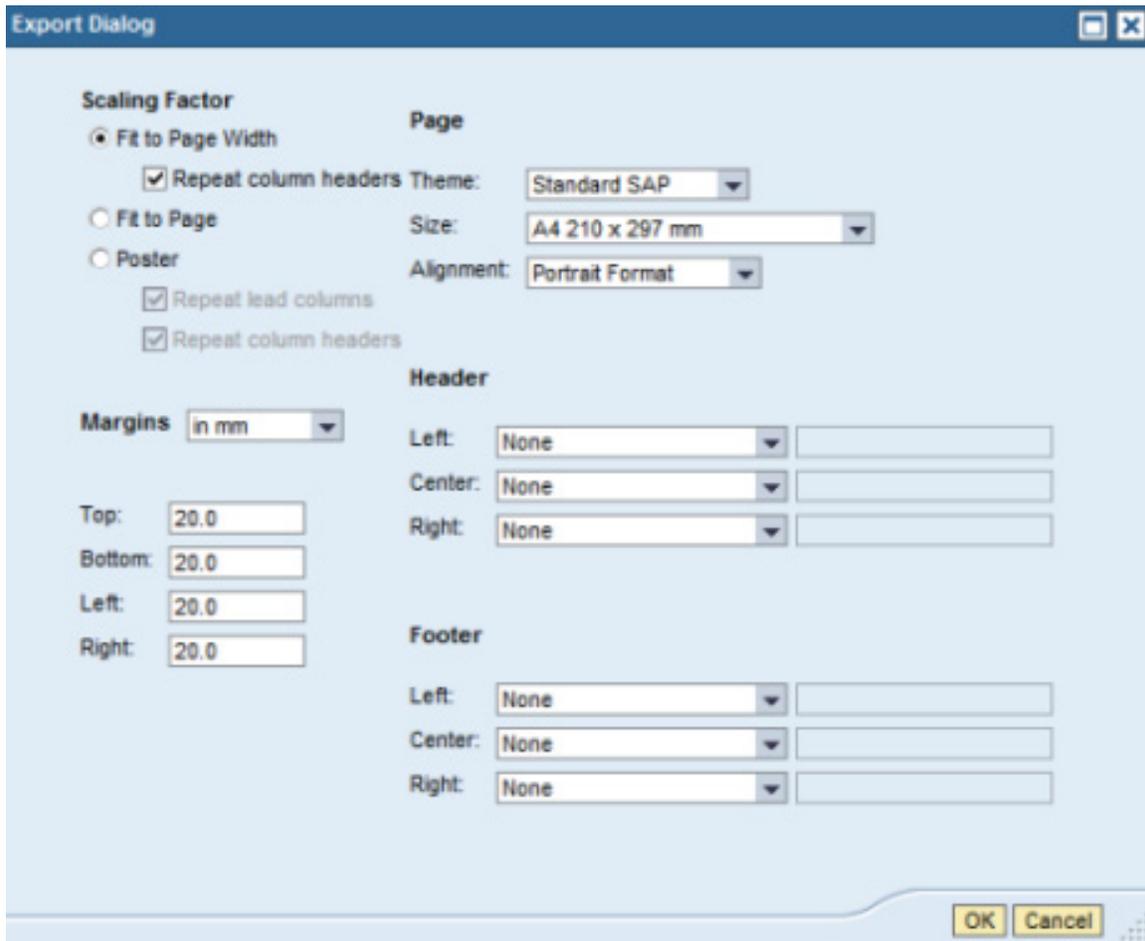
	A	B	C	D	E
1	<b>B0165-1: Job Attributes w/o OrgUnit</b>				
2					
3				Calendar Year/Month	JAN 2015
4	Job	Job Pay Type	Job Pay Area	Job Pay Group	Number of Positions
5	Accountant	Flat Rate	Flat Rate	FLATRATE	1
6	Accountant	Graded	Judicial	JB18	1

- Unmerge the headers of the report if you plan to manipulate data.
- Save Microsoft Excel file or print.

### Exporting Data - Print Version

- 📁 **Note: ONLY RECOMMENDED FOR SMALL REPORTS**
- 📁 **The Print Version will export your data to a PDF file.**

- Select the **Print Version** button. A pop-up window will show where you can change the print configurations.



- Select **OK** button when done.
- The file gets converted to a pdf file and will show on the screen.
- Save it or print it at this point.

## **EXERCISE: Exporting Report to Excel #1**

**SCENARIO**

You want to export your B0165: *Job Attributes* report to Microsoft Excel.

### **Instructions**

1. Access the following report:
  - OM > Job Classification Data > B0165: Job Attributes
2. On the variable entry screen"
  - Select your Organizational Unit
3. Export report to Microsoft Excel

## ***SUMMARY***

In this lesson, you learned:

- exporting reports
- printing reports

## Course Review

*Introduction*  
*Lesson 1: Overview*  
*Lesson 2: Variable Entry*  
*Lesson 3: Formatting Reports*  
*Lesson 4: Data Attributes*  
*Lesson 5: Filtering*  
*Lesson 6 “Jump” Reports*  
*Lesson 7: “Swap” Axis*  
*Lesson 8: Conditions and Exceptions*  
*Lesson 9: Exporting Reports*  
***Lesson 10 Course Review***

## Course Objectives

In this course you learned to:

- Recall terms and concepts from the *BI400 - Business Intelligence Workshop* course.
- View advanced BI functionality
- Understand advanced concepts and functionality
- Understand “Jump” reports
- Export Reports

## Next Steps

- Monitor the HR/Payroll System communication
  - BEST Shared Services web site (especially the Updates tab)
    - URL: <http://www.osc.nc.gov/BEST/index.html>
  - BEACON Training website: What’s New link
    - URL: [http://www.osc.nc.gov/beacon/training/whats\\_new.html](http://www.osc.nc.gov/beacon/training/whats_new.html)
- Review conceptual materials
- Access the Training HELP site
  - URL: <http://www.osc.nc.gov/training/osctd/help>

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Continue to monitor updates on the BEACON University website for information regarding any future training that you are scheduled to attend.

Keep your training materials close by as a ready reference.

Need transactional assistance?

Remember to access the Training HELP website when you need assistance in completing transactions. As stated above, the work instructions can be accessed on line through the web link in the steps above.

If you are experiencing technical difficulties, refer to the State Desktop PC and Browser Setting Requirement documentation.

- URL: [http://www.osc.nc.gov/BEST/support/PC\\_Minimum\\_Requirements\\_State\\_owned\\_PCs\\_12022014.pdf](http://www.osc.nc.gov/BEST/support/PC_Minimum_Requirements_State_owned_PCs_12022014.pdf)

## Course Assessment/Evaluation

Follow the instructions given by your instructor to complete your evaluation of today's class in the Learning Management System (LMS).

 Don't forget to click the SUBMIT button---***TWO DIFFERENT TIMES!***

***CONGRATULATIONS!***

***You've completed the course!***