

OFM

OFFICE OF FINANCIAL MANAGEMENT

Enterprise Reporting Web Intelligence Training



Web Intelligence Training Outline

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Welcome to Web Intelligence Training

The Objectives of this training is a combination of instruction, demonstrations, activities, and hands on. Upon completion, you will:

- Navigate the web-based enterprise reporting tool
- Schedule, access, modify, and save standard reports
- Develop ad-hoc queries based on business needs
- Format query results (add totals, sections, breaks, charts, filters, or quick filters)
- Understand the concept behind combining queries using merged dimensions

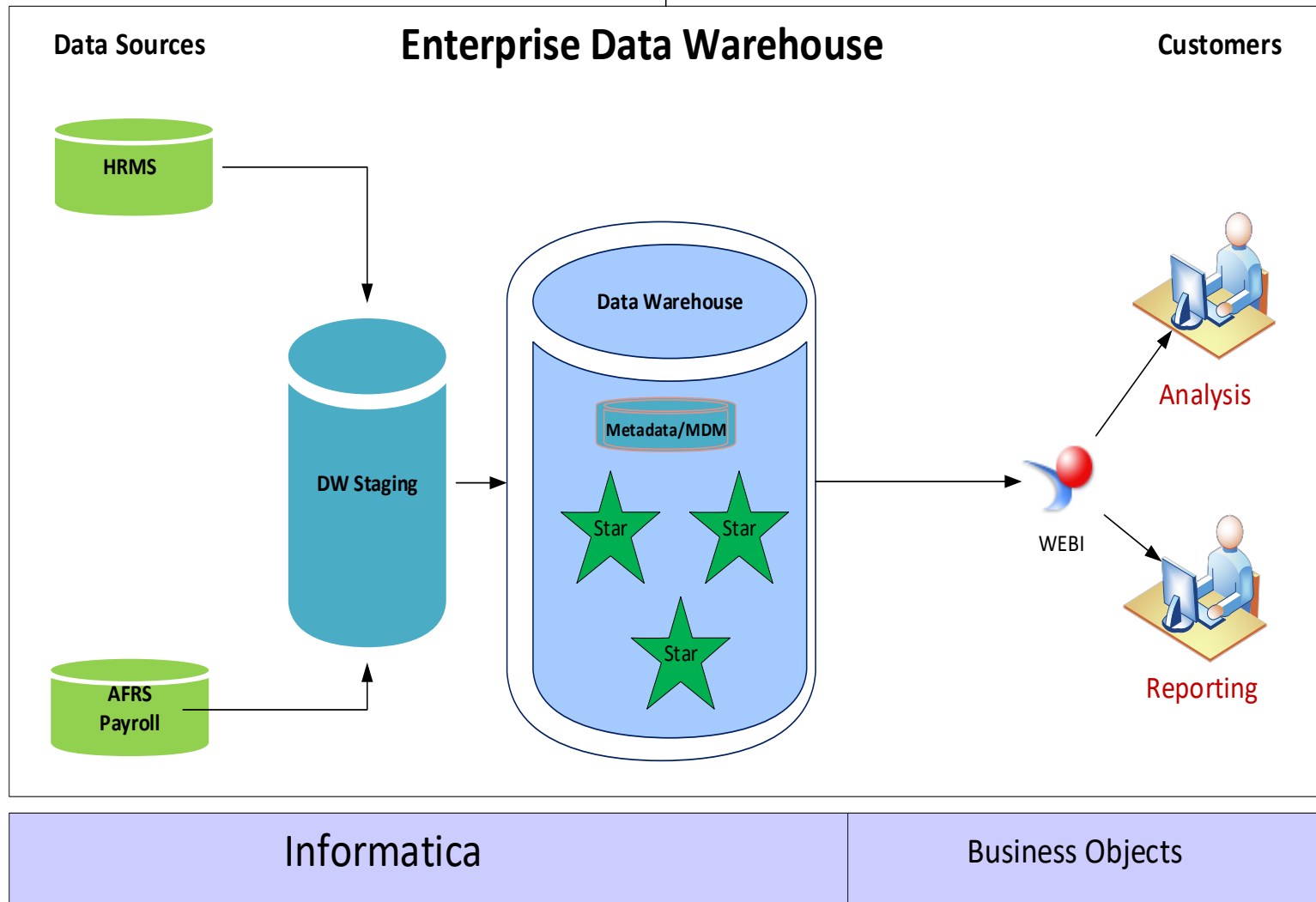
Purpose

Web Intelligence (WebI) is a reporting tool used for the new Washington Workforce Analytics (WWA) Enterprise Data Warehouse (EDW).

WWA EDW objectives include:

- **Flexibility/adaptability** -- quickly respond to stakeholder needs for new data and complex information.
- **Quality data** -- accurate, consistent, and reliable information.
- **Connections** -- establish the commonality of data and its meaning from disparate sources.
- **Strategic analysis** -- providing better data to make better and quicker decisions.

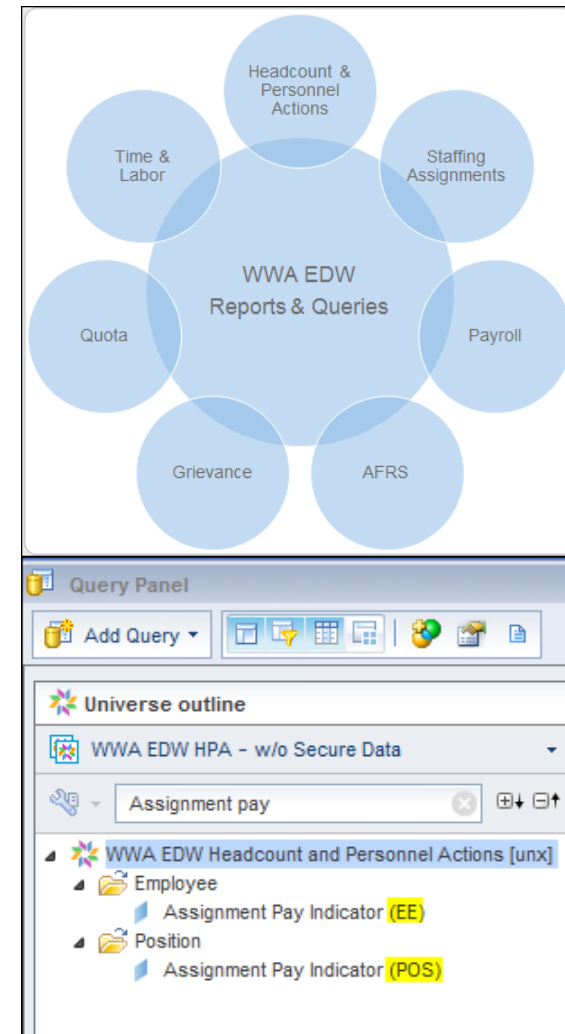
Enterprise Data Warehouse



WWA EDW Universes and Dimensions

WebI is organized into “universes”.

- A universe is the layer between the data warehouse and the user that logically groups and organizes data into subject matter areas for a better reporting experience.
- WWA EDW has seven subject matter universes that use common terms and set of data from HRMS and AFRS.
- Data within universe dimensions have clear labels indicating if it's an attribute of an employee (EE) or an attribute of a position (POS)



WWA Universes

Universe	Granularity	Description
AFRS	Pay Period	Employee and Position level Payroll and Financial data. Includes appropriation index detail, general ledger, master account coding, organizational index detail, and wage type dimensions.
Grievance	Daily	Grievance data by Bargaining Unit. Includes article info, contacts, grievance info and tracking dimensions.
Headcount and Personnel Actions	Daily	Summary level employee counts by demographics. Detail level employee counts by employee specific data. Employee count by Actions. Employee list by Action. Includes military and education dimensions.
Payroll	Monthly	Wage type data by Business Area, Personnel Area, Organizational Unit, or Employee.
Quota	Monthly	Quota accrual and balances by Business Area, Personnel Area, Organizational Unit, or Employee.
Staffing Assignments	Daily	Position count by Organizational Unit and/or Job Class or Position list by Organizational Unit and/or Job Class.
Time and Labor	Daily	Time balances and accruals by Business Area, Personnel Area, Organizational Unit, or Employee.

Data Load Schedule

- 6:00 p.m. to 6:00 a.m.
- Data will not load during HRMS Payroll Processing (Day 3)

Universe	Data Load Frequency
AFRS	Daily (Monday to Friday)
Grievance	Daily (Monday to Friday)
HPA	Daily (Monday to Friday)
Payroll	Semi-Monthly (Payroll Day 5)
Quota	Monthly (Payroll Day 7)
Staffing Assignments	Daily (Monday to Friday)
Time and Labor	Semi-Monthly (Payroll Day 5)

WWA EDW Withdrawn Employee Data

- All universes contain withdrawn employee data.
- Withdrawn employee data can be queried when there are no measures, dates or attributes from other folders used.
- When measures are used, the inclusion of withdrawn employee data in the report varies by universe.

Personnel Number	Employment Status
	Active
	Withdrawn
	Active
	Withdrawn
	Active
	Withdrawn

Personnel Number	Employment Status	Age (Years)
	Active	41
	Active	54.5
	Active	49.8
	Active	55.5
	Active	57.8
	Active	54.6

(in the first example above, withdrawn employees show in the results because there are no measures. In the second example, the measure Age (Years) was added to the results so withdrawn employee no longer display)

Withdrawn Records Returned through Fact Tables

Universe(s)	
AFRS, Payroll	If an employee has any activity in a payroll period they will display in the results, regardless of status.
Grievance	If an open grievance exists after separation, the results will include withdrawn employees.
HPA, Staffing Assignments, Time & Labor	Once an employee is withdrawn, no employee records will display after the last day of employment.
Quota	Withdrawn employee records will still display if any remaining quota exists.

WWA Job Aids and Training Material

<https://ofm.wa.gov/it-systems/washington-workforce-analytics>

Washington Workforce Analytics

Washington Workforce Analytics (WWA) is a reporting solution built for the new Enterprise Data Warehouse (EDW). The WWA EDW replaces HRMS Business Warehouse/Business Intelligence (BW/BI) reporting system was decommissioned on Oct. 5, 2018.

The WWA EDW was implemented in January 2018 and has been stabilized to support business needs.

The WWA Enterprise Data Warehouse has met the following criteria during our transition from HRMS BW/BI to WWA:

- Resolution of known critical defects
- Database adequately tested
- 30 days of data loads without incident

HRMS BW/BI will no longer be supported and WaTech will remove access to HRMS BW/BI through the SAP Logon pad, the HRMS Portal, and the SAP Business Explorer start menu.

Classroom training for the Washington Workforce Analytics (WWA) enterprise reporting system is offered by WaTech and registration options are listed in the Learning Management System (LMS).

Additional information regarding WWA EDW and available training is available on the [Washington Workforce Analytics project page](#).

System access

Web Intelligence Tool

- Within the State Network
- Outside the State Network

Contact information

- 👤 WaTech Support Center
- 📞 360-586-1000
855-Watech1
- ✉ support@watech.wa.gov



Web Overview

Learning Objective:

- Overview of BI Launch Pad
- Overview of WebI and its features
- Difference between a standard report and an ad hoc query



SAP Business Objects Web Intelligence


- Drag-and-drop features to view data from different perspectives.
- Drilldown into or across data to perform strategic analysis.
- Functions to merge reports, create formulas, sort, filter, and change page layouts.
- Multiple options to display data using a web browser or exporting to other formats.
- Search options to find objects, reports, and queries.
- Scheduling options for report execution and delivery.
- Folder structures to save/store and quickly retrieve reports/queries.
- Pre-developed standard reports and flexible ad hoc querying.

BI Launch Pad


- Is a web based software that allows you to log into a Business Objects Repository and perform a number of actions depending on your security profile.
- Is used to navigate, organize, refresh, schedule and print documents created in Web Intelligence.
- Allows you to securely share documents with other users. User ID and privileges are tied to folders, groups, or individual documents so only authorized users may view sensitive data.
- Documents may be organized, categorized, shared and scheduled under a secure environment.



BI Launch Pad - Home













Help Desk:
(360)407-9100

Welcome: **Rosie Ranger** | Applications ▾ | Preferences | Help menu ▾ | Log off 

Home Documents

▼ My Recently Viewed Documents

 W
 Va
 DR
 DR
 HS
 DF
 Tim
 Sta
 EM
 HP




Last 10 documents viewed

▼ 0 unread messages in My Inbox

10 most recent unread messages

See more...



▼ My Applications

▼ My Recently Run Documents

Last 10 documents scheduled or ran

▼ 2 Unread Alerts

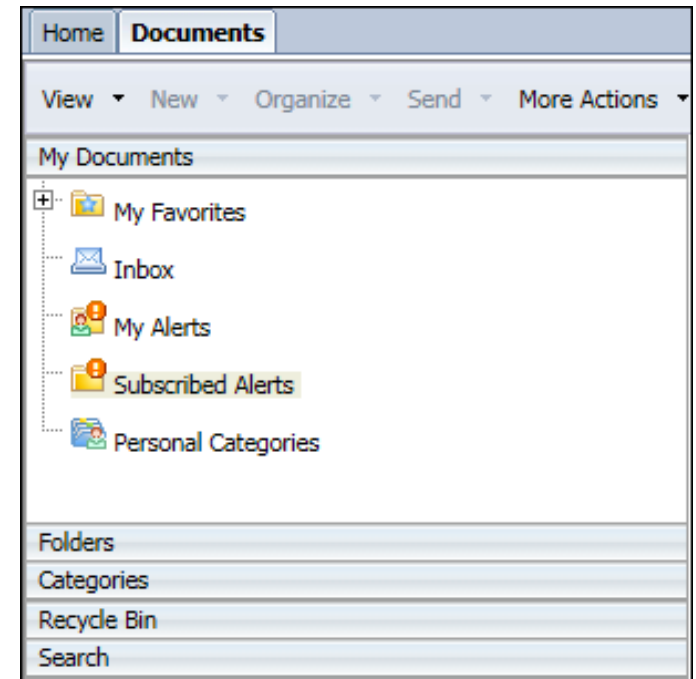
 Erroneous Records in Payroll Universe
 Enhancements – New Alert Functionality

See more...

Folder Structure

The “Documents” tab allows access to:

- **My Documents** – Access to personal documents. Other users will not have access to these documents.
- **Folders** – Access to Agency and other public folders.
- **Categories** – Allows users to group reports that are used frequently together regardless of their folder.
- **Recycle Bin** - Appears under Documents tab in BI Launch Pad after a user has deleted a query...this puts the deleted query in the Recycle Bin and causes the Recycle Bin to become visible.
- **Search** – Allow users to search for documents and objects stored in Web Intelligence.



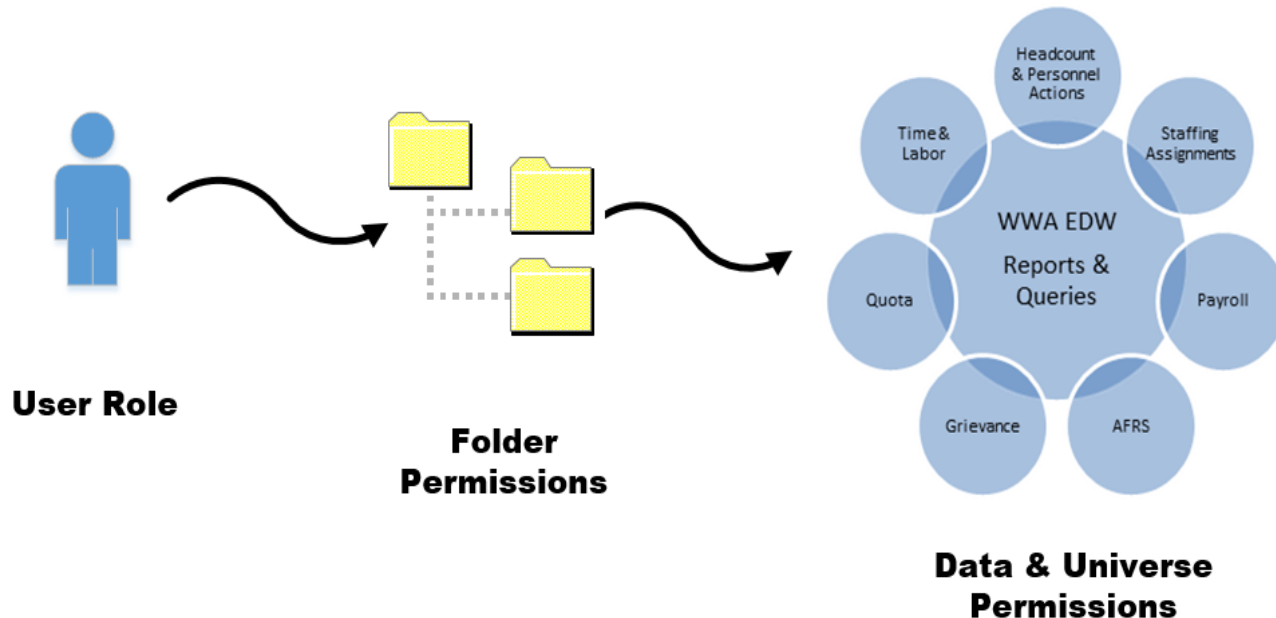
WWA Security

- Agency level, role level, and universe level security
- User responsibilities



WWA Security and Permissions

WebI uses several layers of security to ensure confidential data is properly protected for Washington Workforce Analytics (WWA) Enterprise Data Warehouse (EDW).



Role-based Permissions

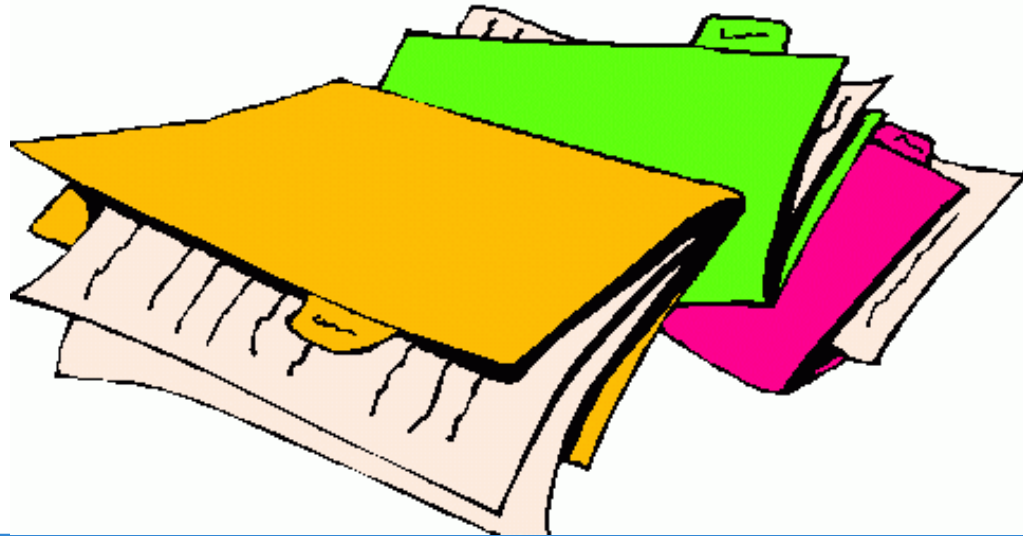
- WWA role-based permissions determine the tools and options a user can use.
- All roles have permissions to manage WebI documents in their personal folders, as well as execute standard reports from the WWA Reports folder.

Role	Permissions
Agency User Small Agency Client Services User Enterprise User (OFM)	<ul style="list-style-type: none">✓ Execute queries within designated agency folder.✓ Power User (Optional): Manage designated agency folders.
Agency Secure User Small Agency Client Services Secure User Enterprise Secure User (OFM)	<ul style="list-style-type: none">✓ Execute queries within designated agency folder.✓ Limitations: Due to access to secure data, this role cannot schedule queries to destinations, or send queries to email, BI Inbox, or FTP.
Developer / Security Administrator (OFM)	<ul style="list-style-type: none">✓ Manage (create, copy, edit, delete, execute, save) standard reports.✓ Manage enterprise folder structure.

Folder Permissions

Folder permissions are determined by the user's agency and role. By default, all roles have permission to:

- View and manage their own private folder.
- View their own agency's folder.
- View the Washington Workforce Analytics Reports folder.



Data Level Permissions

Users are assigned data level permissions which grant them access to certain data based on their agency and role within the agency.

Role	Permissions
Agency	<ul style="list-style-type: none">✓ Restricted to Business Area data.✓ No Access to Secure Data.
Agency with Secure Data	<ul style="list-style-type: none">✓ Restricted to Business Area data.✓ Access to Secure Data for Business Area.
Statewide Limited	<ul style="list-style-type: none">✓ Access to statewide data if query does not include Personnel Number or Employee Name.✓ Queries with Personnel Number or Name restricted to Business Area.
Statewide Limited with Secure Data	<ul style="list-style-type: none">✓ Access to statewide data if query does not include Personnel Number or Employee Name.✓ Queries with Personnel Number or Name restricted to Business Area.✓ Access to Secure Data for Business Area only.
Statewide	<ul style="list-style-type: none">✓ Access to statewide data including Personnel Number and Employee Name.✓ No access to Secure Data (date of birth, email address, home address, phone number, social security number).
Statewide with Secure Data	<ul style="list-style-type: none">✓ Access to statewide data including Personnel Number and Employee Name.✓ Access to Secure Data (date of birth, email address, home address, phone number, and social security number).

Universe Permissions

Users are granted permission to each universe based on agency need.

User Role	Grievance	AFRS	HPA	Payroll	Quota	Staffing Assign.	Time & Labor
Agency User	Agency	Statewide Limited					
Agency Secure User	Agency w/ Secure Data	Statewide Limited w/ Secure Data					
Small Agency Client Services User	Agency	Statewide Limited					
Small Agency Client Services Secure User	Agency w/ Secure Data	Statewide Limited w/ Secure Data					
Enterprise User (OFM)	Statewide						
Enterprise Secure User (OFM)	Statewide w/ Secure Data						
Developer / Security Admin (OFM)	Statewide w/ Secure Data						

User Responsibilities

- Abide by the terms of the Non-Disclosure Agreement.
- Safeguard data, redacting information when necessary.
- Use caution when exporting, printing or sharing reports that contain personnel numbers, employee names, etc.
 - ✓ Some collective bargaining agreements have notification requirements related to sharing employee data.
 - ✓ Know who your agency public records officer is.
- Do not share your log on ID or password with anyone.
- Notify your WWA Agency Administrator if you no longer need access (Changes to job, employment status, etc.).

Logging On and Off

How to log on, navigate the launch pad, change passwords and log off

WaTech Enterprise Reporting
BI Launchpad (Web Intelligence) **HELP ?**

Enter your user information, and click "Log On".
If you are unsure of your account information, contact your system administrator.

User Name:

Password:

[Forgot password, User name, or Enable your account](#)

Applications ▾ Preferences Help menu ▾ | **Log off**

[Forgot password, User name, or Enable your account](#)

Enterprise Reporting **HELP ?**

Forgot Password or Enable Account?

Enter your User Name and click Send

Forgot User Name?

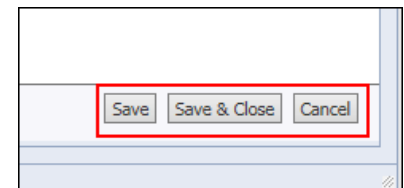
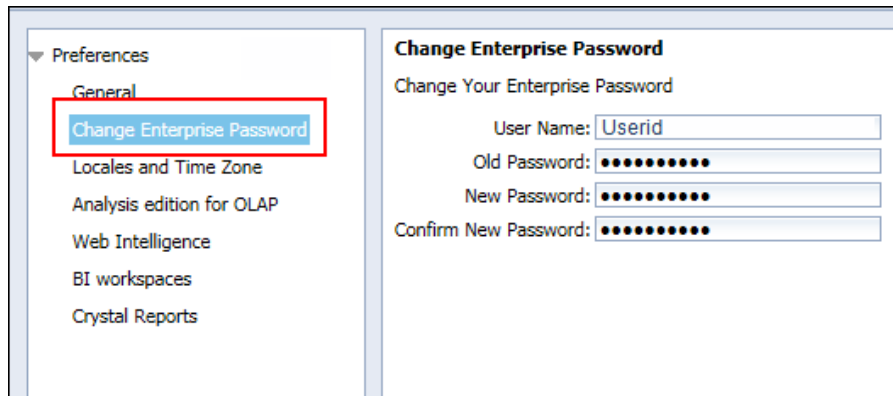
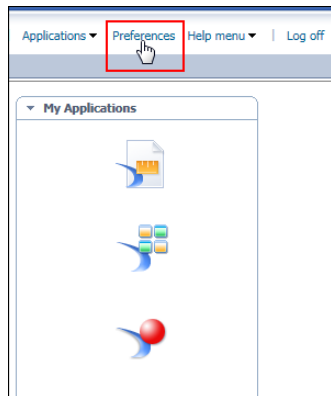
Enter your Email address and click Send

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Logging On and Off

- You can change your password at any time from the BI Launch Pad.
- Click the “Preferences” option in the right hand corner of the screen.
- Click “Change Enterprise Password”.
- User Name will be filled in by default → enter your old password → enter your new password twice.
- Click Save, Save & Close, or Cancel
 - Save will save the change and keep the Preferences screen open.
 - Save & Close will save the change and close the Preference screen.
 - Cancel closes the Preference screen. If you do not save prior to cancelling, your changes will not be saved.



Activity 1: Logon/Logoff



Standard Reports

- Overview of standard reports
- Benefits and limitations of standard reports
- Schedule, access, modify, export, print and save a standard report

The image displays four overlapping screenshots of standard reports from a financial management system. The reports shown are:

- Accounts Receivable**: A table with columns for Invoice Date, Customer, Invoice Total, and Balance Due. It lists various invoices and their corresponding balances.
- Invoice Journal**: A table with columns for Invoice Date, Customer, Invoice Total, and Balance Due. It provides a detailed view of individual invoices.
- Tax Charged (Summary)**: A table with columns for Customer, Invoice Total, and Tax Total. It summarizes the tax amounts charged on invoices.
- Order Journal**: A table with columns for Order Date, Customer, Order Total, and Balance Due. It tracks the status of orders and their associated balances.

Standard Reports Overview

- Standard reports are pre-built queries based on common business scenarios to meet enterprise reporting needs.
- All standard reports include a required date prompt to prevent accidentally running a report wide open for all time periods.
- Standard reports can be copied (save as) and modified to meet a specific business need.
 - Copies will not be impacted or updated if the original report is updated by WaTech
 - Removing key objects or measures from a standard report may create undesirable results

Washington Workforce Analytics Reports – Web Intelligence

Financials

FI-001 - Distribution of Payroll and Related Costs

Grievance

GR-001 - Grievance History

Headcount and Personnel Actions

HPA-001 - Job Class Distribution

HPA-002 - Classification Turnover

HPA-003 - Diversity Profile

HPA-004 - Diversity - New Hires

HPA-005 - HR Management Actions

HPA-006 - HR Management Manager to Staff

HPA-007 - HR Management Age Distribution

HPA-008 - Layoff Activity

HPA-009 - Salary Range Distribution

HPA-010 - Service Ranges

HPA-011 - Projected Service Years

Payroll

PAY-001 - HR Management Average Overtime

PAY-002 - HR Management Percent Receiving Overtime

PAY-003 - HR Management Overtime Costs

Quota

QU-001 - HR Management Quota Activity

Staffing Assignments

SA-001 - Position Detail

SA-001 - Position Detail

Description:

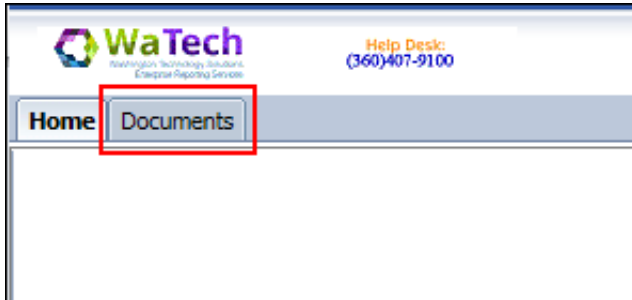
Position availability, vacancy status, and position holder information. Provides the ability to audit position and employee coding. Includes an additional view of position detail by Organizational Unit Hierarchy. This report contains the following views: 1. Position Detail (Default) 2. Position Detail with Org Hierarchy VERSION: R1.1.0

Type: Web Intelligence

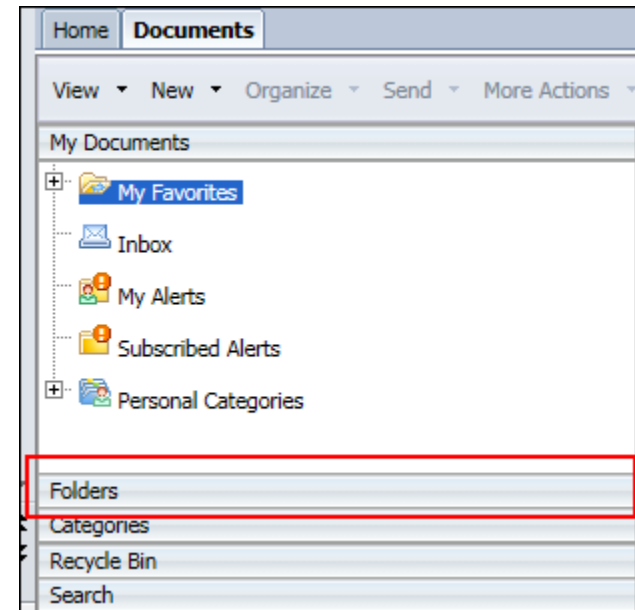
Last Run: Dec 15, 2017 3:06 PM

Accessing Standard Reports

From the Launch Pad, select Documents:

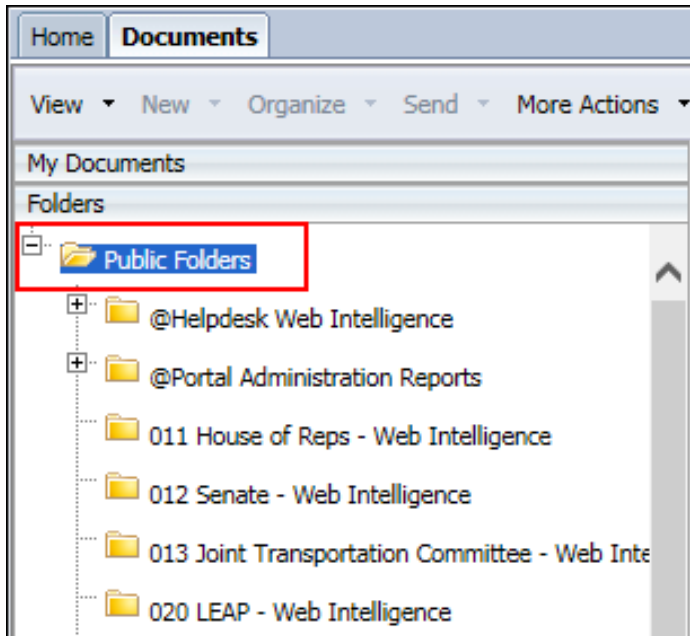


Documents tab defaults to “My Favorites”. Select the “Folders” bar at the bottom of the screen:

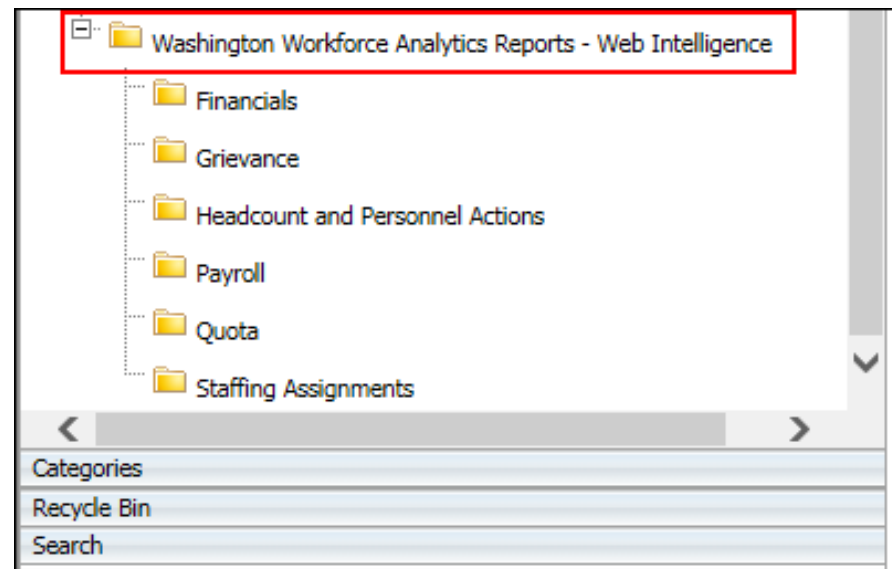


Accessing Standard Reports

Expand “Public Folders” and scroll to the bottom:



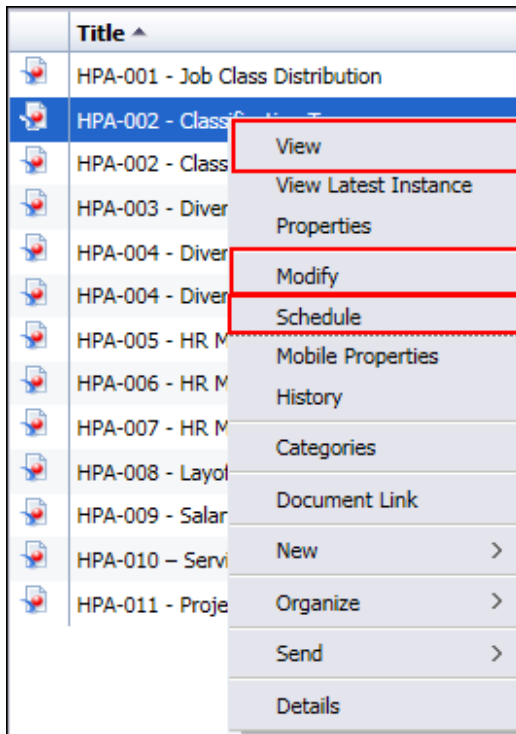
Expand “Washington Workforce Analytics Reports – Web Intelligence” and select the folder you need:



Accessing Standard Reports

Headcount and Personnel Actions was selected. To open the report, right click the report you want to run. You can select:

- View (opens in Reading view)
- Modify (opens in Design view...some users may not have this option)
- Schedule (allows you to run the report in the background)



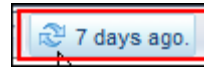
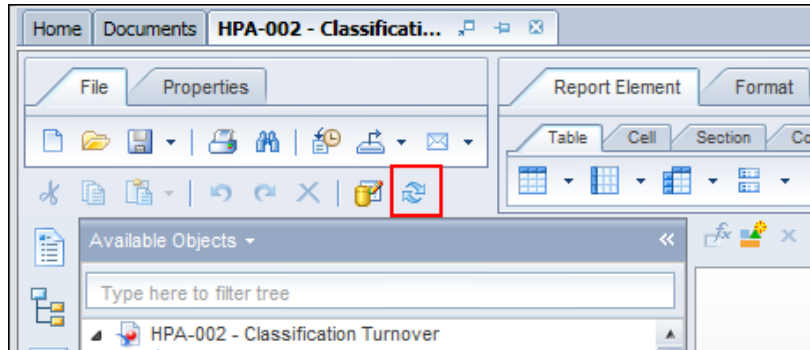
The selected report will open in WebI (unless you select “Schedule”):

A screenshot of the WebI report viewer interface. The report title is 'Classification Turnover - Turnover Summary'. The report number is 'HPA-002'. The description is: 'Turnover activity summary by Job Code specific to classification and compensation proposal request. Excludes turnover that does not meet the criteria for classification and compensation proposals (such as death Commission work contracts)'. The report displays a table with the following columns: Business Area Code (EE), Business Area (EE), Job Code (EE), Job (EE), Average Employee Count, Total Turnover Actions, and Turnover Rate. The table shows a total turnover rate of 0.00%.

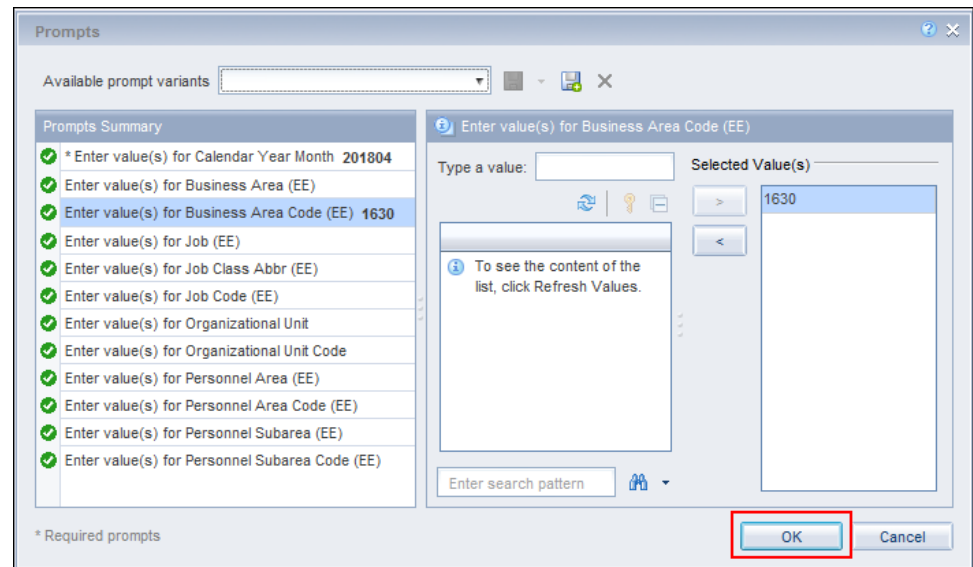
Business Area Code (EE)	Business Area (EE)	Job Code (EE)	Job (EE)	Average Employee Count	Total Turnover Actions	Turnover Rate
						0.00%
Total:						0.00%

Accessing Standard Reports

Click the “Refresh” icon to bring up the prompt screen. You can also use the “Refresh” icon in the bottom right:



The prompt screen will be displayed.
Enter your selections and click OK:



Prompts

Available prompt variants

Prompts Summary

- ✓ * Enter value(s) for Calendar Year Month 201804
- ✓ Enter value(s) for Business Area (EE)
- ✓ Enter value(s) for Business Area Code (EE) 1630
- ✓ Enter value(s) for Job (EE)
- ✓ Enter value(s) for Job Class Abbr (EE)
- ✓ Enter value(s) for Job Code (EE)
- ✓ Enter value(s) for Organizational Unit
- ✓ Enter value(s) for Organizational Unit Code
- ✓ Enter value(s) for Personnel Area (EE)
- ✓ Enter value(s) for Personnel Area Code (EE)
- ✓ Enter value(s) for Personnel Subarea (EE)
- ✓ Enter value(s) for Personnel Subarea Code (EE)

* Required prompts

Enter value(s) for Business Area Code (EE)

Type a value: Selected Value(s) 1630

To see the content of the list, click Refresh Values.

Enter search pattern

OK Cancel



Accessing Standard Reports

The selected report is generated. You can make modifications to it by adding or removing **optional fields**, adding breaks, sections, filters, or special sorting and save a copy as your own.

The screenshot displays the 'HPA-002 - Classification Turnover' report. The interface includes a sidebar with 'Available Objects' and a main area with the report title, description, and a data table.

Available Objects:

- HPA-002 - Classification Turnover
 - Action Reason
 - Action Reason (ACTIONS)
 - Action Reason (HEADCOUNT)
 - Action Reason Code
 - Action Type
 - Action Type Code
 - Business Area (EE)
 - Business Area Code (EE)
 - Calendar Year
 - Calendar Year Month
 - Calendar Year Quarter
 - Contract Type
 - Duty Station County
 - Employee Group (EE)

Classification Turnover - Turnover Summary

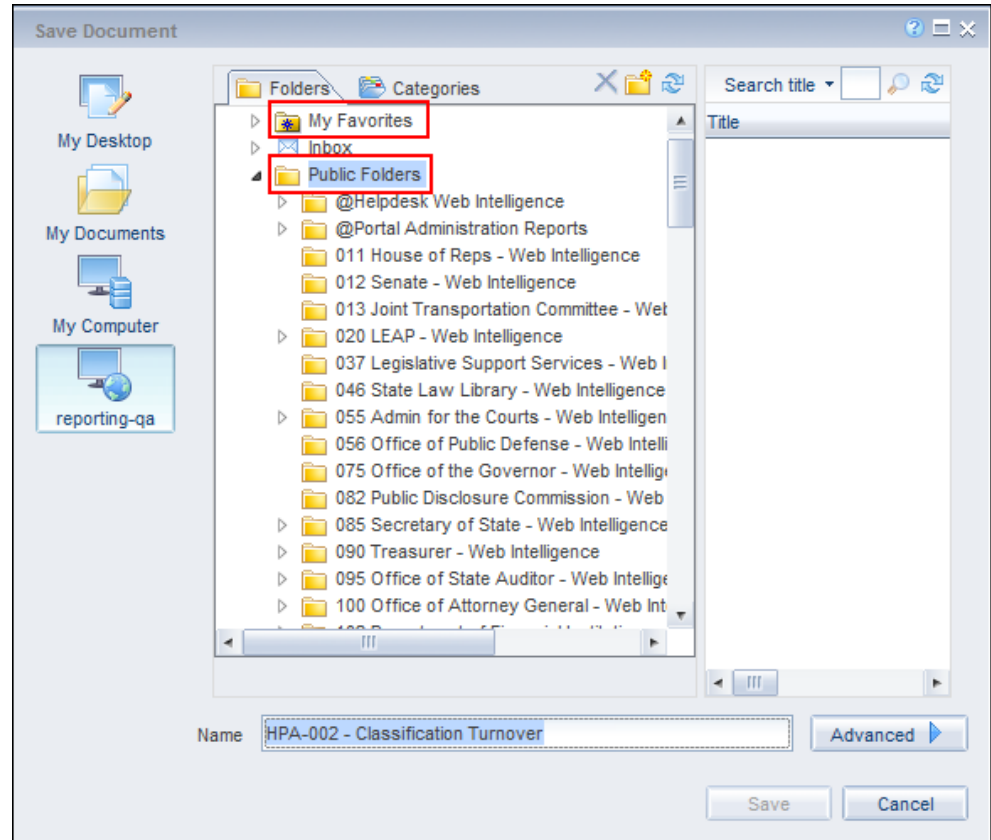
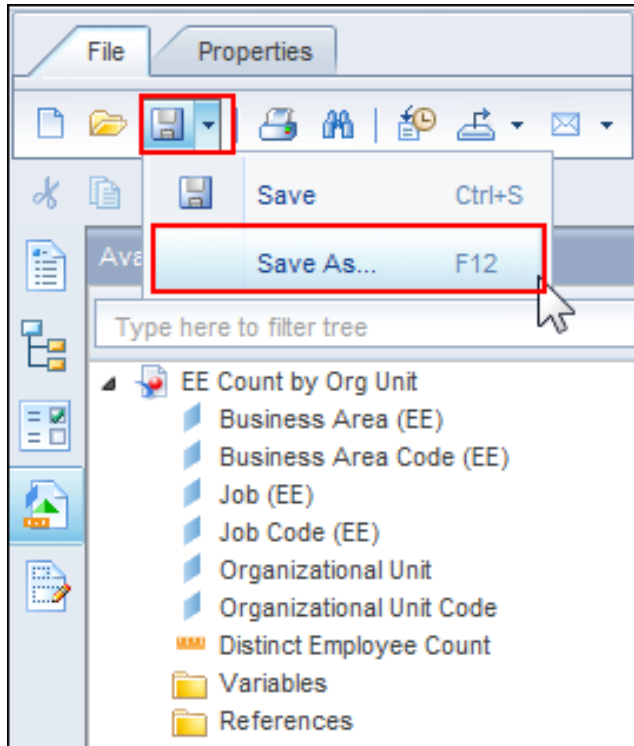
Report Number: HPA-002

Description: Turnover activity summary by Job Code specific to classification and compensation proposal requests. Includes permanent or intended to become permanent. Excludes turnover that does not meet the criteria for classification and compensation proposals (such as death, retirement, non-permanent appointments, etc.). Excludes Commission work contracts.

Business Area Code (EE)	Business Area (EE)	Job Code (EE)	Job (EE)	Average Employee Count	Total Turnover Actions	Turnover Rate
1630	Consolidated Technology Svcs	50000188	IT SYSTEMS/APP SPEC 6	40	1	2.50%

Accessing Standard Reports

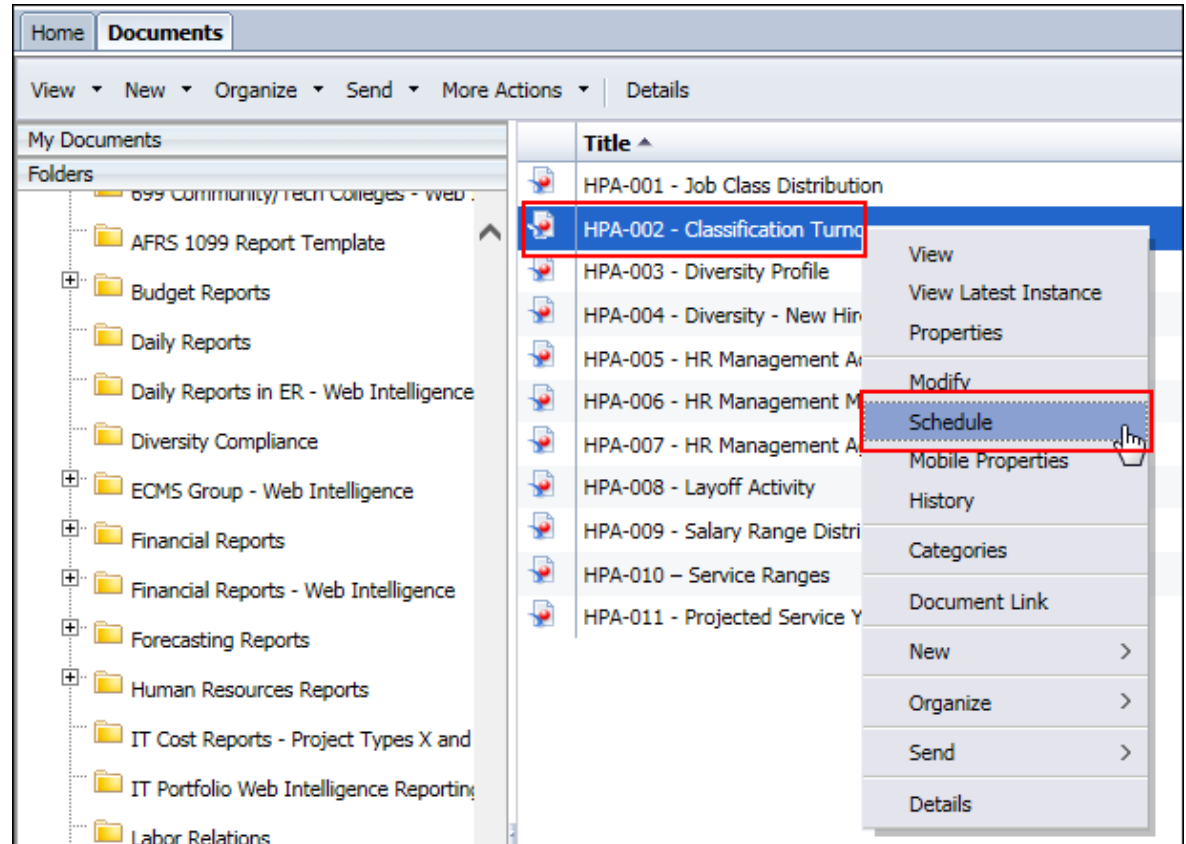
Once you have made your modifications, you can do a “Save As” and save it in your “My Favorites” Folder or your Agency folder (if your security role has that permission) under the “Public Folders”:



Accessing Standard Reports

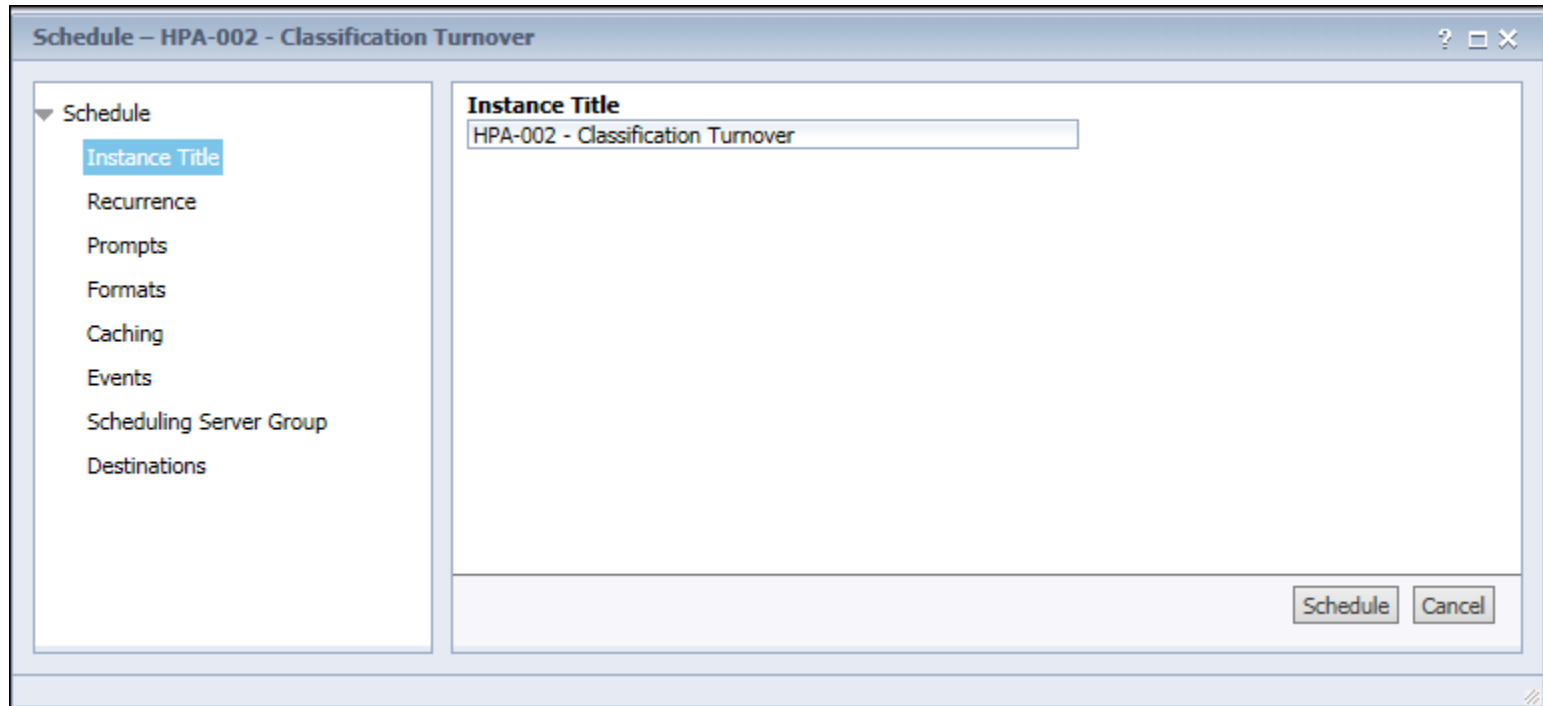
Web Intelligence reports can be scheduled to run on a recurring schedule.

1. On the **Documents** tab, locate and select the object that you want to schedule.
2. Right click.
3. Select “Schedule”.



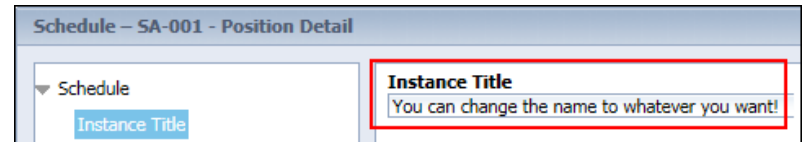
Accessing Standard Reports

4. The Schedule Dialogue will open.



Accessing Standard Reports

5. In the **Instance Title** box, type a new name for your report or leave as is.



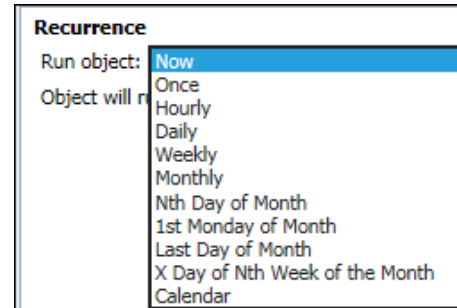
Schedule - SA-001 - Position Detail

▼ Schedule

Instance Title

Instance Title
You can change the name to whatever you want!

6. In the "Schedule" dialog box, click **Recurrence**, the default is "Now."



Recurrence

Run object: Now

Object will run

- Once
- Hourly
- Daily
- Weekly
- Monthly
- Nth Day of Month
- 1st Monday of Month
- Last Day of Month
- X Day of Nth Week of the Month
- Calendar

The following additional options are available:

- **Once**

This option requires a start and end time parameter. The object runs once at the time that you specify.

- **Hourly**

This option requires information in hours and/or minutes for how frequently the object is run. Instances are created regularly to match the parameters that you enter. The first instance is created at the start time that you specify, and the object will cease to run on its hourly schedule at the end time that you specify.

- **Daily**

This option requires a start and end time parameter. The object runs once every N days at the time that you specify. It will not be run after the end time that you specify.

Accessing Standard Reports

- **Weekly**

This option requires a start and end time parameter. Each week, the object runs on the selected days at the time that you specify. It will not be run after the end time that you specify.

- **Monthly**

This option requires a start date and time, along with a recurrence interval in months. The object runs on the specified date and time every N months. It will not be run after the end time that you specify.

- **Nth Day of Month**

This option requires a day of the month on which the object is run. Instances are created regularly each month on the day that you enter at the start time that you specify. The object will not be run after the end time that you specify.

- **1st Monday of Month**

This option requires a start and end time parameter. An instance is created on the first Monday of each month at the time that you specify. The object will not be run after the end time that you specify.

- **Last Day of Month**

This option requires a start and end time parameter. An instance is created on the last day of each month at the time that you specify. The object will not be run after the end time that you specify.

Accessing Standard Reports

- **X Day of Nth Week of the Month**

This option requires a start and end time parameter. An instance is created monthly on a day of a week that you specify. The object will not be run after the end time that you specify.

- **Calendar**

This option allows you to select a calendar of dates. (Calendars are customized lists of schedule dates that are created by the BI platform administrator.) An instance is created on each day that is indicated in the calendar, beginning at the start time that you specify and continuing until the end time that you specify.



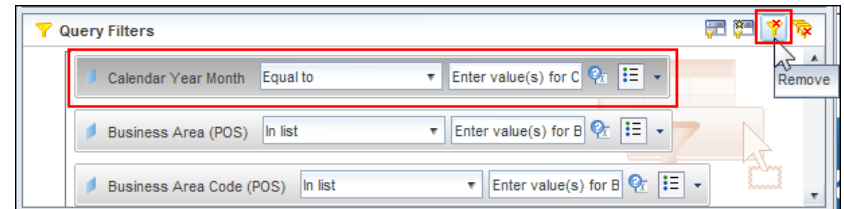
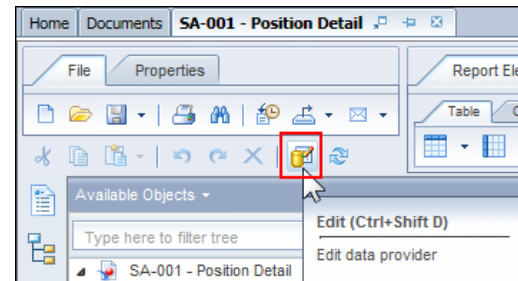
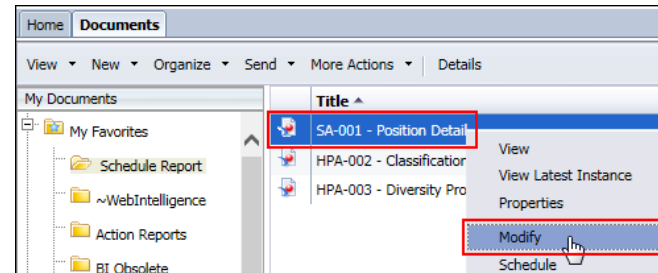
Accessing Standard Reports

• **NOTE:** Before scheduling a recurring report, you will need to remove the existing Date object from the Query Filter section and replace it with one of the pre-defined Date Filters. To modify a report, it must be your own so you'll need to do a "Save As" to save modifications.

1. Select: **Report** to add Pre-defined Date Filter to.
2. Right click: **Modify**.
3. Select: **Edit Data Provider** when the report opens.

To remove the existing Date Filter.

4. Select: **Date object** from the Query Filters.
5. Select: **Remove**.

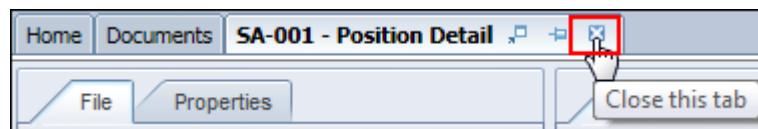
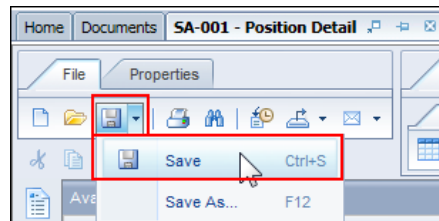
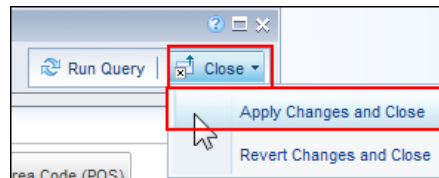
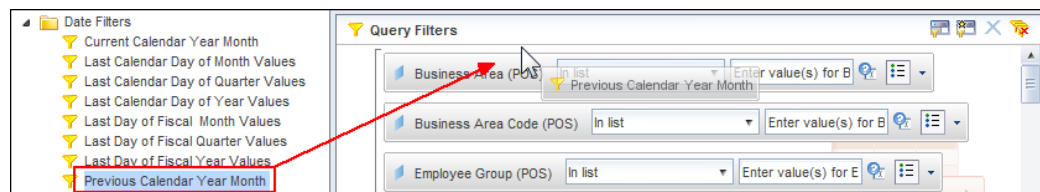


Accessing Standard Reports

To add the new recurring Date Filter.

6. Select: **Pre-defined Date Filter** from the Date Filters and **drag & drop Date Filter** into the **Query Filters** section.
7. Select: **Close → Apply Changes and Close**.
8. Select: **Save/Save As**.
9. Select: **Close this tab** to close the report to schedule it.

Your report is now ready to schedule a recurrence.



Accessing Standard Reports

1. Click **Formats**
2. Select the format you want to schedule to from the Output Format list (Web Intelligence, Microsoft Excel, Adobe Acrobat, Comma Separated Values (CSV), or Plain Text).
3. Click **Destinations**
 - a) Select a destination option
 - b) Select the **Keep an instance in the history** check box if you want to save a copy of the instance.
 - c) Select the **Use default settings** check box if you want the report to be sent to the logged in user.

You can schedule to the following destination locations:

- **Default Enterprise Location**

If you select this option, the instance is saved within Business Objects.

- **BI Inbox**

This option saves the instance to BI Inboxes specified.

- **Email**

This option sends the instance to the specified email recipients.

- **FTP/SFTP Server**

This option saves the instance to the specified FTP/SFTP server.

- **File System**

This option saves the instance to the specified file location.

4. Click **Schedule**

Activity 2: Schedule Classification Turnover (HPA_002)



Ad Hoc Query Overview

- Overview of ad hoc queries
- Data structures and differences in the universes

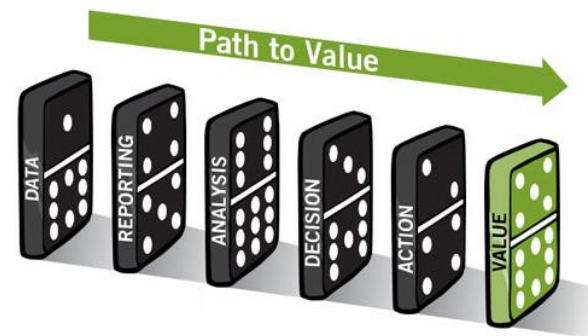


Ad Hoc Queries

WebI ad hoc query tools provide an interactive way for agency users to display and analyze workforce-related data. A WebI document consists of a query, a report, and any formulas or variables created.

Features include:

- Drag-and-drop fields.
- Preview results before running or saving a query.
- Manage page layouts and sort/filter data.
- Display data using web browser or export to other formats.
- View historical and trend data.



Elements of an Ad Hoc Query



Universe: Represents a set of data from one or more data sources, structured by subject areas.



Dimension: Collections of related data that represents aspects of a business such as an Employee dimension.



Attribute: Descriptive data about a dimension.



Measure: Numeric data that represents calculations of data in the universe such as Number of Employees.

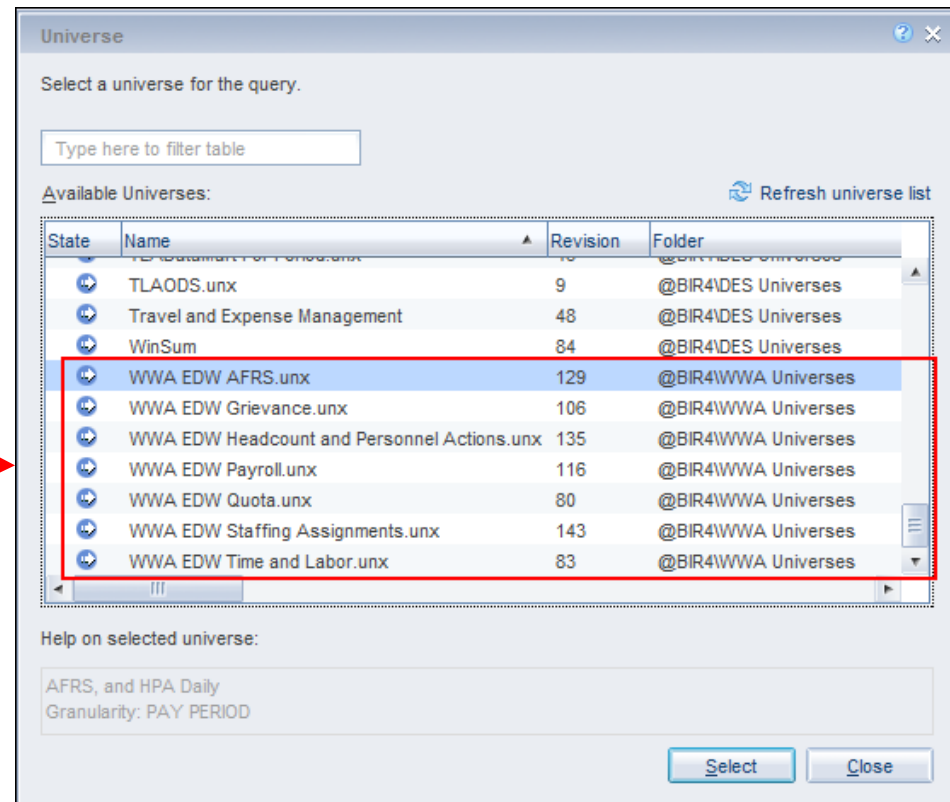
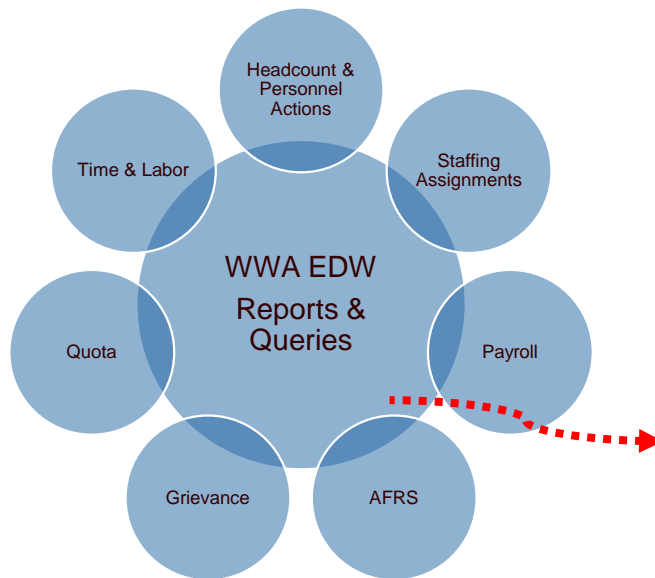


Filter: Narrows query results to focus on specific data elements.

Available Universes

Building an ad hoc query begins with selecting the right universe.

- All Washington Workforce Analytics (WWA) Universes begin with the prefix WWA EDW:



Universe Job Aids

- Universe Job Aids describe the universe and provide:
 - Level of Granularity,
 - Load Schedule,
 - Available measures and pre-defined filters, and Special “things to know”.
- Universe Data Design Job Aids have a pictorial listing of the data dimensions and measures included in each universe.
- Job Aids are on the WWA Training site:
<https://ofm.wa.gov/it-systems/washington-workforce-analytics>



Create an Ad Hoc Query

Learning Objective:

- Overview of the Query Panel
- Difference between Headcount Measures and other Measures
- Query Filters, Quick Filters and Pick Lists
- Using Pre-defined Filters
- Modifying an Ad Hoc Query
- Basic Formatting Functions
 - Totals
 - Breaks
 - Sections
 - Charts



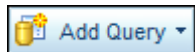
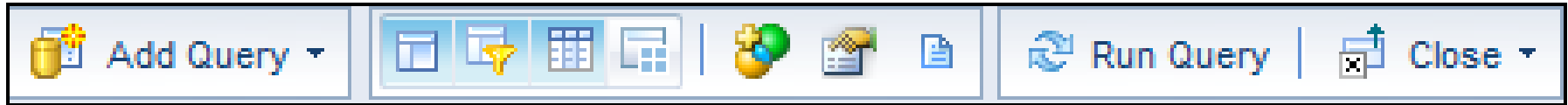
Ad Hoc Query Development Questions

Things to consider when creating a query...

- What is the business question we need answered?
- Which universe is most applicable?
- What fields would we include to provide enough detail?
- What measures do we need?
- What time period(s) are we querying?
- Do we want to filter any data out of the data set?



Web Query Panel – Toolbar



Add Query: Use drop-down menu to select data source for additional queries.



Show/Hide Universe Outline panel.



Show/Hide Filter Pane.



Show/Hide Data Preview Panel.



Scope of Analysis Panel.



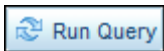
Add Combined Query.



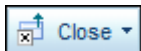
Query Properties.



View Script: Shows the SQL select statement produced by the Query Panel.



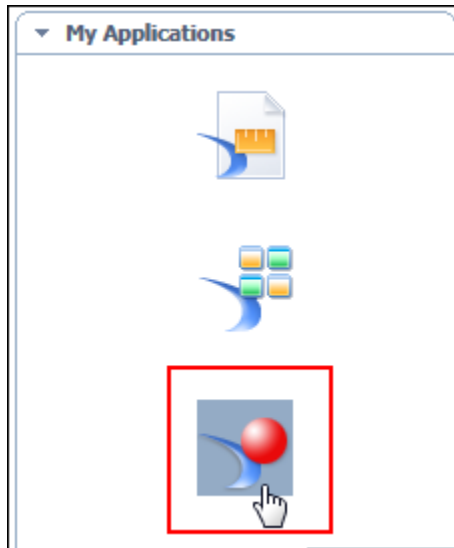
Runs the Query.



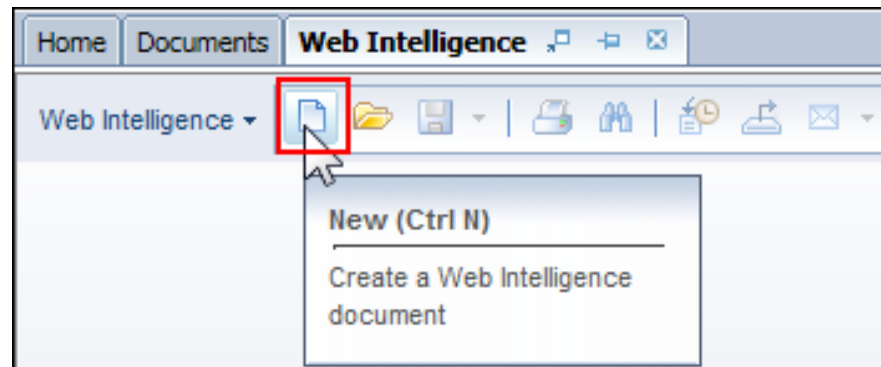
Close Query Panel: Gives option to apply or revert changes.

Creating an Ad Hoc Query

From the Launch Pad, select the Web Intelligence icon:

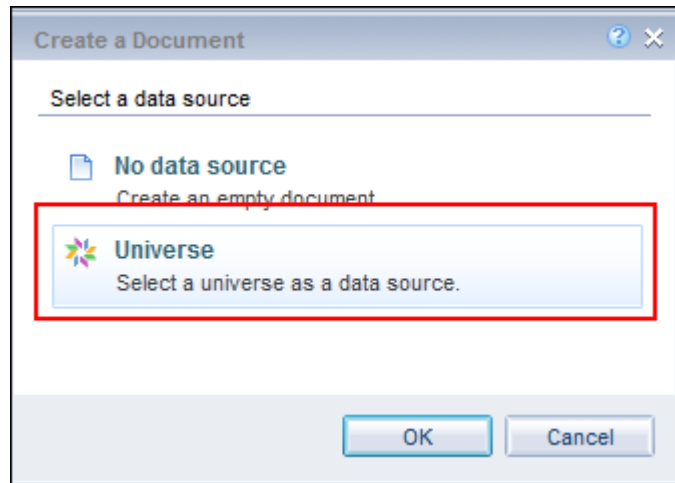


The Web Intelligence screen is displayed. From here, you can either create a new report or open an existing report. Select the “New” icon to create a new report:

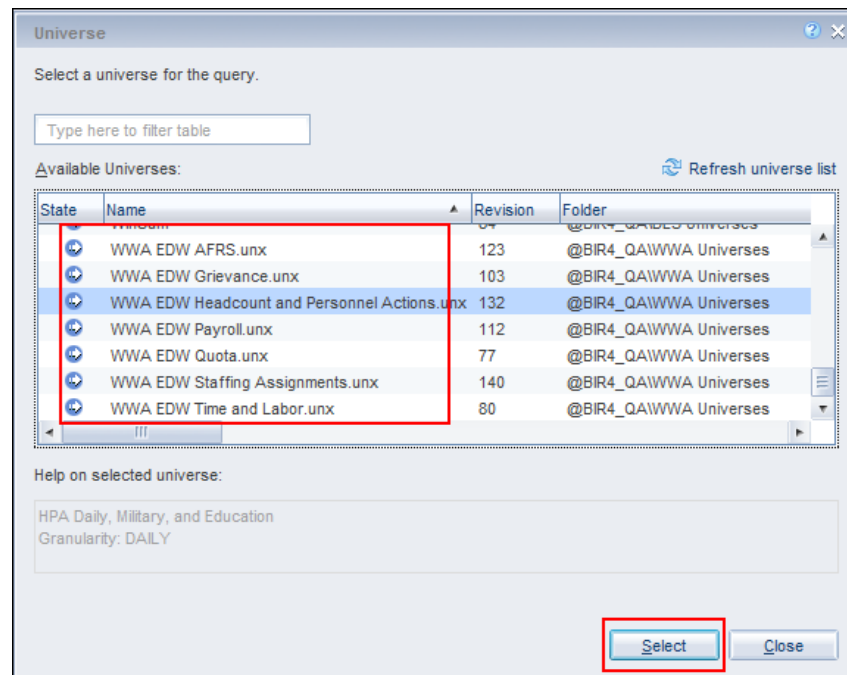


Creating an Ad Hoc Query

Select “Universe” for your data source:

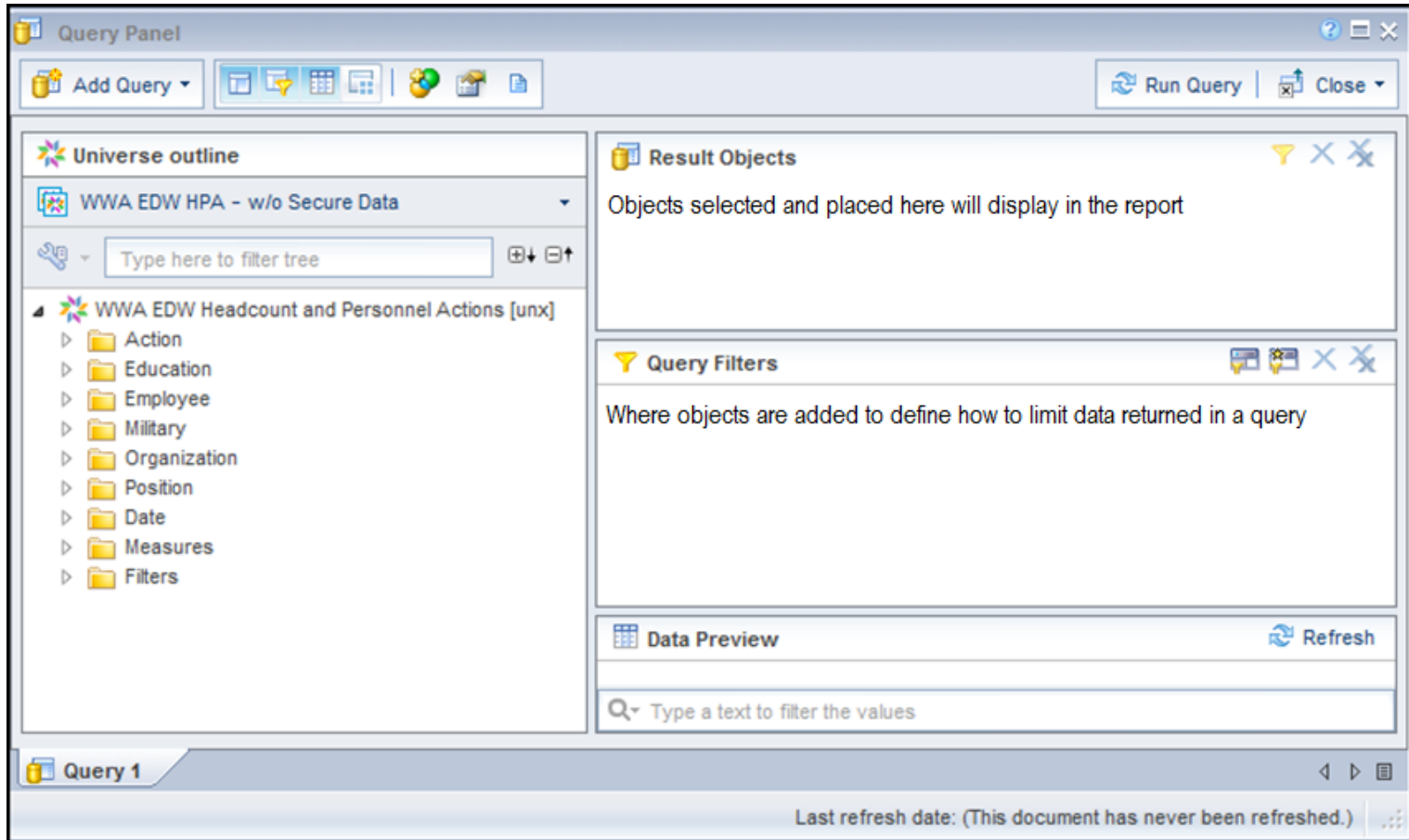


Universe screen is displayed. Scroll to the bottom and select the Universe you want to use and click “Select”:




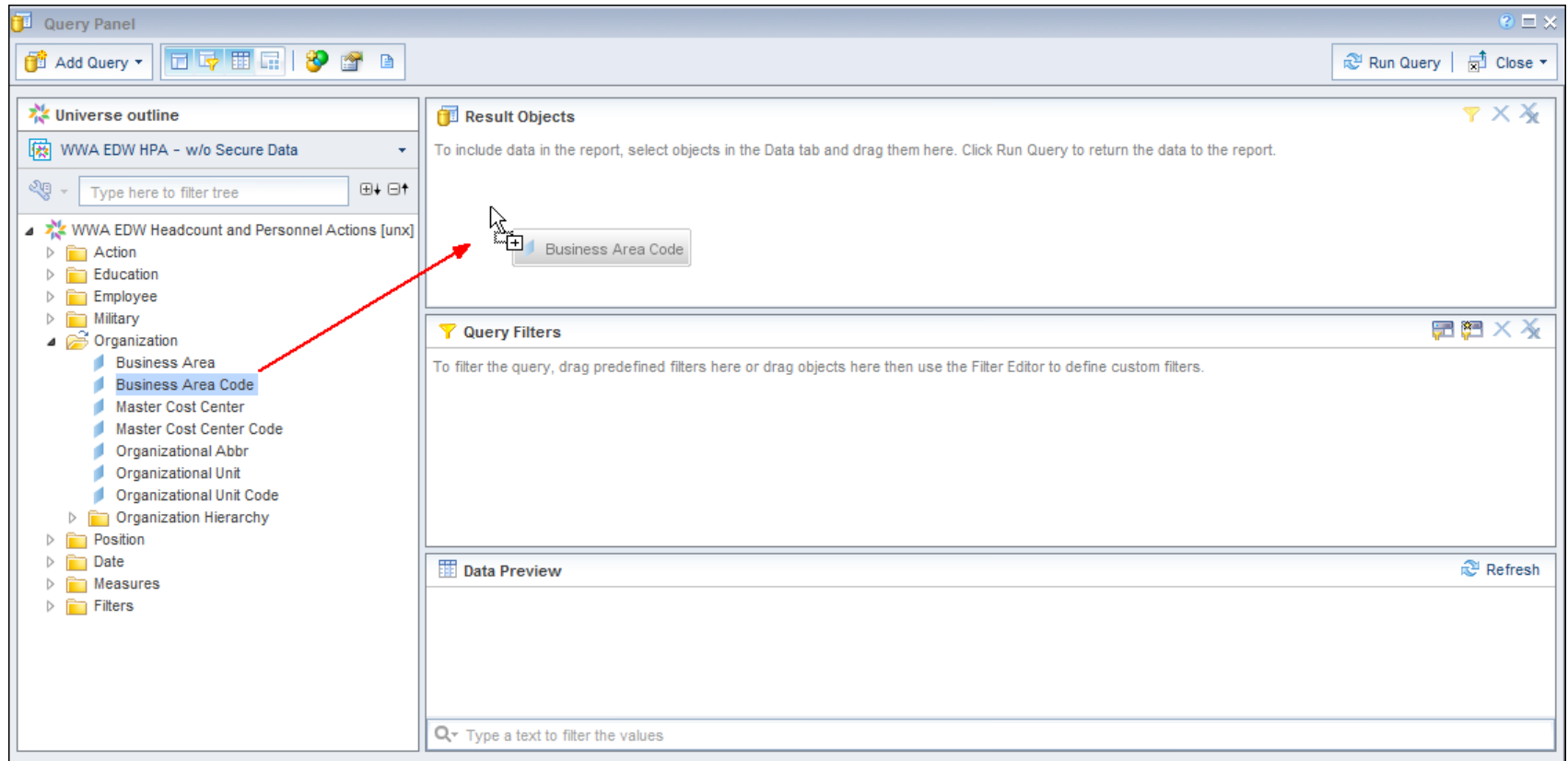
Creating an Ad Hoc Query

Query Panel is displayed with data from the selected Universe. You can now create your Ad Hoc Query:



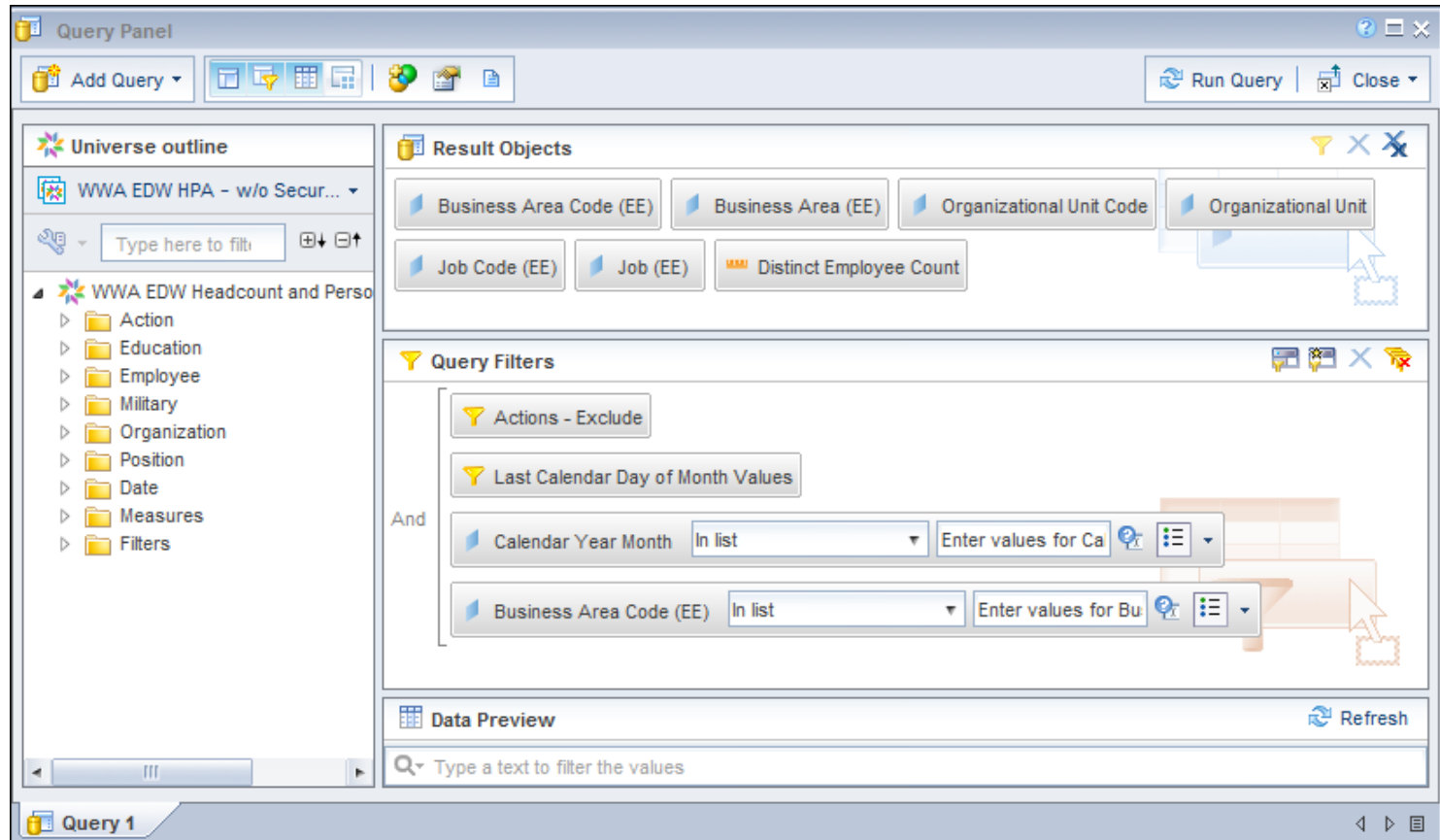
Creating an Ad Hoc Query

Select the objects you want to include in the query and drag them to the Result Objects pane. To add **all** the objects in the class  , drag the class to the Result Objects pane.



Creating an Ad Hoc Query

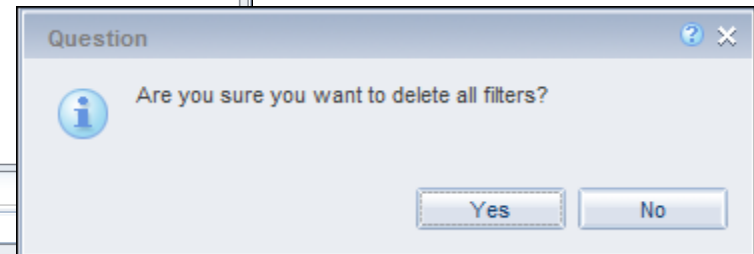
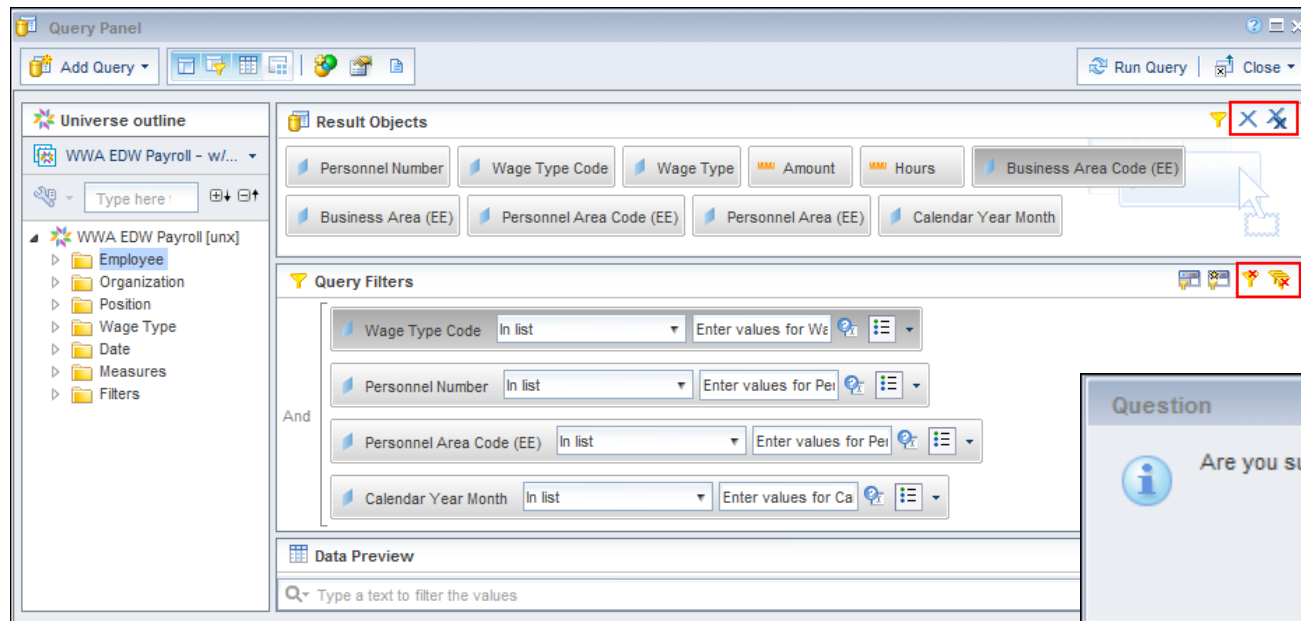
Using the Headcount and Personnel Actions Universe, a simple query to show the number of employees by Organizational Unit and Job was created:



Creating an Ad Hoc Query

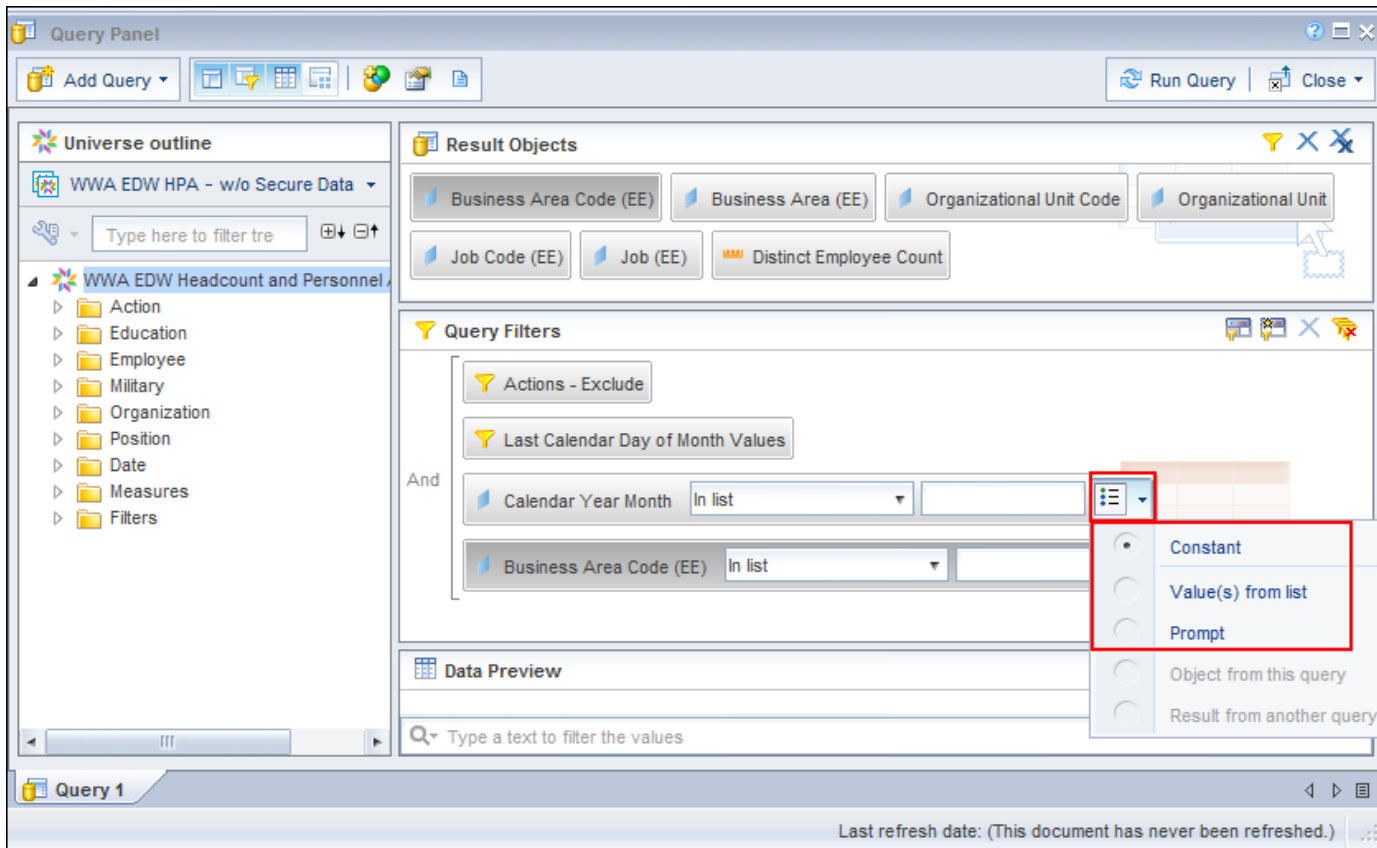
To remove an object from the **Result Objects** or **Query Filters** panes, select the object and click **Remove** at the top right corner of the pane.

To remove all objects from the **Result Objects** or **Query Filters** panes, click **Remove All** at the top right corner of the pane (you will receive a warning before they are deleted). You can also drag and drop them off the screen.



Creating an Ad Hoc Query

There are 3 options for the Query Filter. Constant, Value(s) from list, and Prompt.



Creating an Ad Hoc Query

Constant: Allows you to enter value(s) that will not change. Since these values won't change, they will not be displayed on the prompt screen when you run your report.

The screenshot shows a software interface for creating an ad hoc query. At the top, there is a prompt for 'Business Area Code (EE)' with a dropdown menu set to 'In list' and a text input field containing '1630'. To the right of the input field is a small icon of three horizontal lines with dots. A red box highlights the 'Constant' option in the dropdown menu that appears when the icon is clicked. Other options in the menu include 'Value(s) from list', 'Prompt', 'Object from this query', and 'Result from another query'. Below the prompt, there is a 'Data Preview' section with a text input field for filtering values.

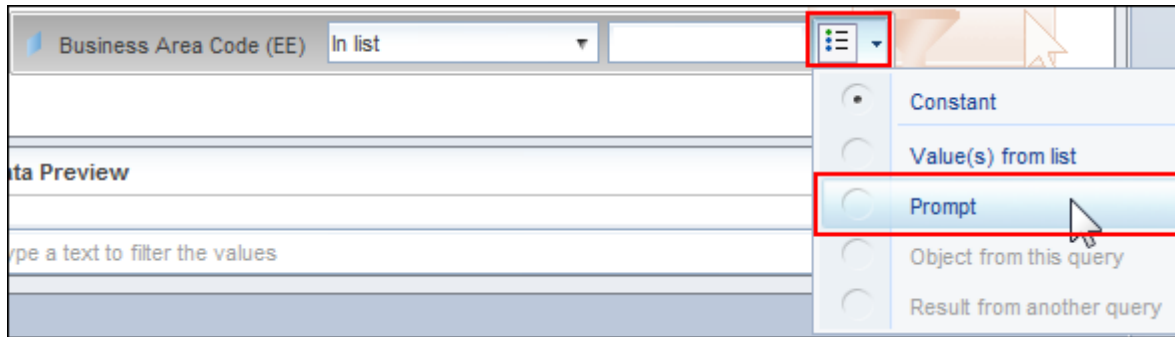
Value(s) from list: Allows you to select pre-existing values from a pick list. Since these values are pre-selected, they will not be displayed on the prompt screen when you run your report.


This screenshot is similar to the one above, showing the 'Business Area Code (EE)' prompt. However, the dropdown menu is open, and the 'Value(s) from list' option is highlighted with a red box. The text input field is currently empty.

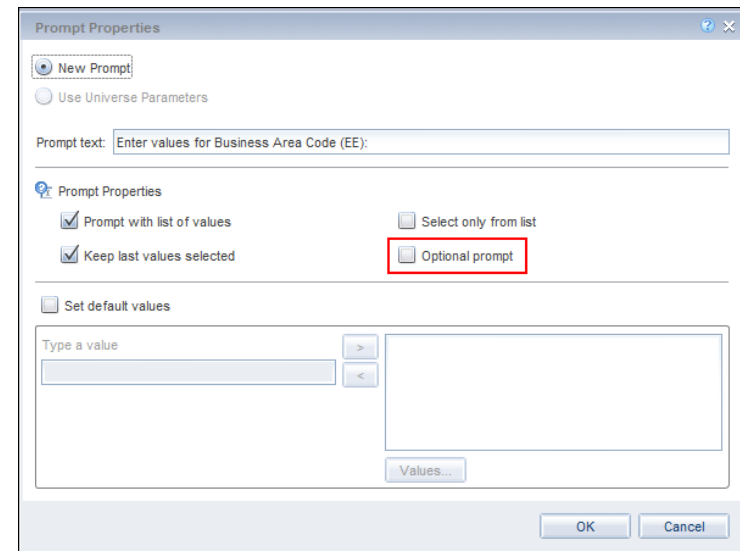
The 'List of Values' dialog box is shown. It has a title bar 'List of Values' and a close button. Inside, there is a section for 'Business Area Code (EE)'. Below this, there is a 'Type a value:' text input field and a 'Selected Value(s)' list. A list of values is displayed in a scrollable area: 0110, 0120, 0130, 0140, 0200, 0350, 0370, 0380, and 0400. To the right of the list are navigation buttons: '>', '<', and '<>'. At the bottom, there is a search field labeled 'Enter search pattern' and 'OK' and 'Cancel' buttons. The date and time 'June 6, 2018 10:11:40 AM GMT-07:00' are also displayed.

Creating an Ad Hoc Query

Prompt: Allows you to enter a value at the prompt screen before running the report.

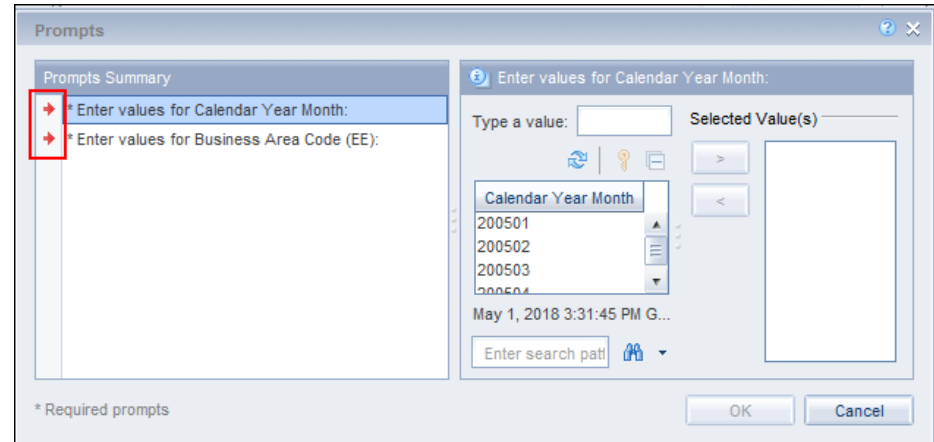


Prompt Properties (A screenshot of a report interface. It shows a dropdown menu labeled 'Calendar Year Month' with the text 'In list' next to it. To the right of the dropdown is a text input field with the placeholder text 'Enter values for Ca'. A red box highlights a small icon (a circle with a question mark) to the right of the text input field. To the right of this icon is another small icon (three horizontal lines).



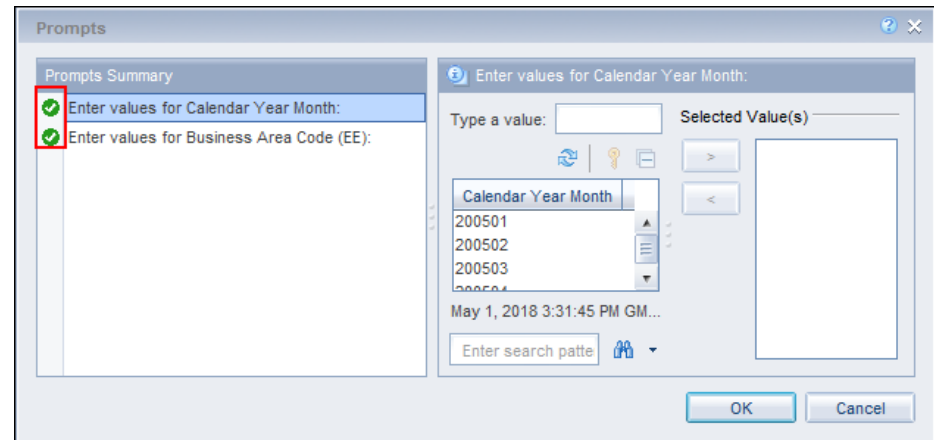
Creating an Ad Hoc Query

Prompt without “Optional Prompt” checked. Red arrow means they are required and must have a valid value entered before running the report:



The screenshot shows the 'Prompts' dialog box. On the left, the 'Prompts Summary' list contains two items: 'Enter values for Calendar Year Month:' and 'Enter values for Business Area Code (EE):'. Both items are preceded by a red arrow icon, indicating they are required prompts. The right pane shows the configuration for the 'Enter values for Calendar Year Month:' prompt, including a 'Type a value:' text box, a 'Selected Value(s)' list, a 'Calendar Year Month' dropdown menu with values 200501, 200502, 200503, and 200504, a timestamp 'May 1, 2018 3:31:45 PM G...', and a search box. At the bottom, there is a note '* Required prompts' and 'OK' and 'Cancel' buttons.

Prompt with “Optional Prompt” checked. White check in green circle means that it's optional and the report can be run without entering values.



The screenshot shows the 'Prompts' dialog box. On the left, the 'Prompts Summary' list contains two items: 'Enter values for Calendar Year Month:' and 'Enter values for Business Area Code (EE):'. Both items are preceded by a white checkmark inside a green circle icon, indicating they are optional prompts. The right pane shows the configuration for the 'Enter values for Calendar Year Month:' prompt, including a 'Type a value:' text box, a 'Selected Value(s)' list, a 'Calendar Year Month' dropdown menu with values 200501, 200502, 200503, and 200504, a timestamp 'May 1, 2018 3:31:45 PM GM...', and a search box. At the bottom, there are 'OK' and 'Cancel' buttons.

Creating an Ad Hoc Query

Report generated using Calendar Year Month 201804 and Business Area Code (EE) 4050.

Business Area Code (EE)	Business Area (EE)	Organizational Unit Code	Organizational Unit	Job Code (EE)	Job (EE)	Distinct Employee Count
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003338	DEPUTY SECRETARY, POLICY -TRANSPORTATION	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003356	ASSIST SECY, ENGINEERING AND REGNL OPERS	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003596	SECRETARY DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003609	CONF. SECRETARY	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003611	CONF SEC - DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003612	CONF SEC DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51000780	ADMINISTRATIVE ASSISTANT 3	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51004200	DEPUTY CHIEF ENGINEER - DOT	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50000314	MANAGEMENT ANALYST 4	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50000315	MANAGEMENT ANALYST 5	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50003348	DIR INTERGOV REL	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50003608	CONF SEC - DOT	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50003922	WMS BAND 2	1
4050	Department of Transportation	30005486	AUDIT INVESTIGATIONS	50000593	AUDIT SPECIALIST - DOT 2	1
4050	Department of Transportation	30005486	AUDIT INVESTIGATIONS	50000598	AUDIT SPECIALIST - DOT 4	3
4050	Department of Transportation	30005486	AUDIT INVESTIGATIONS	50003921	WMS BAND 1	2
4050	Department of Transportation	30005486	AUDIT INVESTIGATIONS	50003922	WMS BAND 2	3

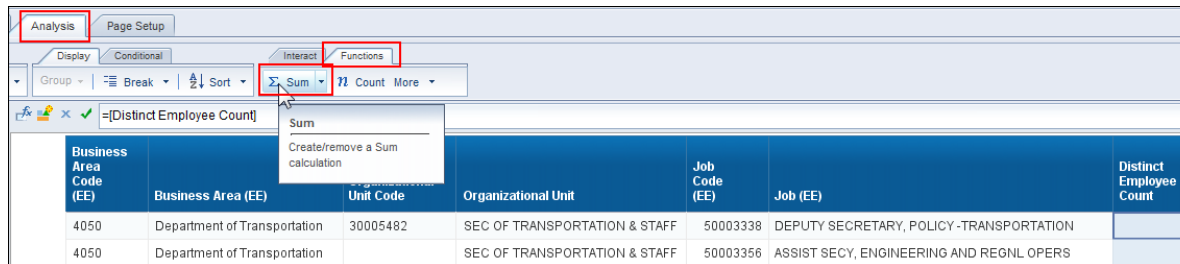
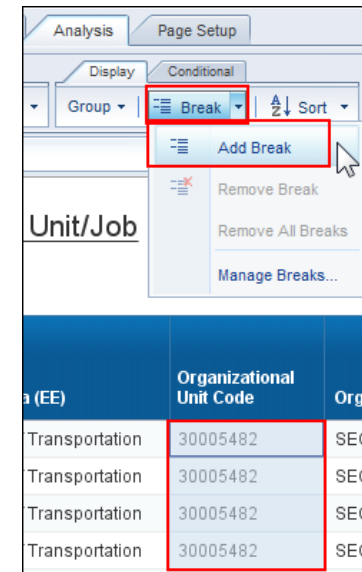
Creating an Ad Hoc Query

To add a break by Organizational Unit Code:

1. Select the column (the column, not the header) to add the break to.
2. Under the Analysis/Display tab, select “Break > Add Break”.
3. A Break is added to the report by Organizational Unit Code.

To sum the employee count for each Organizational Unit:

4. Select the Distinct Employee Count column.
5. Under Analysis/Functions, select Sum (should be done AFTER the Break is done to have the total for each Break.).



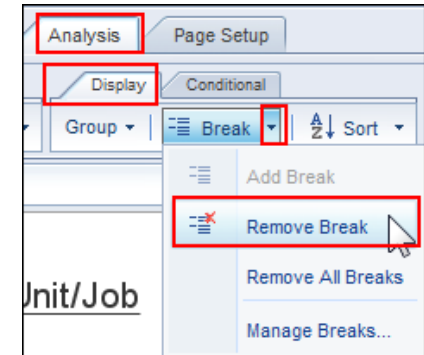
The report now has a total employee count for each Organizational Unit.

Business Area Code (EE)	Business Area (EE)	Organizational Unit Code	Organizational Unit	Job Code (EE)	Job (EE)	Distinct Employee Count
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003338	DEPUTY SECRETARY, POLICY - TRANSPORTATION	1
4050	Department of Transportation		SEC OF TRANSPORTATION & STAFF	50003356	ASSIST SECY, ENGINEERING AND REGNL OPERS	1
4050	Department of Transportation		SEC OF TRANSPORTATION & STAFF	50003596	SECRETARY DOT	1
4050	Department of Transportation		SEC OF TRANSPORTATION & STAFF	50003609	CONF. SECRETARY	1
4050	Department of Transportation		SEC OF TRANSPORTATION & STAFF	50003611	CONF SEC - DOT	1
4050	Department of Transportation		SEC OF TRANSPORTATION & STAFF	50003612	CONF SEC DOT	1
4050	Department of Transportation		SEC OF TRANSPORTATION & STAFF	51000780	ADMINISTRATIVE ASSISTANT 3	1
4050	Department of Transportation		SEC OF TRANSPORTATION & STAFF	51004200	DEPUTY CHIEF ENGINEER - DOT	1
		30005482		Sum:		8

Creating an Ad Hoc Query

To remove a break from your report:

1. Select the column (the data in the column, not the header) that the break was added to.
2. Under the Analysis/Display tab, select the dropdown and click "Remove Break".



The Break is removed from your report:

Business Area Code (EE)	Business Area (EE)	Organizational Unit Code	Organizational Unit	Job Code (EE)	Job (EE)	Distinct Employee Count
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003338	DEPUTY SECRETARY, POLICY-TRANSPORTATION	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003356	ASSIST SECY, ENGINEERING AND REGNL OPERS	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003596	SECRETARY DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003609	CONF. SECRETARY	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003611	CONF SEC - DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003612	CONF SEC DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51000780	ADMINISTRATIVE ASSISTANT 3	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51004200	DEPUTY CHIEF ENGINEER - DOT	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50000314	MANAGEMENT ANALYST 4	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50000315	MANAGEMENT ANALYST 5	1

The sum is still on the Distinct Employee Count column (last page of the report):

50002552	TRANSPORTATION TECHNICAL ENGINEER	1
50003922	WMS BAND 2	1
50003923	WMS BAND 3	2
Sum:		7,011

Creating an Ad Hoc Query

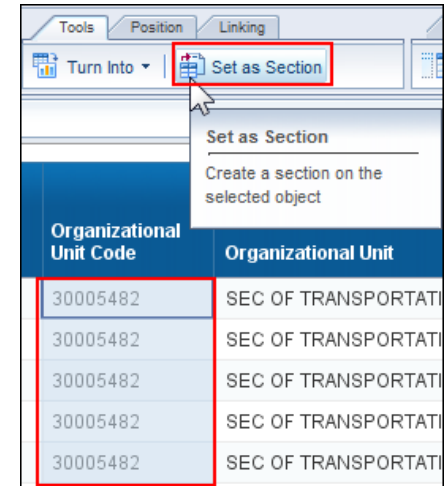
Adding a section to an ad hoc query on a specific field such as Organizational Unit will group the report into sections by the specified field.

To add a section to your report:

1. Select the column (not the column header) to add the section break to.
2. Under the Report Element/Tools tab, select “Set as Section”.

Once the section has been set, the section object will be removed from the body of the report and added as a header to each section.

The sum can be added before or after adding the section.

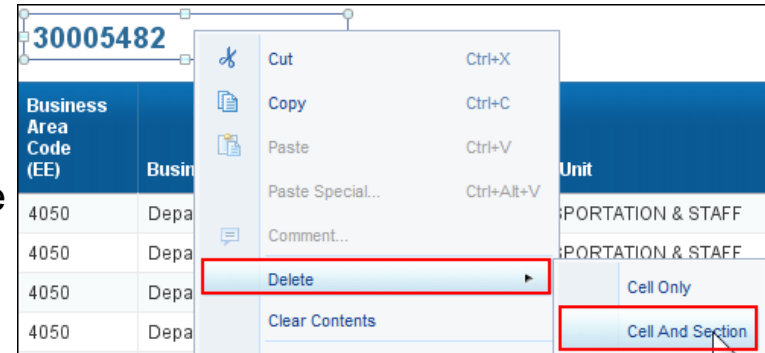


30005486					
Business Area Code (EE)	Business Area (EE)	Organizational Unit	Job Code (EE)	Job (EE)	Distinct Employee Count
4050	Department of Transportation	AUDIT INVESTIGATIONS	50000593	AUDIT SPECIALIST - DOT 2	1
4050	Department of Transportation	AUDIT INVESTIGATIONS	50000598	AUDIT SPECIALIST - DOT 4	3
4050	Department of Transportation	AUDIT INVESTIGATIONS	50003921	WMS BAND 1	2
4050	Department of Transportation	AUDIT INVESTIGATIONS	50003922	WMS BAND 2	3
4050	Department of Transportation	AUDIT INVESTIGATIONS	50003924	WMS BAND 4	1
Sum:					10

Creating an Ad Hoc Query

To remove a section from your report:

1. Right click on the Organizational Unit Code header.
2. Select “Delete/Cell and Section” (this removes the section but does not add the object back into the report, Delete Cell only removes the cell – it doesn’t not remove the section).
3. Add Organizational Unit Code back into the report.



Business Area Code (EE)	Business Area (EE)	Organizational Unit
4050	Department of Transportation	ACCOUNTING & FINANCIAL SERVICES

Business Area Code (EE)	Business Area (EE)	Organizational Unit Code	Organizational Unit	Job Code (EE)	Job (EE)	Distinct Employee Count
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003338	DEPUTY SECRETARY, POLICY -TRANSPORTATION	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003356	ASSIST SECY, ENGINEERING AND REGNL OPERS	1

Creating an Ad Hoc Query

To add a chart to your results that displays the Distinct Employee count by Organizational Unit Code:

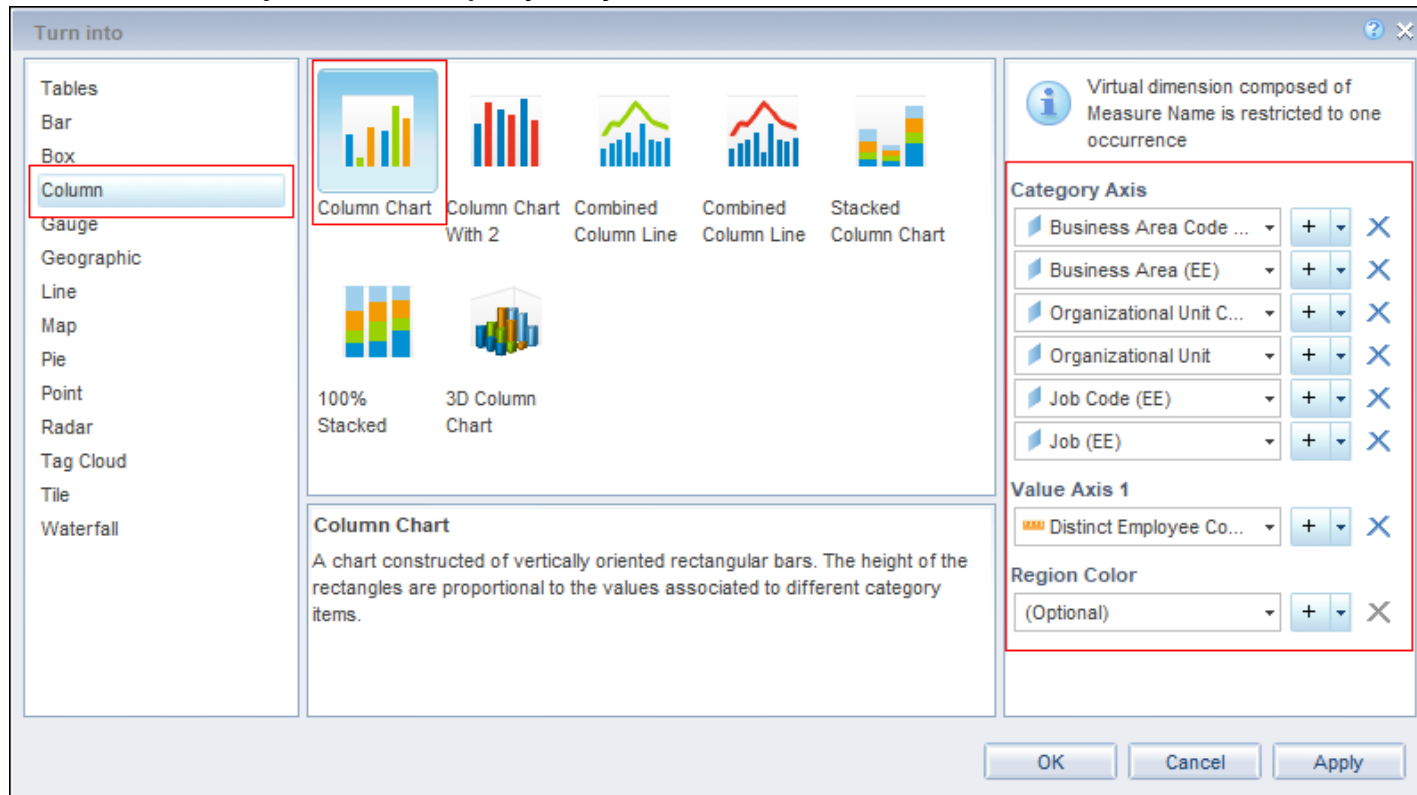
1. Right click on any object in the header.
2. Select Turn into → More Transformations...



Business Area Code (FF)	Business Area	Organizational Unit
4050	Cut	Ctrl+X
4050	Copy	Ctrl+C
4050	Paste	Ctrl+V
4050	Paste Special...	Ctrl+Alt+V
4050	Comment...	
4050	Insert	
4050	Delete	Delete
4050	Clear Contents	
4050	Set as Section	
4050	Turn Into	
4050	Edit Formula...	Ctrl+Enter
4050	Linking	
4050	Assign Reference...	
4050	Start Drill	
4050	Group	
4050	Filter	
4050	Ranking	
	Vertical Table	
	Horizontal Table	
	Cross Table	
	Column Chart	
	Line Chart	
	Pie Chart	
	More Transformations...	

Creating an Ad Hoc Query

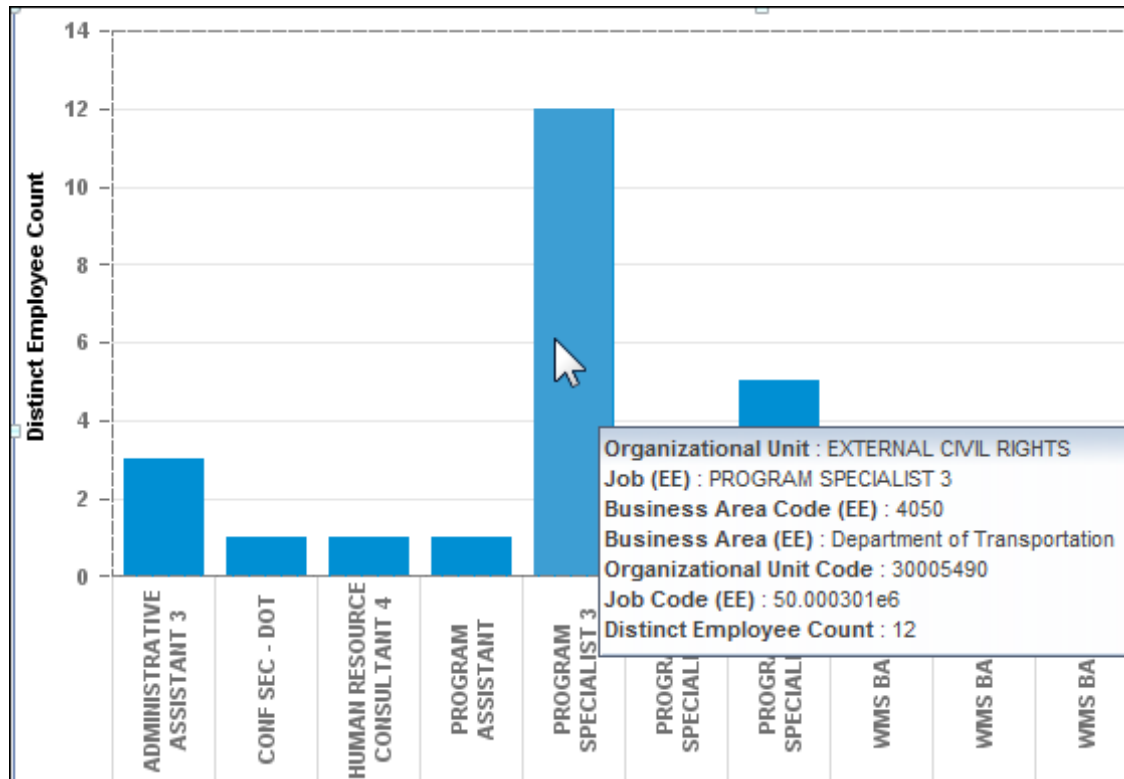
3. Select the chart option you want to use from the Turn into screen.
4. Select the objects to display in your chart.



Creating an Ad Hoc Query

Adding chart by Organizational Unit Code (filtered example to one Organizational Unit).

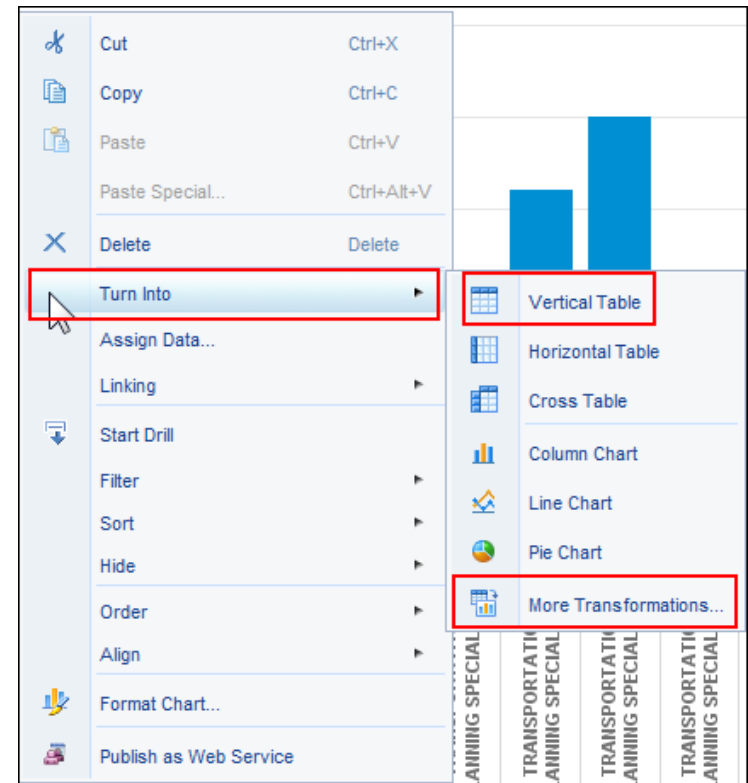
- The report has been turned into a chart filtered by one Organizational Unit, Job, and number of employees in each Job.
- Putting your cursor over a column in the graph will give you the information for that column.



Creating an Ad Hoc Query

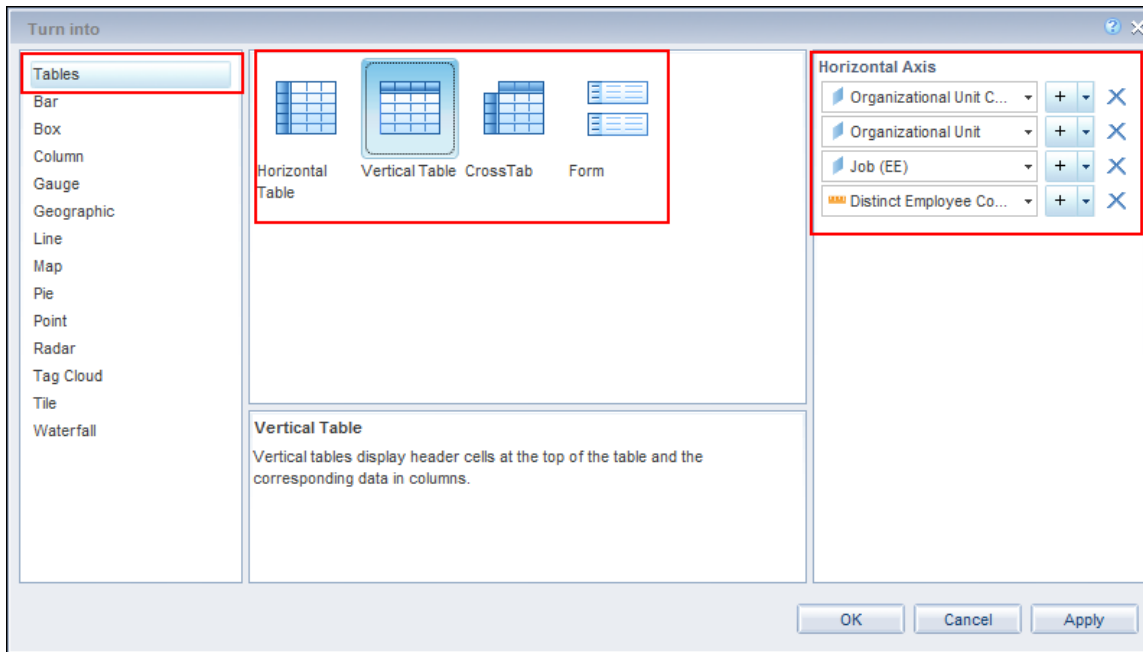
To change a chart back into a table report:

1. Right click in the chart.
2. Select “Turn into.”
3. Select either an individual table type or click More Transformations...



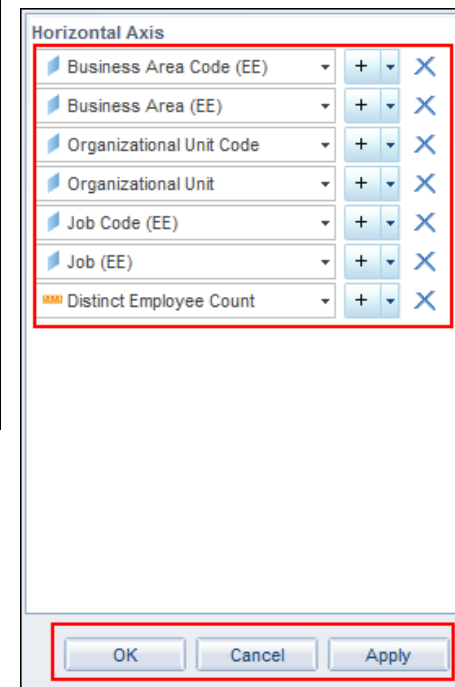
Creating an Ad Hoc Query

4. Select Tables and choose a table type. If you didn't use all the objects from your query in the chart, you'll need to add them back to the report.



To add objects back into the report:

5. Click the + next to an object to add a new field.
6. Select the object from the drop down list box.



Creating an Ad Hoc Query

Result: Your report will be changed back to a table report

Business Area Code (EE)	Business Area (EE)	Organizational Unit Code	Organizational Unit	Job Code (EE)	Job (EE)	Distinct Employee Count
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003338	DEPUTY SECRETARY, POLICY -TRANSPORTATION	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003356	ASSIST SECY, ENGINEERING AND REGNL OPERS	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003596	SECRETARY DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003609	CONF. SECRETARY	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003611	CONF SEC - DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003612	CONF SEC DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51000780	ADMINISTRATIVE ASSISTANT 3	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51004200	DEPUTY CHIEF ENGINEER - DOT	1



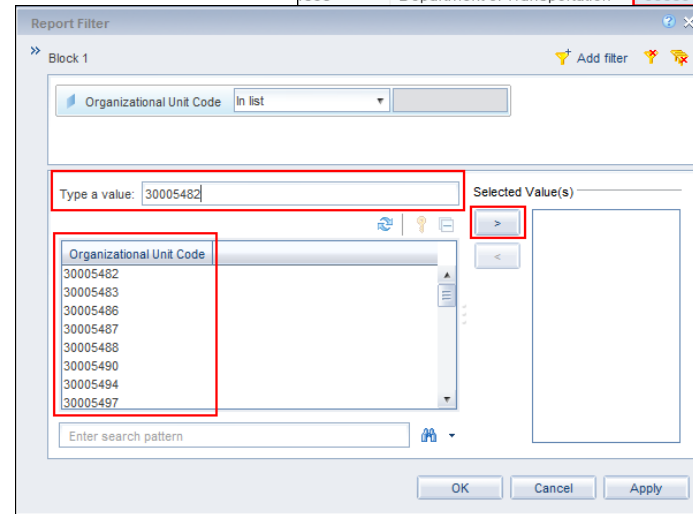
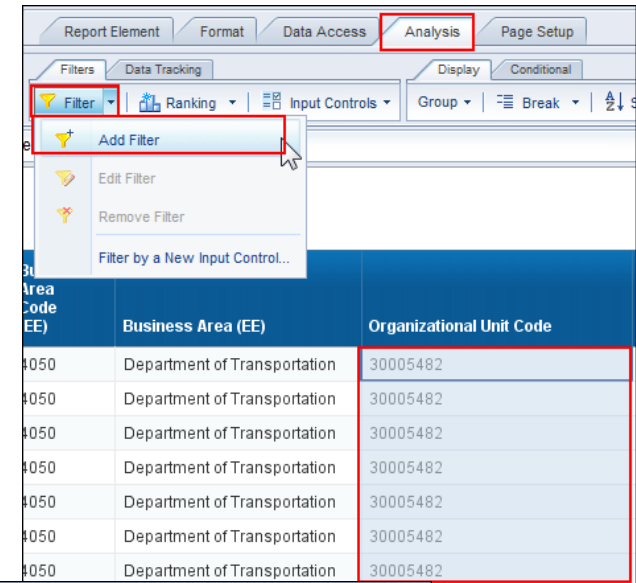
Creating an Ad Hoc Query

To add a Filter to your report:

1. Select the column (not the column header) to add the Filter.
2. Select Filter → Add Filter.

The “Report Filter” Screen is displayed.

3. Select the value you want to filter on and add it to the “Selected Value(s)” section.
4. Click OK or Apply



Creating an Ad Hoc Query

Adding a Filter to the report.

- Your report will display the data specified in your Filter



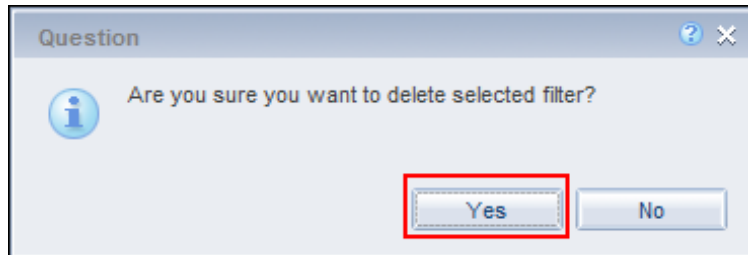
Business Area Code (EE)	Business Area (EE)	Organizational Unit Code	Organizational Unit	Job Code (EE)	Job (EE)	Distinct Employee Count
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003338	DEPUTY SECRETARY, POLICY -TRANSPORTATION	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003356	ASSIST SECY, ENGINEERING AND REGNL OPERS	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003596	SECRETARY DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003609	CONF. SECRETARY	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003611	CONF SEC - DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003612	CONF SEC DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51000780	ADMINISTRATIVE ASSISTANT 3	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51004200	DEPUTY CHIEF ENGINEER - DOT	1

Creating an Ad Hoc Query

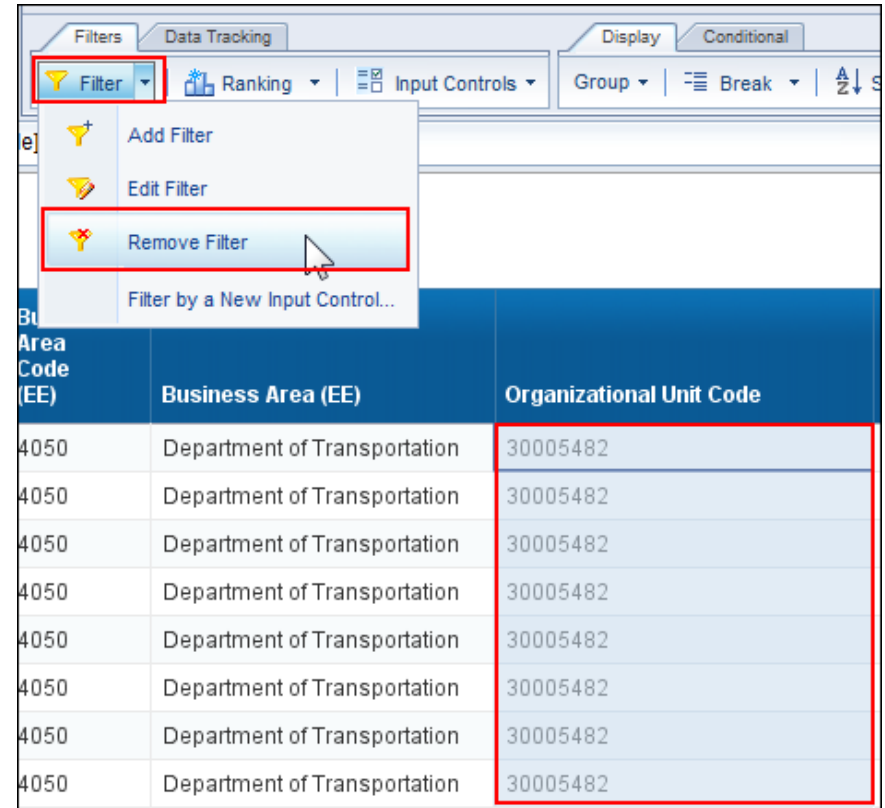
To remove a Filter from your report:

1. Select the column (not the column header) that the Filter was added to.
2. Select Filter → Remove Filter.

A message will be displayed asking if you are sure you want to delete the filter.



3. Select "Yes" if you are sure.

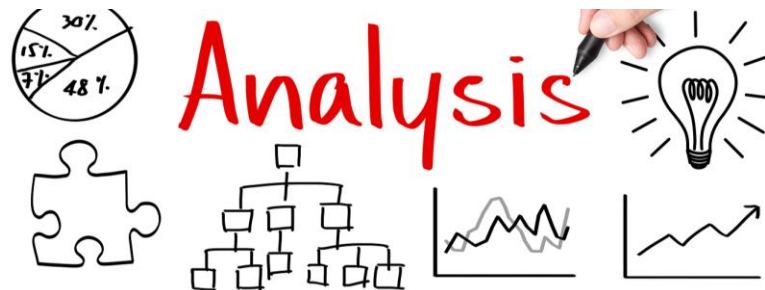


Creating an Ad Hoc Query

Removing a Filter from the report.

- The Filter is removed and your report displays all the data

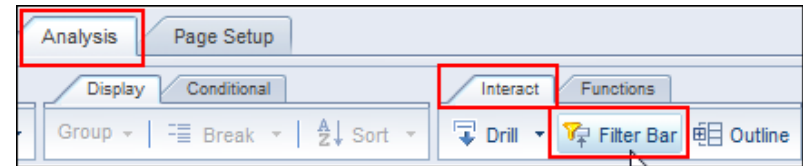
Business Area Code (EE)	Business Area (EE)	Organizational Unit Code	Organizational Unit	Job Code (EE)	Job (EE)	Distinct Employee Count
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003338	DEPUTY SECRETARY, POLICY -TRANSPORTATION	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003356	ASSIST SECY, ENGINEERING AND REGNL OPERS	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003596	SECRETARY DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003609	CONF. SECRETARY	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003611	CONF SEC - DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	50003612	CONF SEC DOT	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51000780	ADMINISTRATIVE ASSISTANT 3	1
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF	51004200	DEPUTY CHIEF ENGINEER - DOT	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50000314	MANAGEMENT ANALYST 4	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50000315	MANAGEMENT ANALYST 5	1
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS	50003348	DIR INTERGOV REL	1



Creating an Ad Hoc Query

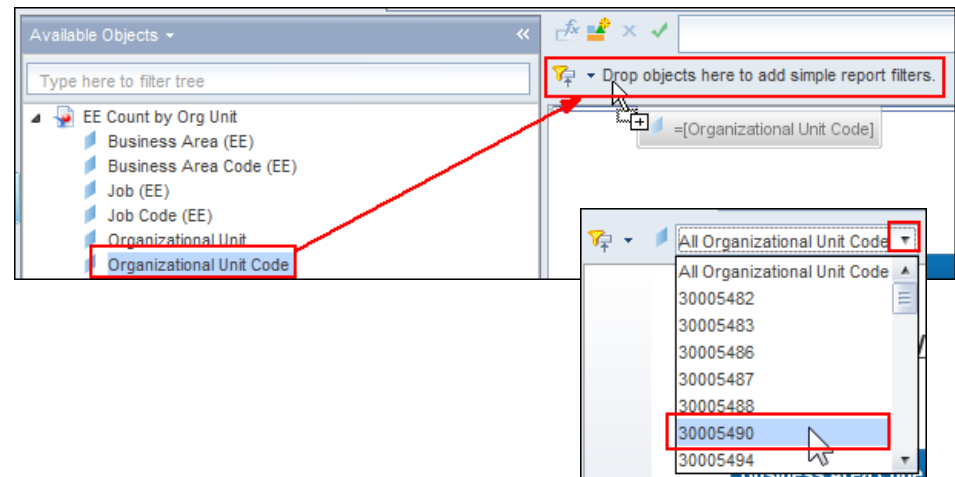
To add a Quick Filter to the report:

1. Select Analysis/Interact tabs and click “Filter Bar”.



This adds a “Filter” option under the Formula Bar.

2. From the Available Objects, drag and drop the object you want to use in your Quick Filter.
3. Use the dropdown arrow and select the value to filter on.



Results: Report is filtered by the value entered in the Quick Filter (Quick Filter only allows one filter selection per object).

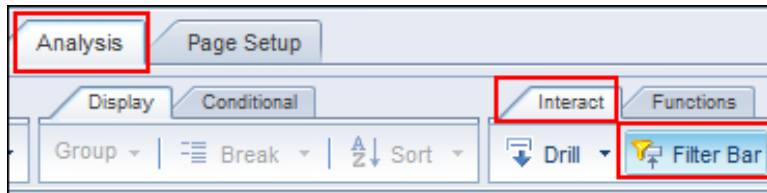
A screenshot of the report results. At the top, there is a dropdown menu showing the value '30005490' selected, highlighted with a red box. Below this, the report title 'EE Count by Org Unit/Job' is displayed. The report table has three columns: 'Business Area Code (EE)', 'Business Area (EE)', and 'Organizational Unit Code'. The 'Organizational Unit Code' column is highlighted with a red box. The table contains three rows of data, all with the same values: '4050' for Business Area Code (EE), 'Department of Transportation' for Business Area (EE), and '30005490' for Organizational Unit Code.

Business Area Code (EE)	Business Area (EE)	Organizational Unit Code
4050	Department of Transportation	30005490
4050	Department of Transportation	30005490
4050	Department of Transportation	30005490

Creating an Ad Hoc Query

To remove a Quick Filter from your report:

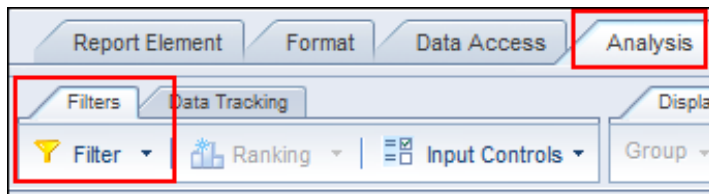
1. Select Analysis/Interact tabs and click “Filter Bar”.



The “Filter” option under the Formula Bar is removed, but if you didn’t set the quick filter back to display all objects before removing the Filter Bar, the Filter is still active and filtering the report for the value that was entered in the Quick Filter. You will need to manually remove the filter.

To manually remove the filter:

2. Select Analysis/Filters tabs and click the “Filter” option.



Creating an Ad Hoc Query

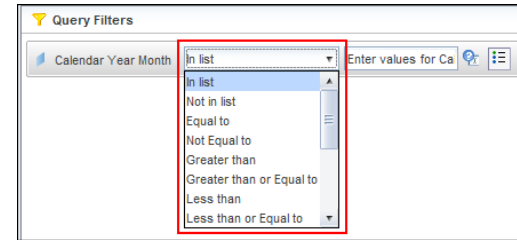
- From the Report Filter screen, select the filter to remove and click the “Filter Remove” icon
- Click OK or Apply.

Results: The filter is removed and all data is back in the report.

Business Area Code (EE)	Business Area (EE)	Organizational Unit Code	Organizational Unit
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF
4050	Department of Transportation	30005482	SEC OF TRANSPORTATION & STAFF
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS
4050	Department of Transportation	30005483	GOVERNMENTAL RELATIONS

Creating an Ad Hoc Query

There are multiple Operators available when creating a filter...you access them by selecting the dropdown arrow:



<u>Operator</u>	<u>Retrieves Data</u>	<u>Example</u>
Equal To	Equal to the specified value	{Business Area} Equal To Business Area "4050" returns data for 4050 only
Not Equal To	Not equal to the specified value	{Business Area} Not Equal To Business Area "4050" returns data for all other Business Areas
Greater Than	Greater than the specified value	{Age (Years)} Greater Than "55" returns data for data over "55"
Greater Than or Equal To	Greater than or equal to the specified value	{Age (Years)} Greater Than or Equal To "55" returns data for 55 and over
Less Than	Lower than the specified value	{Age (Years)} Less Than "55" returns data for data under 55
Less Than or Equal To	Lower than or equal to the specified value	{Age (Years)} Less Than or Equal To "55" returns data 55 and under
Between	Between two values; including these values	{Age (Years)} Between "45" and "55", retrieves data for 45 thru 55
Not Between	Outside the range of two specified values	{Age (Years)} Not Between 45 and 55 retrieves data for all not between 45 and 55

Continued...

Creating an Ad Hoc Query






Operators continued...

<u>Operator</u>	<u>Retrieves Data</u>	<u>Example</u>
In List	Same as values specified	{Business Area} In List '2250;3100;4707' returns data for 2250, 3100, and 4770 only
Not In List	Everything other than values specified	{Business Area} Not In List '2250;3100;4770' excludes data for 2250, 3100, and 4770
Is Null	Which there is no value entered in the database	Is Null retrieves objects with no value entered
Is Not Null	For which there is a value	Is Not Null retrieves objects with value entered
Matches Pattern	Includes a specific string that is like a value	{Program Index} Matches Pattern '15%' retrieves data for any Program Index that begins with 15
Different From Pattern	Excludes a specific string that is like a value	{Program Index} Different From Pattern '15%' retrieves data for any Program Index that does not begin with 15
Both	Corresponds to two specific values	{Business Area} Both "3100" and "4050" returns data for "3100" and "4050" only
Except	Corresponds to one specified value and does not correspond to another specified value	{Business Area} Except option "3100", excludes "3100" from data results

Creating an Ad Hoc Query

To add an object to a report:

1. Select the object you want to add to your report.
2. Drag and drop the object where you want it to appear in the report. The drop location determines how it will display in the results.

 Consolidated Technology Svcs	Adds the object as a new column to the left.
Consolidated Technology Svcs 	Adds the object as a new column to the right.
 Consolidated Technology Svcs	Replaces the current column.
 Consolidated Technology Svcs	Adds the object as a new row above.
 Consolidated Technology Svcs	Adds the object as a new row below.

In the example below, the Business Area (EE) object was added as a new column to the right of the Business Area Code (EE) object.

Business Area Code (EE)	Organizational Unit Code
4050	30005482
4050	30005482
4050	30005482
4050	30005482
4050	30005482

Business Area Code (EE)	Business Area (EE)	Organizational Unit Code
4050	Department of Transportation	30005482
4050	Department of Transportation	30005482
4050	Department of Transportation	30005482
4050	Department of Transportation	30005482

Creating an Ad Hoc Query

To remove objects from your report:

1. Select the object you want to remove from your report.
2. Drag and drop the object into the “Available Objects” pane, that removes it from the report.

Note: You can also right click and select Delete.

Results: Business Area (EE) field has been removed.

Available Objects >> << [Business Area (EE)]

Type here to filter tree

- EE Count by Org Unit
 - Business Area (EE)
 - Business Area Code (EE)
 - Job (EE)
 - Job Code (EE)
 - Organizational Unit
 - Organizational Unit Code
 - Distinct Employee Count
 - Variables
 - References

EE Count by Org Unit/Job

Business Area Code (EE)	Business Area (EE)	Organization
4050	Department of Transportation	80005482
4050	Department of Transportation	80005482
4050	Department of Transportation	80005482

Business Area (EE)	Organizational Unit Code	Orgar
Department of Transportati	80005482	80005482
Department of Transportati	80005482	80005482
Department of Transportati	80005482	80005482
Department of Transportati	80005482	80005482
Department of Transportati	80005482	80005482
Department of Transportati	80005482	80005482
Department of Transportati	80005482	80005482
Department of Transportati	80005482	80005482

Cut Ctrl+X

Copy Ctrl+C

Paste Ctrl+V

Paste Special... Ctrl+Alt+V

Comment...

Insert

Delete Delete

Business Area Code (EE)	Organizational Unit Code
4050	80005482
4050	80005482
4050	80005482
4050	80005482

Creating an Ad Hoc Query

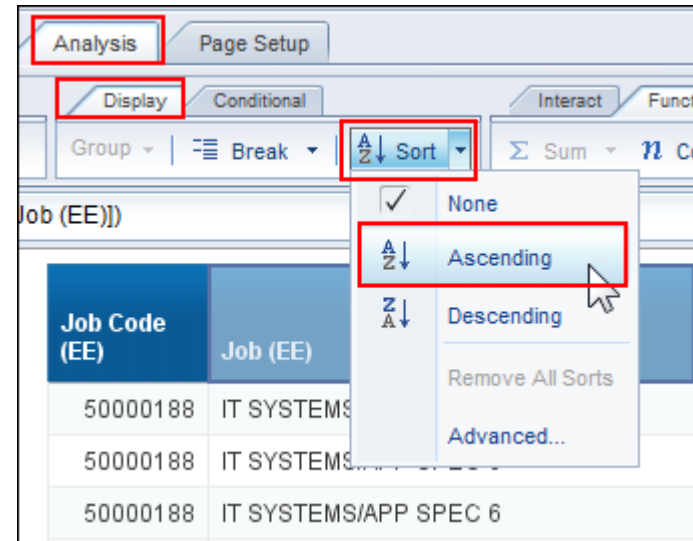
Managing Sorts

- Even if no sorting has been applied, the table is sorted by default. The dimension and detail objects are sorted from left to right in ascending order.
- The default sorting is in effect, so the table is sorted by Job Code (EE).

To change the sort by the Job (EE) field:

1. Select Job (EE) on any part in the report...header will work also.
2. Select Analysis → Display → Sort/Ascending.

Results: Sort order is now on Job (EE).



Job Code (EE)	Job (EE)
51000780	ADMINISTRATIVE ASSISTANT 3
51000781	ADMINISTRATIVE ASSISTANT 4
51000781	ADMINISTRATIVE ASSISTANT 4
50000260	ADMINISTRATIVE ASSISTANT 5
50000260	ADMINISTRATIVE ASSISTANT 5

Continued...

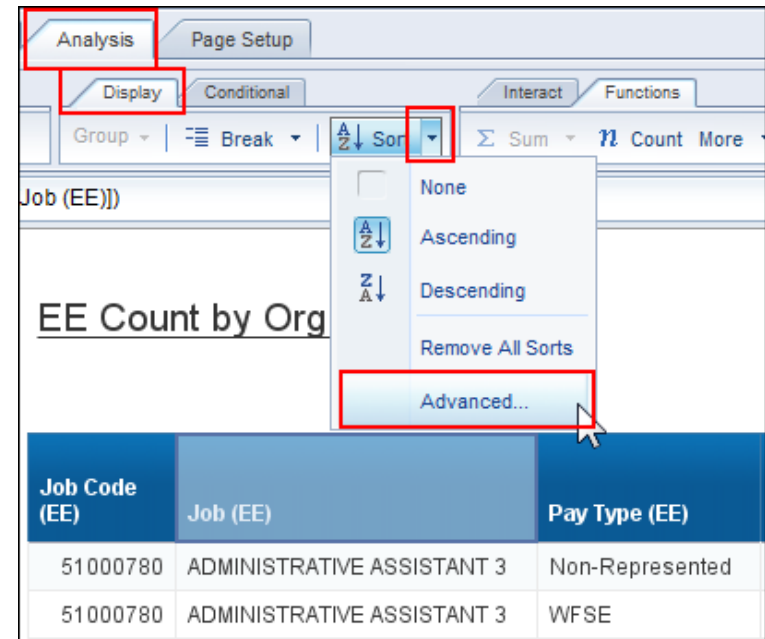
Creating an Ad Hoc Query

Managing Sorts, continued...

- The Advanced option in the sort menu allows you to add, edit, and remove sorts, as well as change the priority of the sort.

To change the sort priority of a report:

1. Click anywhere in the table results.
2. Select Analysis → Display → Sort.
3. Click the dropdown arrow and select “Advanced”.

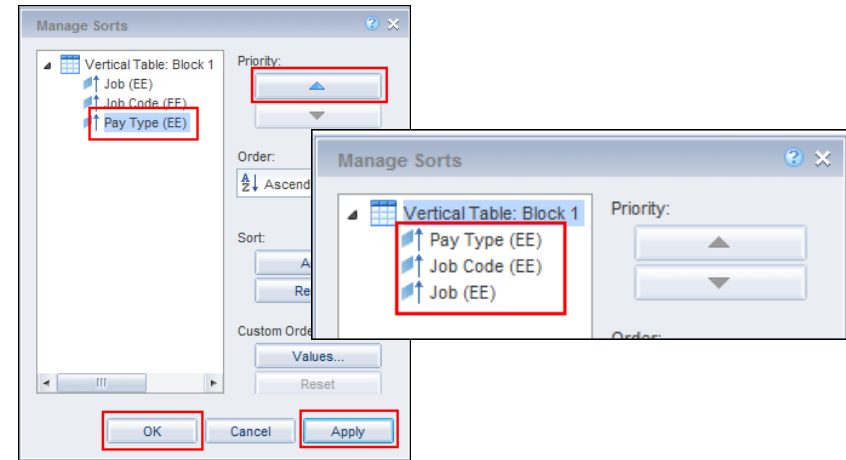


Continued...

Creating an Ad Hoc Query

Managing Sorts, continued...

4. Select Pay Type (EE) and click the up arrow until the Pay Type (EE) object is at the top of the priority list.
5. Click Apply or OK.



Results: Sort order is now by Pay Type (EE), Job Code (EE), Job (EE).

Job Code (EE)	Job (EE)	Pay Type (EE)
50000274	OFFICE ASSISTANT 3	Coalition
50001304	COMMUNICATIONS OFFICER 4	Coalition
50001304	COMMUNICATIONS OFFICER 4	Coalition

Continued...

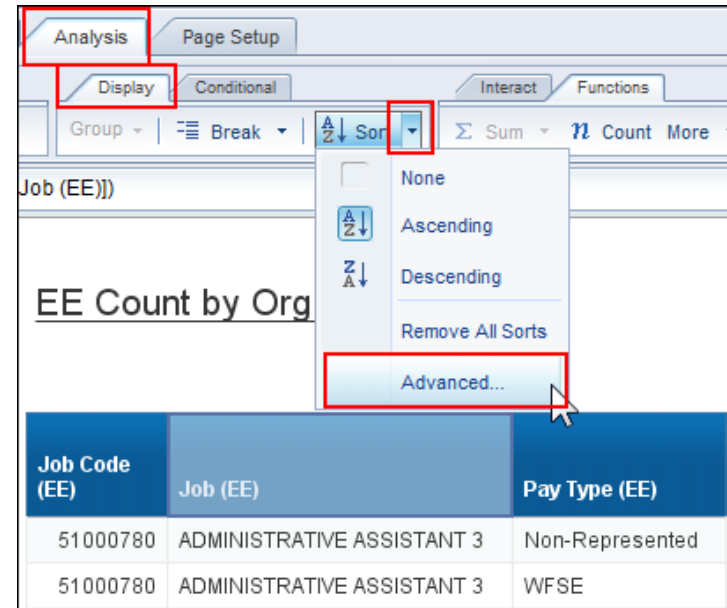
Creating an Ad Hoc Query

Managing Sorts, continued...

- The Advanced option in the sort menu also allows you to create a “Custom Order” for your sort.

To create a custom sort order:

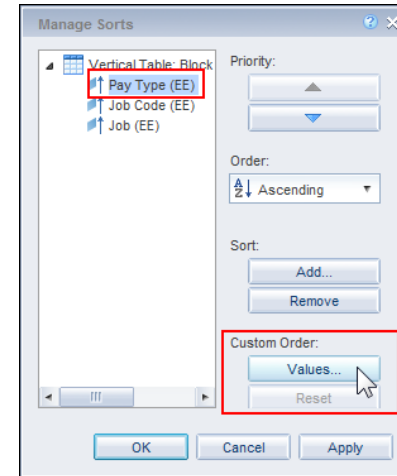
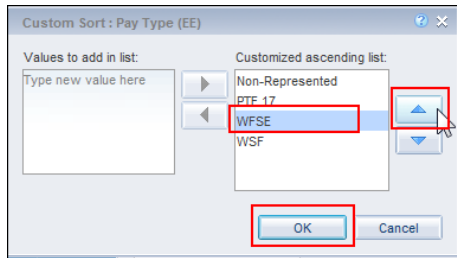
1. Click anywhere in the table results.
2. Select Analysis → Display → Sort.
3. Click the dropdown arrow and select “Advanced”.



Creating an Ad Hoc Query

Managing Sorts, continued...

1. Select the “Values” button under “Custom Order”.
2. Order the sort how you want it and click OK.



3. At the “Manage Sorts” display, click Apply or OK.

Results: Report is sorted by the Custom Order.

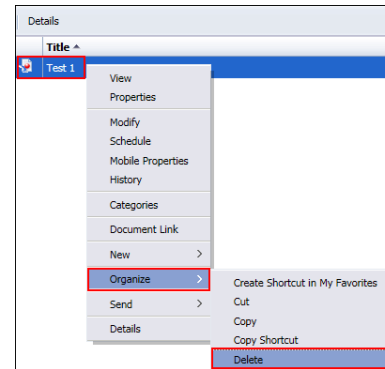
Job Code (EE)	Job (EE)	Pay Type (EE)	Pay Type Code (EE)
50000188	IT SYSTEMS/APP SPEC 6	WFSE	01
50000188	IT SYSTEMS/APP SPEC 6	WFSE	01
50000188	IT SYSTEMS/APP SPEC 6	WFSE	01
50000188	IT SYSTEMS/APP SPEC 6	WFSE	01
50000188	IT SYSTEMS/APP SPEC 6	WFSE	01
50000188	IT SYSTEMS/APP SPEC 6	WFSE	01
50000188	IT SYSTEMS/APP SPEC 6	WFSE	01

Creating an Ad Hoc Query

You have the ability to delete queries that are your own.

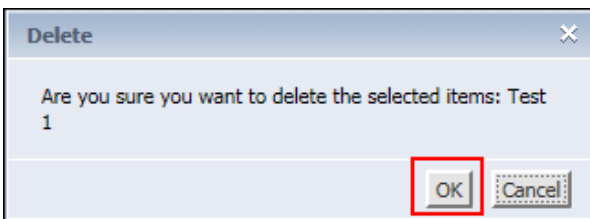
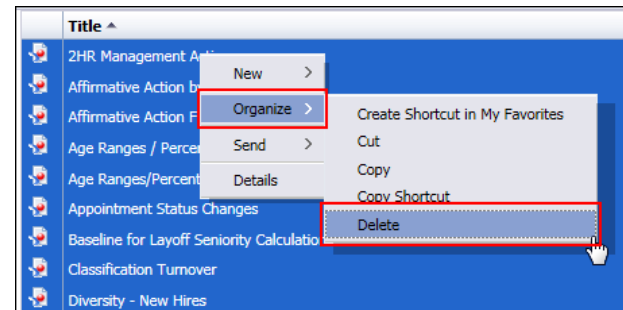
To delete a personal ad hoc query:

1. Right click on the query or queries you want to delete (hold down Ctrl key to select multiple queries).



2. Select Organize → Delete.

You will get a popup box asking if you are sure you want to delete the query.



3. Click OK if you are sure you want to delete your query(s).

Results: Query(s) are deleted.

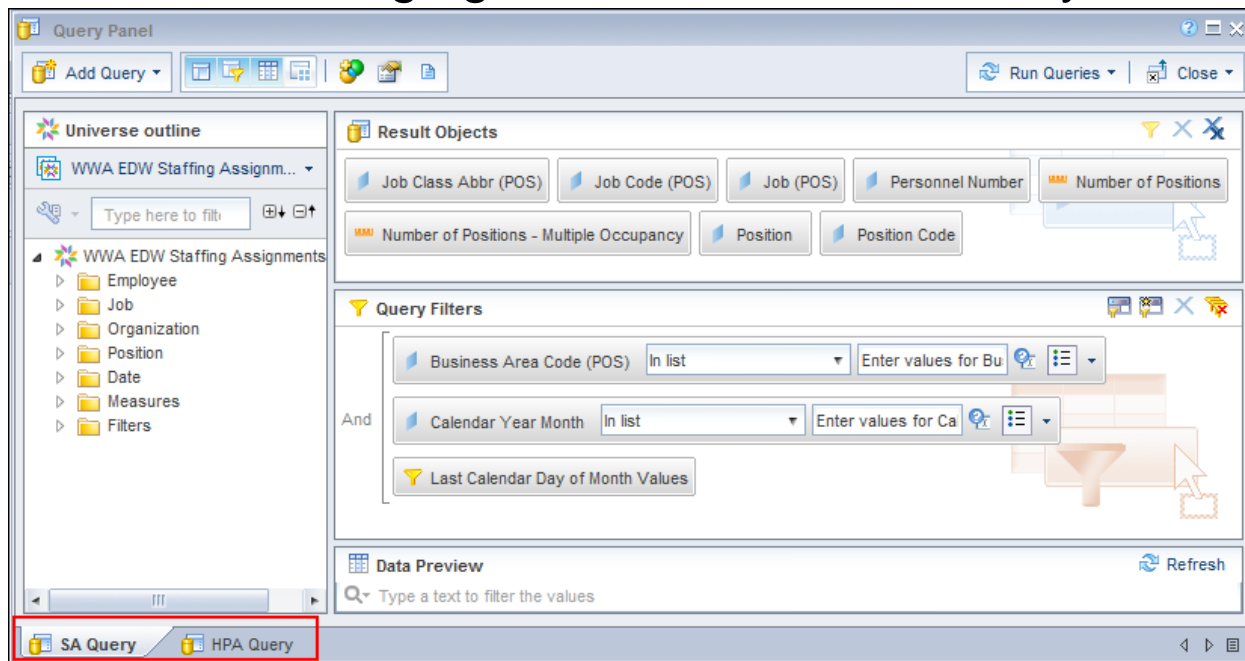
Activity 3: Scripted Ad Hoc Query



Creating Multiple Queries

Learning Objective:

- Create multiple queries
- Combine multiple queries
- Understand when merging dimensions is necessary



Merged Dimensions

- Web Intelligence allows you to synchronize data from multiple queries or data providers by merging dimension objects.
- Merging dimensions is the only way to combine data from different data sources in a report.
- You can define multiple data providers when you create a new document or add more data providers to an existing document.
- Merged Dimensions may be necessary when:
 - ❑ Measures need to be calculated at a different granularity in the same ad hoc query.
 - ❑ A field or measure is not available in the current universe but is available in another universe.

Merged Dimensions Data Values...

Rules when merging dimensions

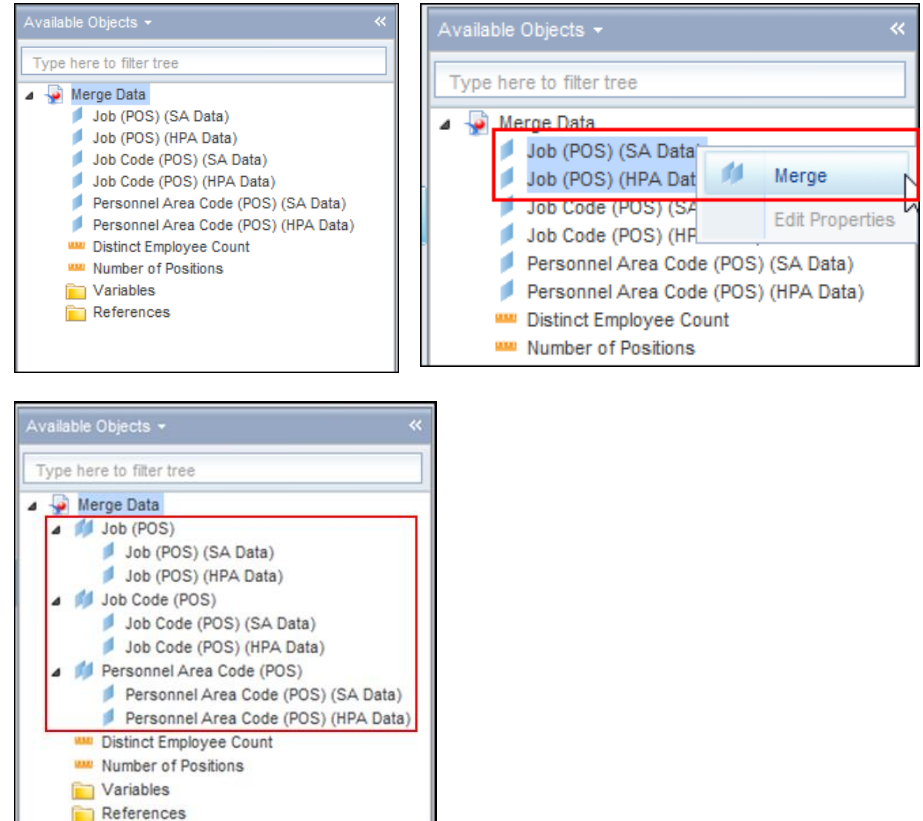
- Only dimensions defined in the universe can be merged. You cannot merge variables.
- Objects must have the same data type. You cannot merge a number with a string.
- Any number of queries can be merged. There is no limit.
- Any number of dimension objects can be merged between two queries. Again, no limit.
- Values are case-sensitive. So, if the values are the same, but of different case, they will not match. They will be shown as different values.
- Measures cannot be merged. Measures must be calculated with a formula or variable.
- If you want to build a different query on a universe already included in the document, you can duplicate the existing query on that universe and then modify it, instead of starting from scratch.
- You must run the query first before you are allowed to duplicate the query.
- Duplicated Queries always use the same data source as the query they were duplicated from.

Merged Dimensions Data Values...

Once two or more queries have been created, you can merge the objects in the dimensions.

To merge objects:

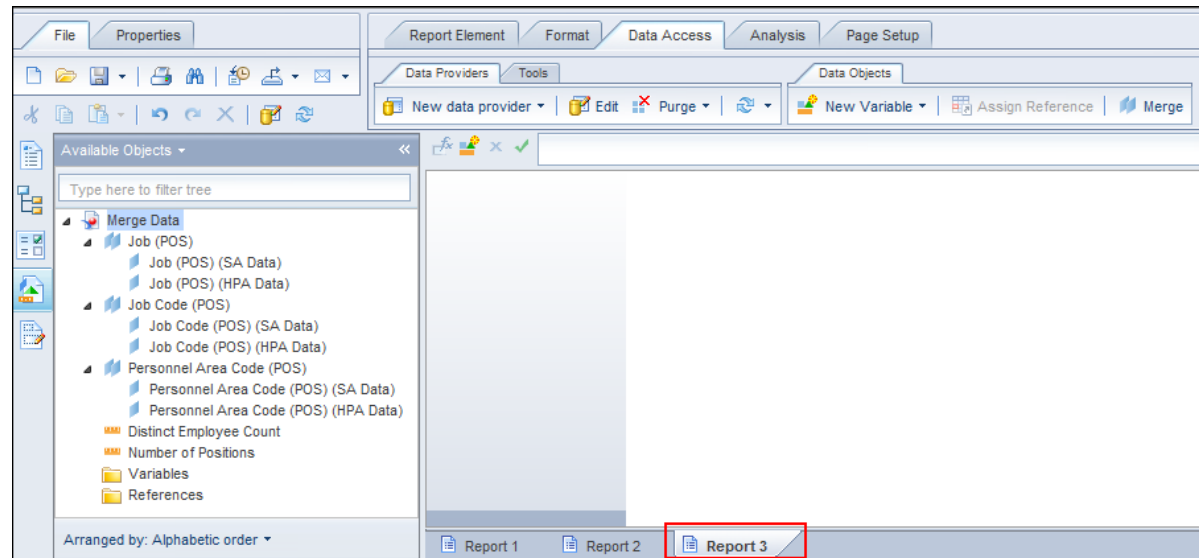
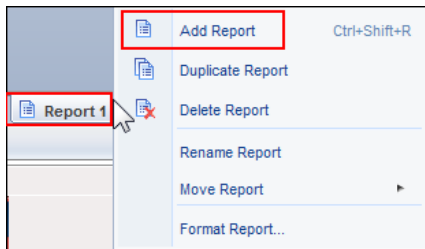
1. Locate the objects to merge in the **Available Objects** pane.
2. Holding down the control key on the keyboard, click on the first objects to be merged (must be the same type).
3. Right mouse-click and select **Merge**.
4. Repeat until all fields are merged.



Merged Dimensions Data Values...

To add merged dimension objects to a report:

Click on an existing report tab at the bottom of the report and select **Add Report**.

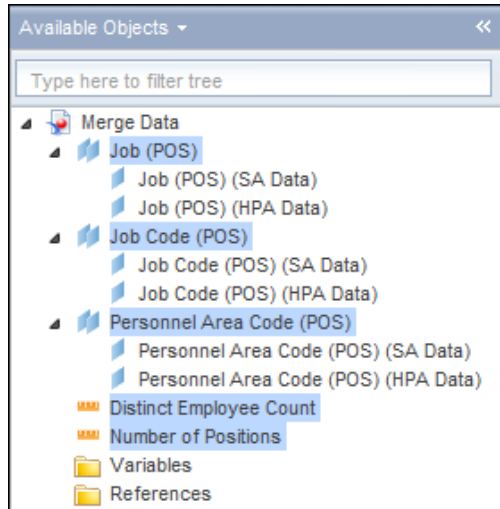


An empty report will open and an additional report tab will be added.

Continued...

Merged Dimensions Data Values...

2. Drag the objects into the empty report to display the results.

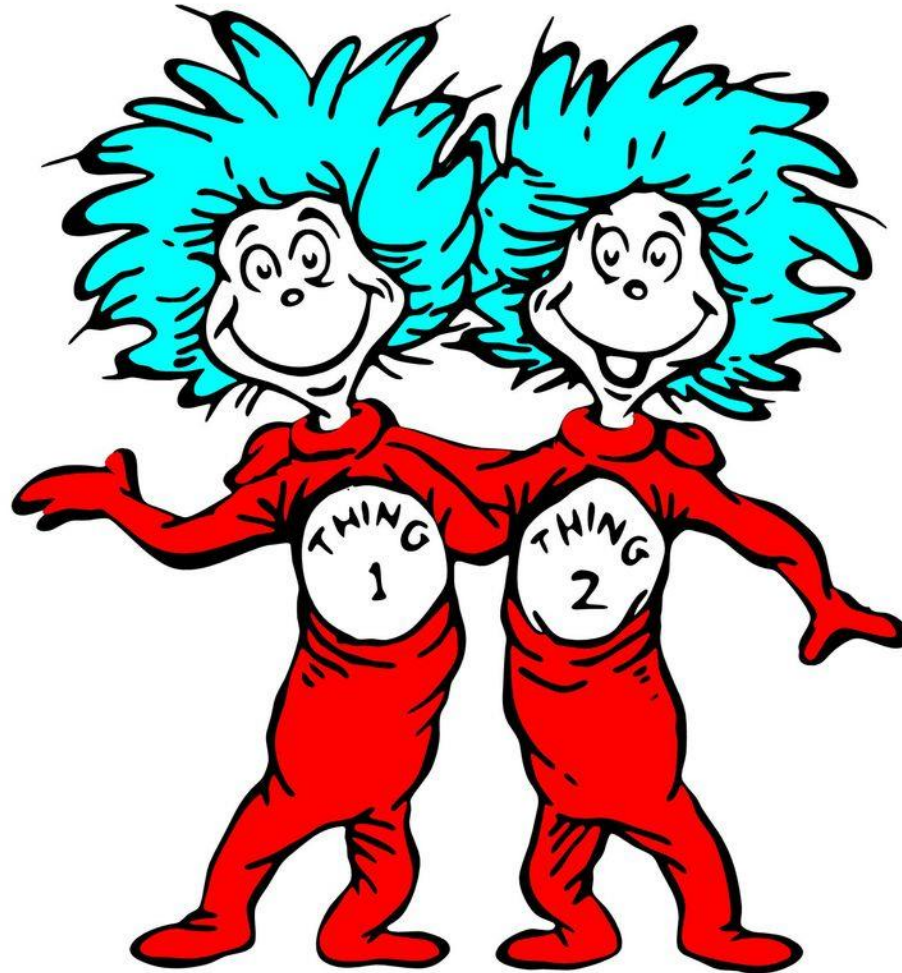


This example shows merging Staffing Assignments (position data) and Headcount and Personnel Actions (employee data).

This merge was done to get the **Number of Positions** and **Distinct Employee Count** in one report.

Personnel Area Code (POS)	Job Code (POS)	Job (POS)	Number of Positions	Distinct Employee Count
4050	50000188	IT SYSTEMS/APP SPEC 6	61	59
4050	50000256	ADMINISTRATIVE ASSISTANT 2	1	
4050	50000260	ADMINISTRATIVE ASSISTANT 5	14	11
4050	50000271	OFFICE ASSISTANT 2	5	1
4050	50000274	OFFICE ASSISTANT 3	17	13
4050	50000283	SECRETARY SENIOR	73	60
4050	50000286	SECRETARY LEAD	1	1
4050	50000288	SECRETARY SUPERVISOR	35	30
4050	50000292	CUSTOMER SERVICE SPECIALIST 2	11	8
4050	50000293	CUSTOMER SERVICE SPECIALIST 3	2	2
4050	50000297	CUSTOMER SERVICE MANAGER	2	2
4050	50000301	PROGRAM SPECIALIST 3	16	13
4050	50000304	PROGRAM SPECIALIST 4	5	3
4050	50000306	PROGRAM SPECIALIST 5	11	10
4050	50000314	MANAGEMENT ANALYST 4	6	2
4050	50000315	MANAGEMENT ANALYST 5	2	2
4050	50000329	FORMS & RECORDS ANALYST 1	5	5
4050	50000333	FORMS & RECORDS ANALYST 3	13	12

Activity 4: Create a Merged Dimension



Review of Learning Objectives

- Understand the purpose and benefit of the WWA EDW
- Navigate the web-based enterprise reporting tool
- Schedule, access, modify, and save standard reports
- Develop ad-hoc queries based on business needs
- Format query results (add totals, sections, breaks, or charts)
- Understand the concept behind combining queries using merged dimensions



Getting Help

- For technical issues with WWA, please email or call the OFM Help Desk and provide the following information:
 - User ID
 - Report Name & Folder
 - The issue.
 - *Providing a screen image helps when it is an issue with the enterprise reporting environment.*
 - The parameter values used in the report.
 - *This helps the team try to re-create the issue.*

OFM Help Desk:

360-407-9100

Email: HereToHelp@ofm.wa.gov



Questions

