HRS 750: UDW+ Ad Hoc Reports Training

2015 Version 1.1

Program Services Office & Decision Support Group
HRS 750: UDW+ Ad Hoc Reports Training

Views.................................................................................................................................17
XML Code ..........................................................................................................................18
Graphs ...............................................................................................................................19
Create New Analysis

1. Select **New** from the Header section. Choose **Analysis**.

   This brings to you a list of available **Subject Areas**. Subject Areas group similar data elements together that answer specific business questions. These are granted to users based on security access and role. The following HR Subject Areas may be available to you:

   - **HR - Position Assignment**: use this subject area to see the current status of a person and position, as well as all related information.
   - **HR - Compensation**: use this subject area to see captured events related to a compensation change for a person or position (including all full-time faculty and administrative employees that are salary or hourly employees).
   - **HR - Activity Based Pay**: use this subject area for certain employees that receive activity-based pay as the base compensation for their job (i.e. adjuncts and some student-related positions that are paid for specific activities).
   - **Not yet available: HR – Labor Distribution**: this subject area combines Compensation and Activity Pay
   - **Not yet available: HR – Change Action**: use this subject area to see HR transactional changes (such as hires, promotions, and terminations).
   - **Not yet available: HR - Position Assignment Monthly Snapshot**: use this subject area for trending (i.e. monthly, yearly, quarterly) analyses of people and positions over time, from the current date, back to 9/1/2008.

2. Select **HR - Position Assignment**.
Criteria Tab

Title of currently opened request (by default this analysis is “Untitled”).

Data elements are stored in an expandable/collapsible tree. Click the plus signs to expand a branch, and the minus signs to collapse it.

- **Facts** are Business Measures. Facts are things that are counted, aggregated, or that allow other mathematical calculations or analyses. Examples include Headcount, Position Open Count, Position Filled Count.

- **Dimensions** are entities that describe how facts are analyzed. They are attributes of facts. Examples include accounts, faculty, student, programs, department, time period, and location. Using dimensions allows you to bring context to the facts.

Selected Columns are where your data elements go.

Filters are used to filter specific elements.

Save and Save As icons to save your analysis.

Catalog displays your saved filters.

Data Elements: Expand a folder by clicking the plus sign, then either double-click or drag and drop the data element into the “Selected Columns” area.
Key Fact (Measurement) and Dimension (Attribute) Definitions

As Of Dates

Position Assignment As Of Date: used to see position related information at past or present date/time
Costing Allocation As Of Date: how a position is funded (if it is not filtered on, you will see all funding sources during the life of the position)

Costing Allocation
Business Unit, Fund, Org, Program, Project, Account
Costing Allocation Start Date
Costing Allocation End Date
Distribution Percent

Day Position Filled
Position Filled Date

Day Position Vacated
Position Vacated Date

Job Profile

Hierarchy: Job Family Group → Job Family → Job Profile → Position (or Business Title)
Job Family Group: used to differentiate between types of employees (including Academic, Administrative, Casual, Non-Exempt, Student, Union)

Person

Last Name, First Name
Employee Flag: indicates employment status

Position

Position ID
Position Title
Business Title
Worker Type: used to differentiate between regular, consultant, contractor or fixed term workers

Position Status

Position Status: Filled, Unfilled (positions, not jobs), End Assignment, or Closed
Current Indicator: allows you to see the position in the current state; close equivalent to As Of Date = today; use Y or N

Supervisory Organization

Hierarchy: School Group → School → Reporting Department → Organization → Position ID
Reporting Department: cross-walk of FAME and Workday Depts. into Business Dept names
Staffing Model: used to differentiate between a position and job

Facts

Position Filled Count: may include same person in multiple positions
Position Requisition Open Count: when a requisition for a position is opened
Headcount: actual human bodies. Should match the filled count (except when a person holds 2 positions)
Position Vacant Count
Position Closed Count
Training Scenario #1: View which Organization you belong to today

1. Locate and add data elements:
   - **Organization** (under Supervisory Organization)
   - **Business Title** (under Position)
   - **Position ID** (under Position)
   - **Worker Type** (under Position)
   - **First Name** (under Person)
   - **Last Name**
   - **Position Assignment As Of Date** (under As Of Dates) = used to see position related information at past or present date/time.

**Filters**

In almost all cases, you wouldn’t want your query to return data from every record in the database. To limit that data, you add filters to your queries. To create a new filter on a given data element, hover over the three lines and click the Filter icon on the drop down menu for that element.

2. Create a filter where **Last Name = (enter your last name)** case sensitive
3. Create a filter where **Position Assignment As Of Date** = today’s date in format: MM/DD/YY (example: 8/12/14)
4. Click on the **Results** tab.

**Results**

**Compound Layout** shows the Table view and Title view by default. Additional views may be added such as Pivot Tables, Graphs, Gauges, Maps, etc. and will be covered later in this class.

**Icons** for viewing:

- **Format Container** = change alignment, colors, border styles, etc.
- **Editor** = provides options to edit
- **Remove** = removes given view from compound layout

**Subject Area** = data elements columns can be added directly to a view on the Results tab by double clicking or dragging and dropping.

**Catalog** = displays your saved filters.

**Views** = A list of all created views, which may be added or removed from the Compound Layout. By default, Title and Table already exist.

**Rows** = Displays the first 25 rows. You may view the next 25 rows by clicking the single downward arrow, or view up to 500 rows by clicking the double sided arrow.
Training Scenario #2: List of all employees within your Organization at the current time

Delete a filter:

Return to the Criteria tab. Hover over the filter for the data element you would like to delete, and click on the red \( \times \).

1. Delete Last Name filter
2. Create a new filter where Organization is equal to your org (as identified in the previous exercise).
3. Run Results.

Add column to results:

In the Results tab, and add the following columns:

4. Position Status (under Position Status) = Filled, Unfilled (positions, not jobs), End Assignment, or Closed
5. Employee Flag (under Person)= indicates employment status
6. Reporting Department (under Supervisory Org -> Supervisory Org Reporting Dept) = cross-walk of FAME and Workday Depts. into Business Dept names.

Rearrange Columns

By default, UDW+ will group columns together by their folder structure. You can rearrange the columns by dragging and dropping them. Make Reporting Department and Organization the first two columns:

a. Grab the Reporting Department column by hovering above its name until you see the multidirectional arrow \( \uparrow \) over the tab on the top.

b. Drag it and position it until you see a light-blue line to the left, then drop it to be the first column.

c. Repeat steps for Organization, so it is the second column.

Save Analysis

1. Save the created analysis by clicking the Save \( \square \) icon. The Save As \( \square \) option is also available should you wish to save an analysis under a different name or location.

2. Go to My Folders, create a new folder by clicking the New Folder \( \square \) icon.

3. Name this folder “Training”.

4. In the new Training folder, save the analysis as “Employees in my Org”.

5. Click OK. Note that the name of the analysis and title have been changed.

Catalog

In the Catalog section, you can open, edit, copy, rename, and perform a variety of other actions accessed through the “More” dropdown option.

6. To access your saved analyses, click on Catalog in the header row.

7. Expand My Folders by clicking on the + sign.

8. Find your training folder.

9. Find your analysis and click Open.
Training Scenario #3: View a total headcount and position count within your Reporting Department as of 1/1/2015

Analysis with Figures

1. Go to New and click Analysis.
2. Select the Subject Area: Position Assignment.
3. Add the following dimensions:
   - Reporting Department (under Supervisory Org -> Supervisory Org Reporting Dept)
   - Staffing Model (under Supervisory Org) = used to differentiate between a position and job.
   - Organization (under Supervisory Org)
   - Job Family Group (under Job Profile) = used to differentiate between types of employees (including Academic, Administrative, Casual, Non-Exempt, Student, Union)
   - Worker Type (under Position) = used to differentiate between regular, contractor, adjuncts, post-doc’s or fixed term workers.
   - Position Status (under Position Status) = Filled, Unfilled (positions, not jobs), End Assignment, or Closed
   - Position Assignment As Of Date (under As Of Date) = used to see position related information at past or present date/time.

4. Add the following facts:
   - Position Requisition Open Count
   - Position Filled Count - may include same person in multiple positions
   - Position Vacant Count
   - Position Closed Count
   - Headcount - actual human bodies. Should match the filled count (except when a person holds 2 positions).

5. Add the following filters:
   - Reporting Department = (select your Reporting Dept)
   - Position Assignment As Of Date = 1/1/2014

6. Run Results.
7. Save the analysis as “Position and Headcount in My Dept”.

Preview Results in Dashboard View

If you want to drill down on a hyperlink, such as Job Family Group, to view more details, you can use the “Show how results will look on a Dashboard” view. This will avoid adding additional columns and filters to your analysis.

8. In the Results tab, click the Show how results will look on a Dashboard icon to preview.

9. In the Dashboard Preview window, drill into the Job Family Group, to Job Family, to Job Profile as desired to see the results. A new column will be added for each.

   Hierarchy: Job Family Group -> Job Family -> Job Profile -> Position (or Business Title)

10. When finished, click the delete icon in the upper right-hand corner to close the Dashboard Preview window. (Be careful not to close the UDW+ window.)
**Training Scenario #4 (on your own):** View filled positions and their funding source within your organization as of one month ago.

1. Go to **New** and click **Analysis**.
2. Select the Subject Area: **Position Assignment**.
3. Add the following **dimensions in the order below**:
   a. Under, Position:
      - Position ID
      - Position Title
   b. Under, Position Status:
      - Position Status
   c. Under, Sup Org:
      - Organization
   d. Under, Costing Allocation:
      - Business Unit
      - Fund
      - Org
      - Program
      - Project
      - Account
      - Costing Allocation Start Date
      - Costing Allocation End Date
   e. Under, As Of Dates:
      - Position Assignment As Of Date
4. Add the following **filters**:
   - **Organization** = (select your own)
   - **Position Status** = Filled
   - **Position Assignment As Of Date** = one month ago

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**Note:** Under, As Of Dates, there is **Costing Allocation As Of Date**. If there is no filter on this date, you will see all funding sources during the life of the position.

5. To see the funding sources as of a specific date, add the **Costing Allocation As Of Date** column (As Of Dates folder)
6. Create a **filter**: **Costing Allocation As Of Date** = one month ago
Print
1. If you would like to print all of your rows, be sure to click on the double sided arrow at the bottom of your analysis prior to printing. If not, it will only print the first 25 rows.
2. Click the Print icon in the upper left hand corner.
3. Select either Printable PDF or Printable HTML. At this point you can print the output.
4. Close the PDF or HTML window.

Export
5. Click the Export icon.
6. Options:
   a. PDF
   b. Excel- Formatting will be maintained. Limited amount of rows exported- cell limit of 50,000 cells.
   c. PowerPoint 2003 or 2007
   d. Web Archive
   e. Data >
      i. CSV Format (Comma Separated Values)
      ii. Tab delimited Format- Brings over the raw data (not formatting). Total row count exported.
         It is best practice to use Tab delimited Format when you want to analyze the data.

Note: Both Excel and Data: Row limit is 500,000 rows.
Training Scenario #5: Add Distribution Percent

Column Properties

Go to Criteria tab.

1. Under Costing Allocation, add the Distribution Percent.
2. Go to Distribution Percent column, click the drop-down menu and select the Column Properties icon. Column properties opens up a dialog box where you can change numerous things about the appearance and functionality of the field.
   - Style properties change the data element’s formatting, including fonts, colors, borders, and alignment.
   - Column Format properties change the data element’s headings and value suppression settings.
   - Data format properties allows you the change how the data element values get displayed. With numeric fields, for example, you can set the number of decimal places to display, choose to display a thousand’s separator, and define negative numbers.
   - Conditional Format lets you set formatting when specific conditions are met.
3. Select the Style tab. Choose the Color red, Style italic, and Background yellow.
4. Select the Column Format tab. Check Custom Headings.
5. Select Data Format. Change to “Treat Number As” Percentage.

Copy and Paste Style Format

If you want to copy and apply the style properties from one column to another:

6. Open the Column Properties window for the column from which you wish to copy the formatting.
7. On the Style tab, click the Copy Cell Format icon and click OK.
8. Open the Column Properties window for the column to which you want to apply the copied formatting and click the Paste Cell Format icon.
9. To restore the default setting and Clear Cell Format (eraser) icon.

Note: Changes made to a column in the Criteria tab will apply to all views within the analysis. Changes made to a column in the Results tab will apply only to that specific view.

10. Save your analysis in the Training folder as “Costing Allocation”.

~ 12 ~
Training Scenario #6: Create a calculation that determines the days in current position.

Calculated Item:
You can create a mathematical formula, which can range from simply adding two facts together to finding the percentage of two facts. You start by adding a data element of the same data type as the computed item (for example, if you want to create a new fact, choose a fact field). You are then going to rename the folder heading and column heading and delete the formula presently there. You have now created a “blank slate” to write a new formula.

1. Go to New and click Analysis.
2. Select the Subject Area: Position Assignment.
3. Add the following dimensions in the order below:
   - Position ID (under Position)
   - Position Title (under Position)
   - Position Status (under Position Status)
   - Organization (under Sup Org)
   - Position Filled Date (under Day Position Filled)
   - Current Indicator (under Position Status) = allows you to see the position in the current state (when = Y it is a close equivalent to As Of Date = today)
4. Add the following filters:
   - Organization = (select your own)
   - Position Status = Filled
   - Current Indicator = Y
5. Add a dimension data element.
6. For the newly added data element, select the Edit Formula icon from the options drop down menu.
7. In the “Edit Column Formula” box, check Custom Headings.
8. Rename the Folder Heading to “Calculated Field.”
9. Rename the Column Heading to “Days in Position.”
10. In the Column Formula box, delete the default formula presently there.
11. We will create a custom formula that shows:
   
   Days in Position = Current Date - Position Filled Date

12. Click Insert Function  . Under Calendar/Date folder, choose TimestampDiff.
   
   Formula:
   
   `TIMESTAMPDIFF(interval, expr, timestamp2)`

13. Highlight interval and replace with “SQL_TSI_DAY” (must type in) in order to show the difference in days (note: SQL command name is case sensitive).
14. Highlight expr and replace with Position Filled Date column (by selecting it from the Column menu).
15. Highlight timestamp2. Insert function  . Under Calendar/Date folder, choose CURRENT_DATE.
   
   Formula should look like:
   
   `TIMESTAMPDIFF(SQL_TSI_DAY, "Day Position Filled","Position Filled Date", CURRENT_DATE)`

16. When finished, click OK.
17. Run Results. Verify that your newly calculated column accurately displays the results.
18. Save your analysis with the title “Days in Position”.

~13~
Training Scenario #7 (on your own): View the days a current vacant position has been unfilled.

Continuing with the example created above....

19. Go to the Criteria tab.
20. Delete the Position Filled Date and Days in Position columns (by selecting Delete from each column’s menu options)

![Image](image_url)

21. Add Position Vacated Date (under Day Position Vacated).
22. Add Position Requisition Open Count fact.
23. Change Position Status filter to Unfilled.
24. Add any dimension data element to be a “blank slate” for your calculation.
25. Select the Edit Formula icon from the options drop down menu for that data element.
26. In the “Edit Column Formula” box, check Custom Headings.
27. Rename the Folder Heading to Calculated Field.
28. Rename the Column Heading to “Days Position Unfilled”.
29. In the Column Formula box, delete the default formula presently there.
30. Create the following custom formula that shows:

   \[
   Days \ Position \ Unfilled = Position \ Vacated \ Date - Current \ Date
   \]

31. Insert function.
32. Under Calendar/Date folder, choose TimestampDiff, which is:

   Formula:
   \[
   \text{TIMESTAMPDIFF(}interval, \ expr, \ timestamp2)\]

33. Highlight interval and replace with “SQL_TSI_DAY” (must type in) in order to show the difference in days (Reminder: SQL command name is case sensitive).
34. Highlight expr and replace with Position Vacated Date column.
35. Highlight timestamp2. Insert function \[\text{CURRENT\_DATE}\]. Under Calendar/Date folder, choose CURRENT\_DATE.

   Formula should look like:
   \[
   \text{TIMESTAMPDIFF(}SQL_TSI\_DAY, "Day \ Position \ Vacated","Position \ Vacated \ Date", \text{CURRENT\_DATE})\]

36. When finished, click OK.
37. Run Results. Verify that your newly calculated column accurately displays the results.
38. Save your analysis with the title “Days Position Unfilled”.

You have completed Exercise #7!
Training Scenario #8: Display a red flag when there are no open position requisitions

**Conditional Formatting**
You can create conditions for how cells are formatted. When the value of the cell meets the condition, the format you select is applied to the cell. *For example, you can have a cell appear **bold** when the value is greater than 100. This allows you to identify important data at a quick glance.*

1. Go to the **Criteria** tab.
2. From **Position Requisition Open Count** column, select the **Column Properties** icon.
3. Go to the **Conditional Format** tab.

   ![Conditional Format Tab](image)

   a. Click **Add Condition**. Choose **Position Requisition Open Count** column.

   ![Add Condition](image)

   *Thinking point: Why is it asking me to select a column when I’m already in the column properties?*

   b. In the **New Condition** box, select “is equal to / is in” and type in “0”. Click **OK**.

   c. In the **Edit Format** window, add the image of a **red flag**. Click **OK**.

4. Run **Results**. Verify that your new column accurately displays the results.

Training Scenario #9: View Filled and Vacant Positions for a School

1. Go to **New** and click **Analysis**.
2. Select the Subject Area: **Position Assignment**.
3. Add the following **facts** and **dimensions** in the order below:
   a. Under, As Of Dates:
      - **Position Assignment As Of Date**
   b. Under, Sup Org > Sup Org Reporting Dept:
      - **Reporting Department**
      - **School Group**
      - **Staffing Model**
   c. Under, Job Profile:
      - **Job Family Group**
   d. Under, Fact Position Assignment:
      - **Position Filled Count**
      - **Position Vacant Count**
4. Add the following **filters**:  
   - **School Group** = (select your school)  
   - **Position Assignment As Of Date** = *today*
5. Run **Results**.
**Edit Mode**

To **edit** any view, scroll to the far right and click the **Pencil** icon. This will bring you to the **Layout Pane** for that view.

**Title View**

1. In the toolbar for **Title**, click the **pencil** icon **to edit**.
2. Uncheck the “**Display Saved Name**” options and change **Title** to “**Filled and Vacant counts in my school**”.
3. **Format** the Title style by clicking on the **format** icon and changing the font **color** to blue.
4. Change **Subtitle** to “**Report for Dean**”.
5. Change the **Started Time** to “Display date and time.”
6. Add a **Help URL** for the **DSG KnowledgeBase** articles: https://nyu.service-now.com/servicelink
7. Click **Done**.

**Table View**

8. In the toolbar for **Table**, click the **pencil** icon **to edit**. This brings you to the **Layout Pane**. To make **changes**, **drag** fields into different sections of this pane and when you see the **blue line**, drop it in.

*Tip:* It’s a good idea to uncheck **Display Results** icon in the upper toolbar while modifying your analysis. This prevents the results from being displayed in the Editing section, which can improve performance.

**Prompts**

Creates a prompt dropdown box for that field.

9. Drag **Reporting Department** column and drop into **Table Prompts** area.

**Sections**

Sections will create a separate table for each field.

10. Drag **Staffing Model** column and drop into **Sections** area.

**Excluded**

Not displayed in results view. These columns are still included in your criteria, but are “excluded” from the results view.

11. Drag **School Group** and **Position Assignment As Of Date** columns into **Excluded** area.

**Totals**

Add a variety of grand and subtotals.

12. To add grand total for each Staffing Model, go to **Columns and Measures** field and click the **Sum** icon and select “**After**”.
13. Click **Done**. Verify prompt for **Reporting Department**, sections for **Staffing Model**, grand totals.

**Sorting**

Hover-over a column header to apply sorts. Click the up arrow to “Sort Ascending” or down arrow to “Sort Descending.”
Pivot Table

View Position fact counts by Job Family, and Position Status.

1. In the Results tab, click the New View icon in the top toolbar.
2. Select Pivot Table. A Pivot Table view will be added to the bottom of the Compound Layout.

3. Scroll down to find your Pivot Table. Click the pencil icon to edit.

   Additional features:
   - Rows and Columns = define the pivot table’s rows and columns
   - Measures = where you put value data elements you want to appear in the pivot table

   Tip: It’s a good idea to uncheck Display Results icon in the upper toolbar while modifying your analysis. This prevents the results from being displayed in the Editing section, which can improve performance.

4. Make the following edits to the Pivot Table:
   a. Exclude data elements: School Group and Position Assignment As Of Date.
   b. Columns should include: Reporting Department
   c. Rows should include in the following order: Job Family Group
   d. Measures should include the fact amounts: Position Filled Count and Position Vacant Count
   e. Table Prompts should include: Staffing Model

5. Click Done and scroll down to view the results.
6. You may rearrange columns and rows in a pivot table, to suit your data needs (such as moving the Reporting Department to the Rows, and Job Family Group or Staffing Model to Columns).
7. Save your analysis.

⚠️ Please do not re-pivot large data sets as it will crash the system.

Views

⚠️ Duplicate: DO NOT press the Duplicate View button in the Views section. This will crash the server.
XML Code
Sharing XML codes is a great way to troubleshoot any issues you may be having with your analysis or sharing your analysis with another user. You may be asked to send your XML code to the DSG Analyst or another user for troubleshooting.

Obtaining and Sending XML Codes:

1. In your analysis, go to the Advanced tab.
2. Under Analysis XML, highlight and copy the entire section (Ctrl+A to select all and Ctrl+C to copy).

3. Paste it into an email send to the appropriate person.

Applying XML Codes:
If someone sends you XML code that you wish to apply:

1. Create a new analysis using any subject area.
2. Go to the Advanced tab.
3. In the Analysis XML section, delete any code that is currently there.
4. Copy the entire contents of the XML code that was sent to you.
5. Paste the XML code into the Analysis XML section (using Ctrl+V to paste).
6. Click Apply XML.
7. Go to the Results tab to run the analysis.
Exercise #10 (on your own time): Create a pie graph that shows the headcount for various job families within your organization.

Graphs
When creating an analysis for graphs, it is important to use the highest level of data, or most summarized. Since you’ll be pulling data at the granular level, it is also important to use a filter for the time period. Let’s create a simple analysis that can be used to create a pie graph.

1. Go to New and click Analysis.
2. Select the Subject Area: Position Assignment.
3. Add the following dimensions in the order below:
   - Job Family Group
   - Job Family
   - Position Assignment As Of Date
4. Add the following fact:
   - Headcount
5. Add the following filters:
   - Organization = (select your own)
   - Position Assignment As Of Date = today’s date

Pie Graph
1. Add a New View and select Graph > Pie. UDW+ will attempt to create a visualization based on your data set and type of Graph selected (this almost always needs to be edited).
   - Measures “Slice Size”= where you put your facts: Headcount
   - Pies and Slices “Pies”= creates a pie for each value
   - Pies and Slices “Slices”= what makes up the pie: Job Family
2. Edit the Graph: move Job Family Group to be a table prompt.
3. Modify the Graph Title:
   a. On the properties toolbar at the top, click on the Edit graph properties icon.
   b. Go to the tab Titles and Labels.
   c. Uncheck the option to “Use measure name as graph title”. Rename the Title to “Headcount by Job Family”.
   d. To show percentages in your graph, click on Data Markers.
   e. In Display Options tab, change Show Data Labels to “Always”.
   f. Click OK.
4. Click Done. Note that graphs are drillable when you use hierarchy fields.
5. Save your analysis as “Pie Graph.”
6. Using the same data, try creating a Bar Graph.
In-class Assessment

To successfully complete this course, please construct the following analysis.

Create an analysis for your school that shows Total Headcounts by Full time or Part time employees as of today, by each Organization.

*Hint: Under Position, Type Type shows full time and part time status*

Present your results to the UDW+ instructor when finished.

Congratulations! You have successfully completed the HRS 750: UDW+ Ad Hoc Reports Training course!

The Decision Support Group (DSG) is here to help!

- Email: askDSG@nyu.edu
- Phone: 212-998-2900
- Web: www.nyu.edu/datawarehouse and visit the Decision Support Group tab
- DSG Knowledge Base: Dashboards → UDW+ Help → Knowledge Base Articles
  - UDW+ FAQs
  - UDW+ Functionality
  - UDW+ Training and Access
  - UDW+ System Requirements