

## Ad Hoc Query Overview

Web Intelligence (WebI) is a web-based reporting and analysis tool that Washington Workforce Analytics (WWA) Enterprise Data Warehouse (EDW) users will use to interact with and analyze workforce-related data. Ad hoc queries are created and managed by agency users and are based on agency-specific scenarios to meet business data needs. When an ad hoc query is saved, it becomes a WebI “document” within the user’s personal folders or agency-specific folders based on security/permission levels.






- ✓ A WebI document includes a query/report and related objects/formulas/variables.

## Benefits

WebI ad hoc query tools provide an interactive way for agency users to display and analyze workforce-related data. Features include:

- ✓ Drag-and-drop fields when creating new or modifying existing ad hoc queries.
- ✓ Preview results before running or saving a query.
- ✓ Quickly save and retrieve a query using common folder structures.
- ✓ Manage page layouts and sort/filter data.
- ✓ Multiple options to display data using web browser or export to other formats.
- ✓ View historical and trend data.

## Ad Hoc Query Data Structures

- ✓ Workforce-related data structures are organized into subject areas. Agency users create ad hoc queries based on specific business scenarios and data structures in a WWA universe.
- ✓  **Universe** Represents a set of data from one or more data sources. The set of data is structured by subject areas to support agency data needs. These include measures, dimensions, attributes, and filters that are used to create queries and reports.
- ✓  **Dimension** Collection of related data that represents aspects of a business such as an Employee dimension or Organization dimension.
- ✓  **Attribute** Descriptive data about a dimension.
- ✓  **Measure** Numeric data that represents calculations of data in the universe such as number of employees or age in years.
- ✓  **Filter** Narrows query results to focus on specific data elements such as specific jobs or bargaining units.

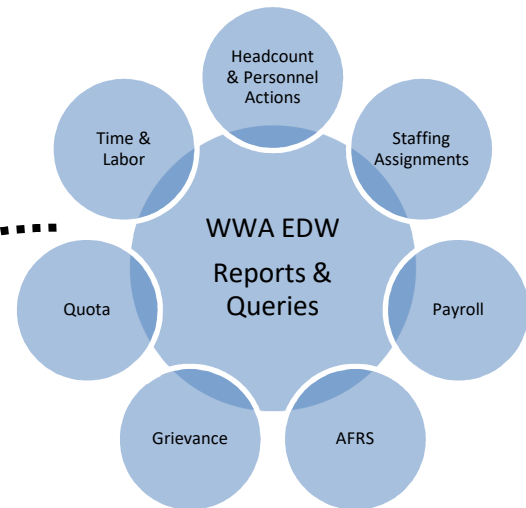
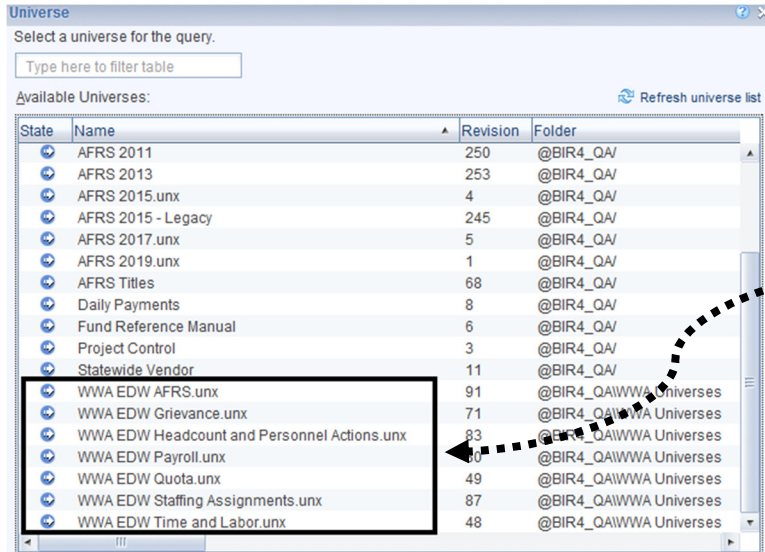
## More about Universes

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 ad hoc reporting experience. Users will determine which universe meets their business need when performing ad hoc query analysis.

WWA universes are designed so that agency users can create ad hoc queries using common terms and sets of data to get answers to their workforce-related questions. While this is an important benefit, it requires a balance between understanding common data structures and query features along with agency workforce information.

### WWA Universe Inventory

All Universes include employee, position, and organizational dimension attributes, as well as dates, measures and pre-built filters dimensions.



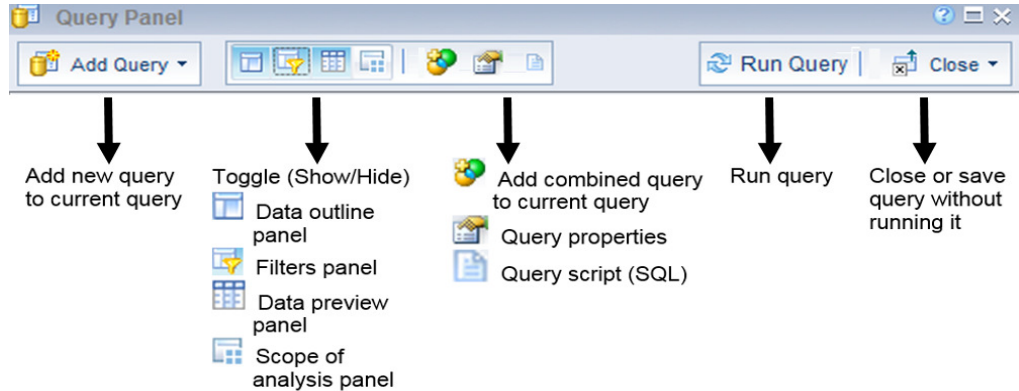
Universe Name	Granularity	Description
AFRS (Agency Financial Reporting System)	Pay Period	Includes appropriation index detail, general ledger, master account coding, organizational index detail, and wage type dimensions. ✓ Facts and measures for hours and amount using AFRS time dimension.
Grievance	Daily	Includes article info, contacts, grievance info and tracking dimensions. ✓ Facts and measures for number of grievances and collective bargaining articles, with headcount measures.
Headcount and Personnel Actions	Daily	Includes military and education dimensions, as well as actions. ✓ Facts and measures for headcount, age, service, salary, and personnel actions.
Payroll	Monthly	Includes wage type dimension. ✓ Facts and measures for dollar amount, hours, and headcount measures.
Quota	Monthly	Includes quota type dimension. ✓ Facts and measures for quota (leave) balances, accruals, usage, donations, payouts, and adjustments with headcount measures. ✓ HRMS data only; does not include leave balances from other shadow systems.
Staffing Assignments	Monthly	Includes job dimension. ✓ Facts and measures for position status of occupied, unoccupied, and vacant, with some headcount measures.
Time and Labor	Daily	Includes time type dimension. ✓ Facts and measures for planned and actual time with headcount measures.

- ✓ Take time to plan and design your query based on a specific business scenario. Depending on your data requirements, you may need to create separate queries to get the information.
- ✓ Ad hoc query tools include multiple options and advanced features that may take some extra time for you to learn. There are several SAP Business Objects Web Intelligence reference guides and tutorials available online (search [www.SAP.com](http://www.SAP.com) or [www.youtube.com](http://www.youtube.com)).

## Query Panel

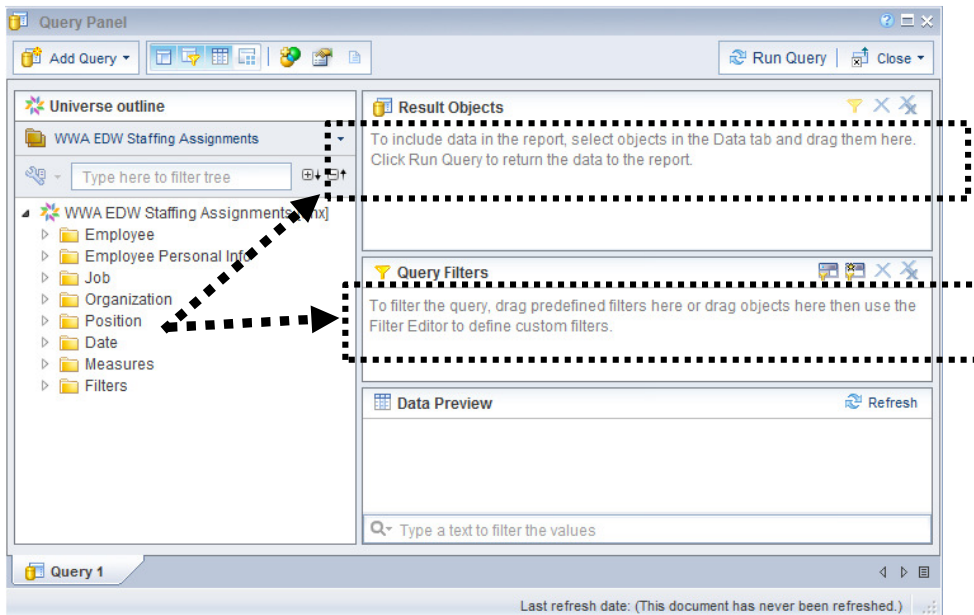
Ad hoc queries are created and modified using the WebI Query Panel.

### WebI Query Panel - Sample Toolbar for New Ad Hoc Query



Users select report elements for the Result Objects and Query Filters from the universe.

✓ Data design Job Aids are available for each universe.



## Query Filters

Filters narrow your query results to focus on specific data elements. They also help to prevent long run times and system timeouts.

✓ Filters contain three basic components.

Component	Description	Example
Object	Value that you want to filter	Business Area Code
Operator	How you want to filter the value	Equal to
Operand	What you want to filter the value with	Specific business area code for an agency

### Custom Filters

When you add an object to the Query Filters area, WebI will use a combination of Object > Operator > Operand to create a custom filter for your query.

- ✓ Default filter settings are 'In list' and 'Constant'. This allows you to quickly input values for your filter.
- ✓ You can modify the filter after it is created.

➔ Use the options in the dropdown to modify how you want to filter the value.

**Query Filters**

Business Area Code In list

In this example, we have a query filter for Business Area Code > Equal to > 1630.

**Query Filters**

Business Area Code Equal to 1630

➔ Use the options in the dropdown to define how you will input the filter value.

**Query Filters**

Business Area Code In list

In this example, we have a query filter for Business Area Code > In list > 1050;1630.

- Constant
- Value(s) from list
- Prompt
- Object from this query
- Result from another query

**Query Filters**

Business Area Code In list 1050;1630

- ✓ Multiple values must be separated by semi-colons (;).

### Pre-defined Filters

Pre-defined filters are customized for WWA users based on current business needs. Agency users cannot modify a pre-defined filter.

- ✓ Pre-defined filters are required when using certain data fields and/or measures. For example, use the “**Actions - Exclude**” pre-defined filter with Headcount measures in the Headcount and Personnel Actions universe. This filter excludes employee action records so that you get more accurate employee counts.
- ✓ The Job Aid for Pre-defined Filters provides descriptions of all pre-defined filters available in each universe, as well as the restrictions built in to them.

- Filters
  - Date Filters
    - Last Calendar Day of Month Values
    - Last Calendar Day of Quarter Values
    - Last Calendar Day of Year Values
    - Last Day of Fiscal Month Values
    - Last Day of Fiscal Quarter Values
    - Last Day of Fiscal Year Values
  - Actions - Exclude
  - Branches - Executive (EE)
  - Branches - Executive (POS)
  - Branches - Judicial (EE)
  - Branches - Judicial (POS)
  - Branches - Legislative (EE)
  - Branches - Legislative (POS)

### Quick Filters

Quick Filters can be created by selecting an object in the Result Objects. When you create a quick filter for your query, WebI will use a default Operator of 'equal to' for a single value or a list of values.

- ✓ Use the Shift-key or Ctrl-key to select multiple values from the pick-list.
- ✓ You can modify the quick filter after it is created.

