ALDER Report Development Tool Enhancements

Introduction

The ALDER reporting solution is built upon the SAP Business Intelligence platform and uses the SAP Web Intelligence software as the tool that allow users to build, modify and execute reports in ALDER. Over the past several months, the data warehouse team has been analyzing and testing a version upgrade to the SAP Business Intelligence platform and the SAP Web Intelligence tool. This new version corrects many know issues with the tool and significantly improves the responsiveness of the tool, particularly during the execution of reports and the query prompt dialogs. The new version of the tool allow includes several changes to the tool's user interface, the iconology used by the tool and location of various controls and options used for report development and execution. This document provides a review of the changes and improvements that are part of the upgraded tool. The document groups these changes into three categories;

- User Interface changes,
- Query Panel changes, and
- Report execution changes

User Interface

There are several visual changes to general user interface and iconology used and available for report development and execution. The vast majority of these changes are simply refinements to the icons used and the layout of the user interface controls.

Navigation Dialog

The navigation dialog is in the left-hand border of the user interface and provides options for the various views of the report that the user interacts with to build and execute the report.

Prior to update

The capture shows the "views" available prior to the update. From top left down the views include;

- the document summary
- the navigation map
- input control
- user prompt input
- available objects
- document structure and filters

After update

The capture shows the "views" available after the update. The existing views are maintained but two new views are added;

- the document summary
- the navigation map
- input control
- user prompt input
- available objects
- document structure and filters
- shared elements (new)
- comments (new)

These new views provide the ability to create variables that are sharable across a user's reports and the ability to create comments about a specific report that are stored with the report definition.
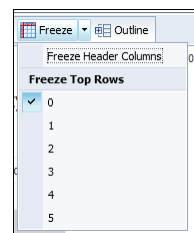
Freeze Columns / Rows

The tool provides the ability to freeze either header columns (vertical tables) or header rows (horizontal tables). The freeze tab is grey out outline a column(s) or row(s) are selected.

Vertical Table
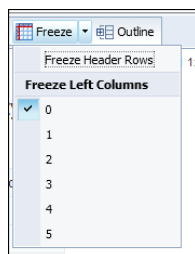
Horizontal Table

Export Report Dialog

The icon for exporting a report/document interactively remains in its current location, but there is a new dialog with addition information that is now displayed when exporting a report/document (see capture

below). The dialog allows the user with select whether the report is to be export or the only the raw data is to be exported.   The dialog also allows individual reports to be selected.
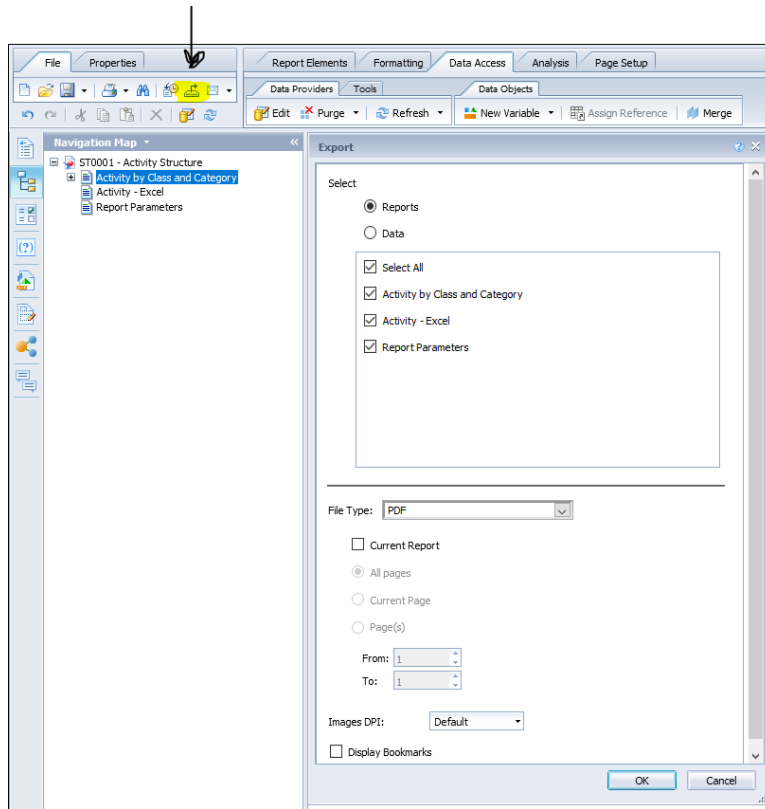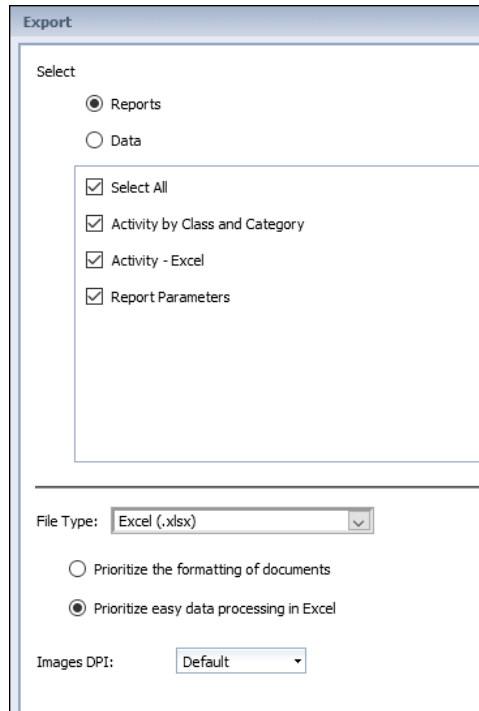

Export to Excel

For export to MS Excel the dialog includes new options that allow the user to select whether the export should prioritize the formatting of the report or prioritize for easy processing in Excel. The

dialog also clarifies the version of Excel that export targets allowing the user to select export to Excel .xlsx format or Excel .xls format.


Export to PDF

For export to Portable Document Format (PDF) the dialog allows the selection of all pages, the current page of range of pages and allows the selection of the DPI (dots per inch) that will be used in export formatting and whether or not the export will include bookmarks.
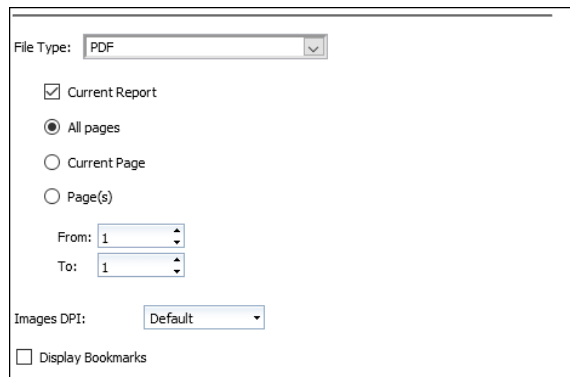
Export to CSV

For raw data export, the dialog provides the ability to select all data provider or to select individual data providers. The text qualifier and column delimiter can also be selected.
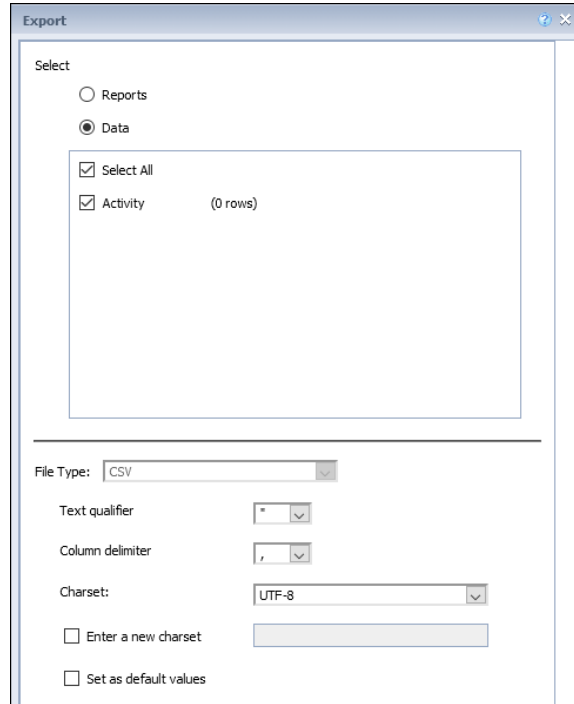

Report Printing

The icon for report printing remains in the same location under the file tab but now displays a new dialog allowing the user to specify a number of printing options.   The print range allows the selection of which report(s) will be printed and selection of which pages will be printed.   The page size and orientation can be selected as well as the top, bottom, left and right margins. The scaling dialog allow reports to be scale to fit various page sizes.
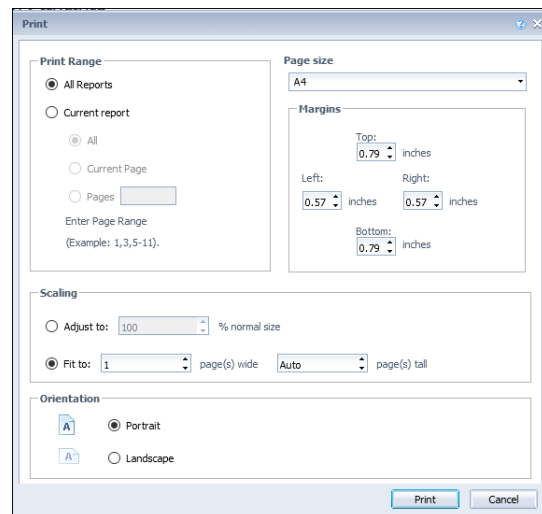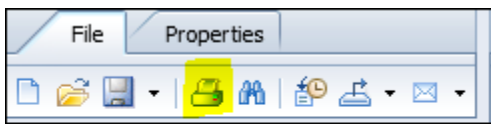
Charting

The "other" tab has been removed from the ribbon, all of the charts are available under the chart tab.
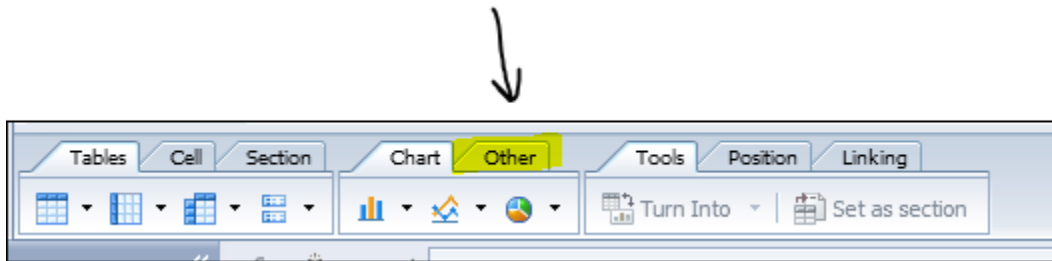
The chart tab of the ribbon now provides a range of new chart types including geo-mapping of data.
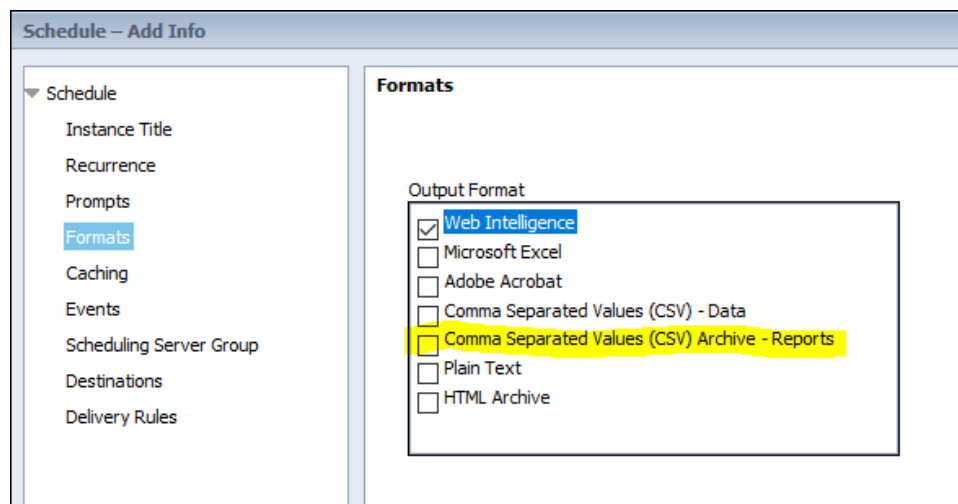

Scheduling Reports

There are several changes and new options available in the report scheduling dialogs.

Formats

The available output format for a schedule report now includes two options for CSV export. The CSV – Data exports the raw data from the data provider. The CSV Archive – Reports format exports the data as displayed on the report (i.e. column order).


Scheduling Server Group

The additional information tab now provides the ability to schedule reports into specific queues. ALDER provides a "high priority queue" that has in the past provided partial ability to allow reports to target a specific queue. In its current form the high priority queue gives the reports in the

queue a 10 minute "head start" over reports in the normal priority queue. The update provides enhanced ability to control scheduled report execution. The data warehouse team will be implementing additions queues once the update is moved to the production ALDER environment.
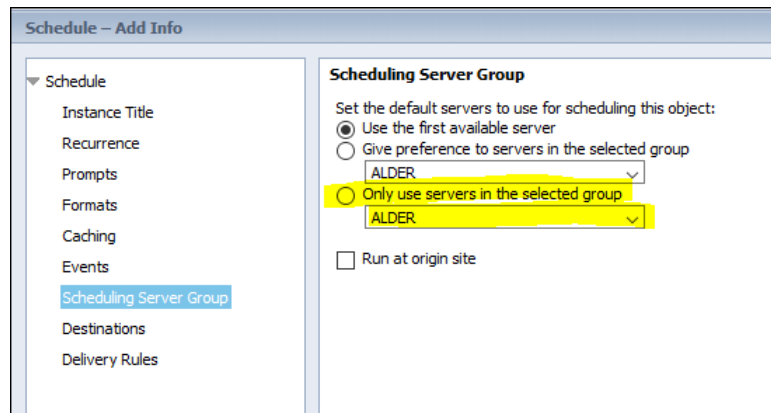
Destinations

The destinations tab provides a new Secure File Transport Protocol (SFTP) destination. This will allow users to schedule reports to their own SFTP site locations.
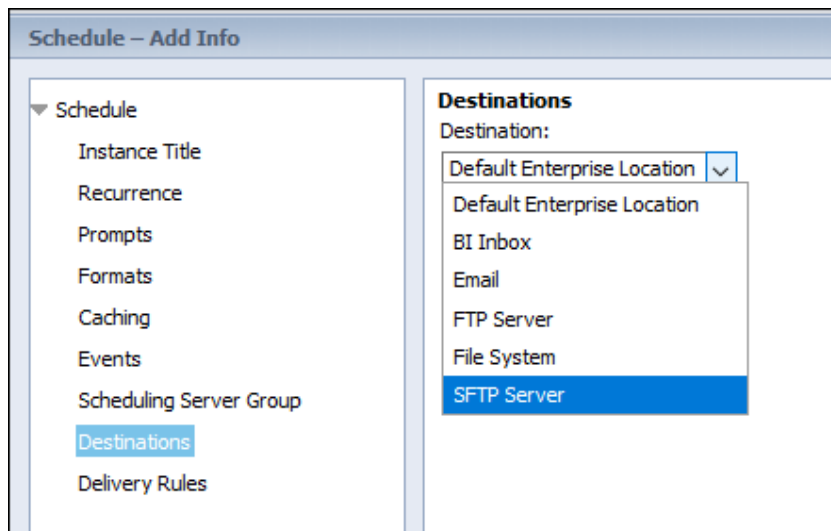
Delivery Rules

The delivery rules tab is a new tab in the scheduling dialog and provides the user the ability to control delivery of the report(s) so that the report is only delivered to recipients when the report refreshes successfully and completely, and/or when the report contains data. This new capability

will allow users scheduling reports to prevent "empty" or "timed-out" reports from being sent to recipients.
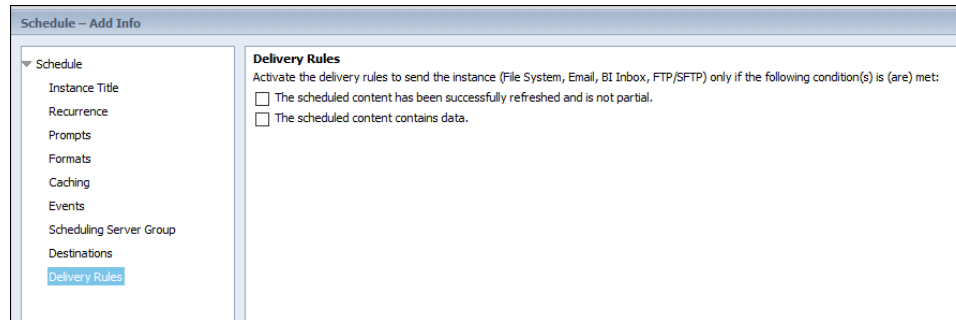
Query Panel

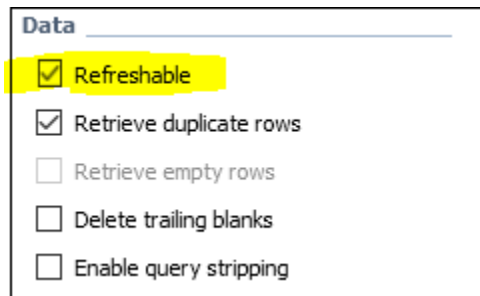## Query Properties

The query properties dialog has a new option labeled "Refreshable" which is enabled by default. This allows/prevents other users from refreshing the data in the report. This option **should not** be "unchecked".


Sub Query

The query filters dialog has a new icon for inserting a sub-query into the main query. The first capture below shows the location of the new sub-query icon.
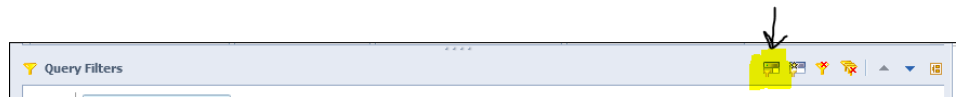
When the sub-query button is used a new query block will be added to the query filter panel. This is a query within the main query. The sub-query capability is useful when a report needs to determine a list of results (e.g., a list of document ID) that need to be reported, but the filtered would ordinarily filter out results. For example, consider a report that needs to report all posting lines for documents with any posting to a particular object code. Without the sub-query the query filtering to determine which documents to include (i.e. Object Code = xxxx) would also result in excluding rows that did not include the object. The sub-query needs to contain the filtering to determine the list of documents which is then used in the primary query to limit the results.

Note: Sub-Query are a somewhat advanced query filtering topic. The data warehouse team will be including instruction in their use in an upcoming workshop.   If any report developer believes they have a report that needs a sub-query prior to the workshop, please contact the data warehouse for assistance.
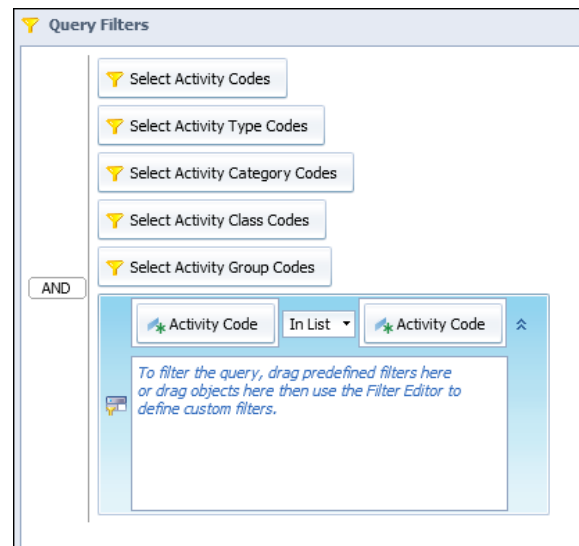
Formatting Rules

The update provides enhanced table and cell formatting, including conditional reporting that is row sensitive. For example, consider a report that has a posting amount and the report developer wants to highlight certain conditions such as amount greater than 1,000,000.00 or amounts posting to a specific object. Formatting rules all conditions to be defined under which the display of the information will be different than the default (e.g. bold, increased font size, different color, etc).
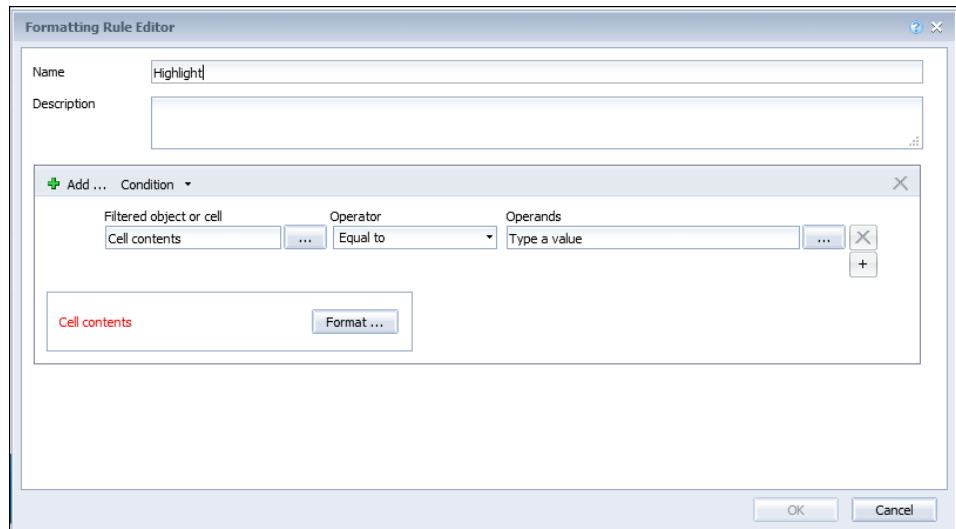
Below is an example using a formatting rule to display information in bold red whenever the activity code is 1301. This capability allows report developers to easily highlight information and draw the attention of the report consumer to various defined conditions.

Activity Department: 01 - Office of the Governor

Activity Category: 1300 - Elections

Activity Class: 1300 - Temp

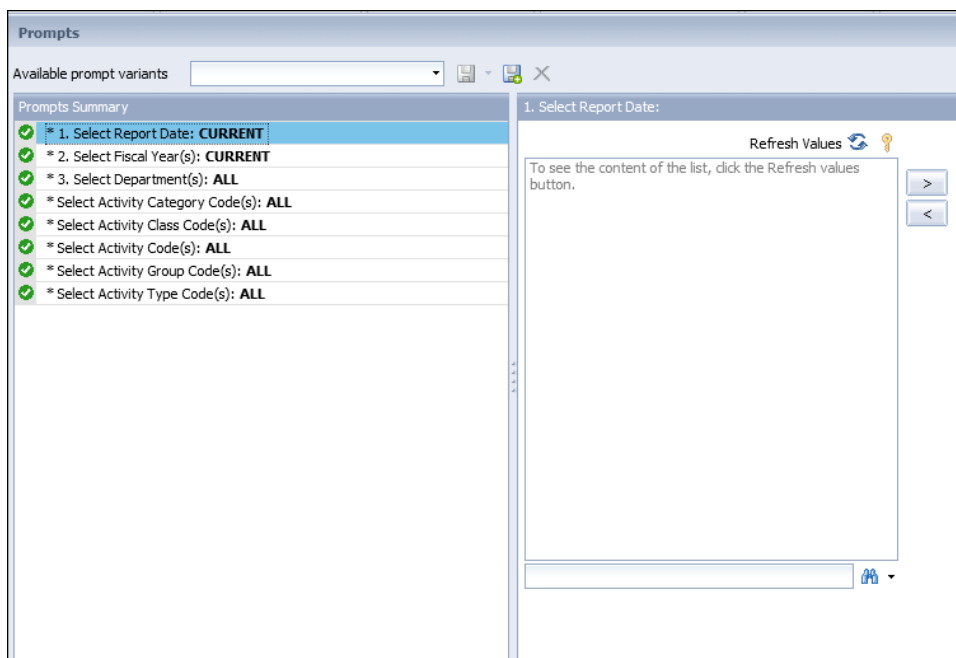| Activity Fiscal Year	Activity (FQ)	Activity Code	Activity Name	Reimbursement Eligible	FACP Eligible
2021	2021-01-1301	1301	Primary & General Elections 50/50 Split Exp	Eligible	Yes
2021	2021-01-1303	1303	Annual List Maintenance Mailing	Eligible	Yes

Report Execution

This section details enhancements to the Web Intelligence tool that effect the execution of reports.

The upgraded version of the Web Intelligence tool significantly improves the performance of the display and refresh of the "Lists of Values" (LOV) associated with query prompts.

LOV Behavior

The enhancements effect the default behavior of some of the LOV's. Prior to the update most LOV's automatically perform a refresh and display a complete list of values when prompt "has focus" (i.e. is selected and highlighted [see capture below]). With the update this behavior is changed and the initial refresh of the LOV is not perform for certain prompts and LOV's. For example, the LOV for the prompt Select Report Date is one of the LOV's that does not perform an automatic refresh of the list. In order to refresh the LOV the refresh value button located in center box of the dialog is used.

Prompts

Available prompt variants

Prompts Summary | 1. Select Report Date:

- ✓ * 1. Select Report Date: **CURRENT**
- ✓ * 2. Select Fiscal Year(s): **CURRENT**
- ✓ * 3. Select Department(s): **ALL**
- ✓ * Select Activity Category Code(s): **ALL**
- ✓ * Select Activity Class Code(s): **ALL**
- ✓ * Select Activity Code(s): **ALL**
- ✓ * Select Activity Group Code(s): **ALL**
- ✓ * Select Activity Type Code(s): **ALL**

Refresh Values

To see the content of the list, click the Refresh values button.

LOV Performance

The refresh performance of all LOV's is significantly improved with the update. In testing all of the LOVs were refreshed and display in under 2 seconds. Additionally, the time interval between starting the query refresh and the prompt dialog being display is significantly reduce, even for reports with high number of query prompts.