ALDER REPORT DEVELOPER USER GUIDE

OCTOBER 24, 2018

STATE OF ALASKA

Table of Contents

Introduction

The ALDER Report Developer User Guide provides conceptual and detail information to aid users in building accurate, optimal reports.

ALDER Best Report Practices

Tying ALDER reports to IRIS

It is extremely easy to produce an ALDER report with information that is not accurate. Whenever possible, ALDER reports should be tied to IRIS for report validity. This can be done in a variety of ways. One method is to tie summary information to the IRIS budget screens. The example below is a tab in a report that documents that the report has been verified.

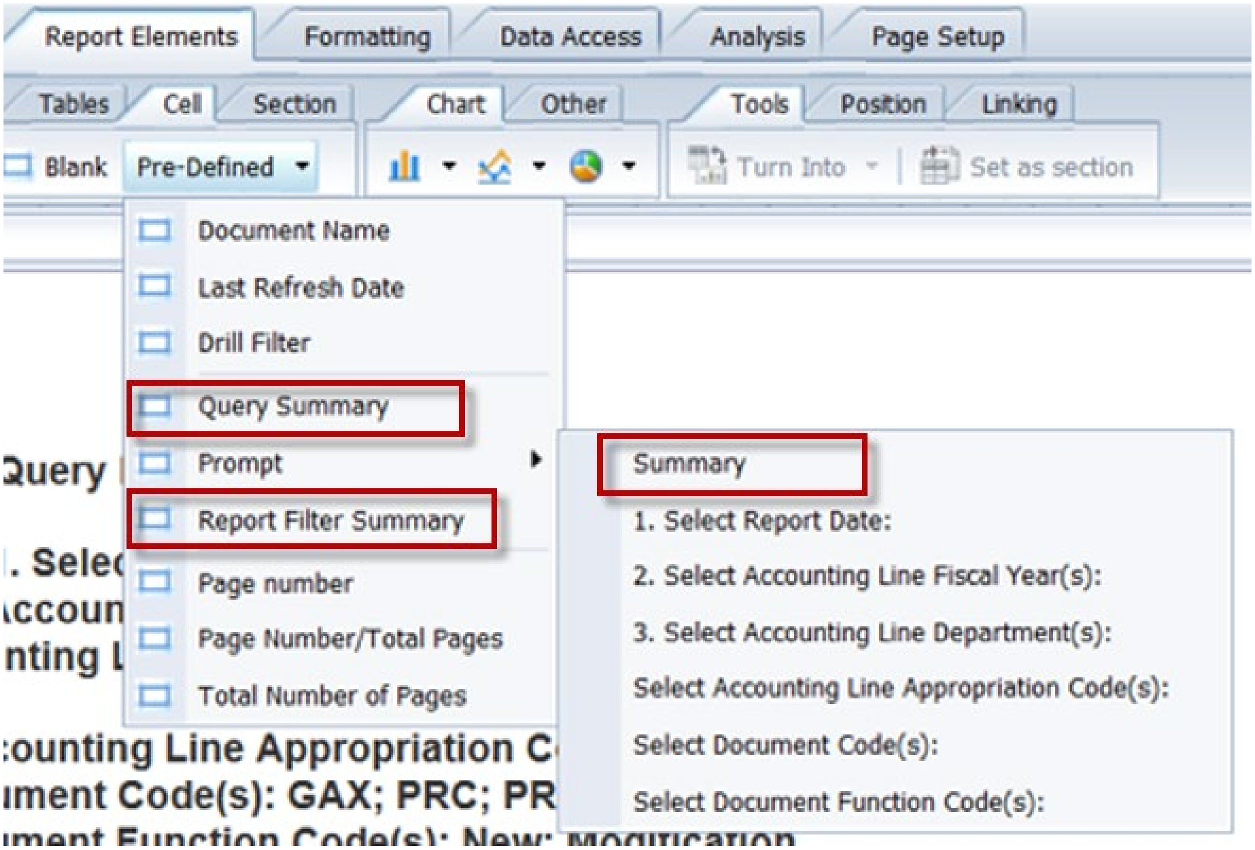
Ties to IRIS BQ72LV3 by BFY

PL Budget Fiscal Year	Appropriatio	Budgetary Expenditures
2014	2513HNS35	66,960.87
2015	2515OTZCB	0.00
2016	2513HNS35	0.00
2016	2515OTZCB	0.00
2017	2513HNS35	0.00
2017	2515OTZCB	0.00
2018	2513HNS35	0.00
2018	2515OTZCB	0.00
	Sum:	**66,960.87**

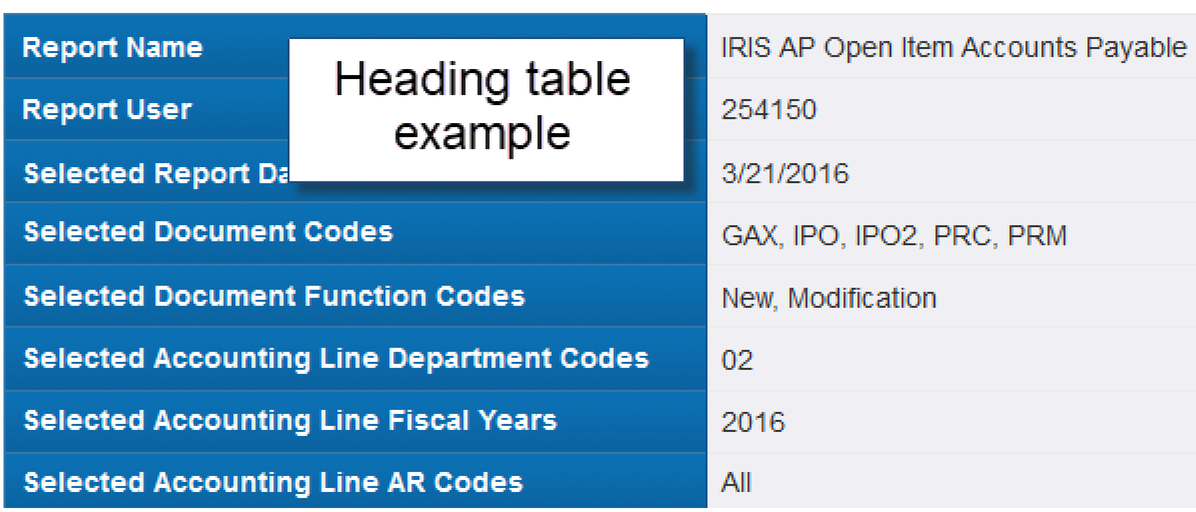
Cost accounting reports can be tied to the IRIS REIMHIST table. Fixed asset reports can be tied to the FAHIST or FARHDR table.

Report Parameters

As a standard practice, all reports should include a Report Parameters tab. The tab should include the pre-defined cells of Prompt Summary, Report Filter Summary and Query Summary.



These fields are more inclusive than the header used in many documents. When this practice is in place, the traditional "heading" table is not necessary on a report.



Report Name	IRIS AP Open Item Accounts Payable
Report User	254150
Selected Report Da	3/21/2016
Selected Document Codes	GAX, IPO, IPO2, PRC, PRM
Selected Document Function Codes	New, Modification
Selected Accounting Line Department Codes	02
Selected Accounting Line Fiscal Years	2016
Selected Accounting Line AR Codes	All

Do Not Exclude Document Type AD

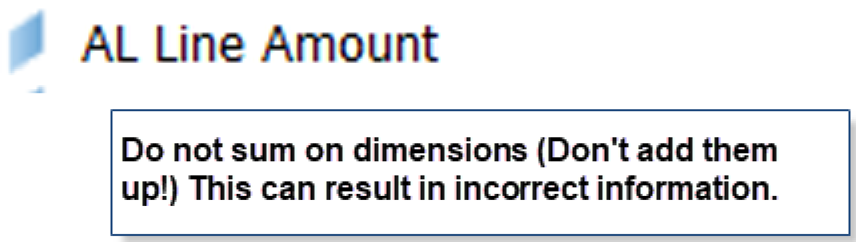
As a best practice, it is advised to **<u>not</u>** exclude document type AD, either in the query filter or by filtering in the report.

Document Type	Document Code	Document Name
AD	AD	Automated Disbursement
AD	CAD	Confidential Warrant Automated Disbursement
AD	CEFT	Confidential Warrant Electronic Funds Transfer
AD	EFT	Electronic Funds Transfer

The IRIS disbursement job includes processes that determine adjustments to be applied to the expenditure prior to disbursement, this includes discounts and retainage. This results in an adjustment to existing accounting lines on the document and the creation of additional posing lines.

By excluding document type AD, these adjustments are not captured, leading to incorrect reports.

Summing Dimensions

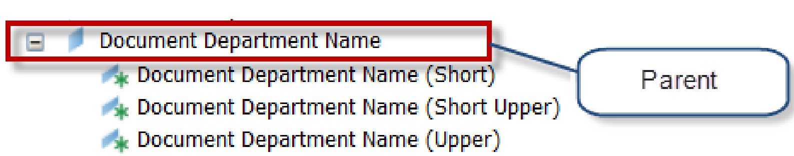


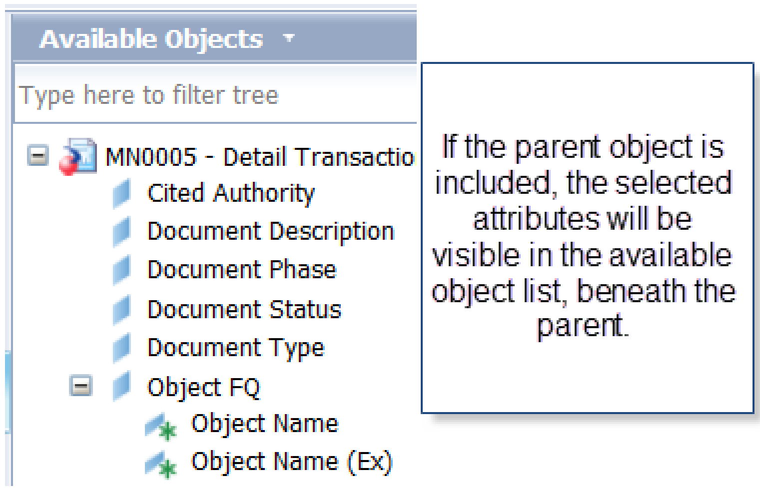
Measures, Dimensions, Attributes and Filters

Measure = objects that data is calculated upon, pre-defined calculations. Measures should not be used in a query filter. The measure groups and aggregates information. *Measures are compatible with dimensions at the <u>same or greater level of summary.</u>*

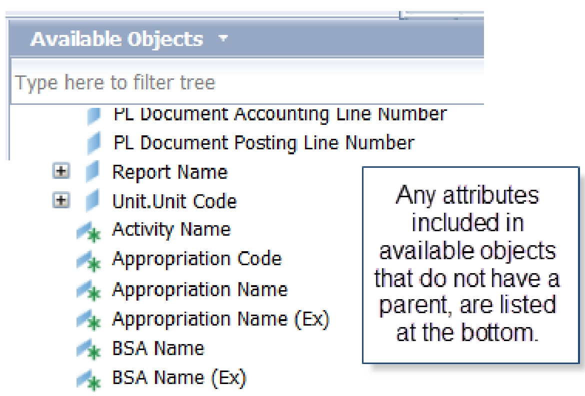
Dimension = objects that data is aggregated by. Can be used in query filter.

Attribute = similar to dimensions, has a "parent" dimension. <u>Using an attribute speeds up the visible performance of the report.</u>





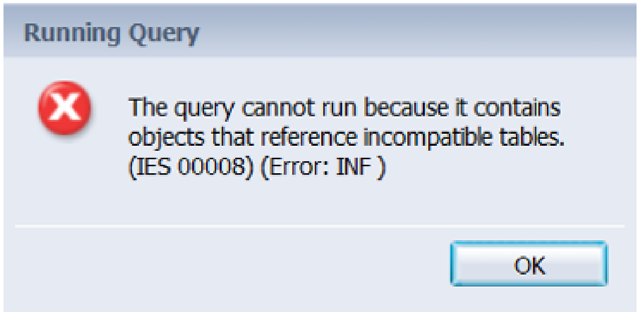
Any attributes included in available objects that do not have a parent, are listed at the bottom.



There are two types of filters, predefined and user defined. Predefined filters have been defined by programers, that definition can be found by hovering over the filter in the query panel. For example, the filter Documents Most Recent Final Phase is defined as "Selects most recent document version in phase – final/final (historical)". User defined filters are those which the user defines when running the query, these filters have "Select" in the title, Select Department Codes .

Dimension and Measure Compatibility

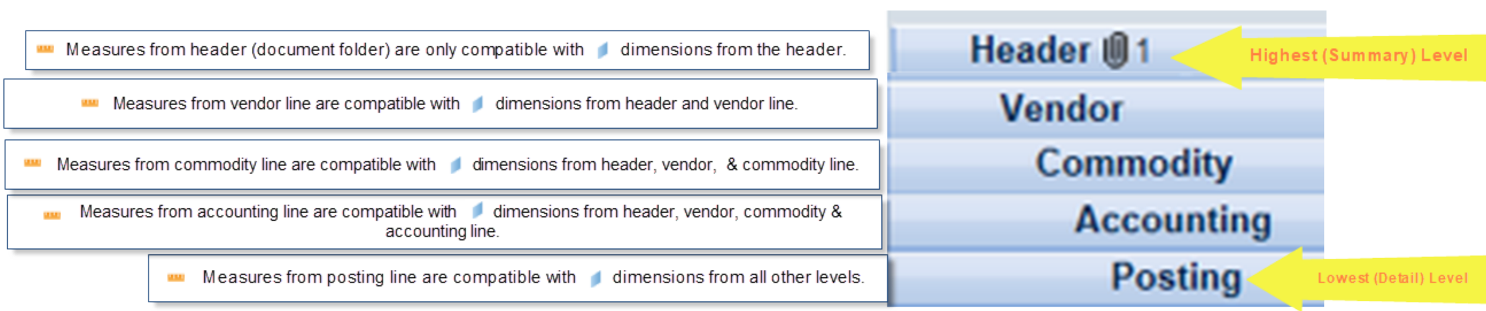
If a report is built that contains incompatible dimensions and measures, a message dialog “Cannot run – Query contains incompatible objects” will appear.



The compatibility functionality in ALDER is specifically to protect users from developing reports that would include incorrect information. This is not a report error, it is a notice that there is a problem with the report elements.

The Header (document folder) is the highest level. Only header measures are compatible with header dimensions. Vendor measures are compatible with vendor and header dimensions. Posting line measures are compatible with dimensions from ANY level.

<u>The dimension must be used from a level equal or higher than the measures being used.</u>



Measures

Dimensions are ALWAYS trying to summarize, so there is a correlation between the dimension and the measure. Dimensions control the level at which measures report.

For example, using the Posting Amount measure with one appropriation code, the posting amount is summarized at the AR level.

Appropriation Code	Posting Amount
059021402	12,338,583.00

When Document FQ is added to the table, the posting lines are summarized for each document, which frequently means the amount reported is zero.

Appropriation Code	Document FQ	Posting Amount
059021402	EFT-02-EF170042004-1	0.00
059021402	GAE-05-CVEC0540038-1	0.00
059021402	GAE-05-CVEC0540038-2	0.00
059021402	GAE-05-CVEC0540038-3	0.00
059021402	GAE-05-CVET0540038-1	0.00
059021402	GAE-05-CVET0540038-2	0.00
059021402	GAX-05-170053570-1	0.00
059021402	JVA-05-CVEX_05_1193_001-1	12,338,583.00

When the Document Posting Line Number dimension is added to the report, the information continues to be summarized.

Appropriation Code	Document FQ	Document Posting Line Number	Posting Amount
059021402	EFT-02-EF170042004-1	1	0.00
059021402	EFT-02-EF170042004-1	2	0.00
059021402	EFT-02-EF170042004-1	3	0.00
059021402	GAE-05-CVEC0540038-1	1	0.00
059021402	GAE-05-CVEC0540038-2	1	0.00
059021402	GAE-05-CVEC0540038-2	2	0.00
059021402	GAE-05-CVEC0540038-3	1	0.00
059021402	GAE-05-CVEC0540038-3	2	0.00
059021402	GAE-05-CVET0540038-1	1	0.00
059021402	GAE-05-CVET0540038-2	1	0.00
059021402	GAX-05-170053570-1	1	0.00
059021402	GAX-05-170053570-1	2	0.00
059021402	JVA-05-CVEX_05_1193_001-1	1	12,338,583.00

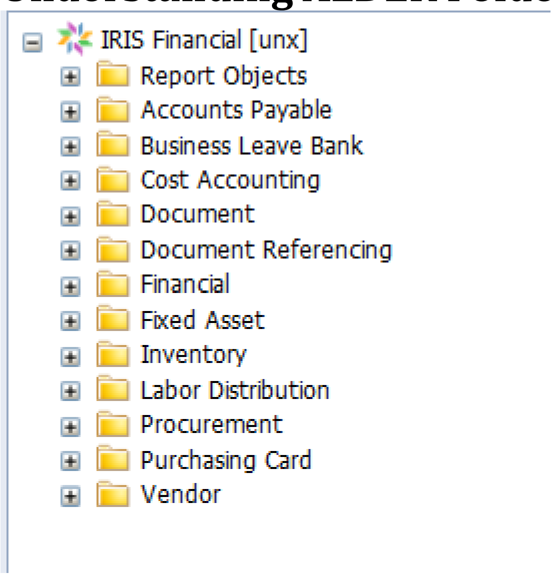
This is because a posting line naturally sums to zero,

Res Encumbrance	$1,451,598.00	
Encumbrance		$1,451,598.00

To get to the true posting amount, another element must be added, posting code and account code both work.

Appropriation Code	Document FQ	Document Posting Line Number	Posting Code Name (Ex)	Posting Amount
059021402	EFT-02-EF170042004-1	1	D001 - Disbursement Payable	1,451,598.00
059021402	EFT-02-EF170042004-1	1	D011 - External Accrued Expenditure / Expense	-1,451,598.00
059021402	EFT-02-EF170042004-1	2	D017 - Warrant Clearing Cash	1,451,598.00
059021402	EFT-02-EF170042004-1	2	DY18 - EFT Clearing Payable	-1,451,598.00
059021402	EFT-02-EF170042004-1	3	A001 - Cash	-1,451,598.00
059021402	EFT-02-EF170042004-1	3	D014 - External Cash Expenditure/Expense	1,451,598.00
059021402	GAE-05-CVEC0540038-1	1	P005 - Encumbrance	2,177,399.00
059021402	GAE-05-CVEC0540038-1	1	P006 - Reserve for Encumbrance	-2,177,399.00
059021402	GAE-05-CVEC0540038-2	1	P005 - Encumbrance	0.00
059021402	GAE-05-CVEC0540038-2	1	P006 - Reserve for Encumbrance	0.00
059021402	GAE-05-CVEC0540038-2	2	P005 - Encumbrance	2,177,399.00
059021402	GAE-05-CVEC0540038-2	2	P006 - Reserve for Encumbrance	-2,177,399.00
059021402	GAE-05-CVEC0540038-3	1	P005 - Encumbrance	0.00
059021402	GAE-05-CVEC0540038-3	1	P006 - Reserve for Encumbrance	0.00
059021402	GAE-05-CVEC0540038-3	2	P005 - Encumbrance	2,177,399.00
059021402	GAE-05-CVEC0540038-3	2	P006 - Reserve for Encumbrance	-2,177,399.00

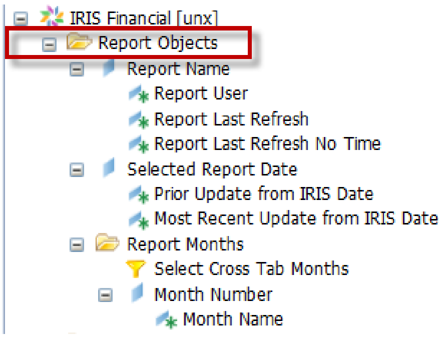
Understanding ALDER Folders



The elements available in ALDER are arranged in group folders. It is important to understand the interaction and limitations of using elements from different folders.

 Last Updated: 10/24/2018

Report Objects

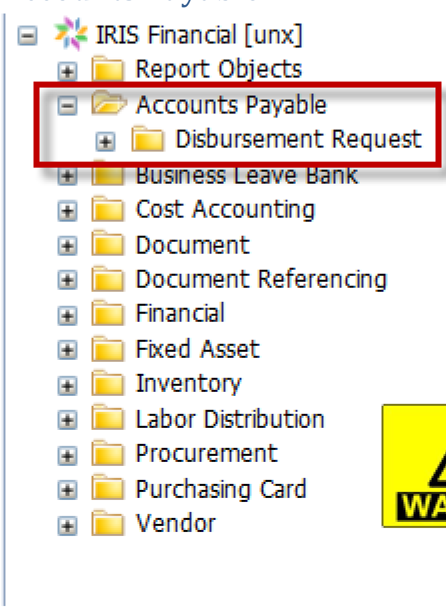


These elements are frequently used in reports, they are placed here for convenience. Report Name, Report User and Selected Report Date are standard in the template.

There was a need by users to have "Prior Update from IRIS Date" and "Most Recent Update from IRIS Date". Updates from IRIS do not run daily for FIN, updates occur every night except Saturday.

The Report Months folder is designed to run in its own query, for use on a fixed table. This will populate columns, even when there is no data. The report Crosstab by Month, in Enterprise>IRIS Workshops folder, is an example using this query filter.

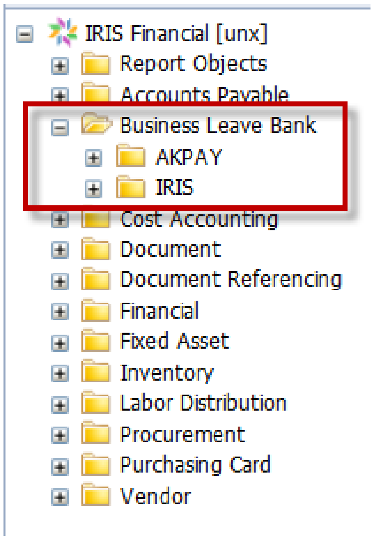
Accounts Payable



This folder maps to <u>tables</u> in IRIS. While the IRIS tables are populated with IRIS documents, this folder is specifically for the tables, not the IRIS documents.

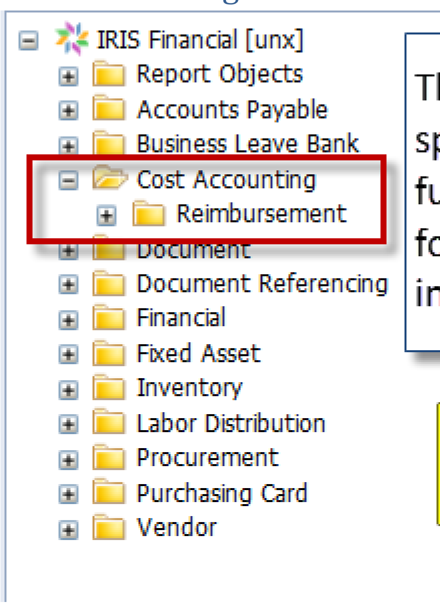
DO NOT mix elements from Accounts Payable folder with Financial\Posting\Measures.

Business Leave Bank



The Business Leave Bank folder contains elements specific to leave bank reports for unions. The AKPAY folder is for the period when AKPAY interfaced with IRIS (7/1/2015 - 1/17/2017).

Cost Accounting



The Cost Accounting folder is specific to the IRIS reimbursement functionality. Elements from this folder can mimic the REIMHIST table in IRIS.

DO NOT mix elements from Cost Accounting folder with elements from other folders.

- CA Disbursement Document
  - CA Disbursement Accounting Line
  - CA Disbursement Posting Line
- CA Expenditure Document
  - CA Expenditure Accounting Line
  - CA Expenditure Posting Line
- CA Receipt Document
  - CA Receipt Header
  - CA Receipt Accounting Line
  - CA Receipt Posting Line
- CA Receivable Document
  - CA Receivable Accounting Line
  - CA Receivable Posting Line

Within the Cost Accounting folder, there are four sub folders. Disbursement documents are expenditure request documents (GAX, PRC, TAPRC, ect). Expenditure documents are where the cash posts (AD, EFT, PREXP, CH8, PRCC, ect). Receipt documents are the posting of the cash receipt, the CR2. Receivable documents post the revenue, RE or IET.

Document Folder:

- IRIS Financial [unx]
  - Report Objects
  - Accounts Payable
  - Business Leave Bank
  - Cost Accounting
  - Document
    - Select Document Application Create Date Range
    - Select Document Category Codes
    - Select Document Codes
    - Select Document Codes Exclude
    - Select Document Create User ID
    - Select Document Create Date Range
    - Select Document Current System Date Range
    - Select Document Department Codes
    - Select Document Effective Date Range
    - Select Document Fiscal Years
    - Select Document Function Codes
    - Select Document FQ
    - Select Document ID
    - Select Document Initial Submit User ID
    - Select Document Last Submit User ID
    - Select Document Last Update Date Range
    - Select Document Last Update User ID
    - Select Document Period
    - Select Document Phase Changed Date Range
    - Select Document Phase Codes
    - Select Document Record Date Range
    - Select Document Status Codes
    - Select Document Type Codes
    - Select Document Vendor Codes
    - Budget Documents
    - Closed Documents
    - Documents Created Today
    - Documents Created Today (Application Create Date)
    - Documents Created since last update

The Document Folder is very large. The elements in the folder, and the data they retrieve is strictly from IRIS FIN. Elements for IRIS HRM ARE NOT included in this folder.

The first section contains a long list of user defined and pre-defined filters.

- Cross Document Component Filters
  - Documents with Accounting Lines
  - Documents with Commodity Lines
  - Documents with Posting Lines
  - Documents with Vendor Lines
  - Documents with Posting Lines with Assets
  - Documents with Posting Lines with only Assets
  - Documents with Posting Lines with Liabilities
- Relative Date Filters
  - Created Current Month
  - Created Current Calendar Year
  - Created Past 30 Days
  - Created Past 31 to 60 Days
  - Created Past 61 to 90 Days
  - Last Update Current Day
  - Last Update Current Month
  - Last Update Current Calendar Year
  - Recorded Current Month
  - Recorded Current Calendar Year
  - Submitted Current Calendar Year
  - Submitted Current Month

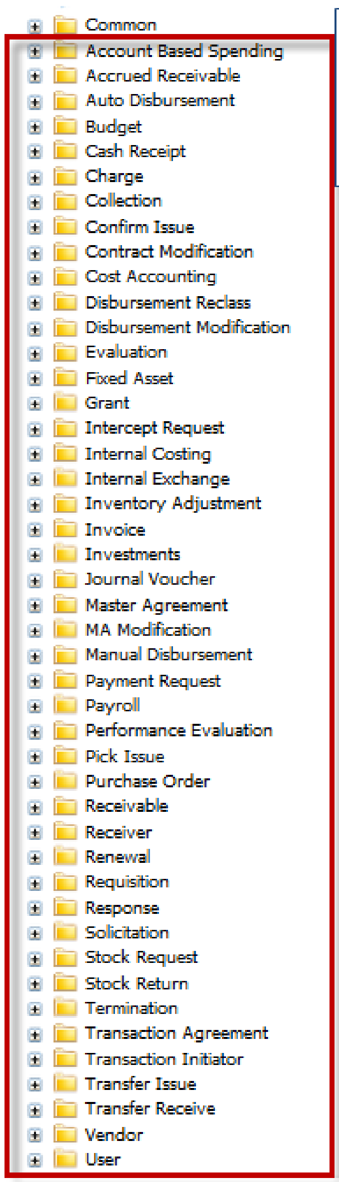
Cross document component filters allows use of measures in the header without compatibility problems. These filters were created to allow people to pull information from documents in a summary manner. For example, the filter Documents with Posting Lines with Assets will filter to only documents that have posting lines with assets, but all of the posting lines will be on the report, rather than only asset posting lines.

Relative date filters are filters with specific relative dates. Hovering over the query filter can provide a definition.

- Document FQ
- Document (FQ Unit)
- Document (No Version)
- Document Code
- Document Code Name
- Document Code Name (Ex)
- Document Department Code
- Document Department Name
- Document Department Name (Ex)
- Document Key
- Document Id
- Document Version Number
- Document Action Code
- Document Active Flag
- Document Category
- Document Category Name
- Document Category Name (Ex)
- Document Create Date
- Document Create User Id
- Document Current System Date
- Document Description
- Document Function
- Document Initial Submit Date
- Document Initial Submit User Id
- Document Initial Submit User Name
- Document Initial Submit User Name (Last, First)
- Document Interface Source
- Document Interface Source (Payroll)
- Document Interface Flag
- Document Last Approval Date
- Document Last Approval Level
- Document Last Approval Action Status Before
- Document Last Approval Action Status After
- Document Last Approval User Name
- Document Last Approval User ID
- Document Last Submit Date
- Document Last Submit User Id

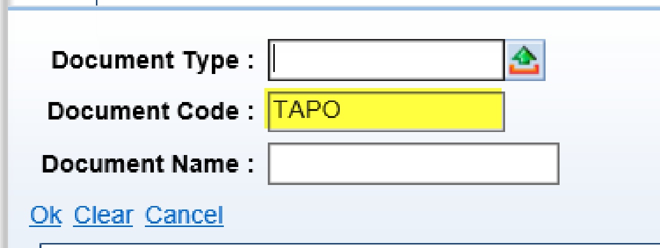
There is a long list of elements universally related to documents. Each of these begins with "Document".

Every element in this folder that isn't accounting line (AL), vendor line (VL) or commodity line (CL) is from the document header.

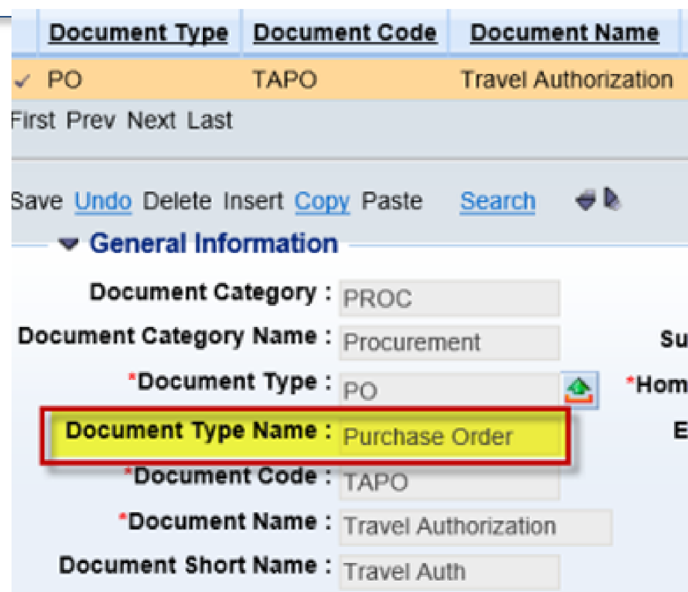


The remainder of sub folders in the Document folder are elements that are not common across documents, there are folders related to each document type.

To determine a document type, in IRIS, jump to table **DCTRL,** use the search feature to locate the document type assigned to the document a report is being built upon. For example, searching for document code TAPO.



The result shows the TAPO as a Purchase Order document type. Any document report should use the Document>Purchse Order folder for items not in the Document>Common folder.



Last Updated: 10/24/2018

- Budget
- Fixed Asset
- Inventory Adjustment
- Vendor
- User

In the Document folder, the Budget, Fixed Asset, Inventory Adjustment, Vendor and User sub-folders are specific to **documents** and do not report table information.

In IRIS, individual documents populate tables. However, some tables can be directly populated, so a document based report would not capture all information.

For example, this folder includes budget document BGE70 information, but does not provide BQ70LV4 information. A budget report with balances would use elements from Financial \budget folder.

Document Referencing

- Document Referencing
  - Backward References
  - Backward References (Preserve)
  - Forward References
  - Forward References (Preserve)
  - Direct Parents
  - Direct Parents (Preserve)
  - Direct Children
  - Direct Children (Preserve)
  - Exclude Document Self References
  - Referenced Draft Phase Documents
  - Referenced Draft Phase Documents (Preserve)
  - Referenced Final Phase Documents
  - Referenced Final Phase Documents (Perserve)
  - Referenced Historical Phase Documents
  - Referenced Historical Phase Documents (Perserve)
  - Select Referenced Document Types
  - Select Referenced Document Types (Preserve)
  - Select Referenced Document Codes
  - Select Referenced Document Codes (Preserve)
  - Select Referenced Document Dept Codes
  - Select Referenced Document Dept Codes (Preserve)
  - Select Referenced Document ID
  - Select Referenced Document ID (Preserve)
  - Select Referenced Document FQ
  - Select Referenced Document FQ (Preserve)
  - Select Referenced Document Create Date Range
  - Select Referenced Document Create Date Range (Preserve)
  - Select Referenced Document Update Date Range
  - Select Referenced Document Update Date Range (Preserve)

Many of the documents in IRIS "chain" together, this is referred to as referencing. The Document Referencing folder has filters specific to this functionality. A report intended to capture referencing information using this folder requires a multi-query report.

(Preserve) indicates that the filter will include documents without references.

Direct Parents/Children indicates that the filter will limit to one layer of referencing. For example, a report capturing GAE information that inclides the Direct Children filter will be limited to GAX documents and will not include AD/EFT documents.

The **Exclude Document Self References** eliminates any self-referencing (a document refering to itself), which is prevelent in IRIS.

Financial Folder

- Financial
  - Select Appropriation Codes
  - Select Appropriation Class Codes
  - Select Appropriation Category Codes
  - Select Appropriation Group Codes
  - Select Appropriation Type Codes
  - Select Budget Fiscal Years
  - Select BSA Codes
  - Select BSA Category Codes
  - Select BSA Class Codes
  - Select BSA Group Codes
  - Select BSA Type Codes
  - Select Closing Classification Codes
  - Select Department Codes

The Financial folder includes elements that can be used for financial **or** structure reports.

All elements that appear directly on the posting catalog have "PL" in the title. The PL elements can only be used for financial reports and not structure reports.

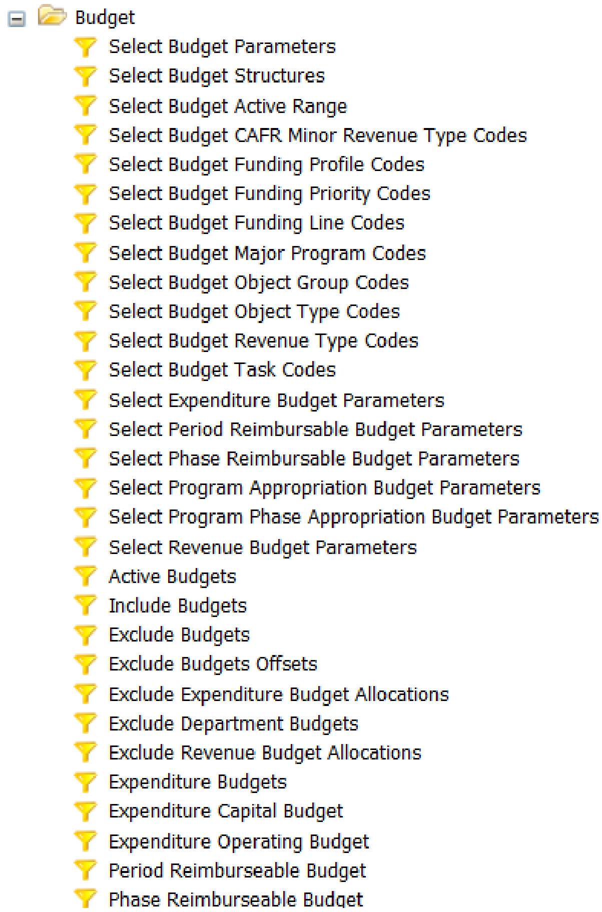
A structure report built with PL elements will only return information that has been posted. If a specific structure hasn't been used, a PL based structure report will not included that structure.

- Bank
  - Bank Account
  - Checks
  - Deposits
- Balances
  - BSA
    - BSA Summary ITD
    - BSA Detail ITD
    - BSA Detail FY
  - Cash
    - Cash Balance Pool
    - Cash Balance Summary
    - Cash Balance
  - Fund
    - Fund Balance Summary
    - Fund Balance Detail
    - Fund Audit

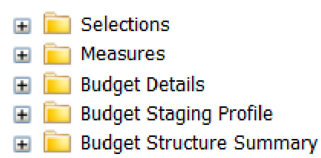
The Bank folder is specific to a very small group of users to monitor deposits, bank balances and check reconciliation. Items from this folder **should not** be mixed with other folders.

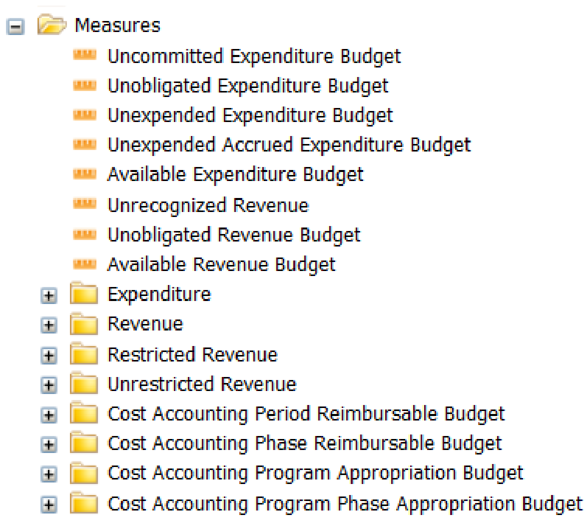
The Balances folder is used specifically to import the balances of specific IRIS elements to the aggregate of the same ALDER elements. This folder is specific to a very small group of users, but could be used to tie ALDER reports to IRIS balances.

Financial Folder\Budget



There are several pre-defined and user defined filters in the budget folder. As well as the related selected objects, measures and budget structure summary.





Budget measures are predefined calculations, the definition can be viewed by hovering on the measure.

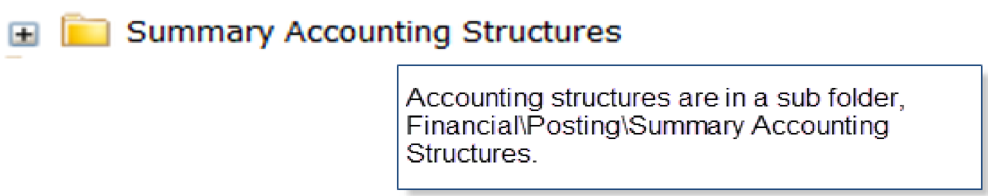
The four cost accounting folders represent IRIS budget query 39, 40, 74 & 75 respectively. Using these measures will mimic the information on the IRIS Budget screens.

Financial Folder\Posting

Within the Financial folder is a posting folder. Accurate financial reports should be built exclusively from the Financial\Posting folder. Optimized financial reports should follow these standards.

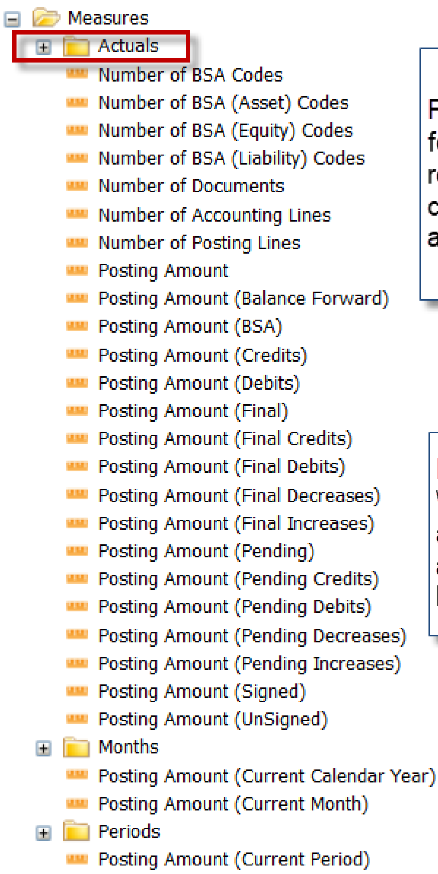
- Use elements and query filters from Financial\posting folder
- If the element or query filter(s) are not available in Financial\posting folder, use elements from the Financial folder
- If absolutely necessary, use elements from the document folder (When combining elements from the document folder and the financial folder, the Documents Most Recent Final Phase and Posting Final or Historical query filters should be included).

The Financial\Posting folder contains a number of user defined and system defined query filters. There are also a great deal of dimensions, all of which begin with "PL" to designate they are from the posting folder.



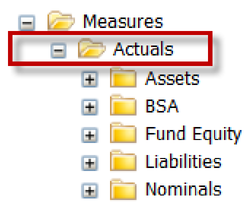
Financial\Posting\Measures Folder

Measures group and aggregate information. These are pre-defined calculations. These can get very specific and can include specific time periods (month, year, quarter, ect.).

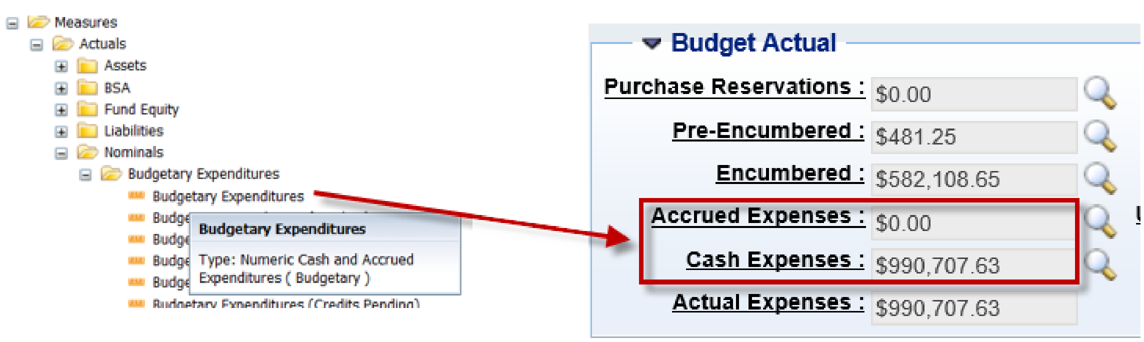


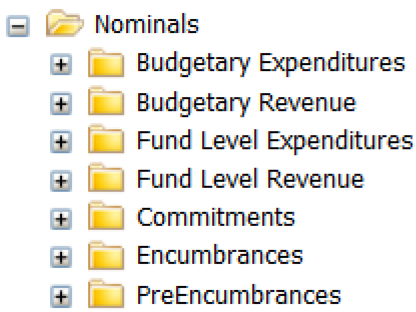
Financial\Posting\Measures folder provides calculations on reports. These calculations can be a count or a financial amount.

Financial\Posting\Measures \Actuals is divided into the five account types. Object (expense) and revenue source measures are located in the Nominals folder.



Hovering over any of the pre-defined measures will provide a definition of the calculation. The definition will match fields on the budget inquiries in IRIS.



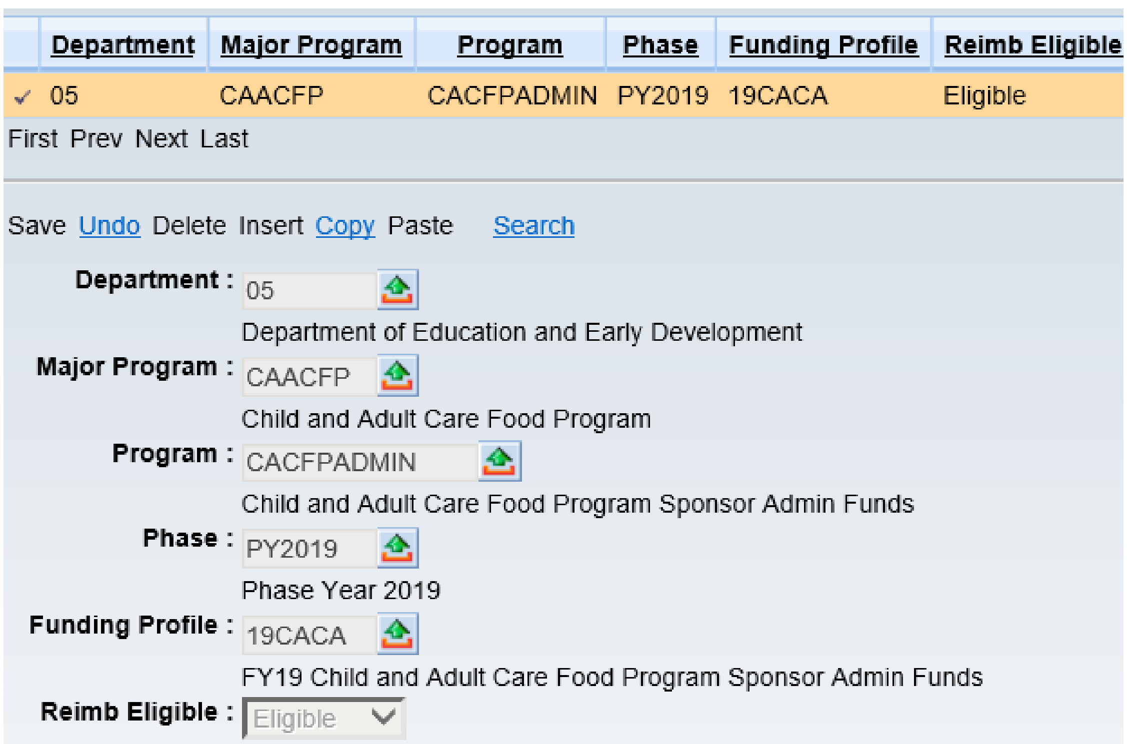


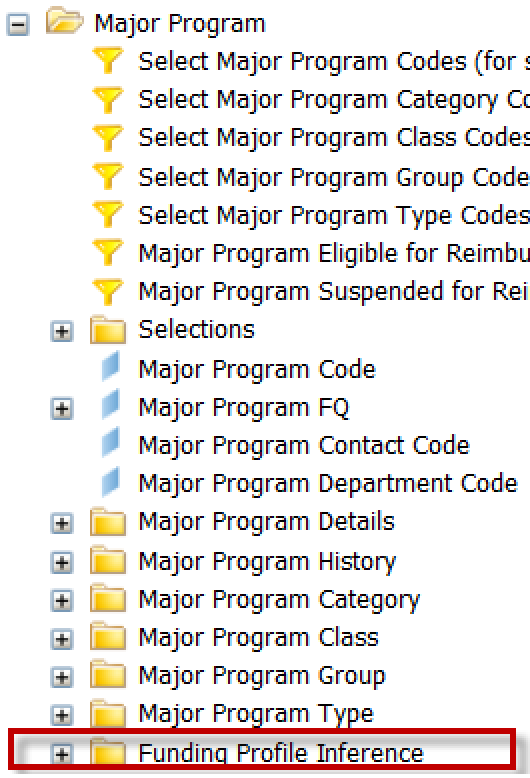
As part of the posting code definition in IRIS, some postings can be defined to **not** impact the revenue or expenditure budgets.

Budgetary Expenditures and Budgetary Revenue **only** include postings that impact budgets.

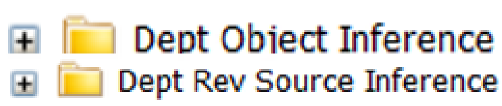
Financial Folder - Inferences

Within IRIS there are multiple instances of inferences that can occur. An inference is when an element is entered on a document and another element is inferred. The most widely used inferences are funding profile inferences. The funding profile inference is used to define the inference rules for the funding profile codes. The specific combinations of elements identify which funding profile to use; "program" is nearly always one of the elements. There are seven funding profiles in IRIS. Funding Profile 2 is a combination of program and phase. When the program "CACFPADMIN" and phase "PY2019" are entered on an IRIS document, the funding profile "19CACA" is inferred.



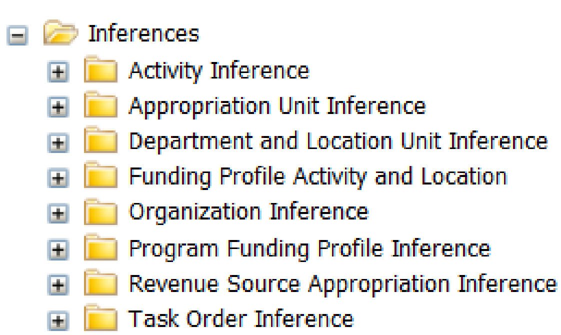


Funding profile inference structures are found in Financial\Major Program \Funding Profile Inference folder.



Department objects and department revenue sources infer central objects and revenue sources. In IRIS these tables are OBJINF and RSRCINF respectively. These ALDER folders provide that table information.

Cannot be used with elements from other folders, this would create a PL report, not a structure report.



Other inference structures are found in the Financial\Inferences folder.

Fixed Asset Folder

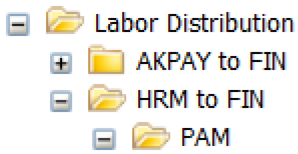
The Fixed Asset folder reports on fixed asset **TABLES** (not documents) in IRIS. This section should not be used for documents. Documents update the tables in IRIS, these elements mimic those tables. For example, FARHDR (Fixed Asset Registry Header).

Inventory Folder

The Inventory folder is similar to the Fixed Asset folder, the folder contains elements to report on the inventory tables in IRIS. This section should not be used for inventory documents.

Labor Distribution Folder

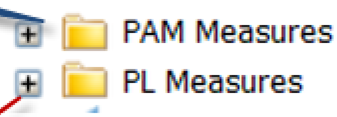
The PAM interface transmits the original version of the HRM payroll charges in aggregated form. The HRM information is stagnate after the interface process, changes to information in IRIS FIN are not reflected in IRIS HRM. ALDER contains complicated business logic to align the original PAM postings and correlate these with the IRIS FIN and all of the potential changes that occur to the information in IRIS FIN.



The Labor Distribution folder is a complicated merge of the financial and HRM environments, at the employee level. PL is how information posted in FIN. HRM has employee level information, not posting detail. FIN has posting level information, no employe detail.

The PAM information is only what was originally sent from HRM. This means that PREXP documents that were rejected and had changes made will not match PAM information. Likewise, documents that have been reclassed will not be reflected. There is no "PAM" data in IRIS FIN and conversely, there is no FIN data in IRIS HRM.

PAM Measures are **HRM Journal** only. If using PAM measures, **DO NOT** use dimensions from outside the Labor Distribution folder.



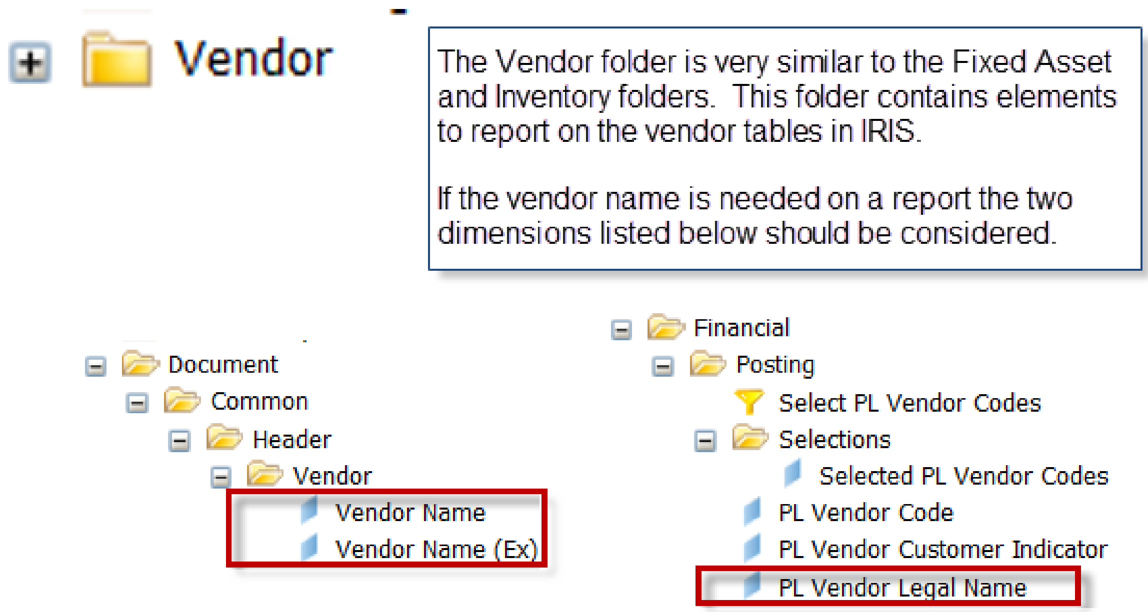
PL Measures are a combination of IRIS FIN PL and HRM Journal.

Labor Distribution>PL Measures can be combined with dimensions from Labor Distribution folder, however query filters should be from Financial>Posting area.

Procurement Folder

The Procurement folder contains elements which are primarily related to measuring the progress of procurement documents.

Vendor Folder



Understanding ALDER Structure

Business Contexts

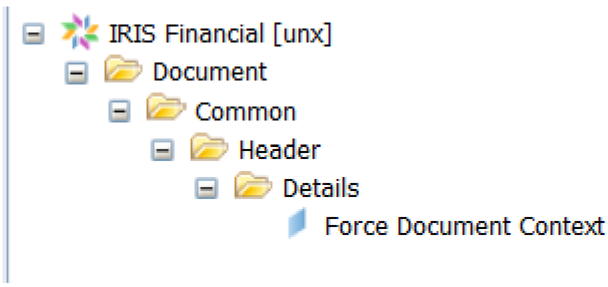
In ALDER 2.0, the elements used for structure reports and financial reports are the same. The difference is that when the report is built specifically for structure it should run much faster AND the system will confirm the context selection.

A structure only report should be built from the Financial folder and should not include Financial\Posting elements. If Financial\Posting elements or Documents elements are included, the results will be only those structures which have had postings or documents.

Context can be thought of as a unique path between two points. In the majority of the ALDER reports these two points are the document header and the posting line catalog. Contexts determine the route that will be taken between two points and enforces compatibility, which ensures that measures will return the correct amounts or counts when used on the reports.

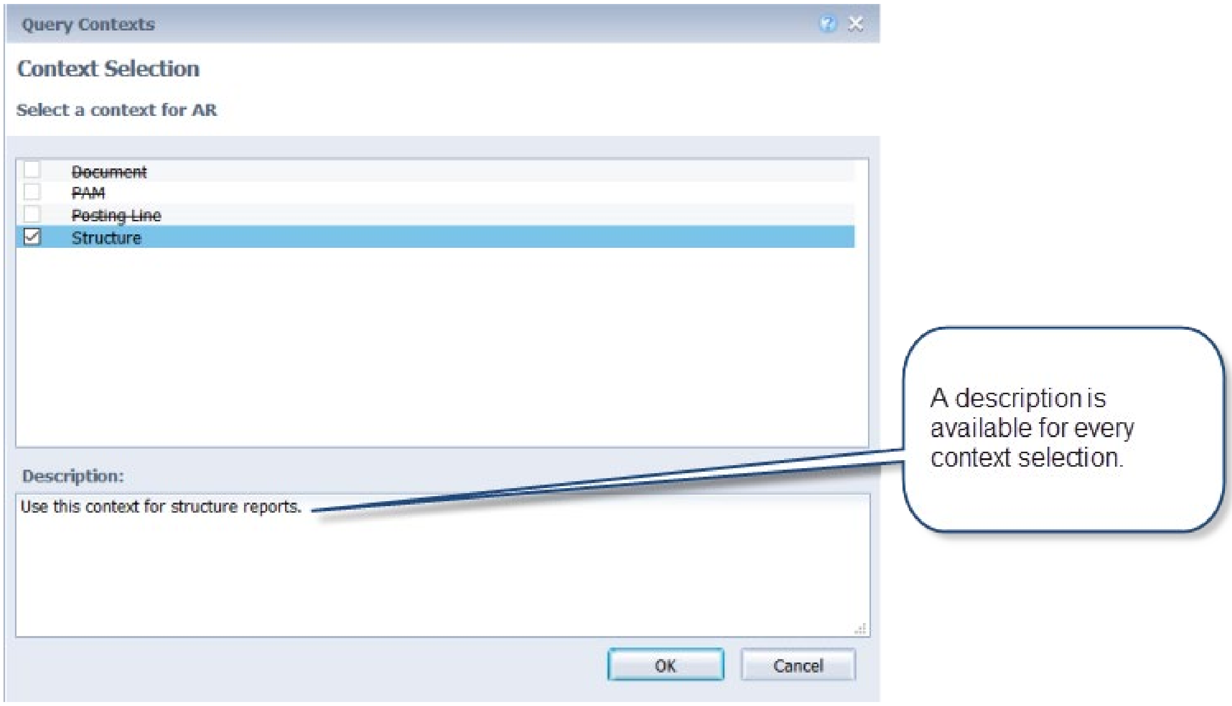
Any report that uses a measure will automatically determine the appropriate context to be used and does not need to prompt the user to select a context.

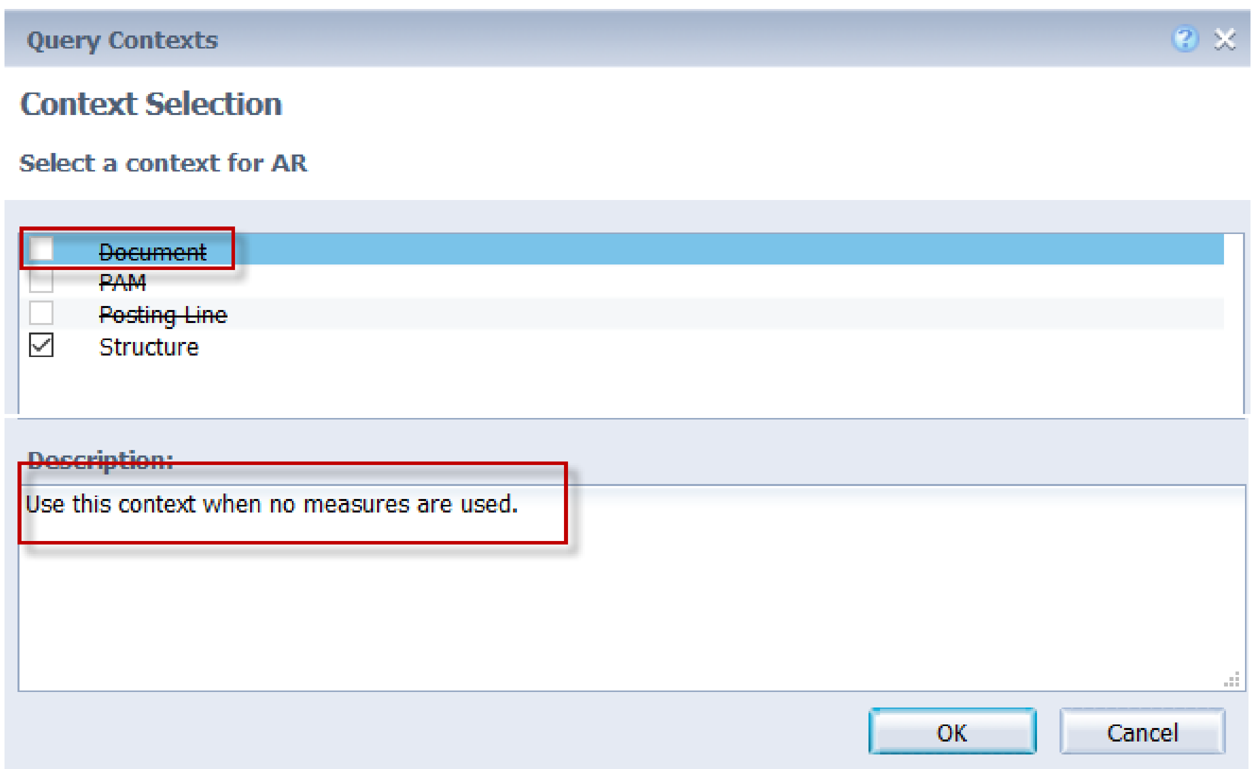
When a report does not have a measure and there exists more than one way to retrieve the data for the report, ALDER prompts the user to select a context. The same is true for scheduled reports which will prompt for the context when the report is scheduled, and the query parameters are selected. When new capabilities are added to ALDER that include new contexts, it will prompt the user to select the context again. When a scheduled report is run, there is no user to respond to the context selection and the report fails. To avoid the need for ALDER to prompt for the context, use the dimension **Force Document Context**.

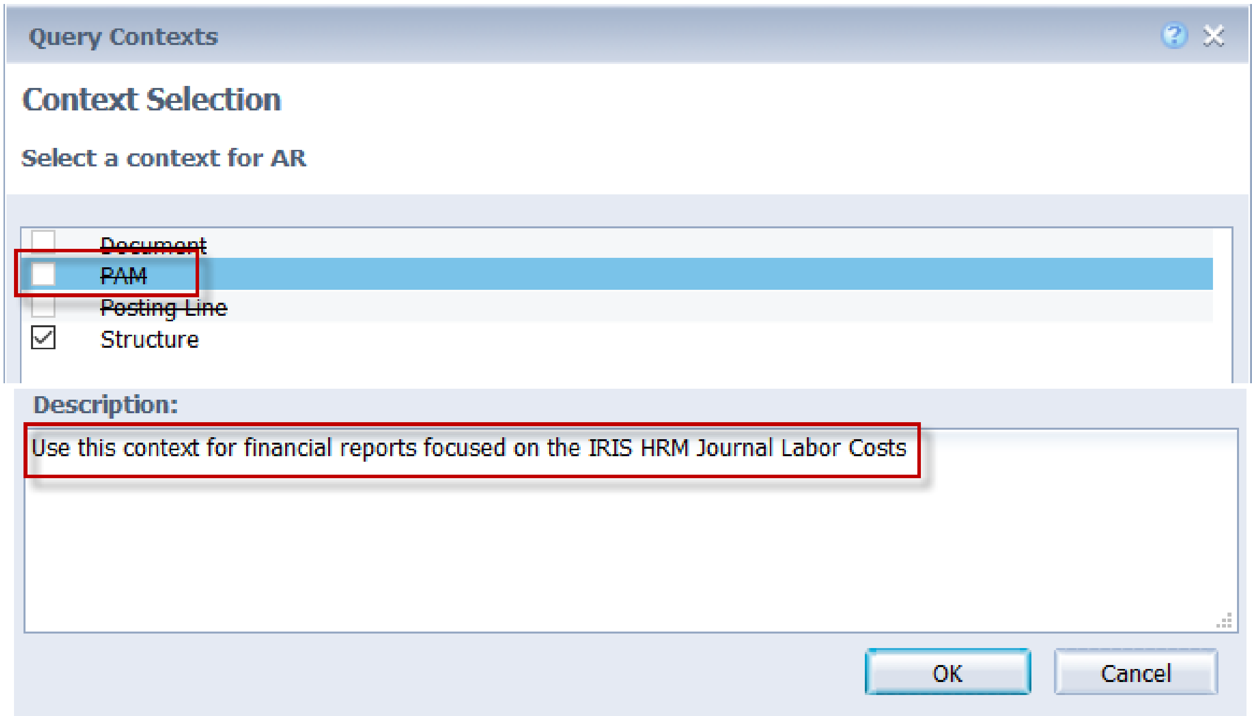


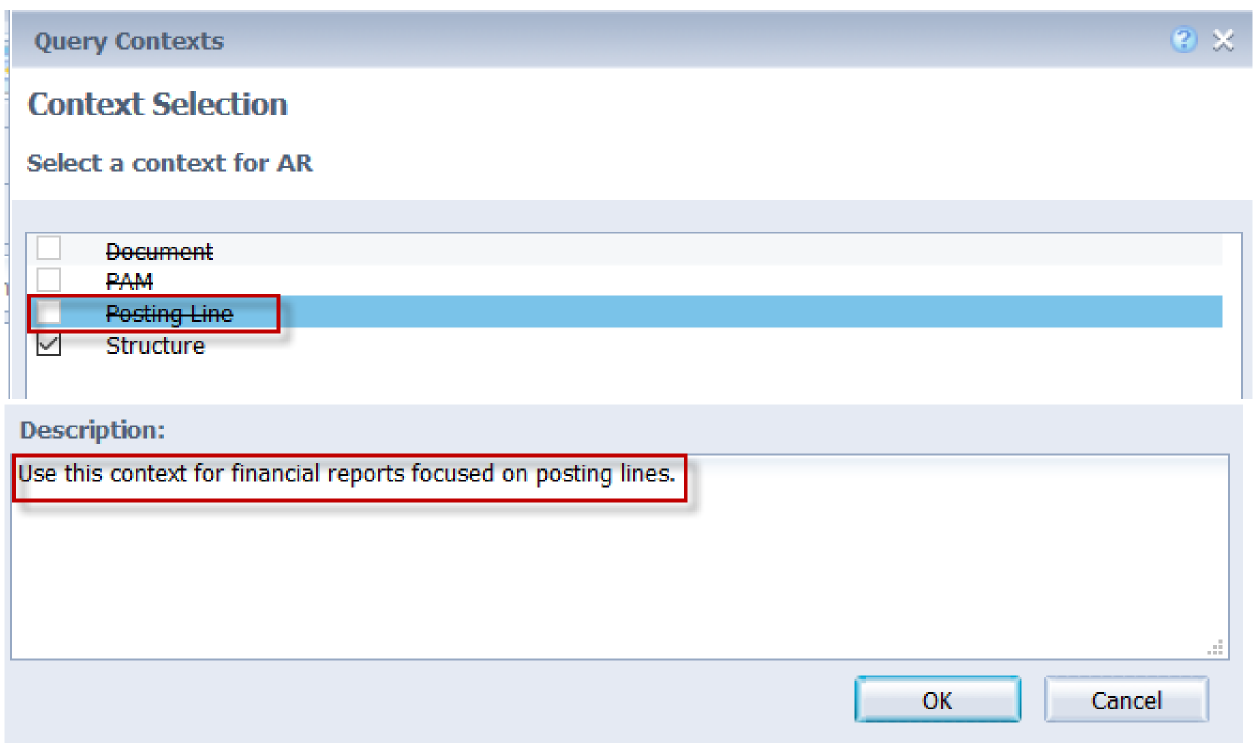
When the **Force Document Context** dimension is in the result objects, the report will automatically select the document context and will not prompt for the context. This avoids the need not only to select the context but avoids scheduled reports needing to be updated when a next context is added to ALDER.

When building a structure report, i**f the context selection box does not appear, the report is not built properly to be a structure only report.** The context selection box appears before the query prompts box.


Query Contexts
Context Selection
Select a context for AR
~~Document~~
~~PAM~~
~~Posting Line~~
Structure
Description:
Use this context for structure reports.
OK
Cancel
A description is available for every context selection.


Query Contexts
Context Selection
Select a context for AR
~~Document~~
~~PAM~~
~~Posting Line~~
Structure
Description:
Use this context when no measures are used.
OK
Cancel


Query Contexts
Context Selection
Select a context for AR
~~Document~~
~~PAM~~
~~Posting Line~~
Structure
Description:
Use this context for financial reports focused on the IRIS HRM Journal Labor Costs
OK
Cancel

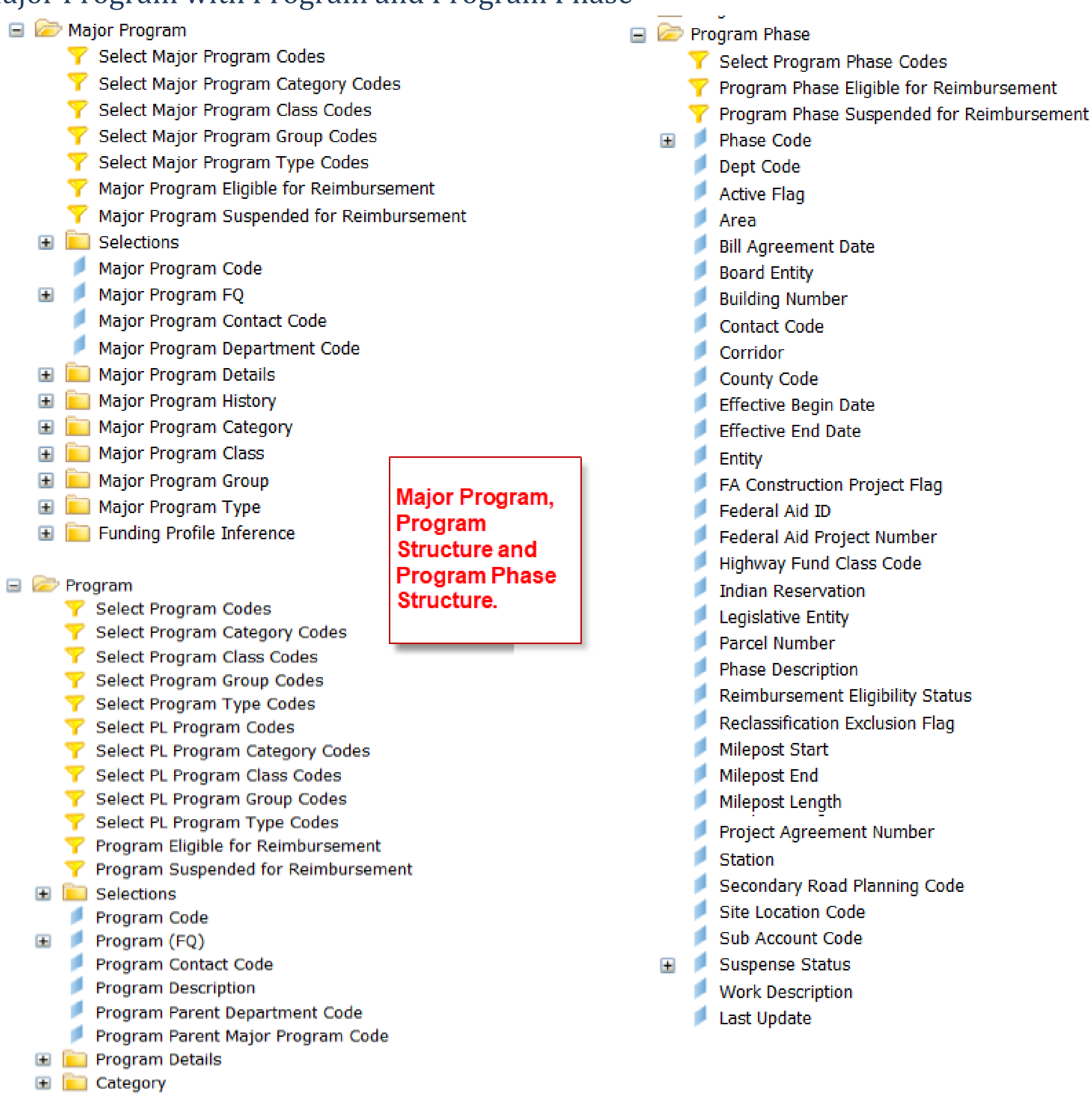

Query Contexts
Context Selection
Select a context for AR
~~Document~~
~~PAM~~
~~Posting Line~~
Structure
Description:
Use this context for financial reports focused on posting lines.
OK
Cancel

Cost Accounting Structure

For a cost accounting structure report, there are combinations which generate a posting line report rather than a structure report, **even when no measures are in the result objects**. Reports built on posting lines take significantly longer than those built as structure, as a posting line report reads all documents in the system.

The following combinations of Cost Accounting structures will result in a structure report.

Major Program with Program and Program Phase



Major Program with Funding Priority, Funding Profile or Funding Line

- Major Program
  - Select Major Program Codes
  - Select Major Program Category Codes
  - Select Major Program Class Codes
  - Select Major Program Group Codes
  - Select Major Program Type Codes
  - Major Program Eligible for Reimbursement
  - Major Program Suspended for Reimbursement
  - Selections
  - Major Program Code
  - Major Program FQ
  - Major Program Contact Code
  - Major Program Department Code
  - Major Program Details
  - Major Program History
  - Major Program Category
  - Major Program Class
  - Major Program Group
  - Major Program Type
  - Funding Profile Inference

Major Program Structure, Funding Priority, Funding Profile or Funding Line Structures.

- Funding Priority
  - Funding Priority Eligible for Reimbursement
  - Funding Priority Suspended for Reimbursement
  - Funding Priority Code
  - Funding Priority FQ
  - Funding Priority Details
  - Funding Priority History

- Funding Profile
  - Select Funding Profile Codes
  - Funding Profile Eligible for Reimbursement
  - Funding Profile Suspended for Reimbursement
  - Selections
  - Funding Profile FQ
  - Funding Profile Code
  - Funding Profile Parent Dept Code
  - Funding Profile Parent Major Program Code
  - Funding Profile History

- Funding Line
  - Funding Line Eligible for Reimbursement
  - Funding Line Suspended for Reimbursement
  - Funding Line Code
  - Funding Line FQ
  - Funding Line Details
  - Funding Line History

Major Program with Program Period Code

- Major Program
  - Select Major Program Codes
  - Select Major Program Category Codes
  - Select Major Program Class Codes
  - Select Major Program Group Codes
  - Select Major Program Type Codes
  - Major Program Eligible for Reimbursemer
  - Major Program Suspended for Reimburse
  - Selections
  - Major Program Code
  - Major Program FQ
  - Major Program Contact Code
  - Major Program Department Code
  - Major Program Details
  - Major Program History
  - Major Program Category
  - Major Program Class
  - Major Program Group
  - Major Program Type
  - Funding Profile Inference

Major Program Structure and Program Period Code Structure

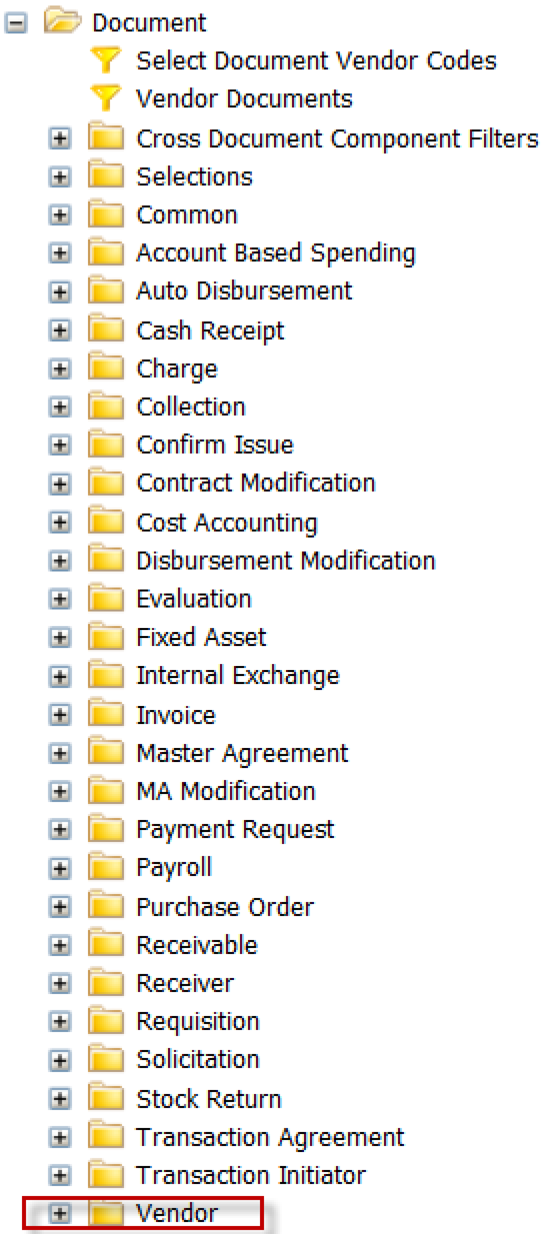
- Program Period Code
  - Select Program Period Codes
  - Active Program Period Codes
  - Program Period Eligible for Reimbursement
  - Program Period Suspended for Reimbursement
  - Selections
  - Program Period Code FQ
  - Program Period Code
  - Program Period Parent Dept Code
  - Program Period Parent Major Program Code
  - Program Period Description
  - Program Period Active Flag
  - Program Period Budgeting Flag
  - Program Period Common Accounting Number
  - Program Period Contract Code
  - Program Period Construction Budget Authorization Number
  - Program Period Major Program Effective Begin Date
  - Program Period Major Program Effective End Date
  - Program Period Federal Appropriation Number
  - Program Period Federal Appropriation Name
  - Program Period Federal Appropriation Name (Upper)
  - Program Period Federal Appropriation Name (Short)
  - Program Period Federal Appropriation (Short Upper)
  - Program Period Federal Appropriation Demo Id Requirement
  - Program Period Federal Catalog Agency Code
  - Program Period Federal Agency Name
  - Program Period Federal Agency Name (Upper)
  - Program Period Federal Appropriation Name (Short)
  - Program Period Federal Appropriation (Short Upper)
  - Program Period Federal Appropriation Demo Id Requirement
  - Program Period Federal Catalog Agency Code
  - Program Period Federal Agency Name
  - Program Period Federal Agency Name (Upper)
  - Program Period Federal Agency Name (Short)
  - Program Period Federal Catalog Number Prefix
  - Program Period Federal Catalog Number Suffix
  - Program Period Federal Payment System
  - Program Period External Account Number
  - Program Period Letter of Credit Number
  - Program Period Inference Start Date
  - Program Period Inference End Date
  - Program Period Sequence
  - Program Period Suspense Status
  - Program Period Suspense Status Code
  - Program Period Stage Profile Code
  - Program Period Total Clearance Percentage
  - Program Period Last Update

Major program, combined with Program and funding profile or funding priority or funding line or program period code structures results in a posting line report NOT a structure report.

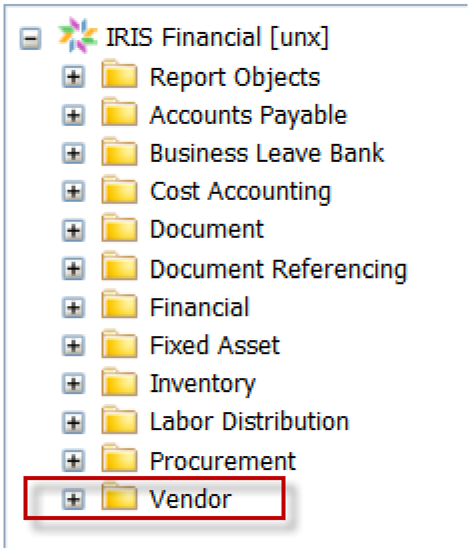
Vendor Reports

IRIS has several types of vendor information, the type of information needed will drive which folder is used for information. Normally, a report will only need vendor information from one of these areas, depending on the purpose of the report.

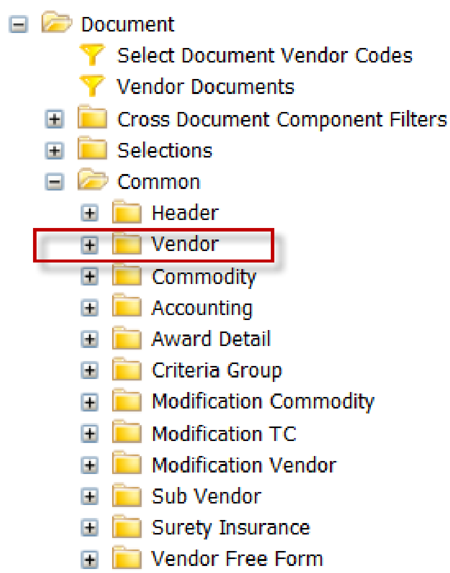
1. If the purpose of the report is to show vendor maintenance activity from the VCC (vendor customer creation) and VCM (vendor customer modification) documents, the Document and Document\Vendor folders are used.

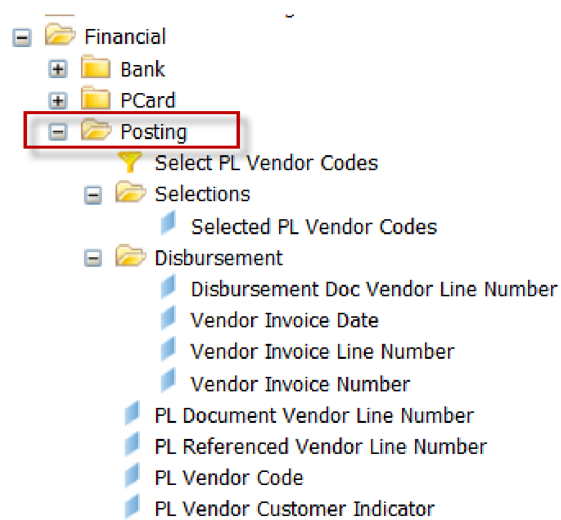


2. If the purpose is to report on vendors known to IRIS (e.g. a vendor list), then the elements from the Vendor folder are used.

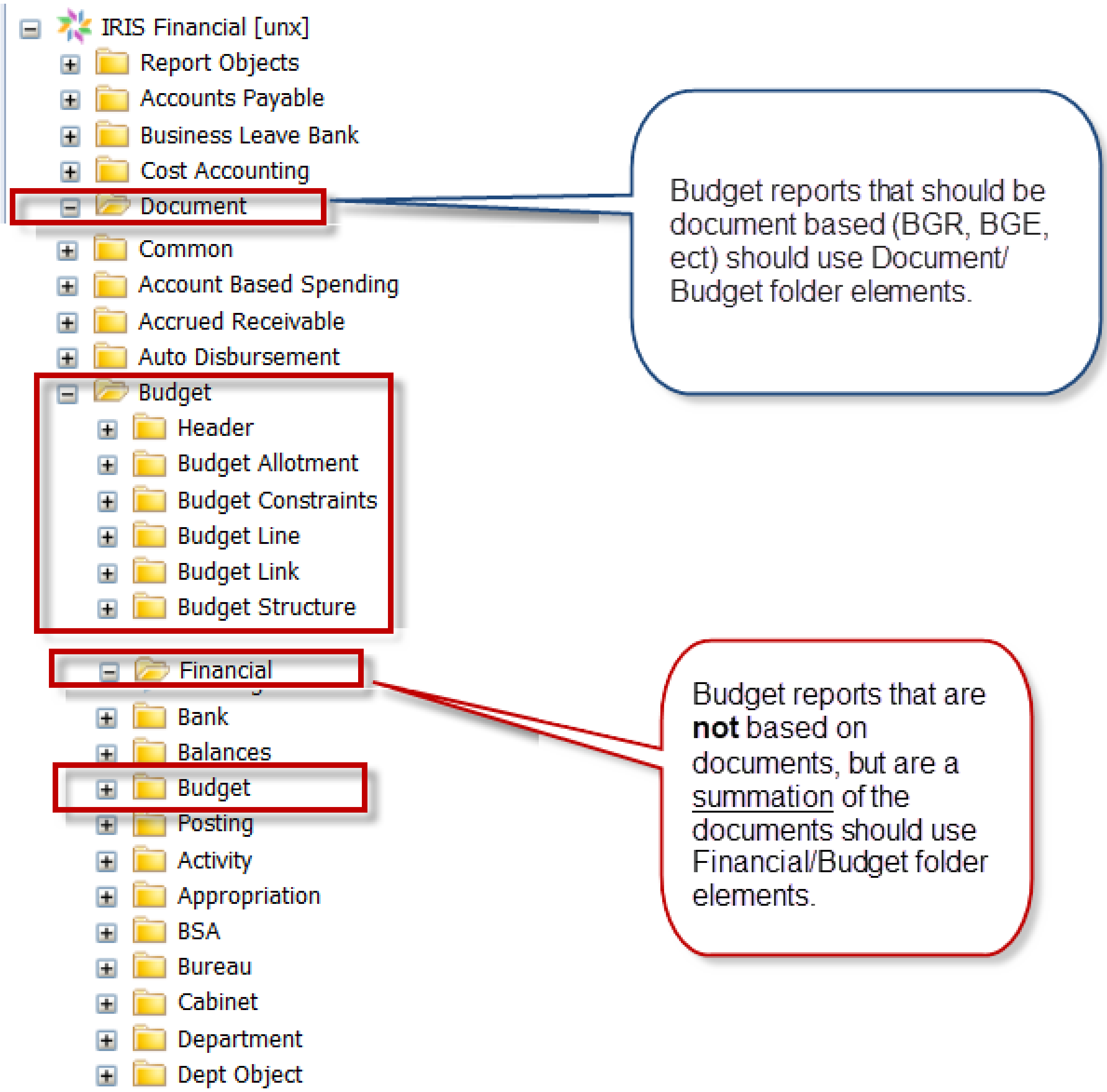


3. If the purpose is to report on transaction activity, then elements from Document and Document\Vendor line or Financial\Posting folder are used.



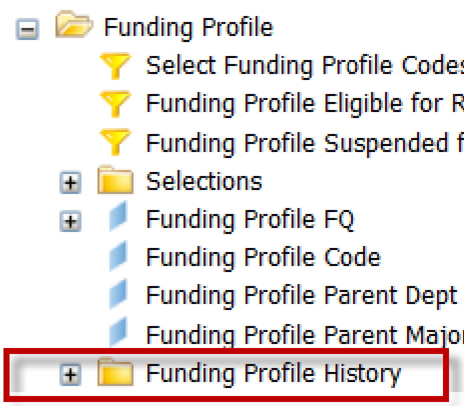


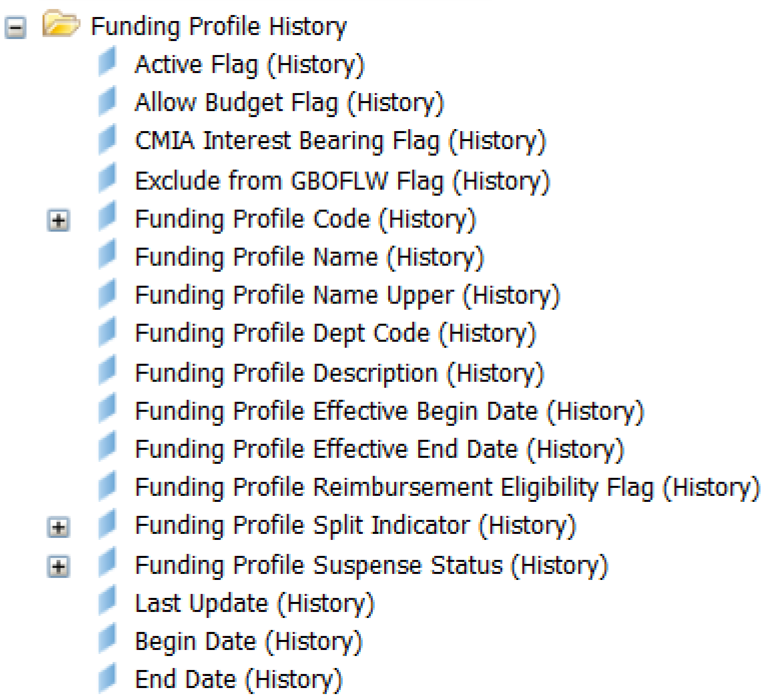
Budget Documents VS Budgets



Structure History

While some structures are affected by documents, several structures are only added to or updated by direct table changes. For several structure elements, there are History dimensions available to build a report that details the changes made to specific tables. These elements are all in the Financial folder.





Report Performance Improvement

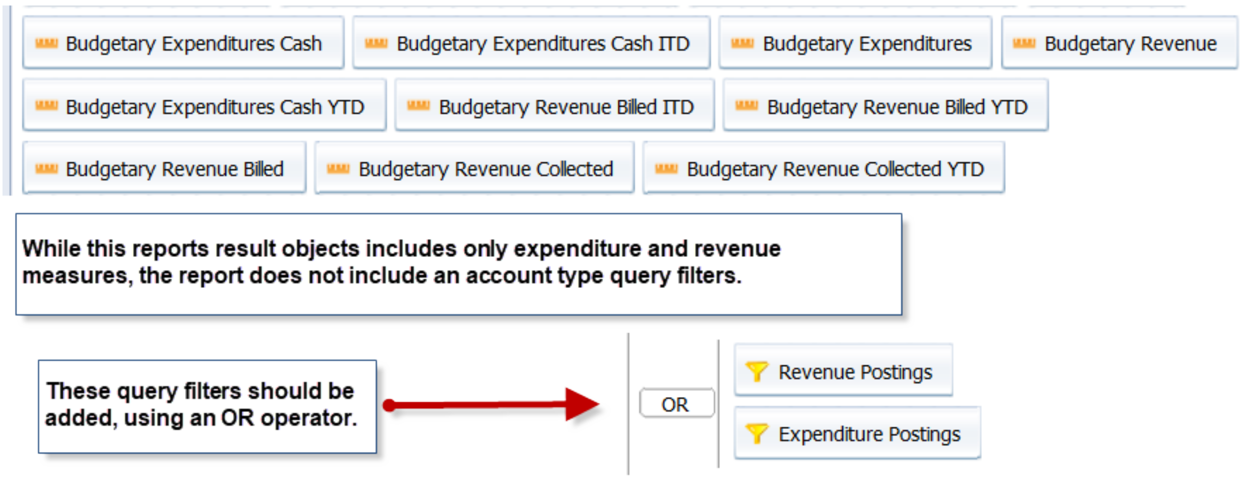
When built correctly, an optimized ALDER financial report should return results in less than 5 minutes. There are several concepts to consider when building reports.

Include Department Query Filter

The data warehouse has been "partitioned" based on department, this greatly improves the efficiency of reporting. If a report is built without this query filter, the system must review documents from all departments looking for specific posting line information. A "Select Department" query filter is available in most ALDER folders.

Include Account Type Query Filters

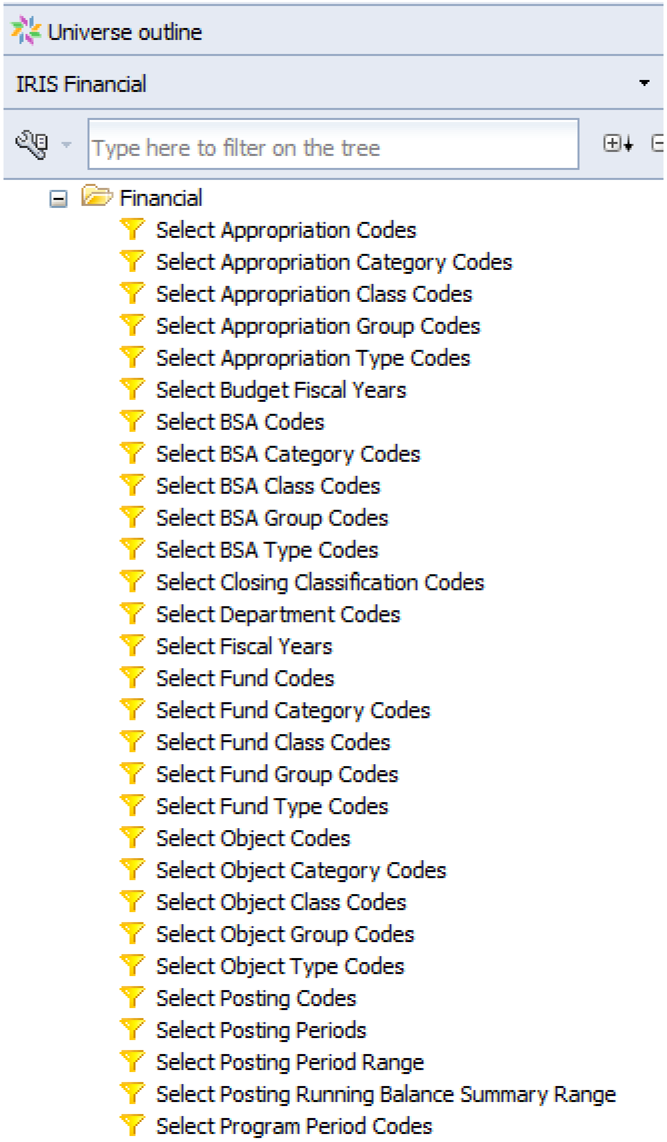
To prevent ALDER from scanning every document, include the account type query filters needed for the measures that will be on the report.



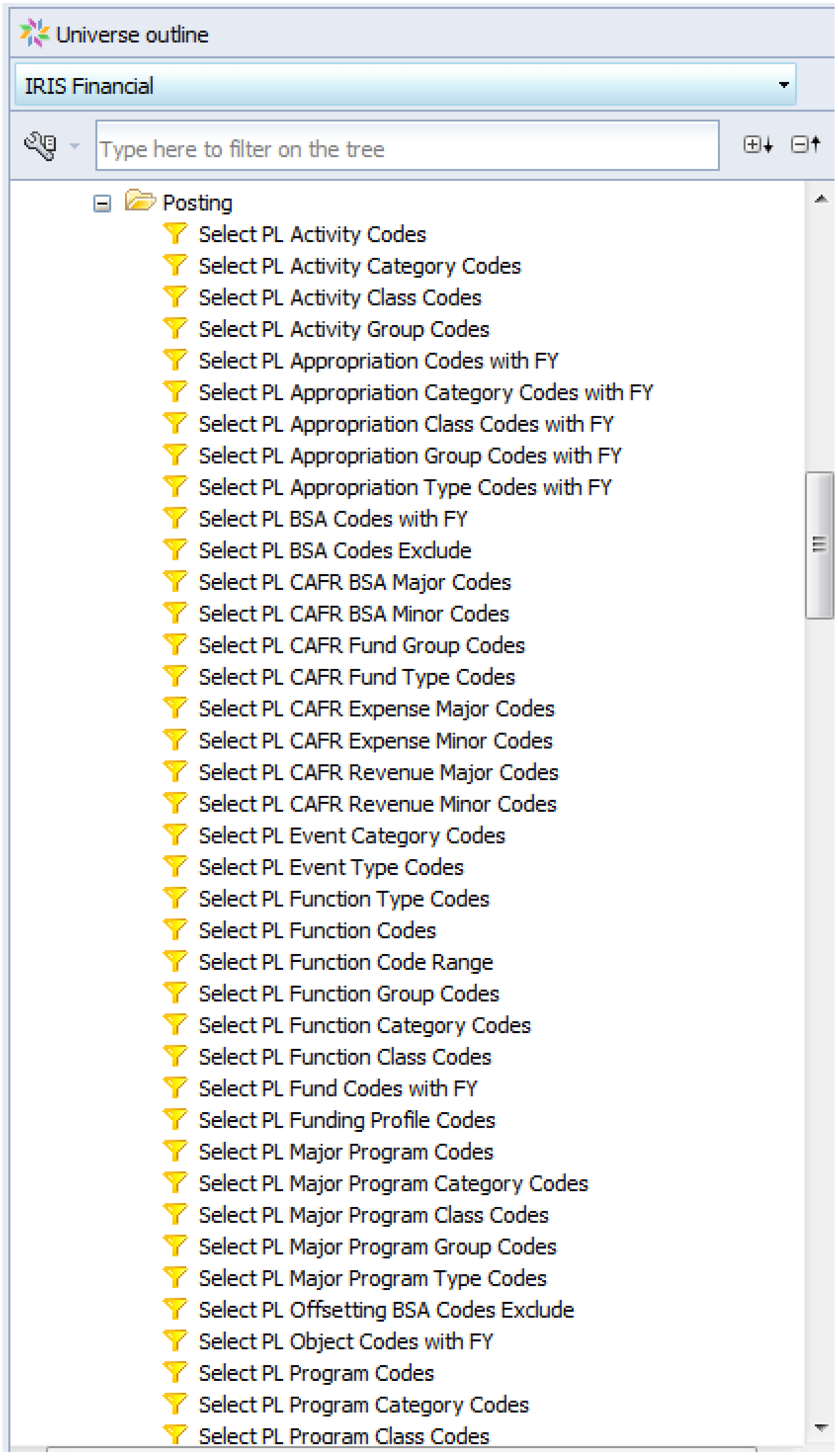
Posting Line Reports

In general, posting line focused reports should use elements from the Financial folder over those from the Document folder whenever possible.

For filtering by accounting structures (e.g. Appropriation, Fund, BSA, etc) the query should use the filters directly under the Financial folder (see screen capture below). These filters only require a single selection regardless of the number of fiscal years that are selected.

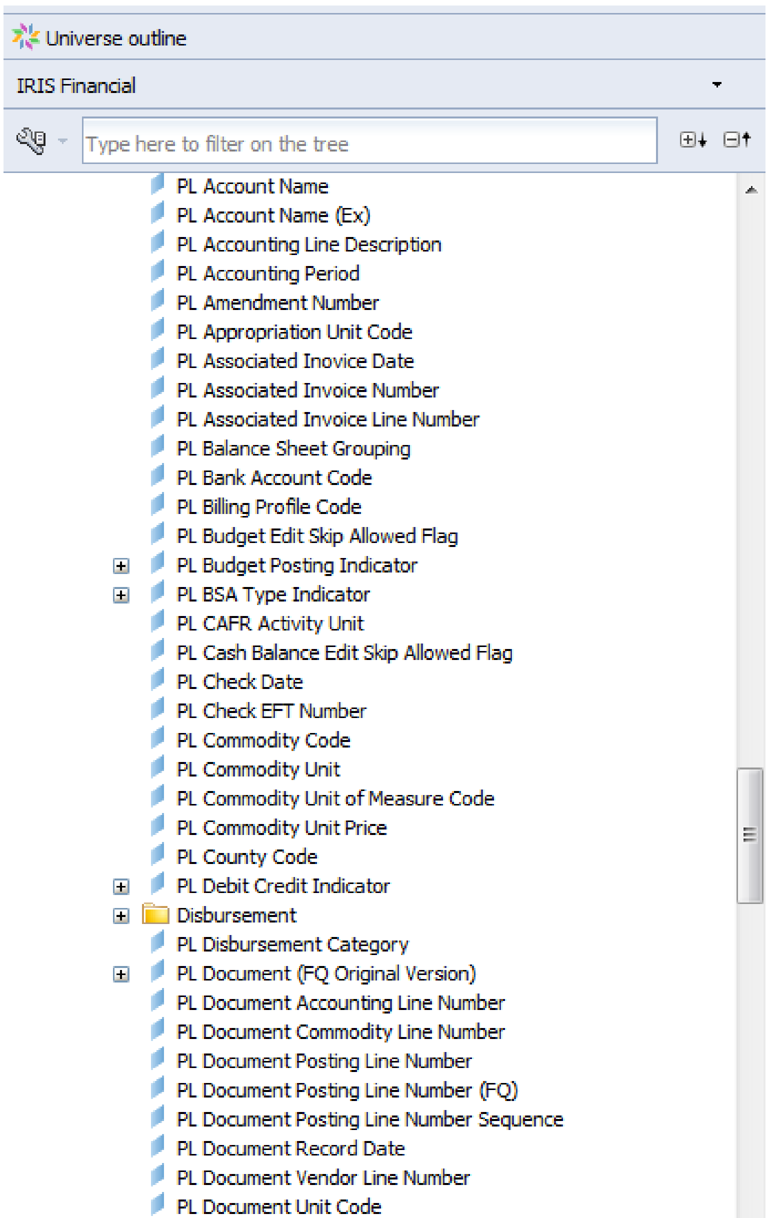


When a filter is not present directly under the Financial folder, or the user needs to select specific codes for individual fiscal years, then the query filters under the Financial\Posting folder should be used.



Posting line focused detail transaction reports should use the dimensions from the Financial and Financial\Posting folders whenever possible (instead of those in the Document folder). Reports needing document level detail such as document code, document ID should use the dimensions prefixed with PL from the Financial and Financial\Posting folder.

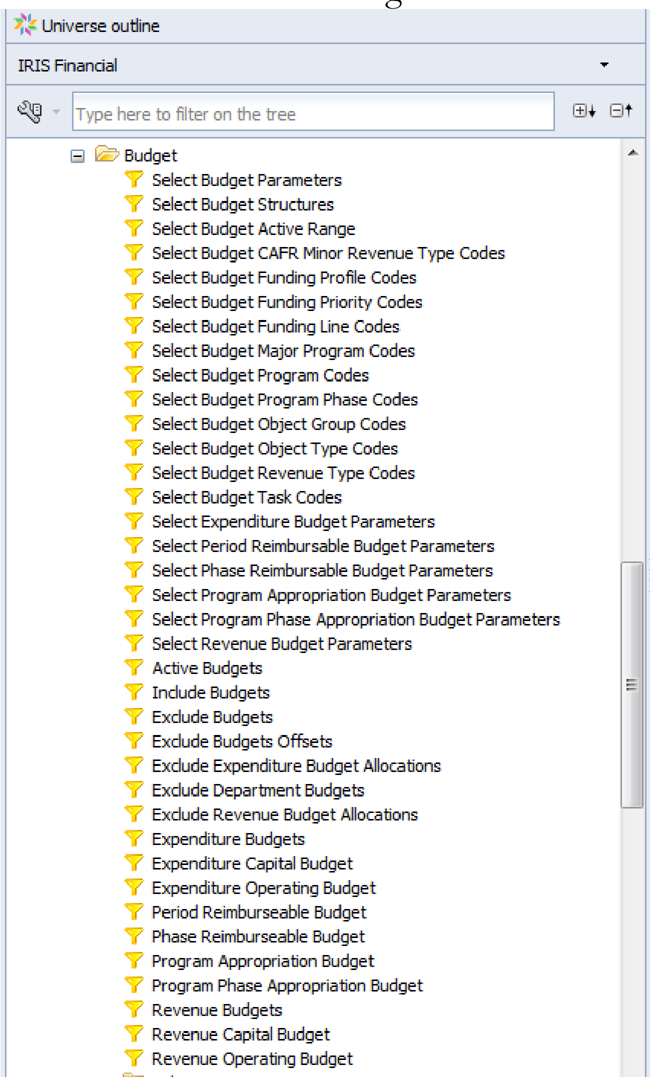
Several commonly used elements, such as accounting line number and accounting line description, have dimensions with PL prefix (in the Financial\P\posting folder) and these should be used instead of the dimensions from the Document\accounting Line folder whenever possible.



Reports that need only transactions that are in final (and historical) phase should use the query filter Posting Final or Historical. <u>Note: reports that also include dimensions from the document header also need the Document Most Recent Final query filter.</u>

Budget Reports

The report should use the query filters from the Financial\Budget folder. When the report includes only a specific budget(s), the corresponding query filter for that budget should be used. For example - if a report needs only the Expenditure Operating budget then the query Expenditure Operating Budget should be used instead of the Include Budgets filter.



Tips on Specific Filters:

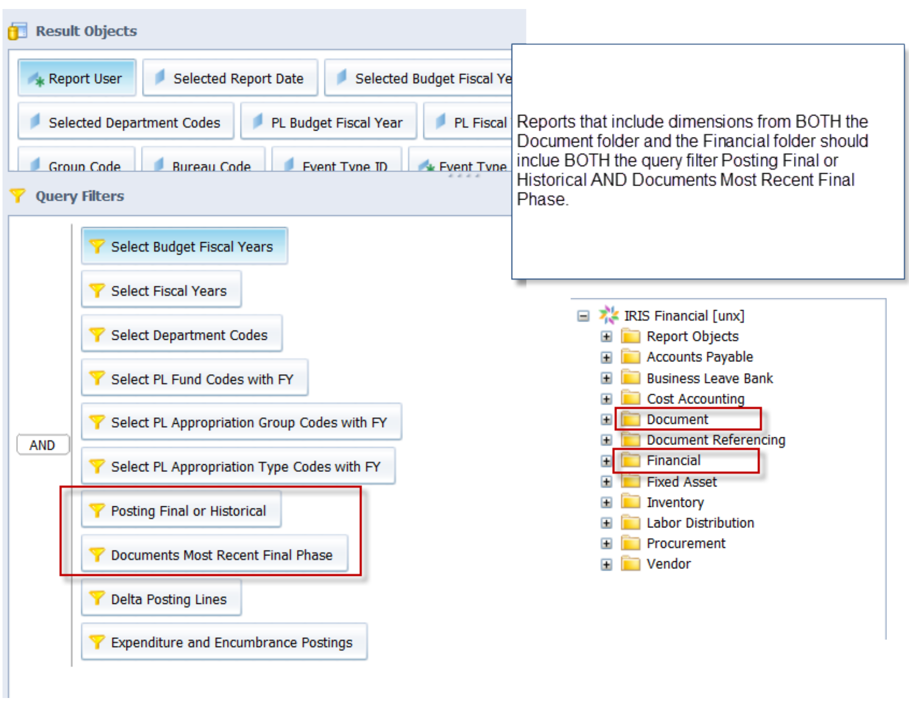
Documents Most Recent Final Phase and Posting Final or Historical

In IRIS, when a document is modified IRIS **DOES NOT** re-post every line in the document. The modified version only includes delta postings (the changes). To retrieve the information for all versions of a document, the Documents Most Recent Final Phase or Postings Final or Historical query filters must be used. These two filters will result in all posting lines for a document, current and all prior versions, being included in the report. It is only be including all versions of a document that the entire financial activity is reported.

While the two filters return the same information, they retrieve the information from the database differently.

Documents Most Recent Final Phase This filter should be used for reports that require document level detail. Pulls most recent information from the header, commodity line, vendor line and accounting line, but all versions of the posting line.

Posting Final or Historical This filter should be used for reports that do not require document level detail. This allows the query to avoid reading the entire document for every posting line and reduces the run time for the report.



Using elements from the Document folder without the Document Most Recent Final Phase query filter will provide misleading or inaccurate amounts. Using dimensions from the Document folder without the query filter will return each version of the documents and all posting lines. A document with 2 historical versions and one current final version will be retrieved three times and all posting measures will be triple the actual amount.

Department Number Query Filters

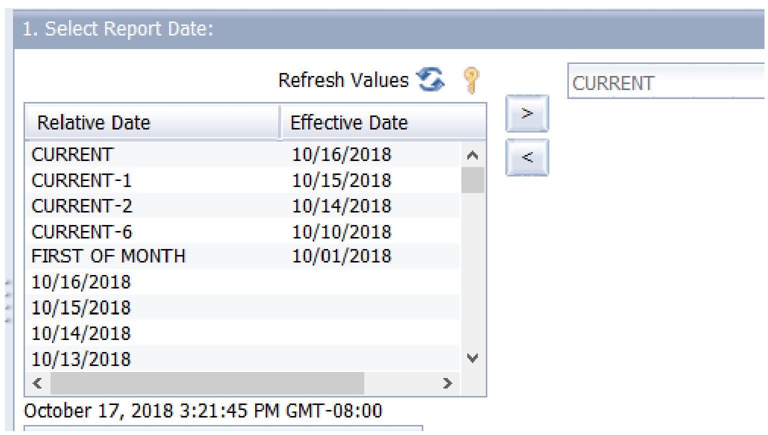
Department numbers are used in two places within IRIS. They are used in the header as the department that created the document and in the accounting line. There are times when the header and accounting line department numbers are not the same; AD and EFT documents all have a header of 02. To use the department code in the header, the filter Select Document Department Codes should be used.

The department is also part of the posting line and accounting line. To capture this information, the department filter from the accounting line or posting line should be used. *Other elements in document headers with similar quirks are BFY, Period, and Quarter.*

Dates in IRIS

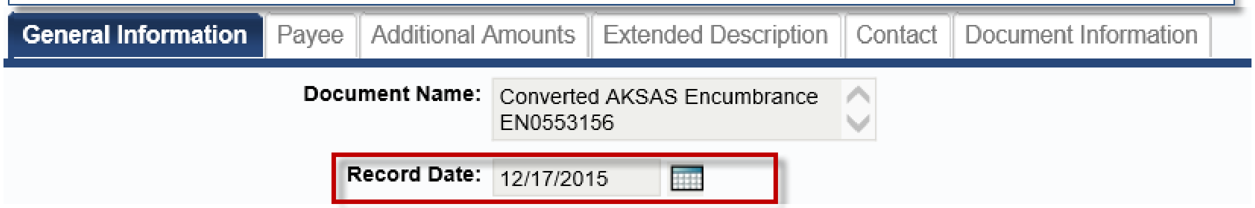
In ALDER, report date is an ALDER date, not an IRIS date. The report date identifies the IRIS transactions in ALDER as of the report date. User prompts in ALDER always include the selection of a report date; the default is Current.

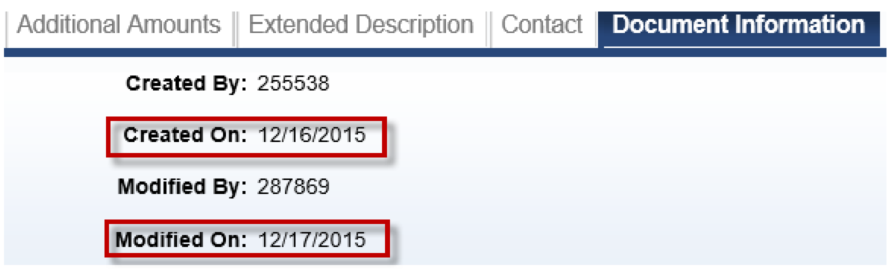
The effective date of a relative date is listed to the right of the relative date.



There are a variety of dates within IRIS, which are reflected in ALDER.

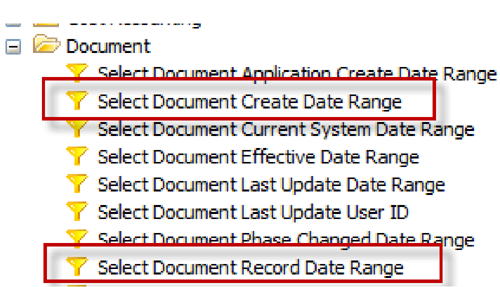
In the document header, there can be a record date, create date and modified date.



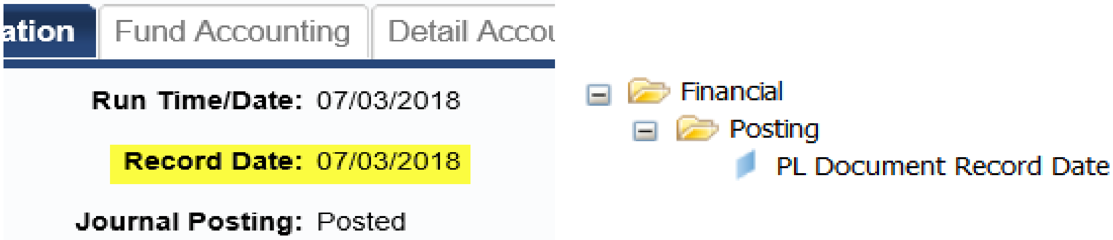


There is also an application create date. The create date is the date the user creates the document. The application create date is when the batch process runs to create the document. Most of the time, these two dates are the same, however there are times when the batch process occurs after midnight and therefore is the next day.

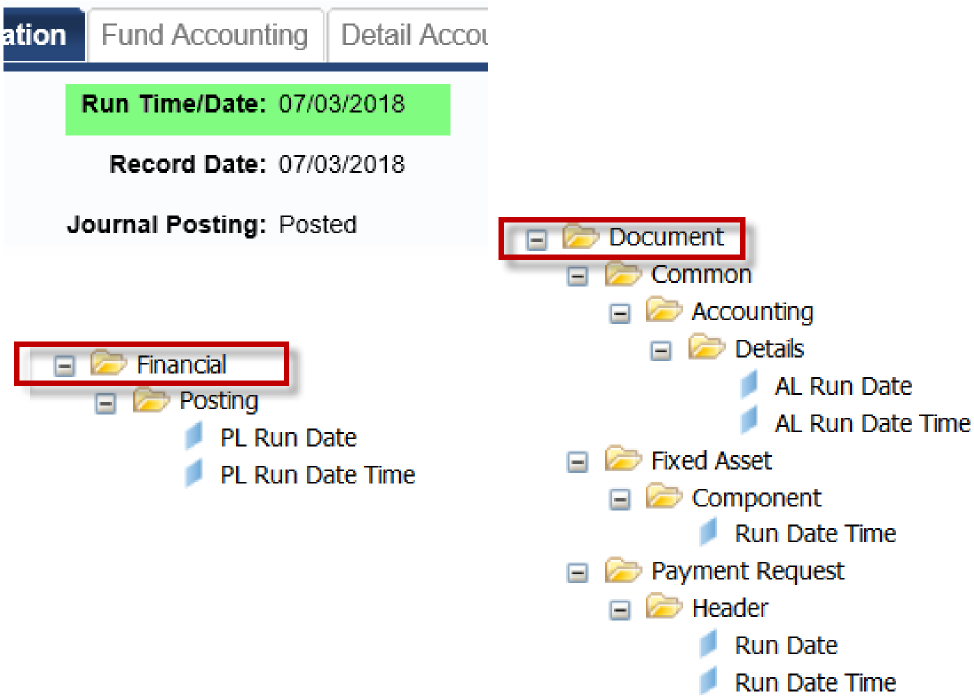
For a document-based report, the document record date or document create date are available.



The document record date is the date the document was successfully submitted. The record date is also on the posting line and is available in the Financial\posting folder of ALDER.



Run date is a system generated time and date stamp. Run Date is available in many folders, including the Document and Financial folders.



There are also dates associated with the vendor line, commodity line, accounting line and posting line. However, when there are modifications to the document, it is possible that the vendor line, commodity line, accounting line and posting line date will be misleading, as the modification can apply to only one line.

Which date field to use in a report is entirely dependent upon the needs of the user and the ultimate use of the report itself.

Relative Periods

If a report includes a filter on an appropriation collector (AR, AR Group, AR Type, AR Class, AR Category) and the user schedules the report using an absolute value (e.g. 2017), the report will always filter for 2017, regardless of the setting of the relative periods.

If a report includes a filter on an appropriation collector and the user schedules the report using a relative value (Current, Prior, Prior-Prior), the report checks the value of the relative period at the time that the scheduled report executes.

The relative periods are not tied to the actual calendar date (e.g. July 1st), but rather are controlled by DOF. The purpose of having the relative periods is to prevent the need to reschedule reports every time the fiscal year changes.

Miscellaneous Items

Delta Posting Lines This filter will show just the changes.

Posting Code Closing Classification Code A rough equivalent to account type in AKSAS.

Document Posting Line Number Sequence A sequence of "0" is the base posting line, a sequence of "2" is the offsetting posting line. Use this dimension and set the filter to exclude the offsets.

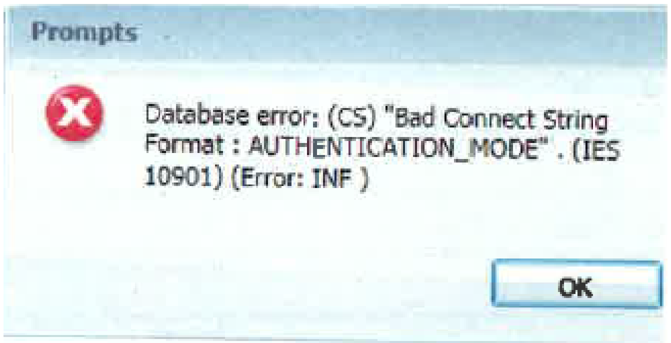
Exclude Offseting Posting Lines This filter only works on BSA postings.

The ITA (internal transaction agreement) does not include a document record date, which is on every other transaction. To capture ITA information based on a date, the dimension Document Phase Code Changed Date must be used.

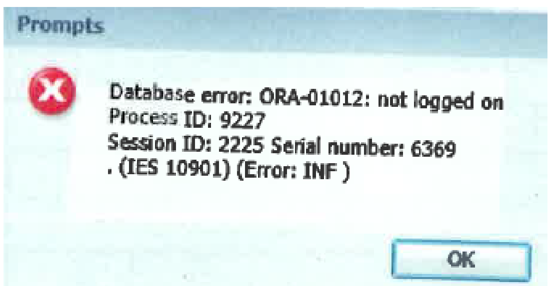
Formulas in ALDER are very similar to formulas in Excel. One key difference,

- A comma (,) in Excel, is a semi-colon (;) in ALDER
- A semi-colon (;) in Excel, is a comma (,) in ALDER

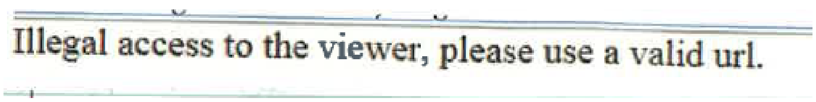
Error Messages

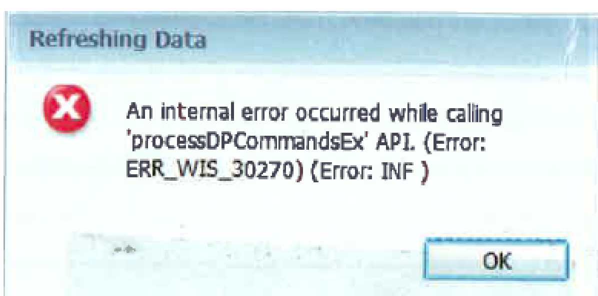


The report name includes an ampersand, "&". Remove this symbol from the title.



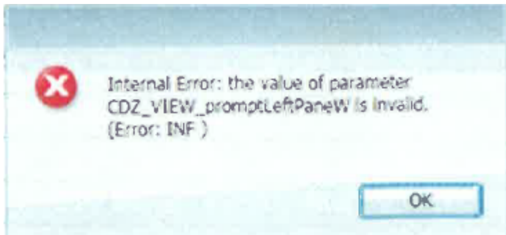
Both messages indicate that servicer was overloaded and session disconnected. Log out and try again.



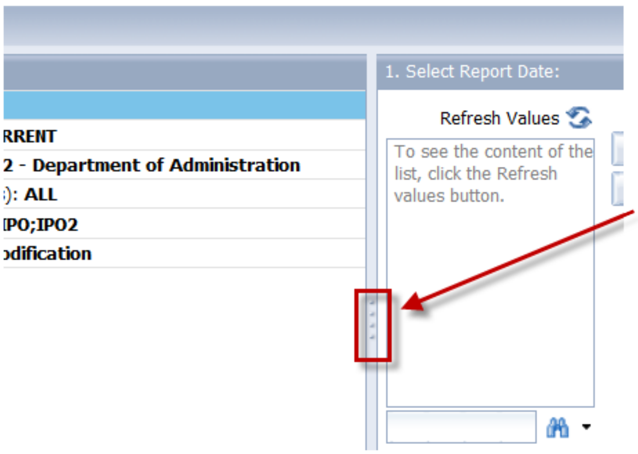


This can indicate that there is a document element in the result objects, removal of that element can correct the problem. This correction doesn't always work.

This can also indicate a server space problem.



This is a known bug. This occurs when a report is opened and the prompt window resized. Select OK and refresh.



Don't resize the prompt window.

Server issue, should be reported to the ALDER team, cannot usually be resolved by the team as server is controlled by OIT.

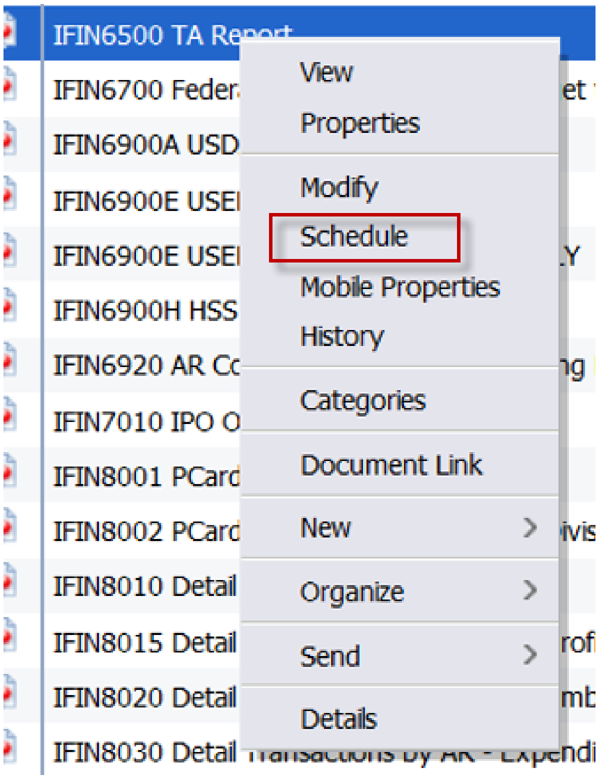
Scheduling Reports

Often, a report is needed on a recurring basis, daily, weekly, monthly or annually. A scheduled report can be delivered to an ALDER (BI) inbox or as a document (PDF or Excel) through email.

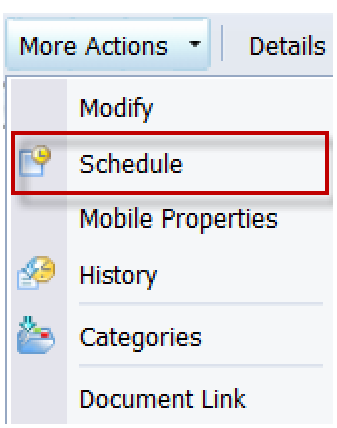
Reports cannot be scheduled from the ALDER Enterprise folder; however, they can be scheduled from department folders. When reports are scheduled from department folders they are associated with that individuals ALDER security. If that individual changes departments, their ALDER security changes and the reports will need to be re-scheduled by another department employee.

Basics of Scheduling Reports

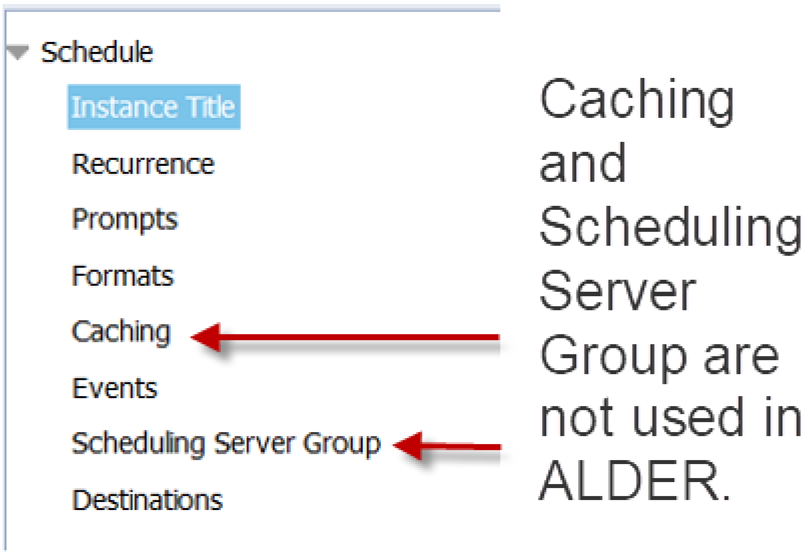
While in the report list, highlight the report to be scheduled and right click. Select "Schedule"



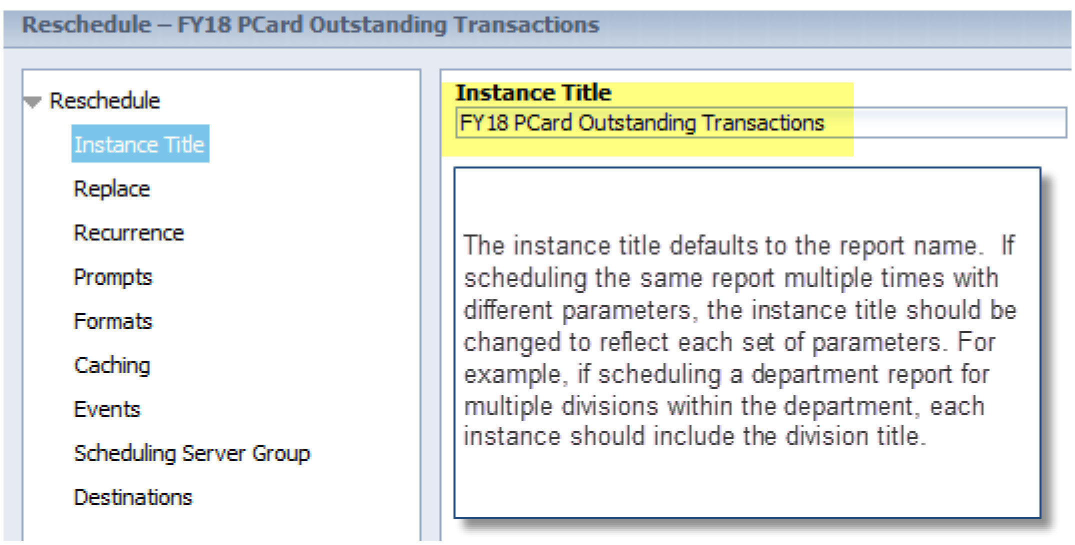
Alternatively, the "More Actions" button can be used. With the report to be scheduled highlighted, select the "More Actions" button and "Schedule".



The schedule generator will appear, depending on the report needs, not each area needs to be completed.

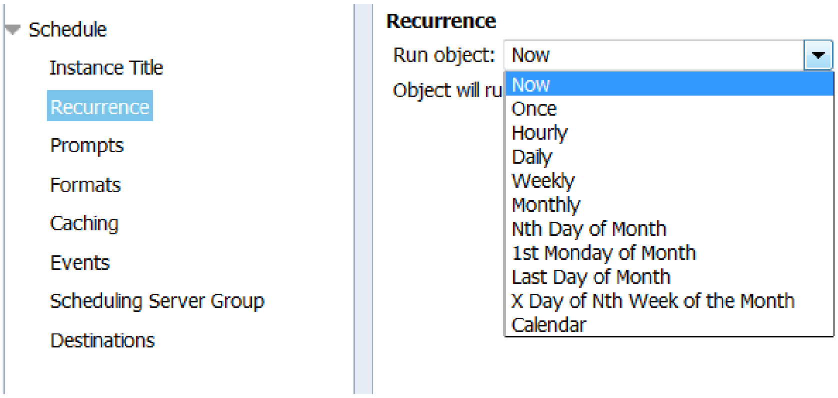


Instance Title



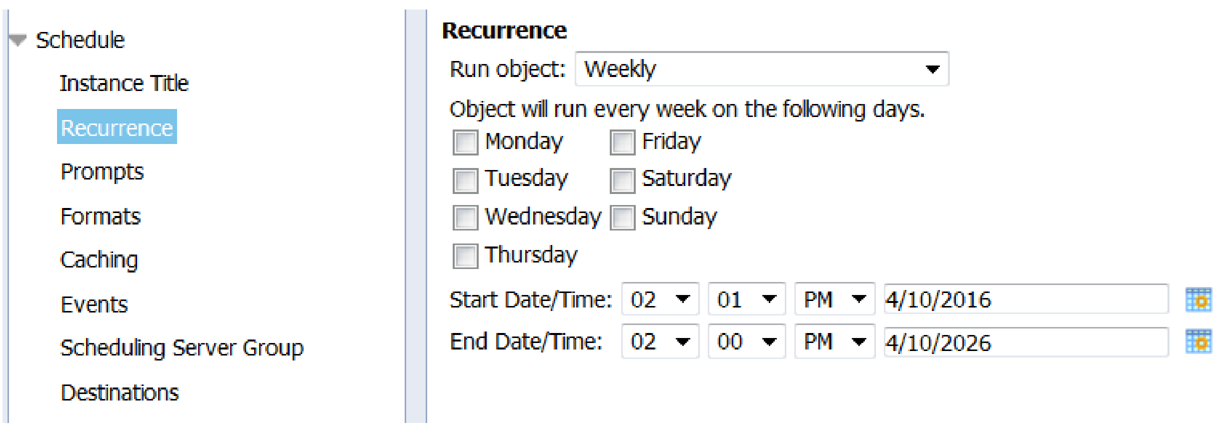
Recurrence

Recurrence identifies how frequently the report should generate.



A report can be scheduled to run at various intervals, such as now, daily, monthly or on a certain day of the month. Although the option is available, it is not recommended to schedule reports hourly. ALDER is updated from IRIS each night, running a report hourly does not provide updated information throughout the day. In addition, an hourly report consumes the limited resources of the server.

If the report is to be generated only during the work week, select weekly and the Monday through Friday checkboxes.

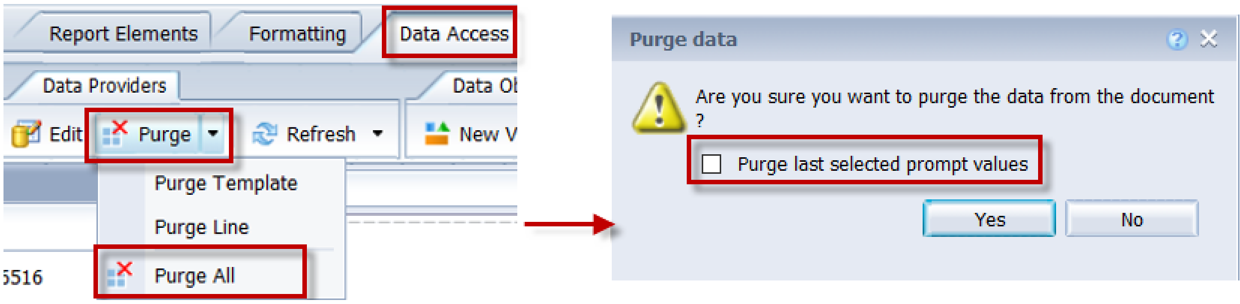


When setting up a recurring report, the start date will automatically populate the current date. If the desire is to have the report available at the beginning of the business day (generally 8:00am), the start time should be set as 11:59pm. Leave the end time unchanged.

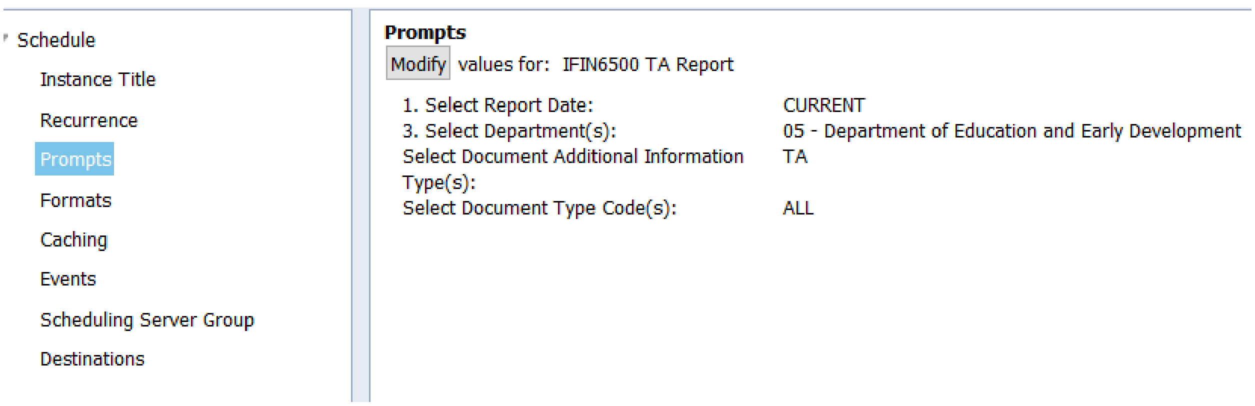
Prompts

Prompts provides the opportunity to change the query prompts. If the input prompts are acceptable without change, this step can be skipped. Be patient, it takes time for the "Modify" button to appear.

By purging the data from the report before scheduling, the prompts will appear faster.



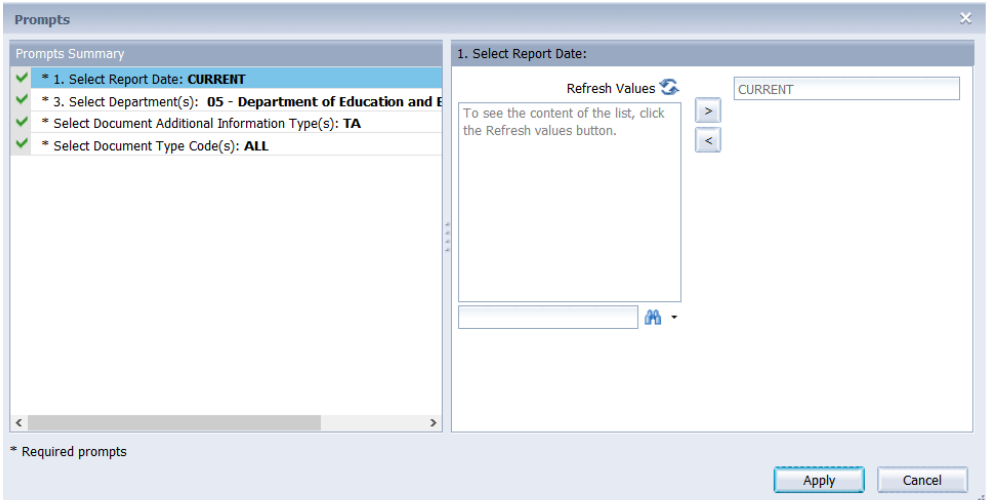
If scheduling the same base report multiple times with different queries, it is helpful to name each instance of the report in the Instance Title. For example, if scheduling a departmental report for each division, the instance title could include the name of each division.



Select "Modify" to get the query prompts.

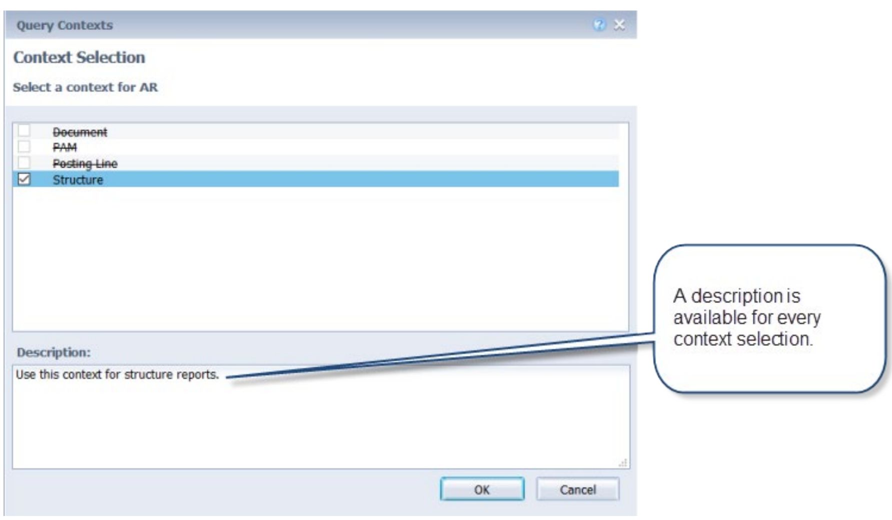
The normal query box will appear.

 Last Updated: 10/24/2018



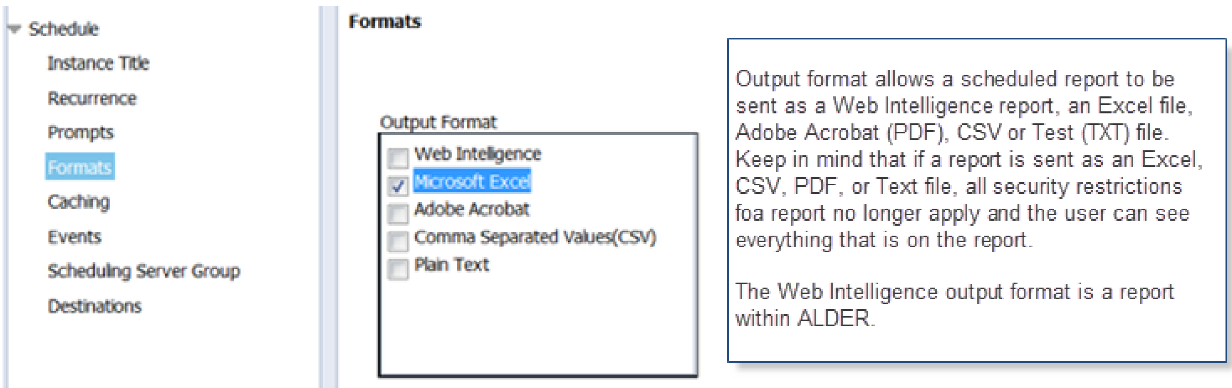
For a report that is scheduled to generate on a recurring basis, the scheduled instance stores a set of prompt values. Any saved changes to the visual appearance of the report will appear in the next scheduled run, but the prompts remain with the scheduled instance.

For example, if result objects have been added to the saved report, they will be included on the next version of the scheduled report. If a new query filter has been added to the saved report, the scheduled report prompts remain the same. If the new query filter has a default value, the scheduled report will generate with that value. If the new query filter has no default, the scheduled report will fail. If the report is a structure report and selecting the context is required, the scheduled report will fail.



Format

Choose a format for the output.



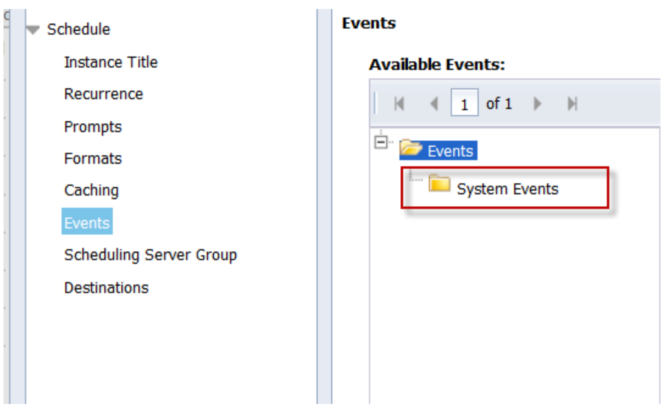
Caching

This section is not used.

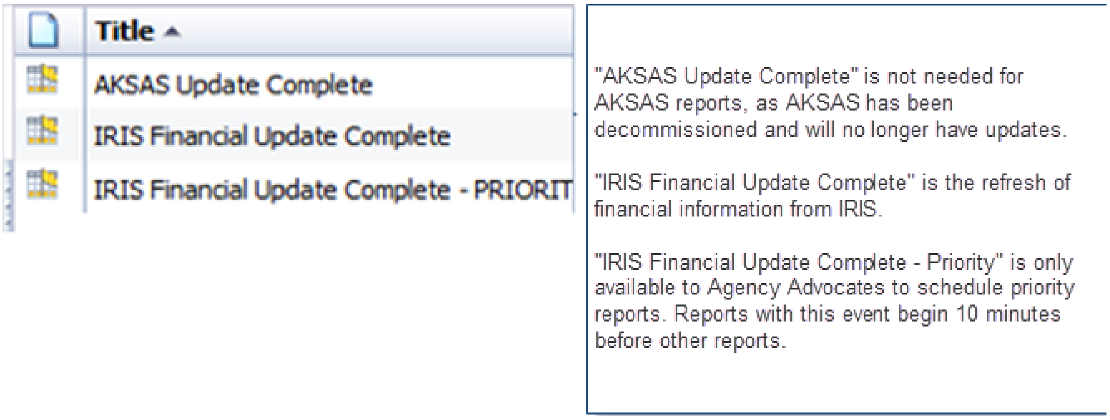
Events

If scheduling a report to generate on a <u>recurring</u> basis (daily, weekly, monthly, ect), it is <u>**critical**</u> to add "IRIS Financial Update Complete" as an event to wait for.

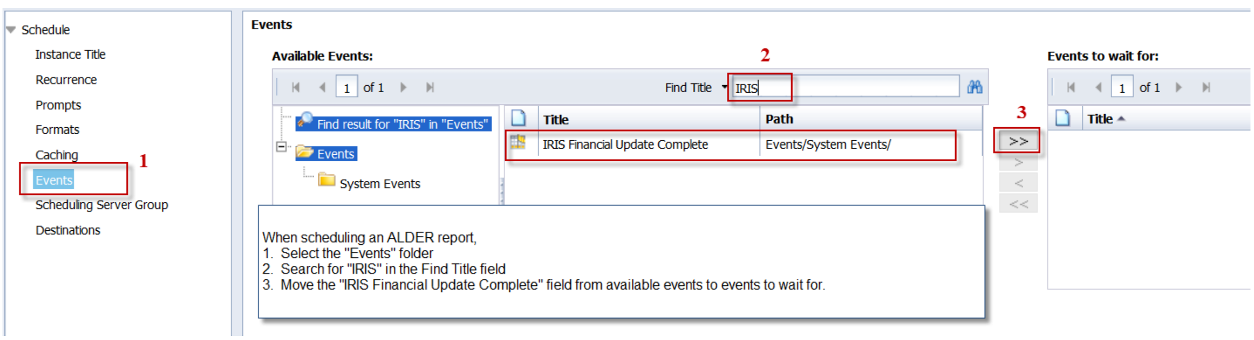
Select "System Events"



All events available to the user (based on security rights) will populate under the title.



Alternatively, in the "find title" field, enter "IRIS". The title field should populate with "IRIS Financial Update Complete".



Move the resulting event to the "events to wait for" table. This will prevent the report from generating, no matter what time selected, until after the IRIS financial update is complete. ***Without this event, a single report can delay or even crash the nightly refresh of data from IRIS to ALDER. Without this event, the validity of the data returned is questionable.***

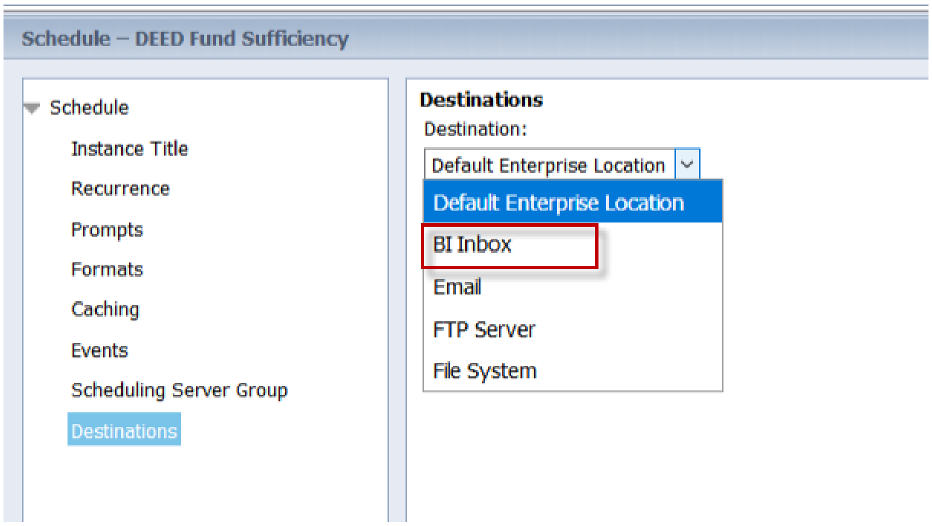
Recurring reports that do not include the "IRIS Financial Update Complete" event are subject to being paused by the ALDER team WITHOUT WARNING.

Scheduling Server Group

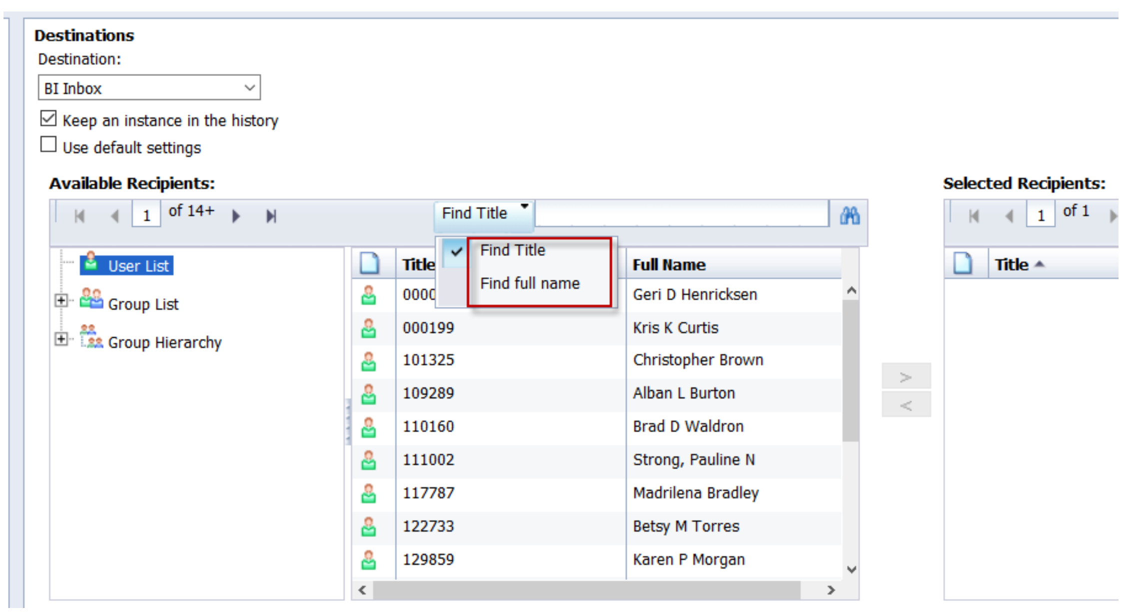
This section is not used.

Destinations

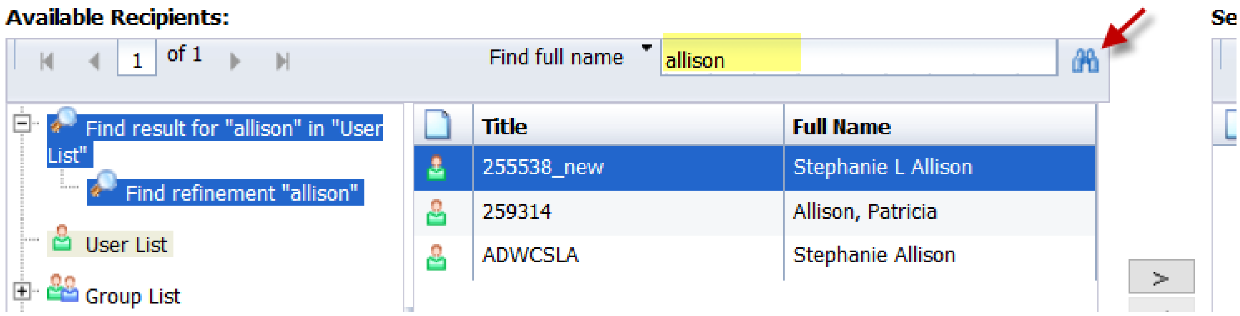
If sending the document to another users ALDER inbox, select the BI Inbox destination.



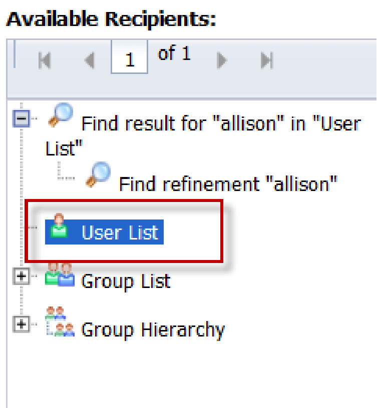
A search can be performed on the employee ID (Title) or the employee name. Using "Find Title" is a search for six digit employee ID. Select "Find Full Name" and enter search criteria.

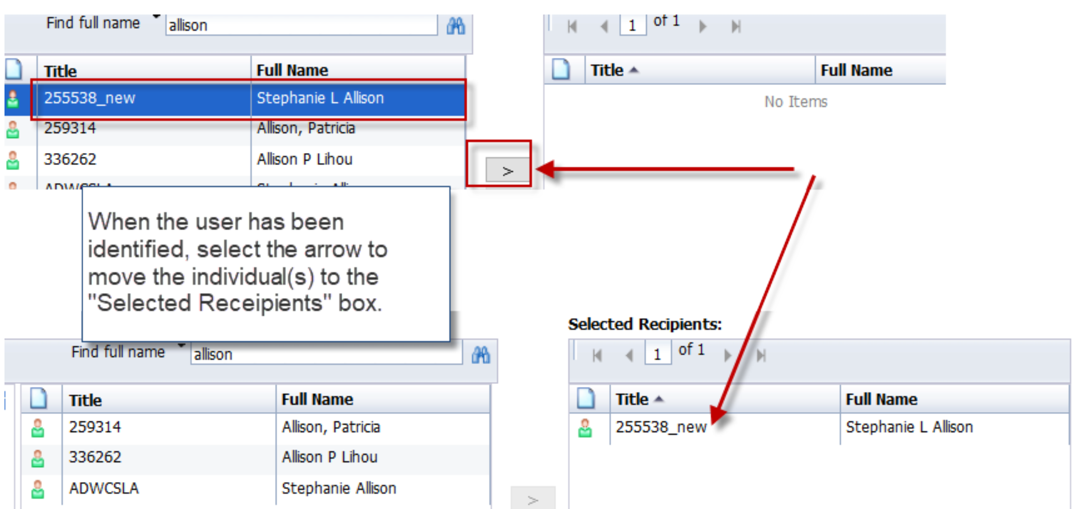


Select the binocular symbol **<u>be patient.</u>**

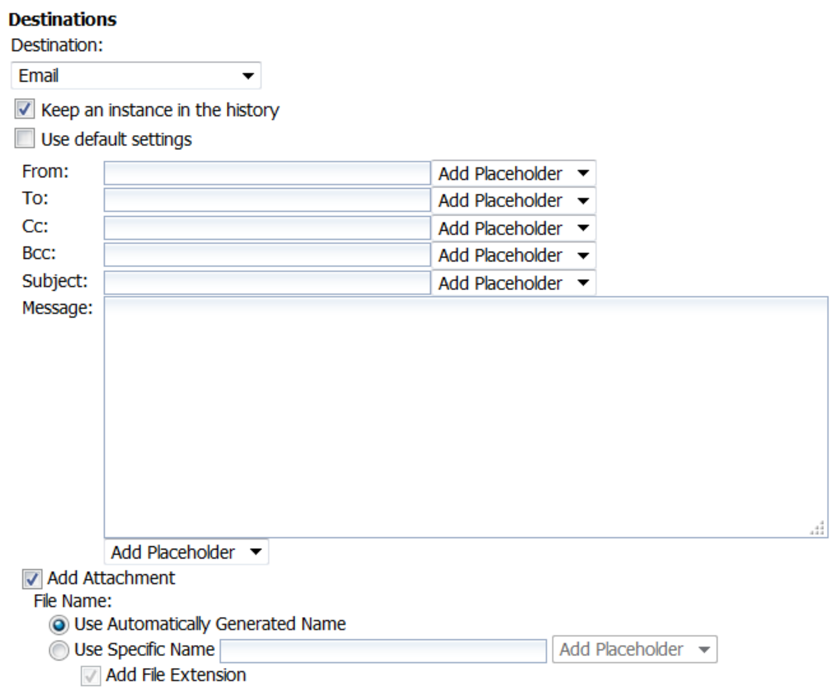


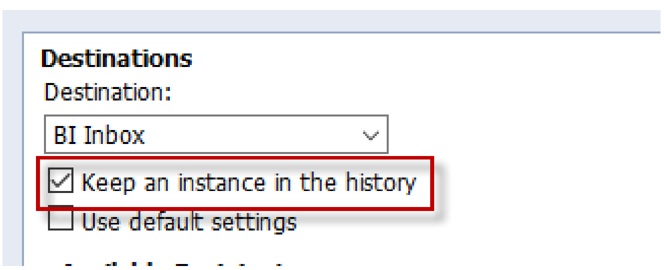
If there is a need to search for a second name, the User List on the left must be selected first.





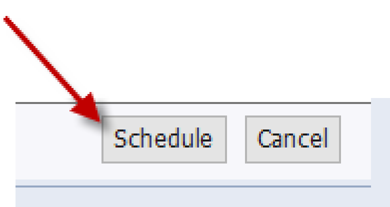
If the report will be sent via email, fill in the information on this screen. If sending to yourself, use your email address in both the “From” and “To” fields.





The scheduler defaults to "Keep an instance in the history". If an instance does not need to be kept, the box should be unchecked.

When all of the scheduling criteria has been completed, select "Schedule" in the lower right-hand corner.

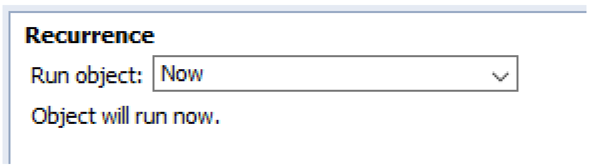


Scheduling Reports for the Same Day

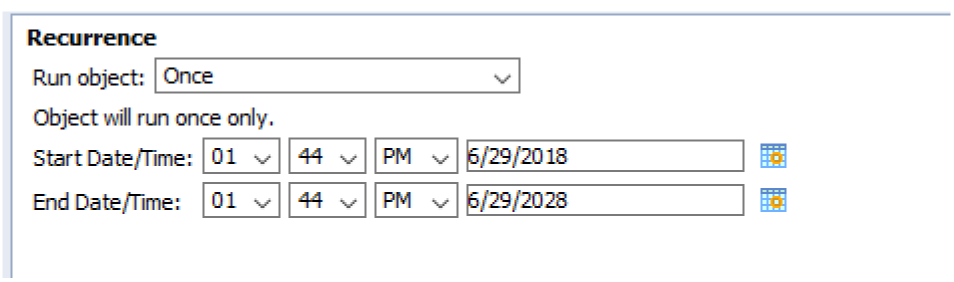
There are many reasons to schedule a report to generate the same day, rather than simply running a report while in the system. By scheduling a report, users can remain productive and not have to monitor ALDER report execution.

A report scheduled to run on the same day, should have:

1. Recurrence = Now, or Once



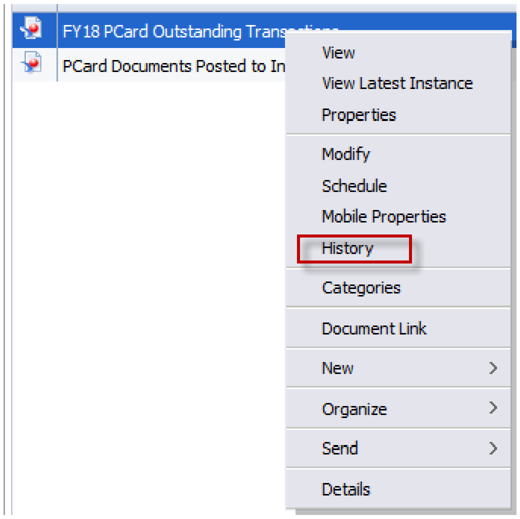
If using "Once", the date and time should be set as the current date **and a time prior to 8:00pm**. A recurrence of "Now" will not necessarily execute immediately, it depends on the volume of reports already in the que.

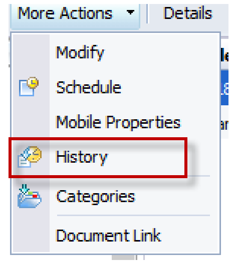


2. Events = this does not need to be populated ***only for non-recurring reports set to generate on the same day.***

Report History

By default, a scheduled report is only visible by viewing the history of the report. With the scheduled report highlighted, right click on the report and select History, or use the More Actions drop down menu.





From the history list, each version of the scheduled report is listed. The status column indicates the status of the specific version of the scheduled report.

Success - indicates the scheduled report was executed, not that it reached completion. A report could reach the timeout limit, not contain any results, and still have a status of success.

Paused - indicates that a scheduled report has been paused.

Recurring - the parameters of the recurring report.

Failed - indicates that the report did not execute.

Pending - indicates the report is in a queue waiting for processing.

Running - indicates report actively being processed.

To determine why a specific report failed, select the blue status for specifics. By selecting the status of recurring, the schedule parameters are viewable.

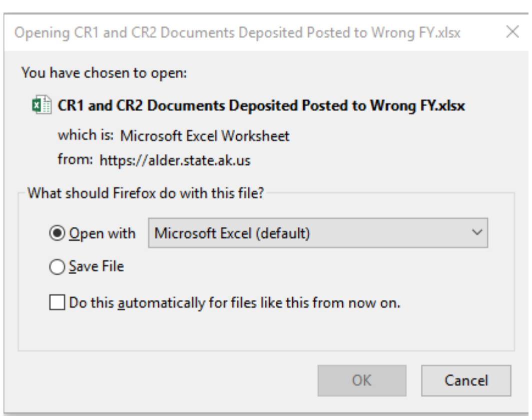
Status

Title:	FY18 PCard Outstanding Transactions
Document Type:	Microsoft Excel
Status	Recurring
Destination:	Mail the instance to: "[stephanie.allison@alaska.gov]" with a
Owner:	255538_new
Creation Time:	4/19/2018 11:55 AM
Next Run Time:	7/6/2018 8:00 AM
Waiting for event(s):	IRIS Financial Update Complete
Recurrence Type:	Object will run every week on the following days:Friday
Parent Object Path:	User Folders/255538_new/DOF Final/Monitoring/PCard/
Remote Instance in Federated Cluster:	No
Expiry:	4/19/2028 11:54 AM
Formats:	Microsoft Excel
Parameters:	

Each instance of the report is listed with the date, time and status of the report.

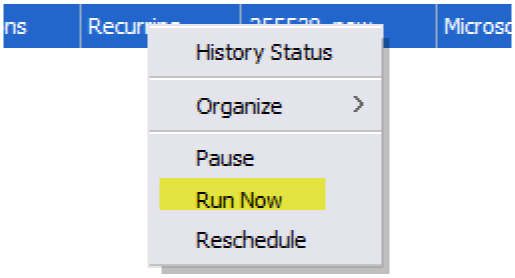
Instance Time	Title	Status	Created By	Type	Parameters
Jul 11, 2018 9:05 AM	CR1 and CR2 Documents Deposited Posted to Wro	Success	255538_new	Microsoft Excel	CURRENT;CURRENT;PRIOR;ALL
Jul 10, 2018 9:24 AM	CR1 and CR2 Documents Deposited Posted to Wro	Success	255538_new	Microsoft Excel	CURRENT;CURRENT;PRIOR;ALL
Jul 10, 2018 9:22 AM	CR1 and CR2 Documents Deposited Posted to Wro	Success	255538_new	Web Intelligence	CURRENT;CURRENT;PRIOR;ALL
Jul 10, 2018 8:58 AM	CR1 and CR2 Documents Deposited Posted to Wro	Paused	255538_new	Web Intelligence	
Jul 9, 2018 7:35 AM	CR1 and CR2 Documents Deposited Posted to Wro	Recurring	255538_new	Microsoft Excel	
Jul 7, 2018 9:42 AM	CR1 and CR2 Documents Deposited Posted to Wro	Success	255538_new	Web Intelligence	CURRENT;CURRENT;PRIOR;ALL
Jul 6, 2018 9:53 AM	CR1 and CR2 Documents Deposited Posted to Wro	Success	255538_new	Web Intelligence	CURRENT;CURRENT;PRIOR;ALL

Each successful instance can be viewed by selecting the blue instance time or report title. If the report format is Excel, selecting the report instance will generate an option to open the report in excel or save the file.



If the report format is Web Intelligence, selecting the report instance will generate the report in a new tab for the instance selected.

With status line of recurring highlighted, right clicking provides a menu of options.



Organize - Provides the option to delete the scheduled report entirely.
Pause - Pauses the scheduled report
Run Now - Runs the report after the IRIS Financial Update event.
Reschedule - Provides the entire menu for report scheduling, any element can be changed and will adjust the entire schedule.

Additional Information on the Report Scheduler

The report scheduler triggers a report based on two factors:

1. The IRIS Financial Update event being completed
2. The scheduled start time for the report being reached

The IRIS Financial Update event activates once a day, any scheduled report that exists when it is activated are flagged for execution. If a report is scheduled after the IRIS Financial Update event has been activated and includes the update event, the report will be flagged the next time the IRIS Financial Update event activates. Once the scheduled report has been flagged and the scheduled start time criteria has been reached, the scheduler executes the report and resets the execution flag. This process operates the same no matter what the specific time the report is scheduled.

Consider the following scenarios:

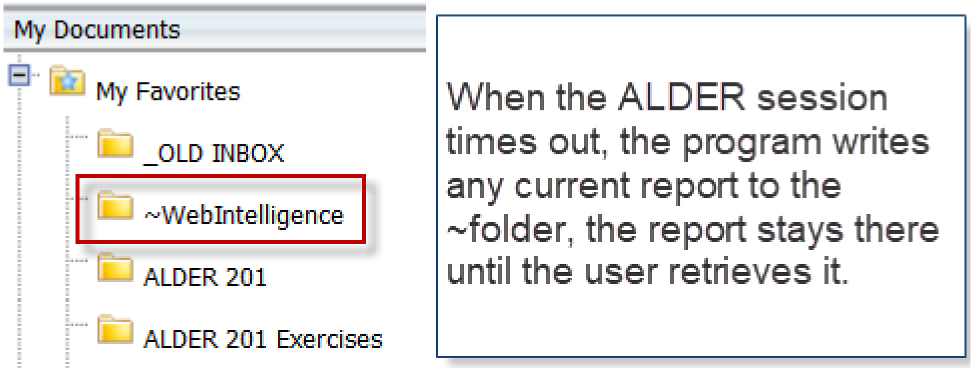
- If on 7/1 at 11:00am (after the IRIS Financial Update event has been activated) a report is scheduled for 11:59pm, the report will run on 7/2 AFTER the completion of the IRIS Financial Update event.
- If on 7/1 at 11:00am (after the IRIS Financial Update event has been activated) a report is scheduled for 10:00am, the report will run on 7/2 AFTER the completion of the IRIS Financial Update event and not before 10:00am.

- If on 7/1 at 11:00am (after the IRIS Financial Update event has been activated) a report is scheduled for 3:00pm. The report will run on 7/2 AFTER the completion of the IRIS Financial Update event and not before 3:00pm.
- If on 7/1 at 11:00am (after the IRIS Financial Update event has been activated) a report is scheduled for 10:00am **but fails to include the IRIS Financial update event**. The report will run on 7/2 at 10:00am. ***However, the validity of the data is questionable and if the IRIS Financial Update event has not occurred by 10:00am, the report could both slow the entire system or completely crash the system.***

Recurring reports that do not include the "IRIS Financial Update Complete" event are subject to being paused by the ALDER team WITHOUT WARNING.

Using the WebIntelligence Folder

Each user has a ~WebIntelligence folder in their personal ALDER folder.



To open items in the WebIntelligence folder, go to the folder and select the report.