

# *Datamart & Hyperion Interactive Reporting Studio (IR Studio)*

## *Tips and Tricks*

### General Tips:

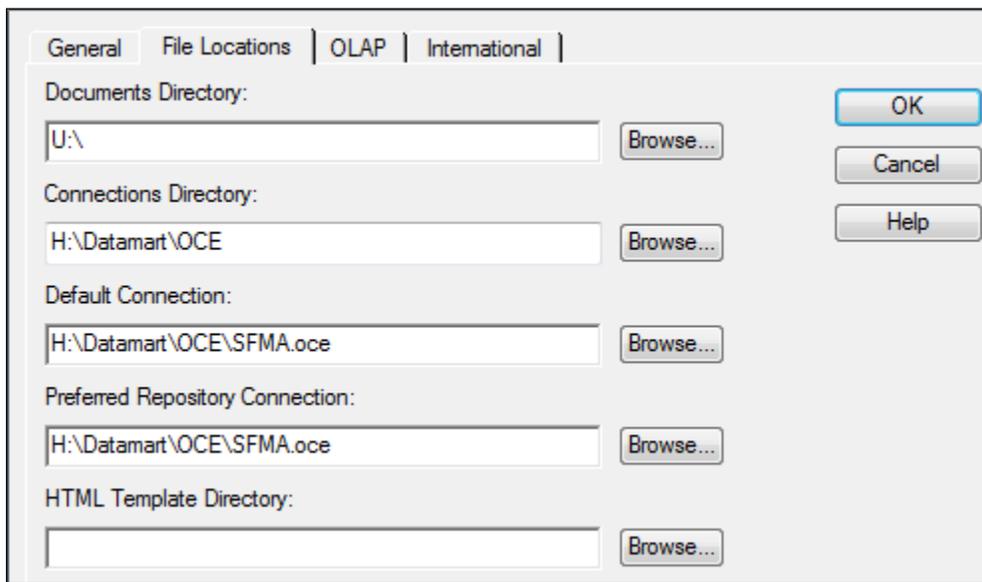
1. Attending Datamart training can provide a lot of valuable information. There are two free courses, which are offered on approximately a once a month basis. Please visit the Datamart website for details. ([http://www.oregon.gov/DAS/EGS/FBS/Pages/datamart.aspx#Datamart\\_Training](http://www.oregon.gov/DAS/EGS/FBS/Pages/datamart.aspx#Datamart_Training))
2. Some users are under the impression that accessing the DAS Datamart with a standard view has a cost associated with the amount of time a query processes. This has not been true for many years. There are no additional costs associated with running a query with a standard view of the Datamart.

### Application Tips:

3. Check the Hyperion version you are currently using. All State of Oregon Datamart users should be on at least version 11. If you are not on the current version, please contact your tech support and request an upgrade (no charge for application upgrade, due to Enterprise license). The complete upgrade process is available and documented on the Datamart website (<http://dasapp.oregon.gov/datamart/>). Using at least version 11 is crucial, due to legacy versions of this application not functioning properly with Windows 7 and beyond.
4. Be careful to not let your files become too large. Although Hyperion does not have a file max, the file does become slower the larger it is and can eventually become corrupt.
5. If you have multiple files that you need to process, you can open two sessions of the Hyperion application and run both queries at one time. This can help save time and is much more efficient.

### Saving Tips:

6. Make sure to save and back up your queries – especially if you are running data for an auditor. An auditor may want to know what criteria were used to create a report as part of their verification procedures. If you don't have the query, it can be very difficult to reproduce the information. Also, you may want to use the query that produced a report six months later – if you don't have the query, again, reproducing the query can be difficult.
7. To compress a file document, select File\Save Options\Compress Document. You can also make this the default option for saving documents by checking the appropriate box under the Hyperion Interactive Reporting Studio 'General' options tab (found at Tools\Options\Program Options...).
8. It is recommended to save your Open Catalog Extension's (OCE) to a drive that is backed up, such as the network drive. In the past, they were saved to the 'C' drive, which is not backed up. In addition, we have up-to-date OCE's available for download on our website. (<http://dasapp.oregon.gov/datamart/>)
9. Here are the steps to update the default file locations in Hyperion. (Click on Tools > Options > Program Options and then select the 'File Locations' tab. The 'Documents Directory' is the directory opened when you need to obtain a new file. The 'Connections Directory' is the one related to where Hyperion will search for an OCE. In addition, the 'Default connection' and 'preferred Repository connection' are locations looking for an OCE and should be similar to the 'Connections Directory'. (See example below)



### Query Build & Filtering Tips:

10. When building a query, start with a financial table first. When selecting fields for your request line, the most efficient way to query is to take as much as you can out of the financial table. In addition, you should limit the number of joins in your query for most efficiency. (See the Datamart website for financial table info).
11. Setup filters based as much on the financial table fields as possible. Filtering on a field within a profile table tends to slow the query down. If you can limit/filter only on fields in the financial table, your queries come back faster.
12. When creating a new query the best practice is to not have tables joined to other tables. Run your main query with only the financial table and obtain results, prior to adding any joins. This will help provide you with the correct results. If joins are needed, add after initial data pull to evaluate if joins were done properly.
13. It is recommended to use at least two filters/limits when building any query. The most commonly used filters are 'Agency' and 'Fiscal Year'. These two filters alone can really help the speed of your query.
14. It is recommended to filter all queries by AY or FY unless there is an overriding need not to use these filters. Without these filters, you'll get data for all years within the database.
15. When querying any of the 'Accounting Event' tables (All, Active, & Archive), make sure to include 'Agency', 'Year' and 'GL Account' in your query filters. This speeds the query immensely and filters the amount of data returned. Remember, the 'Accounting Event' table itself is 99+ gigabytes of data in the Datamart.
16. If you think you have results that seem incorrect, check your query first – did you filter your data the way you really wanted it filtered, or did you not include (or include too many) filters? If you still have doubts, it is recommended to remove all profile tables and only leave the financial table. This will help provide you with the proper results.
17. Try to filter/limit your queries as much as possible; it cuts down query run time. However, if you need to look at a broad view of data, don't hesitate to bring in more data than you think you need. You can always refine your data output (in Hyperion anyway) via filters in the results set. When you get the results you want, if you expect to rerun the query regularly, transfer the filters in the results set to the query section.
18. If using 'Show Values' for filtering data within the query section, be aware that it could take quite some time for the list to come back for selection. It is not recommended that you use 'Show Values' in the query section. 'Show values' actually queries against the Datamart, and can take additional time, depending on the field chosen. However, using 'Show Values' within the Results section is very quick.

19. Test your query by filtering the number of rows to 1000. This gives you a reasonable amount of data to look at in the results section before you run a full query.
20. If you do not need detail transaction data, you can use the 'GL Detail' table to obtain summary values. A good example of this is on the Repository (instructions on website) within the 6610 and 6620 report files.
21. The YE Datamart tables (YE Active Accounting Event, YE GL Detail, and YE GL Summary) only contain data during Month 13 and the rest of the year they are blank.
22. Large agency's who believe their queries take too long, should look into altering their standard query build. Evaluate if they could be changed into 'Derived' queries. This alteration could have dramatic improved effects. See additional info on this conversion on the main Datamart website.

#### Join Tips:

23. Unless you have a reason, always use the 'custom' joins provided by the Datamart. These joins were created in order to simplify querying, and to protect new users from runaway queries. If a join doesn't show up when using custom joins, there's usually a reason, and it is usually when a query will produce inappropriate results.
24. In Hyperion, it is recommended to place your 'Financial' table to the far left of the query (content pane) screen. Believe it or not but this can affect your query. Place profile tables you wish to join to the right of the financial table. This seems to speed up queries to some degree, especially if you are using an outer join.
25. If an Open Catalog Extension (OCE) does not have the 'custom joins' coding activated, be very careful of the automatic joins that the Hyperion application makes. They are made exclusively on whether field names match exactly, not whether they are key fields or not. Always try to make sure your OCE has the custom joins.
26. Do not join two 'financial' tables together because it can cause issues. When you run the query, you will get what is called a 'Cartesian product' - basically, the number of unique records in one table multiplied by the number of matching records in the other joined table. A runaway query is usually a Cartesian product.

#### Formatting Tips:

27. The Hyperion application standard number format is not very user friendly; however, the following custom number format “#,##0.00 ;(#,##0.00)“ will help better present financial data. You can set this format as your default by going to the 'Tools' menu, 'Options', 'Default Formats', click on the 'Numbers' tab, alter the 'Real:' number format. If the above format is not an option on the drop down menu to select, you can select the 'Custom' button and input the format. Once input, it becomes part of the 'Real:' drop down menu.
28. In the 'Results' or 'Table' sections, if you select 'Ctrl A' & then 'Ctrl E', it will 'auto fit' all columns.

#### Password & Maintenance Website Tips:

29. Standard Datamart passwords are good for 90 days and then must be altered by using the Datamart User Maintenance site (<https://dasapp.state.or.us/DatamartApp/>). The site was updated 6/17/15 as well as the old site taken down. Passwords should be 8 characters in length and follow the rest of the state password guidelines.
30. If you have a runaway query, or you decide to end a query early, you cannot end a query just by closing down your computer program. When you send a query to the Datamart, all of the work goes on at the Datamart server, not your PC. Closing down your application does not send a message to the Datamart to close the query. If you want to stop a query at the Datamart, you must use the 'Kill Query' process via the Web.
31. Whenever you have the Hyperion application open and you have logged into the Datamart, you have a session running. Open several queries, and you will have several sessions open. Be aware of this if you are going to kill/stop one of the queries from the Maintenance website. The 'kill' process stops all active sessions, not just the single one you wish to stop processing.