Banner Expert Query

What is an expert query?

Expert query is a way to execute more complicated queries within Banner using a simplified SQL language. In some forms, utilizing just the standard enter query/execute query commands, you are unable to tab into the field on which you wish to query, thereby limiting the queries you are able to execute. Using expert query, you can execute queries on any fields within the table being referenced by the form. Additionally, you are able to make use of complex query commands that typically are not available in any Banner form as well as prescribe a sort order for your output.

What do I need to know to do an expert query?

In order to execute some expert queries, you must know the table or field names. This information can be found in the form you are querying by clicking on Help and then Dynamic Help Query. The table and field name will be displayed in the third row. Other basic expert queries will be able to be performed without knowing the field names.

You will follow these basic steps in order to execute an expert query (first, you must be in a form that allows queries):

1. Key F7 or use the icon the toolbar to enter query mode
2. Type the colon symbol (":") in any field.
3. Key F8 or use the icon on the toolbar to execute the query. The following pop-up window will be displayed so that you can type in the expert query instructions.
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Press OK to execute your query.

Expect Query Basic Commands & Rules

There are a number of basic commands that can be used to filter your Banner queries:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>between</td>
<td>This is an inclusive between</td>
</tr>
<tr>
<td>=</td>
<td>Equals</td>
</tr>
<tr>
<td>&gt;</td>
<td>Greater than</td>
</tr>
<tr>
<td>&lt;</td>
<td>Less than</td>
</tr>
<tr>
<td>&gt;=</td>
<td>Greater than or equal to</td>
</tr>
<tr>
<td>&lt;=</td>
<td>Less than or equal to</td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td>Not equal</td>
</tr>
<tr>
<td>like</td>
<td>Used in conjunction with wildcards like “%” or”_”</td>
</tr>
<tr>
<td>is null</td>
<td>Returns values where the specified field is empty (a space is not considered an empty field)</td>
</tr>
<tr>
<td>is not null</td>
<td>Returns values where the specified field is not empty</td>
</tr>
<tr>
<td>in</td>
<td>Allows for multiple specific values to be enter in the following format: indicator_field in ('value1', 'value2', 'value3')</td>
</tr>
</tbody>
</table>

When using Expert Query, follow these rules:

- Query values must be surrounded by single quotes if it is an alphanumeric or date value.
- Dates should be entered in the format ‘31-OCT-01’, or ‘DD-MON-YY’.
- Numeric values are entered without quotes.

You can also sort the query output by making use of the ‘order by’ command.

- To sort ascending: “order by : asc”
- To sort descending: “order by : desc”

All of the equal to, greater than, or less than operators listed above can all be used in Banner query pages without Expert Query, assuming the field length permits that many characters to be entered.
Select More Than One Field for Your Expert Query

Before causing Banner to display the Query/Where dialog box, it is possible to select more than one of the fields in the original query form for your Expert Query. For each field you wish to select, enter a colon followed by an identifying letter (for example - :A, :B, :C). Then, when you execute your query, in the popup box, preface a query on a specific field with the colon and identifying letter.

:A order by : asc  
:B is null  
:C like '%ABC%'

Please note that this only is possible when the field length is at least two characters.

Data Dictionaries

In order to fully utilize the Expert Query functionality, you will need to potentially reference the Banner data dictionaries as they list out every table and field (along with an associated description) in the database.

They can be found here: F:\Data Dictionaries\Banner 8.x. Choose the data dictionary for the particular module that you are using (e.g. Finance, Payroll, or AR).

Example #1: Sorting Output on FGITRND

What if you want to find documents that recently posted to an expense account on a specific fund and department and know that what you are looking for occurred in the past couple days. This is a good candidate for sorting by activity date on FGITRND. To sort a query list in descending/ascending order:

1. Navigate to FGITRND, enter the fiscal year (‘14’), Fund (‘111111’), and Organization (‘505030’) and then next block.
2. Key F7 to start a query
3. Enter : into the Activity Date field. In this example, you are assigning “:” to represent the activity date when you perform the expert query sort.
4. Key F8 to execute the query - The expert query box should appear.
5. Type in the expert query box  
   Order by : Desc
6. Click OK.
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Example #2: Viewing Only Reconciled Checks on FTICHKS

What if you want to see a list of checks that have been marked as reconciled in Banner and want to see it sorted in descending check date order. This is a good candidate for using Expert Query on FTICHKS. To filter on a field not on a form and sort the query list in descending/ascending order:

1. Navigate to FTICHKS.
2. Determine what table FTICHKS is sourced from by selecting Help and then Dynamic Help Query.
3. Key F7 to start a query
4. Enter : into the Check Date field. In this example, you are assigning “:” to represent the check date when you perform the expert query sort.
5. Key F8 to execute the query - The expert query box should appear.
6. Type in the expert query box
   
   FABCHKS_RECON_IND = 'F'
   order by : desc
7. Click OK.

Example #3: Making Use of the PIDM on FOAIDEN

What if you are testing data and only know a person’s or corporation’s PIDM and not their ID or name? This is a good candidate for using Expert Query on FOAIDEN. To determine an ID based on the PIDM:

1. Navigate to FOAIDEN. Choose the drop down box next to the ID in the key block and choose Person Search. This takes you to the FOIIDEN form.
2. Determine what table FOAIDEN is sourced from by selecting Help and then Dynamic Help Query.
3. Key F7 to start a query
4. Enter : into the ID field.
5. Key F8 to execute the query - The expert query box should appear.
6. Type in the expert query box
   
   SPRIDEN_PIDM = '73689'
7. Click OK.

Example #4: Displaying the Current Record on FTVFUND (or ANY FOAPAL Form)

What if you want to query FTVFUND (or any of the FOAPAL validation forms) for all funds starting with “RG” but only want to see the current record for each. If you do not filter this form, you will see multiple records for each fund because of financial manager or title changes. All you want to see is the
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current record. This is a good candidate for using Expert Query on FTVFUND as this involves a more complex query:

1. Navigate to FTVFUND.
2. Determine what table FTVFUND is sourced from by selecting Help and then Dynamic Help Query.
3. Key F7 to start a query
4. Enter : in the Chart of Accounts field (or any field other than Fund Code).
5. Enter RG% in the Fund Code field.
6. Key F8 to execute the query - The expert query box should appear.
7. Type in the expert query box
   \[\text{ftvfund\_nchg\_date} > \text{sysdate or ftvfund\_nchg\_date} \text{ is null}\]
8. Click OK.

Example #5: Determining E-Procurement Vendors on FTMVEND

What if you are looking for specific vendors that are marked as e-procurement vendors, meaning that they sync up with Deacon Depot. This is a good candidate for using Expert Query on FTMVEND as this involves a complex query:

1. Navigate to FTMVEND. Choose the drop down box next to the Vendor. This takes you to the FTTIDEN form.
2. Determine what table FTTIDEN is sourced from by selecting Help and then Dynamic Help Query. Note that this form is sourced from SPRIDEN but the e-procurement flag is on FTVVEND.
3. Key F7 to start a query
4. Enter : in the ID field (or any other field for that matter as we are only using : to access expert query and are not going to assign : to any specific field).
5. Key F8 to execute the query - The expert query box should appear.
6. Type in the expert query box
   \[\text{spriden\_pidm} \text{ in} \left(\text{select ftvvend\_pidm from ftvvend where ftvvend\_eproc\_ind} = 'Y'\right)\]
7. Click OK.