Enhancing your Voyager Access queries: a series of ‘quick tips’

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Strategizing

- Use ER diagrams and other resources to decide which tables are needed
- Develop a strategy, think about what your goal is
- Get an idea of what to expect in a result
- Look at examples in the clients
- Open the tables linked to Voyager and look at the contents
- Ask your question on Voyager-L
Inner and Outer Joins

Inner Join
Is the default
Linking line has no arrow head

Outer Join
Right click on linking line to pull up dialogue box
Select option 2
Linking line now has arrow head
Inner and Outer join examples

Inner Join on Patron_Notes results in only 26 rows. Displays the records that only had data in a note field.

No arrow head on join link

Outer join link results in 1,154 rows

<table>
<thead>
<tr>
<th>21628</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>23111</td>
<td>DEPT(988)</td>
</tr>
<tr>
<td>23376</td>
<td></td>
</tr>
<tr>
<td>27130</td>
<td></td>
</tr>
<tr>
<td>27605</td>
<td>Withdrawn, 2006-01-30 - djv</td>
</tr>
<tr>
<td>31628</td>
<td></td>
</tr>
<tr>
<td>31716</td>
<td></td>
</tr>
<tr>
<td>32061</td>
<td></td>
</tr>
</tbody>
</table>
Why do I have duplicates in my answer?

Last name (Aarsleff) has 4 rows, all contain identical data.

Only one patron record for this person, but there are 4 P barcode segments.
Use Group By

Click on Sigma \( \sum \)

Total line displays, Group By is the default

Resulting answer is aggregated so just one row if all the data is otherwise the same
Working with money - CCur

Currency fields are stored and displayed as text, so 233700 not $2,337.00

Use the CCur function, CCur([Field name]/100)

Produces a formatted result

Apologies to all for the US dollar example!
Working with money – Foreign Currencies

If you pay for materials in currencies other than the Base Currency (USD in the US), you need this expression to convert the foreign currency into US dollars:

```
Line Price: Sum(CCUR(Convert([INVOICE][Conversion_Rate],[INVOICE_LINE_ITEM_FUNDS][AMOUNT],[currency_code])\100))
```

Converts any currency into the base currency and expresses as USD.
Other functions

For Unicode release or above you will need to apply a function to any fields that may contain diacritics or special characters.

Function is `utf8to16([table name].[field name])`

Date formatting: if you want a date/timestamp expressed in a certain format

```
<table>
<thead>
<tr>
<th>To</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/31/2005</td>
<td><code>Expire date: Format([EXPIRE_DATE], &quot;mm/dd/yyyy&quot;)</code></td>
</tr>
<tr>
<td>10/31/2003</td>
<td><code>Expire date: Format([EXPIRE_DATE], &quot;mm/dd/yyyy&quot;)</code></td>
</tr>
<tr>
<td>10/31/2009 8:48:03 AM</td>
<td><code>Expire date: Format([EXPIRE_DATE], &quot;mm/dd/yyyy&quot;)</code></td>
</tr>
<tr>
<td>10/31/2009 8:48:03 AM</td>
<td><code>Expire date: Format([EXPIRE_DATE], &quot;mm/dd/yyyy&quot;)</code></td>
</tr>
</tbody>
</table>
```
Parameter queries

You can make your queries prompt you for a value such as dates.

Example of criteria field from a query.

Tip: Locations and funds are popular fields for parameter queries. Great option for situations where others are running standard queries.
Types of Queries useful with Voyager

- Select Query default, not a permanent answer
- Make Table Query creates a permanent table, but will need to be updated. I use these a lot
- Append Query takes an answer from a query and appends it to another answer
- Union Query combines result of select queries into one result set. SQL only
Ways to avoid using the BLOB

BIB_TEXT table includes title, author, imprint information, some fixed fields and many id numbers. It does NOT include subjects, and many added entries.

<table>
<thead>
<tr>
<th>BIB_ID</th>
<th>AUTHOR</th>
<th>TITLE_BRIEF</th>
<th>EDITION</th>
<th>ISBN</th>
<th>LANGUAGE</th>
<th>BIB_FORMAT</th>
<th>PUBLISHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>3205327</td>
<td>Rowling, J. K.</td>
<td>Harry Potter and the goblet of fire /</td>
<td>1st American ed.</td>
<td>0439139597</td>
<td>eng</td>
<td>am</td>
<td>Arthur A. Levine Books,</td>
</tr>
</tbody>
</table>

BIB_INDEX table supplies data for indexing but can be used for reporting

<table>
<thead>
<tr>
<th>BIB_ID</th>
<th>DISPLAY_HEADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3205327</td>
<td>eng</td>
</tr>
<tr>
<td>3205327</td>
<td>nyu</td>
</tr>
<tr>
<td>3205327</td>
<td>2000</td>
</tr>
<tr>
<td>3205327</td>
<td>3205327</td>
</tr>
<tr>
<td>3205327</td>
<td>00131084</td>
</tr>
<tr>
<td>3205327</td>
<td>0439139597</td>
</tr>
<tr>
<td>3205327</td>
<td>Magic Fiction.</td>
</tr>
<tr>
<td>3205327</td>
<td>Rowling, J. K.</td>
</tr>
<tr>
<td>3205327</td>
<td>Wizards Fiction</td>
</tr>
<tr>
<td>3205327</td>
<td>PZ7 R79835 Hal 2000</td>
</tr>
<tr>
<td>3205327</td>
<td>(CSTRLIN)DCLCD131084-B</td>
</tr>
<tr>
<td>3205327</td>
<td>Harry Potter and the goblet of fire /</td>
</tr>
<tr>
<td>3205327</td>
<td>Potter, Harry (Fictitious character) Juvenile fiction</td>
</tr>
<tr>
<td>3205327</td>
<td>Hogwarts School of Witchcraft and Wizardry (Imaginary place) Juvenile fiction</td>
</tr>
</tbody>
</table>
The BLOB!

- BLOB is a function
- There are 3 kinds: Bibliographic, Authority and Holdings
- BLOB syntax can be tricky, take care
- BLOB queries can take a long time to run
- Use criteria where possible
- Break up queries for quicker response time
BibBLOB Example

You need to extract bib records containing certain words found in 500 fields.

Use the GetFieldAll function. This will extract all 500 fields that contain the criteria specified. I could add other tables but often quicker to do this query first.

Syntax: GetFieldAll(GetbibBlob([Table].[Bib_ID]),"Tag")
Example: GetFieldAll(GetbibBlob([BIB_DATA].[BIB_ID]),"500")
Result: Princeton copy is gift of Edmund Keeley.
Further BibBLOB Example

Use the GetField function.

This will extract the first 610 subject field that contain the criteria specified.

Syntax: `GetField(GetbibBlob([Table].[Bib_ID]),"Tag",Position)`

Example: `GetField(GetbibBlob([BIB_DATA].[BIB_ID]),"610",1)`

Provides this answer
MFHDBLOB EXAMPLE

Use the GetFieldAll function. This will extract all 866 fields from the MFHD record.

Syntax: GetFieldAll(GetMFHDBlob([Table].[MFHD_ID]),"Tag")
Example: GetFieldAll(GetMFHDBlob(MFHD_MASTER].[MFHD_ID]),"866")

"Current Issues" note does not seem to display!

Place cursor in CAS column and hit the down arrow key, data is there.
Other examples of GetField functions

GetFieldRaw(GetAuthBLOB([AUTH_ID]), “1”, 1)

    Gets the first 1XX field from an Authority record

150  aBlack Death

GetFieldAll(GetBibBLOB([BIB_ID]), “6”)

    Gets all 6XX (subject) fields from Bibliographic record

Black Death. Medicine, Medieval. Diseases and history

GetSubField(GetFieldRaw(GetBibBLOB([BIB_ID]), “300”,1),”c”,1)

    Gets the first 300 field, delimiter c from a Bibliographic record

23 cm.
Tips for efficient queries

- Some data is better extracted in multiple queries
- Use Make-table queries if your answer is large
- Be systematic in query and table naming
- Use known record id criteria to keep your results small while testing. Remove it at the end!
- Save and Test. Save and Test...
Tips for efficient queries cont.

- Double check in the clients to make sure that your answer is valid
- Link on indexed fields for speedier results
- Windows Task Manager “Not Responding” – maybe just thinking!
- Give your queries a prefix to distinguish them from the prepackaged ones
- Before installing new clients save a copy of Reports.mdb