Access Reports for Tenderfeet (or is that tenderfoots?)

EndUser 2003
Session #27

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WHAT IS A QUERY?

A query has several aspects: fields, tables, joins, criteria, sorting and grouping.

You know about fields from using Voyager. Here we see last name, first name, middle name, etc. fields.
A train schedule is a good example of a table. Each row holds one record, and each column holds one field. Here, each record is for one station and each field is for one train.

<table>
<thead>
<tr>
<th>STATIONS</th>
<th>2132</th>
<th>2134</th>
<th>2136</th>
<th>2138</th>
<th>2140</th>
<th>2142</th>
<th>2144</th>
<th>2146</th>
<th>2148</th>
<th>2150</th>
<th>2152</th>
<th>2154</th>
<th>2156</th>
<th>2158</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOX LAKE</td>
<td>LV:</td>
<td>AM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
<td>PM</td>
</tr>
<tr>
<td></td>
<td>10:44</td>
<td>12:00</td>
<td>2:00</td>
<td>4:00</td>
<td>6:00</td>
<td>8:00</td>
<td>10:00</td>
<td>12:00</td>
<td>14:00</td>
<td>16:00</td>
<td>18:00</td>
<td>20:00</td>
<td>22:00</td>
<td>00:00</td>
</tr>
<tr>
<td>Long Lake</td>
<td>10:50</td>
<td>12:10</td>
<td>2:10</td>
<td>4:10</td>
<td>6:10</td>
<td>8:10</td>
<td>10:10</td>
<td>12:10</td>
<td>14:10</td>
<td>16:10</td>
<td>18:10</td>
<td>20:10</td>
<td>22:10</td>
<td>00:10</td>
</tr>
<tr>
<td>Mayfair</td>
<td>11:53</td>
<td>12:02</td>
<td>4:02</td>
<td>6:02</td>
<td>8:02</td>
<td>10:02</td>
<td>12:02</td>
<td>14:02</td>
<td>16:02</td>
<td>18:02</td>
<td>20:02</td>
<td>22:02</td>
<td>00:02</td>
<td>02:02</td>
</tr>
<tr>
<td>Grayland</td>
<td>11:55</td>
<td>12:03</td>
<td>4:03</td>
<td>6:03</td>
<td>8:03</td>
<td>10:03</td>
<td>12:03</td>
<td>14:03</td>
<td>16:03</td>
<td>18:03</td>
<td>20:03</td>
<td>22:03</td>
<td>00:03</td>
<td>02:03</td>
</tr>
</tbody>
</table>
MORE ON JOINS

Joins represent the process of matching up records in one table to records in another table. It wouldn’t do to match up records in one table with the wrong ones from another table.

PATRON
George W. Bush
Tony Blair
Jacques Chirac
Saddam Hussein
Kofi Annan

PATRON_ADDRESS
UN Headquarters, NY, NY
Presidential Palace, Baghdad
10 Downing Street, London
1600 Pennsylvania Ave, Wash.
Palais de l’Élysée, Paris
You need to set criteria so you don’t get more records than you want.

“just the expired ones”
“can I get all of the blue ones?”
“I only want last year’s”
“non-serials only, please”
“I’d like the ones that haven’t been circulated”
“the ones with a 510 field”
GROUPING

The concept of grouping is to end up with one record for each significant group.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scout</td>
<td>5</td>
</tr>
<tr>
<td>Tenderfoot</td>
<td>13</td>
</tr>
<tr>
<td>Second Class</td>
<td>11</td>
</tr>
<tr>
<td>First Class</td>
<td>9</td>
</tr>
<tr>
<td>Star</td>
<td>10</td>
</tr>
<tr>
<td>Life</td>
<td>4</td>
</tr>
<tr>
<td>Eagle</td>
<td>2</td>
</tr>
</tbody>
</table>

Once you’ve got one record per group, the other fields can be counts, sums, averages, etc.
FULL QUERY

A query puts all of these elements together:
Select fields
From tables
Joined a specific way
Matching a set of criteria
Grouped as desired
Sorted as desired

Show the number of patrons of each patron group that have overdue books, sorted by patron group name.
WHAT IS ACCESS?

Access is a relational database management program. It can contain tables, queries, reports and other database objects.
ACCESS AND VOYAGER

Access can be set up to pretend that the Voyager data is contained in it. Like a virtual library that gets all of its books via Interlibrary Loan, Access can get any Voyager data, but only gets it on request.
BEFORE ACCESS

Before you start using Access with Voyager, you must install the Oracle ODBC (Open Database Connectivity) drivers. Excellent instructions for doing this are in the Reporter manual, in the section on, “Setting Up the Prepackaged Access Reports”.

Setting Up the Prepackaged Access Reports

Before using the Prepackaged Access Reports you must have the following items installed and configured on the users’ computers:

- Access Report database files
- Oracle (ODBC) driver version 8.0.5.7-0
- On Patch (if other ODBC driver version)
- Links to the database

Installing the Access Report .mch Files

The Access Report .mch files are placed in the appropriate directory when you run Voyager Programs.exe and check the Access Reports check box. In the process of installing the modules, when running the Voyager Programs.exe installation be sure to check the Access Reports check box to install the .mch files.

Complete instructions on installing the clients can be found in the Voyager Technical User’s Guide.
PROTECTING YOUR WORK

It’s heartbreaking to lose a lot of work, so don’t take a chance that you might lose your Access queries and reports. Copy the file, “c:\Voyager\Access Reports\reports.mdb” database to a work space before using it.

Don’t use me!

Use me!
OPENING YOUR DATABASE

When you open Access, it will prompt you to open a database. Choose your copy of “reports.mdb” (which may not be on the list).
When you first open the database, it won’t have many tables in it. You need to link them, again following the instructions in the Reporter manual.
YOUR FIRST QUERIES

Your first 150 or so queries have already been written for you. Start with those, rather than creating your own queries.
Most queries have a corresponding report. Instead of running the query, run the report.
ONE STEP BACK

To “run” a report, double-click it or select it and click “Preview”.

To run a query, double-click or select and click “Open”.

![Image of software interface with tasks highlighted]
WHAT ARE YOU SEEING?

The big problem with the prepackaged reports is that you don’t know what you’re seeing when you run them. To find out, you need to look at the query and analyze it. For that, select the query and click “Design”.
Don’t make queries harder than they need to be. Use a common-sense approach to reading and interpreting them.
You can read this as:
Select the ITEM_ID, LOCATION_CODE and ITEM_TYPE_CODE fields from the LOCATION, ITEM and ITEM_TYPE tables where the LOCATION_CODE is “edu-juv” and the ITEM_TYPE_CODE is “book”, or:
Get all of the books in the edu-juv collection.
Behind every Design View query, there is a SQL version of the query. SQL is a text-based query language shared by many applications.
Voyager-L and SupportWeb have lots of SQL queries. Create a blank query, paste in the SQL text, then go back to Design View.

1. Create a new query
2. Choose Design View
3. Close the Show Table box with no tables
4. Go to SQL View
5. Paste query text
6. Return to Design View and save
REPORTS

Reports are designed to “pretty up” the data you extract with queries. Use the Report Wizard to get you started.
You can alter the Design View of a report to make it look however you want it to look.
SUMMING UP

Although you may be a Tenderfoot now, if you make the effort to Be Prepared, you can create First Class queries and reports. Your spirits will soar on Eagle’s wings, and you will be a Star for Life. Scout’s honor!