

QMQUERY may be better than traditional queries...



By Aziz Saleh

I have been coaxing my friend and coworker to write an article on SQL for the magazine for a while now. I profess my failure in doing so and attempt to relay his wisdom in this article. This article shall cover in some detail some of the hidden advantages of using the QM Query tool option rather than the traditional WRKQRY route.

The Traditional Query Definitions created with the WRKQRY command option allows only limited runtime options such as file overrides and output redirection. One of the things I have always found lacking when I have to code RUNQRY statements in my CL programs is the inability to pass parameters and customize the query output. By executing these same queries using STRQMQUERY, one is able to harness the ability to use parameters. Parameters minimize the need for storing selection values inside the query at design time rather than having them passed in at runtime. (See the example in

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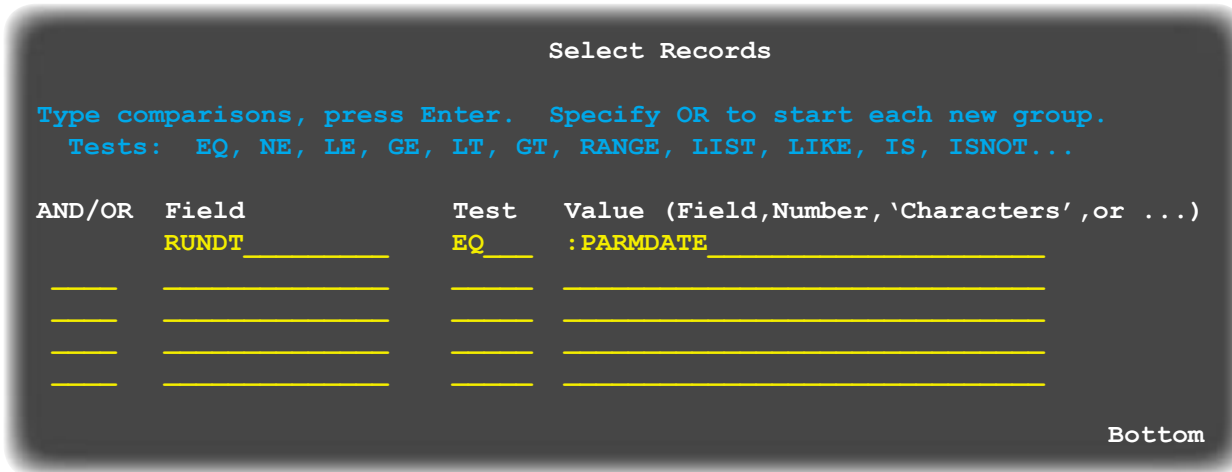


Figure 1.

Figure 1.) To select records for the field PRCDTE equal to a certain date, you could easily replace,

```
PRCDTE      EQ      20021203
with,
PRCDTE      EQ      : PARMDATE
```

SQL has been available on the iSeries since its early days. I remember using embedded SQL in RPG programs as far back as the early 90's. Since then, SQL on the iSeries has come a long way. From being extremely resource intensive, SQL today has become a viable alternative to programming, and is in many instances a better alternative with regards to performance. From what I understand, SQL performance has been constantly improving since its introduction more than a decade ago. Hopefully I have enticed you somewhat to go back to your terminals and check it out for yourselves. But wait there is more.

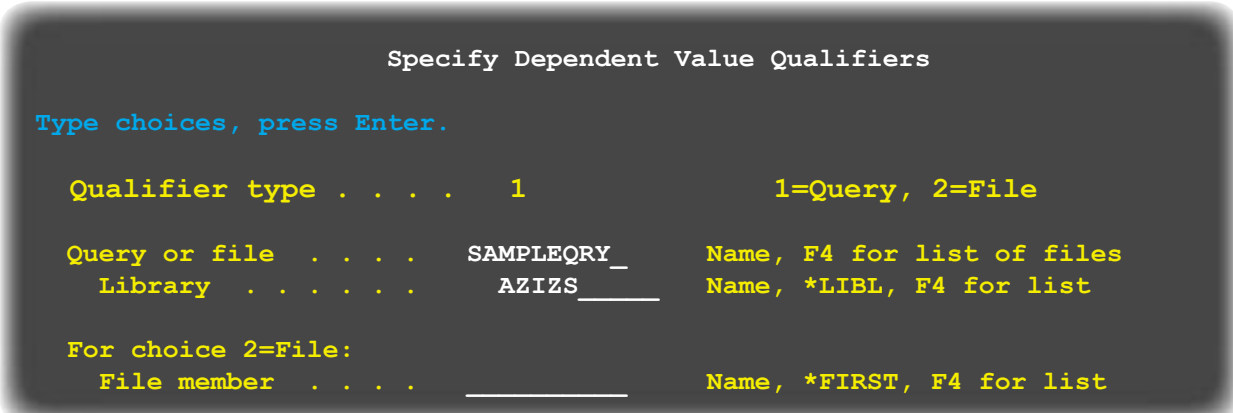


Figure 2.

Now you could run the same query for different dates without changing the selection date value for each execution. Note that when you add parameters to your WRKQRY queries, it prompts you for another set of values on the following screen. **Figure 2** shows a sample of the values I tend to use, SAMPLEQRY is the name of the Query Definition itself.

Another advantage of using the STRQMQRy route is the flexibility to specify the primary and the secondary file pairs. Using WRKQRY, one is limited to specifying a single Primary file and all the others are Secondary files linked to it. For example, if one wants to join the Customer File to the Order File and then join the Order File to the Products File, it may be a challenge in the WRKQRY method. However, using an SQL statement and the appropriate JOIN clause, this can be done quite painlessly.

Three of the most common variations are: INNER JOIN, LEFT OUTER JOIN and LEFT EXCEPTION JOIN,

which are supported by WRKQRY. These correspond to choices 1, 2 and 3 on the **Specify Type of Join** panel. The RIGHT OUTER JOIN and RIGHT EXCEPTION JOIN are not available in WRKQRY. Rather than copying the definitions for the various JOIN types, I shall just define the JOIN concept and then point you to a manual where you can find more details. JOIN enables the combination of information from more than one table using specified combine criteria. The DB2 UDB for iSeries SQL Reference V5R2 defines the JOIN in more detail on page 338. To understand the need for these JOIN types, consider a query with three tables. You want to join the first two with an INNER JOIN and the last two with a RIGHT OUTER JOIN, this combination is not supported currently by WRKQRY.

Now that I have got you interested in STRQM and STRQMQRy commands, you probably want to look up these additional resources on the IBM iSeries website at <http://publib.boulder.ibm.com>

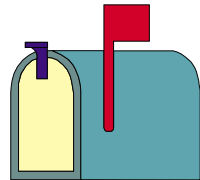
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Happy SQLing!!!



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@tug.ca
(... we got mail!)



From: dgallagher@deloitte.ca
To: vaughn@tug.ca>
Subject: **Web Site for PM Tales**
Vaughn:

Here's a link to my personal web site, www.gallaghers.ca/debbie, which makes available all of my Project Management Tales, as printed in TUG eServer magazine. As always, the articles will continue to be published first in TUG eServer magazine. The web site will always be one issue behind. I hope that TUG members find them a useful reference. Continuing thanks to you and TUG for publishing the series, and producing such a high-quality magazine. Regards, Debbie

From: MVadeboncoeur@ASTROMED.com
To: "Wende E. Boddy" <admin@tug.ca>
Subject: **RE: TUG Magazine**

Hi Wende,
I just received a copy of the issue by mail, so I will not need any additional copies. It came out very nice! ("No More SNA" - Nov 2002, Vol.18 No.2) You produce a very high quality publication. Happy Holidays & Best Wishes, Marc Vadeboncoeur

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