WHAT'S NEW AT ROBELLE

SEP 2021 ISSUE

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We hope this newsletter finds everyone well during these challenging times. Years ago, Robelle took steps to be a virtual company. So regardless of whether we are self isolating or isolate due to various governments. Robelle will be able to do all our business and support operations from any location. To be clear Tammy, Bob and Neil are working as normal. We wish everyone well and do not hesitate to contact us if you have any questions 604-501-2001 or 289-480-1060 or tammy@robelle.com or neil@robelle.com

2021 Fall/Winter Holiday Schedule

Oct 11th Thanksgiving Canada Nov 11th Remembrance Day Nov 25 Thanksgiving Day Nov 26 Tryptophan Recovery Day Dec 25th Christmas Dec 27th as Boxing Day falls on Sun Dec 31st New Years Eve Jan 3rd as New Years Day falls on Sat

QeditOpen Linux – Calling All Beta Testers

During the latest Canadian lockdown, we were busy working on porting Qedit to Linux. The main focus of the first part of the project is to get the line editor commands working as many of our users use Qedit in a job stream or script to edit report files or even spool files to summarize and capture data for reporting.

This is the biggest request we have had to add to Qedit in quite some time, mainly to port their applications from HP-UX to Linux. While, Qedit / Open doesn't currently have visual/screen mode or server mode, the line editor functions are all working as you would expect. So text/keep, change, delete, add, append, etc all work as expected.

If you're interested in trying out Qedit on Linux or need additional information? Contact Neil Armstrong <u>neil@robelle.com</u>

Qedit and Deleting Blank Lines

One of the nice features of Qedit is the ability to delete all blank lines using the pattern matching feature of:

Delete "~" (pattern)

I sometimes receive the question, "I am trying to delete all blank lines, but when I do Delete " \sim " (pattern), no blank lines are deleted.

The simple reason for this "not working", is that the lines aren't actually blank. At times there are extra CR and LFs (Carriage Returns and Linefeeds) and some times a single Tab character. There is an easy solution to this.

To see if you have some of the common invisible characters you can do:

Set Dec On List '10 {LF} List '13 {CR} List '9 {Tab}

If Qedit prints any of those "blank" lines you can fix by changing to nothing

Set dec on Ch '10 :: @ Ch '13 :: @ Ch '9 :: @

Then you can delete the lines that are now considered blank by doing the Delete " \sim " (pattern).

Writing Good Suprtool Code

Suprtool is a scripting language like many other computer languages, in fact there is a small compiler than generates Object Code that gets run after the XEQ command is issues.

The compiler, is invoked in the if and extract commands, and some object codes is generated and stored and then runs when reading thru a given file.

The if command at xeq time, uses short circuit evaluation, so the way to help improve performance and reduce CPU is to put the portion of the if command that eliminates most of the records in the least expensive way.

So let's say you want to find all the records with a date of toda and a flag value of 1 and then \$lookup to a matching customer record.

Now, a \$lookup is very good at what it does, however, it is a more expensive operation than a simple comparison.

So one example of improving an if command performance:

Table mycust,cust-no,file,custfile If \$lookup(mycust,cust-no) and entry-date=\$today and invoice-flag=1 The same if command with the reversal of some of the if statements.

Table mycust,cust-no,file,custfile If entry-date=\$today and invoice-flag=1 and \$lookup(mycust,cust-no)

So instead of doing a \$lookup, in every record selection we only do the more expensive \$lookup operation on the records that have an invoice flag of one **and** only the records with todays date.

If you think, you've read this before, we often give this advise in our courses and in e-mails and in other newsletters, but we still get asked the question quite often and when I am asked to review some Suprtool code from customers, I often go thru the if command as a first step.

Tech Support Question – Speeding up a job

Recently we received an interesting tech support question. These are the questions we love to answer as we can help customers speed up their processes.

The question, edited for anonymity, was as follows:

Was wondering if suprtool had a way to accomplish something specific. Is it possible to extract data items to an ascii file and specifically define at what column the data items start?

For example, say I have the following query3k routine that spits out an ascii file where the word FLAG is right justified at column 4 and the account number from the query is right justified at column 13:

export QSLIST=">>FLAGSET" query3k << EOD B=HISTRY LOOKUP 5 AS LOCKOPTION=OFF S=SH-HISTORY OUTPUT=LP F COMMAND EQ 69 AND TYPE EQ 100 AND & ENTRY-DATE GE & MBEG AND ENTRY-DATE LE & MEND REPORT NOPAGE D,"FLAG",4 D,ACCOUNT,13 S.ACCOUNT END EXIT EOD

So the output looks like this depending on if the account is 9 digits, or 6 digits, or 4 digits since the position specifies column 4 for FLAG and column 13 for account:

Does suprtool have a way to define at what column certain extracted data starts like query3k can?

Our Reply:

Not specifically, but it can be done and pretty easily. In relation to your task here is a replacement off the top of my head.

```
rm FLAGSET
suprtool << EOD
base HISTRY,5,;
TABLE DATES,ENTRY-DATE,FILE,MYDATES
CHAIN SH-HISTORY,ENTRY-DATE=DATES
IF COMMAND=69 AND TYPE=100
DEFINE FLAG,1,4
DEFINE ACCOUNTBYTE,1,9
EXT FLAG="FLAG"
EXT ACCOUNTBYTE=\$EDIT(ACCOUNT,"ZZZZZZZZ9")
SORT ACCOUNT
OUT FLAGSET
EXIT
EOD
```

This small change took a job from fifteen minutes down to 15 seconds.

If you have tech support questions please contact support@robelle.com or 289-480-1060

SD File To Excel

We have wrestled at times, trying to help customers to import data into Suprtool. We added the \$split command and some other features that really help users to read CSV files and put that data into a self-describing file.

Overwhelmingly, the data comes from Excel Spreadsheets, gets converted to CSV, ftp'ed up to a server and then has to be imported using Suprtool. A lot of steps that aren't easy to automate etc.

I have been toying with finding ways of getting data into Suprtool easier and expanding the ways of getting output from Suprtool easier and in a variety of formats.

One of the technologies we have been playing with is Python and specifically the OPENPyxl library. I have watched the prevalence of Python and various uses, libraries and a couple of recent courses in Python, Flask and NumPY and other Python based technologies had me intruiged as to how much fun it is and how useful it can be. I often recommend parents who often ask me, what should my child learn if they are interested in programming and my number one recommendation is to learn Python. You can learn scripting, solve interesting problems, learn Data Mining, Data Science, Web Development frameworks and even Object Oriented programming.

So as part of an exercise and test, I wondered if I could read a Excel spreadsheet and simply use the heading names as the fieldnames, and write out the .sd file (file labels on MPE) and the data into another file.

I started playing with the OpenPYXL, library and read a number of examples and after learning how it all worked, I managed to write a simple version of exceltosd, which does the following.

ExceltoSD reads thru the entire sheet and finds the types of the data involved, and determines the maximum size of each field, then generates the .sd field information and splits out the data and formats it to be able to be read by Suprtool.

Currently it splits the data into X and Z types so the data is human readable and there are no Endian issues to contend with, although there is a Python library that allows you to write out either Big Endian data and Little Endian data. So theorectically you can produce data for either HP-UX and / or Linux, although Suprtool/Open on Linux can read both as long as the SD information is correct.

Long story short after a weekend of hacking, I managed to get Suprtool/Open to read and Excel spreadsheet and have Suprtool read the file(s) it generated.

```
[root@localhost suprtool]# ./suprtool
SUPRTOOL/Open/Copyright Robelle Solutions Technology Inc. 1981-2021.
(Version 6.3 Internal) TUE, JUN 29, 2021, 12:12 PM
Build 2
>form myOutFile
   File: myOutFile (SD Version B.00.00) No linefeeds
                             Offset
      Entry:
                         X8 1
        STK#
                                 9
        P/N
                          X12
        CUST-PN
                         X18
                                21
        LOT#
                         X8
                                39
        STK-QTY
                         Ζ8
                               47
        RESV-QTY
                         Ζ8
                                55
        STK-REMKS
                         X24
                               63
        DEPT
                          Χ4
                                87
   Entry Length: 90 Blocking: 1
>in myOutFile
>num 1
>list
>xeq
>IN myOutFile (0) >OUT $NULL (0)
    = 82010385 P/N
STK#
                                          = 100C112-AA-GGX
            = 930056
CUST-PN
                          STK-QTY
LOT#
            = 810 - 6292
                                         = 10
RESV-QTY
            = 0
                            STK-REMKS
                                         = DC 1820
             = F1
DEPT
```

We have started working on SDToExcel and this is working with some tweaks left to make but a lot of cases work, but there is still more to do. If anyone is interested in this project please shoot me an e-mail at <u>neil@robelle.com</u>.

Robelle Book Club

As you are aware we Robellians like to read, especially during these challenging times. We also enjoy a good TV show and movies.

Non-Fiction book Bob Green has enjoyed:

Under an English Heaven - The Remarkable True Story of the 1969 British Invasion of Anguilla. By Donald E. Westlake

In 1995 I moved to the tiny British Caribbean Island of Anguilla. Upon arrival I started hearing stories of the Anguilla revolution. At a local gift shop, I saw reprint of the book, "Under an English Heaven" by well-known author Donald Westlake. Donald is most famous for his comic crime novels such as "The Hot Rock", which was made into a film with Robert Redford and George Segal (1972). The most recent film from his books is "Parker" (2013).

Under the English Heaven is a story of how Anguilla fought and won a revolution to REMAIN a colony! The United Kingdom tried to make them independent but ruled from St Kitts, whose leader Robert Bradshaw had said "I will not rest until I have reduced that place to a desert." This was a unique revolution in that no one was killed!

The book was long out of print, but now you can buy the ebook and paperback at Amazon <u>https://www.amazon.com/Under-English-Heaven-Remarkable-Invasion/dp/1909269816</u>

Tammy's audio book recommendations: Over the spring/summer I listened to many audio books while I'm gardening. This year I have been listening and reading lighter reads. Here are a few of my 2021 favorite audio books.

The Graveyard Book by Neil Gaiman: This magical book is a great story for children (8+) to adults. With Neil Gaiman incredible imagination there are lots of twists and turns and Neil narrates the book. Just under 8 hours it's a great road trip book for the family. *Summary: Nobody Owens, known to his friends as Bod, is a perfectly normal boy. Well, he would be perfectly normal if he didn't live in a graveyard, being raised and educated by ghosts, with a solitary guardian who belongs to neither the world of the living nor the world of the dead. There are dangers and adventures for Bod in the graveyard: the strange and terrible menace of the Sleer; a gravestone entrance to a desert that leads to the city of ghouls; friendship with a witch, and so much more. But it is in the land of the living that real danger lurks, for it is there that the man Jack lives and he has already killed Bod's family.*

The Last Train to Key West by Chanel Cleeton: Although this book is a lighter read, the book includes a lot of history of Key West, WW1 veterans building the Overseas Highway and Great Labor Day Hurricane of 1935. I found the history very interesting as I had no knowledge of the area or era. The story follows three women who are in different social classes and places in their lives. Their lives are forever changed by the 1935 hurricane. These women have connections with each other during their journeys and they all need to make difficult decision. A few twists and turns with women's connections to each other.

Yearbook by Seth Rogan: Seth true life short stories are funny and at times I laughed out loud. Many of the people who are in the book have narrated their parts. Disclaimer: Seth is from Vancouver and many of the stories are in Vancouver. Our office is in the suburbs of Vancouver.

Narration of these audio books is very good. I would also recommend the books as e-book or hard copy.

We are always looking for book or TV shows or movie recommendations. Send your recommendations to <u>tammy@robelle.com</u>

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