

# WHAT'S NEW AT ROBELLE

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## 50 Years of HP3K ~ Gavin Scott

On November 1, 2022, Gavin Scott eloquently posted a tribute to the HP 3000 on the 50<sup>th</sup> anniversary of the beginning of the HP3000.

Well, today is the day :)

It has been a long and winding road, and I will raise a glass to toast the machine, its creators and maintainers, and above all, the amazing people who orbited around it for so long at HP, software developers, and so so, many customers.

Thank you for the ride, everyone.

Gavin

P.S. I have been posting the below to the usual classic computer lists today...

Well, here we are. If you boot up a classic HP 3000 system and simply hit return when it asks you for the date and time, it will default to:

```
HP32002E.01.00
WHICH OPTION <WARMSTART/COOLSTART>? COO
ANY CHANGES? N

DATE (M/D/Y)?
WED, NOV 1, 1972, 12:00 AM
LOG FILE NUMBER 64 ON
*WELCOME*
:HELLO OPERATOR.SYS;HIPRI
0:00/13/SP#6/SPOOLED OUT
0:00/#S1/14/LOGON FOR: OPERATOR.SYS,OPERATOR ON LDEV #20
HP3000 / MPE V E.01.00 (BASE E.01.00). WED, NOV 1, 1972, 12:00 AM
```

which is exactly 50 years ago today. November 1972 was the month that the very first HP 3000 systems were shipped to customers. Shortly after this, those initial deliveries were all hastily recalled when it quickly became clear that they were not yet capable of living up to their specifications. The 3000 however would go on to recover from this event and eventually became one of HP's most successful and profitable product lines, and one of the most beloved computer systems of all time, regularly beating out IBM, DEC, DG, and others in customer satisfaction surveys.

For some stories about the earliest days of the platform, I refer you to the words of Bob Green <http://www.robelle.com/smugbook/classic.html> and Bill Foster <http://www.teamfoster.com/hewlett-packard> who were there.

The original "Classic" CISC HP 3000 systems live on today through Dave Bryan's most excellent SIMH simulation <http://simh.trailing-edge.com/hp/> and I have a turn-key setup which will let you have your own 1980-vintage HP 3000 system up and running in a couple minutes which is downloadable from my Google Drive at <https://drive.google.com/file/d/16vaNUrmfs2aQpjdQijG4PZmJaNu3hfcz> (Save the zip file using the download link in the upper right then extract it anywhere convenient and see the README file for further instructions) This only includes a SIMH binary for Windows, but you can also build a SIMH executable from Dave Bryan's source above for your platform of choice and use the rest of my infrastructure.

MPE Forever.

G

## Suprtool \$Change Function

Suprtool's \$change function returns a string that was changed by the \$change function which takes three parameters. The first is the field that contains the data you want to change. The second parameter is the from string, the string we want to change. The third parameter is the to string, or what we want to change it to. Note that the strings are enclosed in quotes.

### Sample Extract Usage:

```
extract Name=$change(name, "Neal", "Neil")
```

In the example above the first string of Neal, is the from string, and the to string is Neil.

If you need to change a phrase with a double quote then you can enclosed the strings in a single quote:

### String with Quotes:

```
extract xml_input=$change(xml_input, "'LP'", 'LP')
```

The primary use of the \$change function is to update fields using the extract command; however, you can use it in the if command. However, the field you are changing will appear in the output file as the changed record.

### If Command Examples:

```
if $change(name, "Neal", "Neil")="Neil"  
if ("Neil"=$change(name, "Neal", "Neil"))
```

A reminder that if you start the if equation with the constant string first, you need to encase the complete equation in brackets, as shown above.

## Forgotten Features by Neil Armstrong

Sometimes, I get a tech support e-mail and need to remember that it is already a feature in Suprtool. This happened recently when I had a question about dates, consisting of the year YYYY, and the day of the Year, as in the Day of the year. (January 1<sup>st</sup> is 001), and how to convert from CCYYDDD, to CCYYMMDD. At first, I remembered that I had written some sort of article about these dates in our [How Do I? ~ Neil Armstrong ~](#)

[Robelle](#) section of our website. Sadly, I noticed that I had written how to convert in the opposite direction of CCYYMMDD to CCYYDDD. Unfortunately, that wasn't what the user required, so I devised a method of doing this mathematically. I started with taking the Year0101, and converting it to a \$days number and then adding the DDD portion of the date, and then taking that result and defining the resulting date to be a Julian date using the item command, then using \$stddate to convert to ccyyymmdd. I went to check the manual, on the details of the Julian format and realized that I had already provided support for CCYYDDD.

The solution was simply:

```
>item dbl-field,date,ccyyddd
>ext ccyyymmdd_date=$stddate(dbl-field)
```

## Date Comparison

Recently, we had a good question about using the IF command and comparing a date to \$today(-180). Specifically, the commands below the question was what does \$today(-180) resolve to.

```
ITEM DATE-ENTERED,YYMMDD
IF $stddate(DATE-ENTERED) >= $today(-180)
```

```
in xyzdate
item date-entered,date,yyymmdd
if $stddate(date-entered) <= $today(-180)

>set dire on
>dire

SUPRTOOL/DEBUG/Copyright Robelle Solutions Technology Inc 1987-2023
(Version 1.6)
Break @ 0.0
Flags = %000000 #0
Cause : Dire Command

STDEBUG: print if

o.k., size = 24
Regp Regi Rego
0 wr1 0
1 std1 date2'version = 2
      date2'length = 11
      date2'from'real'type = 2
      date2'from'blen = 4
      date2'from'edit = 11
      date2'from'date'type = 1
      date2'to'real'type = 2
      date2'to'blen = 4
      date2'to'date'type = 22
      date2'aux'result = 10
2 wc2 13
3 cd Value 20221111 <= Note
4 tle
5 rtn

STDEBUG:

>list
>xeg
>IN XYZDATE.NEIL.GREEN (0) >OUT $NULL (0)
DATE-ENTERED = 230510
```

In the above, we show, the internals of Suprtool and how you can see what the \$today(-180) resolves to internally to do the compare between the two expressions. The Dire mode can print out details of the Virtual Machine that processes expressions in the If/Extract commands.

We checked that the right side of the equation was resolving to what we expected, so now we need to check the left side of the equation and check what \$stddate(date-entered) resolved to.

\$stddate converts a date from any of the supported date formats to ccyyymmdd. However, since date-entered is yymmdd, Suprtool has to pick either 19 or 20. Here we need to look at set date cutoff. By default, Set Date Cutoff is a value of 10.

```
>in xyzdate
>def new-date,1,4,double
>ext new-date=$stddate(date-entered)
>list
>xeq
>IN XYZDATE.NEIL.GREEN (0) >OUT $NULL (0)
NEW-DATE = 19230510
```

When we changed the Set Date Cutoff to be 30, we then got the results that we expected.

```
>set date cutoff 30
>in xyzdate
>def new-date,1,4,double
>ext new-date=$stddate(date-entered)
>list
>xeq
>IN XYZDATE.NEIL.GREEN (0) >OUT $NULL (0)
NEW-DATE = 20230510
```

In this case, the solution was to add set date cutoff 30 to the script or globally.

## 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.

### **What a Strange Paradise By Omar El Akkad - Book review by Tammy Roscoe**

What a Strange Paradise is 2021 Scotiabank Giller Prize winner. It's a small book at 288 pages and is quick paced at times making you feel breathless. The story almost reads like a fable and/or an adventure story. The ending was a real puzzle. I had to read it twice before realizing there is Greek Mythology throughout the whole book, including the ending. I think this book will stay with me for a long time, like The Road by Cormac McCarthy.

The story is about Amir, a 9-year-old boy on a shipwrecked boat on a small Greek island fleeing from Syria. Vanna a Greek 15-year-old who is determined to do whatever it takes to save Amir. Even though they are complete strangers and do not speak a common language, in alternating chapters, we learn about Amir's life and how he came to be on the boat, and we follow him and Vanna as they make their way toward safety.

### **A Gentleman in Moscow by Amor Towels - Book review by Tammy Roscoe**

A Gentleman in Moscow has been sitting on my bookshelf for years. I decided to take this book on my recent vacation to Ecuador. This beautifully written book is a perfect vacation book. The cast of

characters are interesting including their interconnection with each other. How their relationships change and develop from 1922 to the 1950s. Amor Towels's books have a quiet elegance and are about a society on the cusp of radical change. Much to my surprise there is a twist in the ending of the book.

The story starts in 1922, Count Alexander Rostov is deemed an unrepentant aristocrat by a Bolshevik tribunal, the count is sentenced to house arrest in the Metropol, a grand hotel across the street from the Kremlin. Rostov, an indomitable man of erudition and wit, has never worked a day in his life, and must now live in an attic room while some of the most tumultuous decades in Russian history are unfolding outside the hotel's doors. The hotel is Alexander's prison, and his sanctuary.

### **10 LB. Penalty by Dick Francis - Book review by Neil Armstrong**

I have long been a fan of Dick Francis novels, introduced to them by my grandfather, who knew Dick Francis when he was a jockey. I love that many of the characters are underestimated or put in horrible situations and get out using wits and grit.

10 LB. Penalty is the story of Ben Juliard a young man who wants to be a jockey, and his politician father's journey into the world of politics. There are forces wanting to keep George Juliard from being elected, and Ben has been asked to help his father with the campaign. All the while the underestimated, young Ben becomes an asset in keeping his father from harm and on a path to being elected.

Most of the books revolve around horse racing and horse farms. While this book touches on that world, the relationship between Ben and his father is interesting, as Ben's father learns to trust Ben and his opinion.

It is an easy and quick read with little fluff and plenty of action.

We are always looking for book or TV shows or movie recommendations. Send your recommendations to [tammy@robelle.com](mailto:tammy@robelle.com)

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