What's Up, DOCumentation? 2000 # 4



September 2000

From: **Technical Support**

To: Users of Robelle Software

Re: News of the HP e3000 and of HP-UX, 2000 #4

What You Will Find in This News Memo:

- Operating System: MPE/iX 6.5 and Performance
- New XP256 Disk Arrays
- Operations: Backup Horror Story
- Suprtool Tips
 - Adding hpvariables to List Headings
 - o Selection by Day-of-Week
- Qedit Tips
 - Adding Color to Windows Client
 - o **Inserting Lines**
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MPE/iX 6.5 Power Patch 1 Performance Problems

Recently a customer called to report that Suprtool extracts were considerably slower since moving to MPE/iX 6.5. This was contrary to our experience at HP when we worked on Suprtool support for large files on MPE/iX 6.5.

Dave Lo suggested that the customer turn prefetch off and do some comparative timings, because we have seen memory pressure increase when moving from one O/S version to another if the system was already memory-bound.

We didn't expect performance to improve, given that the system had 3.75 GB of memory. Surprisingly, performance did improve with prefetch turned off in Suprtool. To investigate, I began testing on our MPE/iX 6.5 system to see if I could duplicate the results. Surprisingly, in my first attempt I recreated this anomaly on our system and generated results that were contrary to the performance indicator I had when we did the work to make Suprtool support large files.

Obviously, we needed to investigate this further. As it happened, I was scheduled to go to HP CSY to do some other testing, so I made an appointment with my good friend, and programmer extraordinaire, Craig Fairchild to show him what I was seeing and try to discuss some plausible reasons for this.

Craig and I set up an MPE/iX 6.5 test machine, I restored my test environment and we began to run some comparative tests. To make a long story short, we could not reproduce the problem. At this point we decided to apply some patches to see if we could duplicate the results.

After acquiring and applying the patches we did see the anomaly, but it was not as dramatic as I had seen in my lab. I set up some comparative tests for Craig and he worked very hard to identify the point at which this anomaly showed up. What he found was that sorting, with either Suprtool or Sort.Pub.Sys, was slower on MPE/iX 6.5, starting with patch MPELX66. Things were slower in Suprtool no matter what the setting of prefetch. It just so happened that a higher level of prefetch made the problem worse.

At this point, however, PP1 (which contains the MPELX66 patch) was already released. Craig organized a team within HP to fix this problem and they are working on a patch ID of MPELXB0, which will be available any day now.

Because of how the patches work, this problem will occur if you have Power Patch 1 or any of the following patches in Hpswinfo.Pub.Sys:

- MPELX66
- MPELX70
- MPELX75

So if you are on MPE/iX 6.5 and have installed either Power Patch 1 or any of the three patches above, we recommend that you install patch MPELXB0 when it is released. Until then, you can temporarily add the following line to your Suprmgr.Pub.Sys file:

```
set prefetch 0 {zero}
```

I would like to mention that many people at HP helped investigate this performance problem. People such as Kevin Cooper, Steve Macsisak, Bill Cadier and, of course, Craig Fairchild were invaluable in investigating this problem. I'm certain that many other engineers were involved, but these four were my main contacts. It has been a pleasure to work with them and I am happy that they are involved with the HP e3000 and its community.

[Neil Armstrong]

User Pleased with New XP256 Disk Array

For those of you interested in HP's new XP256 disk array, here are some early results on its performance. We recently installed an array to replace our poorly performing Model 12H (AutoRAID) arrays. The new array is still being tested, so these are merely indications of what final performance might be. However, they are relatively equal comparisons, as the tests were done on each machine in (mostly) exclusive access mode.

```
AutoRAID XP256
Re-omnidex of MACORD 45 minutes 16 minutes
Vertex process 25 minutes 5 minutes
```

Just for fun, I also created four jobs that used Suprtool to read our largest data file (ORDER-ACTIONS, at 5.8 million records) and direct the output to a flat file. I submitted all four jobs at the same time. All four processes completed in under four minutes.

These are just preliminary results, but I'm very encouraged!

[Originally posted on MACS-L by Randall Davis, Director Enterprise Operations, KBkids.com]

Editor's Note: The XP256 disk array has a maximum capacity of 9 terabytes!

What To Avoid When Your Backups Need Two DATS

In a local turnkey, essentially operatorless, HP e3000 operation, backups were done nightly without fail on a two-week retention cycle. Everything was fine until one day the systems management consultant asked the secretary-cum-operator to restore files from a few days prior to a failure. The restore did not work for the following reason: when the backups went from one to two nightly tapes, the appropriate people were not informed. Instead of purchasing an additional 14 DDS tapes, only a single tape was purchased and it was used every night when the system prompted for volume #2. The unfortunate result: they only ever really had the previous night's backup, not two weeks worth!

[Mike Shumko]



🗫 Displaying a Date Range in a List Standard Heading

With Suprtool 4.3 you can read hyvariables on the List (or any other) command. This is quite useful, for example, when you want to display a date range in a List Standard heading.

To accomplish this task, first create a one-line file by extracting the two dates, then turn the contents of the file into an hpvariable.

```
>get d-sales
>num 1
>def a,1,8
>item a, date, ccyymmdd
>EXT a = DATE(*/*-3/FIRST)
>EXT " - "
```

```
>EXT a = $DATE(*/*-1/LAST)
>out varfile
>x
Warning: NUMRECS exceeded; some records not processed.
IN=2, OUT=1. CPU-Sec=1. Wall-Sec=1.
>:input myvar < varfile</pre>
>:showvar myvar
MYVAR = 20000501 - 20000731
>q d-sales
>set varsub on
\Rightarrowif a \Rightarrow= $DATE(*/*-3/FIRST) and a \Rightarrow= $DATE(*/*-1/FIRST)
>list standard title "Range : !myvar"
>x
Aug 09, 2000 15:57
                           Range: 20000501 - 20000731
                                                                      Page 1
CUST-ACCO DELIV-DATE PRODUCT-N PRODUCT-PRI PURCH-DATE SALES- SALES-TAX
```

[Paul Gobes]



Selecting on Day-of-Week

Recently, on the MACS discussion list, Katherine Mantis asked:

HI! Does anyone have a quick way in Suprtool (version 4.2) to determine the day of the week based on the date? I need to do an analysis on any orders entered on a Saturday, but I have a feeling I will need to look at each day of the week...

Well, there's no way to do this with version 4.2, but it does showcase two of the new features in version 4.3, the \$days and Mod functions. The \$days function converts any supported date to a Julian day number, that is the number of days since 4713 BC (...<u>its a long story</u>...:-). The Mod operator returns the remainder between a dividend and a divisor.

It happens that Julian day 0 was a Monday. So if we divide any Julian day value by 7, any Monday would yield a modulus of 0. And any Saturday would yield a 5.

```
> get D-Orders
> item ord-date,date,yyyymmdd
> if $days(ord-date) mod 7 = 5
...
```

Suprtool version 4.3 was distributed to supported customers in North America in May 2000.

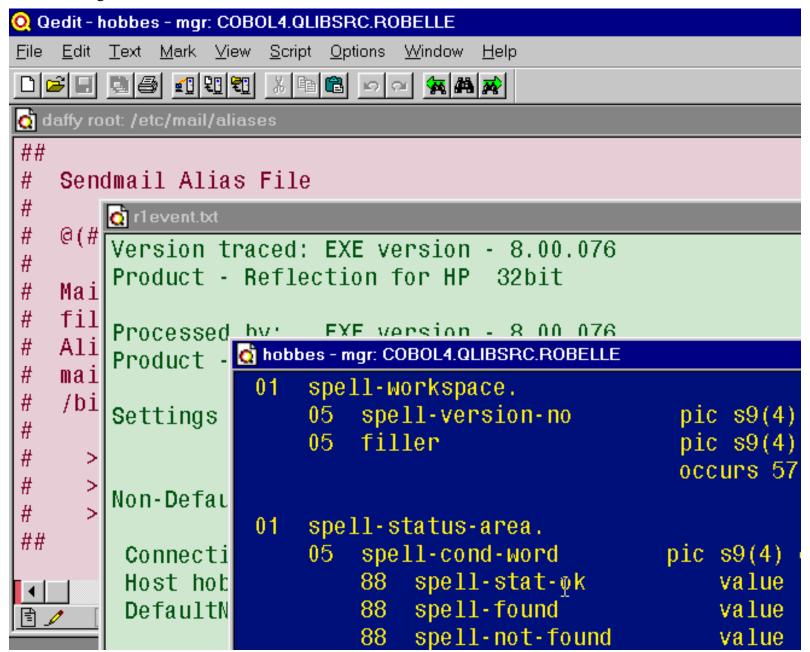
[Hans Hendriks]



New Color Schemes Offer Rainbow of Possibilities

Color schemes, one of the most popular enhancements, has been added to Qedit for Windows version 4.9.11. You can now configure Qedit to use different color schemes for document windows. Each color scheme allows the configuration of certain window elements. You can select a default color scheme for all files, for each file type (local, UNIX and MPE), as well as for individual connections and files.

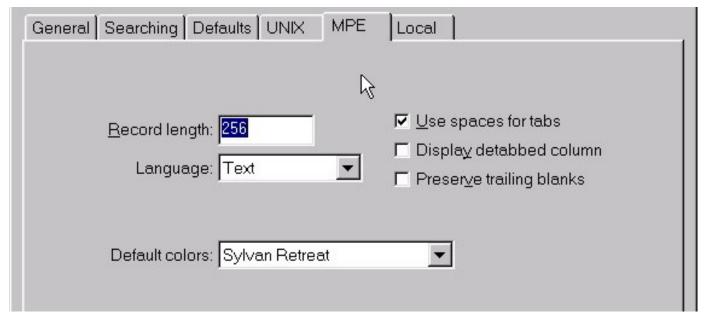
The following screen shot shows different schemes for MPE, HP-UX and network PC files.



To configure these settings,

- 1. Select Preferences from the Options menu.
- 2. When the Qedit Preferences dialog box appears, go to the MPE tab and set your Default Colors to the desired scheme.
- 3. Go to the other UNIX and Local tabs to set different color schemes.

4. Click the OK button to save your preferences.



With the latest version of Qedit for Windows, you can use the new color schemes to make your Qedit work space both more comfortable and convenient.

[Paul Gobes]



Inserting Lines Between Every Line in a File

Recently a customer needed to convert his file into a Reflection script that needed these two lines

```
Transmit "^M"
Hold For "^JMD.VOYNERM>"
```

between each of his file's existing lines.

Here is one solution that uses Qedit's Append and Divide commands:

```
/append '|Transmit "^M"|Hold For "^JMD.VOYNERM>"' all
/divide "|" all
/change 1/1 "" "|"(1/1)
/divide "|" all
/change 1/1 "" "|"(1/1)
```

The first line appends the two new lines to each line, plus an extra vertical bar character (|) to help manipulate the new lines. The second line divides each line on the first vertical bar. The third line removes the vertical bars that are in the first column. The fourth and fifth lines repeat this process for the second new line.

This approach would only work if your file is wide enough to accept the appended columns.

[Dave Lo]



Training Opportunity for Suprtool Users

The next off-site Suprtool training class will be held October 11th, 12th and 13th. The three-day class, led by Jeff Kubler, will be held at the office of Lund Performance Solutions in Albany, Oregon.

To sign up or for more information, phone Jeff Kubler at Kubler Consulting, Inc., (541) 745-7457 or e-mail him at jrkubler@proaxis.com.

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