

QL Today

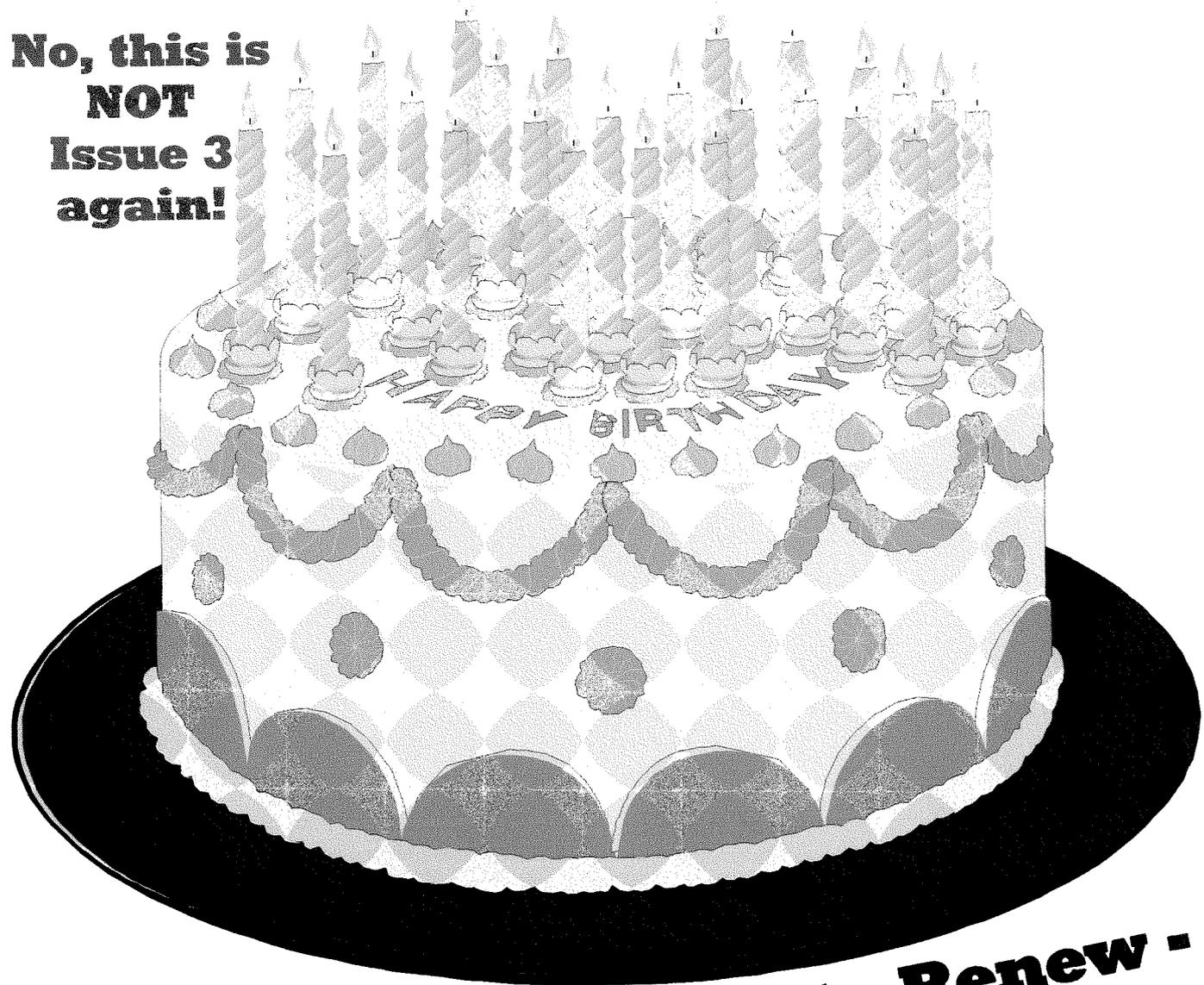
Volume 13
Issue 4
June - August
2009

ISSN 1432-5454

The Magazine about QL, QDOS,
Sinclair Computers, SMSQ...

JMS is 25

No, this is
NOT
Issue 3
again!



**Time to Renew -
if you have not
done it already!**

www.QLToday.com

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QL Today

ISSN 1432-5454

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QL Today is published four times a year, our volume begins on beginning of June. Please contact the German or English office for current subscription rates or visit our homepage www.QLTODAY.com.

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If you need more information about the UNZIP program which is used by our BOOT program to unpack the files, we suggest that you visit Dilwyn Jones' web site where you find more information about lots of interesting QDOS software and INFOZIP at <http://www.dilwyn.uk6.net/arch/index.html>

The last issue of a volume is when I traditionally take a look at what we have achieved over the previous 12 months. Volume 13 was not our luckiest.

Editorially the magazine remained strong. During the year we produced 230 A4 pages, 86.5% of which were editorial. This is a slight increase on the previous year. A noticeable feature of the year was a high news content, which indicates there is still a lot of activity in the QL community. 18 writers contributed articles to QL Today and a further 2 wrote letters. This is a welcome improvement on the previous year. Good and loyal though our team of writers are, a magazine that is too heavily dependent on a handful of authors can soon become stale. Another welcome feature has been more emphasis on hardware related articles.

Where we have not been lucky is in our reliability to our UK subscribers. Problems with the UK office meant that UK readers had to wait several weeks for issue 1, and although we were able to deliver issues 2 and 3 on time, there was no certainty we would be able to do so. We can only apologise once again for this and say that, now Bruce Nicholls has taken over administration and distribution of the UK copies, we can be confident that the problems are solved.

It is traditional in this editorial for me to say something about the Quanta Magazine and up till now it has always been highly positive. This year it is more difficult.

The Quanta Magazine faced a major crisis when a newly appointed editor went AWOL without producing a single issue. Quanta had to go over to an emergency publishing schedule and at one point failed to produce an issue for almost 6 months. Some members thought Quanta and its magazine had closed down. Others felt the quality of the emergency issues was below standard. Unfortunately Quanta appears to have learnt nothing from this and is now unrealistically boasting that its magazine is a "flourishing production".

It is not only the magazine that Quanta has attempted to improve. It has also made a huge effort to improve its website, but has still not mastered the art of keeping it up to date. Are Quanta's officers making a mistake of looking too much at the mechanics of its publications and too little at detailed editorial guidance?

As it happens at QL Today we have recently been looking at the mechanics of our publication by offering readers the chance to comment on some layout ideas we floated in the last issue. Our thanks to those of you who did reply, and especially for the compliments on the content of issue 3. Most comments on the layout changes were positive, but you had a dislike for small columns and printing on a background.

In this issue Quanta has responded to our offer of 2,000 words to present their case. Their article begins with a long list of Quanta's recent achievements, one of which is a welcome increase in the number of committee members. My critical comments on Quanta's magazine and website must not detract from the real progress the organisation has made in recent years, progress that QL Today has encouraged and regularly reported.

This increase happened because Quanta - aided by QL Today - realistically confronted their members about the lack of a future for the organisation if the committee remained undermanned. We wish the new and expanded committee well and hope for them that more realism will bring more rewards.

25 YEARS CHUMP OR CHAMP?

It is one of their most remembered covers. A chimpanzee seated behind a "black box" with the question "Sinclair QL - Chump or Champ?"

1984: Sinclair QL

Welcome to the first of a new series of Retro features, showcasing our original reviews of ground-breaking products from the past 30 years. In June 1984 PCW expressed mixed feelings about the new Sinclair QL (see News, page 14). We're not sure about the relevance of the chimp (below), but this remains one of PCW's most fondly remembered cover images.



This is how Personal Computer World (PCW), one of the UK's most famous computer magazines, publicised its first review of the QL in June 1984. It was a mixed review stating:

"If everything were in place, then I would consider this machine very seriously as a truly personal computer but not as something to run a business on."

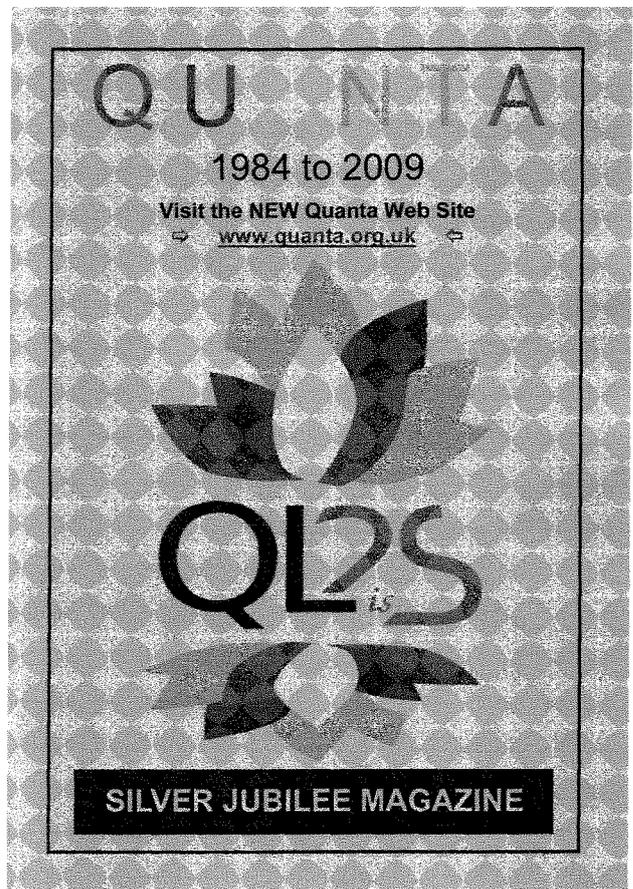
25 years on, in the April 2009 issue, PCW reprinted that review together with several other items devoting no fewer than 11 pages to a retro feature on the QL, including an interview with designer David Karlin.

This was Urs König's greatest success in publicising the QL's quarter centenary, but, as he expected, interest on the Sinclair blogs has been very limited. At the end of March Urs reported that 1,064 people had downloaded the Power Point presentation he had placed on his special QL is 25 website. A staggering 392 visitors had downloaded the demonstration version of QPC.

The web address is:

http://www.qivsaguar.homepage.bluewin.ch/SinclairQL_25th_anniversary_1984_to_2009.html

Published on a much smaller scale than PCW, but no less important as a celebration of 25 QL years, was a souvenir silver jubilee edition of the Quanta Magazine. At 80 pages it is probably Quanta's largest ever magazine and came with a colour cover printed on silver card (or as one Quanta committee wag put it, "Wrapped in tinfoil"). The magazine was filled with reminiscences from committee members and others, reprints from early QL documents, reviews of the Asus EEEPC and ACER Aspire one, a comprehensive review of QL, PC and Spectrum emulators and a history of QL magazines.



The Quanta Magazine is the only QL publication that can boast of being almost as old as the QL itself. At second place in the longevity stakes, but a long way behind the Quanta Magazine at a youthful 13 years, is QL Today.

Jochen Merz, publisher of QL Today, can also make a unique claim to fame. He started Jochen Merz Software on 2nd May 1984. Jochen is now

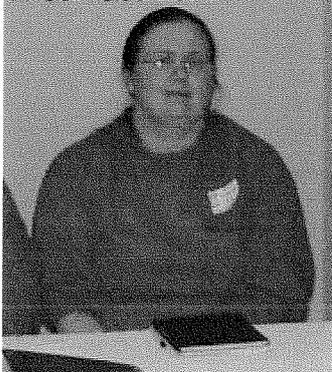
the only trader to have traded almost as long as the QL has existed and he promises some special offers to celebrate. Close second was Tony Firshman who ended active trading last year. In recognition of their services to the QL, both have been awarded honorary life membership of Quanta.

ALL CHANGE AT QUANTA

2009 brought major changes to Quanta as the old officers had reached the end of their 3 year term of office. Under the Quanta constitution retiring chairman, John Mason, stepped down from the committee having served on it continuously for six years. (In total he has served more than 15 years on the committee.) John has also ceased to be co-editor of the Quanta Magazine as this is a committee post.

Although in Quanta men outnumber women by almost 90 to 1, two of the new officers are female. Sarah Gilpin moves from Secretary to Chairman and Alison Southern takes her

Alison Southern



Keith Dunbar

place as Secretary. John Gilpin remains Treasurer and Dan Abbott and Dilwyn Jones remain on the committee. Keith Dunbar has been co-opted as a committee member to assist in the development of the web site.

Quanta is rapidly becoming concentrated in the northern half of the UK. All the new officers are members of the Manchester subgroup and the other committee members live in the north. Privately the officers are expressing a deep concern that, with the exception of the London subgroup, organised Quanta activity has all but disappeared south of Birmingham. Financially Quanta broke even for the first time for some years, but this was because only 3 magazines were produced in 2008 instead of the usual six. Had a full six issues been produced then there would have been a loss of about

£500. Subscription income only covered about four fifths of Quanta expenditure, and once again Quanta was partially dependent for its financial viability on the sale of second hand hardware on Quanta's behalf by Rich Mellor.

Quanta members should be prepared for a large deficit and reduction in Quanta's capital during 2009. This is because of the large number of issues of the Quanta Magazine, possibly as many as 9, to be produced during the year and the heavy costs of the quarter centenary celebrations.

At the end of 2008 Quanta had a membership of 180, a fall of 11 over the previous year. Although membership fell by 5.8%, subscription income fell by 16.3%. The difference is partly due to a knock on effect from the Quanta Magazine problems. Renewal forms were sent out late to those members whose subscriptions are due in July and some did not renew until late 2008 or early 2009. For the first time Quanta has released details of the number of members opting for the electronic version of the magazine. Response from UK QL-ers has been disappointing with fewer than 1 member in 10 going electronic. Almost a third of overseas members have opted for the electronic version and these members qualify for a reduction in their subscription. Uptake over the whole membership is 11.5%.

Given the interest shown at meetings and in the QL media a higher uptake rate would have been expected. A similar phenomenon has been observed in QL software where interest in a new product is not always translated into sales.

DILWYN JONES WEBSITE

Dilwyn has moved his website to:

<http://www.dilwyn.me.uk/index.html>

This is a site that is hosted by Tony Firshman and the old site has a "forwarding" page pointing to the new one. The new page will eventually allow Dilwyn to have all his websites in one place.

The screenshot shows the website header with the logo 'The Dilwyn Jones Sinclair QL website'. Below the logo, it says 'Site Last Updated: 03.05.09' and 'List of recent updates to this site'. A welcome message follows: 'Welcome to Dilwyn Jones's QL information and PD software download pages. All of the software here is only for the Sinclair QL and compatible computers unless otherwise stated, and is either freeware, PD, shareware or charity-ware unless explicitly stated otherwise. If you discover that any software on this site should not be here for copyright or any other reasons, please let me know as soon as possible so that the offending software may be removed. Similarly, if you discover any errors, please let me know so that I may try to correct them. If your browser supports Frames, use the links just below to select the "Display with frames" option to get a page index on the left of the screen.' Below this are two links: 'Display without frames' and 'Display with frames'. The main content area has four columns: 'QL CD-ROMs' with a CD icon and text 'visit this page for details of my QL CD-ROMs available from Quanta Direct or direct from me. My CDs are all freeware'; 'QL On A Stick' with a stick icon and text 'Probably the most portable QL ever! Several QL emulators to run in Windows, including QLv2, QL2K, Q-emulator'; 'Launchpad' with a monitor icon and text 'A graphical, pointer driven front end program launcher for QL and'; 'QL Is 25' with a leaf icon and text 'The QL and user group Quanta are both 25 years old in 2009! Here's a page with some pictures from the 25th anniversary'. At the bottom right, there is a small 'QL25' logo and a '100%' indicator.

JUST WORDS!

The Just Words! website has been temporarily reprieved. Just three days before it was due to be closed Lycos announced that it had found a new host, Mediamania.

Some cosmetic changes have been made to the site to improve the balance between content and advertising. Just Words! has now removed the shows page. This was originally set up as a resource for Quanta in 2004 when there was a dispute over a clash between a North American show and the Quanta AGM. The number of shows has now fallen too low to justify the continuance of the page.

Just Words! had hoped to modify the page into an interactive news service, a facility the QL community needs, but could not guarantee the time needed for frequent maintenance.

Just Words! is grateful to several people in the QL community who offered to host the site. These offers could not be taken up because, wherever the site was hosted, time still had to be available for routine maintenance.

SOFTWARE NEWS

QEMULATOR

Daniele Terdina has announced an update of this program.

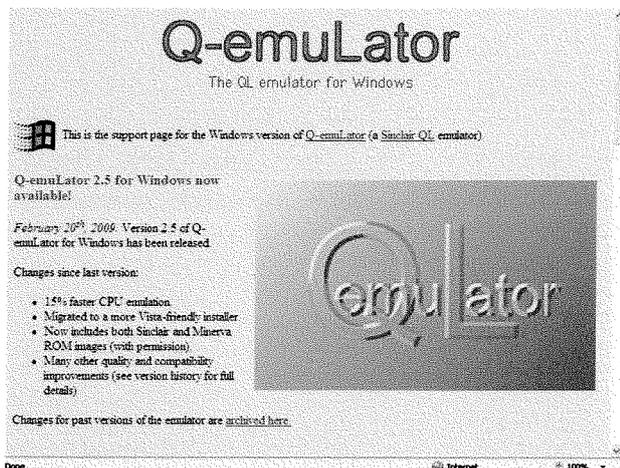
The main features of the update are 15% faster CPU installation; migration to a more Vista-friendly installer; and the inclusion, with permission, of both Sinclair and Minerva ROM images. There are also bug fixes and compatibility improvements.

Daniele recommends the uninstallation of the old version before installing the new one.

The new version of Q-emuLator is available at:

<http://www.terdina.net/ql/winql.html>.

The Standard QL emulation is freeware, but registration unlocks additional features.



DILWYN JONES

Dilwyn announces six additions to his website plus another CD:

GUITAR CHORDS DATABASE

I've added a Guitar Chords Database program from Phillip Sproston to my website.

It's written in SuperBASIC, was originally published by Quantum Soft in 1985 and there are two versions, the original being for QDOS systems, and a second version I've amended slightly to allow it to run on SBASIC systems like QPC.

It's available to download from

<http://www.dilwyn.me.uk/edu/index.html>

(about 12K download).

Phillip has kindly given me some other games programs to release as freeware, which I'll add to the website as soon as I get a chance to test them."

Q-DICT

"This is a new pointer driven dictionary program, which uses plain text dictionaries commonly available on the web. The program itself is pointer driven and lets you enter a word or phrase in one language and it will search for a translation or meaning. Various types of search are available (exact match, starting with/ending with/containing a string, unaccented match, or wildcard search). Search results can be copied to stuffer buffer, Scrap, file, or sent to a job (e.g. transfer to an editor).

The dictionary format is quite simple, allowing you to build your own dictionaries or modify these as you see fit - basically plain text with the entry and meaning separated by a colon or tab character, e.g. house:maison. This allows them to be used in an editor rather than Q-Dict if you prefer - they have been converted to use the QL character set and have the standard QL linefeed as end of line character.

Q-Dict is supplied with a French-English and English-French dictionary as part of the package and a further 14 language pairs can be downloaded, including German, Dutch, Spanish, Italian, Swedish, Norwegian, Danish, Finnish, Welsh and Scots and Irish Gaelic.

Q-Dict needs Pointer Environment, Wman2 (recent SMSQ/E v3.00 or later, or QDOS with pointer environment 2.00 or later), Toolkit 2, and expanded memory.

Q-Dict is Freeware. The dictionaries are public domain.

Download the dictionary program and dictionaries from:

<http://www.dilwyn.uk6.net/diction/index.html>

(just scroll down to the Q-Dict section, where you'll find a sample screen dump from Q-Dict)"

NEW SUDOKU PROGRAM

Frank Dibowski has sent me a rather neat little pointer driven Sudoku program.

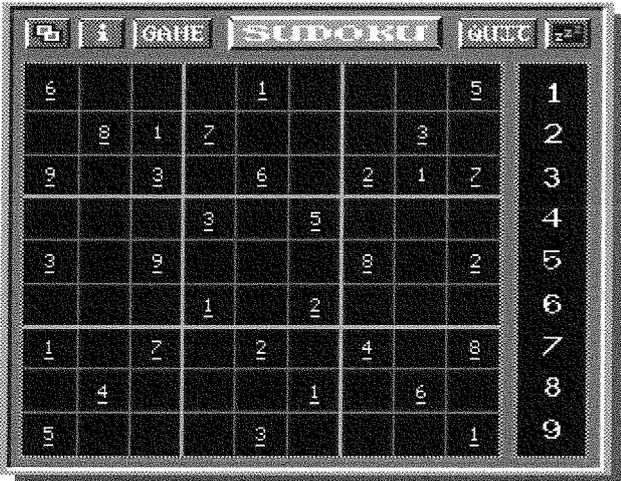
Using this, you can design your own Sudoku puzzles, or load/save puzzles from/to disk, or even get the computer to design you a puzzle, which can be easy, medium, or hard.

It can even solve the puzzle for you if, like me, you find Sudoku puzzles a bit difficult. Just tell it that you 'give up' and it will show you the completed puzzle.

Three sample puzzle files are supplied along with short instructions (in English).

Note that you will get different results from the '[GAME]' icon depending on whether you Hit (left click) or Do on it, so read the short instruction file with it to make sure you know how to get all the available options."

Sudoku is a 24KB download from <http://www.dilwyn.me.uk/games/index.html>



FAVICON

I have added a small package to my website which shows you how to get a Favicon (favou-rites icon) displayed when your web page is displayed in some modern browsers. You may have noticed that when some sites like those of Mar-

cel Kilgus and myself load, they display a QL or QPC or such icon in the title bar. In my case, loading my website in recent Internet Exploders displays a little "QL" logo which can also be displayed when the site is placed in a favourites or bookmarks folder. Why do this? I just like to announce to the world that my site is a QL website! Actually, you can blame Tony Firshman for this as I did it at his suggestion. Nonetheless, aspiring QL website owners can get the icon and details of how to make your pages display it by downloading a small zip file from my website at: <http://www.dilwyn.me.uk/htmlutil/index.html> If your browser supports the FavIcon system, you can see the end result by visiting websites such as those of Marcel Kilgus"



UQLX

Phoebus Dokos reports that he has found some time to fiddle with uQLx-win32 (the version of the uQLx emulator for Windows) and although he did not manage to recompile it with the newest cygwin, he was, however, perfectly able to boot it properly. TCP/IP is not working but he figures that after Richard Zidlicky releases the newest version of the sources it should.

The latest distribution is available as a zipped or 7-zip file from Dilwyn Jones's Emulators page:

<http://www.dilwyn.me.uk/emu/index.html>

Scroll down to Win-UQLX and you can download a zipped package (about 270K) or a 7-zip archive (about 219K).

To be able to run the emulator, you'll need parts of the Cygwin distribution from

www.cygwin.com,

which provides a Linux-like environment for Windows. Phoebus says you'll need the Base and X-Org (or X11) parts of the package - be careful to follow his instructions for getting past the installer, don't just use the 'default' settings, make sure you change Default to Install for the parts you need by clicking on the word Default (it cycles round through Install, Uninstall, Reinstall, etc, often with quite a delay between clicks). Once installed, it adds a Cygwin entry in the Windows start menu. In this, start a Linux Bash Shell,

then when that starts type startx to get things going, then you should be able to start the emulator.

It didn't work for me, but then you all know what I'm like with Windows, let alone introducing Linux-like things into the equation, so I'm sure everyone else will do just fine..."

QL GAMES CD

"This CD is a compilation of over 150 PD, free-ware and shareware games for the QL, thought to be the first time that an all-games CD for the QL has been launched. The games are supplied in a large QXL.WIN file for systems able to handle that filing system, and as zipped files ready to copy to the target QL or compatible system. The CD costs just £5.00 from Dilwyn Jones. Further details of this and other QL CDs can be found at:

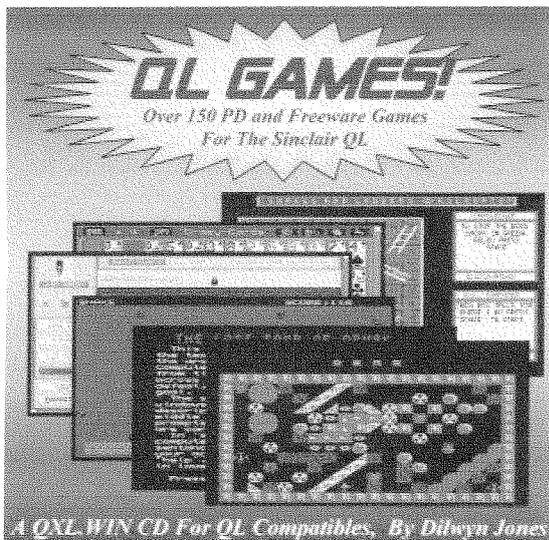
<http://www.dilwyn.me.uk/cdandsoft/index.html>

and can be ordered through Quo Vadis Design's online ordering pages at:

<http://www.ql-qvd.com/>

(just click on the Products tab and scroll down for the item you require)."

QL Today has a copy of this CD that is free of charge for any reader wishing to write a review.



GEORGE GWILT

George has updated two of his programs:

"The latest version of UCONFIG, my program for producing config blocks for S*BASIC, C and assembler programs, contained mistakes in the assembler output.

"I have updated the programs (SVSCR) for saving and manipulating areas of a screen so that the area saved will no longer contain the small window giving the size and position of the saved area if it is inside the area to be saved."

Both programs are found at:

<http://web.ukonline.co.uk/george.gwilt/>

CORRECTION AND UPDATE QSTRIPPER

Apologies to Norman Dunbar for an error in the report on the source code for QStripper in the last issue. During one of the many transfers between programs and systems part of the report became corrupted. Norman writes:

"Where the commands to build a subversion repository of my QStripper program's source code, everything has been put on one line. At the top of column two on page 9, it should read as follows:

```
cd src
mkdir qstripper
cd qstripper
svn checkout http://qstripper.svn.sourceforge.net/svnroot/qstripper ./
```

Then, below paragraph two, the instructions to build the program are also on a single line. They should read as follows:

```
qmake -makefile
make
```

The latest news is that since I posted the original email to ql-users, I have created a download package to save people having to install subversion. To obtain the source, proceed as follows: Go to

<http://qstripper.sourceforge.net/>

in your favourite browser, or use Internet Explorer if you absolutely must!

On the left of the screen, click the 'Download QStripper files' link. On the following screen, click on any of the links, but the 'download' one makes most sense to click!

Finally, click on the qStripperSourceRelease.zip link. When prompted to open or save the file, choose save and save it to a location on your PC.

The file is 103 KB in size so shouldn't take too long to download, even on dial-up links.

The file can be saved to Windows or Linux as desired - the same source code works on both. You will need the QT4 development system to compile and build the source of course.

The commands to build the source are as shown above:

```
cd qStripperSourceRelease
qmake -makefile
make
```

To run it, simply type QStripper on Windows or ./QStripper on Linux - or, double click on the

program name in Windows Explorer or whatever file manager you are using on Linux.

Hopefully, soon, I'll have a binary build for both Windows and Linux available for download for those people not able or willing to install a QT4 development system on their PC simply to build and run my program.

To those very interested in a cross platform development system for free, may I suggest you check out and download QT4.5 from

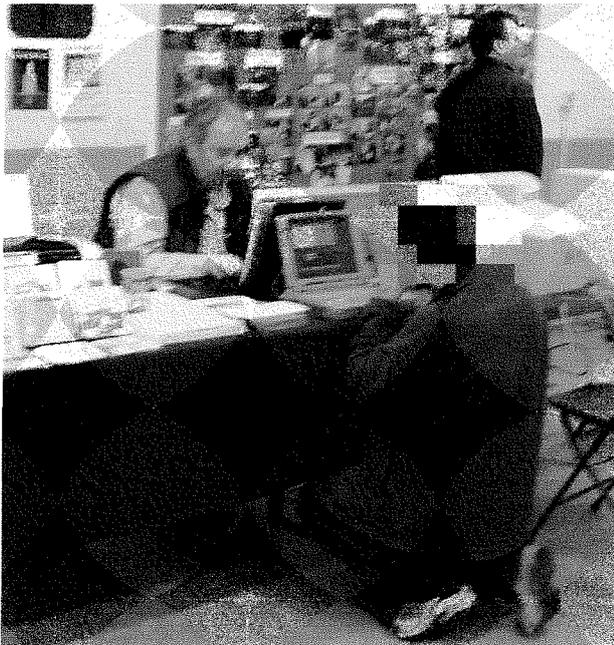
<http://www.qtsoftware.com/downloads>

Select LGPL/Free Downloads and then select the Windows or Linux version desired (Don't click on the word 'torrent' though!)

These are quite large downloads (269 Mb for Linux and 194 MB for Windows) but the effort is well worth it."

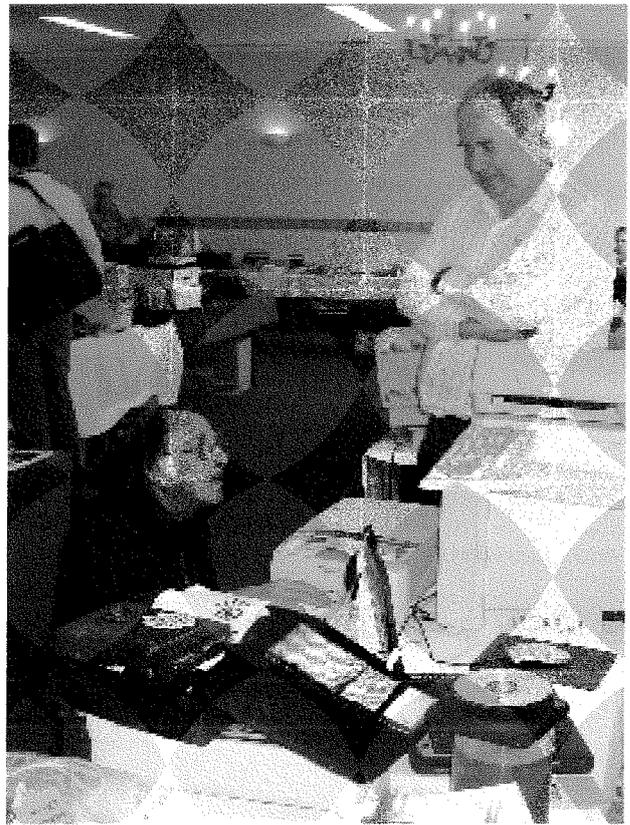
TOUCHÉ

In our report of the 2008 Quanta AGM we printed a photo showing how Dilwyn Jones requires ordinary Quanta members to kneel before addressing him.



Dilwyn has now got his revenge. Using a scoundrel who is not prepared to reveal his true identity but who goes under the name of "Mischief Maker" he has printed a humiliating picture of QL Today's editor in the Quanta Magazine. QL Today's team of sleuths soon discovered the identity of "Mischief Maker".

Alas we cannot reveal his identity, because our moles have discovered Mischief Maker is in possession of a compromising image of the editor drawn by a police artist.



ANOTHER REPRIEVE

Dutch user group Sin_QL_Air is hoping to continue running meetings in Eindhoven this year. Although the original plan was to hold three meetings, the first of these did not prove possible because of ill health of the organiser, Sjef v.d. Molegraaf.

Sin_QL_Air still hopes to hold a show in October.

LAST SECOND NEWS FROM LAST ISSUE

The very interesting story about the development and release of the QL is not quite ready, we still need some facts! Therefore, we would like to ask again if you have paper cuttings from all the press releases shortly before and after the QL was launched. If so, please scan and (e)mail it to us! Do YOU know anything about it? We are especially interested in dates - when do you think JM and JS ROMs were shipped? The only replies so far came from Urs König and Simon Goodwin - thank you.

News

Reply from QBranch

by Roy Wood

I have spent the last week deliberating about whether to write anything here about the article in QL Today. In some ways I was very disinclined to do it because I did not want it to turn into one of those acrimonious arguments that run on these pages.

I would, however, like to run in a little background information.

QBranch was doing fine right up to the Q40 / Microfast 2000 period. In retrospect both of these ventures were not the best conceived and I will not go too deeply into them but suffice it to say they left QBranch depleted and in debt. Quite apart from the various QL related problems I made the foolish decision of tying the QBranch funds to those of Microfast 2000. At the time I thought that would make the QL side stronger so I could invest the shop profits into the QL business. As it was the shop made a massive loss and was burdened with rent and rates (when QBranch was run from home it had neither of these problems.)

Having closed the shop and taken on a job I had to set about rebuilding things. There was a lot of debt to be dealt with and, as usual, I dealt with the one who shouted loudest. Jochen, being a nice guy, was not shouting. I dealt with two year's unpaid rates and a whole host of other bills to do with closing the shop and tried to get QBranch back on an even keel. Fast forward a couple of years and Jochen and I started to try to get the debt to him dealt with. We started by paying off the oldest invoices whole. After a while I realised I was falling into a similar trap to the one I had built for myself in the shop and, because the QL Today Subscriptions were all sitting in the QBranch bank, account they got used for other stuff, so I then decided to open a separate account which required notice if I was to draw money from it. All the QL Today money would sit in there (and earn a bit of interest).

Jochen wanted me to make regular payments to him. The trouble with this was that it was a bit of a struggle to do that. Young family, not a brilliantly paid job, etc. I was paying using my credit cards but, in the end just ran my credit cards up, added to my monthly payments, and all the while QL revenues went down.

For the last five years QBranch has posted a loss. Last year it was around £3500. This year I expect it to be more. Almost every invoice was for QL Today (most of the rest were QPC2 and

QPCPrint) and the profit from doing that was minimal.

The most recent arrangement I made was that all QL Today payments were prepaid and all new invoices were settled in 30 days. In addition I would pay extra money to reduce the debt. There seemed to be a bit of confusion a while back when I thought the money I had sent was for QL Today and Jochen thought I had paid it off the debt and not paid for QL Today. But I have tried to do it this way. The main problem was making a regular debt repayment. It got worse 6 months ago when my car died, I bought a new one which proved to have two expensive faults. In spite of the continuing loss from QBranch I have paid off around 80% of the money I owed JMS and the rest will get settled during this year. At any point in the above I could have closed QBranch and walked away from the debt but I did not do that. Although I have now closed QBranch. I have no intention of walking away from the remainder of the debt.

When I mentioned that 'I no longer thought about the QL' I meant it in terms of the fact that I was no longer gathering items for the article. Usually, a couple of weeks before the magazine was being prepared for printing, I would get requests for the adverts and for the article. With neither of those to worry about and a whole load of other stuff going on in my life - I was not thinking about the QL. Hence I needed reminding that I needed to sort this issue out and, since I had already spoken with Bruce about his taking it on and I realised he needed to do something about renewals so I contacted him.

With regard to the software side. Geoff and I had a very loose arrangement about it. I made up the disks and he gave me labels and manuals. The financial side was mostly me saying 'I have no more manuals for x program' and asking how much money he needed from me. At no point was I ever asked to provide a list of people who bought the program. It would have been easy enough to do - in fact I still can do this (although it would take a while) because every sale is recorded on a database. I don't think there is a single customer out there who has ever bought an item from me without getting an invoice and every invoice was recorded on the main database. It got more complex with Just Words

when he started offering discounts for buying multiple programs but I never owed him any money and returned a whole load of manuals when he took it all back 'in house' he asked me to do so. At the time I thought I had settled everything with him and this was the first I heard of any problem.

QDT was a different matter. We had high hopes of that being a good seller but I sold only 28 copies in over 3 years (to 2008). Each one had a unique licence number and I sent a spreadsheet with all the licence numbers, names and emails addresses to Jim and he invoiced me for the sales. I think I may owe him for 2 copies since his last invoice (in 2006) and, if he emails me privately I can give him those details and sort out that payment.

Like most businesses QBranch worked on forward sales, you are, essentially paying part of the previous bill from the current sales because running expenses take their toll. When there are few sales for a couple of years running expenses figure large in the equation. I should have closed QBranch two or three years back but I enjoyed running it, liked the shows and the people and kept thinking something would come up to make it get better again. When QBranch did close it had over 200 copies of QL Today back issues which represents a sizeable amount of money as well as a few unsold programs which had been invoiced and paid for because I always felt I should have at least one of each item in stock to avoid delay in shipping to the customer. I also still had a swathe of QDT / Easyptr / QPC-Print CDs and manuals made up. Some of this I have now disposed of, the rest I will donate to Bruce but I suspect he will not be able to sell any. Gradually, as my diving activities became more prominent and then my rock band started to happen I got less and less time to devote to the QL but then the QL scene devotes less and less time to itself. After 25 years it is in great need of new programs and a bit more drive from the people who are still involved. It's future is in the hands of the users now because there is but one trader and nothing new to sell. A parlous state.

There we are. This has been a lot longer than I intended it to be at the start and I hope you are all still awake. I have done this without suggesting that I was misrepresented in the article and I hope without raising anyone's hackles or creating a disturbance. I just wanted my side out there.

I hope you were not too bored and that the above will not raise any blazing rows. They don't do us any good at all.

Comments from Jochen:

This reply was posted by Roy to the QL Users group and I asked him to print it here as well, with his permission.

My only direct comment is: the debt is mainly QL Today invoices (and QPC, QPCPrint sales etc.), as mentioned in the initial article. So, payment always covers the eldest invoice, this is how it was done by me over the years, reported to Roy this way and general book-keeping practice anyway.

I got a few responses from readers, one saying that he could not see what good it could possibly do apart from giving me a false sense of satisfaction.

Well, this is a complete misinterpretation. I was very sorry I had to publish the initial article. Not a single bit of satisfaction. Worries, massive worries only. How much stomach pain and headache all this gave me (thinking about if and what to publish, not just all the worries over the years of not getting the money in time).

The article was meant to do as little damage as possible. The alternative would have been: possibly NO DELIVERY of issue 4 WITHOUT all of Roy's readers knowing the reason. What kind of damage had THIS done? We would have to explain on the newsgroup anyway at that stage. Late. Not reaching all the readers.

And could I happily take renewals without informing the readers? No, I preferred to be fair and explain to the readers BEFORE taking any money.

I finally had to go the route which I felt would be the fairest - there was no perfect solution to all this (except from getting the promised payment in time - but that was not under my control). So, whatever I did, it would not please everybody and could lead to wrong impressions. Please ask yourself: what had you done in my situation?

Taking renewal money and not delivering without telling everybody would be unacceptable to me, and it would have been the definite end of QL Today.

So, the situation is: if you are one of Roy's subscribers, then you should not have this magazine in your hand, as I did not get the money from Roy I asked for (not all of the outstanding money, just 500 Euros plus QL Today money ... beginning of June I got 100 pounds plus QL Today money) plus another promise from Roy to set up a standing order to pay back 100 pounds every month. I hope it will come...

QL Is 25 - QL and Quanta's Silver Jubilee

by Dilwyn Jones

Saturday 18th and Sunday 19th of April 2009 saw Quanta's major event of the year take place, the celebration of 25 years since both the Sinclair QL itself and Quanta came into being.

The workshop and AGM were held at the Allesley Hotel, near Coventry, with a good standard of attendance compared to some recent shows, with visitors coming from as far afield as France and The Netherlands.



Entrance to the Imperial Room, where the meeting was held. The Quanta stand can be seen through the door to the left, with Leo Moll walking towards the door.

Some had stayed overnight on Friday night and enjoyed a good meal and chat in the Allesley Hotel. The Saturday was the main workshop day held in the Imperial Room and talks held in the smaller Maynard Room alongside. Talks were given by George Gwilt, Steve Poole and Simon Goodwin on subjects as diverse as the future of computing, PCB Cad design software and the uQLx (Linux) QL emulator. Steve Poole gave a second talk on the Sunday on the subject of 3D graphics and how he has mapped out a view of several kilometres around his house in France. This was the first time Steve had given such a presentation although his writing in both QL Today and Quanta magazines are prolific.

QL Today and Quanta author, Steve Poole, who gave two talks over the weekend.



George Gwilt, pictured just before the start of his talk.

The expected Question and Answer session on Sunday morning did not appear in the end, probably because everyone had already asked all their questions the day before. Nonetheless, notes were made of questions asked and these will appear in future Quanta Helpline columns. Most questions asked revolved around the use of emulators and the transfer of data from QL disks and cartridges to the emulator environment. QL Today has already covered this task in the December 2007 issue, page 48, in an article about QLayer entitled "My Holiday Romance" and hopefully Quanta's Helpline articles will also cover this subject in the near future.

A substantial QL History Exhibition had been prepared, with subjects as diverse as original QL reviews, rare documents (such as an Open University course featuring the QL) and first editions

of several QL magazines including Quanta, QL User and QL World. Various people had brought along rare pieces of old QL hardware to display, such as Simon Goodwin's Thor XVI and MCS Multi-ROM (a 16K



RAM cartridge which plugs into the QL EPROM port allowing ROM images to be switched in and out), John Gilpin's Sinclair/MP disk interfaces, and George Gwilt's Thor 21 machine.



The QL History Exhibition

An in-depth QL history presentation was seen running on-screen all day, occasionally interspersed with another presentation from Urs König. The original Sinclair QL demo tape could also be seen running.

Rich Mellor represented the QL traders at the workshop, with a generous stand full of both software and second user hardware. Dilwyn Jones had a new QL Games CD on show with over 150 freeware and shareware games collected onto it. John Southern and Chris Grogan manned the QL A&E table where they sought to resuscitate and recycle sick QLs and other hardware brought along for repair.

A significant movement in QL philosophy was evident at the show. Very few original black box QLs were to be seen. Most visitors seemed to be using Q emulators running on Windows or Linux systems. This is probably evidence that although there are still users running black boxes, the active core of QL users are largely moving towards emulation systems to benefit from having two platforms to use on one machine. John Mason, outgoing Chairman, had predicted this in an article in *Quanta* recently and I could see at this workshop how accurate his words were.

Saturday night's dinner ended with the presentation of an engraved tankard to outgoing *Quanta* Chairman John Mason. John is the longest serving of *Quanta* officials, having served in one capacity or another for some 15 years or more. We hope we will continue to see contributions from him to the magazine for some time to come - his experience of both the QL and computing in general is to be greatly respected.

The outgoing Secretary also announced that honorary life memberships have been awarded to traders Tony Firshman and Jochen Merz for their

long service to the QL community, and discretionary life membership to Gil Lamb in Thailand who at 94 is thought to be the oldest member.

The AGM on Sunday saw the election of the new committee unopposed. Outgoing Chairman John Mason thanked everyone and wished his successor well after presenting a few points as to how he saw the last 25 years and how he thinks the next period will progress. *Quanta* now has its first female Chairman in Sarah Gilpin, and we welcome Alison Southern to the committee as the new Secretary. Other officers were returned unopposed.

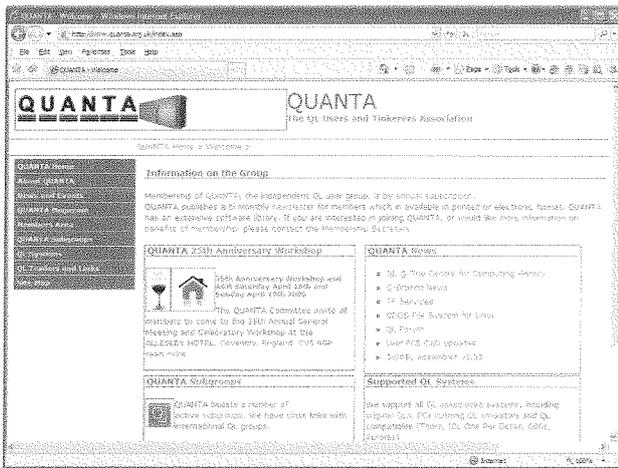


The committee for 2009/10. From left to right: Dan Abbott (Webmaster), John Gilpin (Membership Secretary, Treasurer and Magazine Editor), Sarah Gilpin (Chairman), Alison Southern (Secretary) and Dilwyn Jones (Librarian, Helpline and News Editor)

Webmaster Dan Abbott gave a brief mention of how work on the *Quanta* website is progressing, with three Content Management Systems under evaluation to help us maintain and progress the *Quanta* website in the future.

Librarian Dilwyn Jones gave a brief roundup of the library situation, noting that he has now caught up with all outstanding submissions to the library. In an effort to encourage use of the large library of software available, and to celebrate the Silver Jubilee, committee had decided to issue a copy of the Library Guide to all members with their newsletters and the entire library is available on a single CD-R to members for just £1.00. He also announced that he hoped that in the future (after the Content Management System was in place) the entire library could be placed online for members to download, to make it easier in this world of modern technology to obtain copies of library disks without having to use the now clumsy method of sending disks back and forth in the post. The download library would only be available to members via a password system, although the library guide disk itself would be freely

downloadable to all in the hope that it could be a free advert for Quanta to encourage new members to join by showing people how much software is available to members. It was suggested that Dilwyn Jones should contact QL groups overseas with a view to including information about these groups in the sub-groups pages of the magazine. Dan Abbott also suggested that once the Content Management System has been selected and implemented, it should be possible for sub-groups to have their own space on the expanded Quanta website, to publicise their local activities and to give them an opportunity to present themselves to others out there and possibly gain new local members.



The Quanta website at www.quanta.org.uk

A committee meeting was held after the AGM where it was decided to co-opt Keith Dunbar to the committee to assist Dan with the task of evaluating and implementing the Content Management Systems and generally progressing the website, as it is a vital facility in this day and age for Quanta.



Keith Dunbar

Quanta now faces the task of how to progress the organisation as it passes its Silver Jubilee, and also how to tackle the shortage of volunteers to serve on the committee. We have been fortunate enough to have Alison Southern (who is a northerner despite her name) volunteer to serve as Secretary, and we will need to find a treasurer next year as John Gilpin steps down as an officer at the end of his period as defined by the constitution.

During the weekend we also had the opportunity of meeting some ex-traders like Stuart Honeyball of Miracle Systems, and past officers of Quanta like former Chairmen Roy Brereton and Phil Borman.

Roy Brereton also hinted that he would look at the possibility of holding a southern workshop in the Clevedon area later this year or next year (an old venue for very successful workshops in the past) and it was suggested that future AGMs could be held in the Coventry/West Midlands area as it was convenient and fairly centrally located for visitors from most parts of Britain. However, if workshops could be organised in London and/or Clevedon it would help to redress the recent northern bias.

Another issue discussed this weekend was the collecting of ED floppy disks, which are becoming harder and harder to find. The last word goes to Alison Southern on this one, as her husband has apparently been making his own, by carefully adding an extra offset hole to HD disks to fool ED drives that they are ED disks, which as far she knows still work OK. ■

XMAS Helicopter Simulation

by Stephen Poole

My last 3D animation program for QL Today was Racer_bas, which, although it contained a rally circuit, was situated on a completely flat surface, to restrict driver controls to either 'turn left' or 'turn right'. This time I thought it would be interesting for readers to manoeuvre in all three dimensions, again in full perspective. So I decided to rewrite an old helicopter simulator. As always, my problem as a code writer was to keep the program as short as possible for you to type in, which accordingly restricts the complexity of the game. So I decided to write a modern Father

Christmas program, where you are confronted with a number of multi-story apartment blocks, to each floor of which you must deliver a present. The game starts by drawing a random number of buildings of random height (drawn only in wire-frame at first). You may fly up, down, left, right, forwards or backwards. (UP arrow, DOWN arrow, LEFT arrow, RIGHT arrow, F(orewards) or B(ackwards)). These key choices simplify the coding, as the helicopter therefor **always** faces the same way, and only moves one block at a time in the

selected direction. When you arrive in front of an apartment, to deliver the present you must simply be positioned directly in front of its center, and there are cross-wires to help guide you, (the flat will thereafter be filled with solid colour). To simplify things further, the towers are pre-sorted in a simple way that needs no subsequent hidden-face routine nor matrix searching.

WARNING: If there are no buildings on the screen, then just move backwards until some come into view, but watch out, as if you collide with a building you will crash and lose. When you have delivered all the presents, your score will be given as ten times the average time you took per present. And that's all there is to it! At first you may feel confused, but don't worry as there is a relatively simple winning strategy, which I will leave you to discover. The screen frame drawing is pretty well instantaneous on my 2.8+Ghz PC with QPC2, but should be rather slower on a standard 128k QL.

If you want a programming challenge, try modifying the code so as to be able to fly around the buildings, looking from any skew, slope, height or direction... I would be very much interested to hear how you get on! If any readers wish to have diagrams showing the geometry and trigonometry of the program, then contact me on my public email terminal: stevepoole@minitel.net: I will send you photocopies of my programming notes. This is

the best way to grasp all the parameters, without which you will rapidly find yourself hopelessly lost in space-time...

You may be surprised when examining the code, as all the variables seem to be working upside-down and back to front. This is because QL trigonometry functions do not operate in the way you expect them to. If you use standard Maths logic, you can only get output in the positive quarter of the scaled and centered screen. I worked out how to manoeuvre in QL 3D space after much trial and error. This is why my code contains its own ATAN_ function, where the 'opposite' and 'adjacent' parameters are inversed and where the returned angular values do not correspond with standard trig recommendations! But one does what one can... This program is a cut-down version of one I wrote some years ago, which allowed me to fly around my home parish, but this contained far too many DATA lines to detail buildings, walls, trees and fields for publication. After finalising Hover_bas, I started working on a far more ambitious 3D animation project which I will reveal if it works as expected. But this could mean much debugging as for me it is breaking entirely new ground!

Happy reindeer steering!

[Editor's comment: while I lay this out, with outside temperatures of about 7 degrees, it feels more like winter than summer]

```

100 ::
110 REMark HOVER_bas. by S.Poole. v1jan08
120 REMark for QL Today. Beta-test by B.Coativy.
130 :
140 CLEAR: OPEN#1,con_16
150 WINDOW 512,256,0,0: PAPER 0: INK 7: CLS
160 AT 1,1: INPUT 'Difficulty? (easy:1 to hard:16) >'!i$
170 IF i$='': GO TO 160: ELSE Ntwr=i$
180 SElect Ntwr: =1 TO 16: =REMAINDER : GO TO 160
190 :
200 REMark Do not alter scale. It controls off-screen lines:
210 scy=5: SCALE scy,-scy/1.5,-scy/2: CLS: high=12
220 :
230 REMark P holds coordinates, T holds presents delivered:
240 DIM p(Ntwr+1,3),p_2(Ntwr+1,3),T(Ntwr+1,high)
250 x=1: y=2: z=3: p1=PI*.49: p2=PI*2: L=.5
260 left=192: right=200: up=208: down=216: fore=102: back=98
270 r90=RAD(90): r180=RAD(180): r270=RAD(270): r360=RAD(360)
280 ct=Ntwr: kt=0: Get_random_towers: Fix_reference_line: D1=DATE
290 :
300 REPEAT play_loop
310     Set_perspective_referentials
320     Get_tower_coordinates
330     REMark Draw Aiming cross-wires:
340     OVER 0:INK 0,7,3:LINE 0,L TO 1,L, L,0 TO L,1: FILL 1: CIRCLE L,L,.35: FILL 0
350     get_key: IF ct=kt: won: ELSE : CLS
360 END REPEAT play_loop

```

```

370 ::
390 DEFine PROCedure Get_random_towers
400 REMark Get Random towers on a 7 by 7 by 7 cubic volume:
410 FOR f=1 TO Ntwr
420   REMark Leave space around towers:
430   pfx=RND(-3 TO 3): SElect pfx: =-2,0,2: GO TO 430
440   pfy=RND(-3 TO 3): SElect pfy: =-2,0,2: GO TO 440
450   pfz=RND(1 TO high)
460   :
470   REMark Don't build two towers on same spot:
480   FOR j=1 TO Ntwr
490     IF p(j,x)=pfx: IF pfy=p(j,y): GO TO 430
500   END FOR j
510   REMark Tower origin coordinates:
520   p(f,x)=pfx: p(f,y)=pfy: p(f,z)=pfz: ct=ct+pfz
530 END FOR f: sortem
540 END DEFine
550 :
560 DEFine PROCedure sortem
570   np=1
580   FOR yy=3 TO -3 STEP -1
590     FOR xx=-3 TO 3
600       FOR tw=1 TO Ntwr
610         IF p(tw,x)=xx THEN
620           IF p(tw,y)=yy THEN
630             p_2(np,x)=xx: p_2(np,y)=yy: p_2(np,z)=p(tw,z): np=np+1
640           END IF
650         END IF
660       END FOR tw
670     END FOR xx
680   END FOR yy
690 END DEFine
700 :
710 DEFine PROCedure Fix_reference_line
720 REMark Leave space around towers:
730 tx=RND(-3 TO 3): SElect tx: =-2,0,2: =REMAINDER : GO TO 730
740 ty=RND(-3 TO 3): SElect ty: =-2,0,2: =REMAINDER : GO TO 740
750 tz=RND(1 TO high): D1=DATE
760 Rx=tx: Ry=ty+2 : Rz=tz: REMark target-position.
770 END DEFine
780 :
790 DEFine PROCedure Get_tower_coordinates
800 FOR twr=1 TO Ntwr
810   REMark coordinates of front-lower-left position of building:
820   xQ=p_2(twr,x): Yq=p_2(twr,y): zQ=p_2(twr,z): INK twr,twr+3,3
830   IF tx=xQ: IF ty=Yq: IF tz<=zQ: lost
840   REMark Get each floor:
850   FOR box_=0 TO zQ
860     Get_box_coordinates
870     IF NOT Get_perspective_coordinates: GO TO 890
880     draw_box
890   END FOR box_
900 END FOR twr
910 END DEFine
920 :
930 DEFine PROCedure Set_perspective_referentials
940 REMark consider eye to target triangle
950 Fx=Rx-tx: fy=Ry-ty: fz=Rz-tz: fh=SQRT((Fx^2)+(fy^2))
960 REMark eye to target polar orientations:
970 c=ATAN_(fy,Fx): IF c>PI: c=c-p2: END IF : IF c<=-PI: c=c+p2
980 b=ATAN_(fz,fh): IF b>PI: b=b-p2: END IF : IF b<=-PI: b=b+p2

```

```

990 END DEFine
1000 :
1010 DEFine FuNction Get_perspective_coordinates
1020 IF VIEW_(xA,yA,zA): mA=m: nA=n: ELSE RETURN 0
1030 IF VIEW_(xB,yB,zB): mB=m: nB=n: ELSE RETURN 0
1040 IF VIEW_(xC,yC,zC): mC=m: nC=n: ELSE RETURN 0
1050 IF VIEW_(Xd,yD,zD): mD=m: nD=n: ELSE RETURN 0
1060 IF VIEW_(xE,yE,zE): mE=m: nE=n: ELSE RETURN 0
1070 IF VIEW_(xF,yF,zF): mF=m: nF=n: ELSE RETURN 0
1080 IF VIEW_(xG,yG,zG): mG=m: nG=n: ELSE RETURN 0
1090 IF VIEW_(xH,yH,zH): mH=m: nH=n: ELSE RETURN 0
1100 RETURN 1: END DEFine
1110 :
1120 DEFine PROCedure Get_box_coordinates
1130 XA=xQ : yA=Yq : zA=box_
1140 xB=XA+1: yB=yA : zB=zA
1150 xC=XA : yC=yA+1: zC=zA
1160 Xd=xB : yD=yC : zD=zA
1170 xE=XA : yE=yA : zE=zA+1
1180 xF=xB : yF=yB : zF=zE
1190 xG=xC : yG=yC : zG=zE
1200 xH=Xd : yH=yD : zH=zE
1210 END DEFine
1220 :
1230 DEFine PROCedure draw_box
1240 AmA=ABS(mA): AnA=ABS(nA)
1250 REMark Test if aligned with origin-corner:
1260 IF AmA<5E-2 THEN
1270 IF AnA<5E-2: IF p_2(twr,y)=ty+1: IF T(twr,box_)=0: kt=kt+1: T(twr,box_)=1
1280 END IF
1290 AT 1,1: INK 7: PRINT ct!kt,: INK twr, twr+4,3
1300 fl=T(twr,box_)
1310 FILL fl: LINE mA,nA TO mE,nE TO mG,nG TO mC,nC TO mA,nA: FILL 0
1320 FILL fl: LINE mC,nC TO mG,nG TO mH,nH TO mD,nD TO mC,nC: FILL 0
1330 FILL fl: LINE mB,nB TO mF,nf TO mH,nH TO mD,nD TO mB,nB: FILL 0
1340 FILL fl: LINE mA,nA TO mE,nE TO mF,nf TO mB,nB TO mA,nA: FILL 0
1350 END DEFine
1360 :
1370 DEFine PROCedure get_key
1380 BEEP 1234,5: i$=INKEY$(#1,-1)
1390 IF i$<>'': cd=CODE(i$): ELSE GO TO 1380
1400 SElect cd
1410 =left : tx=tx-1: IF tx<-3: tx=-3: END IF : Rx=tx
1420 =right: tx=tx+1: IF tx>+4: tx=+4: END IF : Rx=tx
1430 =down : tz=tz-1: IF tz<0 : tz=0 : END IF : Rz=tz
1440 =up : tz=tz+1: IF tz>high : tz=high : END IF : Rz=tz
1450 =fore : ty=ty+1: IF ty>+4: ty=+4: END IF : Ry=ty+2
1460 =back : ty=ty-1: IF ty<-7: ty=-7: END IF : Ry=ty+2
1470 =REMAINDER : GO TO 1380
1480 END SElect
1490 END DEFine get_key
1500 :
1510 DEFine FuNction VIEW_(vx,vy,vz)
1520 REMark (Append underscore_ or else crash the name_table).
1530 REMark Consider (eye to target) & (eye to viewed-point) triangle:
1540 lx=vx-tx: ly=vy-ty: lz=vz-tz: lh=((lx^2)+(ly^2))^.5
1550 REMark Keep orientation angles in a simple positive circle:
1560 h=ATAN_(ly,lx)-c: IF h>PI: h=h-p2: END IF : IF h<(-PI): h=h+p2
1570 e=ATAN_(lz,lh)-b: IF e>PI: e=e-p2: END IF : IF e<(-PI): e=e+p2
1580 REMark See if angles mean that the point is off-screen:
1590 IF h>p1 OR h<(-p1): RETURN 0

```

```

1600 IF e>p1 OR e<(-p1): RETURN 0
1610 REMark Perspective screen coordinates:
1620 m=TAN(h): n=-1*TAN(e)*((m^2)+1)^.5: RETURN 1
1630 END DEFine VIEW_
1640 :
1650 DEFine FuNction ATAN_(oo,aa)
1660 REMark Gets ATAN right in all signed quarters:
1670 REMark Sign(opposite side) & Sign(adjacent side):
1680 so=(oo>0)-(oo<0): sa=(aa>0)-(aa<0)
1690 IF so=0 OR so=1: IF sa=0: RETURN 0
1700 IF so=0 : IF sa=1 : RETURN r90
1710 IF so=-1: IF sa=0 : RETURN r180
1720 IF so=0 : IF sa=-1: RETURN r270
1730 oa=ATAN(aa/oo): REMark hypoteneuse angle in RADs.
1740 IF so=1 : IF sa=1 : RETURN oa
1750 IF so=-1: IF sa=1 OR sa=-1: RETURN r180+oa
1760 IF so=1 : IF sa=-1: RETURN r360+oa
1770 END DEFine ATAN_
1780 :
1790 DEFine PROCEDURE won
1800 d2=DATE-D1: score=INT(100*(d2/ct))
1810 AT 3,1: INK 7: PRINT'Bravo...!score: BEEP 12345,6
1820 AT 5,1: PRINT'Another? (y/n)': i$=INKEY$(#1,-1)
1830 IF i$='': GO TO 1820
1840 IF i$=='y': RUN: ELSE : STOP
1850 END DEFine
1860 :
1870 DEFine PROCEDURE lost
1880 AT 3,1: INK 7: PRINT'You Crashed...': BEEP 12345,67
1890 AT 5,1: PRINT'Another? (y/n)': i$=INKEY$(#1,-1)
1900 IF i$='': GO TO 1890
1910 IF i$=='y': RUN: ELSE : STOP
1920 END DEFine
1930 ::

```

The future of Quanta

by the Quanta Committee

QUANTA has now passed its 25th birthday and is looking forward to the next few years. We have some achievements under our belt, and need to look ahead to what we can do in the future. We can list quite a few recent achievements:

- Identifying the need for and appointing a News Editor - improving news coverage in both the magazine and the website
- Appointing a Helpline co-ordinator
- Appointing a magazine editor and improving the content and standard of presentation
- Electronic version of the magazine
- Postage savings for electronic version of the magazine mean overseas members can now actually pay less per year than before
- Online subscription payments
- Improving the website
- Magazine listings available from the website
- Managed to get new committee members

- Email committee meetings enable issues to be tackled as they arise
- Started on a project to scan and make available electronic back issues of the magazine

These are the recent perfectly respectable achievements, yet we know we have more to do. QUANTA must remain at the heart of the QL community, a user group always has to be, and we have to move with the times, face up to realities and look at what steps we take for the future. Just because we have "survived" for 25 years, it neither means we sit back and just wait for QUANTA and the QL community as a whole to expire, nor that we should seek to set ourselves impossible targets.

It is probably inevitable that at some point in the (hopefully distant) future, QUANTA as an organisa-

tion will either be wound up or, less likely, merged with another organisation. The merger of QL Today and QUANTA magazine was raised recently, and QUANTA responded with an opinion poll. At the time of writing, only the opinions of those at QL Is 25 were known and that opinion was overwhelmingly against such a merger.

Criticism

Of course, it is easy to criticise a committee or an organisation at any time, but if you have ideas for progress and change, you should make those known as well as the criticisms. QL Today has been critical of QUANTA, but has also been constructive when dealing with many issues. We may not always agree with everything that is said, but it has at least resulted in a consensus that we need to actively move forward and never be content with the status quo. We understand that some things that got said were mutually disagreeable but equally feel that this is now a new year for QUANTA, under a new Chairman and that we should look forward rather than dwell on things which are likely to prove potentially destructive to both organisations, especially as even some QL Today readers complained about the ongoing "personal dispute" as "needless and tedious". We would rather celebrate achievements and look forward to what we can do in the future. If you have views on what QUANTA should be doing and isn't (or doesn't seem to be) doing, write and let us know. Even better, let us know what you think should be done about it. Some very good ideas often arise from constructive criticism like this. If you have strong feelings, you can stand for election to the committee and with at least one more officer due to stand down next April (Chairman John Mason stood down this time) there is a clear opportunity for someone to get him/herself nominated to stand for election to a committee and possibly serve as an officer in the future.

Opinions Expressed

There are some issues raised by writers such as Duncan Neithercutt about the future of QUANTA that we will agree with completely, while there are others we can comment on constructively even if we don't agree with them.

As an example, he states that *"the email distributed .pdf magazine is a doppelganger for the paper magazine! None of the opportunities of electronic publishing have been used, not even colour!"*

QUANTA's Editor has spent a lot of time on this. He has come up with what he believes to be the

best compromise between quality and file size. Yes, we can try to make sure that web links can be clicked on within the electronic magazine, for example. But as to whether the paper or electronic versions are the future, at this stage only a small minority take the electronic version and when asked at QL Is 25 for example, many said they simply preferred the paper version to carry around and read. Cost might be a factor for overseas members because they can now pay the base subscription price for the electronic newsletter and save themselves several pounds in postage - the first time in recent years that overseas members can join at the same price as UK members. And of course the paper version is the only option for those without internet access or the facility to read PDF files.

Library

Duncan's comments about the QUANTA Library are valid.

As an example of what we want to do in the future, our Librarian wishes to place QUANTA Library online for download to members via a password system. This will need a proper system of controlling access to the Library, which in turn will involve the Membership Secretary setting up passwords, changing them when needed and of course removing access from members who decide not to subscribe the following year. The old system of sending disks and return postage and so on to librarians is just too clumsy in this day and age for those with internet access when, as Duncan mentioned, you can get all sorts of software freely and quickly on many QL websites.

Not all members have internet access, though, and not everyone will know how to download a zipped disk and transfer it to their QL system or emulator and unpack it to be able to run it, so we will need to make sure we tackle that particular issue too. But, the infrastructure of the website needs to be in place before we can embark on anything other than gather ideas.

It is also hoped that local sub-groups can have their own sections on the website. Here they can publicise their existence in order to recruit new local members, and make their local activities known. Which leads to another subject - the activities of the overseas QL user groups. It was decided at QL Is 25 that a committee member would seek to get in touch with the overseas groups to list those which still exist and try to get them to send us details of their activities, who to contact to join and so on.

The QUANTA website is a vital tool for us in this day and age and we want to try to get it right rather than just put "a website" in place overnight

which would risk becoming quickly out of date and becoming little more than the name of the organisation and a contact point list.

Multi-Platform?

Now to look at the subject of QUANTA considering becoming a multi-platform group. This has been discussed many times in the past and of course we have always resolved to remain a QL (and compatibles, including emulators) group. We are against it becoming multi-platform, but are happy to allow some Windows, Linux or Mac OS discussion where this is relevant to us as a QL group, for example, discussing a particular Linux, Windows, or Mac issue where it causes problems in getting a QL emulator to work, or porting a particular Linux or Unix application to QDOS or SMSQ, or where relevant in furthering QDOS and SMSQ.

News

We saw that news coverage was a weakness in the magazine and appointed a committee member to be responsible for gathering news items for the magazine and for news to be available on the website too. The result - even in our Silver Jubilee year we have seen several pages of news in most recent magazines. A positive and successful step, and of course an essential function of keeping members informed of news and developments in a period where QUANTA and QL Today are the main (and sometimes only) sources of information for many QLers, apart from the email mailing list.

We also ensured that a committee member was responsible for the Helpline and this has resulted in many helpful questions being answered via the magazine. We hope that in time we could add the compilation of Helpline articles as a reference source of FAQs (Frequently Asked Questions) on the website which members could refer to first, then perhaps add a "message form" to the Helpline pages for members to contact us. Again, this will be looked at in more depth once our Webmaster has got the CMS fully in place.

Business Proposals

We have to be at the heart of the QL community (that's what any user group should be) yet we dare not be too recklessly adventurous. We have to do the best we can with members' money, yet we have looked at business proposals such as Rich Mellor's loan for new keyboard membranes, and D&D Systems' loan for Qx0 production. Both plans were considered on the merits of the business plan submitted and the loans duly repaid as planned, with the results that spare

parts continued to be available as the opportunity arose, and we were able to assist with the Q40/Q60 systems.

What we are getting at is this: In his editorial, QL Today's editor asks if "we prefer the safety of going on as before?" or if it should be "a radical reshaping of our community?" The answer lies between these extremes, of course. We cannot afford the luxury of doing nothing and going stale, yet we dare not take risks so great that a failure would wipe us out overnight or leave members so disillusioned that they quit in droves.

The Web

QUANTA recognises the vital importance of the World Wide Web and electronic communication. We have taken active steps to improve our website and recognise that further work is needed, which is why we have also been proactive here and co-opted another committee member with experience in this area (Keith Dunbar) who can assist our webmaster to move the website on a little quicker to what we want it to be (pivotal to QUANTA - a proper web presence is essential rather than just desirable) rather than resting on our laurels with what we already had.

Committee And The Future

Our constitution states that we need to have three officers and up to six other committee members. The constitution states that members can't serve for more than six years and officers not normally for more than three years. So we will need at least one new officer next April. These rules were introduced in an effort to bring new blood to the committee, but have not been as successful as originally hoped and it has looked from time to time as though QUANTA may struggle to survive when faced with a lack of volunteers (although this year we have two new committee members). Even if the constitution allowed the same people to stay in place forever, this would scarcely be good in the long term - new blood is vital from time to time.

So our vision is to make sure we are well placed to take on the QL scene as it changes with time. We have taken proactive steps with the magazine, we are on the lookout for potential future committee members, we are investing time and effort into putting a CMS in place for effective future use of the website, we have got online subscription payments up and running, we are planning ahead for what we can do once these steps are fully in place.

And of course we will have to learn to blow our own trumpet rather better than we have done in the past! ■

QUO VADIS
DESIGN

Independent Information
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www.ql-qvd.com

QL/QDOS/SMSQ/E Software

The screenshot shows the Quo Vadis Design website. At the top left is the company logo and name. To the right, it says 'Independent Information Technology Services'. The main header is 'QL/QDOS/SMSQ/E Software'. Below this is a navigation bar with links for Home, Products, Support, Company, and Contact. The main content area is divided into three columns. The left column has a 'Welcome' section with text about software for the Sinclair Quantum Leap computer and a 25th anniversary notice, accompanied by a photo of a computer keyboard and mouse. The middle column has a 'News' section with two items: 'QVD QL News Blog - keep up to date News Blog' dated 24/02/2009 and 'Quo Vadis Design Website Launched' dated 01/02/2009. The right column has a 'FEATURED PRODUCT' section with a 'QPG II' logo and a 'BUY NOW!' button. At the bottom of the page, there is a copyright notice and a footer with navigation links.

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The logo for 'QL Today' magazine. The text 'QL Today' is in a stylized font. To the right, in a box, it says 'The QL magazine for all QDOS, QL, SMSQ ... users!'.

Subscriptions taken online

QL Today and the Quanta Magazine

by Geoff Wicks

Ian Burkinshaw's letter in the last issue of QL Today, which was also published in the Quanta Magazine, has caused quite a stir. Ian suggested the time has come for QL Today and Quanta to merge.

Let us be clear straight away that neither Quanta nor QL Today supports this proposal, but at QL Today we feel the issue should be discussed. Ian is not a lone voice, because we have heard others making a similar suggestion. In the last year both QL Today and the Quanta Magazine have had severe difficulties, and there is a strong possibility that the Quanta Magazine will again face a major crisis next year. Even if both publications were eager for a merger, finding a mechanism for doing so would be very difficult if not impossible.

Ian's letter appears to have shocked Quanta's high command and at their recent quarter centenary show they produced a document and survey that, frankly, we found bizarre and misleading.

Quanta stated "this is surely about the future of QL Today not QUANTA Magazine", in spite of the fact that Ian and others have clearly stated that Quanta's magazine problems over many years are one reason for making this suggestion.

In the document Quanta describes their own magazine as a "flourishing first class production". At QL Today we have frequently praised the efforts Quanta has made to improve the Quanta Magazine, which has been transformed editorially in recent years, but Quanta is losing touch with reality by claiming it is a "flourishing production". The facts are that for five years Quanta has been unable to find a permanent editor for the magazine, and a year ago a newly appointed editor went AWOL without producing a single issue. Quanta had to go over to an emergency publishing schedule, which meant there was no magazine published for almost six months. Some members thought the magazine and Quanta had closed down.

Other members were highly critical of the emergency issues, suggesting the content had fallen below acting editor John Gilpin's usual high standards. One member put it forcibly "the signal to noise ratio frequently drops to below detectable values". Others felt news items had been used to pad out the magazine because of a lack of other

content. There was some truth in these allegations, but I felt they were a little harsh given the pressures that John Gilpin was working under. Now that he is back on his normal schedule he has produced two issues that have won praise as being among the best ever.

Quanta tells us that John Gilpin has to step down as treasurer next year because he will have served 6 years on the committee. If this is true he also has to stop all work for the Quanta Magazine, just as John Mason has done this year, because the magazine editor is a committee post. Realistically if Quanta has failed to find a permanent magazine editor since 2004, what is the chance of it doing so within the next six to 10 months? When John Gilpin steps down we can anticipate a major Quanta Magazine crisis.

I wonder whether Quanta's present officers have read and understood the Quanta constitution, because it is unequivocal on how the six year rule applies to officers as distinct from ordinary committee members. John Gilpin is entitled to remain in office until 2012 and even then a scenario could arise where he could serve for a further three years. (If the Quanta officers want to check this they should avoid getting confused by the pleonastic oxymoron in clause 5.3 and just simply remember that "at" means "at". Not "before", not "after" nor even "on or after".)

Perhaps the most disturbing part of Quanta's document and survey are some dodgy financial statistics. Quanta accuses Jochen Merz of wanting it both ways:

"He alternates, in one breath, between rejecting Ian's proposition and putting forward an option which would be very financially beneficial to QL Today"

It then claims this financial benefit would be between £4,000 and £5,000 per year.

Jochen has made his position abundantly clear:

"QL Today and Quanta cannot become one entity.. simply because I, Jochen, prefer to stay independent."

However he suggests that if people wanted to press the matter he would be open to suggestions and raised the possibility of using the same construction that had previously been used

with the German QL club of providing a supplement for club members. However this would be modified to allow Quanta several pages in the magazine which they could edit themselves. In return he would expect something like half the Quanta income from subscriptions.

We cannot understand how Quanta claims this would give QL Today a financial benefit of £4,000 to £5,000, a calculation that Quanta makes no attempt to justify. However we assume Quanta's calculation is based on not a single one of its members currently subscribing to QL Today.

Even more bizarrely Quanta claims a combined Quanta and QL Today subscription would be £43.50 UK, £49.54 Europe and £62.72 rest of the world. In practice at the full prices and exchange rates being offered in the last issue of QL Today these figures are approximately £41.50, £43.35 and £53.45 respectively.

Now let's look at the financial implications for Quanta. Based on Quanta's financial reports for 2006 and 2007 the Quanta Magazine costs about £1,380 to produce - £956 printing costs and £424 postage. (We cannot use the 2008 figures as only 3 magazines were published during the year.)

£1,380 is 46.2% of 2006 subscription income, 52% of 2007 subscription income and 62.1% of 2008 subscription income. The print run of the Quanta Magazine is now so small that there is no longer a direct relationship between size of membership and the cost of the magazine. By falling membership Quanta pays less on postage and slightly less for paper but still has to pay the same overheads to the printer. We can expect the magazine to continue to take up a higher and higher proportion of Quanta's subscription income, and, sooner or later, Quanta will have to face up to the implications of this.

Quanta's jiggery-pokery over the cost of a merger between QL Today and the Quanta Magazine detracts from what is its most powerful argument against a merger. Any merger would be so financially disadvantageous to the majority of its members that many would leave Quanta.

The UK still has a large number of people who make only a simple use of the QL, the so called black box users, and they form a large proportion of Quanta membership. These QL-users are just not in QL Today's target readership group and, were we to try to include them, then many of our present readers would accuse us of dumbing down the magazine.

QL Today and Quanta are two distinct entities with different aims and different membership or readership. While it may seem attractive to merge them in order to safeguard the future of the QL community, in practice it would be almost impossible to do.

The QL community, particularly in the UK, is much more diverse than many QL-ers realise. A common mistake is to assume that most UK QL-ers are Quanta members, QL Today readers and a participants in the QL-users email group. This is far from being the case and the number subscribing to all three is relatively small.

Those who criticise the Quanta Magazine's news coverage as being just a rehash of what has already appeared on the QL-user's group - and the same criticism could be made of QL Today - should realise that there are readers of both magazines that value this because they do not themselves subscribe to the user group.

QL Today and the Quanta Magazine may be rival publications, but that is a good thing. Competition helps to keep standards high and at QL Today we have often said a strong Quanta Magazine would be good for us.

In a recent email to me John Gilpin, who is now the sole editor of the Quanta Magazine wrote:

"I look forward to an informative and lively exchange of views between our respective publications. I have seen it said that QUANTA magazine refused to give you the right of reply in recent issues. This should now no longer be the case.."

At QL Today we have the fullest confidence in John Gilpin as editor and Dilwyn Jones as news editor of the Quanta Magazine, and ideally would like to see both of them continue in post for a few more years. Obviously before long Quanta will have to look at the finances of the magazine, but first priority should be a check of clauses 5.2, 5.3 and 5.4 of the Quanta constitution.

[Jochens comment: I have not printed the survey here, as I feel we do not want to cover half of this issue with Quanta related matters. I am aware that these matters are also positive and promising and the 2000 words were promised, and all of this affects more or less all of us QLers. If you wish as you have not seen it and find it missing to get the full understanding, I am happy to print it in the next issue.]

■

Renaming a File

by George Gwilt

It is easy enough to rename a file using the TK2 command RENAME. But various curious things come to light if you try to rename a file inside an assembler program.

The underlying routine in RENAME is the Trap #3 routine IOF_RNAM with D0 = \$4D.

The manual remarks: "This trap does not work on every device, especially not on MDV on an unexpanded QL". This trap is called by setting the timeout in D3.W, the channel ID of the file whose name is to be altered in A0 and the pointer to the new name in A1.

The implementation of this trap for a particular device forms part of that device's driver. Thus it turns out that for a RAM directory the form of open inherent in the channel ID can be OPEN, OPEN_NEW or OPEN_OVER. These are the forms of open with D3 being 0, 2 and 3 respectively for the Trap #2 routine IO_OPEN.

If the directory is either FLP or WIN only OPEN is allowed. If the file was opened by OPEN_NEW or OPEN_OVER the error "write protected" is signalled.

For DOS directories, which are used in QPC2, renaming is not allowed.

I was faced recently with the problem that I had to rename a file which had been opened by OPEN_OVER (D3 = 3). My program had to work whether the device was RAM, FLP, WIN or DOS. My solution was this.

1. Find the position of the original file. By that I mean find where the next byte would be read from or written to in the file.
2. Open the new file.
3. Move the position of the first file to the start.
4. Copy a block from the original file to a buffer.
5. Write the bytes fetched to the new file.
6. Test the old file for EOF.
7. If not EOF go to 4.
8. Rewind the new file to the old file's original position.
9. Delete the original file.

The result is as if I had used IOF_RNAM with the exception that A0 now contains the new channel ID.

The code to do this is in the subroutine RNAM given below.

This uses two subroutines OPENFILE and DELETEFILE. These form part of the assembler GWASS and were added to it in 1996 by Dave Walker. These allow for the possible addition of DATAD\$ to the filename.

```
; Rename a file
; On entry A0 = file ID
;          A1 -> new name
;          A2 -> a buffer
;          A3 -> old file's name
;          D2.W = buffer size
;
; On exit  A0 = new ID
```

```
NAM_REG  REG      D1-6/A1-6
```

```
RNAM:
```

```
; Store the registers to be used.
; Find and store DATAD$. It might be needed.
; Keep the input information safe.
```

```
MOVEM.L  NAM_REG, -(A7)
MOVEQ    #1, D0          Set only . .
BSR      SET_DP          . . DATAD$
```

```

MOVEA.L  A1,A4      -> new file name
MOVEA.L  A2,A5      -> buffer
MOVEA.L  A0,A6      ID of old file
MOVE.W   D2,D4      length of buffer

```

; Find the file's position

```

MOVEQ    #-1,D3
MOVEQ    #0,D0      to find position
MOVEQ    #FS_POSRE,D0 find the relative position
BSR      TT3        do Trap #3 and check D0
BEQ      L1         no error
CMPI.W  #-10,D0    EOF? . .
BNE      EREXIT    . . no
L1       MOVE.L    D1,D6      keep position in D6

```

; Now open a file to the new name

```

MOVEA.L  A4,A0
MOVEQ    #3,D3      open_over
BSR      OPENFILE
BNE      EREXIT    ->

```

; Now A0 is ID of new file: A6 is ID of old file

; We set the old file to its beginning and copy it to the new

```

EXG      A6,A0      A0 = old ID: A6 = new ID
MOVEQ    #-1,D3
BSR      SET_BEG    set old file to start
MOVE.W   D4,D2      size of . .
CPY      MOVEA.L    A5,A1      . . buffer
MOVEQ    #IO_FSTRG,D0
BSR      TT3        read a block from the old file
MOVE.W   D1,D2      bytes fetched
MOVE.L   D0,D5      error code
BEQ      CPY2       no error
CMPI.W  #-10,D0    was it EOF? . .
BNE      EREXIT    . . no
CPY2     EXG      A6,A0      A0 = new ID: A6 = old ID
MOVEA.L  A5,A1      -> buffer
MOVEQ    #IO_SSTRG,D0 send the number of bytes fetched
BSR      TT3
BNE      EREXIT    ->
EXG      A6,A0      A0 = old ID: A6 = new ID
TST.L   D5         EOF? . .
BEQ      CPY       . . can't be so get another block

```

;
; Now close the old file's channel and delete it
;

```

CPY1     MOVEQ    #IO_CLOSE,D0
TRAP     #2
MOVEA.L  A3,A0      old file's name
BSR      DELETEFILE
BNE      EREXIT1   ->

```

;
; Set the new file's position
;

```

MOVEA.L  A6,A0      new ID
MOVE.L   D6,D1      position
BSR      SET_BEG1   set old position in new file
BEQ      EREXIT     no error
CMPI.W  #-10,D0    was it EOF? . .
BNE      EREXIT    . . no!
EXIT1    MOVEQ    #0,D0      no error
EREXIT   MOVEM.L  (A7)+,NAM_REG
RTS      return with A0 = new ID

```

```

SET_BEG  MOVEQ    #0,D1          position 0
SET_BEG1 MOVEQ    #FS_POSAB,D0   set the absolute position

TT3      TRAP     #3
         TST.L    DO
         RTS

```

```

;                               GW_DJW1_ASM
;                               ~~~~~
;   Routines added to GWASS assembler by Dave Walker
;

```

```

;=====
;                               STRING HANDLING
;
;   Useful string handling routines.
;
;   - These are based on C68 C style routines adapted to handle QL strings.
;   - Parameters are passed on the stack.
;   - All registers are preserved.
;   - The calling routines must tidy the stack.
;-----

```

```

;   Copy a QL string
;   4(A7) = Target
;   8(A7) = Source

```

```

QSTRCPY  MOVEM.L  DO/A0-A1,-(A7)   ; save registers used
         MOVE.L   12+4(A7),A1      ; Target address
         MOVE.L   12+8(A7),A0      ; Source address
         MOVE.W   (A0),DO          ; Length to copy
         MOVE.W   (A0)+,(A1)+      ; Copy length field
         BRA      QSTRCPY2         ; Remove if NULL byte at end wanted
QSTRCPY1 MOVE.B   (A0)+,(A1)+      ; Copy a byte
QSTRCPY2 DBRA     DO,QSTRCPY1      ; loop until finished
         MOVEM.L  (A7)+,DO/A0-A1   ; restore saved registers
         RTS

```

```

;   Concatenate a QL string onto another one
;   4(A7) = Target
;   8(A7) = Source

```

```

QSTRCAT  MOVEM.L  DO/A0-A1,-(A7)   ; Target address
         MOVE.L   12+4(A7),A1      ; Source address
         MOVE.L   12+8(A7),A0      ; get old length
         MOVE.W   (A1),DO          ; Calculate new length
         ADD.W    (A0),DO          ; Store new length
         MOVE.W   DO,(A1)+         ; Reset to old length
         SUB.W    (A0),DO          ; skip over current data
         ADDA.W   DO,A1            ; get length to copy
         MOVE.W   (A0)+,DO
         BRA      QSTRCPY2

```

```

;   Copy a QL string with maximum length check
;   4(A7).L = Target
;   8(A7).L = Source
;   12(A7).W = Maximum length

```

```

QSTRNCPY MOVEM.L  DO-D1/A0-A2,-(A7) ; Target address
         MOVE.L   20+4(A7),A1      ; ... copied to A2
         MOVE.L   A1,A2
         MOVE.L   20+8(A7),A0      ; Source address
         MOVE.W   20+12(A7),D1     ; Maximum length
         MOVE.W   (A0)+,DO        ; Length to copy
         CLR.W    (A1)+           ; Clear target length
         BRA      QSTRNCPY2
QSTRNCPY1 CMP.W   (A2),D1          ; Check max length not reached
         BEQ      QSTRNCPY3       ; If so exit immediately

```

```

        ADDQ.W   #1,(A2)           ; Update length
        MOVE.B   (A0)+,(A1)+       ; ... and copy byte
QSTRNCPY2 DBRA   DO,QSTRNCPY1      ; Loop until finished
QSTRNCPY3 MOVEM.L (A7)+,DO-D1/A0-A2
        RTS

; Concatenate a QL string onto another one with maximum length check
;      4(A7) = Target
;      8(A7) = Source

QSTRNCAT
        MOVEM.L  DO-D1/A0-A2,-(A7)
        MOVE.L   20+4(A7),A1       ; Target address
        MOVE.L   A1,A2            ; copied to A2
        MOVE.L   20+8(A7),A0       ; Source address
        MOVE.W   20+12(A7),D1      ; Maximum length
        MOVE.W   (A1)+,DO         ; Existing length
        ADDA.W   DO,A1            ; Skip over source length
        MOVE.W   (A0)+,DO         ; Length to copy
        BRA      QSTRNCPY2        ; Join QSTRNCPY code

;-----
;                               FILE HANDLING
;
; Friendly versions of file open/delete that will
; allow use of TK2 directories in names.
;
; These routines assume that the parameters have been set up
; for the respective TRAP #2 call. They can then be called
; in place of the TRAP #2 routine.
;-----

; When we OPEN a file we want to try the open in
; the following sequence of events:
; - The name exactly as supplied
; - If that fails, the name with the DATA_USE directory
;   added to the front.
; - If that fails, and we are doing a read the name with
;   the PROG_USE added to the front. We do not do this
;   with WRITE types of open as we only want those in the
;   current directory if a path is not explicitly specified.

OPENFILE
        MOVEQ    #IO_OPEN,DO
        MOVEQ    #-1,D1
        MOVEM.L  DO/A0,-(A7)       ; Save name pointer

; We start by trying the name exactly as passed

        TRAP     #2                ; Try operation
        TST.L    DO                ; OK?
        BEQ      OPENEXIT         ; YES, jump

; If we failed with the first try, we now want
; to try with the DATA_USE directory added

        MOVEM.L  (A7),DO/A0       ; restore saved registers
        BSR      DATA_USE
        TRAP     #2
        TST.L    DO
        BEQ      OPENEXIT

; If the DATA_USE did not work and we are
; attempting to read a file, then try the
; PROG_USE as well.

        CMPI.B   #1,D3            ; OPEN_IN ?
        BGT      OPENEXIT         ; ... NO, then give up
        MOVEM.L  (A7),DO/A0       ; restore saved registers
        BSR      PROG_USE
        TRAP     #2

```

```

OPENEXIT  ADDA.W   #2*4,A7           ; remove saved values
          TST.L    DO                ; set condition code
          RTS

; When we DELETE a file we want to try the delete in
; the following sequence of events:
; - The name exactly as supplied
; - If that fails, the name with the DATA_USE directory
; added to the front.

DELETEFILE
          MOVEQ    #IO_DELET,DO
          MOVEQ    #-1,D1
          MOVEM.L  DO/D1/A0,-(A7)    ; Save registers

; We start by trying the name exactly as passed

          TRAP     #2                 ; Try operation
          TST.L    DO
          BEQ      DELEXIT

; If we failed with the first try, we now want
; to try with the DATA_USE directory added

          MOVEM.L  (A7),DO/D1/A0    ; restore saved registers
          BSR      DATA_USE
          TRAP     #2

DELEXIT  ADDA.W   #3*4,A7           ; remove saved values
          TST.L    DO                ; set condition code
          RTS

; Get the DATA_USE value, and build up a name
; which has this at the front followed by the
; user's name and try that.

DATA_USE PEA      DATAD
DATA_USE1 PEA     TK2_BUFFER        ; Target
          BSR     QSTRCPY
          ADDQ.L  #8,A7             ; Remove parameters
          MOVE.W  #50,-(A7)        ; Max length
          MOVE.L  A0,-(A7)        ; Source
          PEA     TK2_BUFFER        ; Target
          BSR     QSTRNCAT
          ADDA.W  #10,A7           ; Remove parameters
          LEA     TK2_BUFFER,A0    ; set A0 to new filename
          RTS

; Get the PROG_USE value, and build up a name
; which has this at the front followed by the
; users name and try that.

PROG_USE PEA      PROGD
          BRA     DATA_USE1

;
; At entry DO.B = 0 for set both DATAD and PROGD
; = 1 for set DATAD and zero PROGD
; No registers are used
;
SET_DP   MOVEM.L  DO-2/D4/A0-1,-(A7)
          MOVE.B  DO,D4             ; Set code to D4.B
          MOVEQ   #MT_INF,DO       ; Find system variables address
          TRAP    #1
          MOVE.L  SV_DATA(A0),-(A7) ; Address of DATAD$ . .
          BEQ    SET_DP1           ; . . If zero no DATAD$
          PEA    DATAD             ; Address for DATAD$
          BSR    QSTRCPY           ; Copy it there
          ADDQ.L #8,A7             ; Tidy the stack
          BRA    SET_DP2
SET_DP1  ADDQ.L  #4,A7             ; Tidy the stack

```

```

        LEA      DATAD,A1          ; Set a zero . .
        CLR.W   (A1)              ; . . DATAD
SET_DP2  TST.B   D4                ; Test for PROGD$ to be set
        BNE    SET_DP3           ; zero PROGD
        MOVE.L SV_PROG(A0),-(A7) ; Address of PROGD$ . .
        BEQ    SET_DP4           ; . . If zero no PROGD$
        PEA    PROGD             ; Address for PROGD$
        BSR    QSTRCPY           ; Copy it there
        ADDQ.L #8,A7             ; Tidy the stack
        BRA    SET_DP5
SET_DP4  ADDQ.L #4,A7             ; Tidy the stack
SET_DP3  LEA    PROGD,A1         ; Set a zero . .
        CLR.W   (A1)              ; . . PROGD
SET_DP5  MOVEM.L (A7)+,D0-2/D4/A0-1
        RTS

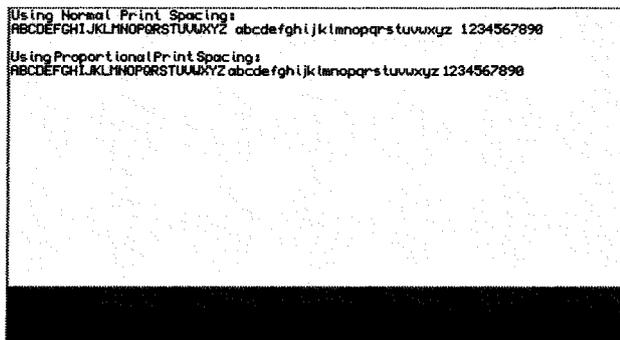
DATAD    DS.W    29
PROGD    DS.W    29
TK2_BUFFER DS.W    29

```

Fun with Fonts - Part 3

by Dilwyn Jones

All characters printed to the QL screen use the same character space on the screen. The letters W and M for example may take the same space as the normally narrower letters such as l or the number 1. The QL fonts are called "fixed pitch" because of this. Text in books or newspapers generally vary the widths and spacings depending on the character in question, so that a W or M or O can take as much space as they need, whereas narrower characters such as an "i" need take no more space than they need. This is called Proportional Spacing, where each character can take only as much space across a line as it needs.



Standard QDOS and SMSQ/E do not include support for proportionally spaced fonts, although one or two programs such as Text 87 and the ProWess/Proforma systems do.

Here is a fairly short listing which gives a BASIC procedure to give a limited form of proportional spacing printing from SuperBASIC or SBASIC.

Figure 6 - Proportional printing using QL font

```

100 REMark Proportional Spacing printing
110 REMark by Dilwyn Jones Sep. 1997
120 :
130 REMark set up the proportional spacing data for a given channel
140 Setup_Proportional #1
150 :
160 CLS
170 t$ = 'ABCDEFGHIJKLMNQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890'
180 PRINT 'Using Normal Print Spacing:'\t$\ : REMark using normal font
190 :
200 REMark print same string using proportional data
210 Prop_Print #1,'Using Proportional Print Spacing:' : PRINT
220 Prop_Print #1,t$ : PRINT \ : REMark newlines
230 :
240 STOP
250 :
260 DEFine PROCedure Prop_Print (channel,str$)
270   LOCAL char
280   FOR char = 1 TO LEN(str$)
290     REMark change 10 in next line to 20 for CSIZE double height
300     CHAR_INC #channel,prop%(CODE(str$(char))),10

```

```

310 PRINT #channel, str$(char);
320 END FOR char
330 CSIZE #0,0,0 : REMark restore standard spacing
340 END DEFine Prop_Print
350 :
360 DEFine PROCedure Setup_Proportional (channel)
370 LOCAL addr, char, wide%, lc1%, nc1%, lc2%, nc2%, bit, byte
380 :
390 font1 = CHAN_L(#channel, 42) : REMark font 1 address
400 font2 = CHAN_L(#channel, 46) : REMark font 2 address
410 :
420 DIM prop%(255) : REMark proportional spacing data
430 lc1% = PEEK(font1) : REMark lowest character code in font 1
440 nc1% = PEEK(font1+1) : REMark number of characters - 1 in font 1
450 lc2% = PEEK(font2) : REMark lowest character code in font 2
460 nc2% = PEEK(font2+1) : REMark number of characters - 1 in font 2
470 :
480 FOR char = lc1% TO lc1%+nc1%, lc2%+1 TO lc2%+nc2%
490 IF char <= lc1%+nc1% THEN
500 addr = font1+(9*(char-lc1%))+2
510 ELSE
520 addr = font2+(9*(char-lc2%))+2
530 END IF
540 wide% = 8 : REMark default is full width char in csize 1,0
550 FOR bit = 1,2,4,8,16,32,64,128
560 FOR byte = addr+0 TO addr+8
570 IF (PEEK(byte) && bit) <> 0 THEN
580 prop%(char) = wide%
590 IF prop%(char) < 2 THEN prop%(char) = 2
600 EXIT bit
610 END IF
620 END FOR byte
630 wide% = wide% - 1
640 END FOR bit
650 IF prop%(char) < 2 THEN prop%(char) = 2 : REMark spaces=2 pixels
660 END FOR char
670 :
680 REMark other characters default to lowest character in font1
690 FOR char = 0 TO lc1%-2, lc2%+nc2%+1 TO 255 : prop%(char) = prop%(lc1%)
700 END DEFine Setup_Proportional

```

```

Using Normal QL Fonts:
ABCDEFGHIJKLMNQRSTUWXYZ abcdefghijklmnopqrstuvwxyz 1234567890

```

```

Using Proportional QL Font:
ABCDEFGHIJKLMNQRSTUWXYZ abcdefghijklmnopqrstuvwxyz 1234567890

```

```

Back to standard font:
ABCDEFGHIJKLMNQRSTUWXYZ abcdefghijklmnopqrstuvwxyz 1234567890

```

Figure 6 shows a sample output from this program. Although it provides a degree of proportional spacing, the font is not really designed for proportional spacing printing, so the output does not look that different to standard printing. Figure 7 shows the output of Listing 9, which seeks to improve output by using a purpose-made QL font held in DATA statements at the end of the program. As you can see, it is a bit more effective.

Figure 7 Sample output using a Proportional Spacing font

```

100 REMark Proportional Spacing printing
110 REMark by Dilwyn Jones Sep. 1997
120 :
130 REMark set up an example font (proportional version of QL font)
140 Setup_Proportional
150 :
160 CLS
170 t$ = 'ABCDEFGHIJKLMNQRSTUWXYZ abcdefghijklmnopqrstuvwxyz 1234567890'
180 PRINT 'Using Normal QL Fonts:'\t$\ : REMark using normal font
190 :
200 REMark print same string using proportional font
210 CHAR_USE #1, font1, font2 : REMark switch #1 to new font
220 Prop_Print #1, 'Using Proportional QL Font:' : PRINT

```

```

230 Prop_Print #1,t$ : PRINT \\ : REMark newlines
240 :
250 CHAR_USE #1,0,0 : REMark back to default font and reset spacing
260 RECHP font1      : REMark release heap memory used by above fonts
270 :
280 PRINT 'Back to standard font:'\t$
290 :
300 STOP
310 :
320 DEFine PROCedure Prop_Print (channel,str$)
330   LOCAl char
340   FOR char = 1 TO LEN(str$)
350     CHAR_INC #channel,prop%(CODE(str$(char))),10
360     PRINT #channel,str$(char);
370   END FOR char
380   CSIZE #0,0,0 : REMark restore standard spacing
390 END DEFine Prop_Print
400 :
410 DEFine PROCedure Setup_Proportional
420   REMark if using AH/JM/JS/MG limit locals to 9 only!
430   LOCAl font1_length,font2_length,addr, char,wide%
440   LOCAl lc1%,nc1%,lc2%,nc2%,bit,byte,a
450   :
460   REMark "font1" and "font2" must be kept global to allow font
470   REMark switching and to be able to release the heap block later
480   RESTORE 1000 : READ lc1%,nc1%
490   RESTORE 2000 : READ lc2%,nc2%
500   :
510   font1_length = 11+(9*nc1%) : IF (font1_length MOD 2)=1 THEN font1_length = font1_length+1
520   font2_length = 11+(9*nc2%) : IF (font2_length MOD 2)=1 THEN font2_length = font2_length+1
530   :
540   font1 = ALCHP(font1_length+font2_length)
550   font2 = font1 + font1_length
560   RESTORE 1000 : REMark get font 1 data
570   FOR a = 0 TO 11+(9*nc1%)-1 : READ wide% : POKE font1+a,wide%
580   RESTORE 2000 : REMark get font 2 data
590   FOR a = 0 TO 11+(9*nc2%)-1 : READ wide% : POKE font2+a,wide%
600   :
610   DIM prop%(255) : REMark proportional spacing data
620   REMark lc1% = PEEK(font1) : REMark lowest character code in font 1
630   REMark nc1% = PEEK(font1+1) : REMark number of characters - 1 in font 1
640   REMark lc2% = PEEK(font2) : REMark lowest character code in font 2
650   REMark nc2% = PEEK(font2+1) : REMark number of characters - 1 in font 2
660   :
670   FOR char = lc1% TO lc1%+nc1%,lc2%+1 TO lc2%+nc2%
680     IF char <= lc1%+nc1% THEN
690       addr = font1+(9*(char-lc1%))+2
700     ELSE
710       addr = font2+(9*(char-lc2%))+2
720     END IF
730     wide% = 8 : REMark default is full width char in csize 1,0
740     FOR bit = 1,2,4,8,16,32,64,128
750       FOR byte = addr+0 TO addr+8
760         IF (PEEK(byte) && bit) <> 0 THEN
770           prop%(char) = wide%
780           IF prop%(char) < 2 THEN prop%(char) = 2
790           EXIT bit
800         END IF
810       END FOR byte
820       wide% = wide% - 1
830     END FOR bit
840     IF prop%(char) < 2 THEN prop%(char) = 2 : REMark spaces=2 pixels
850   END FOR char
860   :
870   REMark other characters default to lowest character in font1
880   FOR char = 0 TO lc1%-2,lc2%+nc2%+1 TO 255 : prop%(char) = prop%(lc1%)
890 END DEFine Setup_Proportional
900 :

```

910 REMark data for proportional font 1

920 :
1000 DATA 31,96
1010 DATA 84,40,84,40,84,40,84,40,84
1020 DATA 0,0,0,0,0,0,0,0
1030 DATA 64,64,64,64,64,0,64,0,0
1040 DATA 80,80,0,0,0,0,0,0,0
1050 DATA 40,40,124,40,124,40,40,0,0
1060 DATA 56,80,80,56,20,20,56,0,0
1070 DATA 72,72,16,16,32,72,72,0,0
1080 DATA 32,80,80,32,84,72,52,0,0
1090 DATA 64,64,0,0,0,0,0,0,0
1100 DATA 32,64,64,64,64,64,32,0,0
1110 DATA 64,32,32,32,32,32,64,0,0
1120 DATA 16,84,56,16,56,84,16,0,0
1130 DATA 0,32,32,112,32,32,0,0,0
1140 DATA 0,0,0,0,0,96,96,32,64
1150 DATA 0,0,0,120,0,0,0,0,0
1160 DATA 0,0,0,0,0,96,96,0,0
1170 DATA 4,4,8,16,32,64,64,0,0
1180 DATA 56,68,76,84,100,68,56,0,0
1190 DATA 32,96,32,32,32,32,32,0,0
1200 DATA 48,72,8,8,16,32,120,0,0
1210 DATA 48,72,8,16,8,72,48,0,0
1220 DATA 8,24,40,72,120,8,8,0,0
1230 DATA 120,64,112,8,8,72,48,0,0
1240 DATA 16,32,64,112,72,72,48,0,0
1250 DATA 120,8,8,16,32,64,64,0,0
1260 DATA 48,72,72,48,72,72,48,0,0
1270 DATA 48,72,72,56,8,16,96,0,0
1280 DATA 0,0,96,96,0,96,96,0,0
1290 DATA 0,0,96,96,0,96,96,32,64
1300 DATA 8,16,32,64,32,16,8,0,0
1310 DATA 0,0,120,0,120,0,0,0,0
1320 DATA 64,32,16,8,16,32,64,0,0
1330 DATA 48,72,8,16,32,0,32,0,0
1340 DATA 56,68,92,84,92,64,56,0,0
1350 DATA 48,72,72,120,72,72,72,0,0
1360 DATA 112,72,72,112,72,72,112,0,0
1370 DATA 48,72,64,64,64,72,48,0,0
1380 DATA 112,72,72,72,72,72,112,0,0
1390 DATA 120,64,64,112,64,64,120,0,0
1400 DATA 120,64,64,112,64,64,64,0,0
1410 DATA 48,72,64,64,88,72,56,0,0
1420 DATA 72,72,72,120,72,72,72,0,0
1430 DATA 112,32,32,32,32,32,112,0,0
1440 DATA 16,16,16,16,16,80,32,0,0
1450 DATA 72,72,80,96,80,72,72,0,0
1460 DATA 64,64,64,64,64,64,120,0,0
1470 DATA 68,108,84,68,68,68,68,0,0
1480 DATA 72,72,104,88,72,72,72,0,0
1490 DATA 56,68,68,68,68,68,56,0,0
1500 DATA 112,72,72,112,64,64,64,0,0
1510 DATA 56,68,68,68,84,72,52,0,0
1520 DATA 112,72,72,112,96,80,72,0,0
1530 DATA 48,72,64,48,8,72,48,0,0
1540 DATA 124,16,16,16,16,16,16,0,0
1550 DATA 72,72,72,72,72,72,48,0,0
1560 DATA 68,68,68,68,68,40,16,0,0
1570 DATA 68,68,68,68,84,84,40,0,0
1580 DATA 68,68,40,16,40,68,68,0,0
1590 DATA 68,68,40,16,16,16,16,0,0
1600 DATA 120,8,16,32,64,64,120,0,0
1610 DATA 96,64,64,64,64,64,96,0,0
1620 DATA 64,64,32,16,8,4,4,0,0
1630 DATA 96,32,32,32,32,32,96,0,0
1640 DATA 32,80,0,0,0,0,0,0,0
1650 DATA 0,0,0,0,0,0,0,124,0
1660 DATA 16,40,32,112,32,32,120,0,0

1670 DATA 0,0,40,88,72,88,40,0,0
1680 DATA 64,64,112,72,72,72,112,0,0
1690 DATA 0,0,56,64,64,64,56,0,0
1700 DATA 8,8,56,72,72,72,56,0,0
1710 DATA 0,0,48,72,120,64,56,0,0
1720 DATA 16,40,32,112,32,32,32,0,0
1730 DATA 0,0,56,72,72,72,56,8,48
1740 DATA 64,64,112,72,72,72,72,0,0
1750 DATA 64,0,64,64,64,64,64,0,0
1760 DATA 32,0,32,32,32,32,32,64
1770 DATA 64,64,72,80,96,80,72,0,0
1780 DATA 64,64,64,64,64,64,64,0,0
1790 DATA 0,0,104,84,84,84,84,0,0
1800 DATA 0,0,112,72,72,72,72,0,0
1810 DATA 0,0,56,68,68,68,56,0,0
1820 DATA 0,0,112,72,72,72,112,64,64
1830 DATA 0,0,56,72,72,72,56,8,8
1840 DATA 0,0,80,104,64,64,64,0,0
1850 DATA 0,0,48,64,48,8,48,0,0
1860 DATA 32,32,112,32,32,32,16,0,0
1870 DATA 0,0,72,72,72,72,56,0,0
1880 DATA 0,0,72,72,72,48,16,0,0
1890 DATA 0,0,68,68,68,84,40,0,0
1900 DATA 0,0,80,32,32,32,80,0,0
1910 DATA 0,0,72,72,72,72,56,8,48
1920 DATA 0,0,120,16,32,64,120,0,0
1930 DATA 16,32,32,64,32,32,16,0,0
1940 DATA 64,64,64,64,64,64,64,0,0
1950 DATA 64,32,32,16,32,32,64,0,0
1960 DATA 40,80,0,0,0,0,0,0,0
1970 DATA 56,68,92,100,92,68,56,0,0

1980 :
1990 REMark data for proportional font 2

2000 DATA 127,64
2010 DATA 84,40,84,40,84,40,84,40,84
2020 DATA 72,0,40,88,72,88,40,0,0
2030 DATA 40,80,0,56,72,88,40,0,0
2040 DATA 16,40,16,56,72,88,40,0,0
2050 DATA 16,32,48,72,120,64,56,0,0
2060 DATA 68,0,56,68,68,68,56,0,0
2070 DATA 20,40,0,56,68,68,56,0,0
2080 DATA 0,0,60,76,84,100,120,0,0
2090 DATA 72,0,0,72,72,72,56,0,0
2100 DATA 0,0,56,64,64,64,56,16,32
2110 DATA 40,80,0,112,72,72,72,0,0
2120 DATA 0,0,120,20,56,80,60,0,0
2130 DATA 0,0,40,84,88,80,44,0,0
2140 DATA 16,32,40,88,72,88,40,0,0
2150 DATA 64,32,40,88,72,88,40,0,0
2160 DATA 16,40,0,56,72,88,40,0,0
2170 DATA 72,0,48,72,120,64,56,0,0
2180 DATA 64,32,48,72,120,64,56,0,0
2190 DATA 16,40,48,72,120,64,56,0,0
2200 DATA 80,0,0,32,32,32,16,0,0
2210 DATA 32,64,0,64,64,64,32,0,0
2220 DATA 64,32,0,32,32,32,16,0,0
2230 DATA 32,80,0,32,32,32,16,0,0
2240 DATA 8,16,56,68,68,68,56,0,0
2250 DATA 32,16,56,68,68,68,56,0,0
2260 DATA 16,40,0,56,68,68,56,0,0
2270 DATA 16,32,72,72,72,72,56,0,0
2280 DATA 32,16,72,72,72,72,56,0,0
2290 DATA 16,40,0,72,72,72,56,0,0
2300 DATA 48,72,72,80,72,72,80,64,64
2310 DATA 0,16,56,80,80,80,56,16,0
2320 DATA 68,68,40,16,124,16,56,0,0
2330 DATA 64,32,0,0,0,0,0,0,0
2340 DATA 68,16,40,68,124,68,68,0,0
2350 DATA 20,40,16,40,68,124,68,0,0

```

2360 DATA 16,40,16,40,68,124,68,0,0
2370 DATA 8,16,120,64,120,64,120,0,0
2380 DATA 68,56,68,68,68,68,56,0,0
2390 DATA 20,40,56,68,68,68,56,0,0
2400 DATA 52,68,76,84,100,68,88,0,0
2410 DATA 72,0,72,72,72,72,48,0,0
2420 DATA 48,72,64,64,64,72,48,16,32
2430 DATA 56,0,68,100,84,76,68,0,0
2440 DATA 60,72,72,124,72,72,76,0,0
2450 DATA 60,72,72,76,72,72,60,0,0
2460 DATA 0,0,36,88,72,88,36,0,0
2470 DATA 56,68,64,56,68,68,56,0,0
2480 DATA 56,68,68,124,68,68,56,0,0
2490 DATA 96,16,16,16,40,72,68,0,0
2500 DATA 0,0,72,72,72,104,88,64,64
2510 DATA 0,0,60,104,40,40,40,0,0

```

```

2520 DATA 16,16,56,84,84,84,56,16,16
2530 DATA 64,0,64,64,64,64,64,0,0
2540 DATA 16,0,16,32,64,68,56,0,0
2550 DATA 24,36,112,32,112,36,24,0,0
2560 DATA 56,68,64,56,68,56,4,68,56
2570 DATA 0,68,56,68,68,56,68,0,0
2580 DATA 0,20,40,80,40,20,0,0,0
2590 DATA 0,80,40,20,40,80,0,0,0
2600 DATA 32,80,32,0,0,0,0,0,0
2610 DATA 0,16,0,124,0,16,0,0,0
2620 DATA 0,0,16,48,124,48,16,0,0
2630 DATA 0,0,16,24,124,24,16,0,0
2640 DATA 0,16,56,124,16,16,16,16,0
2650 DATA 0,16,16,16,16,124,56,16,0

```

In listing 9, the DATA statements from line 1000 onward hold the data for the lower system font, while the DATA statements from line 2000 onward hold data for the upper system font. Taken together, both set up the two QL system fonts to hold suitable characters for proportionally spaced print output.

The procedure called Setup_Proportional differs slightly in both programs, but basically is used to generate an array of proportional spacing data for each character – how wide (in pixels) to print each character. In listing 8, it takes its data from the existing QL font for the channel indicated by the parameter for the procedure. It uses the CHAN_L function from DIY Toolkit to locate the system fonts and builds up a set of data in the array called prop%() which controls how wide each character is to be printed. The "FOR char" loop scans all characters from the rightmost pixel (bit 0) until it finds a set (INK) pixel and makes a note of this position in the prop%() array. This routine need only be called once for a given channel, before printing to that channel.

Once it has been set up, printing is done by using the Prop_Print procedure. This has two parameters, the channel number to be printed and a string to be printed. Note that if you want a newline to be printed, you will either need to include a CHR\$(10) in the string, or add a blank PRINT statement afterwards:

```
Prop_Print #1, 'Hello' & CHR$(10)
```

or

```
Prop_Print #1, 'Hello' : PRINT
```

Study the lines before the STOP statement to see how to use the procedures. You need a call to Setup_Proportional first to create the necessary data in the prop% array.

If using the special font in listing 9, you need a "CHAR_USE #channel, font1,font2" command to set the font for a given channel number.

From there on, you can use the Prop_Print #channel,"string" command to print a string using proportional spacing. This uses a separate CHAR_INC command to set the proportional spacing for each character in turn, so printing is a bit slower than the usual PRINT commands. Also, it only works for CSIZE 0,0 in the current version – you will need to vary the CHAR_INC values for different sizes of text.

After proportional printing, you need to reset the character increment to normal full size text, either by resetting the font or CHAR_INC #channel,6,10 for example. And of course, if you are using the special proportional printing font of listing 9, your program needs to release the heap space allocated for the new font with an RECHP command and reset the system font with CHAR_USE #channel,0,0 to restore everything back to normal.



25 Years J-M-S

by Jochen Merz

Somehow, I thought I already wrote something about the history and background of J-M-S. I searched through the last 5 or 6 volumes of QL Today - didn't find anything. I asked Geoff ... he did not find anything or remembered that I wrote something, so here we go:

J-M-S was founded shortly after my 18th birthday - there are too many restrictions in running a company if you are under 18.

However, I did start computing in 1980 ... with the ZX80. At this time, my main hobby was building model trains, landscape, houses, etc. A room in my parent's house was used for it, and it was not that small. I was already interested in computers, but at this time, they were unaffordable (CMB PETs at big warehouses were the most interesting item in the warehouses at this time for me). Model trains were much more affordable at this time. Both situations have changed nowadays.

The very early bits in a short summary: The ZX80 was my first computer. However, there were problems. So I bought a ZX81 fairly soon. Which worked much better. RAM pack was required, ZX printer was ordered (and arrived many, many months later). All sorts of gadgets were bought - nothing working really reliable (names like DK-tronics come to mind). Many, many programs were bought (Ultimate comes to mind), most of the things were ordered from the UK. I did some things for Profisoft in Osnabr-ck, but I soon went to the QL when it arrived.

After I bought the QL, I visited my first Microfair in London, met several people and my first programs were sold by a UK company which disappeared several months after they started selling (I don't remember the name ... something with "Enterprise") ... so no payment. Ultrasoft existed and promised to sell the products. In these days, Ultrasoft consisted of Martin Berndt and David B. Smith... but after some months they split as well and I was having trouble again. I then remember Anke Pabich from Düsseldorf sold my products, and so did some others. Once again, products were shipped, but more and more invoices remained unpaid. No details, I forgot most of them. I prefer to remember the positive.

Also, I was doing work for Andreas Budde of ABC-Electronics over the years... and I remember him very positively as he always fulfilled his promises, paid invoices in time and I still have a friendship with Andreas... over all the years. So many others came and went, but he is definitely

a positive exception.

The model train had not been touched for years and had been stowed away shortly after I bought the QL ... so the room became the guest room for visitors.

I do not remember the years, I am compressing many years ... but in the early 5 or 10 years of my QLing time, I made so many journeys, met so many nice people... there was always a QL show locally, in the country or somewhere in the world. I traveled with friends, or other members of the German QL club (I was part of the editorial team for some years) ... and remember names like Albin Hessler, Oliver Fink, Stuart Honeyball ... all programmers which do not program for the QL anymore.

I visited many people, and they visited me, stayed in Duisburg, and we visited many QL Today shows together. Great times we had!

I remember my first trip to the USA together with Urs König - that was really great.

I remember the visits to QJump in the UK and later in France... great times, where problems which were collected over the months were fixed in a compressed, intense long weekend.

I remember all the enjoyable car trips with Bernd and Marcel to all the UK meetings.

The more I write here and the more I think about it, the more comes to mind. There are so many stories which I remember thinking of meetings in Austria, The Netherlands, Italy, France, Denmark, Sweden (the eye problem which turned me into a pirate), the ridiculous trip to Norway where I picked up my first ATARI QL emulator), the funny visit to Dilwyn together with Darren and Marcel, great US trips with Jim and Roy and many, many other journeys.

I remember setting up my first BBS to support the QLers online with the help of Phil Borman and Marco Holmer.

I cannot go into details here, as it would probably fill an issue or more ... but I think I will write about some of the most interesting and most funny trips in future issues.

However, thinking about all the 25 years, I have to say that I met many great people, got some great friendships, enjoyed every year of it and never regret to be part of the QL community.

The list of names, countries etc. is definitely incomplete, but please forgive me. 25 years are a long time, and I am getting older as well.

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So, I end this little trip into my history by saying THANKS TO EVERYBODY whom I learned to know in all these 25 years, customers, show organisers, friends ... I am really hoping to see many of you again - at a forthcoming QL show (I know, there are not that many) or a personal visit. ps: after over 20 years, I am back enjoying model trains again. There are wonderful exhibitions in Hamburg, Berlin and round the corner (modellbahnwelt-oberhausen.de (even with live cams)... the Ruhrgebiet in the 60's and 70's in miniature ... they had to declare being insolvent recently, but I hope they will survive! If you're near

the CentrO in Oberhausen, go and see them, it's worth the trip). Locs nowadays come with a digital decoder and can easily be controlled by computers, but the situation is the opposite as it was 25 years ago: now computers are dead cheap, but model trains are rather unaffordable. I was hoping to get some short comments from you when I placed the request on the QL users group. I got congratulations - thank you! If you still feel you would like to write something, maybe about your first contact to J-M-S etc., please do so. Does the font used for "JMS is 25" on the cover remind you of something...?

GOTCHA!

by Geoff Wicks

There could be a fifth columnist in the midst of the QL community. A man who has pledged an undying loyalty to the QL, but who seems to have a touching faith in a product of a certain Mr. William Gates. I cannot reveal his true identity, but, as he is a Welshman, I shall preserve his anonymity by giving him that commonest of Welsh surnames, Mr. Jones.

Readers will know that QL Today has long offered Quanta 2,000 words in the magazine to present their case. Mr. Jones has responded to this offer on Quanta's behalf, and was very proud of the fact that his article was exactly 2,000 words long. However, my own check showed it to be only 1,995 words and I sent him an email rebuking him for his error. Mr. Jones was unrepentant and assured me he was right because Microsoft Word had told him so.

To my great consternation Jochen Merz backed up Mr. Jones saying that his version of Microsoft Word also came out at 2,000 words. He softened the blow by adding a smiley to his pronouncement. I was grateful for this, but for the wrong reason. I now have an excuse to go wildly off topic in part of this article.

I do not possess Word and I did my word count in Lotus Word Pro. Microsoft Works and Quill also come out at 1,995 words, but the other QL word processors differ. Perfection makes it 2,002 and Text87 2,001. My own Style-Check program comes out at 2,003. Armed with the knowledge that no other word processor agreed with Word's word count I triumphantly emailed Mr. Jones, "Gotcha!".

It does not surprise me that different word processors give a different word count for this document. What does surprise me is that the difference between the highest and lowest word

count is only 8 words, and that three word processors came out with the same value of 1,995 words. The moral of this tale is that word counts in word processors are estimates - albeit in most cases good estimates. It is well nigh impossible to make an accurate word count by computer and I suspect, although I have not researched this, that word counts of technical documents may show the greatest differences between word processors.

I learnt a lot about the problems of counting words when I wrote Style-Check. Much of the work of style checkers is done by statistics and thus you need accurate ways of calculating the number of words and syllables and the length of words in a document. It is far more difficult than first impressions suggest, and shortly after releasing Style-Check I tweaked the word count routines to make them approximate to the word counts given by Text87, which many regard as being the most professional QL word processor. The simplest and crudest way of making a word count is to count the number of spaces in a document. However this will only give an approximate result as it does not take into account the idiosyncrasies of different writers. Sometimes there will be more than one space between words. In the early days, when fixed font widths were the norm, some word processors used spaces for tabs. There are writers who do not leave a space between sentences or after a punctuation mark. And in most word processors there is a Line Feed instead of a space at the end of each line. You thus have to count spaces, punctuation marks and Line Feeds and then write routines to check that you have not double counted. Incidentally are brackets - of all types - punctuation marks?

There can also be a problem with both soft and hard hyphens. Most of us would say that "co-opt" is one word, but is "ink-well" one word or two? It would be an onerous job to write a routine to distinguish between the two, and instead you choose either one or the other for all hyphens. Most people quickly suggest this as one of the reasons for differences in the word count between word processors, but there are many others. "Can't" is short for "cannot" which is one word, but "don't" is short for "do not" which is two. Again it would be difficult to write a routine to distinguish between the two. If I am a VIP and I have just got angry in public and told someone to "bugger off" it might get reported in the papers. Some journalists would use the term itself, which has two words, but others would prefer the form "b*gg*r off" which would be 4 words in a word count unless you wrote a routine for this. Nearer home there are the QL filenames. Is "program_bas" one word or two? And how would we count the PC equivalent "program.bas"? Almost certainly two words unless we wanted to write another complicated exception routine.

Numbers are an even bigger problem. Are numbers to be treated as words at all? "4" is simple as it is pronounced "four", but "444" is pronounced "four hundred and forty four". Is it one word or five words? It could make a difference if we were word counting for the broadcast media rather than the print media. An even bigger problem is "4.4". That would come out as two words unless we write another routine to distinguish between decimal points and full stops. And what about dates? The QL was launched on 12.1.1984, which is three words unless you have an exception routine.

I learnt something of the limitations of counting statistics by computer when I discovered that Style-Check assessed an academic paper I had written as being at the reading level of a primary school child. The article was a research study on the growth of criminal sophistication in a group of adolescent delinquents and contained a detailed diary of their numerous court appearances with dates in the form of 12.1.1984. Style-Check assumed that the piece contained many sentences that were both short and had no long words and thus was suitable for young children.

And then you have all the mathematical, chemical and other scientific formulae. How do handle Greek letters? Is boric acid, B(OH)₃ one word or three?

One thing that I did not have to worry about when I wrote Style-Check was smileys. Should

smiley's be counted as a word or not? Most western smileys are made up from punctuation marks and will not appear in a word count. The occasional one - (: - o) - will.

At this point I am about to go seriously off topic. Humourless pedants should avoid the next paragraph.

Unlike western smileys, oriental smileys are written horizontally and can contain letters. They are a potential nightmare for the word count programmer. In texts written by Japanese I frequently came across (T_T) and was certain that it was not a QL filename. Could it be a smiley? I researched Japanese smileys and now have some 14 pages of them. (T_T) means defeat or sadness. See it as tears streaming from the eyes. The Japanese have smileys for sleeping with your girl friend - ([[(-_-)(-_-)]) - and not sleeping all night - (=_=) . Could the two activities be related? Japanese smileys are heavily influenced by the manga or comic strip culture popular among young Japanese and can include roman, greek and cyrillic letters as well as other symbols that are difficult to reproduce on a western keyboard. My last example is one such and represents a person so crippled up with laughter that he is banging a table.

(▽▽)ノ__多☆バンバン!!

(The characters before the exclamation marks are Japanese words meaning "bang bang". I shall now formally bow out of this off topic paragraph using the Japanese bowing smiley - m(__)m - to allow our humourless pedantic friends to rejoin us.

In short you have to be sceptical about the word count that your word processor produces, and some texts should be treated with greater scepticism than others. I check the word count of most material that comes into QL Today because that gives me an idea how many pages an article will take up. However I am always careful about the work of George Gwilt and Norman Dunbar simply because they often have large sections of assembly code in their articles that can distort the true word count. There is a similar problem with SuperBasic. In practice I check only the text of SuperBasic contribution as the number of lines in the basic will give me some idea of its length in pages.

I suspect this article will show huge differences between word processors because it contains many examples of word counting problems. I shall add a postscript to show if I am right.

POSTSCRIPT

WordPro	1,464
Works	1,464
Open Office	1,465
Quill	1,464
Perfection	1,482
Text87	1,457
Style-Check	1,499

Interestingly once again WordPro, Works and Quill all agree indicating that they are using the same algorithm. I checked the word count in Open Office after completion of the article. It gave a word count of 1,998 for the Quanta document.

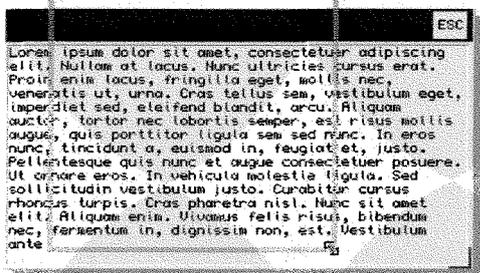
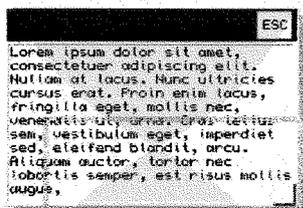
Sorry, Mr. Jones, I don't know how many words a Word word count would give.

(>_<)o-----(~o~)o

Interactive Resizing and other Bits and Bobs...

by Per Witte

Some time ago, on the QL-Users' email list, Ralf Reköndt wrote ".how nice [it would be] to use the Windows facility of changing a window size in the lower right edge of a window.." (qlusers 30/11/2008, Program Updates). Wouldn't it just! Thanks to Wolfgang Lernerz and Marcel Kilgus, on later versions of SMSQ/E we now have an interactive window move routine that allows the user to click on the window move button and visibly drag a window to another location on the screen and drop it there. If the platform is too slow to comfortably move the contents with the window, you can opt for just moving a representative outline instead. This only works with a mouse, so if you use the keyboard instead, or if you switch off the feature, SMSQ/E reverts to the old Qram method of moving the window by icon.



Outline resizing is probably the best we can expect

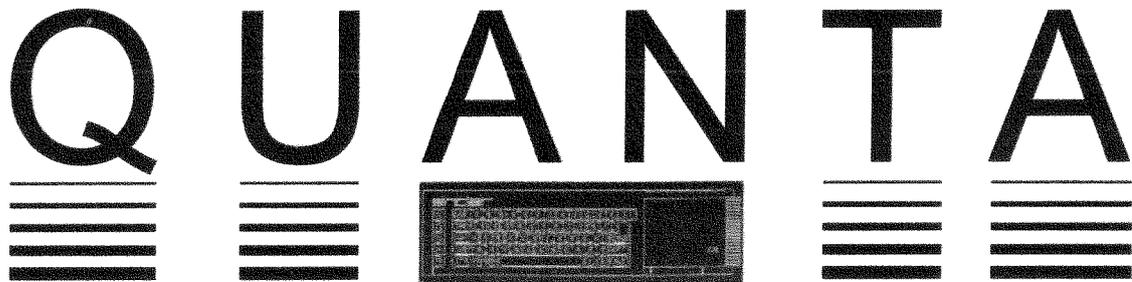
Ideally, interactive resize should be implemented at the system level: Moving the pointer to the edge of a window would change the sprite to an appropriate Resize Sprite and the user could just

drag the edge to resize the window and drop it again (by releasing the mouse button) once the desired size has been attained. A spare byte in the Menu Definition could be used to indicate which of the four edges and four corners of the window were resizable.. Dream on.

In the mean time, the following demo program attempts to achieve something similar here and now. Due to issues in the lower layers of the Pointer Environment [PE] it seems to be impossible to achieve quite the same effect as a typical Windows resize, but it works well enough I think. Just a small point: I don't try to update the window's contents during resizing as this requires a lot of computational power – like a dedicated graphics chip! It is also not trivial to achieve, and it seems unlikely that it could be done in any standard way with the current PE object model, though I could be wrong.

This program, **wresz**, demonstrates mainly three techniques: 1) Interactive outline resizing, 2) unconventional use of Application Windows [AWs], 3) hidden Loose Items [LIs]. Incidental to (2) are techniques for reading AWs by dropping down to discrete routines when AWs are encountered and handling the inherent limitations (i.e. keystrokes are local to each AW). I make no claims of being either the first or the last word in how the desired effects may be achieved, nor in the perfection of their implementation, but I hope this demo will be of use all the same. The controls are operated as follows:

Move: Move the pointer to the titlebar and it changes to a mini window move icon. Click (HIT or DO with the mouse buttons) on the titlebar and interactive move is initiated according to your WM_MOVEMODE settings. You can also move the window by hitting the Ctrl+F4 key [CF4] anywhere in the window. This turns on the internal



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window move sprite which you move, by mouse or cursor keys, to the desired location and then click again to have the window redrawn there, as in the bad old days.

Resize: Move the mouse to the Bottom Right Corner [BRC] of the main window. The cursor changes to the move corner sprite. Click on the BRC and an outline of your window appears. This can be resized between the minimum allowed size and the maximum available size. Click again and the window is redrawn at the desired size. In the complete version of this program, that I hope will be made available to readers, the text contents of the window is reformatted and displayed at the new size. Resize can also be initiated by pressing the function key Ctrl+F3 [CF3]. This immediately fires up the resizing routine and you can resize using the mouse or cursor keys.

Finally, ESCape [ESC]. Press ESC in any AW without a handler and the program terminates. Press ESC in the Move AW or in one of the Resize AWs and the pointer jumps to the middle of the window. You have to press ESC again to quit. This demonstrates that key presses are local to each AW. Great when you want that behaviour, a nuisance when you don't.



Main window. Note the scaling flags at X, Y and X0

Thanks to Marcel, Albin Hessler's EasyPointer [E郑] toolbox has been updated to incorporate most of the facilities of PE. In other developments, George Gwilt has created an alternative toolbox that lends itself better to the Turbo world view, while Norman Dunbar continues his mission of documenting, and educating us in the ins and

outs of PE. This is good stuff and deserves our gratitude and support.

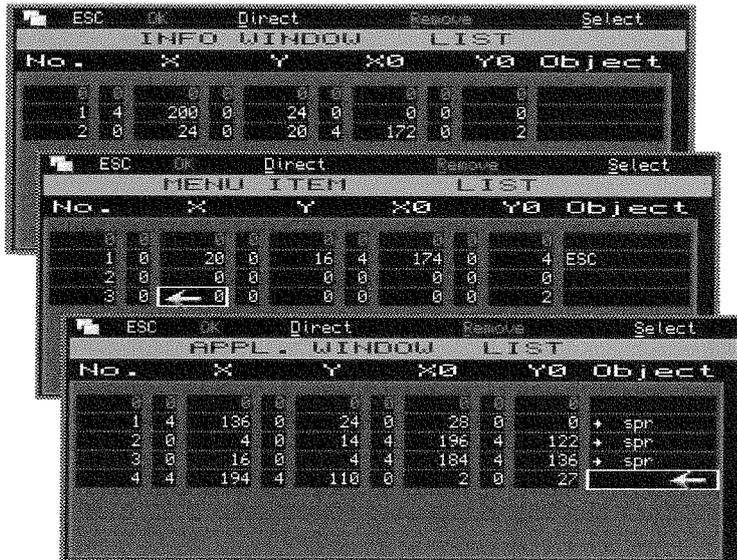
I make no apologies, however, for being a dyed-in-the-wool SMSQ/EasyPointer/QLiberator adherent, as I have been so since their respective beginnings, and they continue to provide good mileage. **wresz** depends on those systems to develop, compile and, to some degree, to run. I leave it to the experts of those other faiths to re-work or produce their own version of what I am trying to show here. If you are acquainted with QDOS/ EasyPEasy/Turbo, etc, with respect to PE programming, you may find it not too difficult to adapt it accordingly. The compiled program should, however run on all systems sporting PE2. As it stands, you will need to be running recent versions of SMSQ/E (v3.13+), EasyPointer (v4.09+) and QLib (v3.35+) to run or develop this code further. You will also need the latest ptrmen (V4.08+) toolkit (included with EZP).

For this project you'll first need to prepare a suitable menu. The illustration shows my menu design in EasyMenu. A 200x140 pixel window with a titlebar containing an ESC button. However, it isn't quite as simple as it looks! The next picture, a composite, shows its other components. There are two Information Windows [IWs], the first being the titlebar, the second creates a border around the ESC item, to avoid messing up the display when the pointer outlines it. Next there are three LIs: The ESC item, and two hidden LIs. As you can see, the latter have no dimensions and are placed in the top left corner [TLC] of the window. Although I have made them 0x0, I have offset their positions to avoid confusing the application (and the programmer!). I can no longer remember whether this is strictly necessary

in the former case, as EZP and Wman have evolved over the years. The ESC item's attributes and selection key is what you'd expect. The two others' selection keys are CF4 and CF3 – or the standard keystrokes for Move and Resize, respectively.

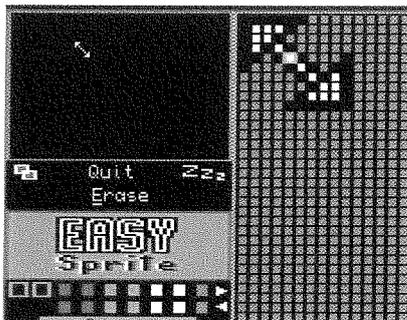
Finally, there are four Application Windows. The first one is the Move item and covers part of the

titlebar and is pixel-aligned to it so as to be invisible. You cannot have a LI covering an



Composite of three EZP element menus

AW (or visa versa) so the AW runs from origin 0x0 to the edge of the ESC LI. It is borderless with attributes the same as for the titlebar IW. However, it has its own sprite. You could either stipulate the sprite to be the standard Move Window sprite or, as I have done, make a miniature Move sprite of your own to go with it. If you have more buttons on the titlebar you will have to adjust the AW accordingly and you may perhaps need more than one AW with the same attributes and sprite to fill in the gaps. As you will see later on in connection with the Resize AWs, their function is easy to group as a single item. The next two AWs are the Resize bars. These are two thin, borderless AWs of about 4x14 pixels located at the BRC of the main window. Actually, one is slightly longer than the other so as to reach right into the corner without overlapping the other. Four pixels wide may be too skinny for some; you may consider it rather fiddly to find it with the pointer. I have made my resize bars visible here, but they could just as well have blended in with



Sample corner resize sprite

the main window border, only revealing their existence when the pointer sprite changes to the corner resize sprite (see illustration).

Many resize scenarios are possible, of course. Using the same technique, you could provide the facility to allow every edge and every corner to be stretched, as most Windows programs do, or just the bottom and/or right edges. But the most useful compact version, to my mind, is the BRC one demonstrated here. The final preparation you'll need to make is to create an APPA file. EZP programmers will know what these are and how to create them, but others may require a short explanation: APPA files consist of a collection of all the EZP components your program needs; your menu definition(s), sprites and, if you

want, the ptrmen toolkit extension(s) your program uses. EZP includes a program to build these files from the output files produced by EasyMenu and EasySprite. The APPA file needed here must contain the menu definition plus the corner sprite described above. They can then be accessed by the program as APPAO("wresz") (the menu) and APPAO("CornB") (the corner sprite).

Below is the code to make it all work. Only salient points are commented and the comments relate to the block immediately above unless otherwise stated:

```

1 REMark $$chan=6
2 REMark $$stak=360
3 REMark $$heap=1600
4 REMark $$asmb=ram1_rz_wresz_app,0,60
5 :
6 REMark Interactive Move and Resize Demo
7 REMark by pjwitte jan 2009. V1a01
8 :
9 REMark Requires SMSQ/E + ptrmen
10 REMark Compile with QLIB
11 REMark Compiled should run under QDOS
12 :

```

Standard header showing files to be included. During testing these files should be LRESPRed.

```

13 REMark Menu definitions
14 awmv% = 1: REMark Move
15 awcr% = 2: REMark Corner right
16 awcb% = 3: REMark Corner bottom
17 awin% = 4: REMark Main app win
18 liqu% = -1: REMark LI quit
19 limv% = -2: REMark Hidden LI Move
20 lirz% = -3: REMark Hidden LI Resize

```

These are the object numbers relating to the menu elements. I'll use the mnemonics to refer to the relevant object. Thus **awmv** refers to the Move AW. (Here **awrz** ⇒ **awcr** and **awcb**.)

```

21 mvec% = 1+2+8:REMark Return conditions
22 irt% = 48: REMark Immediate return
23 DIM pv%(16): REMark Pointer Record
24 :
25 REMark Misc definitions
26 esc% = 27: REMark ESCape
27 kcf3% = 241: REMark Key CF3 - Wresz
28 kcf4% = 245: REMark Key CF4 - Wmove
29 wwd = 0: REMark -> Window Working Def
30 :
31 sp_winbg% = 513: REMark Window backg
32 sp_winfg% = 514: REMark Window foreg
33 ww_xorg = 36:REMark WWD offset $24
34 ww_yorg = 38: REMark WWD offset $26
35 :
36 rzbt% = 4: REMark Resz border thick
37 rzbc% = 228: REMark Resz border colour
38 minx% = 200: REMark Min window size
39 miny% = 140: REMark (from menu)
40 sizx% = minx%: REMark Start size = min
41 sizy% = miny%
42 posx% = -1: REMark Start position
43 posy% = posx%
44 k = 0: stat% = 0: REMark GLOBAL
45 :
46 x% = 0: y% = 0: REMark Scratch
47 :

```

Some definitions, variable and constant.

```

48 REMark Program start
49 SetWin
50 :
51 REPEAT main
52 k = MCALL(#cw\ k, stat%)
53 SELECT on k
54 = liqu%: MCLEAR#cw: CLOSE: STOP
55 = limv%, awmv%: MoveWin
56 = awcb%, awcr%: ReszWin
57 = lirz%: ReszWinBRC
58 END SELECT
59 END REPEAT main
60 :

```

Main program loop. This is a standard menu call (**MCALL**). It triggers when the user interacts with one of the objects, whether they be loose items (LIs) or application windows (AWs). The ESC button, referred to as **liqu** (LI quit), is quite standard. However, the window move routine, **MoveWin** is triggered both by the hidden LI, **limv**, and a user click on the titlebar AW, **awmv**. The **MoveWin** routine will sort out whether the CF4 function key has been pressed or whether this is an interactive move.

Note that the handling of LI keystrokes, have to be processed in each AW handler or else they are just ignored: Only if the pointer is outside any AWs with a handler, do they get processed in the main loop.

Should your pointer hover about one of the BRC AWs, the PI will take care to display the corner sprite. If you then click on one of those AWs, **ReszWin**, the **awrz** handler, is reached. Finally, the hidden LI, **lirz**, gets it if the CF3 key gets pressed. This drops directly into the interactive resize routine, **ReszWinBRC**.

```

61 DEFine FuNction ReadAW%(awno%)
62 LOCAL k%
63 REMark GLOBAL cw, mvec%, pv%
64 REMark Read an App Window
65 :
66 RDPT#cw; mvec%: PVAL#cw; pv%
67 IF (pv%(2) + 1) <> awno%: RETURN esc%
68 k% = pv%(6)
69 IF k% = esc% THEN
70 REMark Centre pointer in awin%
71 RDPT#cw; irt%, posx% + sizx% / 2,
    posy% + sizy% / 2
72 END IF
73 RETURN k%
74 END DEFine ReadAW%
75 :

```

This is a general AW scanner, called by the AW handlers. It returns if the pointer moves out of the relevant AW or if ESC is pressed. If ESC is detected, it centres the pointer in the program window and returns. This behaviour is designed to get the pointer out of the AW and put it somewhere central where any further keystroke commands may be listened for – in this case only Quit.

```

76 DEFine PROCedure SetWin
77 REMark GLOBAL cw, cd, .siz%, .pos%
78 REMark Open main window, get position,
    attach & format display window
79 :
80 cw = FOPEN("con_")
81 cd = FOPEN("con_")
82 MDRAW#cw; APPAO('wresz'), posx%,
    posy%, sizx%, sizy%
83 wwd = MWDEF(#cw)
84 posx% = PEEK_W(wwd + ww_xorg)
85 posy% = PEEK_W(wwd + ww_yorg)
86 MWLINK#cw, awin%, #cd
87 WM_PAPER#cd; sp_winbg%
88 WM_INK#cd; sp_winfg%
89 REMark Display some text
90 END DEFINE SetWin
91 :

```

This routine merely opens the consoles and draws the program window. It also opens a

channel that is linked to **awin**; any window IO sent to that channel [#cd] will appear in **awin**. A call to display some text was removed from line 89 as the routine would unnecessarily lengthen the listing, but that's where the action could go.

```

92 DEFine PROCedure MoveWin
93 LOCAl aml, k%
94 REMark GLOBal cw, k, posx%, posy%
95 REMark Move by WM_MOVEMODE or by key
96 REMark Read Move AW
97 :
98 IF k = limv% THEN
99 WinMove: REMark Move by key
100 ELSE
101 REPEAT aml
102   k% = ReadAW%(k)
103   SElect on k%
104     = esc%: EXIT aml
105     = 1, 2: WMOV#cw; -1: EXIT aml
106     = kcf4%: WinMove: EXIT aml
107     = kcf3%: ReszWinBRC: EXIT aml
108   END SElect
109 END REPEAT aml
110 END IF
111 posx% = PEEK_W(wwd + ww_xorg)
112 posy% = PEEK_W(wwd + ww_yorg)
113 END DEFine MoveWin
114 :

```

This is the window move handler. Firstly, if CF4 was pressed while the pointer is in any other location than **awmv**, a window move, using EZP's internal routine, i.e. saving the relative positions of all the window components, is performed. Otherwise, the pointer *is* in **awmv**, and the AW handler is called to read events in that AW. If user presses a HIT or DO while in **awmv** he means to move the window interactively using Wman. Finally, what if the pointer is in **awmv** and the user presses CF3 (line 107)? He wants to resize, of course, so interactive resize is initiated immediately. The new x/y positions are fetched directly from the Window Working Definition [WWD].

```

115 DEFine PROCedure WinMove
116 LOCAl x%, y%
117 REMark Use Wman routine
118 :
119 x% = -1: y% = x%
120 RDPT#cw; irt%, x%, y%
121 x% = x% - PEEK_W(wwd + ww_xorg)
122 y% = y% - PEEK_W(wwd + ww_yorg)
123 WMOV#cw: REMark Move, keep layout
124 RDPT#cw; irt%, x%, -y%
125 END DEFine WinMove
126 :

```

This wrapper for **WMOV** saves and restores the pointer position. I find it annoying that the pointer

jumps to the TLC every time I do a window move by keystroke. Using **WMOV#cw;-1**, which deploys the internal Wman routine, leaves the pointer in situ and restores it on exit, but it also messes up the window furniture and I have as yet found no workaround. Here I read the current position (line 120), make the positions relative to the window origin, perform the move, and finally restore the position.

```

127 DEFine PROCedure ReszWin
128 LOCAl wsl, k%
129 REMark GLOBal cw, k, posx%, posy%
130 REMark Read BRC AWs
131 REPEAT wsl
132   k% = ReadAW%(k)
133   SElect on k%
134     = esc%: EXIT wsl
135     = kcf3%: ReszWinBRC
136     = 1, 2: ReszWinBRC
137   REMark Restore pointer
138   RDPT#cw; irt%, (sizx%), -(sizy%)
139   = kcf4%: k = limv%: MoveWin
140   EXIT wsl
141 END SElect
142 END REPEAT wsl
143 END DEFine ReszWin
144 :

```

The handler for **awcr** and **awcb**. Pretty much as for **MoveWin**. As it doesn't know which of the two corner AWs it will be reading, it supplies the universal variable **k**, returned from **MCALL**, to the AW reader, which works for either.

```

145 DEFine PROCedure ReszWinBRC
146 LOCAl rzl, cz, ymx%, px%, py%, xl%
147 LOCAl ox%, oy%, cx%, cy%
148 REMark GLOBal cw, pv%, sizx%, sizy%
149 REMark GLOBal posx%, posy%, rzbt%,...
150 REMark Interactive resize routine
151 :
152 REMark Store current pointer position
153 cx% = -1: cy% = cx%
154 RDPT#cw; irt%; cx%, cy%
155 :
156 REMark Make relative
157 cx% = cx% - PEEK_W(wwd + ww_xorg)
158 cy% = cy% - PEEK_W(wwd + ww_yorg)
159 :
160 REMark Work out max screen space,
161 REMark draw window & set outline
162 FLIM#cw; xmx%, ymx%, ox%, oy%
163 xmx% = xmx% - posx%
164 ymx% = ymx% - posy%
165 ox% = sizx% - rzbt%
166 oy% = sizy% - rzbt%
167 CLOSE#cd: CLOSE#cw
168 cz = FOPEN('con_')

```

```

169 OUTL#cz; xmx%, ymx%, posx%, posy%, 0, 0, 0
170 :
171 REMark Draw initial window box
172 OVER#cz; -1
173 :
174 REMark left, right, top, bottom
175 BLOCK#cz; rzbt%, sizy%, 0, 0, rzbc%
176 BLOCK#cz; rzbt%, oy% - rzbt%, ox%,
  rzbt%, rzbc%
177 BLOCK#cz; ox%, rzbt%, rzbt%, 0, rzbc%
178 BLOCK#cz; ox%, rzbt%, rzbt%, oy%, rzbc%
179 :
180 REMark Set appropriate resize pointer
181 REMark sprite and put in BRC
182 SPRS#cz; APPAO('CornB')
183 x% = posx% + sizx% - rzbt%
184 y% = posy% + sizy% - rzbt%
185 px% = sizx%: py% = sizy%
186 :
187 REMark Draw outline interactively
188 REPEAT rzl
189 RDPT#cz; mvec%, x%, y%
190 PVAL#cz; pv%
191 IF pv%(5) <> 0: EXIT rzl
192 IF pv%(6) = esc% THEN
193   py% = sizy%: px% = sizx%
194   EXIT rzl
195 END IF
196 REMark Pointer x/y-position
197 px% = pv%(3): py% = pv%(4)
198 REMark Test limits
199 IF px% < minx%: px% = minx%
200 IF py% < miny%: py% = miny%
201 IF px% > xmx% - rzbt%: NEXT rzl
202 IF py% > ymx% - rzbt%: NEXT rzl
203 IF px% <> ox% OR py% <> oy% THEN
204   REMark Blank and draw t, b, l & r
205   BLOCK#cz; ox%, rzbt%, 0, 0, rzbc%
206   BLOCK#cz; px%, rzbt%, 0, 0, rzbc%
207   BLOCK#cz; ox% - rzbt%, rzbt%,
     rzbt%, oy%, rzbc%
208   BLOCK#cz; px% - rzbt%, rzbt%,
     rzbt%, py%, rzbc%
209   BLOCK#cz; rzbt%, oy%, 0, rzbt%, rzbc%
210   BLOCK#cz; rzbt%, py%, 0, rzbt%, rzbc%
211   BLOCK#cz; rzbt%, oy% + rzbt%,
     ox%, 0, rzbc%
212   BLOCK#cz; rzbt%, py% + rzbt%,
     px%, 0, rzbc%
213   ox% = px%: oy% = py%
214 END IF
215 END REPEAT rzl
216 :
217 CLOSE#cz
218 REMark Set new size
219 sizx% = px%: sizy% = py%
220 SetWin
221 IF cx%<=sizx% and cy%<=sizy% THEN
222 REMark Restore pointer
223 RDPT#cw; irt%, cx%, -cy%

```

```

224 ELSE
225 RDPT#cw; irt%, (sizx%), -(sizy%)
226 END IF
227 END DEFine ReszWinBRC
228 :

```

The final routine here, is also the most complex. It is arrived at either by clicking one of the resize AWs or by pressing the CF3 key anywhere in the window. First the current pointer position is saved in case the routine was reached by keystroke. Then the old program window has to be thrown away and a new window opened, wherein the resize outline, or box, will be drawn. The size of this window need not take up the whole screen, only that part that encompasses the maximum extent that any new window can be redrawn, starting at the old window's origin. A box outline of the old window is drawn for starters (lines 171+) and the pointer sprite is set to be the corner sprite. The loop (188+) reads the pointer, returning on a keystroke, key down or pointer moved event. (**mvec% = keystroke + key down + pointer moved**). Sadly, Wman does not recognise the **key up** event when initially reading a new channel (it always assumes that key up is the initial state). This means you can't just let go of the mouse button to simulate a "drop" as in *drag and drop*; you have to click a second time to terminate the resize operation. This may be a bug, and may therefore one day get fixed. Line 191 says that if the user clicks a second time (the click that got us here was processed elsewhere), to terminate resize with the current size. 192 says that if ESC is pressed resize is aborted and the size reverts to the starting size. If none of these events occurred, the size is read (197+) and tested against the limits to see whether it is legal. If the size passes all the tests and is different from the old size (203), the old outline is blanked (un-XORed out) and a new box is drawn at the new size. This continues until the user is satisfied and terminates (or aborts) the operation. Finally, the drawing window is discarded and a new program window drawn with the new size. The pointer is placed at its old position, provided it still fits inside the window, otherwise it is placed at the BRC.

It is not difficult, but it is extremely fiddly to achieve the effect you want, as the tiniest tweaks can alter the behaviour of the interface. I'm looking forward to seeing more PE programs that use interactive resize!

Editing the QDOSMSQ Wiki

by Norman Dunbar

As you may know from recent issues of the magazine, I have a Wiki at

<http://qdosmsq.dunbar-it.co.uk>

where I am attempting to put as much documentation on the inner workings of QDOSMSQ as I can. This work is based on a long gone web site named QDOS Internals which is no longer around as the ISP shut it down when I moved house about 18 months ago.

You may not know that the Wiki is open to all and sundry to add, edit or update the content. So if you see something that I have written and you disagree, you don't have to tell me to fix it, you can fix it for me! (How lazy is that then?)

George Gwilt, my faithful reader, has already added a huge amount of content to the Wiki and I'm very grateful. My work at the moment is preventing me from doing as much as I would like I'm afraid. However, this shows the benefits of using a Wiki format, while I'm unable to update it, other people can.

The end result of my ambitions is to have, online, a complete and up to date set of documentation for the operating system we know and love so well.

One of George's concerns when he started adding content was having to write HTML. Well, the good news is, you don't need to know HTML as all editing is done in plain text. You can use HTML but you don't have to.

George was also a bit concerned about things being in the right place. To resolve this, I'm using what the Wiki calls "namespaces" but you can think of these as nothing more complicated than directories on a disc. That's basically all that they are anyway.

I shall now attempt to document how the Wiki is structured and how you can use the editor to create content - should you wish to of course!

The Wiki Structure

My Wiki is highly structured and uses namespaces effectively - well, I think so! The top level has two namespaces - Linux and QDOSMSQ. We shall ignore the Linux Namespace for the rest of this article as it is not relevant to QDOSMSQ much - well, other than my documented attempts to get a Linux filesystem written that will read my QL floppy discs!

On the left of each page is an index of namespaces. Usually, the namespace you are 'in' is shown opened out. This index isn't usually of much benefit as, in theory at least, I should have set up links to each topic. In the event that I have missed one or two, maybe three, the index can be used to see all the topics and sub-namespaces. My advice is always click on the "start" topic for the namespace.

Rather than me wittering on about what is where, the following is a diagram of the structure of the QDOSMSQ namespace:

- ▼ **qdosmsq**
 - ▶ errors
 - ▶ fs
 - ▶ jobs
 - ▶ memory
 - ▶ pe
 - ▶ sbinternal
 - ▶ sysvars
 - ▶ traps
 - ▶ vectors
 - start

Note: Namespaces are displayed above in bold blue text with an arrow head pointing at them, while topics are shown in green text with a square blob indicator beside them. So "vectors" above is a namespace and "start" is a topic.

The topic named "start" within any namespace is special. "Start" is a reserved name and should be the one displayed when anyone clicks on the index of namespaces that is always displayed on the left side of the page. Unfortunately, it doesn't appear that this is the case.

However, when someone clicks on a link in any Wiki page that points at a namespace and not at a topic (within a namespace) then the "start" topic will be displayed. So, if you click on a link

that points to "qdosmsq:traps:trap_2" for example, it actually takes you to "qdosmsq:traps:trap_2:start" instead. (The colon is used as a namespace separator by the way.)

NOTE: Internet Explorer users have a problem. Because it cannot correctly process the CSS absolute positioning command, even in the most recent version, the index of namespaces appears all the way down at the bottom of the page, underneath the page's content. It should be alongside the page content. Opera and Firefox have no problems because they are standards compliant browsers. IE is not standards compliant yet.

So the first rule of creating a new namespace is this, always have a "start" topic within the namespace. Use this page to display an introduction, perhaps, or simply a contents page with links to the real content in your namespace.

Note: The PE namespace has been added to by George and the content isn't quite up to standard yet, it needs to have a "start" topic that acts as an introduction and contents list for all the other topics. I have advised George that I shall, at some point, add in a "start". For reference, the PE namespace looks like the following:

- ▼ **qdosmsq**
 - ▶ **errors**
 - ▶ **fs**
 - ▶ **jobs**
 - ▶ **memory**
 - ▼ **pe**
 - chwin
 - drbdr
 - flim
 - fsize
 - idraw
 - index
 - ldraw
 - mdraw
 - mhit
 - pansc
 - pinf
 - prpos
 - rprr
 - setup
 - smenu
 - stiob
 - stlob
 - swapp
 - swdef
 - swinf
 - traps
 - vectors
 - wdraw
 - ▶ **sbinternal**
 - ▶ **sysvars**

You can see that everything is stored within the PE namespace itself. However, on the "start" topic for the QDOSMSQ namespace, I have links pointing to the PE Traps and the WMAN vectors - what to do?

As I informed George, I can fairly easily move topics about and most importantly, update all links to the current location so that they point to the new one. Very useful (I use it at work all the time because my colleagues seem to have a problem with namespaces!). At the moment, the Wiki plugin that allows me to do this is not installed on my host, so I'm unable to move things about just yet.

By the time you read this, I may well have added a start topic to the PE namespace and also a PE:VECTORS and a PE:TRAPS namespace (both with "start" topics), so if you go looking and find that there is one there, don't panic.

Creating New Namespaces

As mentioned above, a namespace is effectively a directory. It can contain other namespaces (sub-directories) and topics or, nothing at all. There are a number of ways to create a new namespace:

From a link on another page.

From a link on the parent namespaces "start" topic.

Directly from the URL entry area on your browser.

The two "from a link" are similar and it is just a matter of editing the page in question and adding a link to the new namespace you require. We will deal with creating links later on, but for now, this is all you have to do:

```
[[qdosmsq:pe:traps|some meaningful text]]
```

The double square brackets enclose what will become a link on the page being edited. The '|' separates the Wiki topic from the meaningful text. So in the above, the Wiki topic being linked to is either the namespace qdosmsq:pe:traps or to the topic qdosmsq:pe:traps:start depending on whether it exists or not.

Once the page has been saved, the link will appear but will be coloured to indicate a topic (or namespace) that doesn't exist. When you click the link, you get a default page that says something like "this page does not yet exist but you can create it". Simply click on "create this page" to do so. How easy was that?

Don't forget, when you create a new namespace ALWAYS create a "start" page within that namespace to use as a table of contents.

Creating a namespace or topic directly from a URL in the browser is equally as simple. In the browser, type in

<http://qdosmsq.dunbar-it.co.uk/doku.php?id=qdosmsq:pe:traps:start>

and press enter. You will be taken to either the topic you entered or to the default page as above. From there the process is the same.

Creating a topic or namespace in this manner does have one drawback. You don't get any links created that take you to your new page. For this reason, I always advise that you add a link (preferably to the parent's "start" topic) that points to your new page and then click that to be taken to the default page.

Of course, I can create namespaces on the actual host server simply by finding the structure on disc and adding a new directory, setting the permissions and so on. But that is not recommended!

A Practical Exercise

Ok, lets do it for real. We shall create a new namespace for you to play in. First of all, only registered people can edit pages. So, if you have not yet registered, please do so (if you want to actually contribute that is) and login.

To register, go to

<http://qdosmsq.dunbar-it.co.uk>

and scroll down to the section named "Registration" and follow the instructions there. It's easy.

Registering should also log you in, if it doesn't, click on the login link and enter your details again. Once logged in you should see 'Edit' buttons or links on some of the pages.

On the left of the page, click "playground" in the namespaces index. It will open up, and display a topic called "start" - I have created this topic as a jump-off to your playing around stuff. If anyone else has been in and followed these instructions, there may be other namespaces or topics lying around. Please do not alter other people's stuff - create your own.

Click on the "start" topic to begin. The "Start" page is displayed on the right of the screen. Under the page contents, you should see three buttons, click on "Edit this page". A new page opens and displays an HTML editor. Beneath the editor are another three buttons, Save, Preview and Cancel.

Within the editor, the current source code for the page is displayed. Scroll down to the bottom and type in, on a new line and without any leading spaces, the following text (ok, replace "yourname" with your name or something unique).

```
[[playground:YOURNAME:start|YOURNAME's playground]]
```

That is all there is to it. The above will create a new namespace under the PLAYGROUND namespace and create a "start" topic within that namespace. In my case, I entered the following:

```
[[playground:norman:start|Norman's playground]]
```

Click on the "Preview" button. If you have the first text on the page, all is well. If there are other users already here, you might find that your text is appended to the end of the line and not shown on a new line. Let's fix that straight away!

Add \\ (two backslashes) to the end of the line ABOVE yours, and to save the next person coming along, add them to the end of your line as well, as follows:

```
[[playground:norman:start|Norman's playground]] \\
```

The pair of backslashes tell the Wiki software to force a new line at this point, much like the
 tag in HTML does.

It makes no difference if you have spaces before the slashes or not, but, the backslashes MUST be the last thing on the line. Click "Preview" again and all should be well. Your link to your playground is now on a line of it's own.

If all looks correct, enter some descriptive text in the "Edit summary" box beneath the buttons - I entered "Added Norman's playground" (without quotes), tick the "Minor Changes" box - as adding a link isn't really a major change, and click on the "Save" button. Job done.

When the page is redisplayed, you should see your new link at the bottom of the list in red text, and all the others - if any - showing in green. Green means a topic or namespace has been created while red shows that it has not. Click on your red link text.

The default page is shown next. It advises you that the topic is not yet created and offers you the option to create it. Click on the "Create This Page" button to do so, and read on.

Creating & Editing Topics

The same editor is shown. You can start typing stuff as you like. I'm not going to give you a load of tutorial stuff to enter, so feel free to mess about. You can create sub-namespaces beneath your own if you like but please remember to always quote the full path when creating links. If I wish to create a new namespace beneath my current one called "Help pages" for example, I would do the following:

```
[[playground:norman:helppages:start|Help Pages]] \\  

```

Now, I have to say that there is nothing more irritating than a web page with a pile of links on it and nothing at all of a description. So, my page above is not helpful at all.

To this end, I request that you always create a page with at least a major heading. To conform with my standard, I need to edit my page above and add a heading.

Click with the cursor at the top of the page - before any other text - and click on the "H1" button at the top. This action creates the following text:

```
=====  
Level 1 Headline  
=====
```

When I created the link to this page above, I called it "Norman's Playground" in my link text. So, start typing and the "Level 1 Headline" will be replaced with your typing. I prefer to name my pages after the link text. My complete page looks like this now:

```
=====  
Norman's Playground  
[[playground:norman:helppages:start|Help Pages]] \\  

```

Click the "Preview" button often to see how things look and you will catch errors before they get too big.

Note: Each page should have an H1 at the top. All other headings should make use of H2 through H5 as appropriate. All headings from H1 to H3 will appear on the page's table of contents which is displayed at the top right - if there are at least 3 headings on the page.

My page looks fine, so I click on "Save" after entering some description of the page. The default text is fine at the moment - "created".

As each new namespace and "start" topic is created, it will be added to the overall namespace index on the left of the page - or, for IE users, way down at the bottom!

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Sidewriter v1.08	£ 10.00
Landscape Printing (EPSON printers)	
ImageD v1.03	£ 10.00
3D object generator	
Q-Help v1.06	£ 10.00
Superbasic On-Screen help system	
Q-Index v1.05	£ 5.00
Keyword-to-topic finder	
ProForma ESC/P2 Drivers v1.04 for ProWeSs Printer Driver	£ 8.00

Applications

Flashback SE v2.03 (upgrade only)	£ 5.00
Database	
QL Cash Trader v3.7	£ 5.00
Accounting/Finance	
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P-Word UK English Dictionary (500.000 words!) Dictionary	£ 15.00

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Adventure	
West v2.00	£ 5.00
Adventure	
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QuizMaster II v2.07	£ 5.00
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Stone Raider II v2.00	£ 5.00
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Hoverzone v1.2	£ 5.00
Arcade Game	
Deathstrike v1.5	£ 5.00
Arcade Game	
Flightdeck v1.0	£ 10.00
Flight Simulation	
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Notes on Software requirements

The following programs have a minimum SGC card requirement: P-Word, Qword, Big Britain MAP for Q-Route

RWAP Services

3 Dale View Court, Fulford, Stoke-On-Trent, Staffordshire ST11 9BA TEL: (+44) 1782 398143 From the UK Dial: 01782 398143

Website: <http://www.rwapsoftware.co.uk>

Email: sales@rwapsoftware.co.uk

We Accept Payment using:



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When You Mess Up!

If you do make a pig's ear of it all and mess up a page completely, click "Cancel" to abort all editing back to the last "Save". If you wish to abort all editing after you have clicked the "Save" button, then you simply click on the "Page Revisions" button when the page itself is being displayed. The "Old Revisions" page is shown.

On this page is a list of all the previous versions of the page in question. One of which will be marked as the current page. This is the one you wish to get rid of.

To simply revert back to the previous version, click the green link text (playground:norman:start) beneath the one marked as current to display it, click "Edit this page" and then immediately click "Save" to save it. This will now become the current version and all is well again.

While the Old Revisions page is displayed, you may notice an icon next to all non-current versions of the page. The icon looks a lot like Elton John's spare pair of 3D glasses. If you click on one of these icons, the differences between the current page and the version you clicked will be displayed.

Editing Text

You should note that the layout of the page displayed when you Preview or Save it is not going to match up to what you typed originally. We have seen this already with the list on the PLAYGROUND page when we typed text on a new line and it was displayed on the same one as the previous line's text.

This is caused by HTML. When a page is rendered in HTML it gets rid of multiple spaces, linefeeds and such like. This allows for the browser window to be changed in width and/or height and the text on the page will 'reflow' to suit.

Also, what you type in the Wiki editor is not HTML but text. Your text is saved on disc in exactly the format you typed in as and when a user displays the page in their browser, the Wiki code (written in PHP) reads the text and converts it to HTML on the fly.

HTML is quite feature rich in formatting and so on, so you should be able to enter text that will be rendered in bold, for example, and indeed you can. The following is a list of things you can do in each page to jazz it up a little!

Bold text is surrounded in a double asterisk ****like this****.

Italic is encased in slashes *//like this//*.

You can do both together ***//**like this**//***.

You can select existing text and press the "B" or "I" buttons (or both) when in the editor as well.

Underlined text is surrounded by pairs of underscores or by selecting it and clicking the "U" button.

__Like this__

There is a way to get something called Code Text into a line. This is used when explaining what commands you should type, for example, on a command line. The code text is surrounded by pairs of single quotes "like this". If you want to show a code listing instead, see below.

Headings are defined by a number of equals signs surrounding the text. These are best added by clicking on the buttons at the top, marked H1 through H5.

Headings H1 and H2 will be displayed with a horizontal line beneath the heading.

Headings H1, H2 and H3 will be shown in a table of contents on the page. This is displayed on the top at the right side. This is not displayed if there are less than three headings (H1 through H3) on the page.

An unordered list is easily created. Each list item should be placed on a separate line and be prefixed by two spaces and one asterisk:

- * Item one.
- * Item two.

You can nest lists as follows by adding another two spaces:

- * Item one.
 - * Item One A.
 - * Item One B.
- * Item two.

Each item on the rendered page will have a blob of some description (like a bullet point) as a prefix. Should you require a numbered (ordered) list, use a hyphen instead of the asterisk:

- Item one.
- Item two.

You can nest lists as follows by adding another two spaces:

- Item one.
 - Item One A.
 - Item One B.
- Item two.

In this case, the outermost level will be numbered 1, 2, 3 ... while the nested lists will be in Roman Numerals. Deeper nesting levels will use different numbering.

Tables

To create a table use the text you want in each cell with a leading and trailing 'l' as follows:

```
| Cell one | Cell Two | Cell Three |
```

You can justify text in cells by adding two or more spaces after the leading 'l' or before the trailing 'l' as follows:

```
| Cell one, justified right by extra spaces on the left | Centre justified cell two |  
Cell three, justified left by extra trailing spaces |
```

The spaces are put on the side of the text that you want the padding spaces to be added. Spaces on the left of the text will cause padding on the left to justify the text to the right. Spaces on both sides will centre the text in the cell.

Tables can be given headings as follows:

```
^ Heading one ^ Heading Two ^ Heading Three ^  
| Cell one | Cell Two | Cell Three |
```

Or, with justifications:

```
^ Heading one ^ Heading Two ^ Heading Three ^  
| Left | Centre | Right |
```

Cells can span more than one cell 'space' as follows:

```
^ Heading one ^ Heading Two ^ Heading Three ^  
| Left || Right |
```

There isn't a space between the two 'l' characters by the way, if there was, then an empty cell would be drawn in the row.

Unfortunately, rows cannot be spanned in this manner.

Tables can have top and side headers if desired :

```
^ Top heading one ^ Top heading Two ^ Top heading Three ^
^ Left Heading one | Centre | Right |
^ Left Heading two | Centre | Right |
^ Left Heading three | Centre | Right |
```

Program Code

Program code is important. It would be nice to see an example of each and every vector and trap where possible. To insert program code is easy and can be done in two ways:

Leave two blanks before the text on each line.
Wrap it in `<code>` and `</code>` tags.

The first option is not advised as it isn't implicit enough when someone else is reading and/or editing your text. Always wrap code in the code tags, as follows:

```
<code>
start    moveq #0,d0
end      rts
</code>
```

When typing or pasting code sections into the page, DO NOT USE THE TAB KEY TO INDENT. Use spaces. If you use TABs then the code looks fine in the editor but is formatted incorrectly when the page is rendered as the TAB is removed by the HTML processing code in the browser.

Summarising the rules

So, in summary then:

- Always use namespaces where these make sense.
- Always use a start page for each namespace. Use it as a contents page and/or introduction.
- When adding a new topic to a namespace, create a link to it on the start page.
- Always fill in the change details to say why you made a change - it helps on the Old Revisions page.
- Don't use the TAB character in code sections.
- Always play in the play ground until you know what you are doing.
- And finally, for now anyway, when you are editing a page, right at the very top is a paragraph of text as follows:

"Edit the page and hit Save. See syntax for Wiki syntax. Please edit the page only if you can improve it. If you want to test some things, learn to make your first steps on the playground."

The word "syntax" is a link to the Wiki software's own page on editing syntax and the word "playground" is a link to the main playground page. The "syntax" page should be printed off and used as a crib list.



**The deadline for
the next issue
is the 15th of
August 2009**

Letter-Box

Steve Poole writes (re. Music article):

How time passes quickly when you have a lot to do. At the 'QL is 25' meeting at Coventry, I managed to get a couple of short conversations with Simon Goodwin, but barely enough to share the mass of information I wished to discuss. But these meetings are a very useful starting point. Simon had written an excellent article and program in QL Today in reply to my request in 'Binary Gamuts' for more information on music theory. His piece neatly dealt with the mathematical problem of how to construct music scales which are harmonically exact, even though his program can only play on Amigas, the QL sound generator being inadequate. Perhaps we will see manufacturers producing pentatonic keyboards soon, as the whole sphere of music composition will become wide open for an entirely regenerated field of development in terms of potential key combinations and refreshingly pure harmonics. In the meantime, Amiga owners can experiment on his

'Mouse Organ'. No doubt the Monty Python team would be flattered!

For my part, I have sent the latest version of the SuperBasic music playing 'QL Tunes' to Jochen who has promised to put it on his web-site for readers to down-load. It now reproduces tempos accurately and will allow you to type in melodies from music scores which the QL can then play. The previous version was published in QL Today with a description of how to use it, and was, to my knowledge the only QL music program printed with its listing.

So for QL programmers who get stuck on some project, remember; do not be afraid to write about it in the magazine. You never know, someone may well just be waiting with a solution...

Bravo again Simon. I am sure a lot of musicians will make exciting use of this implementation. It could radically change the way we are used to hearing sound!



George's & Norman's assembler dialogue - re. Part 23

by George Gwilt
and Norman Dunbar

Editor's comment: [GG] stands for George Gwilt, [ND] for Norman Dunbar

[GG] I have only four short comments this time on the latest article (part 23) on Assembler Programming by Norman Dunbar.

[ND] Only four! I'm getting better!

[GG] The first is that, once again, Norman has taught me something. This time it is the possibility of having a zero pointer to a loose item (top of page 37). I must confess that it seems strange to do this. You could have a whole range of loose items all blank. This would be very confusing. You could of course eliminate this confusion to some extent by having a small explanatory window appearing after the pointer has rested on a loose item for a certain number of ticks. Perhaps Norman will tell us in a later article how this can be done.

[ND] I'm sure I read that information in the documentation, but of course, I don't have it to hand at the moment. I have no idea why you would ever want to have a loose item with nothing in it, but maybe you can start a program up like this and later on, add an object depending on some choice the user has made perhaps. I honestly don't know - yet! If Norman is going to tell you how to pop up a hint window, he's going to have to learn for himself first!

[GG] The second comment relates to the definition of an object for an information window (see infoOBjs on page 35). If the object is text, the word at position 10 gives the colour of the ink to be used to display the text. If the object is a blob (type 4) the word is used as a word relative pointer to the pattern to be used with the blob. If the object is a pattern (type 6) the word points to the blob to be used with the pattern. If the object is a sprite, the word is not used. In all cases the word

at position 14 points to the object itself whether it is text, sprite, blob or pattern. Thus, for a sprite, its pointer is at position 14, not 10 as Norman says.

[ND] I have corrected my article accordingly. Thanks.

[GG] The third comment is about the keypress to activate a loose item (see the bottom of page 36). First of all, any keypress including such things as TAB and the arrow keys can be used. The selection is not confined to letters and those keypresses which are defined as "events". However, lower case letters are not allowed.

[ND] At the bottom of page 36 I mention that "for a letter, the upper case letter. For an event it is the event number minus 14". That should read "event name minus 14" or even better "the event number from the table below".

[GG] The last comment deals with "events". There are seven events each with its own keypress as detailed by Norman in the table on page 37. The official documentation refers to "event number" and "event code". The event number is the number of the bit set in the event vector which is at position \$14 in the window status area. For the seven events listed by Norman the

corresponding bits to be set are 16 to 22. The event code is the event number less 14. If a loose item is to be activated by a keypress producing an event the selection keystroke must be the event code as Norman says. I think the headings of the table listing the events have got transposed somehow. It might be clearer if they were, from left to right, Event, Event Number, Event Code and Description.

[ND] I have looked at my article's source code and as far as the last comment by George is concerned, I already have the table in the order George requests. However, the further explanation about the event number being the bit number is good and I have added that into my source files for future use.

Unfortunately, the table headings have been printed incorrectly in the magazine and this is where the problem could be. The 4 headings should be Event Name, Event Number, Event Code and Description. The second row of headings has been shifted right by one column.

As ever, my thanks to George for keeping me honest, teaching me stuff I had either forgotten or never knew and for continuing to read my articles. (And also, many thanks for continuing to update the <http://qdosmsq.dunbar-it.co.uk> web site.)

QPC Clipboard, Paste text

by Jochen Merz

As I use QPC every day for all sorts of things, including my Shareware services, I need to be able to process data from the Windows clipboard.

By doing so, I can cut & paste addresses and other necessary information out of emails. I mark the required area in the email, CTRL C it and process it in QPC ... which is easy. I deal with cases like 3, 4 or 5 lines, or double-spaced lines or address formats various people all over the world use. The processing routine has grown over the years and is quite complex, and not really suitable to be published here.

However, I often find that I want to cut a single line only and paste it into some input form, program, or whatever in QPC.

So I thought a little hotkey which does what CTRL V does in Windows would be very useful. I did not spend much time thinking about it, and here is what I produced. Maybe it is useful to you too:

```
10 s$=SCRAP_GET$:REMark get line
20 x=HOT_REMV("ē"):REMark remove hotkey
30 ERT HOT_KEY("ē",s$):REMark redefine
40 HOT_DO "ē":REMark paste it!!
```

... and save it as, say `win1_exec_pasteit_bas`. You can use any character, I just used one which I do not use for other purposes.

Then define a Hotkey in your BOOT program, e.g.
100 ERT HOT_THING1("v","SBASIC";"EX pasteit")

Now, you should be able to mark a word or line of text in a Windows program, cut or copy it with CTRL X or CTRL C, switch into QPC and use ALT V to paste into any line input (e.g. the BASIC INPUT or READ_STRING\$ of QMENU). It even gets stuffed into QD.

Maybe not a very elegant way of doing it - can you come up with a more elegant one?

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