

Issue 176

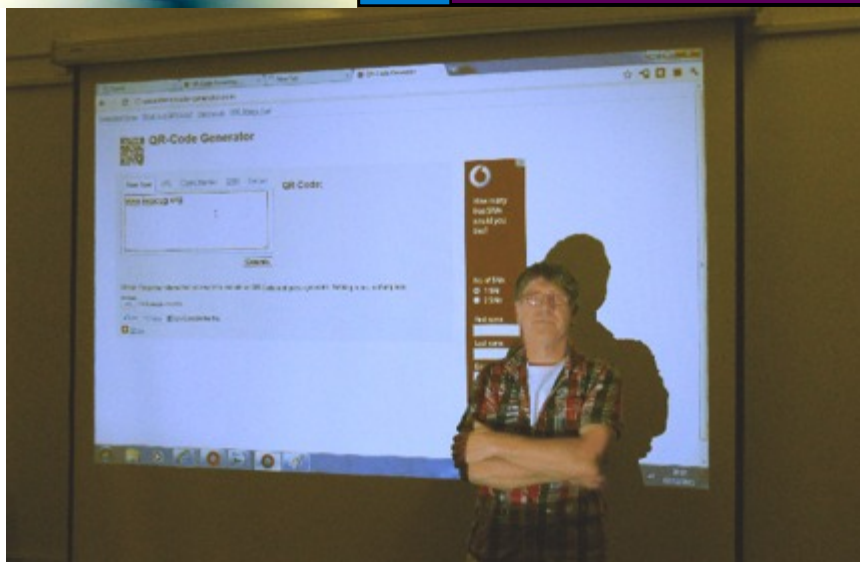
JANUARY 2012



ISLE OF WIGHT PC USER GROUP

HOT KEY

WINTER 2012



Denny Linzmaier was giving a talk which included a description of the QR Code
For more on this see page 9

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The Isle of Wight Personal computer User Group

We welcome all owners and users of IBM compatible Personal Computers.

We are a group which seeks to exchange ideas and new information.

Membership is £10 per annum

Our meetings are held on the first Wednesday of each month at

The Riverside Centre, Newport from 7.30 to 9.30 pm

Visitors are welcome.

A charge of £1 is made per meeting, which includes tea or coffee during the break

The Club Website address is **www.iwpcug.org**

We also have an e-group discussion area on
Yahoo groups: **iwpcusers@yahooogroups.com**.



FUTURE MEETINGS

<u>Date</u>	<u>Subject</u>	<u>Speaker</u>
Jan 4	Video and Camcorders	Steve Sutters
Feb 1	Club AGM , followed by Computers and Chaos	Richard Burkill

In addition to these, there are more meetings that have not yet been finalised.

ISLE OF WIGHT PC USER GROUP COMMITTEE

Chairman : David Groom

Treasurer : Phil Rogers

Secretary : Susanne Bone

Membership & Database Secretary : Ray Boote

Committee Member : Roger Skidmore

Committee Member : Steve Sutters

Committee Member : Soren Johanson

HotKey Editor : Bob Groom

Note:

Contact details have been removed from this copy published on the internet

Suggestions for new events, topics or speakers for talks are always welcome.

Please contact any committee member with your ideas.

If necessary we may be able to find a speaker for your subject.

NOTICE OF AGM

Notice is hereby given that the Annual General Meeting of the Isle of Wight PC User Group will be held on Wednesday 1st February 2012 at 7:30 PM at The Riverside Centre, Newport.

Nominations are requested for the positions of: Chairperson, Treasurer, Secretary, Membership Secretary, and up to eight other committee members.

Please send your nominations to the Secretary, Su Bone. Seconders are not necessary at this stage.

ISLE OF WIGHT PC USER GROUP ANNUAL GENERAL MEETING AGENDA

1. Approve the minutes of the previous AGM, held on 2nd February 2011, (<http://www.iwpcug.org/secure/minutes/AGM2011v1.pdf>)
2. Matters arising from the minutes.
3. Receive reports:
 - 3.1 Chairman
 - 3.2 Treasurer, including approval of the Club Accounts
 - 3.3 Secretary
 - 3.4 Membership Secretary
 - 3.5 Other activities: Computability, HotKey, Cover Disk, Website, Egroup, Marketing, Riverside Liaison
4. Elect a new Chairperson, Treasurer, Secretary, and Membership Secretary.
5. Elect other new Committee members (up to a maximum of eight persons).
6. Set the Annual Subscription.
7. Appoint an Independent Examiner.
8. Any Other Business.

Photo Competition

The winning entry is shown on the back cover, and is from Vic Shears.

Entries for the next competition should be sent to me by 10 March, and should be on the theme "Spring".

David Groom

Chairman's Report

It has been pleasing to note that the number attending our meetings has remained constant, despite the darker (and wetter) evenings. Looking at the topics covered at past meetings I note we really do cover a wide range, and thanks must go to Roger Skidmore for arranging these.

Our ability to use the internet at our meetings has been improved through the use of a WIFI access point, which our existing mobile broadband stick plugs in to. This now gives us the ability to access the internet on a wider variety of devices, running a wider choice of operating systems. So far we have only used it on two meetings, but its performance has exceeded my expectations.

I mentioned in the last issue of HotKey that activity on the E-group had slowed down, but I am glad to say that since then there has been a resurgence in postings. I really would encourage all members to sign up. There is no cost to join, it is free from spam and other unwanted material, and really can be quite a useful resource.

As ever it is a struggle to obtain articles for HotKey, and we are increasing reliant on my cousin in the USA, who has given us permission to reprint articles submitted to the Paducah Parenting Magazine, of which she is owner and editor. Obviously these articles do have a slight American bias, and not all are suitable for HotKey. Even if only one or two of our members could write short articles, then it would help us to fill the pages of HotKey each quarter.

Finally I would like to wish you all a very happy New Year.

Car Sharing / Lifts

It is possible that a number of our members do not attend our monthly meetings because they find transport to Newport difficult and the committee have wondered if it might be possible to arrange lifts for those members. With a membership as large as ours it is not always obvious who might like to attend but has difficulty with transport, and secondly, who might live nearby and be able to offer them a lift.

As a first step, if you would like to attend the meetings, currently can't get to the Riverside Centre on a Wednesday evening and would like to see if there is a nearby member who might offer you a lift, then could you please get in contact with me. We will then try and find a member who might be willing to give you a lift.

Nothing Becoming Zero

Whilst messing about within the doomed library of Cowes, I happened upon a book curiously titled, “The Nothing That Is” by Robert Kaplan. Fortunately, for my benefit, its meaning was explained by the sub-title, “A Natural History of Zero”. This reminded me of the Milne character, Christopher Robin who explained to Pooh Bear what it is meant by saying, “Oh, today I am just doing nothing”. After some discussion Pooh had come to the conclusion that he was, indeed, very happy doing nothing!

For many centuries there was resistance to the idea that Nothing could be expressed in writing by a simple symbol. Acceptance of Zero waxed and waned. The ancient teachers generally believed that the notion of Nothing could only be considered by the gods in their heavenly realm. However, in the affairs of man, there was a need for a more rational numbering system in order to record the taxes of kings and the tithes of temples. There was also the need to calculate currency exchange rates that had become necessary for the burgeoning trade between the ancient kingdoms. These weighty matters sorely taxed the brains of generations of scribes and learned scholars. Initially, they had to cope with ungainly and lengthy methods for writing large numbers. Calculations were performed by either using fingers or by positioning counters in pre-set patterns on sand trays. Later they used more sophisticated tools such as the abacus. Mistakes were common. This meant much time was spent in checking their results. Simple addition and subtraction for large values was difficult enough but multiplication and division was almost impossible. About 5,000 years ago the Sumerians of the ancient Mesopotamian civilization developed a cuneiform system using wedge shapes with a specific shape to depict Zero. Unfortunately, the later civilizations of the Greeks and Romans failed to accept a symbol for Zero in their notation system for large numbers, for example, they used the letter “X” for the ten and its multiples.

During the 14thC the Europeans slowly accepted the Arabic number system with place sensitive numerals for one to nine. This practice forced the addition of a place sensitive digit for Zero to signify a value of Nothing. Consequently, the tenth number could then be denoted by a symbol 1 in the position to denote “Ten Things” followed by a symbol 0 to the right denoting “No Unit Things”, i.e. 10. This enabled a more efficient process for multiplication and division. Calculations were now achievable by anyone with a modicum of education without having to rely on learned scholars schooled by years of apprenticeship.

The passage of decades, centuries and millennia could now be recorded unambiguously for posterity. However, the omission of the year Zero between the year 1 BC and year 1 AD was an illogical error for showing linear numerical time line. The

accepted opinion today is that the early scholars responsible for the formulation of the Christian calendar could not envisage a Zero or Nothing year for the birth of Jesus!

Eventually, by the 15thC, European scholars began to develop a modern mathematics that incorporated Zero.

A few examples:-

- Zero for the origin of Cartesian coordinates;
- Zero defined for division, multiplication, exponents, etc.;
- Zero sum for applied forces at an equilibrium point;
- Zero dimensions for an ideal point;
- Zero as an origin for longitude and latitude;

One problem that still troubles mathematicians is to define the outcome of dividing an integer by zero. Accepting the answer, as infinity requires a defined set of logic rules that are not universal for all conditions (ref. Ian Stewart's "Cabinet of Mathematical Curiosities").

Examples for the modern usage of the concept of Zero can be found in many aspects of electronics. The basis of machine code of digital computers for one BIT is defined as a computed value that can have only two possible states, "ON" or "OFF". The digits, "0" and "1", are used to denote these states or, more accurately, a voltage of 5v or 0v respectively (with a defined tolerance depending on the circuit design). Another example is the description of current in a transistor by the flow of electrons towards the positive terminal by occupying vacant holes (i.e. "Nothing") These "Holes" then effectively act as positive charges moving in the opposite direction. The doping impurity atoms donate these "Holes". Multi-chip processors contain many million transistors and can achieve incredible computational powers at ever-faster rates. The Sumerians would have been really impressed by the "Gods" of modern engineering!

But, there is still a contradiction in modern physics that states nature abhors a vacuum, a state of Nothing. However, the theory describing the birth of the known universe, known as the Big Bang, suggests that all mass was created from a Zero space-time continuum. At time Zero, this anomaly suddenly expanded to evolve into the observable universe. The idea that a Zero or Nothing phase changed into our large and complex universe is, to me, nothing less than pure magic!

Some interesting articles on Nothing appeared in the 19th November edition of the New Scientist Magazine.

Some facts about Zero taken from the WEB.

Zero is the only integer (whole number) that is neither positive nor negative.

In a sense, zero makes negative numbers possible, as a negative number added to its positive counterpart always equals zero.

When zero is added to or subtracted from a number, it leaves the number at its original value.

Zero is essential as a position holder in the numbering system known as *positional notation*.

Essentially, the ancients used an additive system for numbering. This can be developed into a positional one as suggested by the use of the abacus. But, as far as we know, the positional concept historically emerged in only four locations:

Babylon c.2000 B.C.E.

China around the start of the Common Era.

The Mayan astronomer-priests between the 4th and 9th centuries C.E. India.

There are many sources in Europe and the pre-Islamic Levant that attribute the Arabic numerals to India. The earliest depiction of them in English, "*The Crafte of Nombrynge*" (c.1350), correctly identifies them as "teen figurys of Inde." However, there was some speculation for a Greek origin for the ten "Arabic numerals" back to the 16th century Europe. It is now accepted that this was incorrect.

Barry Bates

Joining the Email Group

Send an e-mail to: **iwpcusers-subscribe@yahoogroups.com** with "join" in the subject line.

All members are encouraged to join this group (which costs nothing and is private to club members) in order to keep in touch with events and to join in with the discussions.

You can also keep in touch by regularly visiting **www.ipcug.org**

QR Codes

Those of you who attended Denny's talk in December will already recognise what the image of black and white squares halfway down page 2 is. For those of you who did not attend, this is a QR code.

Introduction

The QR (Quick Response) code is a two dimensional barcode which can hold considerably more data than the simple one dimensional bar code we are used to seeing on products we buy at supermarkets. The QR code was developed in 1984 by the Japanese company Denso Wave to track vehicles during the manufacturing process. In order for it to gain widespread acceptance the company does not exercise any patent restrictions, and so the codes can be freely used by anyone.



So why is something initially designed for the car industry appearing on page 2 of HotKey? Since the QR code can store any textual data, then it has many uses, in part only limited by a users ability to decode the code. Increasingly mobile phones are coming equipped with QR code readers, so many of us can read the codes.

Uses

In one of the more common uses, the code contains the URL of a webpage. Take a picture ("scan") of the code with your phone and the phone will automatically load the webpage. Advertisers in particular have spotted the opportunity, and if you open any magazine on many adverts you will see a QR code, scanning it will take you to a page relating to the product or manufacturer. In his talk Denny explained to us that the IW council will soon start putting these codes on the planning notices we see by the side of a road when someone has applied for planning permission. Scan the code and your phone will open the relevant details on the IW councils website.

There are however other uses for the code. They can be used to store someone's contact details (such as name, address, phone number, email, address, business organisation, etc). Scan the code and your phone will ask if you want to store the details in your address or contacts list. Similarly you can store calendar information, which when scanned can be automatically added to your mobile phones calendar. One of the more interesting uses, if you have an Android phone, is that the QR code can store the SSID and password of a WIFI network. Scan the code and you will get connected to the WIFI network, without the need to enter any password details, this could be especially useful for WIFI zones in pubs and cafes for instance.

Not all uses relate to mobile phones. We should not forget that the QR code was

originally developed for a use totally unconnected with phones, and QR codes will crop up wherever there is a need for exchange small amounts of data electronically. We will see them appearing on tickets for theatres, and other events, on luggage tags, and also I'm sure book tags in libraries.

How to create a QR code

So how could you generate a QR code? The simplest method is to use one of the online forms. Type “qr code generator” into Google, and you will get many possibilities, one of the ones I like best is goqr.me because it allows you many options, colour, size, error correction level etc. Another one to look at is www.qrstuff.com.

There are also standalone programs you can use, and I have included one called QR-Paint on this months month disk.

Lastly, the code generation can be integrated into other programs directly.

Technical details

QR codes are squares, with an equal number of rows and columns. There are a fixed set of 40 QR code sizes: from 21 to 177 rows / columns, increasing in steps of four. Each configuration is called a version. The more rows/columns, the more data the code can store. Note however that not all readers may be able to decode the higher versions. The code at the start of this article is an example of a version 1 code, the example to the right is a version 9 code, made up of a grid of 53 rows & columns.

QR codes include error correction, so that data can be decoded even if the QR code is dirty or damaged. The higher the error correction level, the less the storage capacity. Four error correction levels (L, M, Q, H) are available to choose between, the choice depending upon to the operating environment and the amount of data needed to be stored. Level Q or H may be suited to a factory environment where the QR Code gets dirty, whereas Level L may be OK for clean environment. Typically, Level M (15%) is most frequently selected.



Version	Size	Character capacity (alphanumeric)			
		L	M	Q	H
1	21 x 21	25	20	16	10
2	25 x 25	47	38	29	20
10	57 x 57	395	311	221	174
40	177 x 177	4296	3691	2420	1852

The last point to cover is what physical size should the QR code be? Each of the three QR codes in this magazine are different sizes. The answer is that there is no predetermined size, how large the image is depends upon the resolution of the medium it is on, the resolution of the device expected to scan it, and how far away you expect the scanner and the code to be. In fact the codes on page 2 & 10 are probably about the correct size, whereas the code on page 9 is probably much larger than it needs to be, it could probably be half that size and still be readable.

For more details see www.denso-wave.com/qrcode/index-e.html

David Groom

Cover Disk

New this month

BlueGriffon - is a new WYSIWYG content editor for web pages. Powered by Gecko, the rendering engine of Firefox 4, it's a modern and robust solution to edit HTML in conformance to the latest web standards.

PhotoScape – A feature rich freeware image editor which although having a slightly quirky menu, is worth investigating for the range of features offered. It supports RAW, as well as all other major image formats from JPEG and PNG to animated GIFs. It comes with prebuilt templates for users to create photo collages, fumetti, and Web comics, and has a standard set of red-eye removal, light/shadow, and contrast-editing features.

Foxit Reader - Foxit Reader is a small, fast, and feature rich PDF viewer which allows you to open, view, and print any PDF file. Unlike other free PDF readers, Foxit Reader also includes easy to use collaboration features like the ability to add annotations, fill out forms, and share information with social networks. Foxit Reader has a small footprint that starts up instantly, renders PDF files quickly and uses very little memory.

There will also be some programs relating to Steve Sutters talk given at the January meeting.

QR-Paint - see page 10

Other Changes

Firefox, Adobe Reader, AdAware, AVG, CCCleaner & Spybot have all been updated to the latest versions

The Latest in Web Email

Web-based email had its genesis at the same time the Web exploded into popular consciousness, in the mid-1990s. Compared to using an email program that resides on your own computer, called an email client, with Web-based email or Webmail you use your Web browser to connect to a server of a Webmail provider and exchange messages that way.

The main advantage is convenience. With Webmail, you can send and receive email from any computer, smartphone, or tablet wherever you are. The main disadvantages, which are less pronounced than they used to be, are slower speed and fewer features. Some Webmail providers offer the option of also exchanging email using an email client.

The most popular Webmail services are free and ad-supported. Some offer extra services for a fee, such as email client access or dispensing with ads. With almost all Webmail services, virus scanning is included.

The three most widely known Web email services today are Gmail from Google (mail.google.com), Yahoo Mail (mail.yahoo.com), and Windows Live Hotmail from Microsoft (mail.live.com), with AOL Mail (mail.aim.com) being another major player. Other lesser known services have created a splash lately and depending on your needs may also be worth a look.

Many Internet service providers (ISPs) also offer Webmail as an option for their subscribers. This can be a convenience if you typically use your ISP's email servers in conjunction with an email client but want to access your email through the Web on the road.

Two recent surveys shed interesting light on specific Webmail services and the types of people using them.

The Web site About.com (www.about.com), owned by the New York Times Co., recently published the results of its 2011 Readers' Choice Awards (awards.about.com) for free Webmail services.

Among the big three, Gmail not surprisingly came up way ahead. It was ranked as the top service by 21.73 percent of respondents. Yahoo Mail was a distant second at 6.95 percent, and Windows Live Hotmail received 4.83 percent of the votes.

The big news though was that two lesser known services topped all of the big three services this year. Zoho Mail (mail.zoho.com) was ranked the best Web mail service, garnering 34.15 percent of the votes, and GMX Mail (www.gmx.com) was second with

32.34 percent. Last year in About.com's survey Zoho Mail was only in fifth place with 6.83 percent of the votes and Gmail was way ahead of the pack with 45.50 percent.

Unlike many other Webmail services, Zoho Mail is targeted primarily toward business users, though it does provide free access for personal use.

The polling company Pole Position (pollposition.com) recently published the results of its most recent survey of Webmail services, though it mentioned by name only Gmail, Yahoo Mail, and AOL Mail.

Gmail was ranked the best by 22.8 percent of respondents, Yahoo Mail by 20.2 percent, and AOL Mail by 12.1 percent. The demographic breakdowns are interesting as well.

Republicans choose the user friendly, feature-poor, and relatively slow AOL Mail as the best Webmail service. Democrats ranked it by far as the worst. Democrats and independents both chose Gmail as the top service.

Young people, ages 18 to 29, also preferred AOL Mail, perhaps because of the popularity of its sister program, AOL Instant Messenger (AIM), among young people. People ages 30 to 44 preferred Gmail. Those 45 to 64 picked Yahoo Mail, perhaps because it has been around the longest of the three and they're most familiar with it.

About.com also ranked email clients based on reader votes. On the Windows side, surprisingly, the top program by far was Opera (www.opera.com), receiving 76.45 of the votes. Mozilla Thunderbird (www.mozilla.org/thunderbird) was second at 13.37 percent and Microsoft Outlook (office.microsoft.com/outlook) was third at 5.47 percent.

Opera is a free program that combines a Web browser with email and other Internet tools, including a client for downloading files via BitTorrent, a robust and popular file-sharing system that has been implicated in the illegal transfer of copyrighted materials. Opera is especially popular in Eastern Europe.

On the Mac side, the email program built into Mac OS X, Mac OS X Mail, was ranked the best by About.com readers, with 53.28 percent of the votes. Mozilla Thunderbird (www.mozilla.org/thunderbird/all.html) was second with 22.63 percent and Microsoft Outlook for Mac (www.microsoft.com/mac/outlook) was third at 11.68 percent.

Despite the increasing popularity of social media sites such as Facebook and Twitter, email remains an extremely widespread way of communicating. Various estimates have around 30 billion legitimate (non-spam, non-phishing, non-virus) emails sent in the world each day.

Karen Hammond

What's New With Office Suites

If you buy a new PC, laptop, or netbook computer today, it probably comes preloaded with Microsoft Office 2010 Starter Edition. This is a significantly limited, advertising-laden version of Microsoft's suite of productivity programs, Microsoft Office.

Office 2010 Starter Edition includes only Word and Excel. Missing are PowerPoint, Access, Publisher, Outlook, and OneNote. Furthermore, the versions of Word and Excel that Microsoft includes are scaled down from the regular versions, and they force you to view advertising while working on your documents.

This continues the trend of PC makers providing ever more crippled versions of Microsoft's productivity software with new PCs. Not long ago, most new PCs came preloaded with Microsoft Works, which included a complement of basic programs that didn't subjugate you to advertising while you worked. Before this, many PC makers offered a full version of Microsoft Office.

You do have the option today of upgrading a new PC to one of the full, ad-free versions of Microsoft Office, either before or after you buy the PC. This is made easy because what's actually included on the PC is the full version, and what you obtain when upgrading is a product key -- a combination of letters and numbers -- to activate the full version.

This of course costs, and despite just about everything else in the computer world decreasing in price over the years, Microsoft continues its longstanding practice of premium pricing.

The upgrade to Microsoft Office Home and Student 2010, which includes the word processor Word, the spreadsheet program Excel, the presentation program PowerPoint, and the information manager OneNote, typically costs \$120. Its licensing, however, prohibits installation for business, nonprofit organization, or government use.

The upgrade to Microsoft Office Home and Business 2010, which includes the previous programs and adds the e-mail and calendar program Outlook, typically costs \$200. And the upgrade to Microsoft Office Professional 2010, which includes the previous programs and adds the database program Access and the desktop publishing program Publisher, typically costs \$350. Volume pricing is available to organizations.

According to anecdotal evidence, including discussions online involving computer professionals as well as laypeople, more and more computer users are refusing to buy into such premium pricing, and excellent alternatives are available.

Two basic types of Office alternatives exist: 1) Traditional office suites you download and install on your computer's hard drive, and 2) "Cloud" office suites stored on remote

servers that you use over the Internet through your Web browser.

The most talked about traditional Office alternative these days is LibreOffice (www.libreoffice.org). This is a descendent of OpenOffice (www.openoffice.org), which is still available and which became prominent in the early 2000s when Microsoft archrival Sun Microsystems promoted it as a free alternative to the expensive Microsoft Office.

LibreOffice is not only based on OpenOffice but continues its free tradition. It's made available by The Document Foundation, a nonprofit organization that receives funding from such companies as Novell, RedHat, Canonical, and Google.

Available in versions for Microsoft Windows, Mac OS X, and Linux, LibreOffice consists of a range of Microsoft Office-compatible productivity programs, including a word processor, spreadsheet program, presentation program, database management program, drawing program, and math formula program.

As of September 2011, The Document Foundation estimated that LibreOffice had 25 million users worldwide.

The leading cloud office suite is Google Docs (docs.google.com). Working within your Web browser, you can access a word processor, spreadsheet program, presentation program, drawing program, and forms program for free. You can use any Web browser, though Google's own Chrome browser works best.

Google provides you with free storage of up to 1 gigabyte of data, with additional storage carrying fees. Other limitations are a document size of 1 gigabyte or less, embedded image size of 2 megabytes or less, and spreadsheets limited to 256 columns, 200,000 rows, and 99 sheets.

The biggest positive to Google Docs is its facility for creating and editing documents online while collaborating in real-time with other users. It's also very useful for working on documents using different computers from different locations. Conveniently, it automatically saves documents to prevent data loss.

The biggest negative to Google Docs is its relatively poor compatibility with Microsoft Office documents. It's also not as feature rich as LibreOffice. Further, Windows and Linux users report better experiences overall than Mac users. As with all cloud offerings, Google Docs requires you to be connected to the Internet in order to use it.

More and more, the name of the game these days with digital devices is choice.

Reid Goldsborough



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