

Issue 216

WINTER 2022

ISLE OF WIGHT PC USER GROUP



HOT KEY

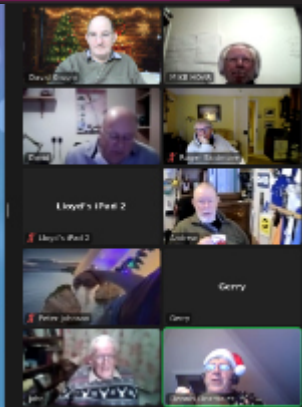
January 2022

IWPCUG Weds 1st Dec 2021

Colin Baker & Tom Baker



Both actors played which iconic character on British Television

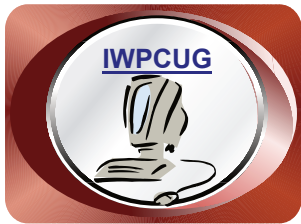


The above image is a screen shot of our December Zoom meeting showing one of the questions in Denny's Christmas Quiz, along with some of the attendees.

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The Isle of Wight Personal Computer User Group

We welcome anyone who has an interest in computers and related technology and what you can do with them.

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

Membership is £12 per annum

Our meetings are normally held on the first Wednesday of each month from 7.00 to 9.00 pm. Until further notice these will be held online via Zoom.

Visitors are always welcome.

If you would like to know more about us, you are most welcome to come along to one of our meetings, or you can contact one of our Committee Members listed on page 3.

The Club web site address is www.iwpcug.org

We also have an e-group discussion area on

Groups.io: <https://groups.io/g/iwpcug>

Details of how to join are on page 4.



FUTURE MEETINGS

<u>Date</u>	<u>Subject</u>	<u>Speaker</u>
12 January	Old Computers	Daniel Buttery
2 February	AGM; followed by Q&A session	
2 March	TBA	
6 April	TBA	

ISLE OF WIGHT PC USER GROUP COMMITTEE

Chairman : David Groom

Secretary : Susanne Bone

Treasurer : Mike Hoar

Membership and Database Secretary : Roger Skidmore

Committee Member : Steve Sutters

Treasury Supervisor : Phil Rogers

Note

Contact details removed prior to
publishing on the internet

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

Please contact Steve Sutters, or any committee member, with your ideas.
If necessary we may be able to find a speaker for your subject.

Chairman's Report

I hope you all had a good Christmas, and on behalf of the committee I wish you a happy new year.

A look at the calendar on page 2 will show it is a little empty, but we hope to fill this soon.

Our AGM will be held at the February meeting, the notice for the AGM is on page 6. This will be held via Zoom and we will ask for voting in the usual manner by a show of hands. If you would like to put your name forward for election to the committee please let one of the committee know over the next few weeks.

The committee have again decided to waive the subscription for the year starting 1st January so you will all automatically have your membership renewed. If at a later stage during the year we believe it necessary to reinstate the subscription we will notify you.

David Groom

Joining the Email Discussion Group

Send an email to: iwpcug+subscribe@groups.io, you will receive a confirmation email, follow the instructions in that email, and then wait for your approval request to be approved by one of the moderators.

All members are encouraged to join this group (it's free and private to club members) so you can keep in touch with events and join in with the discussions.

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

Which SSD?

Now we're all getting used to SSD's it's time to sit back and have a think about them. See:

<https://www.maketecheasier.com/buying-ssd-guide/>

<https://appuals.com/ssd-buying-guide/>

<https://crystalmark.info/en/software/crystaldiskinfo/> (Full or portable versions)

I'm an obsessive back-up freak, using two methods – copying data to external SSD using “SyncBackFree” or doing a whole disk clone using either Acronis True Image (paid for) or more often now MacriumFree (see previous article).

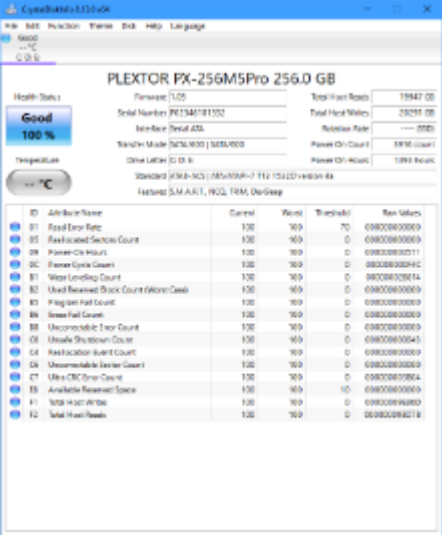
One thing has struck me is the speed of backup. I have used 256Gb SSD's which are about two-thirds full of goodness knows what. But the time taken to clone them (using Acronis) falls into two brackets – fast (about 10 minutes) and slow (about 45 minutes).

SSD's seem to come in two types – expensive branded with DRAM, and cheap unknown brand without DRAM. When cloning I like to have different brand names to minimise the possibility of cloning the wrong way round, hence having ended up with a few cheap ones simply because of the different names.

The actual day-to-day performance doesn't feel very different, probably because they all share a good read speed, but something is slowing down the writing performance during cloning. I suspect it's the absence of DRAM controller chips.

The above web sites guided me to Crystalmark/info. “Info” will let you into some secrets of your SSD, and “Mark” will sort the fast from the slow.

My best SSD is by Plextor, and even though it is 7 years old it scores the best in every respect. (I don't understand everything in the table).



ID	Attribute Name	Current	Value	Threshold	Raw Value
01	Read Error Rate	100	100	70	000000000000
02	Reallocated Sector Count	100	100	0	000000000000
03	Power-On Hours	100	100	0	000000000011
0C	Power Cycle Count	100	100	0	00000000004C
01	Write Leveling Count	100	100	0	000000000014
02	Used Reallocated Sectors Count (Error-Corr)	100	100	0	000000000000
03	Program Fail Count	100	100	0	000000000000
04	Sense Fail Count	100	100	0	000000000000
05	Uncorrectable Error Count	100	100	0	000000000000
06	Unusable Shutdown Count	100	100	0	000000000000
0A	Media Wearout Indicator Count	100	100	0	000000000000
0B	Unrecoverable Bit Error Count	100	100	0	000000000000
07	Ultra-IO Controller Count	100	100	0	000000000000
05	Available Reserved Space	100	100	10	000000000000
01	Total Host Writes	100	100	0	000000000000
02	Total Host Reads	100	100	0	000000000018

Roger Skidmore

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 2nd February 2022 at 7:00 PM via Zoom.

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. Consider matters arising from the previous AGM, held on 3rd February 2021, (<https://www.iwpcug.org/secure/minutes/AGM21v1.2.pdf>).
2. Receive reports:
 - 2.1 Chairman
 - 2.2 Treasurer, including approval of the Club Accounts
 - 2.3 Secretary
 - 2.4 Membership Secretary
 - 2.5 Other activities: Computability, HotKey, Website, Egroup, Facebook
3. Elect a Chairperson, Treasurer, Secretary, and Membership Secretary.
4. Elect other Committee members (up to a maximum of eight persons).
5. Set the Annual Subscription.
6. Appoint an Independent Examiner.
7. Any Other Business.

Quick Tip

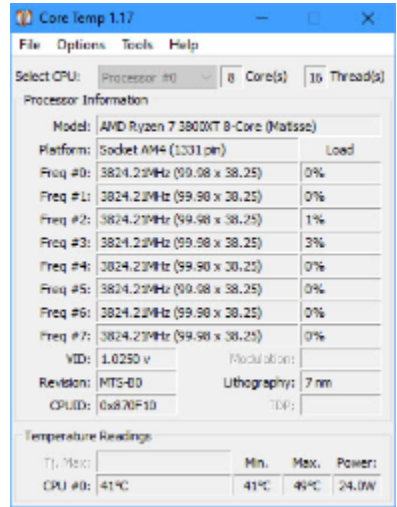
I got fed up with the news and weather widget on the Windows 10 taskbar popping up whenever I accidentally hovered the mouse over it. I tried looking for settings in the widget, but initially could not find any. A quick look on Google showed that to control the operation of this widget you need to right click on the area of blank space on the taskbar and then move to “News and interests”. Here you will find the option to either turn of the widget completely, or to disable the “open on hover” so that you actually need to click the widget to display its feed.

David Groom

In Praise of Fans

I know there is a great eco-movement towards silent computers with silent power supplies and near-silent processor fans but I want to spare a thought for noise. My go-faster computer has a pretty good CPU cooler but it is audible, and as it is intelligently controlled it runs faster when the CPU is working harder. It's important to know if things are running amok on your computer so the CPU fan can offer an important warning.

Task Manager can tell you what is taking up resources but only if you know to look. There is also Core Temp to help, but just hearing your CPU fan (if you've got one) is a first step.



Roger Skidmore

Duplicate Files

A few weeks ago I had the suspicion that duplicate files on my hard disk were taking up space. Although I still had a lot of free space on the disk, I wanted to declutter it. With less files on the disk antivirus checks and drive backups should speed up. But how could I identify these duplicate files? Google informed me that the free version of CCleaner has a duplicate file finder, and this identified files totalling 25 GB which were duplicates!

Most of these were my own fault. A few years ago I had a problem with my user account on Windows 10, and had to set up a new user for me to use. I copied the contents of My Documents from the old user account into the new user account, but I never got round to deleting these files from the old account. Having identified the duplicates I could now delete them.

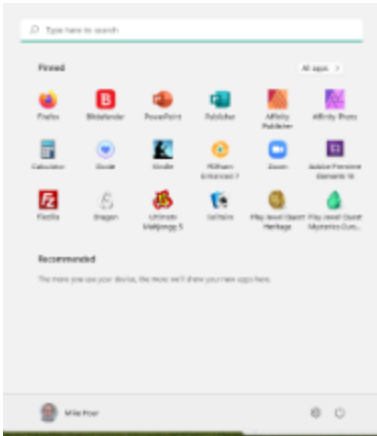
I was interested to see however that a few of the duplicates were not my fault. There were duplicate files used by software programs on the computer. Initially I thought these duplicates must have been the result of software updates, but then I noticed that in most instances the creation date of the files were quite recent, and that both copies of the file had the same date. Quite why programs such as Adobe Reader, Microsoft Edge, and OpenShot Video editor require duplicates of the same file is beyond me.

David Groom

Windows 11 - Does it Live up to the Hype?

The short answer is Nah, not quite.

In October I ordered a new bespoke desktop PC and as Windows 11 had just been released I decided to have it installed from the start. Being a new machine, my first task was to install my software. I had, of course, spent 2 days backing up everything, checking I had all the download files or DVDs etc. Being a bit of an IT nerd, I have all my software details including product numbers, user ids and passwords saved in a database accessible to several devices via my home network. Even so it took the best part of 2 days to get everything installed and setup. ALL the software worked without any problems. The next task was to setup the Windows environment the way I wanted it.



This is where the first major difference between 10 and 11 is noticed. The Start menu has totally changed and so has its position. I definitely did not want the Windows Start menu coming up dead centre of the screen. However, I quickly found the switch in the Personalisation settings which moved it to its correct position on the bottom left. Unfortunately, there is no way to retrieve the old Start menu layout. You are stuck with Windows giving you 18 positions for your commonly used software and then others on successive PAGES you must browse through

using a VERY small browse arrow. It does list recently installed or used apps below your menu and a little button does open the alphabetic app list. Not very practical and my only choice if I want all my usual apps ready to to open at a single click of the mouse is to fill the taskbar with icons. This goes against 25 years of meticulously keeping my taskbar clear (to increase performance).



The start button still opens the start menu

The bottom section usefully shows you and your name – just in case you forget. At the right is the log out/ log off button and beside it is the Settings button. You can also position folders here, such as documents, music pictures etc.

The settings app is much the same as in Windows 10, just with more settings, with more alternatives. How much is due to my new PC and how much to Windows I am not sure, but start up time is about 15 seconds, and I do have quite a few services embedded in the start-up routine, such as the web server and database server. Setting up my printers was a doddle, although setting up the printer management software wasn't. Nothing to do with Windows just the software demanding a particular printer driver and not the one I installed at set up (which worked just as well).

Having got used to Windows 11 on the PC and not experiencing any problems I decided it was time to upgrade my laptop (bought 1 year ago). It is a moderately high end ACER which has more than enough CPU RAM and disk capacity for Windows 11 (also has the security chip demanded by Microsoft) Incidentally this added £2 to the build cost of my PC and delayed delivery by 3 days – in short supply.

I repeated my backup and survey procedures (2 days work) and bit the bullet and visited the web site to download and install Windows 11. Despite having 56Mb fibre broadband the download and install took more than 8 hours. Had to leave the laptop on overnight to finish the job. This time it was done as an upgrade instead of an install and all the software was there. I did have to reconfigure the web server and database server but everything else worked fine after the installation.

So was it worth the effort? All the work I did for the PC I would have had to do anyway but it did take a little more time googling how to do some of the work setting up the start menu.

I'm still getting used to the new Start behaviour which I do not think is an improvement and many of the hyped functions such as widgets and better access to the app store are not things I use. I've not really seen any improvements, but hey it was free. I have no measurements, but it feels as though starting up is quicker and in time I will probably even get used to the new Start menu.

Mike Hoar

Why I use a Database rather than a Spreadsheet

I think I'm a lists sort of person; everything you can think of belongs to another category so shares a commonality with its kith and kin. Christmas card recipients belong to friends and relatives but not all friends and relatives get a Christmas card. Friends and relatives probably belong to the human race.

DVD's on my shelf belong to the category of all DVD's, and so on. How do I keep track of my Christmas card list and my DVD's? OK, and IW PC User Group members. I could use a spreadsheet - seems easy enough to just fill the boxes along a horizontal row - that's your data but then what do you do with your data?

Trick is, to turn data into information. Information tells you something about your data. Not only that your DVD's are a sub-set of all the DVD's there ever were, but that they are my DVD's and just possibly some are classical music and some are pop. We haven't sent out renewal notices for IWPCUG membership*, but we used to, and some had paid their subs and some hadn't. Two subsets of data which tell us something about our membership.

As our data turns into information, we need ways of viewing the information about our DVD's (or members) and a database will allow us to see and edit this information as a visual card index - not so easy with a spreadsheet. When you have complex sets of information such as customers and invoices, or even more complex, students and courses, spreadsheets (good for calculations) lose their functionality in favour of databases.

But you don't get a database (Access) with the basic Microsoft Office which is really annoying, especially as it tempts people to use (or mis-use) Excel. And if you do, initially it's a little more difficult than Excel because you have to lay out your individual information categories (fields) in advance. But once you've done that it's plain sailing (well, nearly).

Libre Office, which is free, contains a database ("Base") from the get-go, as does Ability Office. It's a bit late for Christmas this time but you could start on your DVD/CD collection (if you still have any).

Roger Skidmore

*One day when we get back to normal we may send out renewals again...

Data Furnaces

Despite a comparatively mild winter so far I'm sure most of us have resorted to some form of heating in our homes. With steeply rising prices of gas, and concerns about carbon footprints, how we heat our homes is becoming a "hot topic".

In my relatively small office I quite often have three desktop computers running, these are not particularly modern machines. The heat generated by the processors and the power supplies does make a difference to warming the room. All of the components on a computer motherboard create heat as the computer works. In fact all of the electricity a computer consumes is turned into heat. The reason for this is the first law of thermodynamics which states that energy is always conserved. This is common to all electrical devices – if the electrical energy consumed isn't being stored or transferred to somewhere else as some form of energy then it has to instead end up as heat. This is why electrical and electronic devices get hot.

On a much larger scale we know that cloud computing data centres generate large amounts of heat, in fact some are deliberately sited in northern latitudes so the cooling effect of the ambient air minimises the need for fans and other artificial cooling.

So on the one hand we have people spending money to keep their homes warm and on the other we have companies spending money to keep their data centres cool. If only there were some way of utilising the heat generated by data centres in a more productive way.

In fact an article in the Sunday Times at the beginning of November indicated that at least one company was working on such a solution. Thermify (<https://thermify.cloud>) is a new company based in South Wales. They have developed a heater (which they call a "HeatHub Boiler") comprising multiple Raspberry Pi's, configured in such a way that they can perform cloud computing tasks for clients of Thermify. A heat exchanger within the unit takes the heat from the Raspberry Pi's to heat a households radiators and hot water. According to the Sunday Times these heating units will cost approximately £2,500 and houses will have to pay a monthly fee of £50 for the system. If this is true then these costs compare favourably to the costs of a new boiler and the cost of fuel whether it be gas, oil or electric.

Prompted by the article I did a little more research and it would appear that Thermify is not the first company to think of this application. A research paper (<http://www.iwpcug.org/url/DF>) published by Microsoft and the

University of Virginia in 2011 explored this possibility, and used the term “Data Furnace” to describe such heating units (“furnace” is the American term for what we call “boilers”).

LeafCloud, a similar project to Thermify, appears to be already working in the Netherlands (<https://www.leaf.cloud>), though the hardware appears to be based on more traditional computing hardware using Xeon processors and SSD’s.

A slightly different approach was taken by Dutch company Nerdalize, which built the distributed data server into radiators which could be hung on the wall. Sadly it appears this company went bankrupt in 2019.



One issue that I can see is how the company's managing these new mini data centres will be able to spread computing demand throughout the year. In order to generate enough heat in every home a unit is installed in during the winter they will need to be able to perform quite a lot of computing tasks. Come the summer, when heating is not required, the number of computing tasks able to be performed will be a lot less, unless the heater units have some way of dumping their heat outside of the house.

It will be interesting to see whether such units do in fact become commonplace because it certainly seems to me to be an innovative and quite sensible solution. It may well be that in practice the constraints of having an adequate power supply for these units and an adequate broadband connection from the units back to main data centre limits their real world use, if so it would be a pity.

More information can be found at <https://datafurnace.org>

David Groom

A Month With Linux Mint Xfce

My mums Windows 7 pc was getting very slow after years of use. Its dual core processor and 4Gb of RAM never made it fast but even with her patience of a saint she was frustrated when it took several minutes to load a web page. Years ago I tried and gave up with Linux mainly because I found it impossible to use with a TV tuner card. My mum only needs a basic computer use so I thought why not try Linux instead for the following reasons.

The light weight versions will run on low spec. pc's. Would be great if this could lead to less land fill with old pc's being thrown away.

It's a Free O.S.

It's a more secure O.S. than Windows. Linux has fewer users. It has also been the domain of geeks that tend to be more computer-literate. Compared to Windows, it's not nearly as big or easy a target.

No more Windows nag messages.

Linux is a lightweight system and Windows is crammed with lots of (I consider) unnecessary software. A lot of systems running on the background can make windows PCs sluggish. They also accumulate a lot of junk files with time. I get annoyed by pre-installed games in Windows for instance which I then delete.

There are so many Linux distributions (or distros) one is spoilt for choice. I wanted a simple distro that would run on a slower machine so chose Linux Mint Xfce. Started off by running it from a bootable DVD but this only gave a rough install. For instance I could not get VLC media player to run. I then installed it on a hard drive and VLC worked fine. I was impressed by how easily my HP laser printer was detected and drivers automatically installed. Using Firefox and Google Chrome web browsers is just the same as on Windows and Adblock works even better by blocking ads on TalkTalk mail which didn't happen using Windows. Overall I have found the main challenge is just getting used to a different way of doing things than I'm used to with Windows. More work is required to customise a pc though and having to use the command line in the terminal to make changes would scare a lot of Windows users off. Scares me too when I read the instructions for some commands. Some would consider any Linux variant too steep a learning curve so probably not for anyone who finds using Windows hard enough and is incapable of or can't be arsed with learning a new way of doing things. A lot of hardware and software is incompatible with Linux or would need a Linux boffin to write the code for it.

So far I have managed to do everything I used to do on a Windows pc with the exception of sound recording. Audacity is free and popular for multitrack recording so I installed it but I have not managed to hear what I am playing. This is known as monitoring the sound going into the soundcard on my pc and no amount of changing the sound settings has enabled me to hear myself. I've even seen soundwaves on the screen with Audacity and heard them playing back but not whilst recording. The webcam microphone worked fine with Skype and Zoom. Also the sound for YouTube and VLC works fine so I don't know what is going wrong. Strange. Any ideas anyone?

Sound recording is probably not something my mum will ever do so I reckon Xfce would meet all her needs but I don't know if she will to adapt to the Linux way of doing things despite being a phone call away from I.T. support (me). However her first trial with Xfce went as I showed her how to email, surf the internet and use Skype in an evening. Worked so much faster then the old Windows 7 O.S.

There are some niggles left to iron out. The login keyring password box keeps popping up and it won't accept my password. A rapid click on the cancel button gets rid of it. On the subject of passwords I don't see the point of them if only one person is using a pc. I don't want hackers gaining access to my finance so welcome dual authentication when using PayPal but when opening non financial programs I can't see the point.

O.S. Comparison

Windows user- 'A lot of bloatware but world wide compatibility and works well out of the box'.

Linux user- 'Needs work to set up but is very customisable and results in a fast, streamlined O.S.'.

MAC user- 'Hey everyone look at my shiny new (overpriced) iphone'.

With apologies to all MAC users!

Stephen Sutters

Hydrogen - An Opensource Drum Machine

Hydrogen is an opensource electronic software drum kit available for download from hydrogen-music.org. Once installed it comes with seven sample demos so you can immediately hear its capabilities, and understand the various elements of the interface.

A drum loop consists of individual beats. You can construct a loop by placing drum beats in the pattern chart at the bottom of the Hydrogen interface (see back page). To hear the pattern, click the Play button at the top of the window.

By default, Hydrogen's beat chart gives you a pretty high-level view of a measure: there are four beats, with just half-beats in between. If you don't play drums or play with drum machines often, that might be enough to get you started, but you can give yourself more flexibility by increasing the resolution of the chart.

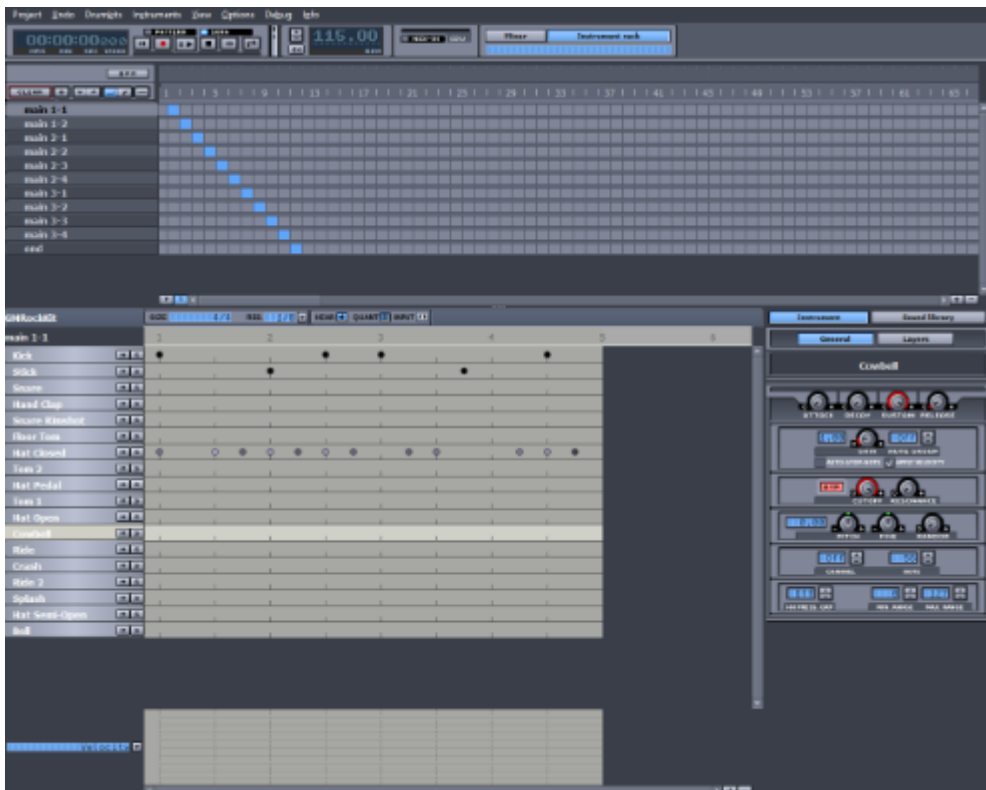
A pattern is a single entity within Hydrogen, and it's designed to be looped for as long as you need it to play. If you're just jamming, then you may not need much more than a single loop, but if you're creating a song with structure, then you can build many different patterns and string them together as a song. The top half of the Hydrogen interface displays patterns. The highlighted box represents the pattern you're currently creating.

To switch Hydrogen over to song mode, click the Song button at the top of the window. In song mode, Hydrogen loops over as many patterns as you have highlighted in the song matrix.

It's not uncommon to have one loop serve as an unchanging foundation, with new loops adding variation on top. For instance, you might want a steady kick drum beat through your entire song, but you want the ability to change the beats of the snare and hi-hat and to add in more cowbell to meet the demands of a producer who has a fever for more cowbell.

You don't have to be a drummer to have fun with the Hydrogen drum machine. Hydrogen has just one bank of sounds, but many more are available online. Using the Drumkits menu, you can import drumkits from Hydrogen's website, or build your own drumkits and import them from local files.

The above is a very shorted version of a longer article “Play the drums on Linux with Hydrogen” by Seth Kenlon available to read from <https://opensource.com/article/21/12/open-source-drum-hydrogen> under a CC-BY-SA licence.



The Hydrogen Drum Machine Interface - see page 15.

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