



Iceni Newsletter October 2024

Coronavirus Impact Covid-19.

If you wish to join us just follow the link or paste into your browser:-
<https://meet.jit.si/IceniComputerClubMeeting> and follow instructions to allow camera and microphone access. There is nothing to download or install. We still meet on the third Wednesday of the month at 7:30 p.m. via Jitsi.org Video Conferencing.

Our Next Meeting : Wednesday 16th October 2024 Dream Machine and Networking Gareth and Michael

At our next meeting Michael and Gareth will introduce and discuss Ubiquiti's Unifi line of Prosumer/SME firewalls, switches, wireless access points and Camera/NVR products. These range from small low cost "all in one" devices up to high performance individual devices suitable for small to large networks, all managed via a web and app based centralised software controller.

Our Last Meeting :Wednesday 18th September 2024 Telephony and VOIP BT landline changes. Porting Numbers – Duncan et al.

There has been a slow trickle of publicity relating to the switch-off of copper telephony services, originally planned for December 2025 and now delayed until January 2027. Not all the advantages and disadvantages are clear.

At the moment, landline phones, known as PSTN (public Switched Telephone Network) or POTS (Plain Old Telephony Service) are powered from the exchange down the copper pair. Early ADSL broadband comes down the same pair all the way from the exchange. Fibre to the Cabinet broadband comes on a fibre from the exchange to the green cabinet and then over the copper. Only Fibre to the Premises uses an optic fibre over the whole distance. In this case the copper pair will not be used and any telephony services will already be routed over the internet, so-called Voice Over IP, or VOIP, also known by the protocol SIP.

When the switch-off occurs, the power from the exchange will cease and all telephony will have to be VOIP. This probably also means the end of ADSL, but if so, the companies are keeping rather quiet about it.

When e-side copper is removed, Openreach in particular will save a fortune in electricity bills, battery and generator backup, and release huge amounts of valuable scrap copper.

One downside is that the power for the phone will now come from the customer's house rather than the exchange. In the event of a power cut, the phone will cease to work. The companies seem to have been assuming up to now that all customers who have been switched have

- 1) an existing broadband contract
- 2) a mobile phone as backup which is always charged
- 3) a mobile signal at their house and
- 4) they can understand the instructions when the new equipment is delivered.

A battery backup is available, but it may only last an hour and unless the customer is "vulnerable" there is a charge for it. Customers who have only a landline and no broadband will apparently be given a limited speed broadband just enough to work the VOIP phone, but it seems the details are not yet worked out.

OFCOM recommend that roadside cabinets have a four-hour battery backup, but won't enforce it.

This is an optical fibre connecting point installed by Gigaclear in Mistley. Effectively it bypasses the telephone exchange.



It seems customers are being given a choice of equipment, which may be supplied free of charge if they are being forcibly switched to VOIP, but possibly not if they opt for VOIP. One is in effect a cordless phone, but which connects not via a wired base station, but over the house's WiFi. Another is a small adaptor which connects to the WiFi and into which the existing analogue phone can be plugged. Most modern routers will have a telephony output socket, and if this is enabled, an analogue phone (or the entire network of wired house phone extensions) could be plugged into it.

How many phones can be powered without overloading the router is not clear. It is clear that not everyone will be capable of rewiring their phone extensions. Because a VOIP-connected phone is no longer identifiable to the emergency services, users need to update their details on their account at the telephony provider. Apparently, multiple VOIP phones attached to the same number can make more than one call at the same time, unlike analogue phones.

It is possible again for broadband and (VOIP) telephony to be purchased from different suppliers. However, although there are comparison websites for broadband, I have not found a site that compares VOIP offerings.

These seem to vary from offerings that keep your landline number but just divert it to a mobile, to all calls included packages with answering and virtual receptionist facilities suitable for a business. Some even offer a real human receptionist - for a fee. Others include phone calls up to a certain number of minutes. Working out which deal is best for any particular person could take a long time. Compare, for example, Andrews & Arnold (aa.net.uk) and Voipfone (voipfone.co.uk)

At the time of our meeting, it was not clear what arrangements were in place to move from a supplier that used one network infrastructure to a supplier on another. Moving from one supplier to another on the same infrastructure (BT to Sky, say) was already easy. Since then, OFCOM have introduced "One Touch Switch" which Vodaphone is already advertising as a feature of its offering! Other suppliers are saying they will buy out their rivals' early cancellation fees for customers who switch to them.

There was some discussion on the fibre packages available. Some suppliers install an underground "straw" and blow fibre up it; others something that looks like a regular cable. Fibre is also supplied as drop wires from overhead poles. It is connected initially to a box on the outside of the house. From there, a different fibre goes through the wall to the internal adaptor. This needs to be connected to a mains outlet, which could be awkward if they are on opposite sides of the room. The internal adaptor is in turn connected to a router (power needed again) and from then on connection is by network cables or WiFi as at present.

It seems we are going to see some interesting changes over the next year or so.

Hope this helps - I didn't take many notes, so this is my take on what I was planning to say. There may well be insights from the other members that I have forgotten but which ought to go in the newsletter.
Duncan.

[Ed. I haven't been able to spot any omissions apart from my addition below. If something important has been omitted let me know and I shall include it next month.]

I am personally rather unclear how arrangements will be made to retain your old phone number especially if some equipment like the Gigaclear box shown above does not connect to the exchange at all. Somewhere there has to be a number translator (server) to keep information on phone numbers. Also I don't know how network services like Callminder, Call Diversion and Call Waiting are being provided.

From a technical point of view it would be interesting to discover how what BT used to call the 21st Century Network (21CN) has been designed. Also blown fibre technology was invented by Mick Reeve and his team BT at Martlesham and I assume is a BT patent.

Apparently many of the redundant BT power cabinets are being modified for use as electric car charging points when they are in a suitable location.

I am very grateful to Duncan for the bulk of this very comprehensive report. It will be very interesting to see how the market plans out with all these companies offering different features and treading on each others' toes no doubt. I just hope we will still have a resilient, secure and reliable system at the end of it.

Peter

ICENI Future programme

2024	Subject	Speaker(s)
16 October	Dream Machine and Networking	Gareth and Michael
20 November	Video and Stills	All
18 th December	Party & Gadgets	All
2025		
15 January	Software defined Radio SDR	Duncan
19 February	3D printing, Octovision and RPI	Gareth and Peter
19 March	Operating System upgrades,	Gareth, Michael,

2024	Subject	Speaker(s)
	Windows, IOS, Ubuntu and Riscos	Steve et all.
16 April	Chrome OS	Gareth
21 May	AGM and Extras	All
18 June	Open	

The programme is open to changes as the year unfolds and topics may become more detailed.

MEETINGS WILL NOW BE HELD ONLINE BUT STILL ON THE THIRD WEDNESDAY UNTIL FURTHER NOTICE UNLESS OTHERWISE STATED..

Our Website and Email and Jitsi meetings

Our website URL is

<http://icenicomputerclub.org.uk>

Email to: iceni@woolridge.org.uk

The website is where you will find copies of the Newsletter from Previous years and also where you will find our Committee Members and future programme.

I am open to suggestions on what people would like to have included in the website.

JITSI Meetings

I am repeating this here from the top of the document.

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