



Iceni Newsletter November 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 20th November 2024 Video and Stills -All

Tonight is a chance for you to show video clips or still shots from holidays, days out or whatever you would like. It is a firm favourite in our programme and is usually a very relaxed and interesting evening.

Our Last Meeting :

Wednesday 16th October 2024

Dream Machine and Networking - Gareth

At our last meeting Gareth presented the Unifi Network line of products from Ubiquiti, a company initially founded by an ex Apple employee to bring long distance wifi to rural areas.

As a result of this Ubiquiti's products were typically split into 2 product lines:

- * Unifi - Prosumer/SME networking
 - Initially Wireless access points and switches, then gateway/firewalls.
- * UISP - WISP (Wireless ISP) gear - popular in the USA
 - MIPS based low power devices for long range wireless ISP usage,

typically on remote towers.

- Wireless access points and antennas
- Switches
- Routers with carrier functionality e.g. dynamic routing.

At the meeting we focussed on the Unifi network line, which Gareth first started using for work events of large numbers of staff in hotel and conference venues.

The Unifi lineup consists of Wireless Access Points, gateways/firewalls, switches, and a number of "all in one" devices combining a number of these features into a single device with the wireless access points also supporting mesh operation to extend wifi coverage.

The budget all in one unit is called Unifi Express and is tiny at 98 x 98 x 30 mm (3.6 x 3.6 x 1.2") and relatively low cost at £103 + VAT.

This combines a Wifi access point, gateway/firewall and Network Controller into a single unit with a WAN port and single ethernet LAN port.

The integrated Network controller provides a web configuration interface (and mobile app) but also allows adopting additional Unifi devices for management, for instance switches and additional access points.

It also supports a number of VPNs as both client and server, but performance is quite limited for VPN, at 40-50Mbps.

Gareth has a Unifi Express to use when camping (where power consumption is a concern, and because it is USB-C powered) and also when travelling for work where he uses it to provide a wireless network in hotels that route all traffic via home internet.

It is however a little slow and Unifi have faster home firewall products such as Cloud Gateway Ultra although this requires separate wireless points.

Gareth's home network is also Unifi based and uses a Unifi Dream Machine Pro as the router/controller, with additional network switches and wireless access points providing network coverage for both the home and home office.

In the house he has one wired access point downstairs, and a wireless mesh unit upstairs as coverage was initially poor in the far corners of the house and further access point in the office.

The Unifi Dream Machine range is much more powerful (and rack mounted) with:

- * Rack mount Network Controller and Security Gateway
- * Quad Core ARM and 4+ GB RAM, 16-128GB Storage (plus HDD bay for Protect camera footage storage)
- * More powerful IDS/IPS features than Express, much faster VPN performance, hundreds of Mbps
- * Supports 100+ additional Unifi devices e.g. switches, access points from management perspective, 1000+ clients e.g. Pro Home / Business use.

As well as being a network router this can also run Protect (for CCTV and with a Hard disk bay for storing recordings), Talk (proprietary VoIP platform), Access (building/door access control) and more.

The UDM line is able to route multiple Gigabits with firewalling enabled, has 10Gb WAN and LAN ports, and has 300+ Mbps VPN performance supporting IPSEC, OpenVPN, Wireguard and Unifi's own Teleport.

Gareth uses Teleport when out and about and if he ever needs to access things at home, rather than expose any applications publically.

Teleport is proprietary on Unifi equipment with Android, iOS, Windows, Mac and Linux clients - although it can be thought of as "one click" Wireguard as it uses wireguard under the hood.

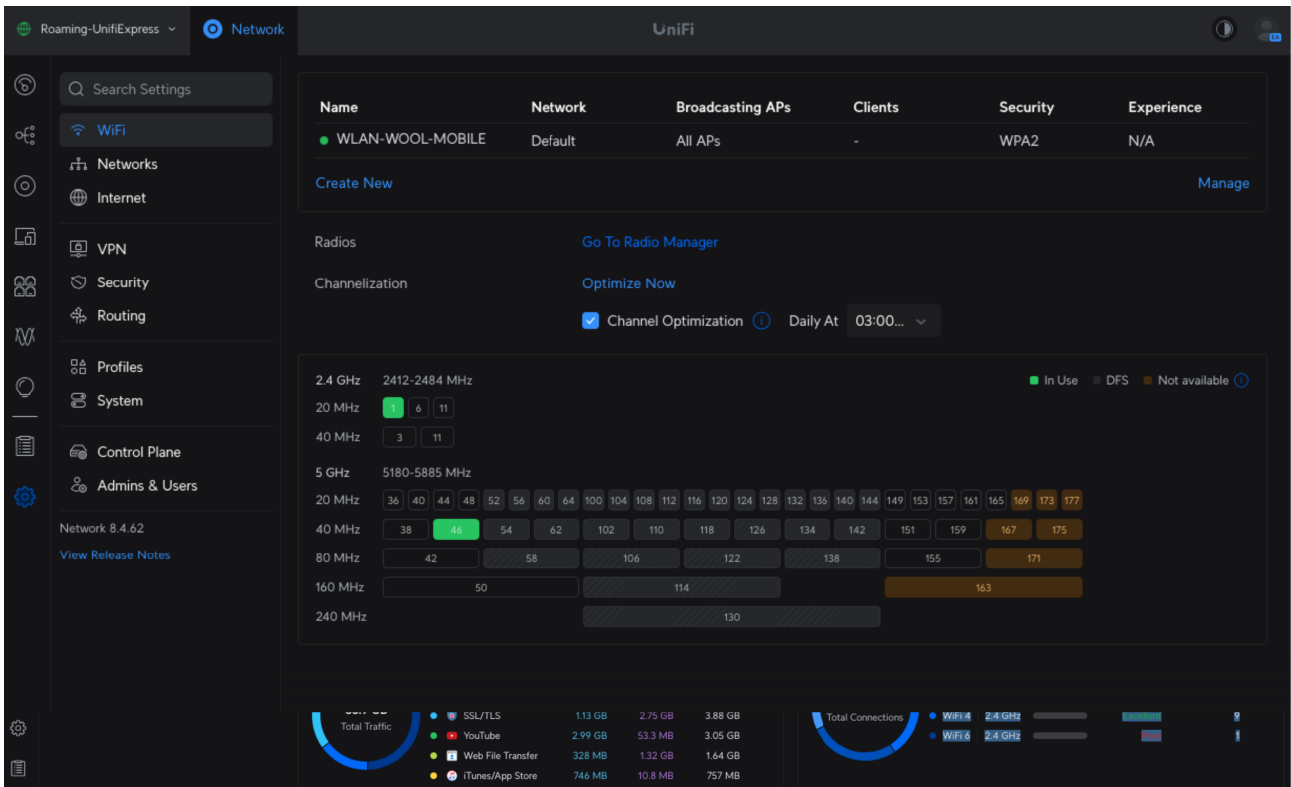
If you have multiple sites in a work setting, or to connect 2 family homes for instance, Unifi also has a feature called "Site Magic" which is "one click" site to site VPN which again is based on wireguard.

Gareth has used this to allow ease of performing IT support to parents and select friends where he's recommended or installed Unifi.

After introducing the lineup Gareth gave an demo of the Network controller web and mobile interfaces and how physical and wireless networks, firewall rules, VPNs etc are set up.

Two screen shots are shown here.

I must thank Gareth both for his excellent presentation and for supplying me with the report and screen shots.



ICENI Future programme

2024	Subject	Speaker(s)
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, Windows, IOS, Ubuntu and Riscos	Gareth, Michael, 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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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.

End