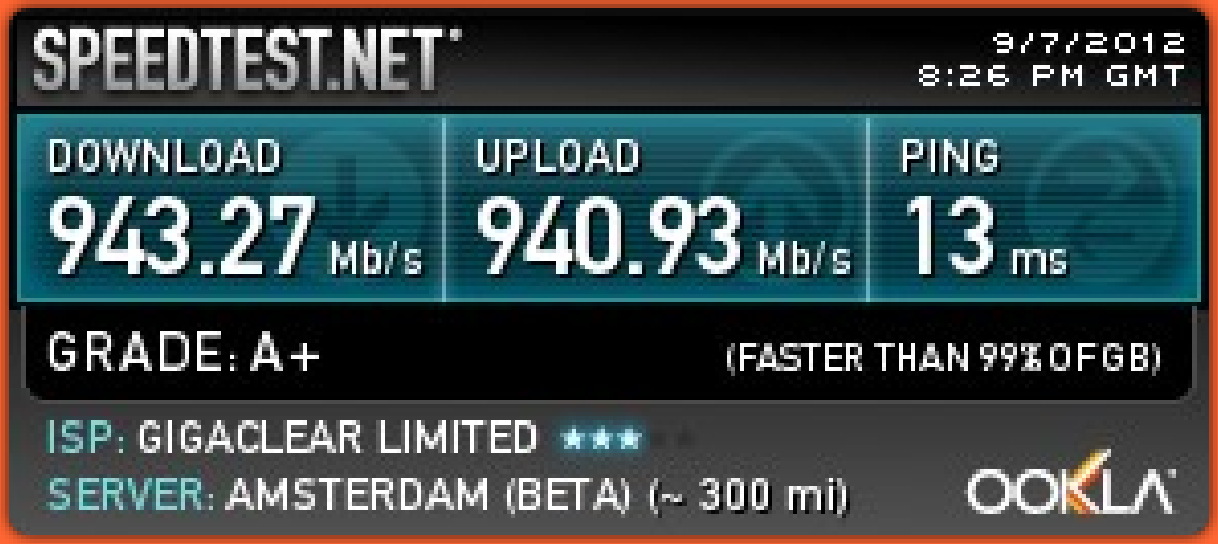
Gigaclear

Ultrafast broadband



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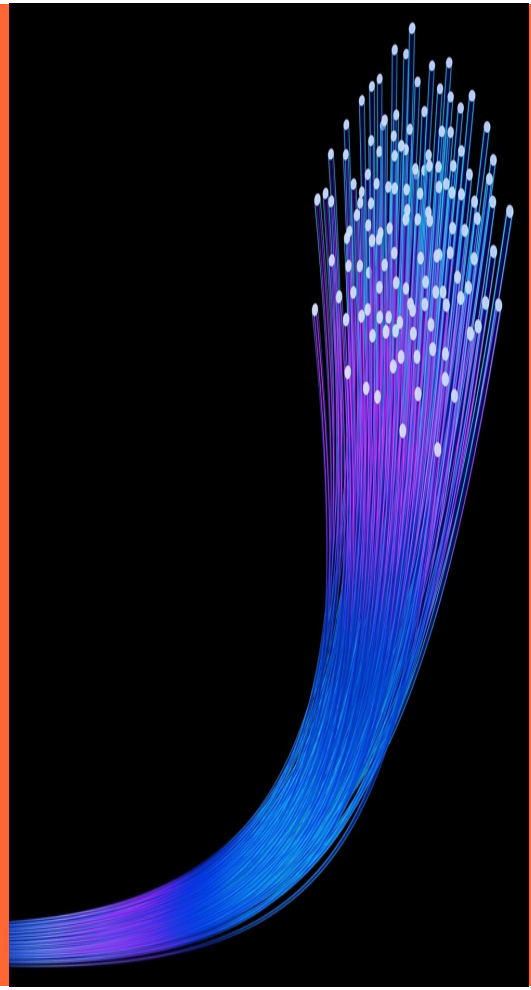
Who is Gigaclear?

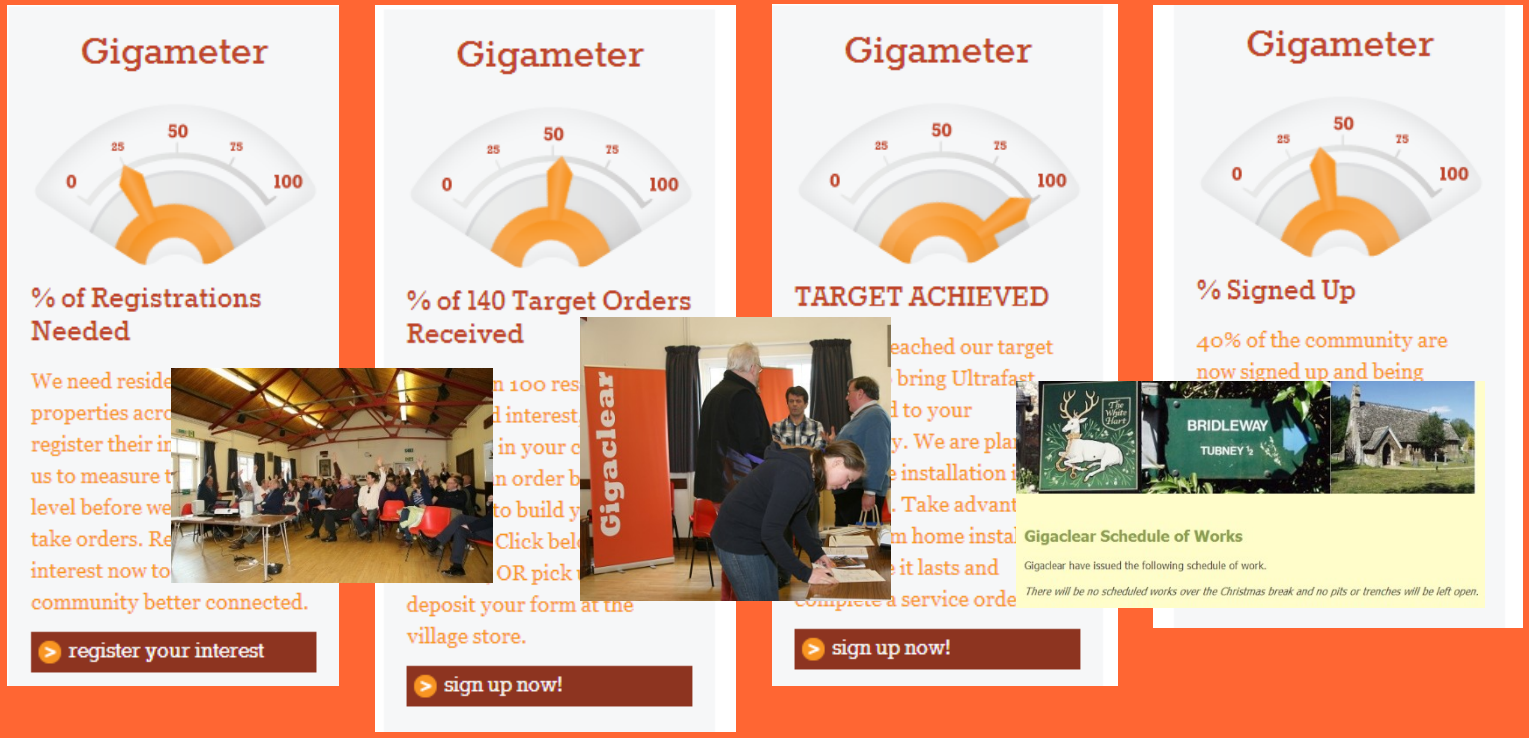
- Private company founded in December 2010
- Full Code Powers granted by OFCOM May 2011
- Opened first pure fibre network in Hambleton October 2011
- Completed second 1000Mbps network in Appleton & Eaton in November 2012
- Started build of new networks in Oxfordshire and Rutland in December 2012:
  - 2 now complete in Fyfield (Oxfordshire) and Uppingham Beeches (Rutland)
  - 1 in build at Frilford (Oxfordshire) completing May 2012
  - Retail and Wholesale access model

What does Gigaclear do?

- We invest in and build pure fibre to the premises, ultrafast broadband networks in rural communities
- Our networks connect to the UK’s national fibre backbone using national carriers
- Every property we pass gets a connection point Our networks do not touch or replace the existing copper based network
- Industrialised installation to property (Self Install)
- Auto provision (Zero Touch)
- Customer self-service portal (Self care)



Building Interest



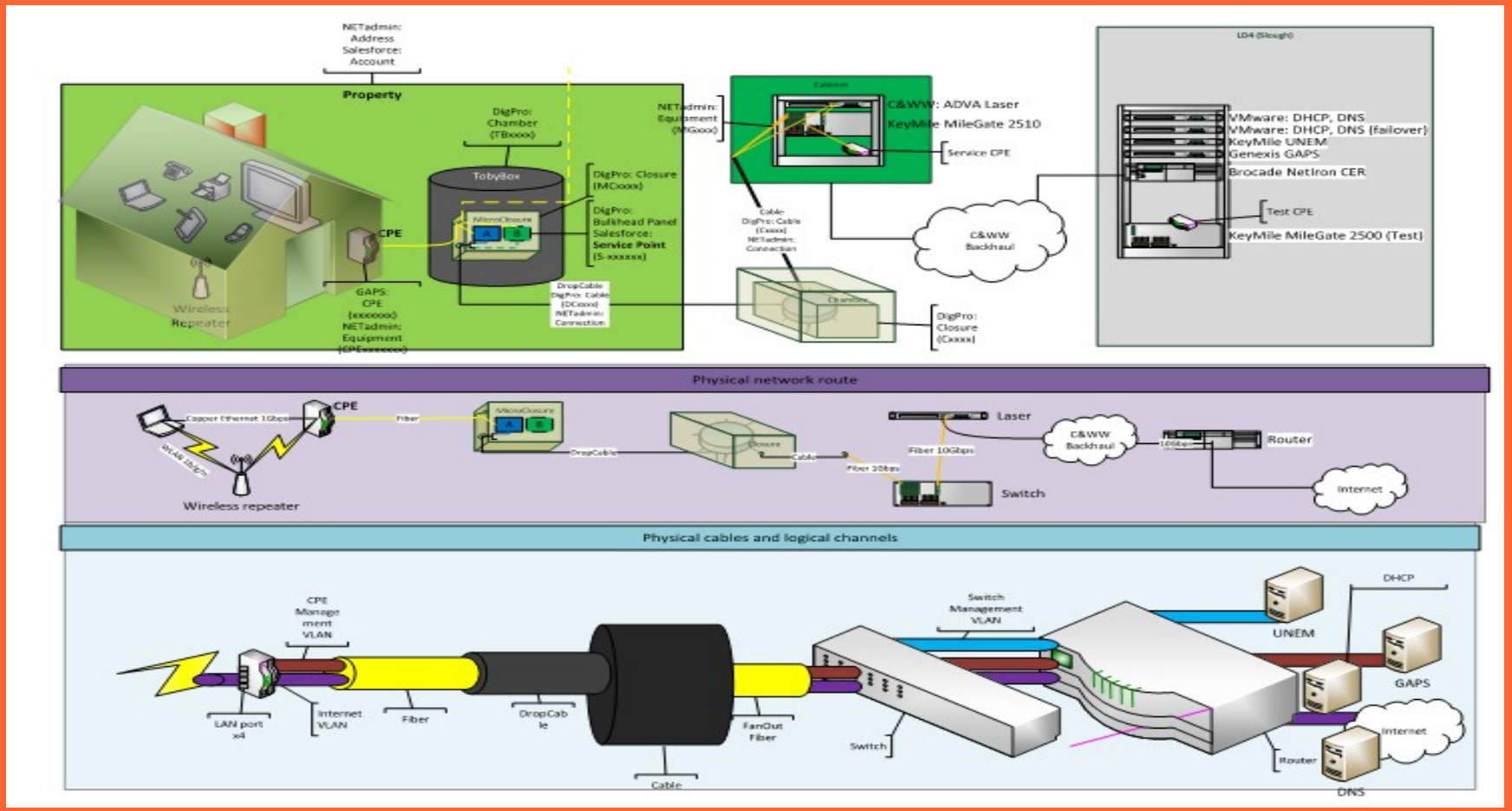
Design and Build

Civil works demands

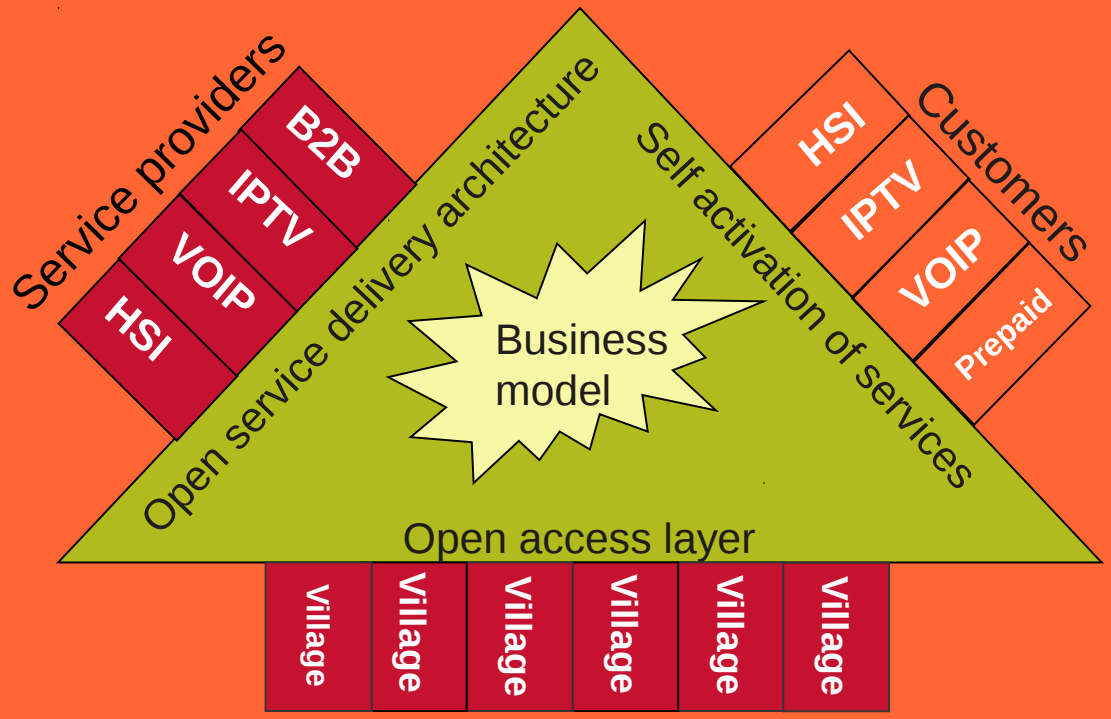
- Code powers from OFCOM
- EtoN
- Wayleaves from Landowners
- Wayleaves from Households
- Streetworks from Highway Authorities
- Conservation Areas
- Choice of method (Chain digger, Mole)

Planning, Information Dissemination and Contractors

Network Over view



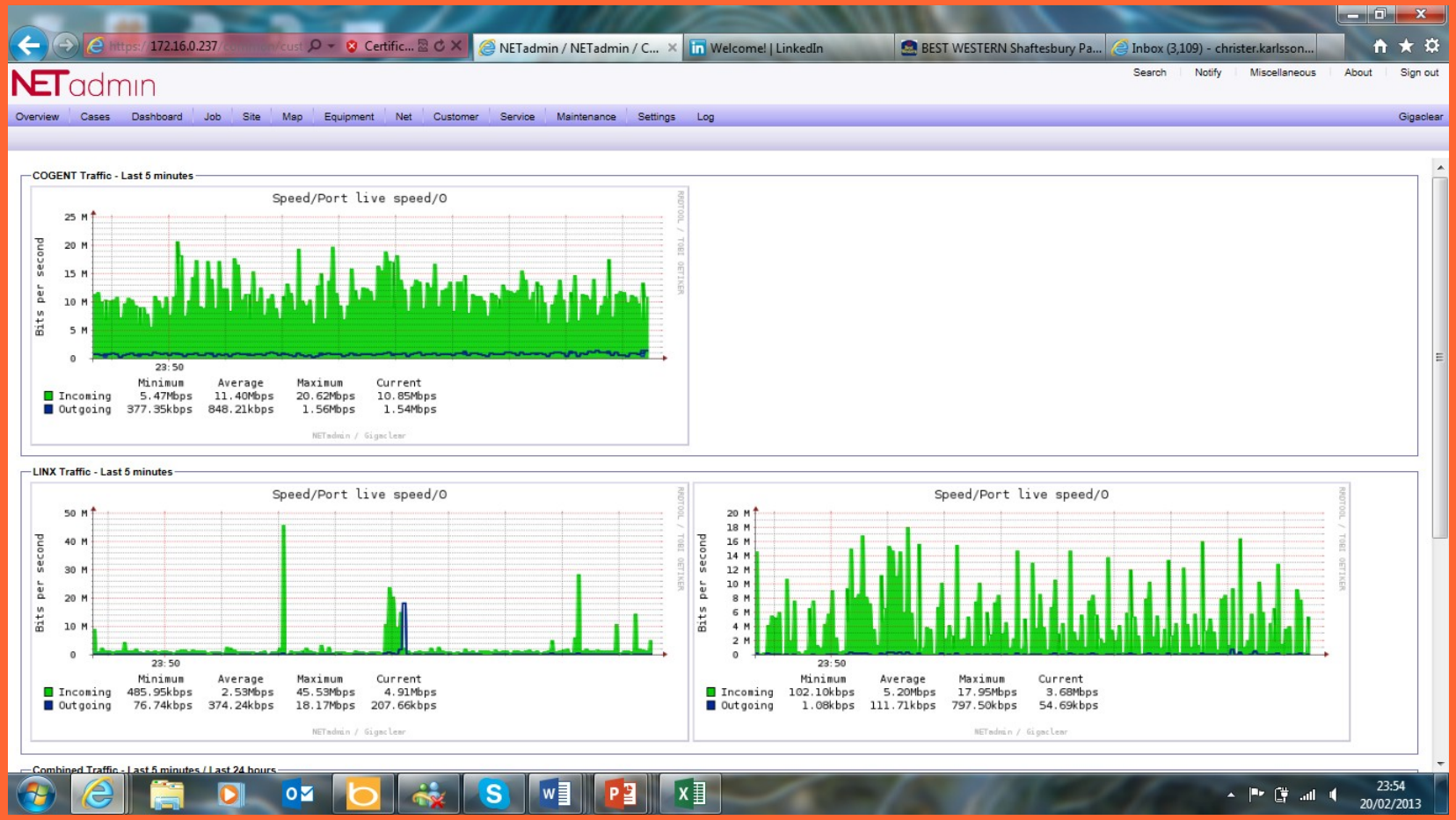
Retail and Wholesale Model



Access technology P2P (Bidirectional)

The goal is to fully automate all processes and provision

Broadband Transit and Peering



Self installation

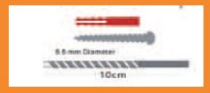
HANDLING FIBRE-OPTIC CABLE

- Do NOT remove the dust caps from the ends of the cable until you are ready to make your final connection. DUST AND DIRT CAN RUIN YOUR CABLE.
- Do NOT satre into the ends of any fibre connectors.
- The cable is designed to be installed underground. Make sure you have a drawn plan of where you installed it and avoid digging or cultivating anywhere near it in the future.
- Under no circumstances bend your cable tighter than the radius allowed by tghe cable guides supplied with the kit.

INSTALLING: Step 1

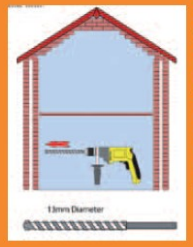
Remove back plate from the back of the Router. Place it on the wall in the location position and mark position of drill holes.

Drill holes using the 5.5mm drill bit, insert rawlplugs and screw backplate firmly to the wall.



Step 2: Drilling cable hole through wall

Decide cable entry point below the router and drill a 13mm hole through the wall from the inside.



Only use the hammer action of the drill after the interior plaster has been penetrated.
Apply less pressure when you near the exit of the hole as it is easy to blow the back off the brick which makes a neat and waterproof finish difficult.

Step 3: Cable feeding and connection to router

- Push the cable-feeding rod through the wall.
- Go outside and insert the cable end into the flexible pulling rod end. Secure with tape and gently pull the cable through the wall.
- Once through disconnect cable from the pulling rod for connection to the router.

Remove the cable retainer tab with the embedded arrow from the backplate (it pops out).

Making sure the guiding lug on the blue cable connector is on the bottom place the retainer over the cable as shown.

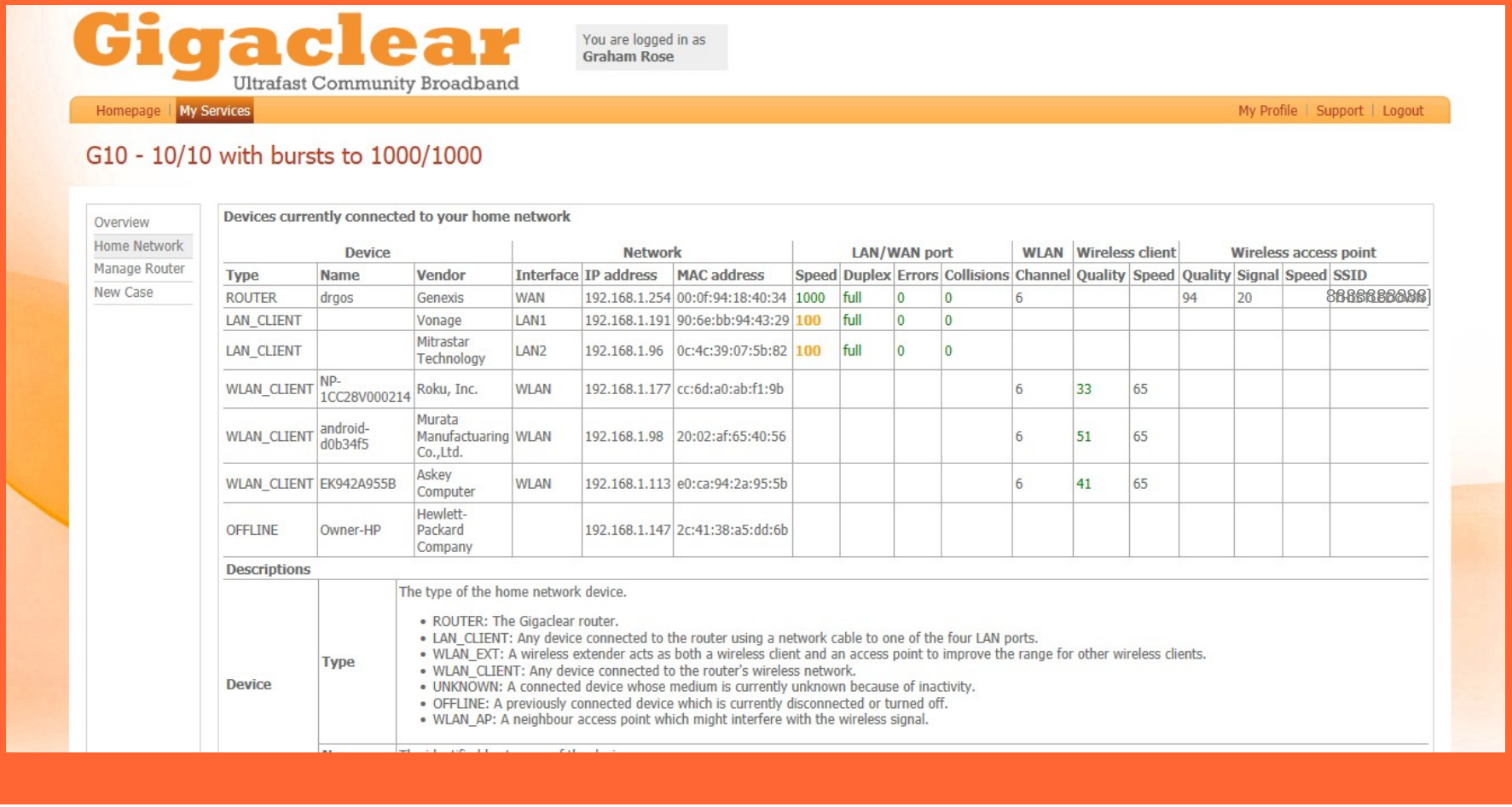
Locate cable and retainer in position on the backplate and slide into position as shown. The retainer will click into position.

Separate the router face plate from the mid-plate by unclipping it. Remove protective rubber dust cap from end of cable and slide the mid-plate down until it locks into place.
NOTE: When the mid-plate is replaced the fibre cable should not move. If it does it has not been properly connected

CAUTION: DO NOT STRIKE OR APPLY EXCESSIVE FORCE ON THE CABLE

Customer Self care

Home network tool



Gigaclear
Ultrafast Community Broadband

You are logged in as
Graham Rose

Homepage | My Services | My Profile | Support | Logout

G10 - 10/10 with bursts to 1000/1000

- Overview
- Home Network
- Manage Router
- New Case

Devices currently connected to your home network

Device			Network			LAN/WAN port				WLAN	Wireless client		Wireless access point			
Type	Name	Vendor	Interface	IP address	MAC address	Speed	Duplex	Errors	Collisions	Channel	Quality	Speed	Quality	Signal	Speed	SSID
ROUTER	drgos	Genexis	WAN	192.168.1.254	00:0f:94:18:40:34	1000	full	0	0	6			94	20		[redacted]
LAN_CLIENT		Vonage	LAN1	192.168.1.191	90:6e:bb:94:43:29	100	full	0	0							
LAN_CLIENT		Mitrastar Technology	LAN2	192.168.1.96	0c:4c:39:07:5b:82	100	full	0	0							
WLAN_CLIENT	NP-1CC28V000214	Roku, Inc.	WLAN	192.168.1.177	cc:6d:a0:ab:f1:9b					6	33	65				
WLAN_CLIENT	android-d0b34f5	Murata Manufactuaring Co.,Ltd.	WLAN	192.168.1.98	20:02:af:65:40:56					6	51	65				
WLAN_CLIENT	EK942A955B	Askey Computer	WLAN	192.168.1.113	e0:ca:94:2a:95:5b					6	41	65				
OFFLINE	Owner-HP	Hewlett-Packard Company		192.168.1.147	2c:41:38:a5:dd:6b											

Descriptions

Device	**Type**	The type of the home network device. • ROUTER: The Gigaclear router. • LAN_CLIENT: Any device connected to the router using a network cable to one of the four LAN ports. • WLAN_EXT: A wireless extender acts as both a wireless client and an access point to improve the range for other wireless clients. • WLAN_CLIENT: Any device connected to the router's wireless network. • UNKNOWN: A connected device whose medium is currently unknown because of inactivity. • OFFLINE: A previously connected device which is currently disconnected or turned off. • WLAN_AP: A neighbour access point which might interfere with the wireless signal.

Your choice of services

Gigaclear delivers open broadband access

Cisco webex

Microsoft Office 365

Google Apps for Business

Cloud Computing

BBC iPlayer

Vonage sounds good

skype

Spotify

facebook

XBOX

YouTube Broadcast Yourself™

NOW TV Powered by sky

NETFLIX

Ultrafast Community Broadband