



¹Access

www.virtual1.com

## Leverage the power of a truly cutting edge network

Virtual 1 owns and operates the largest wholesale only carrier network in the UK. With state-of-theart infrastructure, covering 180 towns and cities nationwide - all across our own resilient dark fibre core.

We deliver a high capacity, low latency network capable of providing Ethernet services from 10Mb up to 10Gb.

By using our own award winning network, and interconnecting with the UK's leading Tier 1 Carriers, we provide solutions across the largest UK network footprint; providing high speed, resilient internet services, regardless of location. We also extend this reach beyond the UK to over 130 countries through key international partners.



## Real-time control of our network - in your hands

Virtual1 is the first UK carrier to fully embrace automation and deliver a fully Software Defined Network. By placing automation at the heart of our business we are removing much of the complexity and overheads of running our network. The introduction of templates and standardisation means that we can give our Partners real time control over their solutions, enabling many of the configuration changes customers frequently request, to be completed directly via 1Portal.

This ranges from modifying bandwidth to resizing VLAN's.

Our automation and integration isn't confined to just our own network either, we have fully automated our ordering process with Openreach, and other key partners shaving valuable days off the ordering process.

# Be in control with real-time quoting, ordering and analytics through our award winning 1Portal and 1View



We know that empowering our Partners, and making ourselves as easy to deal with is just as important as the solutions we deliver. So we have developed 1Portal, our award winning customer interface. From here you can quote, order and manage your customers' solutions online, and with our smart integration to our systems,

network and those networks of our Partners, you can improve your levels of customer service to your end customers and realise revenue faster.

#### **Key features**

- Ability to quote for MPLS, Internet Access and Layer 2 services, with results in seconds
- Real-time control of your solutions, including modifying bandwidth
- Partner enablement toolkits speeding up your time to market
- Provisioning and support case progress updates in real-time

## Not just a network, but a whole readymade ecosystem

UK businesses are increasingly looking for complete solutions, not just components parts. That is why we have put our network at the heart of the wider IT and telecoms ecosystem.

We have introduced our own Backup, Cloud (private IaaS) solutions, as well as privately peering with the leading players in our market, to provide our Partners with complete and secure, on net, SIP, UC and Cloud propositions.

#### **Cloud Exchange**

Cloud from Virtual1 Office 365 Amazon Web Services Microsoft Azure Google Cloud

### **UC Exchange**

ShoreTel Mitel Avaya Unify

#### **SIP Exchange**

TalkTalk Business Gamma VoiceFlex BT Wholesale (IPVS & WHC) Teleware

## **Custom built connectivity solutions, tailored to your needs**

#### **MPLS** and Internet

Virtual1 enables both MPLS and Internet Access solutions through just one network and one supplier. With access available via Fibre Ethernet, EFM, EoFTTC, Broadband FTTC and ADSL.

All MPLS services are fully bespoke: designed to meet the needs of the individual businesses. With a full range of diverse and resilient routing solutions available, as well as the integration to leading Cloud, UC and SIP providers they provide a complete solution.

#### **Layer 2 Access**

Ethernet technology makes it easy for businesses to run complex WAN solutions using the same access technology used on their LAN. Businesses can achieve significant cost reductions whilst leveraging existing in-house skills and implement change through real time updates.

Virtual1's Layer 2 solution enables separate sites to share a common Ethernet broadcast domain, using different configurations such as E-Line, E-LAN or E-Tree, all backed up by rigorous SLAs.



Our 1View application delivers the effective network monitoring that is so essential to managing your customers' networks. It provides detailed information in real-time, so you can see what is happening to your solutions, 24/7.

You can run 1View in your Network Operation Centre (NOC) to manage your entire customer estate. Or you can give your end customers tailored access to 1View, improving transparency of their solution and putting the information directly into their hands.

Showing how applications and users are behaving, helps you to predict trends, plan effective change management and alert you to unusual user activity or any network devices that may have been compromised.

## **Market leading connectivity**

#### **Fibre**

Available across the UK, Fibre Ethernet offers a dedicated and symmetrical bandwidth service delivered on uncontended fibre access at speeds from 10Mb up to 10Gb, all backed up by our industry leading SLA's. Ethernet bandwidth can be increased quickly and easily in line with your customer's emerging business needs.

#### **EFM** - Ethernet in the First Mile

EFM is ideal for customers looking for an alternative solution to Fibre Ethernet or ADSL, who need an uncontended service and symmetrical bandwidth. The service is delivered at speeds of up to 30Mb

EFM is delivered over bonded copper pairs to the customer's premises, which makes it a highly cost-effective and resilient alternative to fibre-based Ethernet solutions, and with shorter lead time than Fibre Ethernet. EFM is ideal for customers needing a quick installation or who have problems with fibre access to their premises.

#### **ADSL**

Virtual1's ADSL solution is business-grade, offering download speeds of up to 24Mb with quick and efficient implementation. ADSL is most commonly used as a backup service.

## **EoFTTC - Ethernet over Fibre to the Cabinet**

EoFTTC is provided over a single copper pair from your business premises over the short distance to the green cabinets in the street. Unlike standard broadband where the copper then continues all the way to the exchange, Ethernet over Fibre to the Cabinet traffic travels across a shared fibre optic circuit to the exchange. As a result, the extra distance doesn't lead to ongoing degradation of performance, which allows access to an uncontended, symmetrical service of up to 20Mb with fixed service SLA's.

Coverage can be limited, and can be more limited than Broadband FTTC as not only do the cabinets need to be enabled but the exchanges must also be an Ethernet node in the supplier's network.

#### **Broadband FTTC**

Offering download speeds of up to 80Mb, and uploads of up to 20Mb. This is the next step up from ADSL. By using the same underlying technology of Fibre to the Cabinet (FTTC) it is offered as reduced cost alterative by being a contended service, so can be impacted at peak times and by other internet users in the area. Able to support a single Virtual1 service, such as Internet or SIP. For the application of multiple services, you will need an EoFTTC service or better. As with EoFTTC, coverage can be limited, although it is more widely available than EoFTTC.

## Resilience is no longer a luxury, it's an absolute necessity

How long could your business survive without access to its key systems? The rapid uptake of cloud services puts an even heavier reliance on your offices connection to the outside world. Your route to the internet is no longer just about communication, but often now also access to the critical systems and data upon which your business relies in order to function.

This reliance means that resilience is no longer a luxury for businesses, so we offer a range of resilience options to find the best fit solution for your customer's business.

## **Connectivity comparison**

Product	ADSL	Broadband FTTC	EoFTTC	EFM	Fibre Ethernet
Max Bandwidth	Up to 24Mb	Up to 80Mb	Up to 20Mb	Up to 30Mb	Up to 10Gb
Price	£	£	££	EEE	EEEE
Coverage	National	National (limited)	National (limited)	National	Global
Suitable for SIP		$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$
Suitable for multiple services			$\checkmark$	$\checkmark$	$\checkmark$
QoS			$\checkmark$	$\checkmark$	$\checkmark$
VLANs			$\checkmark$	$\checkmark$	$\checkmark$
Symmetric bandwidth			$\checkmark$	$\checkmark$	$\checkmark$
Uncontended service			$\checkmark$	$\checkmark$	$\checkmark$
Target Time To Repair	24-48 hours	24-48 hours	6 hours	6 Hours	6 Hours
Guaranteed Latency					$\checkmark$
High speed Failover					$\checkmark$
Use Case	Homeworker or backup to other connectivity services	Homeworker or backup to other connectivity services	Entry level uncontended connectivity ideal for a small/satellite office (limited availability)	Ideal for fast installs in areas where fibre access is restricted (wider availability)	Ideal for business connectivity

## Need a more custom solution? We have a whole range of customisable features

Virtual1 can provide a whole range of bolt-ons to configure the service exactly as your customers require it, from IPv6 routing, through to BGP Public peering.

Bolt-Ons usually require additional information to be gathered at time of order, and they can also be added to a solution once live.

## **Benefits of 1Access from Virtual1**

- A choice of both Layer 2 or Layer 3 services, both are enabled on our network
- Real-time control of your solutions via 1Portal, including modifying bandwidth
- Added value capabilities such as firewalls, Quality of Service (QoS), on-net Co-location and cloud services
- Resilient deployment solutions offering 100% uptime to customers
- The ability for you to define your own SLA's and unique service propositions by placing you in control of your customers' solutions using 1Portal and 1View

- Private connection to our Cloud (IaaS) and Backup solutions
- A readymade ecosystem, our network is interconnected with:
  - Every major SIP provider via the awardwinning SIP Exchange, so customers have choice and flexibility over their SIP provider.
  - Leading IT solution providers including Microsoft Azure, AWS and Google Cloud

