

Direct Internet Access (DIA)

Ethernet over FTTP Data Sheet

Our Direct Internet Access (DIA) services offers leased line internet access for your customers, offering a layer 3 service connected directly to our BT network and platform. It's part of our Wholesale Ethernet portfolio, traditionally available for layer 2 connectivity, but now offering you the option to free up capacity on your network or avoid the need to even build your own network in the first place, by utilising our internet platform as well.

Full-fibre access

In addition to our Ethernet Fibre access options, available in circuit speeds of 100Mbps, 1Gbps and 10Gbps; we also have a range of 'Ethernet over FTTP' access options available. Taking advantage of the ongoing investment and roll-out in full-fibre FTTP (Fibre to the Premises) across the UK, we can connect this to our 21C Ethernet platform and utilise it for our Direct Internet Access service. We already have coverage for ~26% of UK business premises, with ongoing growth at over 10,000 locations per month.

Ethernet over FTTP is available in a wide range of speed options up to 1Gbps download. It's ideal for smaller offices and sites, satellite locations and remote workers, especially where there is a priority for download capacity.

FTTP isn't just for Broadband - Why Ethernet over FTTP is different

You might hear "FTTP" and think this is a Broadband access service, but it doesn't have to be. Our Ethernet over FTTP service is connected to a separate part of our network, connecting to the 21C Ethernet platform in the same way an Ethernet Fibre connection would. This is entirely separate from the 'Wholesale Broadband Connect' platform, and offers different service quality, performance, availability targets and support.

This allows you to take advantage of the FTTP cabling access, which is being rolled out by Openreach, but connect it to a business-grade platform and service within our Wholesale Ethernet portfolio.

- **99.999% Ethernet platform availability** – last year in 2022 we achieved 99.9992% in fact
- **99.977%** individual circuit target availability target
- **7-hour target fix time** as standard
- **Business only traffic**, separate from our consumer traffic network

Why use FTTP instead of Ethernet Fibre for DIA

Where it is available and a location has been enabled, there are several reasons why utilising Ethernet over FTTP to deliver the DIA service could be beneficial:

Lower rental pricing

Compared with an equivalent Ethernet Fibre connection, including free connection on 3- and 5-year terms.

Asymmetrical speeds for higher download

For customers who need higher download capacity for smaller offices and satellite sites, you can take advantage of asymmetrical speeds with a faster download than upload, saving you money on port speed costs. Ethernet FTTP offers speeds of up to 1Gbps download and these can always be changed later quickly and easily.

Simpler and quicker delivery

Because the FTTP cabling is already in the ground, installation is usually simpler and quicker.

- You can avoid Excess Construction Charges (ECC) for Ethernet Fibre delivery, for sites which lack existing fibre cabling and ducting needed for these kinds of circuits. If you've had a site survey and been put off by high ECC for delivery of Ethernet Fibre, you may be able to use FTTP instead if it's available.
- It's great for any problem sites where Ethernet delivery might have been a challenge in the past.
- Delivery lead times can be shorter, subject to site visit and existing service.

A wide range of speeds and options available

DIA Ethernet over FTTP provides a wide range of speed options to suit different end-customer requirements. It can be provided as an asymmetrical service, with a higher download speed than upload; or configured with a symmetrical port speed like a traditional DIA Ethernet service would be. It's quick and easy to increase your port speed later on as well, within the capacity of the access option selected.

The following table explains the speed options available (all speeds shown in Mbps):

Peak "up to" rates Access option	Prioritised Rates		Asymmetrical speeds Max port speed option available	Symmetrical port speeds	
	Download	Upload		Based on "up to" peak rates	With speed promise via "prioritised rate"
40 / 10	15	10	40	10	10
80 / 20	30	20	80	20	20
220 / 30	110	30	200	30	30
330 / 50	110	50	300	50	50
500 / 165	220	110	500	100	100
550 / 75	110	50	500	70	50
1000 / 115	110	50	1000	100	50
1000 / 220	330	110	1000	200	100

Access Bandwidth and Prioritised Rates Explained

Line access speeds

Each access option shown on the left of the table shows the maximum “up to” peak data rates possible. For instance, an 80/20 access would provide a maximum 80Mbps download and 20Mbps upload capacity.

Peak rates are the maximum potential throughput of the access line and may be variable depending on the time of day and network utilisation.

Prioritised rates

Each access option then carries a “prioritised rate”, an amount of bandwidth that is assured and prioritised for the service and will not be impacted by busy periods or higher network utilisation. This gives you certainty and promises around speed performance to a certain level. For instance, the 80/20 access has prioritised rates of 30Mbps download and 20Mbps upload but will “burst” above these speeds into the access capacity where possible and available.

Asymmetrical port speeds for a focus on download capacity up to 1Gbps

Asymmetrical port speeds will allow you to use a higher download speed than upload and take fuller advantage of the FTTP access options. The DIA service has a set range of available port speeds and so these may not always exactly match the “peak rates” of the access in all situations.

The maximum asymmetrical speeds for each access option are shown in the table. For example, a 330/50 service has a maximum port speed of 300Mbps, since DIA does not offer a 330Mbps port speed increment. The upload capacity will be limited by the access option, so in this example will reach 50Mbps peak rate, since this is the limit of the 330/50 access.

Symmetrical port speeds for matching download and upload, and traditional leased line internet access service up to 200Mbps

Alternatively, you can select a symmetrical port speed if you intend to deliver more traditional Direct Internet Access with a matching download and upload. It is possible to select these speeds based on the prioritised rate, in order to offer speed promises to your customers, or based on the peak rates instead to give bursting room. The table provides available options that would fit both scenarios.

Terms and conditions

All information within this document is for illustrative purposes only and may be subject to change without notice. Please speak to your BT account manager or specialist for further information. Terms and conditions apply for the DIA service. All connections and availability of Ethernet over FTTP access are subject to survey.

Offices Worldwide

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