

# BT Ethernet Connect UK

Networks that think



## Adaptive, high performance Ethernet

Ethernet Connect UK is the next generation, adaptive, high-performance layer 2 Ethernet Wide Area Network (WAN) service connecting sites in the UK. Ethernet Connect's strength lies in its flexibility to support a wide range of business requirements. Affordable and reliable, it is the ideal Ethernet service for corporate and government organisations.

### Adapt to a changing world

Ethernet Connect enables you to choose from a pre-defined set of "building blocks". With this flexible approach, you can not only address your immediate requirements, but also reconfigure the service to meet your future needs.

Maintain end-to-end control of IP – with Ethernet Connect you retain exclusive control of your IP architecture, IP version, addressing scheme and routing tables.

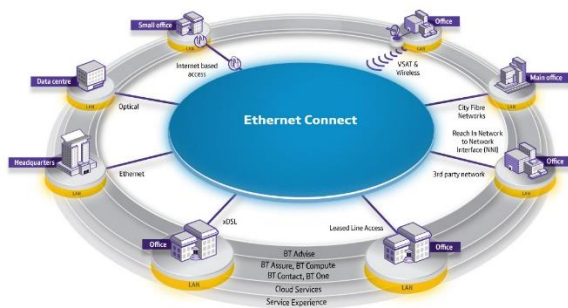
- **Freedom to innovate** – Ethernet Connect is the ideal innovation platform on which to build capabilities not available in IP VPN's such as different types of multicast
- **Data centre friendly** – Ethernet Connect is ideal for the special requirements of data centres including the support of virtual machine environments split across sites
- **Protected bandwidth** – for your critical applications, Ethernet Connect E-Line gives you protected bandwidth between sites
- **Evolving the legacy** – Ethernet Connect is the ideal evolution for ATM, frame relay and private circuits, offering increased bandwidth, improved bandwidth scalability and lower total cost of ownership.



Ethernet can give you the extra network control you are seeking for key sites such as datacentres, or for particular applications. When you need a global VPN that you can rely on, Ethernet Connect is the intelligent choice.

## Evolving to meet your needs

Ethernet Connect is a family of evolving Ethernet VPN services with domestic, in country, and international, cross border, coverage. Ethernet Connect “E-Line” allows you to create E-Line services with Ethernet Private Line or Ethernet Virtual Private Line configurations. Ethernet Connect “E-LAN” allows you to create E-LAN services, which are also called Ethernet Virtual Private LAN services (VPLS), offering any to any connectivity between sites.



Ethernet Connect has been designed to offer you a set of flexible, “building blocks”. These can be ordered and combined in different ways. They can be changed over time to adapt to your organisation’s changing needs. Ethernet Connect’s features include:

**Native Ethernet service** – Ethernet Connect gives you the complete freedom over your end-to-end architecture that you would expect from layer 2 services

**Etherway access** – the foundation of the Ethernet Connect network is the Etherway Access. Available with copper or fibre delivery and a range of resilience options the Etherway access connects you to the BT Ethernet Connect Service. The Multi Service Business Access option can also be shared by IP Connect UK, therefore reducing the time to deliver new services and the total cost of ownership

**Ethernet Virtual Connections** – these allow you to choose service types, speeds and classes of service for each virtual connection. You have the flexibility to create networks configured as Ethernet Private Line, Ethernet Virtual Private Line and Ethernet LAN services (also known as Virtual Private LAN Services). You can choose the speed from 200Kbps to 1Gbps (up to 2.5Gbps for (EPL) point-to-point, or Ethernet Virtual Private Line (EVPL) ) and the classes of service to match the service to your organisation’s exact needs

**National and international coverage** – Ethernet Connect is available to over 90% of UK business locations. Domestic services are also available in Belgium, Germany, Ireland, Italy, Luxemburg, Netherlands, and Spain. In addition, International, cross border, services are available to over 60 countries in Asia Pacific, Europe and North America.

**Unbundled service** – the standard BT Ethernet Connect service is supplied without CPE equipment – giving you freedom of choice when designing, implementing and supporting your network. BT supplies a range of complementary managed services from network supply to a fully managed solution, depending on your needs.

## Improved service and agility

There are two elements to the Ethernet Connect portfolio:

### Etherway access

The Etherway access provides the physical connectivity to BT’s network. And depending on the Etherway, access is available as:

- Ethernet over fibre at 10 Mbps, 100 Mbps, 1 Gbps and 10 Gbps
- Ethernet over copper from 1 Mbps to 35 Mbps
- Ethernet over Superfast Access (FTTC / FTTP)
- Standard, Protected, Diverse and Diverse Plus resilient options
- Multiservice Business Access giving access to BT IP Connect UK

### Ethernet Virtual Connections

Ethernet Virtual Connections (EVC) defines the connectivity between sites:

- Ethernet Connect “E-Line”, EVCs are Ethernet Line Services (E-Line). Enabling the creation of Ethernet Private Line (EPL) point-to-point, or Ethernet Virtual Private Line (EVPL) point-to-multipoint and meshed networks
- Ethernet Connect “E-LAN” Ethernet LAN Service also called Ethernet Virtual Private LAN service (VPLS) allows you to create any to any networks
- Bandwidths are available in small increments up to 1Gbps for E-LAN EVC’s and up to 10Gbps for E-Line EVC’s.
- Class of service options are available with BT Ethernet Connect E-Line and E-LAN services.

### Customer interface options

- 10 Mbps Etherway – 10Base-T
- 100 Mbps Etherway – 100Base-T
- 1000 Mbps Etherway – 1000Base-SX and LX
- 10 Gbps – 10000Base LR

## Ethernet virtual connection speeds

Ethernet Virtual Connection speeds are:

Etherway Speed	Bandwidth Speed E-Line	Bandwidth Speed E-LAN
10Mbps	200kbit/s, 400kbit/s, 600kbit/s, 800kbit/s, 1Mbit/s, 2Mbit/s 3Mbit/s, 4Mbit/s, 5Mbit/s, 6Mbit/s, 7Mbit/s, 8Mbit/s, 9Mbit/s, 10Mbits	200kbit/s, 400kbit/s, 600kbit/s, 800kbit/s, 1Mbit/s, 2Mbit/s 3Mbit/s, 4Mbit/s, 5Mbit/s, 6Mbit/s, 7Mbit/s, 8Mbit/s, 9Mbit/s, 10Mbits
100Mbps	As for 10Mbit/s, plus 15Mbit/s, 20Mbit/s, 25Mbit/s, 30Mbit/s, 35Mbit/s, 40Mbit/s, 45Mbit/s, 50Mbit/s, 60Mbit/s, 70Mbit/s, 80Mbit/s, 90Mbit/s, 100Mbit/s	As for 10Mbit/s, plus 15Mbit/s, 20Mbit/s, 25Mbit/s, 30Mbit/s, 35Mbit/s, 40Mbit/s, 45Mbit/s, 50Mbit/s, 55Mbit/s, 60Mbit/s, 65Mbit/s, 70Mbit/s, 75Mbit/s, 80Mbit/s, 85Mbit/s, 90Mbit/s, 95Mbit/s, 100Mbit/s
1Gbps	As for 100Mbit/s, plus 150Mbit/s, 200Mbit/s, 250Mbit/s, 300Mbit/s, 350Mbit/s, 400Mbit/s, 450Mbit/s, 500Mbit/s, 600Mbit/s, 700Mbit/s, 800Mbit/s, 900Mbit/s, 1Gbit/s	As for 100Mbit/s, plus 125Mbit/s, 150Mbit/s, 175Mbit/s, 200Mbit/s, 250Mbit/s, 300Mbit/s, 350Mbit/s, 400Mbit/s, 450Mbit/s, 500Mbit/s, 600Mbit/s, 700Mbit/s, 800Mbit/s, 900Mbit/s, 1Gbit/s
10Gbps	Up to 10Gb EVC available for E-Line EVC's only. 1.5Gbit/s, 2Gbit/s, 2.5Gbit/s, 3Gbit/s, 3.5Gbit/s, 4Gbit/s, 4.5Gbit/s, 5Gbit/s, 5.5Gbit/s, 6Gbit/s, 6.5Gbit/s, 7Gbit/s, 7.5Gbit/s, 8Gbit/s, 8.5Gbit/s, 9Gbit/s, 9.5Gbit/s, 10Gbit/s	

## Classes of service

BT E- Line classes of service are:

- Default
- Standard
- Multi-CoS– choice of 5 classes
- Premium.

BT E-LAN classes of service are:

- Default
- Multi-CoS – choice of 5 classes

## Frame size

The UK frame size is 1,600 bytes for Etherway copper access, 2,000 bytes Etherway fibre accesses and 1,528 bytes for Etherway Superfast access.

## International capabilities

Ethernet Connect domestic, in country services are available in:

Belgium, Germany, Ireland, Italy, Luxemburg, Netherlands, Spain, and the United Kingdom.

In addition, there are International, cross border services in over 60 countries globally.

## Service feature availability

As you would expect from an evolving service available in a large number of countries, the service features available will vary depending on your exact location. So please check with your account manager that the features you need are available.

## High performance for data intensive environments

### Certification

BT Ethernet Connect E-Line and E-LAN have been certified by the Metro Ethernet Forum to MEF 9 & 14.



Ethernet Connect has been specifically designed for customers with requirements that include:

- **Innovation** – where you need to deploy leading edge capabilities such as multicast and IP V6
- **Ownership of IP architecture** – where you wish to retain end-to-end ownership and control of your IP addressing and router tables
- **Data centres** – to connect multiple data centres over a single Ethernet LAN and support Virtual Machine environments
- **Protected bandwidth** – where you need to ensure critical applications have specified bandwidth between sites
- **Evolving the legacy** – ideal evolution for ATM, frame relay and private circuits, offering increased bandwidth, improved bandwidth scalability and lower total cost of ownership.

## Extensive expertise

Buying from BT not only means that you are buying a world-class, next-generation service, but it also means you are benefiting from over 25 years of investment in the design, building and management of secure networks around the globe.

We are at the forefront of global network technology. We can act as a single supplier for all your IT needs, and offer flexible, consistent service levels and an exceptional customer experience.

BT Global Services' capabilities are well recognised across the industry. We're featured in the Leadership category of Gartner's Magic Quadrant for Global Network Providers - based on Completeness of Vision and Ability to Execute.

Our team of professionals operate in more than 75 countries, and we have the world's largest qualified technical expertise resources, with more than 4,000 Cisco-certified engineers.

**Get in touch with your BT account manager to learn more about BT Ethernet Connect services and how they can provide the connectivity your business needs.**



“ BT's data WAN proposition is market leading in the UK, because the carrier's market traction and operational presence is unmatched, and BT continues to set a fast-moving pace with the latest in sales messaging and technical developments. The carrier is fully capable of meeting the needs of all customer types from small to large, as well as providing support for regional, national or international requirements. Unparalleled on-net reach differentiates BT's data WAN offerings in the UK market. ”

Current Analysis Product Assessment –  
Data WAN (UK), Gary Barton, May 2016



Offices worldwide

The services described in this publication are subject to availability and may be modified from time to time. Services and equipment are provided subject to British Telecommunications plc's respective standard conditions of contract. Nothing in this publication forms any part of any contract.

British Telecommunications plc 2014.  
Registered office: 81 Newgate Street, London EC1A 7AJ  
Registered in England No: 1800000

BT Ethernet Connect UK July 2016