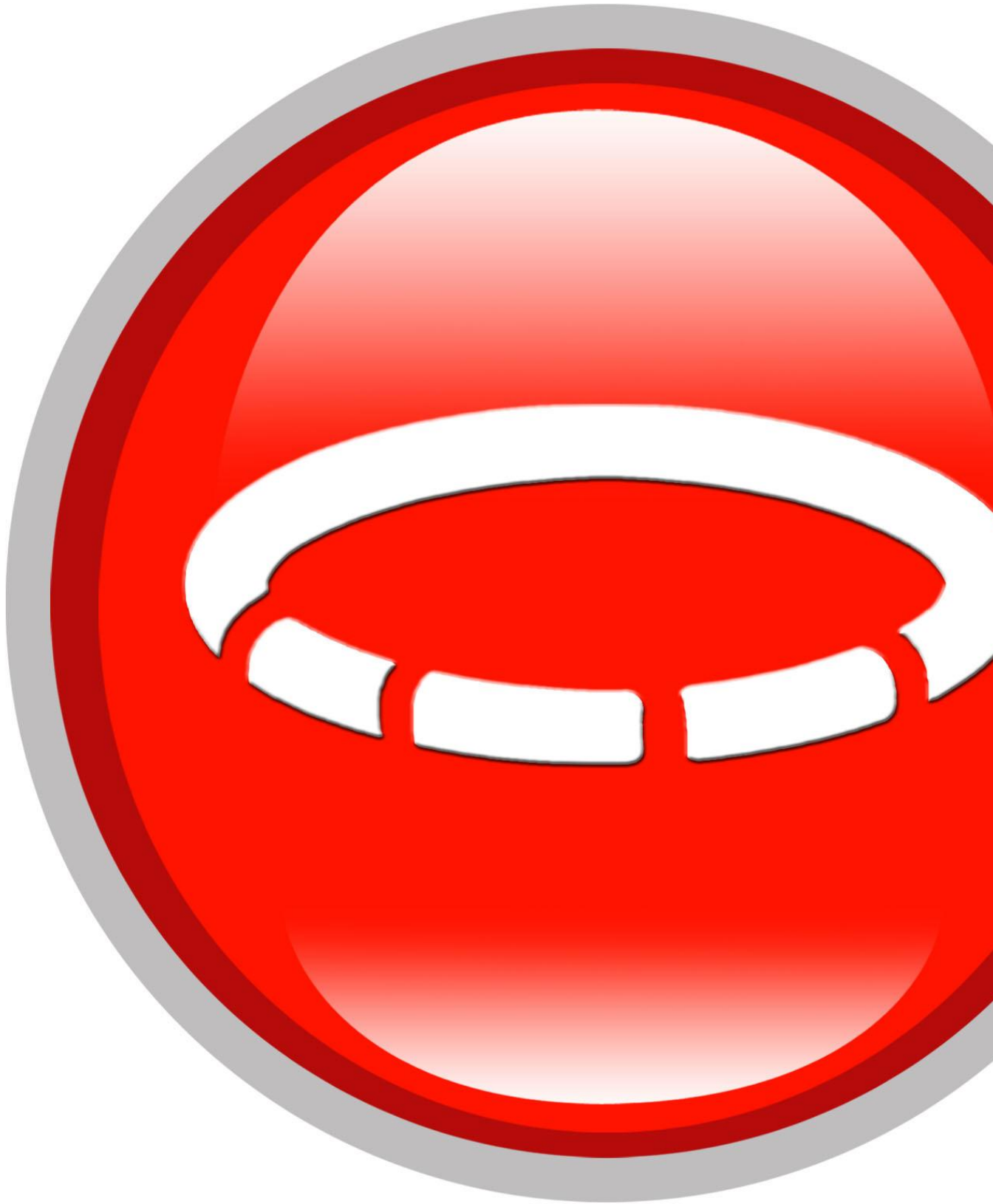


DEDICATEDCONNECT
PERFECT POINT-TO-POINT



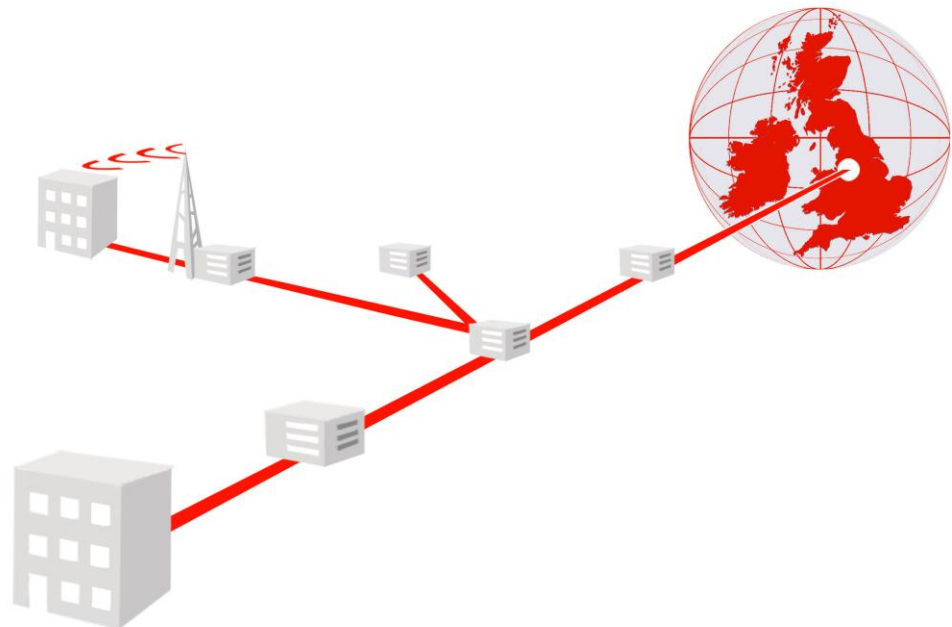
PROTECTED POINT-TO-POINT ETHERNET

For service partners who have a limited number of sites to connect, FibreSpeed recommends its Dedicated Connect service. With multiple options to choose from, service partners can create a wide range of network types from basic single site backhaul through to complex hub and spoke or mesh networks.

Dedicated Connect is a high availability, managed Ethernet product with options to connect:

- **Individual PoPs to the Manchester Gateway in bandwidths ranging from 300Mbit/s to 10Gbit/s.**
- **PoP to PoP in bandwidths ranging from 100Mbit/s to 10Gbit/s.**
- **End user site to a PoP in bandwidths of 1Gbit/s and 10Gbit/s.**

One of the most practical applications is the hub and spoke configuration. This enables service partners to aggregate their entire regional traffic at one PoP before backhauling to Manchester via a single high capacity pipe.



PoP to PoP and PoP to Gateway services of 1Gbit/s and below are inherently resilient - as part of the standard service, FibreSpeed configures a secondary path over its resilient route between North Wales and Manchester. Any disruption on the primary invokes an automatic switchover to the secondary path ensuring trouble-free operation resulting in exceptionally high availability figures.

Although the standard 10Gbit/s services are non-resilient, options to create resilient solutions are available either through the creation of flat rings between sites or via diverse trans-regional 10Gbit/s rings.

A vital component of any network is its ability to connect to end users. Most of FibreSpeed's PoP sites are strategically located on business parks which have been equipped with fibre access rings. This enables businesses on those parks to be directly connected to fibre linked to the PoP and so to service partners' backhaul networks. FibreSpeed also operates a flexible breakout policy, enabling businesses that lie close to the core fibre route between PoPs to be connected back to the nearest PoP thereby maximising the potential for platform development.

Links between end user sites and PoPs are provisioned via the Dedicated Connect Managed Access service. Individual access circuits are non-resilient but in many instances can be combined to provide resilient solutions for end user sites that require such.

Dedicated Connect can be deployed in simple premises to Gateway format where FibreSpeed fully manages the traffic between the connected site and Manchester. However, service partners that wish to build more complex networks will require co-location within FibreSpeed's PoPs. FibreSpeed's co-location product is very flexible, offering equipping levels of anything from a single 1U slot in a shared rack to multiple racks reserved for sole use.

Equipped rack spaces can be AC or DC powered. To ensure integrity of supply under mains failure situations, AC power is backed-up by standby generators and DC power is battery-backed. Inverter feeds off the protected DC supply are also available if required.

In terms of the operational environment, all PoPs are furnished with secure access, environmental control and fire suppression systems.



Many of the PoPs are equipped with wireless towers that range. Ranging from 15m to 25m in height, the towers provide springboards from which service partners can launch wireless services. This enables them to reach deep into rural Wales and dramatically extend their operational footprint. In many cases, the facility can also be used as a simple back-up solution for end users served by a fibre tail but who want an additional layer of operational security.



FibreSpeed's point-to-point network solution provides an architecture that is ideal for any service partner that wants a simple means of exploiting the relatively untapped regional market for genuinely high quality and innovative service delivery. Service partners are equipped with an expansive choice of connectivity options that allows them to create a bespoke network perfectly tailored to their precise needs.

