



Private PoP

- Traffic from more Ethernet Private Lines is aggregated at a common interface
- Traffic from different EPLs can be separated by using VLANs
- Can be remotely located for more efficient use of long-range connections
- New locations are added without hardware changes at the central hub



Carrier Ethernet from GlobalConnect is a series of Ethernet based network services with unparalleled efficiency and simplicity. Carrier Ethernet enables service providers and enterprises to establish long range private networks using technology known from standard Local Area Networks (LAN).

Private PoP is a network node that connects to several locations through one common backbone connection. Private PoP is well suited e.g. to connect a main office or a network

hub to a number of remote locations via one common physical interface.

Private PoP can be installed both centrally and decentralised. When placed at a central location, it collects traffic from a number of distant locations through one common gigabit interface. This makes it easy to connect more locations, since no hardware changes are necessary (see figure 1).

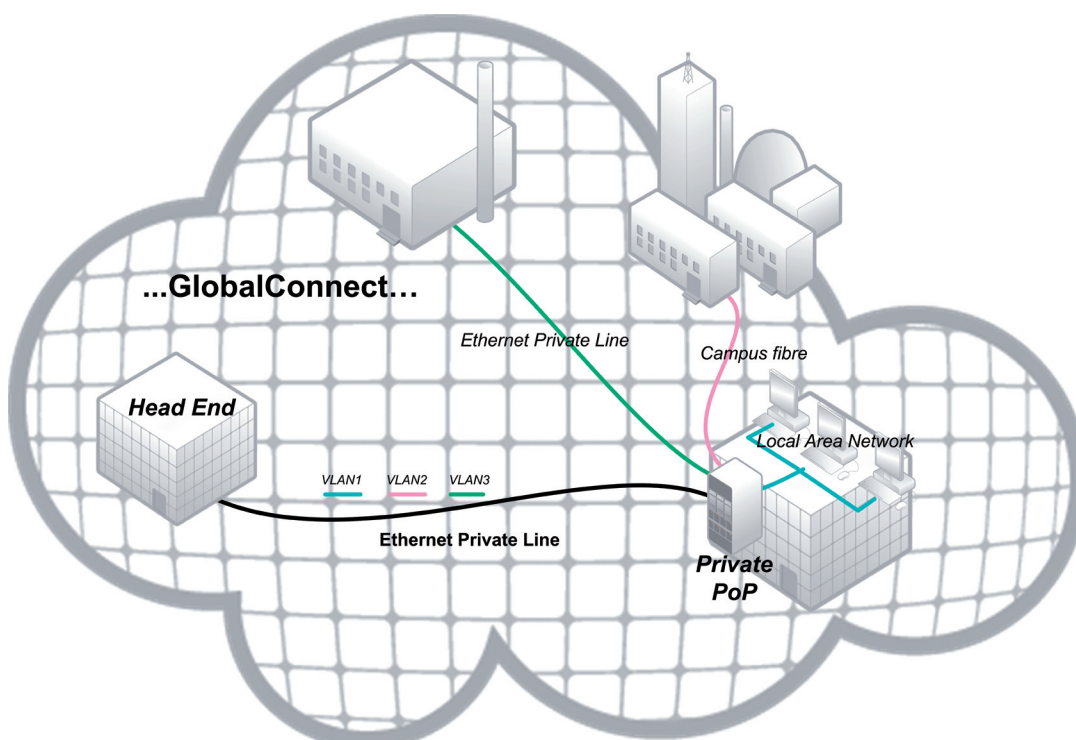


Figure 1: Private PoP at a central location

Private PoP may also be placed remotely to collect traffic from a group of distant locations. In this scenario the Private PoP is connected to the head end via an Ethernet Private line. (See figure 2).

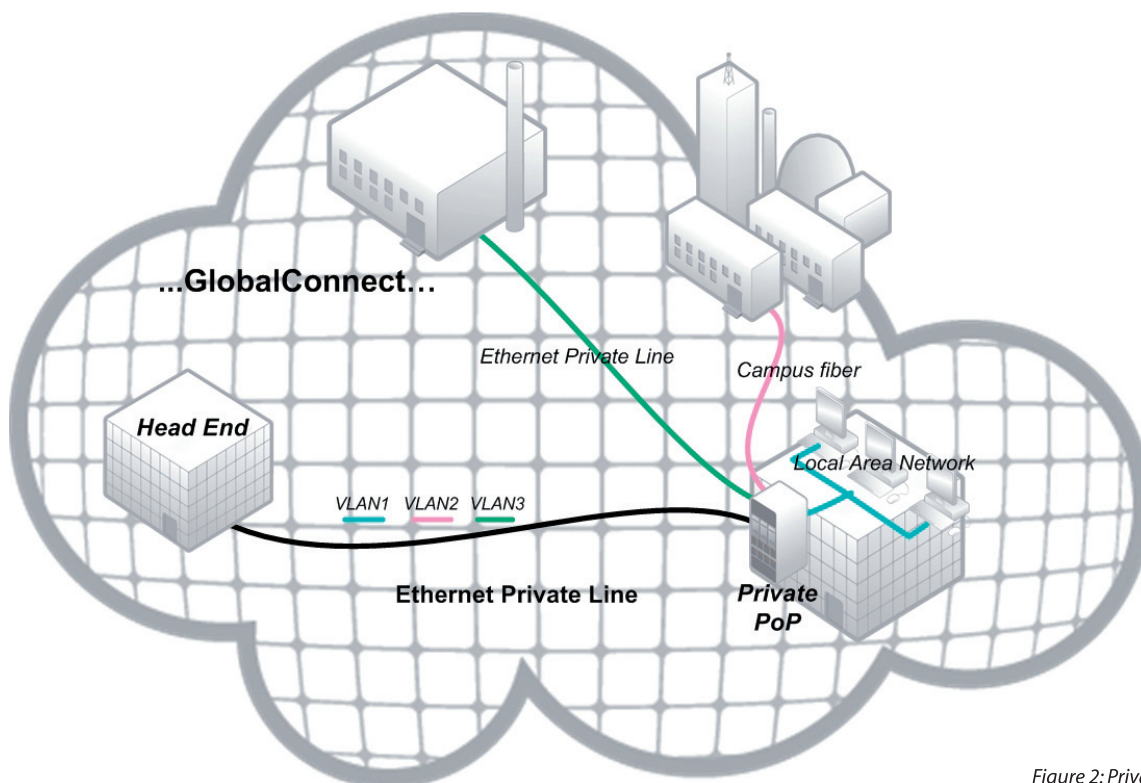


Figure 2: Private PoP located at a remote site

Between the Private PoP and the head-end, one common Ethernet Private Line (EPL) may be established, resulting in efficient utilisation of the common EPL. At the same time more locations can be connected at the remote end without need for hardware changes at the main location.

In such a scenario it is possible to exploit that data traffic comes in 'bursts', where the probability of more locations bursting at the same time may be low. Considering this, and according to further analysis of traffic flows, one may choose not to have the total bandwidth from all remote locations available on the common EPL, in order to save bandwidth.

Private PoP is ideal e.g. for service providers, who may expand coverage without having either to establish new PoPs or to connect several customer sites over long range connections.

Private PoP can be established with or without traffic separation using VLANs. In case of the latter, the network will

convert connections to remote locations to unique, agreed VLANs on the common backbone connection. The VLAN ID to be used for each connection is assigned at the time of ordering the EPL. Using VLAN traffic separation, it is only possible for traffic to flow between end points via a separate router or switch located at the head-end.