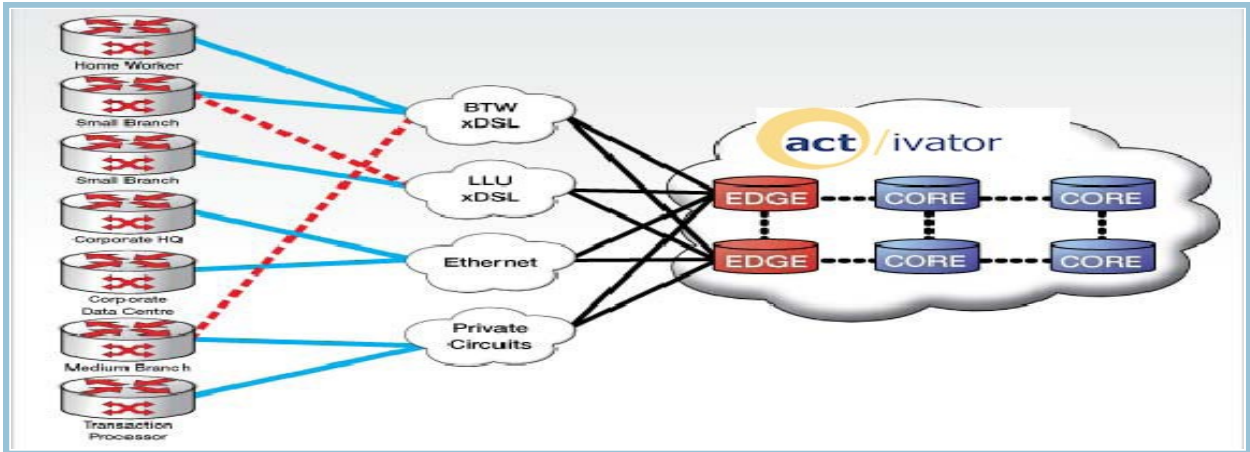


IP VPN SERVICES

NEXT GENERATION RETAIL NETWORKING USING MPLS



OVERVIEW

Virtual Private Networking (VPN) has been massively successful in driving down the cost of retail networks. As a retail managed service company Activator UK has been at the forefront of offering cutting edge network solutions initially introducing ISDN to the UK market back in the 90's, migration to broadband and now we can announce the next step forward in retail networking.

IP-VPN FOR SECURE BUSINESS NETWORKING

The next generation of VPN technology uses in the core network Multi-Protocol Label Switching (MPLS) to manage and control the VPNs and different traffic types. Our next generation MPLS based IP-VPN service is a secure private network product, built on our IP aggregation network, utilising ADSL, SDSL, Ethernet, and private circuits, to provide an MPLS core network, with full mesh or hub and spoke topology VPN.

TOTALLY FLEXIBLE CONNECTIONS

The MPLS IP-VPN provides any to any IP wide area network services using xDSL, private circuits or Ethernet extension services and is designed for multi-sited, single legal entities and businesses. It provides a service that links customer's sites and employees together using the IP networking protocol. The allows cost effective connections to business offices or a single Teleworker - all within the same secure IP network.

MULTI-SITE APPEAL

MPLS IP-VPN suits businesses with multiple sites spread over a wide geographic area, which need a high performance network to run demanding applications such as IP telephony as well as everyday e-business applications, such as email, file transfer and access to corporate information. MPLS IP-VPN can utilise access methods from the our broadband products range and also includes new access methods. These are 2Mbit/sec private circuits (or leased lines) and Ethernet extension services at 10, 100 and 1000Mbit/sec.

SERVICE FEATURES

MPLS IP-VPN TOPOLOGY

There are 2 topology options:

1. Full mesh for full any to any site access
2. Hub and spoke whereby we can allocate up to 2 sites as hub sites, all non hub sites can then only see the (up to) 2 hub sites.

MPLS IP-VPN RESILIENCE

All MPLS IPVPNs will be built across 2 PE (Provider Edge) routers; in combination with Griffin's resilient DSL network, this gives full fail over resilience to all DSL circuits within the VPN.

IP ADDRESSING

Each VPN can be addressed with a chosen range of RFC1918 private IP addresses, which are not available for customer site addressing. These do not have to be unique to each VPN, allowing us to migrate current VPNs without the need for complex and expensive site re-addressing.

A single management IP will be issued to each site by our provisioning system, MOPS, from a range of 172.x.x.x address. The customer's choice of RFC1918 site LAN addresses can then be added via IP Route or the site can simply NAT the management IP if required.

CHANGING ROLE FOR CUSTOMER ROUTER

The use of an MLPS based IP-VPNs means that more of the control and configuration of the VPN is handled in the network rather than in the router on the customer site. This means that the data encryption previously handled by the customer site router is not longer required, thereby simplifying the work done by the router and also removing additional encryption overheads to make more bandwidth available to the customer site traffic. This means the customer site router is less important for security—this is now a private network, but is more focused on managing traffic coming into the network and providing reporting and diagnostic information.

THE MANAGEMENT CHALLENGE

Activator UK are offering a full managed service with our MPLS IP-VPN service because we recognise the key to diagnosing customer application connectivity problems will be difficult if not impossible in the core network without the information you can only get from an intelligent managed customer router. Our existing product from Virtual Access and Funkwerk are ideally suited to working within an MLPS IP-VPN.

Please contact us for more details on how we can apply this technology to your specific requirements