MPLS

Multi Protocol Label Switching (MPLS) is the ideal solution for businesses who struggle to keep their data networks reliable and affordable. Unlike past technologies, MPLS provides a private, connectionless, any-to-any structure allowing every node on the network to communicate directly with every other node. This design is ideal for VoIP and video applications where congestion or latency can negatively impact the quality of communication.

Network downtime is unacceptable. MPLS in combination with other business continuity measures can positively impact the network connectivity and the ability of users to reach essential business

Why MPLS ?

Managed Network:

In a managed solution, carriers provide the premises router equipment at each node leaving one less element for your team to support. Should the network be unavailable for any reason, the carrier will provide notification and start to resolve the issue often before you are aware of the problem.

Class of Service:

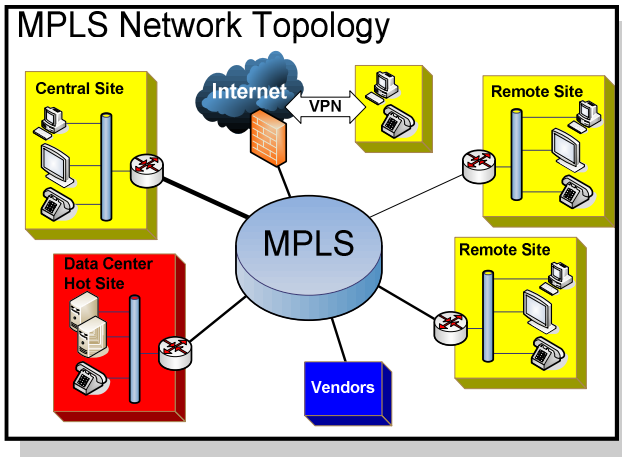
CoS differentiates performance levels for specific applications across the network. Carriers typically offer four (4) levels of prioritization allowing voice, video and critical data applications to take precedence over less critical functions. CoS is a dynamic allocation of bandwidth. If any level is not being fully utilized, lesser prioritized applications can use the available bandwidth.

Data Center/Hot Site:

MPLS networks can incorporate a hosted data center or hot site that provides remote users reliable and redundant access to critical information and resources.

Internet Access:

Traditional network topologies require users to first access a central site before connecting to the Internet. MPLS can provide a secure Internet connection directly to the network at a reduced cost.



Design Considerations

Carrier Selection: Although the solutions offered by respective carriers seem similar, the wrong carrier can limit future flexibility and growth. It is also important to evaluate their available support options.

Network Access Speed: Not all connections require the same bandwidth. MPLS offers variable access speeds to match these requirements.

Access Methods: Not every location warrants the cost of dedicated access. Therefore, VPN can be used to provide connectivity to smaller locations or work from home users.

ORION Communications, Inc
10850 W. Park Place, Suite 220, Milwaukee, WI 53224 I 414-359-2500 I orionnow.com

Case Studies

ORION Communications, Inc

Situation

A nationwide trucking company was searching for ways to decrease costs while providing a dependable network infrastructure to support voice, data and video traffic. The need to maximize network availability was a significant concern. With limited staff, the company also needed to minimize support costs and capital expenses.

Actions by Orion

Designed a network topology that incorporated MPLS with an Internet VPN that would automatically activate should the MPLS network become unavailable for any reason.

Network Resiliency

Solution Results

The network supported their requirements increasing overall bandwidth by 250% while reducing monthly costs by 21%. The inclusion of CoS offered the highest quality voice communications and incorporated video conferencing, which helped to reduce travel costs. By providing a managed

Situation

A Wisconsin based service company found their current VPN network to be inadequate for the increased bandwidth demand. The need for a more powerful, reliable network topology to support their growth and the inclusion of VoIP was required.

Actions by Orion

Orion designed a cost effective, managed network solution that provided a private communications backbone to increase bandwidth and minimize service downtime.

Enterprise Networking

Solution Results

Orion was able to implement the new network and reduce overall communications costs by 5%. Available bandwidth was increased 150% compared to the previous VPN solution which provided the

Situation

An electrical contracting company with numerous national locations was finding network delayed response times between locations. They had determined a significant investment in central site bandwidth was required. An aged data center also projected a large capital investment for new server hardware and associated equipment.

Actions by Orion

Orion designed a new network topology including a managed data center from which Internet access was incorporated. Critical applications were moved to the data center to provide a stable data backbone.

Network Redundancy

Solution Results

The network design using a centralized data center increased available bandwidth to the remote locations at a minimal cost. The relocation of Internet increased access speeds by reducing the load at the central site.