

## I D C T O P L I N E

# Performance Managed Networks: Changing the Collaborative Landscape with Ethernet and Optimization Technologies

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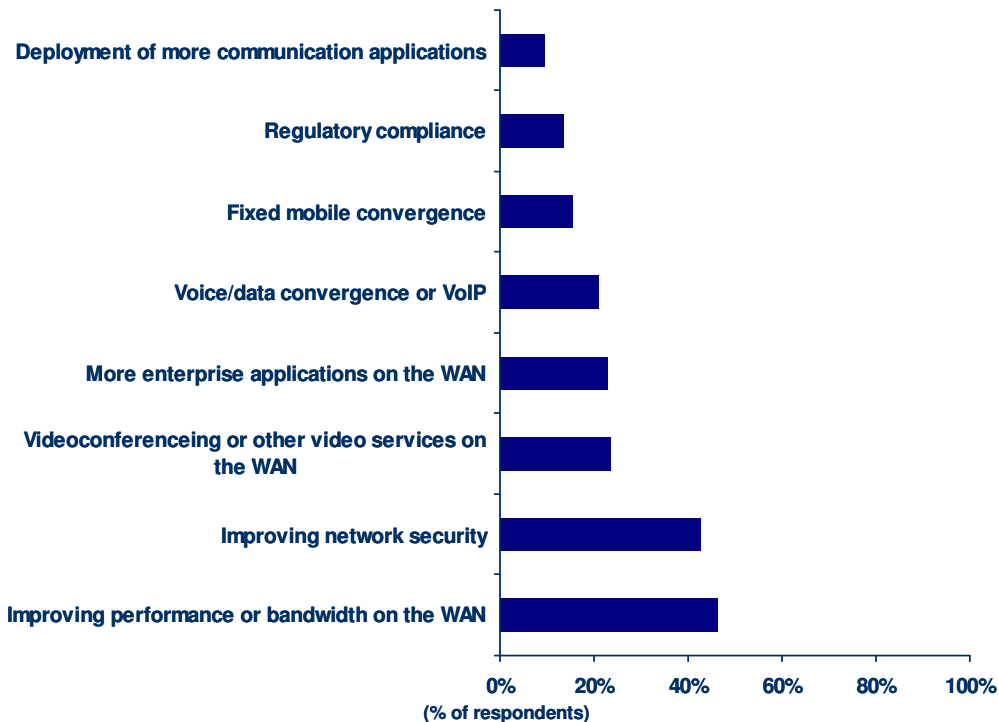
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CIOs face the challenge of improving data networks and server infrastructure used to deliver mission-critical applications such as enterprise resource planning and, more recently, enriched collaborative services including high-definition videoconferencing. This continues to fuel the demand for "always-on-always-available" bandwidth and higher levels of service quality, putting further pressure on CIOs to ensure sufficient resiliency, diversity and availability to meet and exceed this demand. Today's networks need to provide the right levels of scalability and flexibility to create opportunities to fully utilize developments in applications such as unified communications (UC) and innovative service delivery methods such as software as a service (SaaS) and cloud computing. It is therefore critical to have optimized networks to help guarantee smooth delivery of a best-in-class user experience. IDC's research shows that improving bandwidth and network security are the main drivers of network investments in 2010 (see Figure 1).

**Figure 1**

Factors Driving Network Investment in 2010



N = 2,228

Source: IDC's *Networking and Hosting Survey*, November 2009

Furthermore, with recent advancements in optical network systems such as Ethernet and WAN acceleration, new frontiers are opening up for CIOs to actively consider mixing and matching VPN services to optimize connectivity and increase productivity. As organizations are compelled to phase out historical data services like ATM and frame relay which have been deemed by providers to have reached end of life (EOL), they will need to find the right technologies to meet the collaborative demands of their extended enterprise. There are several alternatives, including IP VPN and dedicated leased lines, but IDC also believes that organizations are increasingly attracted to the scalability, simplicity, performance, reliability and overall total cost of ownership of Ethernet services. There is a strong pickup in Ethernet services in Asia/Pacific, especially in countries such as Japan and Korea. Ethernet has specific characteristics that appeal to the finance, travel, logistics and media industries such as the protocol transparency offered with Ethernet private line (EPL) for instance, which gives full control of security to the customer. Robust point-to-point and point-to-multipoint private infrastructure also allows highly flexible and scalable options for site-to-site access and the virtualization of mission-critical assets such as datacenters to help reinforce business continuity and disaster recovery strategies, and aid consolidation and rationalization. Ethernet virtual private line (EVPL) and virtual private LAN service (VPLS) increase options even further, providing options to configure and manage logically secure virtual LANs with isolated cost allocation IP and non-IP applications, and with the relative ubiquity of Ethernet local access, managing regional site offices is made even easier.

## **Why use Ethernet and Optimization Technologies?**

According to IDC's APEJ 1H09 fixed line tracker, Ethernet services revenue in APEJ will grow at a CAGR of 10.3% from US\$1.6 billion in 2009 to US\$2.6 billion by 2014, compared to traditional data services which will register negative growth of 10.5% in the same period, falling from US\$3.66 billion in 2009 to US\$2.10 billion by 2014. Ubiquity, flexibility and ease of use are just a few reasons for its broad appeal. Regional and global service providers continue to invest in Ethernet services as they migrate from traditional circuit-switched networks. The most recent services, for instance, offer increased configuration options delivered as point-to-point (E-Line) or multi-point (E-LAN), and increased granularity with bandwidths ranging from 1Mbps to 10Gbps supporting specific profiles for variable bandwidth and QoS (Quality of Service) requirements. This makes it ideal for data, voice and video, and in a bid to provide a true carrier-grade Ethernet solutions, service providers such as SingTel, Telstra International, Tata Communications and PCCW have been certified by the Metro Ethernet Forum, the highest level of certification available worldwide. Despite this, the performance managed network is not just about a new network. It is as much about cost-efficient provisioning, optimized configuration and support for new applications and working practices. As such, utilizing the latest techniques in WAN acceleration also helps to meet the growing needs of the organization. By deploying VPNs using Ethernet services, companies will be able to enjoy more resilience, security, control and performance creating opportunity to achieve best-in-class performance.

## **Essential Guidance**

Today's communication infrastructures need to deliver quality-controlled bandwidth with highly scalable and flexible options to support new mission-critical applications and innovative service delivery models. IDC strongly recommends that organizations examine their technology roadmap and decide the best network optimization route to take, carefully considering the unique characteristics of datacenters. Engaging established carriers to help plan for a better, cost-effective network will also ensure companies have a scalable network that meets their future requirements. CIOs should also look at Ethernet services to better manage their budgets and improve their information infrastructure's level of performance, availability, security, capacity and agility. This way, the network can support the demands for internal collaboration as well as the extended enterprise which brings together an ecosystem including partners and customers.