

Managed network enables HTM to concentrate its core business

Client

HTM (Haagsche Tram Maatschappij)

Business

Public transport operator based in The Hague, carrying nearly 130 million passengers a year

Size

Midsized

Sector

Government

Challenge

Connect data centres and major offices with a high-speed highly reliable network. Reduce telephony costs to major offices and branch sites. Reduce number of suppliers

Services used

- Colt CPE Solutions (IP over Ethernet option),
- Colt IP VPN Corporate,
- Colt IP Access

HTM interconnected its data centres and major office sites in The Hague using high-speed Ethernet links from Colt. The links carry data and voice traffic, cutting costs and reducing HTM's supplier list.

Simplicity for better performance

HTM wanted a high-speed network between its data centre and nine major sites in The Hague, Netherlands, which support nearly 2,500 employees. It had three key objectives:

- Interconnect the data centre and major sites, but without having to manage the traffic itself
- Reduce its spending on voice telephony and PBXs by moving to voice over IP (VoIP)
- Reduce its supplier list from 256 to 36 by finding a one-stop-shop service-provider.

HTM chose IP over Ethernet, part of Colt CPE Solutions, which is a portfolio of networking services based on managed customer premises equipment (CPE).

It is a unique service that can provide managed IP over Ethernet at up to 1Gbps at a highly attractive cost per bit-per-second.

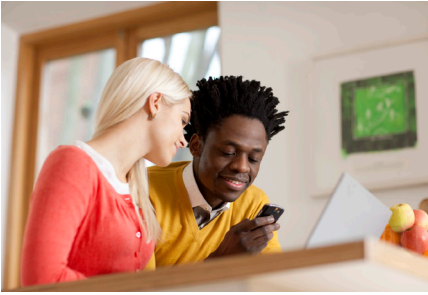
Because it is a managed service, the IP configuration and address allocation are handled by Colt, eliminating a management overhead for HTM.

LAN performance between the sites

The new network carries all HTM's data and voice traffic between its sites. Physically the network is a hub-and-spoke configuration, with the data centre acting as the hub, but logically it is an any-to-any network.

Colt CPE Solutions connects the nine main sites and the hub with fully redundant 1Gbps Ethernet links. As shown in Figure 1 on page two, most of the spoke sites have dual links to the hub site, so in the unlikely event of congestion or failure there is an alternative path. Each link connects in to separate CPE.





// We don't need to think about IP address allocation or configuration any more, so the IT team can concentrate on more strategic issues. We get higher performance with Colt's innovative service. //

Adam Man, Managing Director, HTM

// The service has brought multiple benefits. It is highly resilient, simple, and has given us much more for our telecoms budget. //

Adam Man, Managing Director, HTM

The connections provide LAN-like performance across the metro area, with the simplicity of having a single protocol - Ethernet - throughout.

Class of Service for voice

Class of Service (CoS) was enabled, so that HTM could prioritise VoIP traffic over the network. CoS sets minimum levels for certain parameters such as latency (the time it takes for signals to transit the network), and prioritises urgent traffic - ideal for voice and video. HTM had a further 18 smaller sites that required VoIP. Colt connected them into the hub site using IP VPN Corporate, a managed IP service designed for lower speeds of up to 155Mbps.

Colt IP Access at the hub site provided internet access to all the sites connected to the hub. Colt's flexible approach, providing multiple services to address different needs at the customer's multiple sites, was part of the reason HTM chose Colt as its supplier.

Near-real-time monitoring

Colt's online performance monitoring tool for CPE Solutions provides a near real-time view of utilisation, latency and packet loss for HTM.

Taking HTM forward

The new service has enabled HTM to concentrate on its core business of transporting customers. It does not have to manage its IP traffic; it has reduced the number of suppliers it has to deal with; and it has reduced its voice costs by converging all its traffic onto the single network.

Full range of networking solutions

CPE Solutions is just one of Colt's wide range of network services, which range from leased lines through frame relay, ATM and Ethernet services to IP VPN services.

Next step

To arrange a consultation or to discuss how Colt can help you visit: www.colt.net

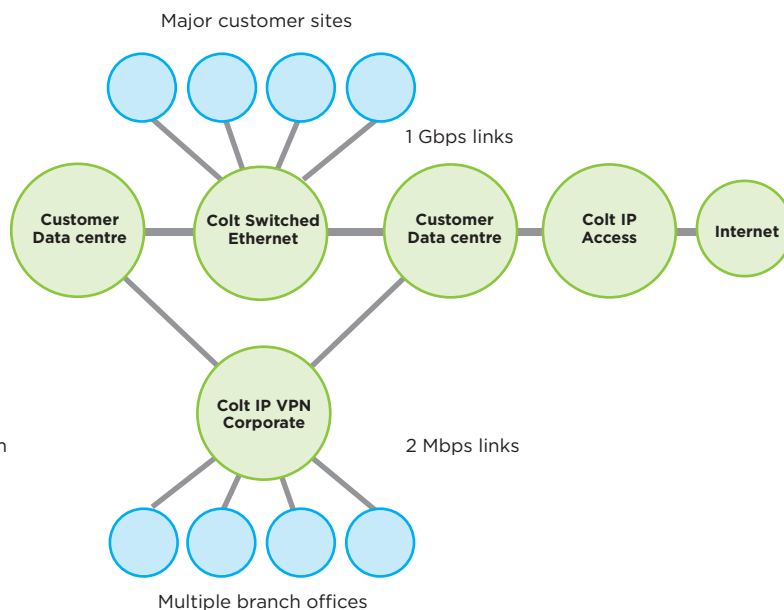


Figure 1. A simplified diagram of HTM's 1Gbps Ethernet network for voice and data.