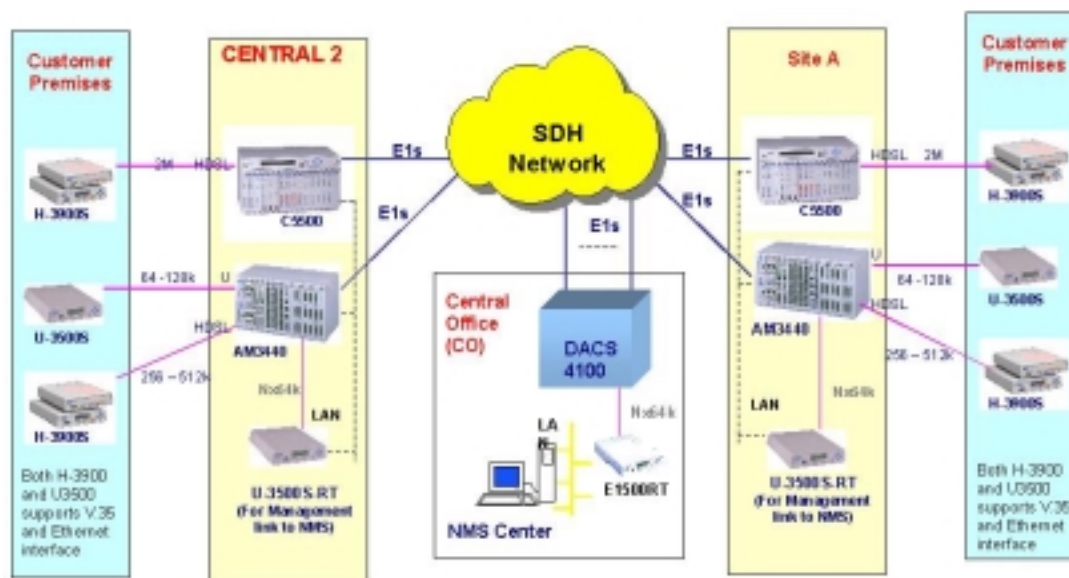


Network Configuration Setup in Asia

This application is used for large corporations and banks in an Asia country. The central office of the telecom carrier wanted to provide three kinds of service: 2 Mbps broadband service to very large corporations; reliable 64 - 128k low speed service for credit card, ATM machine, and low speed internet connections; and 256 - 512 k service for high speed internet connections. A network Management System was also required.

In this application all traffic is aggregated into E1 format 2 Mbps links and transmitted through ADM (Add Drop Multiplexer) by SDH (synchronous digital hierarchy) optical connections. According to the rate of bandwidth, several types of equipment are used to properly handle the data traffic. The following simplified diagram illustrates this situation.

Example of network configuration set up at Site Central 2 and Site A



N*64 Kbps link

Located at the access node, the Loop Am-3440 Quad E1/T1 Mux concentrates all N*64 Kbps links delivered by the Loop-H 3900S and the Loop-U 3500 network terminating units (NTUs) and sends them via E1 trunk. The Loop-AM 3440 Quad E1/T1 Mux has four E1 (G.703/G.704) interface.

and plug-in cards for HDSL interfaces and U interfaces. Connected to the Loop-AM 3440 Quad E1/T1 Mux by a 2B1Q link, the Loop-U 3500 works as a NTU carrying 64 kbps and 128 Kbps traffic. The Loop-H 3900S then handles the higher speed lines such as 256 Kbps, 384 Kbps and 512 Kbps links. Each of the HDSL lines can be programmed for various line rates to match the lengths of the line, with higher rates applicable to shorter lines.

2 Mbps Links

To fully utilize the 2 Mbps bandwidth, Loop-C 5500 and Loop-H 3900 rack cards are installed at the remote sites and interconnected with Loop-H 3900S stand alone units at the customer premises to manage 2 Mbps links. The Loop-H 3900S has one E1 interface and one HDSL interface.

Network Management System

Loop provides a GUI based network management platform to control all the network elements. Each NTU/CPE level Loop-H 3900S/U 3500 element can be managed via the Loop-C 5500 and Loop-AM 3440 Quad E1/T1 Mux using an IP/Ethernet connection. Operators can perform end-to-end management, gather equipment status and set product configuration. Since the management system is interconnected by the LAN connection, Loop also provides a LAN solution as an option to link all nodes together. The H3900S-RT transmits SNMP protocol from LAN Ethernet to WAN Nx64 via the Loop-AM 3440 Quad E1/T1 Mux and sends it to the NMS center for the operator to execute remote control.