Remote Bridge Example

To illustrate the operation of a dial-up remote bridge, Fig. 1 shows two sites, each with a backbone FDDI network linking 100VG-AnyLAN hubs.

Users connected to end nodes 1 and 2 want to communicate by video and audio between the two sites. The backbone networks on each site are connected to the wide area network (WAN) through dial-up remote bridges specifically designed to carry multimedia traffic. We assume that site A and site B can also communicate through existing routes, such as some kind of corporate internet.

When the call between node 1 and node 2 is initialized, an isochronous link with the appropriate bit rate is set up between the two dial-up bridges. Bridge A is told the 48-bit MAC address of node 2. Any subsequent packets that appear on the backbone FDDI bearing that destination address will be forwarded across the WAN. Bridge B puts them on the backbone FDDI at site B, from which they reach node 2.

Any normal-priority data packets destined for node 2 will not be picked up by bridge A because they will carry the destination address of the router connecting site A to the corporate internet, not that of node 2.

Fig. 1. Remote sites connected by dial-up remote bridges.