

In case of direct multicast that DTR5000N is directly connected to the Hub, no other system is required except the DTR5000N. DTR5000N receives the data through the Satellite and puts them onto the LAN. The DTR5000N takes the role of filtering the IP data for Multicasting.

Regarding Unicast, you need Proxy Server and DTR5000N that supports ARP and IGMP protocol.

User sends requests to the LAN at his PC. Here, the source address is IP address of the PC. Then this request goes to the Proxy Server. The Proxy Server keeps the user IP address (original source address) for later use and sends the request and IP address of DTR5000N(new source address) to the Internet. Then, the requested data comes through Satellite to the DTR5000N because the Proxy Server gave the IP address of DTR5000N as a new source address instead of the original source address (IP of the PC). DTR5000N, then, sends the Internet data to Proxy Server, where Proxy Server recovers the original IP address of the PC and sends the Data to the user.

In this way, anyone on the LAN can receive IP Unicast or multicast data via satellite with its full speed.

Indirect Multicasting and Unicasting

Fig 3. Data flow and routing for single IP address with indirect connection

