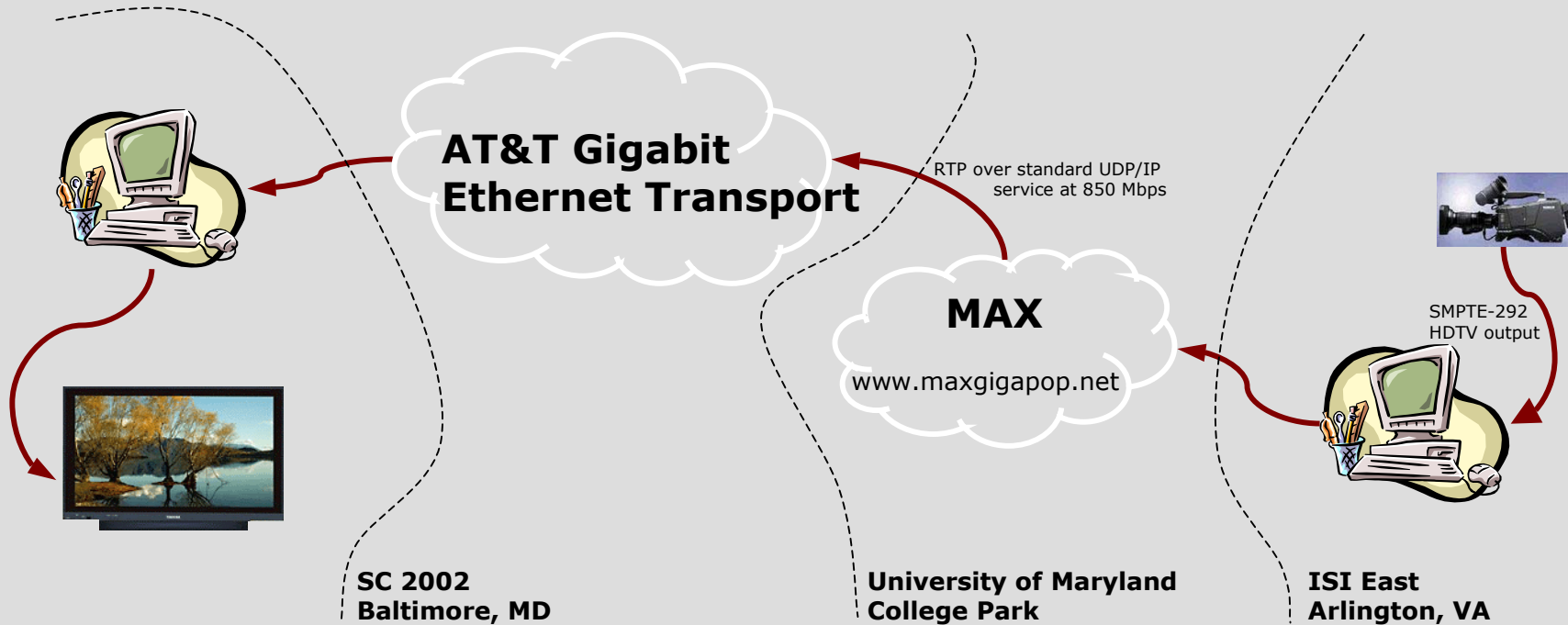


UltraGrid: HDTV over IP



Real time HDTV over commodity IP networks

Based on IETF standard Real-time Transport Protocol (RTP) running over UDP/IP. HDTV is packetized at 850 Mbps, and delivered without quality-of-service support. The network path between ISI East and University of Maryland, College Park, is shared with other traffic.

Commercially available hardware platform

Video capture and playback use Dell PowerEdge 2500 PCs running Linux. They are equipped with gigabit Ethernet and DVS HDstation HDTV capture/playback cards.

Custom software developed at ISI East

RTP packetization, transmission, timing recovery and playback handled in software. Flexible and extensible payload format. Support for IPv4/IPv6 and one-to-many distribution using IP multicast.