

The Wainhouse Research Bulletin

ANDREW CHECKS OUT TELIRIS (ANOTHER HIGH-END VIDEOCONFERENCING SYSTEM)

"In WRB V4 #22 (June 2, 2003) I reported on a visit to a TeleSuite room in NYC. Well last week I got to see another high end videoconferencing system in NYC, this time courtesy of Teliris, a UK-based total solution provider. For those with an unlimited capital expense budget and who can afford to devote 5-20 Mbps of bandwidth for a video call, the Teliris VirtuaLive™ solution provides an absolutely superb telepresence experience. The guts of the VirtuaLive™ videoconferencing solution are based on very low latency MPEG2 encoder/decoder devices running at about 4 Mbps over ATM or TCP/IP transports, custom broadcast quality cameras, and a next-generation user control system in which the user selects how many sites are on the call and how many people are in the room, and the system takes care of the rest.

Another key ingredient of VirtuaLive™ is Virtual Vectoring, an interesting concept that you have to experience to understand. Virtual Vectoring creates a realistic orientation and interface among users by consistently maintaining eye contact and sight lines among participants in a meeting. In essence, you have one camera, codec, and display for each site in the conference (and at each site) - so the same image is not sent to more than one site.

The result is that the display system presents each user to the others in the proper aspect ratio, size, and orientation. It's as if you are all in the same room together. Combine this with low delay and high video quality, and you start to get the picture. Virtual Vectoring also includes a technique which Teliris calls dimensioning - the complexity associated with creating camera placement, site lines etc. that are dependant on the number of rooms and number of participants in each room. This includes guidelines for the maximum number of individuals that should appear on each plasma screen, a tracking system for cameras so that the cameras can adjust automatically to address changes to these criteria, etc.

My Comments:

The TeleSuite room was actually a "room inside a room" where the cameras and microphones were hidden from the user and great effort was made to present lifesize images in a sophisticated display system that made it feel like the others were sitting across the table from you. But the demo I saw in June was based on standard products and technology (Polycom VS4000 codecs). The Teliris situation is quite different. The displays are "vanilla" plasma displays, and the table and microphones are ordinary as well. (The lack of wideband audio was a disappointment to me with the Teliris demo). However, the low latency, high quality video, and the natural affect of the Virtual Vectoring system produced an astounding experience. Of course there are some obvious limits – besides cost; you gain the benefits only when calling another Teliris room, although you can gateway out to a standard H.32X system."