Recommended Practice: Residential Ethernet

Draft PAR November, 2005

Title (4)

Draft: Local and Metropolitan Area Networks: Recommended Practice for Guaranteed Quality of Service for Low Latency Streaming Media in 802.1/802.3 Local Area Networks

PAR Scope (13)

This project will describe how time-sensitive delivery of data transmissions between synchronized end points can be done using 802.1/802.3 Local Area Networks on a plug-and-play basis.

PAR Scope (13)

Is the completion of this document contingent upon the completion of another document? Yes

This PAR includes work on independent capabilities, and much of the work is contingent on other projects. These other projects will need an overall description so that they will result in a coherent architecture.

PAR Purpose (14)

This project will allow 802.1/802.3 Local Area Networks to support the requirements of consumer electronics and professional media content creation devices in the transport of digital media.

PAR Reason (15)

"Residential" networks represent a new and very broad application space for 802.1/802.3 LANs. The digital networking port* on consumer electronics (96 billion USD in 2003) equipment has not yet been decided, and 802.1/802.3 has a strong possibility of being the dominant, long-term solution of choice if it also provides low latency guaranteed bandwidth services.

*The overall market for home networking semiconductors will grow 12% per year from 2004 to 2008, moving from \$1.34 billion in the beginning of the forecast to \$2.32 billion at the end of the forecast. This growth will come despite decreasing prices on a per unit basis, as the average price for a home networking IC will decline from \$8 in 2004 to \$5 in 2008. This increase in revenues despite downward pressure on pricing shows how the overall unit momentum throughout the forecast period will create a "rising tide" for the connected home silicon market (the market will go from 174 million ICs shipped in 2004 to 458 million in 2008). - Instat