Residential Ethernet
Call for Interest Report

Universal Linkage
Consumer Marketplace

• It’s huge!
  – Market for all consumer electronics ($96 B 2003)

• Pace of new product introduction is rapid
  – Product cycles are ~ 3-6 months (sometimes less)
  – Rapid change in features and performance

• Products are mass produced with tremendous economies of scale

• Enormous market pressure for low-cost high-performance exciting products
A/V Has Time Sensitive Applications

• Multi-Room Synchronization
  – Audio playback synchronized across multiple rooms
  – Video playback synchronized across multiple rooms and maintaining lip-sync

• Network Trickplay
  – Multiple HDTVs accessing recorded shows on a Digital Video Recorder
  – Each TV attempts slow/fast playback at same time

• Jam Session
  – Multiple instruments with live effects and mixing
  – Turn on instruments and immediately begin playing
Future digital home in Korea

- Multiple services in the home
- Home appliances and information terminals are connected by wired/wireless networks.
- The home network is connected to the access network through a home gateway
Ethernet Home Network

Ethernet Networks Today

- Plug-and-play
- Large bandwidth (up to 10Gb/s)
- Network management
  - Neighbor Discovery
  - Virtual Network Support
  - Traffic prioritization

- No end-point synchronization
- No data/time support
- No bounded latency support
- No bandwidth allocation
Potential Study Items

Study Item 1: What type of synchronization support does a HN need?
- Clock synchronization at “end-points” only
- Clock distribution
- Over-provisioning for acceptable delay/jitter
- Real time traffic prioritization
- TDM type of service

Study Item 2: What constraints should an in-Home Ethernet have?
- Speeds
- Connectivity

Study Item 3: Investigating existing mechanisms
- 802.3 Clause 64, Clause 65
- 1394 isochronous
- Gibson MaGIC

Study Item 4: Interactions with 802.1
- Ex: 802.1d, 802.1p, 802.1q, etc…
Call for Interest

Request 802.3 at the Closing Plenary to form a Residential Ethernet Study Group to develop a standards project proposal (PAR and 5 Criteria) for Residential Ethernet.

Yes: 85   No: 12
Poll #1

How many people are in the room?
_Est 125_____

___N/A___802.3 Voters
Poll #2

A Study Group to investigate additions to 802.3 to support new A/V applications in the home

I would support and participate in this Study Group:

Total individuals: _50____

Total 802.3 Voters: _42_____
Poll #3

A Study Group to investigate additions to 802.3 to support new A/V applications in the home

My company would support and participate in this study group:

Total companies

Yes: __30  No: 6
Poll #4 Meeting Planning

I will attend the Residential Ethernet Interim Meeting in September:

Yes: _45_____
Motion

Request that 802.3 form a Residential Ethernet Study Group to develop a standards project proposal (PAR and 5 Criteria) for Residential Ethernet.

Moved: Richard Brand
Seconded: Steve Carlson

Y_____ N_____ A_____
Interim Meeting Plans

I will attend the Residential Ethernet Interim Meeting in September/October:

Those that did not already indicate their intention to attend the interim meeting for Residential Ethernet

_____
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Yes: 85  No: 12