# Residential Ethernet Call for Interest Report



# **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 highperformance 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

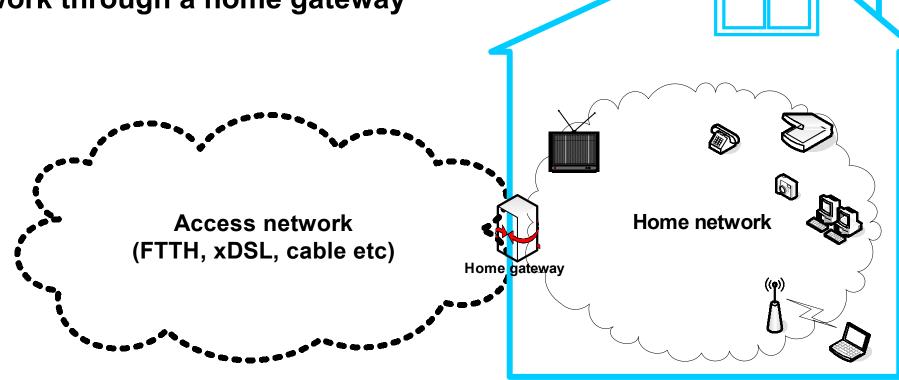
- Multiple HDTVs accessing recorded shows on a Digital Video Recorder
- Each TV attempts slow/fast playback at same time

#### 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



Digital home

### **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 <u>not</u> already indicate their intention to attend the interim meeting for Residential Ethernet

### **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