
**Joint 802.1/802.3 Residential
Ethernet Study Group
Status Report for 802.1
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Progress for this period

- Continuous interactions within SG:
 - 262 subscribers to reflector
 - Weekly conference calls with 1-3 papers/presentations per call
- Presentations this week
 - Possible PAR/5C for 3 projects
 - Timing Synchronization
 - Simple Reservation Protocol
 - ResE Recommended Practice
 - 3 presentations
 - Worst case delay bounds (partial work, status report)
 - Timing synchronization simulations and measurements for several approaches
 - Discussions on integration with 802.1 and possible changes needed to 802.3

Review of initial “802.1” centric objectives

- Guaranteed QoS attributes for streams over small diameter (home-sized) network with 7 Ethernet hops max
 - smaller number of hops for MACs with more inherent latency
- QoS attributes are:
 - delay less than 2ms for tightly interactive use, “larger” (about 20-50ms) for “remote control” interaction
 - guaranteed bandwidth (assignable per stream) such that packets are never dropped (unless there is an error)
 - once a stream is established, its performance is guaranteed
- Timing synchronization between DTEs with low jitter and approaching zero wander
 - Scalable approach such that it’s possible to support uncompressed HD video at the high end

Future Plans

- Organize work within 802.1
 - Continue effort to use existing 802.1 facilities
 - Frame forwarding for streams
 - Traffic class use, queuing, filtering, stream addressing
 - Interaction with SRP
 - QoS Admission Control system
 - SRP
 - “Defended network”
 - DTE/network boundary traffic shaping
- Increase coordination with 1588
 - Attempt to get all protocol specification with 1588
 - 802 spec will be pointer to a 1588 profile
 - Possible that 802 will need to define bridge behavior
- Continue technical work
 - Simulations for both data QoS and timing-synchronization quality