

SRP Planning

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SRP Potential Work Items

- Slide for each category in Qcc PAR scope

Work Item

Dependencies

Presentations

- Each Work Item is from Editor's Notes of <http://www.ieee802.org/1/files/public/docs2013/new-tsn-cgunther-SRP-enhancements-PAR-5C-0513-v05.pdf>
- Dependencies: Other projects likely to be referenced
- Presentations: Relevant links (other than <http://www.ieee802.org/1/files/public/docs2013/new-tsn-cgunther-SRP-next-gen-0313-v01.pdf>)
- Two tables
 - **Ready**: Create proposal in draft-like form; iterate from there
 - **Not Ready**: Need presentation(s) to outline a solution

Support for More Streams

Ready

Work Item	Depend	Presentations
MRP timer work and refresh reduction (including timer negotiation?)		http://www.ieee802.org/1/files/public/docs2010/at-cgunther-mrp-timers-0310-v02.pdf http://www.ieee802.org/1/files/public/docs2011/avb-dolsen-srp-limitations-v2.pdf http://www.ieee802.org/1/files/public/docs2013/new-tsn-cummings-improving-srp-with-rsvp-0313-v1.pdf
Talker VLAN pruning		
Talker pruning per port		

Not Ready

Work Item	Depend	Presentations
Speed up make/break reservation time		
Support reservations on aggregated links		

Configurable SR Classes and Streams

Ready

Work Item	Depend	Presentations
Configurable priority, VID, observation interval; More SR classes		http://www.ieee802.org/1/files/public/docs2013/tsn-pannell-queue-names-0113-v1.pdf
Configurable max latency		
Per stream selection of Qav, Qbv, Q??		
Configuration of new Qbv time-aware shaper	Qbv, Qca	
... creation of reservations from a management interface...		

Not Ready

Work Item	Depend	Presentations
Per stream selection of CB	CB	
Energy Efficient Ethernet and its effects on latency		
Effects on latency in presence of Qbu	Qbu	

Better Description of Stream

Ready

Work Item	Depend	Presentations
Configure max latency per bridge port		(same as "Configurable max latency")
Unicast address stream DA		http://www.ieee802.org/1/files/public/docs2013/new-tsn-nfinn-non-1722-SRP-0313-v01.pdf

Not Ready

Work Item	Depend	Presentations
Lock-down current latency		
Talkers and/or listeners specify acceptable stream characteristics		
Multiple talkers per stream		
Two-way reservations		
Tear-down rank bit		
Allow latency changes from network reconfig		

Support for Layer 3 Streaming

Not Ready

802.1 should establish coordination with IETF prior to starting this work.

Work Item	Depend	Presentations
Interoperability with RSVP	IETF?	
Layer 3 IP addressing problem with multiple VLANs (PVID & SR_PVID)	IETF?	http://www.ieee802.org/1/files/public/docs2013/new-tsn-nfinn-non-1722-SRP-0313-v01.pdf
268M IP multicast -> 8M Ethernet multicast: 32 IP multicast addresses for every allocated Ethernet multicast address (01:00:5e:00:00:00 to 01:00:5e:ff:ff:ff)	IETF?	http://www.ieee802.org/1/files/public/docs2013/new-tsn-nfinn-non-1722-SRP-0313-v01.pdf
Other work items?	IETF?	

Deterministic Reservation Convergence

Not Ready

Work Item	Depend	Presentations
Avoid flapping		
A reboot results in restoration of same reservations (although not persistent in MIB)		

UNI for Routing and Reservations

Not Ready

Work Item	Depend	Presentations
Connect reservation to path created by Qca, including redundant paths	Qca	
IETF PCE (Path Computation Element)	Qca, IETF?	