

# 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?)		<a href="http://www.ieee802.org/1/files/public/docs2010/at-cgunther-mrp-timers-0310-v02.pdf">http://www.ieee802.org/1/files/public/docs2010/at-cgunther-mrp-timers-0310-v02.pdf</a> <a href="http://www.ieee802.org/1/files/public/docs2011/avb-dolsen-srp-limitations-v2.pdf">http://www.ieee802.org/1/files/public/docs2011/avb-dolsen-srp-limitations-v2.pdf</a> <a href="http://www.ieee802.org/1/files/public/docs2013/new-tsn-cummings-improving-srp-with-rsvp-0313-v1.pdf">http://www.ieee802.org/1/files/public/docs2013/new-tsn-cummings-improving-srp-with-rsvp-0313-v1.pdf</a>
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		<a href="http://www.ieee802.org/1/files/public/docs2013/tsn-pannell-queue-names-0113-v1.pdf">http://www.ieee802.org/1/files/public/docs2013/tsn-pannell-queue-names-0113-v1.pdf</a>
Configurable max latency		
Per stream selection of $Q_{av}$ , $Q_{bv}$ , $Q_{??}$		
Configuration of new $Q_{bv}$ time-aware shaper	$Q_{bv}$ , $Q_{ca}$	
... 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 $Q_{bu}$	$Q_{bu}$	

# Better Description of Stream

## Ready

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

## 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?	<a href="http://www.ieee802.org/1/files/public/docs2013/new-tsn-nfinn-non-1722-SRP-0313-v01.pdf">http://www.ieee802.org/1/files/public/docs2013/new-tsn-nfinn-non-1722-SRP-0313-v01.pdf</a>
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?	<a href="http://www.ieee802.org/1/files/public/docs2013/new-tsn-nfinn-non-1722-SRP-0313-v01.pdf">http://www.ieee802.org/1/files/public/docs2013/new-tsn-nfinn-non-1722-SRP-0313-v01.pdf</a>
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?	