

Ring Resiliency

802.1 Standardization

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Prior Art

- Customers are requiring that features of previous ring protocols be made available via Ethernet (and other 802) MACs/PHYs
- The most important of these is protection that provides the responsiveness and reliability of SONET/SDH or IEEE 802.17 RPR
- Rings are common in many Carrier Ethernet networks
 - Rings provide enough of a special case that optimizations beyond (R)STP are warranted
- Many proprietary protocols
 - Demonstrate need and market
 - Show need for standardization



The Object

- To bring the useful capabilities of 802.17 RPR to 802.1 bridges and common 802 MACs/PHYs
- This suggests possible PARs to discuss:
 - Enhancements to RSTP/MSTP for rings
 - Queue techniques for fairness (the “parking lot” problem)
 - Ring topology management/verification
- PARs probably not needed:
 - 802.1ah already provides useful, standard way of isolating customer addresses from the ring
 - 802.1Qat and 802.1Qav should provide appropriate jitter and latency guarantees



Request

- Do you have interest in 802.1 standardizing 802 ring protection?
 - Directly interested and want to work on it
 - Interested, but want others to work on it
- We wish to bring a formal proposal in March
- Talk with Norm Finn, John Lemon