Stream Reservation Protocol (SRP)

Draft PAR

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Title (4)

Draft: IEEE Standard for Local and Metropolitan Area Networks – Stream Reservation Protocol (SRP)

PAR Scope (13)

- This standard specifies protocols, procedures and managed objects that allow network resources to be reserved for specific traffic streams traversing a bridged local area network.

- It identifies traffic streams to a level sufficient for bridges to determine the required resources and provides a mechanism for dynamic maintenance of those resources.

Is the completion of this document contingent upon the completion of another document?

  – Yes. This standard will refer to P802.1ak and P802.1as.

PAR Purpose (14)

- This standard provides a signaling protocol to enable the end-to-end management of resource reservation for QoS guaranteed streams
- The signaling protocol facilitates the registration, de-registration and retention of resource reservation information in relevant network elements
- The signaling protocol is an essential component for bridged local area network applications that require QoS guarantees

PAR Reason (15)

- Many vendors and users desire a single network infrastructure to carry various multimedia applications such as digital video, high-fidelity digital audio, and gaming traffic, as well as non-time-sensitive traffic (e.g., data traffic).
- The application of current IEEE 802 technologies for high quality time sensitive streaming allows users to load their networks unknowingly to the extent that the user experience is negatively impacted.
- To provide the robust guaranteed QoS capability for streaming applications, the availability of network resources along the entire data path must be assured before transmission takes place.
- This requires the definition of traffic stream descriptors and a protocol to signal the resource reservation along the end-to-end path of streams. MRP will be used as a basis for this protocol.