Ring wide SDB Purge

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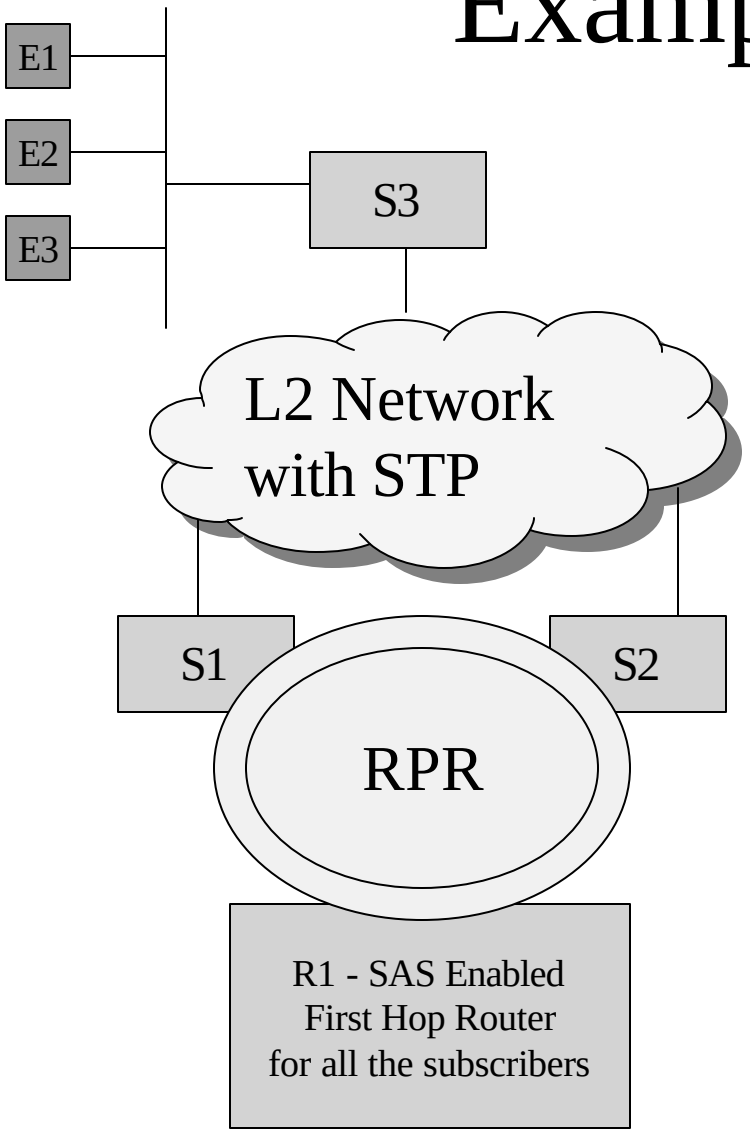
- Why is it needed ?
  - Change in network topology can cause some of all of SAS learnt entries because stale
  - Not all stations on the ring will necessarily detect the change in the topology
  - If some one else don’t tell them about it, these SAS stations on the ring shall continue to use stale SAS table entries
  - This can lead to traffic black holing till the stale SAS table entries age out
  - We need a way to handle this quicker and better

Example Topology



- E1,E2 & E3 are the subscribers accessing the network via the switches S1,S2 & S3 and the router R1.
- S1 & S2 run spanning tree to provide redundant connectivity to the ring.
- If the L2 topology changes such that all the subscribers originally behind S1 are now behind S2 (from R1's point of view), R1 needs to be told about it.
- Why – because R1 does not run spanning tree so would not know about it.
- S1 or S2 need to trigger an SDB Purge message around the ring to let R1 know.
- Upon receiving this message, R1 would flush its SAS table, starts flooding and eventually relearns the new associations.