Overview

SAS 2 r03 describes the behavior of a zoning expander when a BROADCAST primitive or an SMP ORIGINATE BROADCAST PRIMITIVES request is received. The intent was for a BROADCAST primitive or an SMP ORIGINATE BROADCAST PRIMITIVES request to be transmitted by the zoning expander using a similar set of rules. Unfortunately, as written in SAS 2 r03, different rules are used, resulting in different behavior.

For example, a received BROADCAST primitive will be transmitted on ports with the zone participating bit set to zero only when the group ID of the receiving and transmitting ports match. The intended rule is for the BROADCAST primitive to be transmitted on all ports which have permission to communicate with the receiving port according to the zone permission table.

Suggested Changes

4.8.5 BROADCAST processing

If a zoning expander device receives a BROADCAST or an SMP ZONED BROADCAST request, then the zoning expander device shall process the broadcast on each other expander port as follows:

a) Transmit an SMP ZONED BROADCAST request from its SMP initiator port if the expander port has its ZONE PARTICIPATING bit set to one and has at least one zone permission bit set to one in:
   A) at least one ZP[s,d] is set to one where s is any of the zone groups listed in the received SMP ZONED BROADCAST request; or
   B) the ZP[s,d] is set to 1 where s is the zone group of the expander port on which the BROADCAST was received;

or

b) transmit a BROADCAST if the expander port has its ZONE PARTICIPATING bit set to zero and one of the following conditions is met:
   A) at least one zone permission bit-ZP[s,d] is set to one where s is in any of the zone groups listed in the received SMP ZONED BROADCAST request; or
   B) ZP[s,d] is set to 1 where s is the zone group of the expander port matches the zone group of the expander port on which the BROADCAST was received.