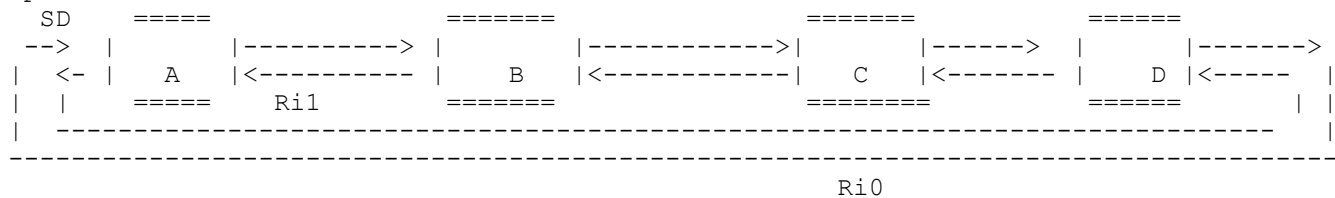


The Ringlet select statemachine(Section 7.7.1.6.4; page 186) calls the function Reachable(frame.da,ringlet_id) (Row 24 of state machine , Page :187) to check whether the destination station is reachable on particular ringlet. This function checks the topoEntry[ringlet_id][index].reachable and enqueue the frame if the destination is reachable in that ringlet.

For the failure in the below figure the reachable field of different nodes should be updated as



For Node A
=====
Nodes B, C,D are reachable in ringlet 0 so the entries topoEntry[0][1], topoEntry[0][2], topoEntry[0][3] should have reachable =TRUE and topoEntry[1][1], topoEntry[1][2],topoEntry[1][3], topoEntry[1][4] and topoEntry[0][4] should have reachable = FALSE

For Node B
=====
Nodes C, D are reachable in ringlet 0 and node A in Ringlet 1 .
topoEntry[0][1], topoEntry[1][1] topoEntry[1][2], should have reachable = TRUE and
topoEntry[0][2] , topoEntry[0][3] ,
topoEntry[0][4] , topoEntry[1][3],topoEntry[1][4] have reachable =FALSE.

In the node B will update the topoEntry[ri][hops].reachable when it receive a TP frame from node A on Ringlet1 and node D on Ringlet 0. This is done by ParseTp StateMachine row 27. (Section 11.6.4.4. page 358).

Analysis of TP Frame received on node B
=====
For the TP frame from D received at node B on ringlet 0 ,
Ri =0 , hops = 2 , new.spanEdge [1] = 1 .
This satisfies the condition for row 26 and the topoentries topoEntry[0][2] to
topoEntry[0][MAX_STATIONS] are marked as
reachable =FALSE.
for the TP Frame from A received at node B on ringlet 1 ,
Ri =1 , hops =3, new.spanEdge[0] =1 ,
This satisfies the condition for row 26 and the topoentries topoEntry[1][3] to
topoEntry[1][MAX_STATIONS] are marked as
reachable =FALSE .

So the node B will have entry topoEntry[0][2] are non reachable and topoEntry[1][2] as reachable which could lead to incorrect ringlet selection.

SOLUTION 1
=====
I feel the row 27 & 32 of the state machine should be modified as
topoEntry[Other(ri)][hops].reachable = FALSE .
Maybe the row 28 ,29 and 32 of Protection update state machine need similar
modification.

SOULTION 2
=====
Modify the Reachable(frame.da,ringlet_id) to check for the
topoEntry[Other(ringlet_id)][index].reachable.