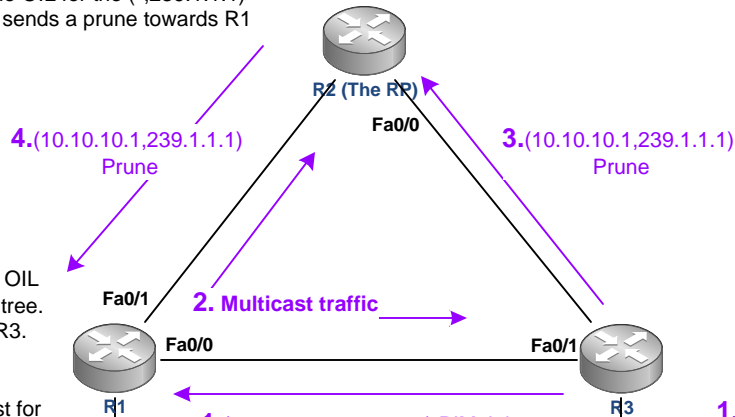


SPT Creation From Member To Source Using PIM-SM

Building the SPT between source and receivers

4. R2 removes fa0/0 from its OIL for (*,239.1.1.1). Because there are no more interfaces on the OIL for the (*,239.1.1.1) group now, R2 sends a prune towards R1



5. R1 removes fa0/1 from the OIL for the (10.10.10.1,239.1.1.1) tree. Traffic is now sent directly to R3.

2. R1 adds fa0/0 to the OIL list for the (10.10.10.1,239.1.1.1) tree and starts forwarding traffic towards R3 as well as via the RP.

3. Because the SPT has now been built between R1 and R3, R3 is receiving duplicate traffic from the RP and R1 from the same source.

R3 sends a prune to the RP for the (10.10.10.1,239.1.1.1) group because he only wants to use the SPT that has just been built between R1 and R3 to receive traffic from PC1.

1. R3 receives the multicast feed from the RP (R2), however, it now builds a SPT towards the source. This is done by sending a (S,G) join out the RPF interface towards the source. In our case this is a (10.10.10.1,239.1.1.1) PIM join out fa0/1. It adds fa0/1 to the IIL and fa0/0 to the OIL list for this tree.

PC1 is sending a multicast feed to 239.1.1.1

PC2 has joined the multicast feed