

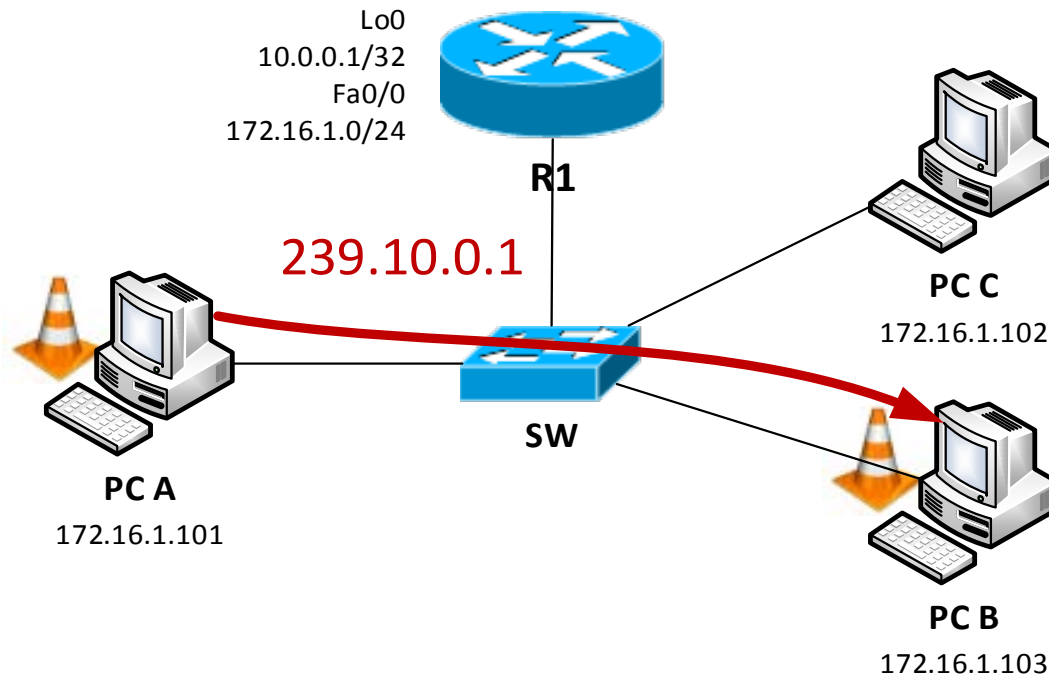


Multicast



SWITCH Module 9

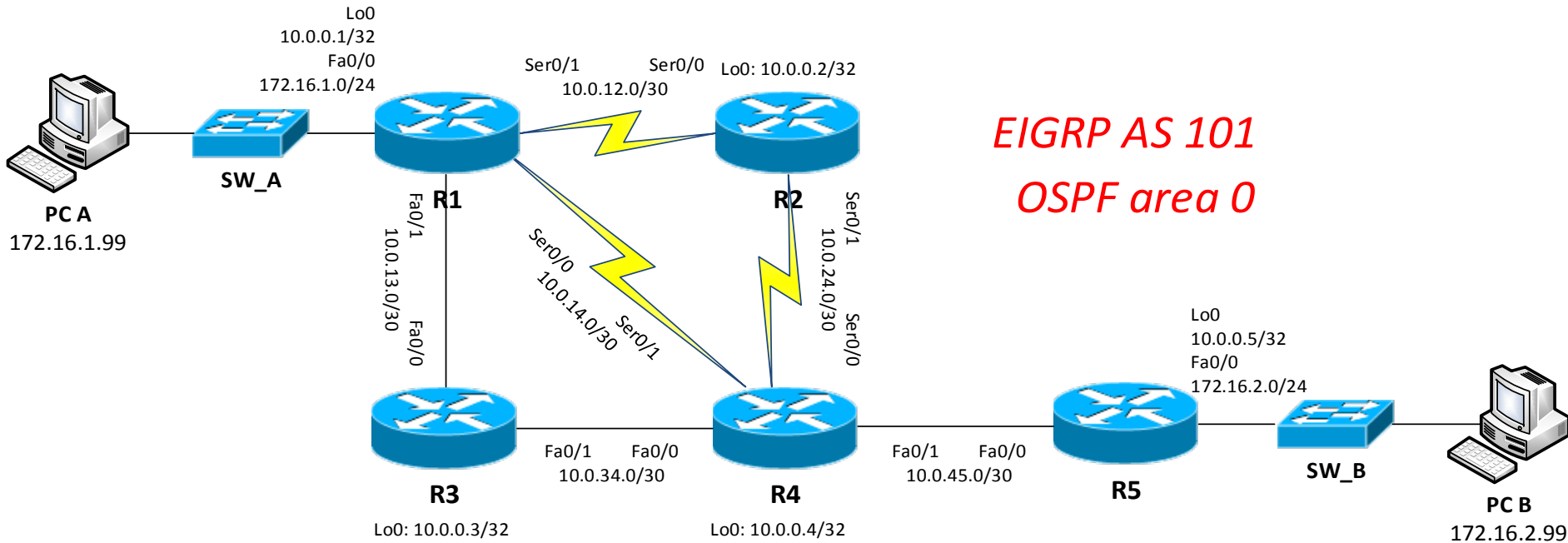
Lab 9.1: Local Streaming



- Use VLC to stream multicast data for group 239.10.0.1
- Observe functionality of IGMP Snooping
- SW:
 - # show ip igmp snooping
 - # show cam address-table

Switch is flooding traffic until it discovers who is IGMP Querier!

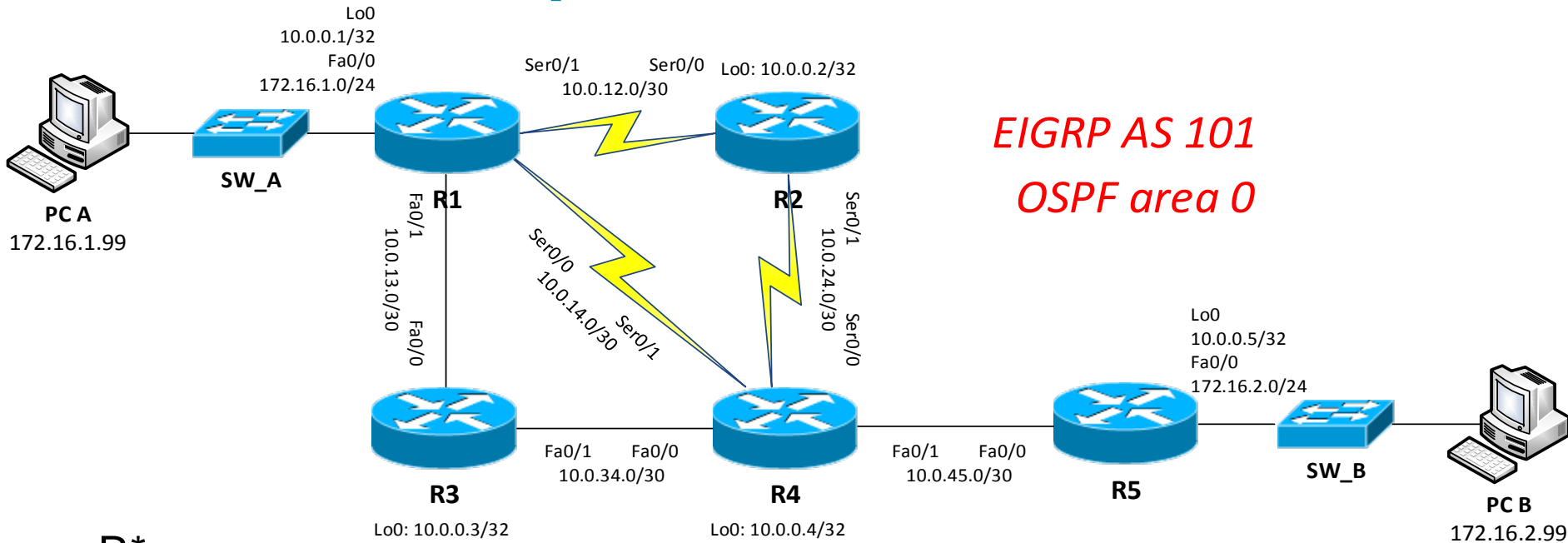
Lab 9.2: PIM Dense Mode



- Establish and verify unicast routing via OSPF
- Start VLC streaming from PC A to PC B
- R*:
 - (conf)# ip multicast-routing
 - (conf-if)# ip pim sparse-dense-mode
 - # show ip pim neighbors
 - # show ip mroute

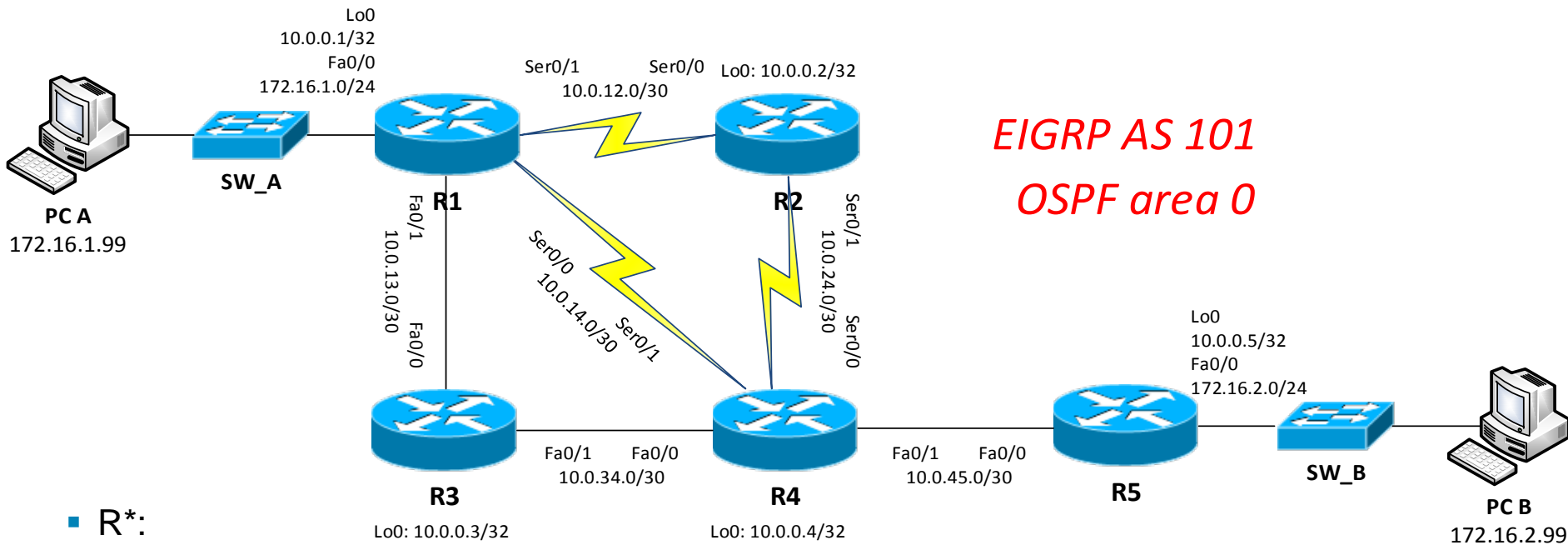
Which way is multicast routed and why?

Lab 9.3: PIM Sparse Mode with R2 as RP



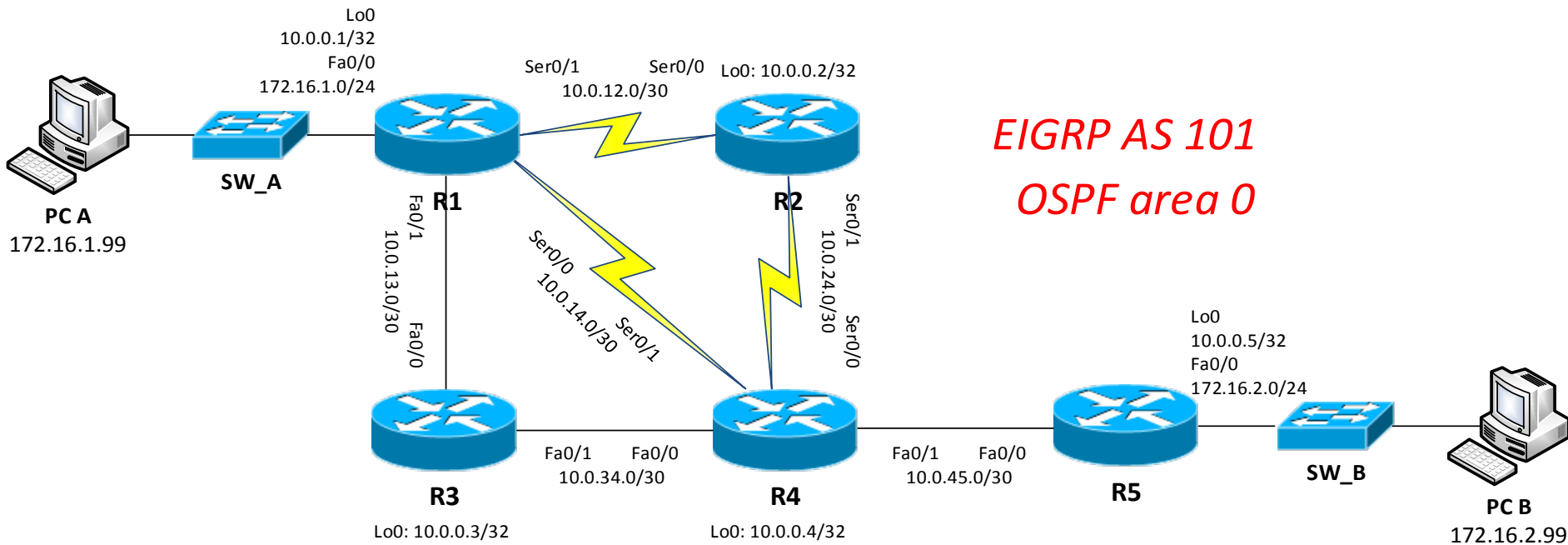
- R*:
 - clear ip mroute *
 - (conf)# ip pim rp-address 10.0.0.2
 - (conf)# ip pim spt-treshold infinity
- Restart multicast streaming
 - # show ip pim rp [mapping]
 - # show ip mroute

Lab 9.4: PIM BSRM with R3



- R*:
 - (conf)# no ip pim rp-address 10.0.0.2
- R3, R2:
 - (conf)# ip pim bsr-candidate Lo0 30 N×50
- R4, R2:
 - (conf)# access-list 1 permit 239.0.0.0 0.255.255.255
 - (conf)# ip pim rp-candidate Lo0 group-list 1 prio 200-N×10
- # show ip pim bsr-router
- # show ip pim rp [mapping]

Lab 9.5: PIM SSM



- R*:
 - (conf)# ip pim ssm range default
- R1, R4:
 - (conf)# interface Fa0/0
 - (conf-if)# ip igmp version 3



Labs created by [Vladimír Veselý](#) for C2P practice.

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