

CCIE R&S Core Knowledge Question(4)

1. Which LSA type is originated by the designated router only? Highlight for answer: Type-2 (Network) LSA 2. An OSPF forwarding address of 0.0.0.0 indicates that packets for the external destination should?. Highlight for answer: ?be forwarded to the advertising router. 3. Does filtering an inbound OSPF prefix with a distribution list remove that prefix from the routing table of neighboring OSPF routers? Why or why not? Highlight for answer: No. While the route is not installed in the local routing table, the LSA is not filtered and is flooded to OSPF neighbors. 4. Why are Register messages needed in PIM SM? Highlight for answer: Because the first hop router does not receive the join message, its outgoing interface list is empty, it is necessary to use unicast to send the register message to RP, waiting for the join message from RP. 5. List some triggers that initiate Join messages Highlight for answer: The receivers send the report message to last hop router, the last hop router will send the join message. When the RP receives the register message, it will send join message to the first hop router. In the situation of spt switchover, when the router find the shortest path tree which is better than the path between rp and first hop, the router send join message.