

## OSPF RID (Router ID):

- o RID is a unique identifier of Router in Open Shortest Path First (OSPF) network.
- o RID must be unique within the autonomous system in Open Shortest Path First.
- o Through Router ID (RID) Routers identify each other in AS (Autonomous System).
- o Router ID is 32-bit long number same as Internet Protocol version 4 (IPV4) address.
- o IPv4 address is also 32 bits in length you can use IPv4 address as a RID (Router ID).
- o **Manual configuration => Loopback interface => Active interface** while selecting RID.
- o If assigned Router ID (RID) manually, OSPF will not look in next two options to use.
- o When multiple IP addresses are available, OSPF always pick highest IP address for RID.
- o For network, stability always set RID by **router-id** command or using loopback interfaces.

## Routers Selection RID:

An Open Shortest Path First (OSPF) Router looks in three places for RID (Router ID):

- o In Open Shortest Path First (OSPF) Router look **Manual** configuration of router ID.
- o In Open Shortest Path First (OSPF) Router look Highest IP address on **loopback** interface.
- o In Open Shortest Path First (OSPF) Router look Highest IP address on **physical** interface.

