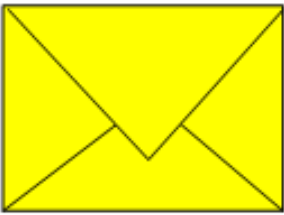


OSPF neighbors

<p style="text-align: center;">Hello Packet</p> 	<ol style="list-style-type: none">1. Router ID2. Router Priority3. Known neighbours.4. Hello (default 10s for broadcast network, default 30s for non-broadcast network) and dead (4 times of hello) timers.5. Authentication password.6. Area ID7. Subnet mask8. Designated router and backup designated router's ip address
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In OSPF, routers have to become neighbors first before exchanging link- state advertisements (LSA). After configuring OSPF on routers it will start sending hello packets to each other. The Hello packets also serve as keepalives to allow routers to quickly discover if a neighbor is down. Hello packets also contain a neighbor field that lists the Router IDs of all neighbors the router is connected to.

OSPF routers will only become neighbors if the following parameters within a Hello packet are identical on each router:

- Area ID
- Subnet Mask
- Hello Interval
- Dead Interval
- Authentication