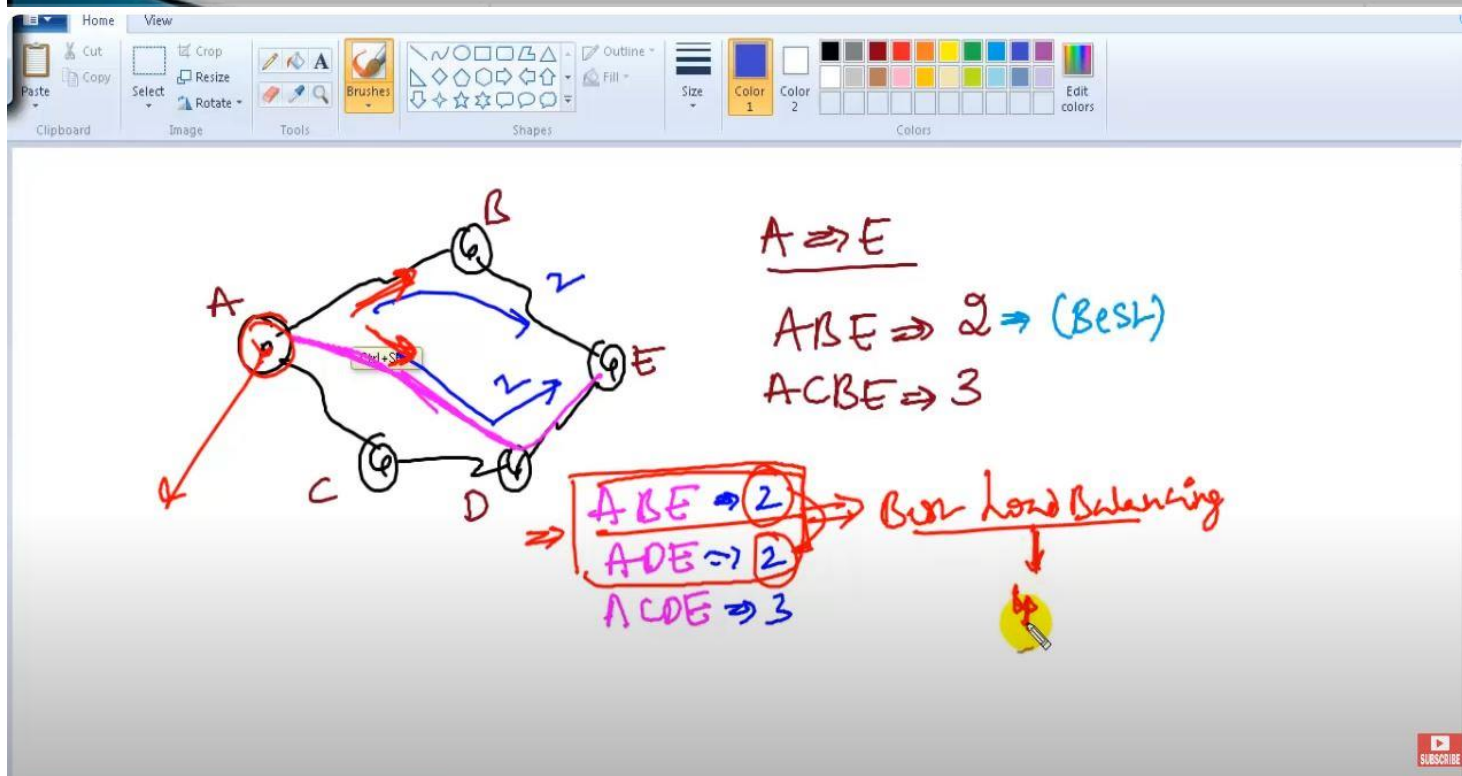


Routing Information Protocol

- Open Standard Protocol
- Classful routing protocol
- Updates are broadcasted via 255.255.255.255
- Metric : Hop count
- Load Balancing of 4 equal paths
- Max Hop counts : 15 Max routers : 16
- Used for small organizations
- Exchange entire routing table for every 30 second
- Administrative distance is 120



Rip Timers

- **Update timer : 30 sec**
 - Time between consecutive updates
- **Invalid timer : 180 sec**
 - Time a router waits to hear updates
 - The route is marked unreachable if there is no update during this interval.
- **Flush timer : 240 sec**
 - Time before the invalid route is purged from the routing table
- **Hold Down timer : 180 Sec**
 - Stabilizes routing information and helps preventing routing loops during periods when the topology is converging on new information.



- | | |
|-----------------------------|-------------------------------------|
| ▶ Classful routing protocol | ▶ Classless routing protocol |
| ▶ No authentication. | ▶ Supports authentication |
| ▶ Uses broadcasts | ▶ Uses multicast address 224.0.0.9. |

Advantages of RIP



- Easy to configure
- No design constraints (unlike OSPF)
- Less overhead

Disadvantage of RIP

- Bandwidth utilization is very high as broadcast for every 30 second
- Works only on hop count (not consider BW)
- Not scalable as hop count is only 15
- Slow convergence

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↑ Periodic