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Answering to the question no → 01

In the connection of routers, the routers or every node in the connection of network generate link state packet and transmit them to neighbours node. Every node generate this packet every certain period of time. Because we have to know the latest information about neighbours node. For this every node maintain a sequence number for their neighbours. A node update a

sequence numbers when new sequence number is higher than before. But there is a problem when the receiver node read a higher sequence numbers by error. So, when a higher sequence enters in buffer it is difficult to get out from comparing this higher sequence numbers with existing sequence numbers. So a router will be in dark for a long time. But ~~now~~ we use 'age' in the link state packet now. As a result, every link state packet has a expire-time. Even if there is a read error of higher sequence number, after age-time new sequence number



is updated, we use 60 seconds for age. So that age suffering is not too long or not too short for losing packet, so age helps this error solution.

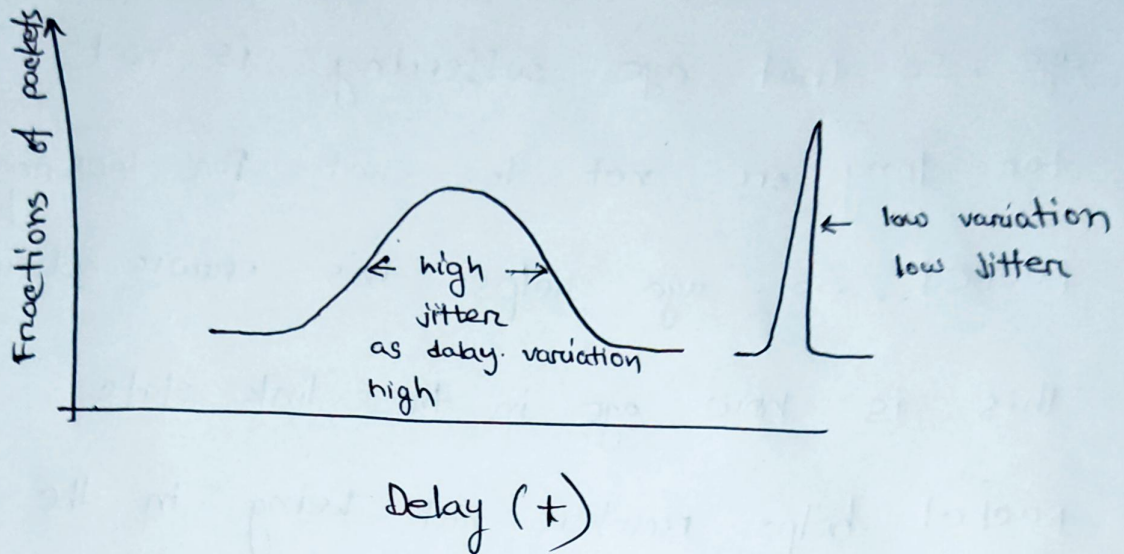
This is how age in the link state.

packet helps router not being in the dark for long.

Answering to the question no → 02

Variation in packet arrival time or variation in data transmission latency is called jitter. When the variation in latency is higher, the jitter is also higher. When the variation is

lower, the jitter is also lower.



Jitter is very important in quality of service. The lower jitter improves multimedia communication smoothly. But higher jitter impacts this badly.



Answering to the question no → 03

User end devices produce burst data to transmit. The devices produce many burst packets which can cause traffic during transmission.

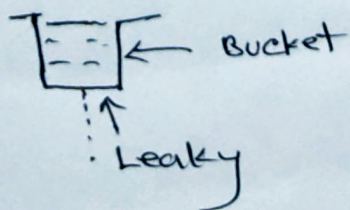
So in network interface can we want to regular flow of data.

Using leaky bucket algorithm we

control the flow of irregular

packet to regular flow of

packet in admission control.



When a bucket is leaky then the flow of water will be limited. And this is also applicable in network interface card. That's why it is named Leaky Bucket Algorithm.