| Token Bucket Algorithm | Leaky Bucket Algorithm |
|---|---|
| It depends on tokens. | It does not depend on tokens, |
| If bucket is full, token is discarded but not the packet. | If bucket is full, then packets are discarded. |
| Packets can only transmit when there are enough tokens. | Packets are transmitted continuously. |
| Allows large bursts to be sent at faster rate. Bucket has maximum capacity. | Sends the packet at a constant rate. |
| The bucket holds tokens generated at regular intervals of time. | When the host has to send a packet , packet is thrown in bucket. |
| If there is a ready packet , a token is removed from Bucket and packet is send. | Bursty traffic is converted into uniform traffic by leaky bucket. |
| If there is no token in the bucket, then the packet cannot be sent. | In practice bucket is a finite queue outputs at finite rate. |