Ratio based Load Balancing

Use Case:

Using pseudo random number generation, in run time take decisions like sending part of the traffic to one pool versus another. Below example sends 2% of connections to a separate pool and remaining 98% of connections are sent to the virtual server's default pool. The second example selects a separate pool for 2% of requests to a specific set of URLs.

F5 iRules:

```
"/uri3*" {

    # Send 2% of connections to a separate pool
    if { rand() < 0.02 } {

        pool other_pool

        # Exit from this event in this iRule
        return
    }
}

# If we're still executing in this iRule, select the primary pool
pool primary_pool
```

URL: https://devcentral.f5.com/codeshare/ratio-load-balancing-using-rand-function

NetScaler Solution:

```
set lb vserver vip1 -lbMethod TOKEN -rule SYS.RANDOM.MUL(10).TYPECAST_UNSIGNED_LONG_AT.MOD(4)
```
The effective solution here is to do token based load balancing using specific Random number generated using the advance policy expression. This logic can be used in any ways and to create different kind of use cases. \( N \text{ in } \text{MOD}(N) \) in the expression here denotes the number of services bound to the load balancing vservers.