

## 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 URIs.

### 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.  $N$  in  $MOD(N)$  in the expression here denotes the number of services bound to the load balancing vserver.