Exp 1 (all OSDs have maximum weight and no device is down)

Storage hierarchy:

```
layer 1: ['cab', 'straw', 24]
layer 2: ['row', 'tree', 3]
layer 3: ['pool', 'list', 2]
layer 4: ['datacenter', 'uniform', 2]
```

Parameters:

Number of OSDs -- 100

Minimum data object ID: -- 0

Maximum data object ID: -- 1023

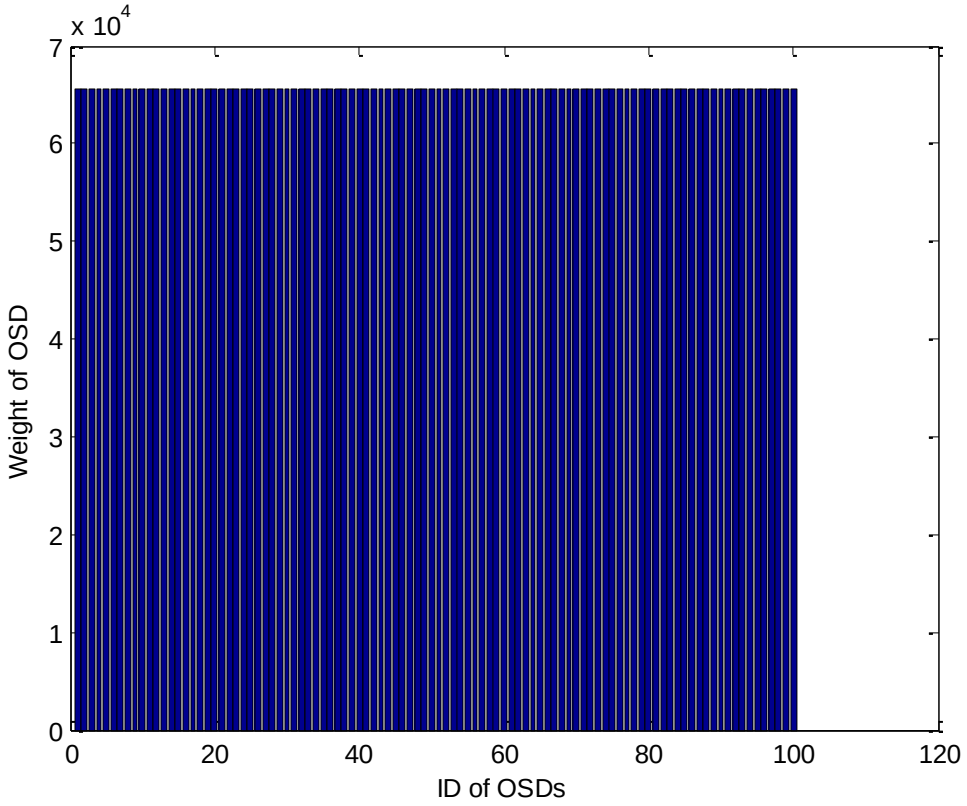
Number of replicas: -- 3

The ratio of buckets which are down -- 0.0

The ratio of devices which are down -- 0.0

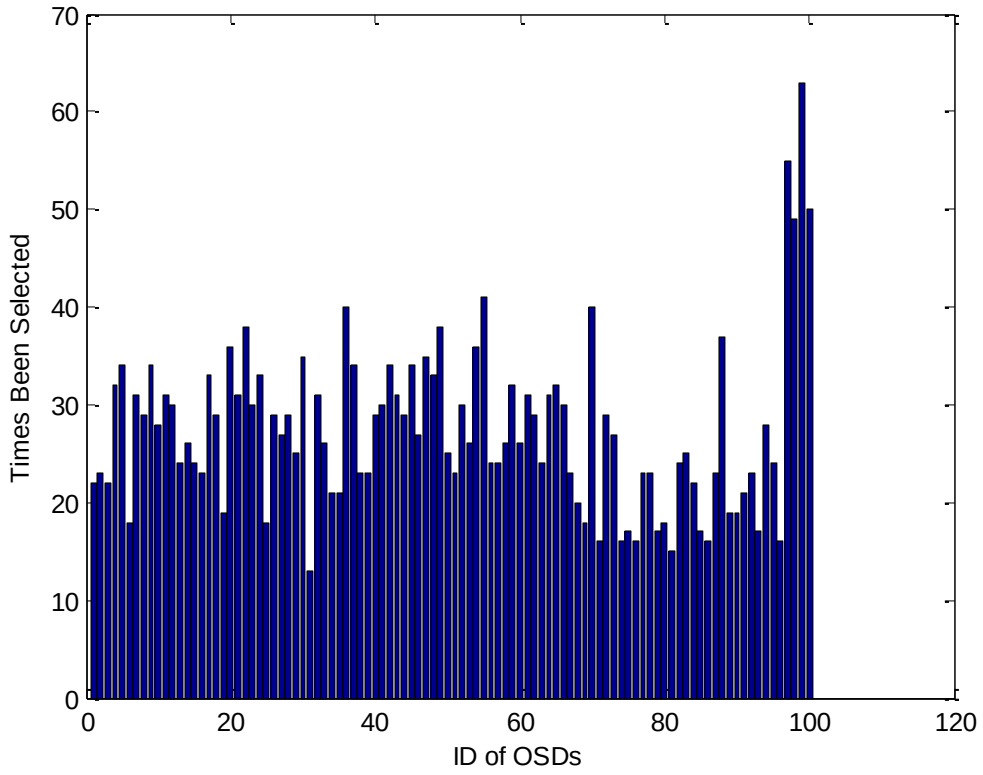
Number of batches to run the simulation -- 10

Device weights:

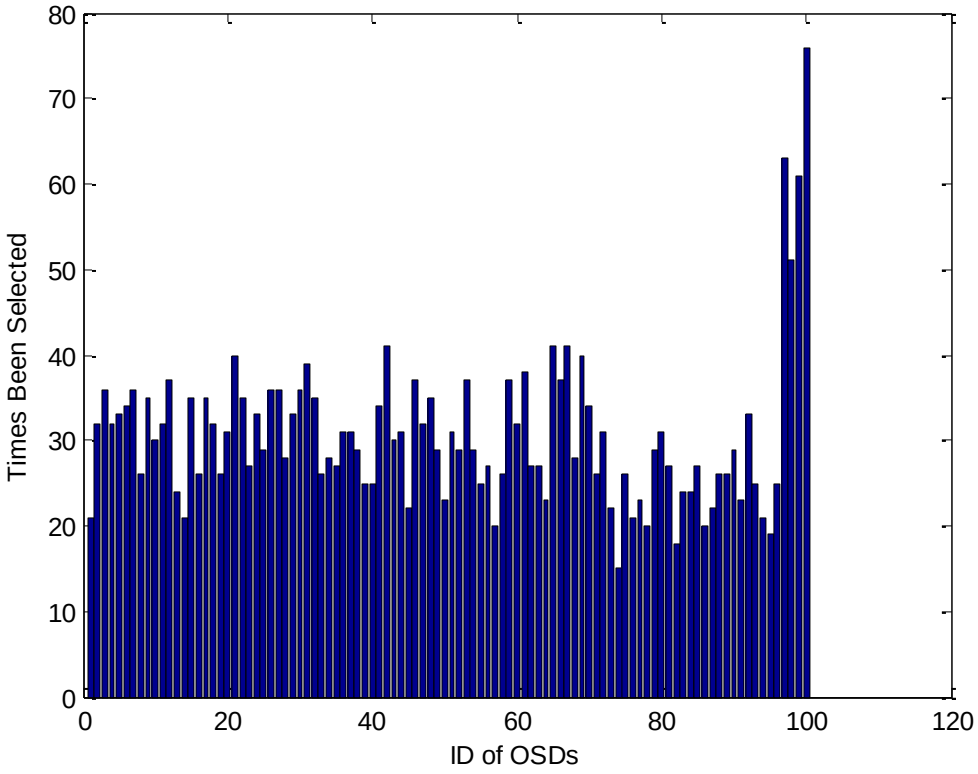


Times each device has been selected:

1. Results of our simulator:



2. Results of crushtool.cc provided by Ceph:



Exp 2 (all OSDs have randomly assigned weight and some devices are down)

Storage hierarchy:

```
layer 1: ['cab', 'straw', 24]
layer 2: ['row', 'tree', 3]
layer 3: ['pool', 'list', 2]
layer 4: ['datacenter', 'uniform', 2]
```

Parameters:

Number of OSDs -- 100

Minimum data object ID: -- 0

Maximum data object ID: -- 1023

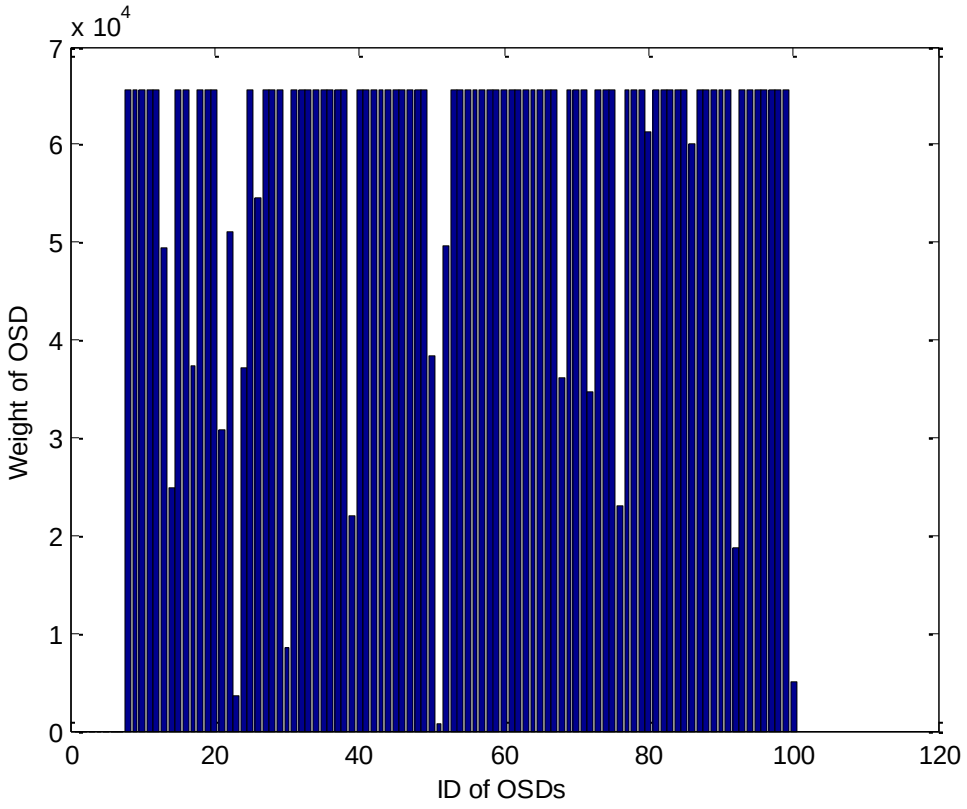
Number of replicas: -- 3

The ratio of buckets which are down -- 0.2

The ratio of devices which are down -- 0.3

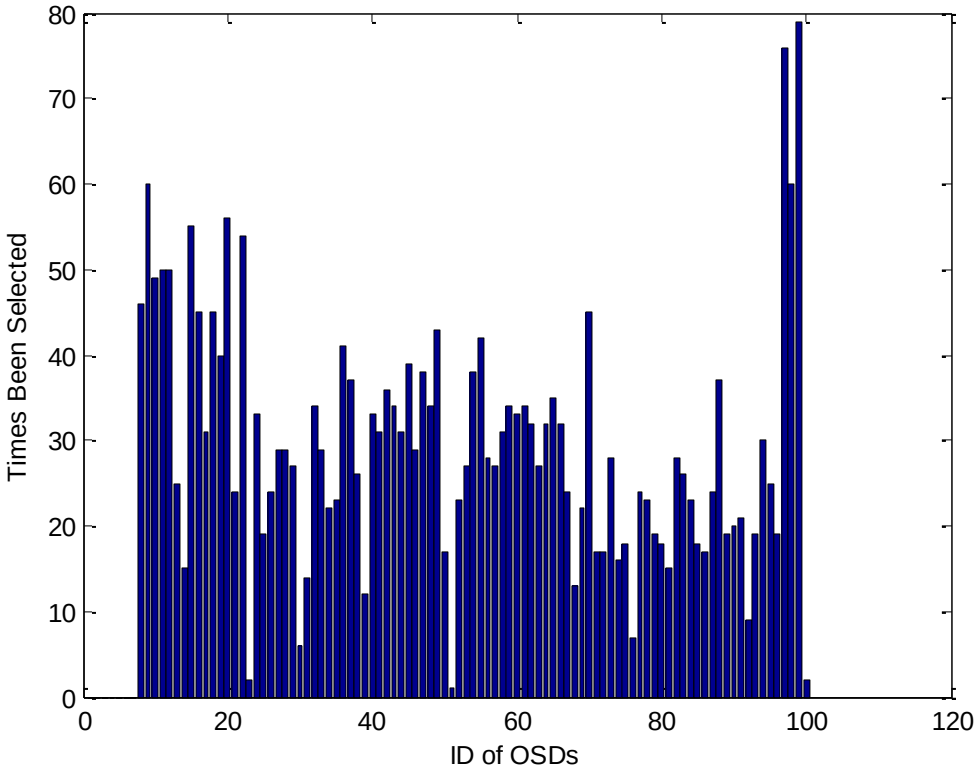
Number of batches to run the simulation -- 10

Device weights:

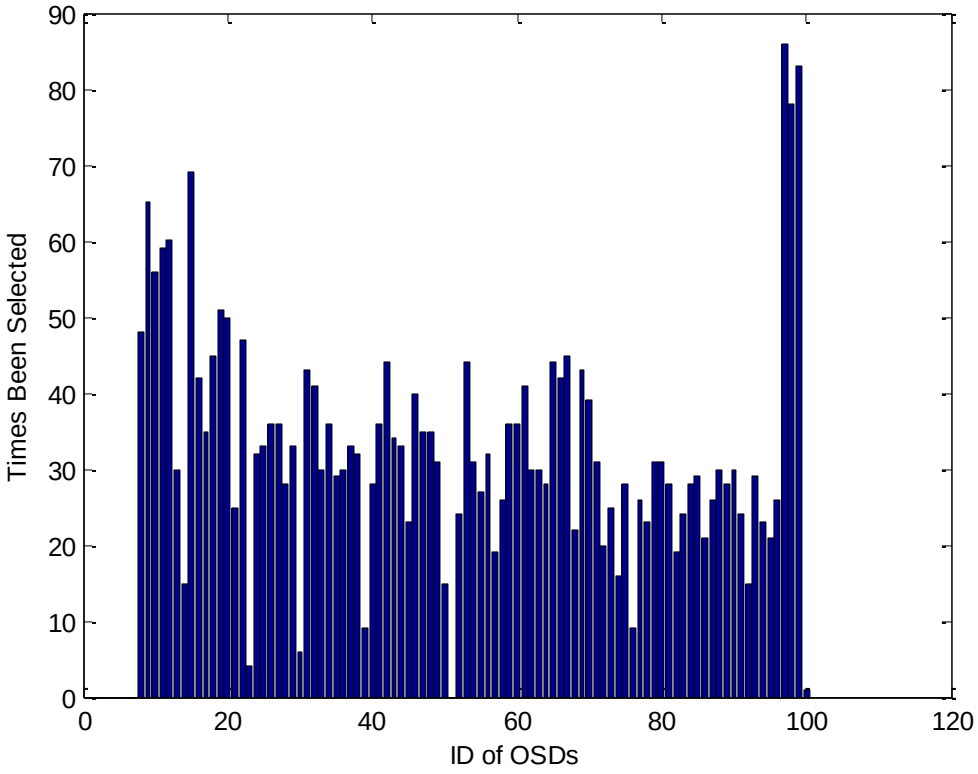


Times each device has been selected:

1. Results of our simulator:



2. Results of crushtool.cc provided by Ceph:


Times Been Selected
ID of OSDs
0
10
20
30
40
50
60
70
80
90
0
20
40
60
80
100
120