

1 Plotting all figures

1.1

Listing 1. Cluster and Node Placement Times

Cluster and Node Placement Times (ms)

replications	cluster-placement-time	node-placement-time
replica-1	0,00	0,00
replicas-5	0,00	3,00
replicas-10	0,00	6,00
replicas-20	1,00	12,00
replicas-30	1,00	13,00

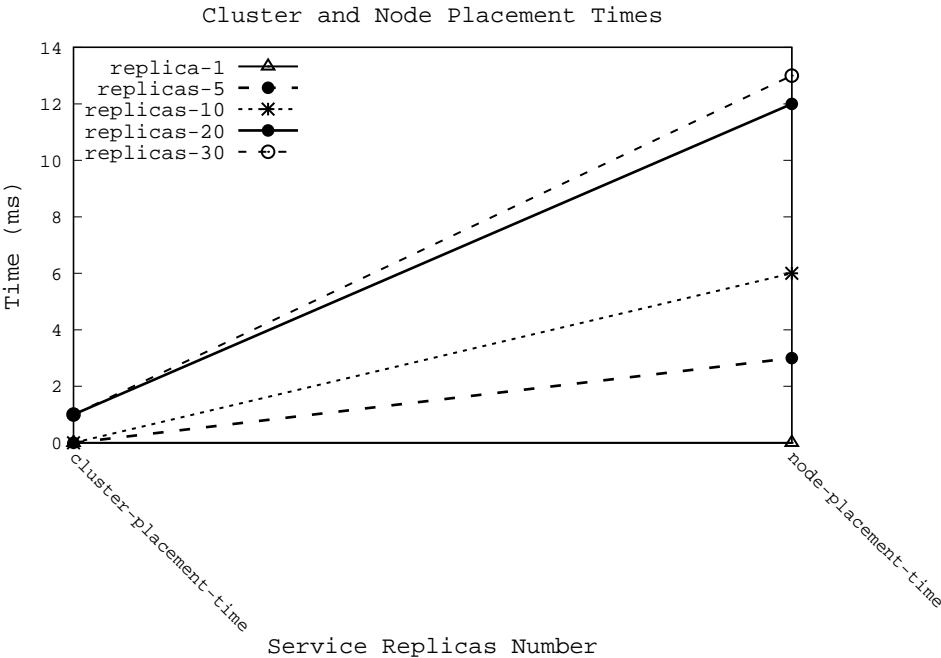


Fig. 1. Cluster and Node Placement Times

1.2

Listing 2. Cluster CPU Utilization

Cluster CPU Utilization (%)

replications	cluster-1	cluster-2	cluster-3
replica-1	7,00	0,00	0,00
replicas-5	39,00	0,00	0,00
replicas-10	78,00	0,00	0,00

```

replicas-20 92,00 0,00 56,00
replicas-30 99,00 0,00 56,00

```

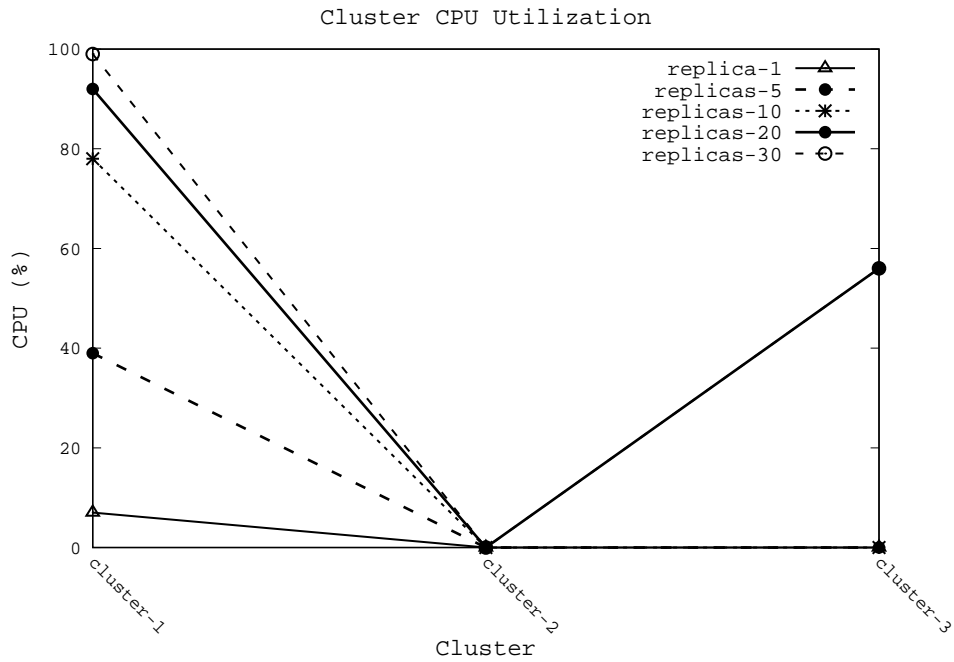


Fig. 2. Cluster CPU Utilization

1.3

Listing 3. Cluster Memory Utilization

```

Cluster Memory Utilization (%)
replications cluster-1 cluster-2 cluster-3
replica-1 3,00 0,00 0,00
replicas-5 19,00 0,00 0,00
replicas-10 39,00 0,00 0,00
replicas-20 46,00 0,00 28,00
replicas-30 50,00 0,00 28,00

```

1.4

Listing 4. Cluster Node Utilization

```

Cluster Node Utilization (%)
replications cluster-1 cluster-2 cluster-3
replica-1 100,00 0,00 0,00
replicas-5 100,00 0,00 0,00

```

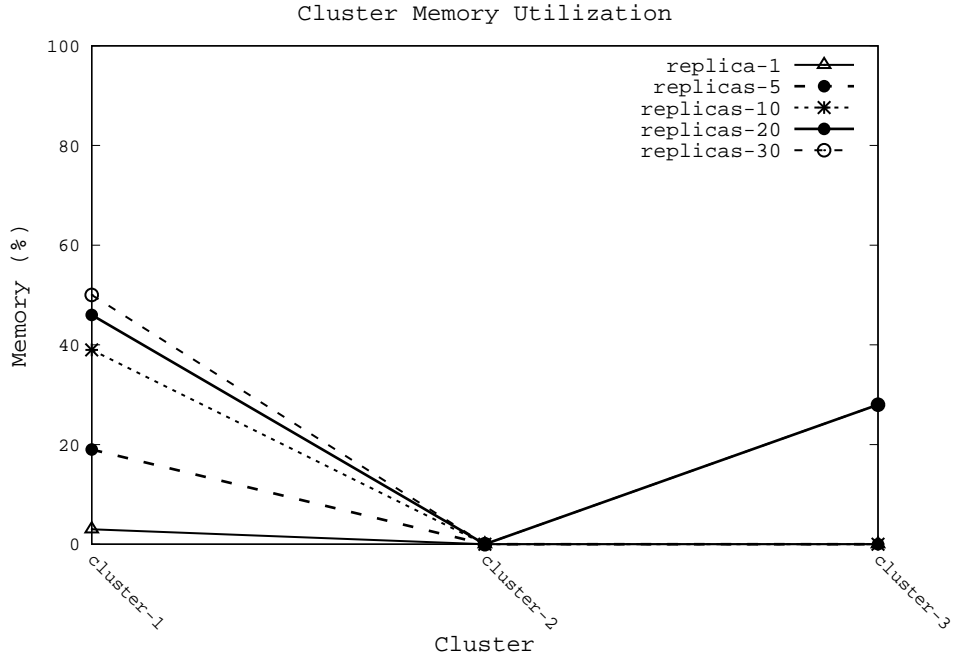


Fig. 3. Cluster Memory Utilization

```

replicas -10 100,00 0,00 0,00
replicas -20 100,00 0,00 100,00
replicas -30 100,00 0,00 100,00

```

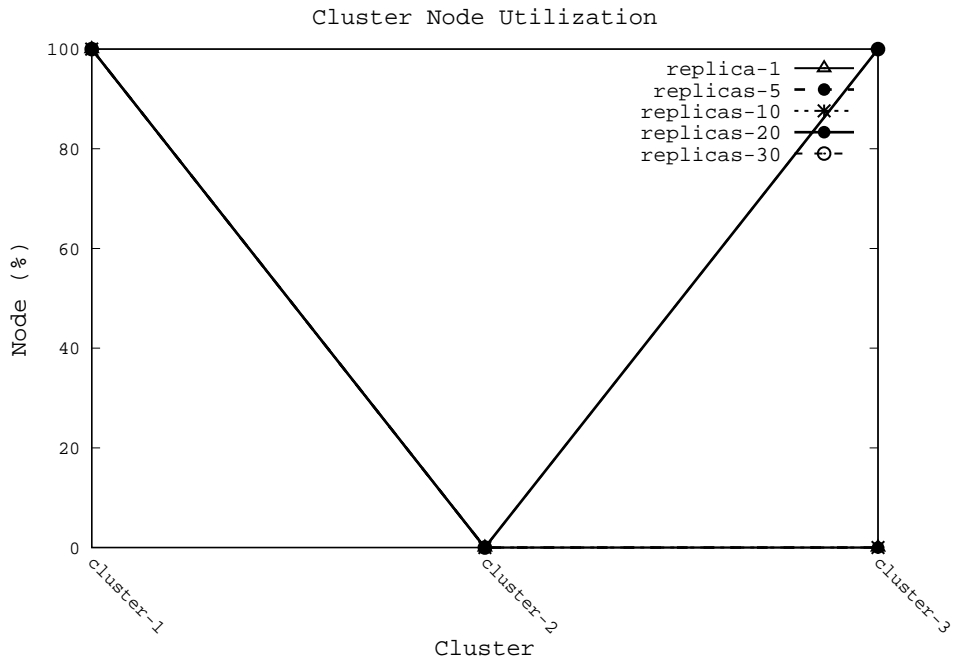


Fig. 4. Cluster Node Utilization

1.5

Listing 5. Node CPU Utilization

Node CPU Utilization (%)

nodes	cluster-1-node1	cluster-1-node2	cluster-2-node1	cluster-2-node2	cluster-3-node1	cluster-3-node2
replica-1	7,00	7,00	0,00	0,00	0,00	0,00
replicas-5	39,00	39,00	0,00	0,00	0,00	0,00
replicas-10	78,00	78,00	0,00	0,00	0,00	0,00
replicas-20	100,00	84,00	0,00	0,00	99,00	12,00
replicas-30	99,00	99,00	0,00	0,00	99,00	12,00

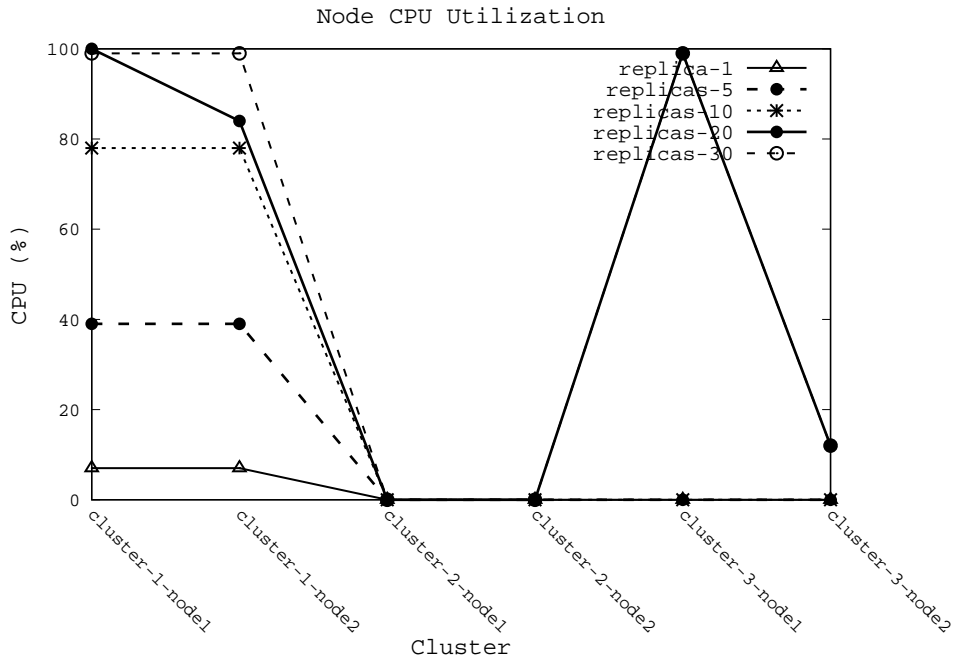


Fig. 5. Node CPU Utilization

1.6

Listing 6. Node Memory Utilization

Node Memory Utilization (%)

nodes	cluster-1-node1	cluster-1-node2	cluster-2-node1	cluster-2-node2	cluster-3-node1	cluster-3-node2
replica-1	3,00	3,00	0,00	0,00	0,00	0,00
replicas-5	19,00	19,00	0,00	0,00	0,00	0,00
replicas-10	39,00	39,00	0,00	0,00	0,00	0,00
replicas-20	50,00	42,00	0,00	0,00	50,00	6,00

replicas -30 50,00 50,00 0,00 0,00 50,00 6,00

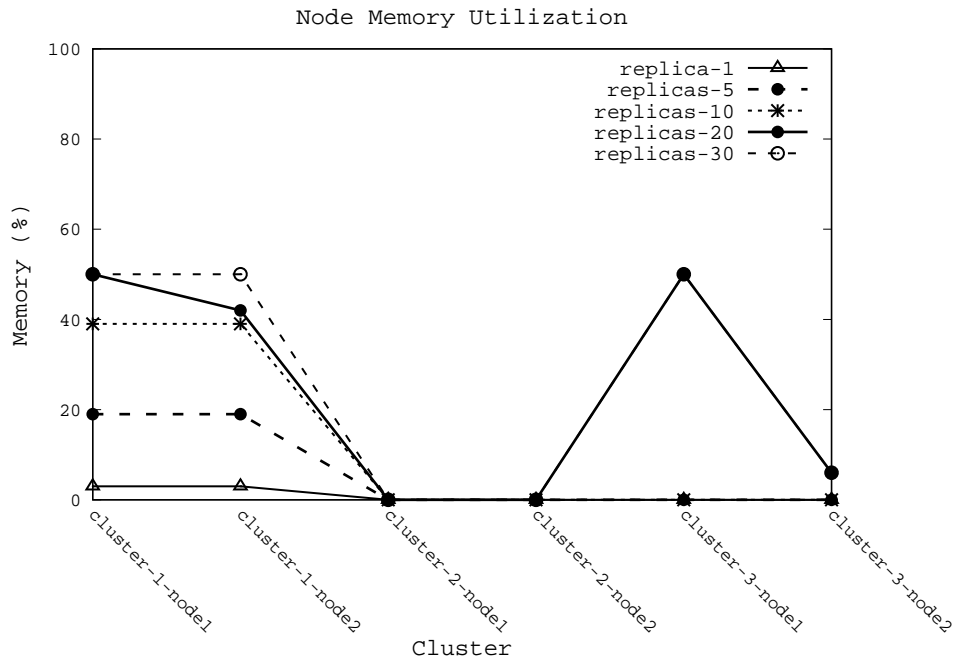


Fig. 6. Node Memory Utilization