

1 Plotting all figures

1.1

Cluster and Node Placement Times (s)

```
replications cluster-placement-time node-placement-time
replica-1 0,00 0,40
replicas-5 0,20 3,30
replicas-10 0,10 6,30
replicas-20 0,40 13,00
replicas-30 0,90 19,10
```

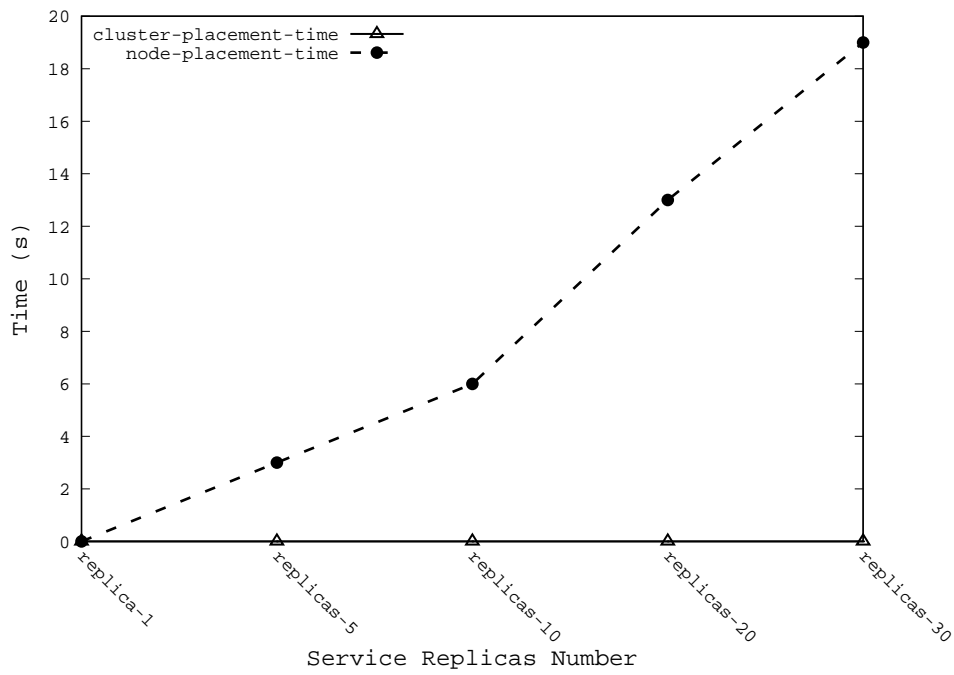


Fig. 1.

1.2

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 99,30 0,00 56,30
replicas-30 99,40 34,00 99,80
```

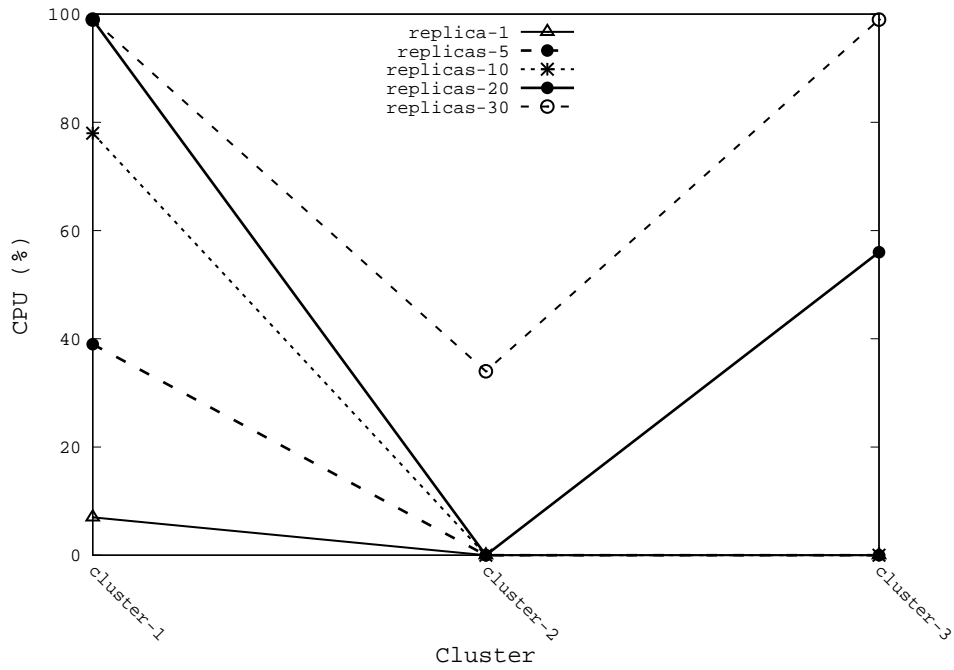


Fig. 2.

1.3

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	49,70	0,00	28,00	
replicas-30	50,00	17,00	50,00	

1.4

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	
replicas-10	100,00	0,00	0,00	
replicas-20	100,00	0,00	100,00	
replicas-30	100,00	50,00	100,00	

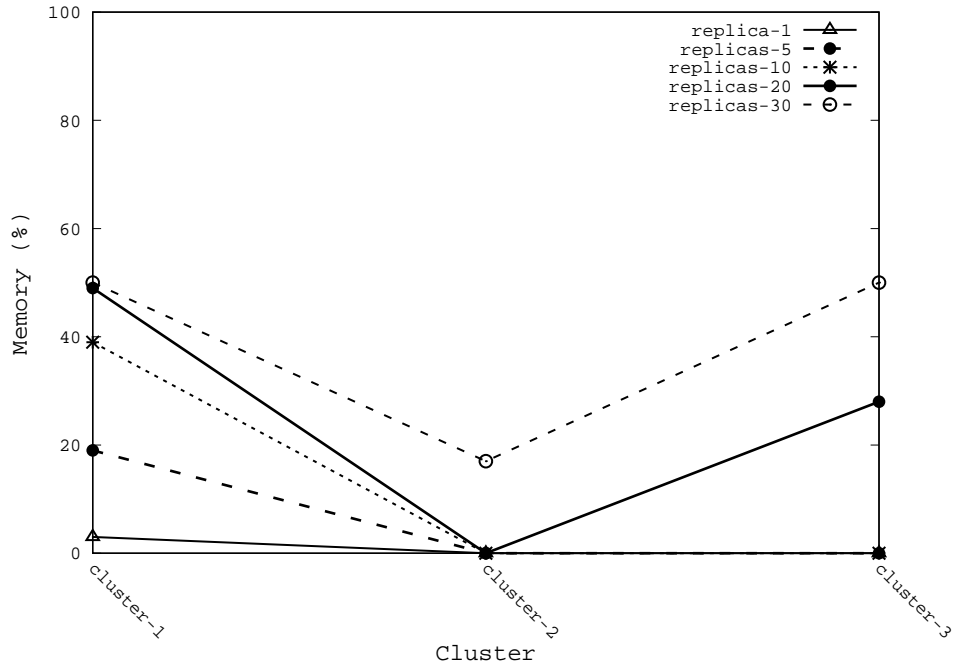


Fig. 3.

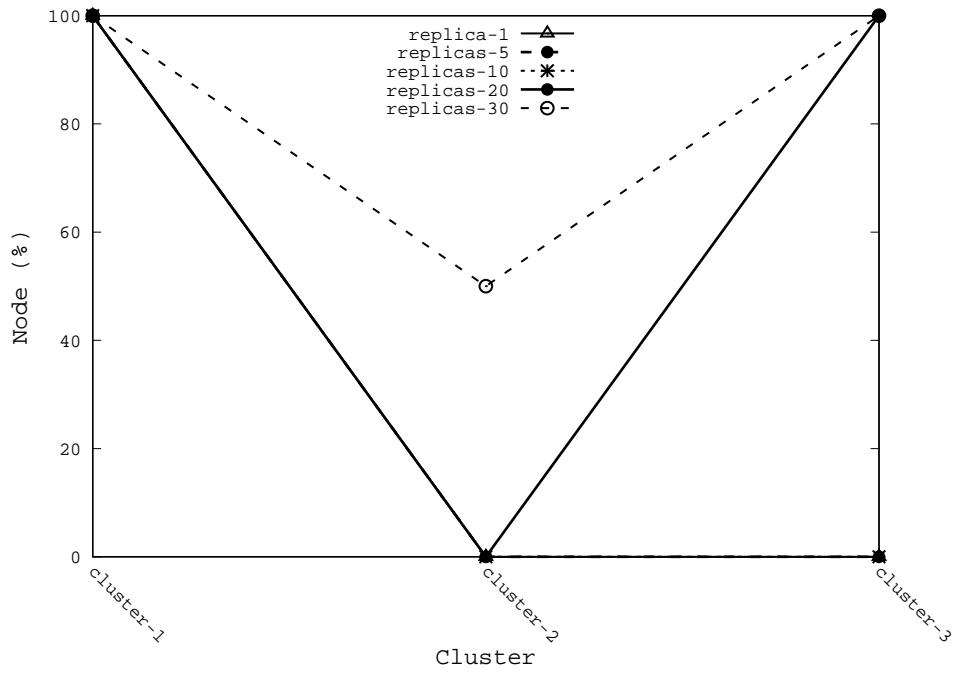


Fig. 4.

1.5

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 99,60 99,10 0,00 0,00 99,70 12,60
replicas-30 99,50 99,50 68,00 0,00 99,70 99,60

```

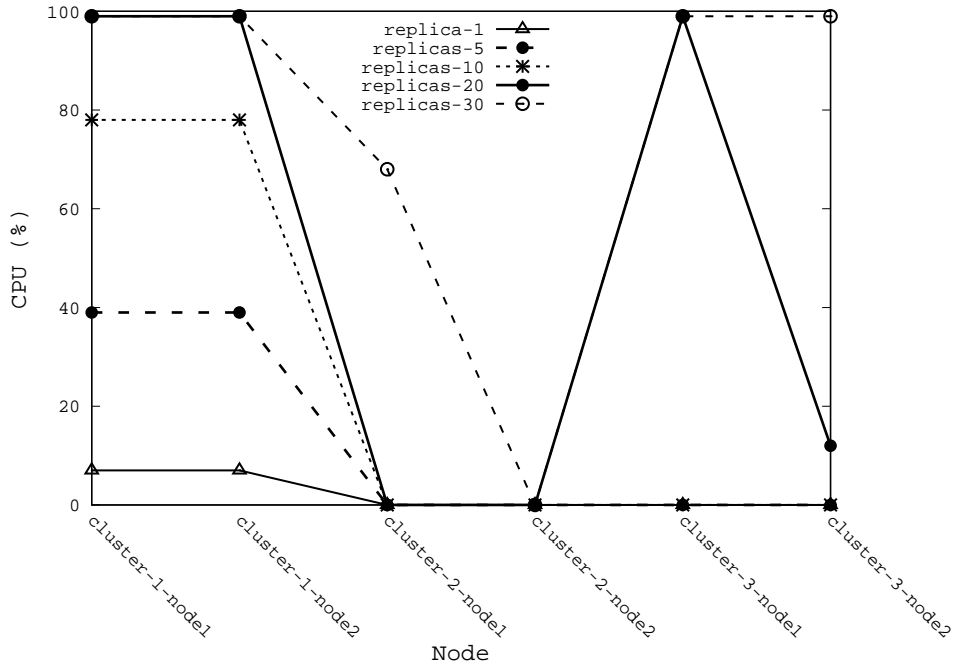


Fig. 5.

1.6

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 49,70 0,00 0,00 50,00 6,30
replicas-30 50,00 50,00 34,00 0,00 50,00 50,00

```

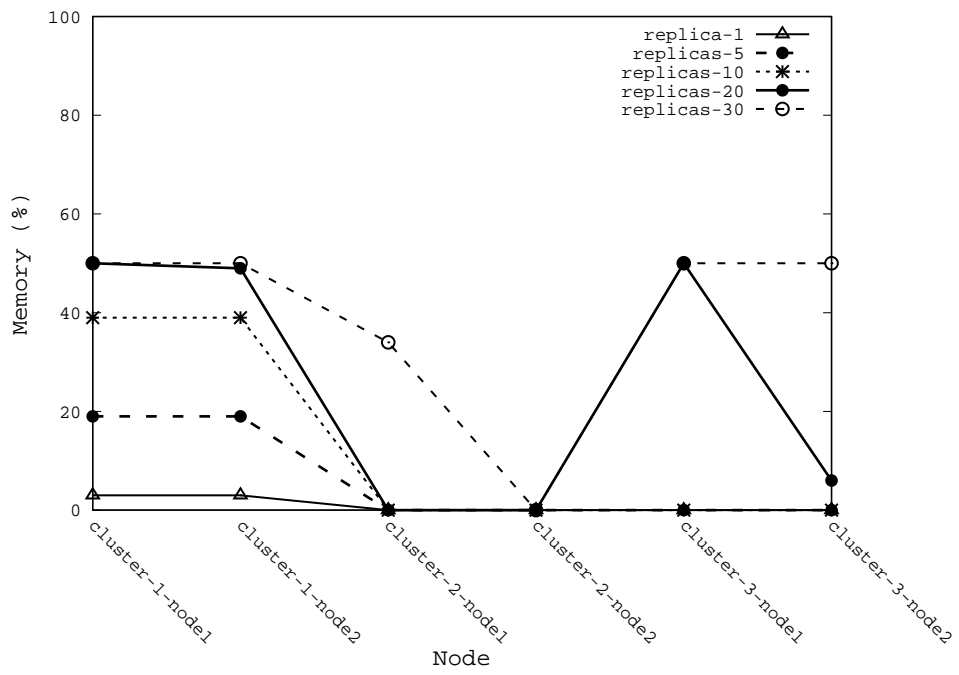


Fig. 6.