

Feedback-based Optimization of a Private Cloud

November 9, 2010

1 case 1

rules:

- if `cpu-0/cpu-idle.value` < '40' for 4 min then vote to grow array
- if `cpu-0/cpu-idle.value` > '50' for 1 min then vote to shrink array
- Rest Period: 5 minutes,
- Decision Threshold: 51
- Increase Value: 1
- Decrease Value: 1

2 case 2

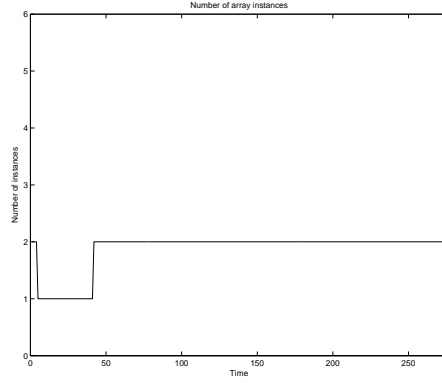
rules:

- if `cpu-0/cpu-idle.value` < '30' for 3 min then vote to grow array
- if `cpu-0/cpu-idle.value` > '35' for 3 min then vote to shrink array
- Rest Period: 2 minutes,
- Decision Threshold: 66
- Increase Value: 2
- Decrease Value: 1

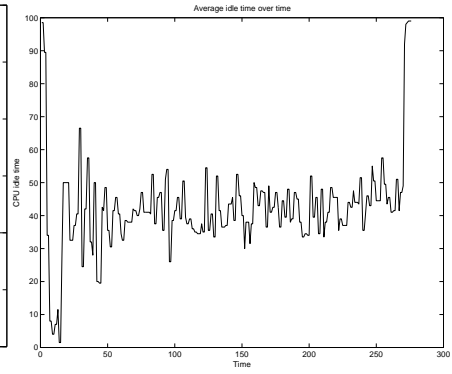
3 case 3

rules:

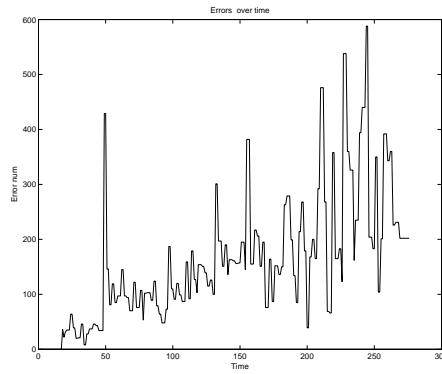
- if `cpu-0/cpu-idle.value` < '30' for 2 min then vote to grow array
- if `cpu-0/cpu-idle.value` > '60' for 1 min then vote to shrink array
- Rest Period: 10 minutes,
- Decision Threshold: 66
- Increase Value: 1
- Decrease Value: 2



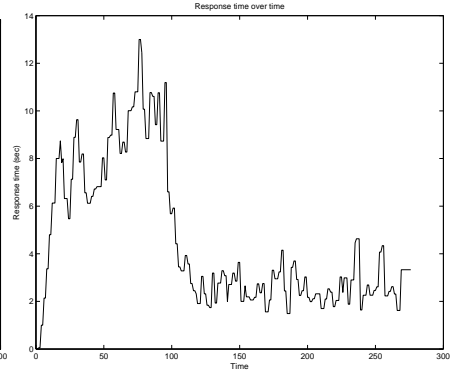
(a)



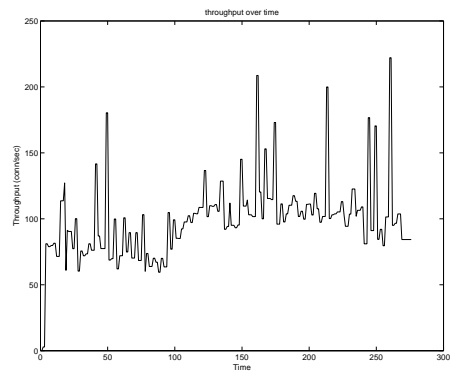
(b)



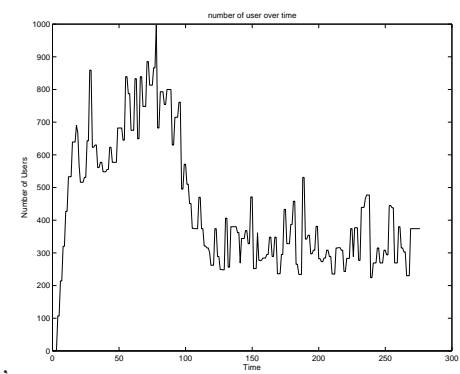
(c)



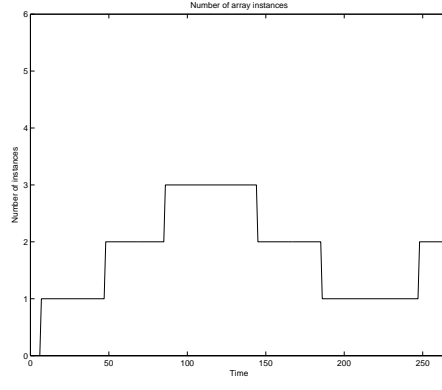
(d)



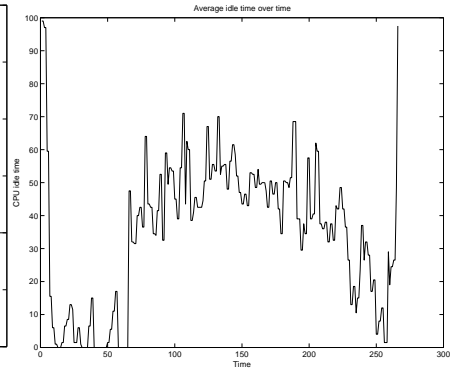
(e)



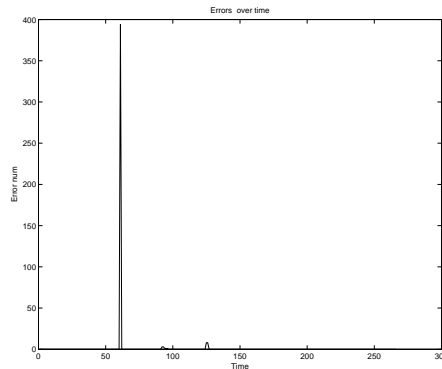
(f)



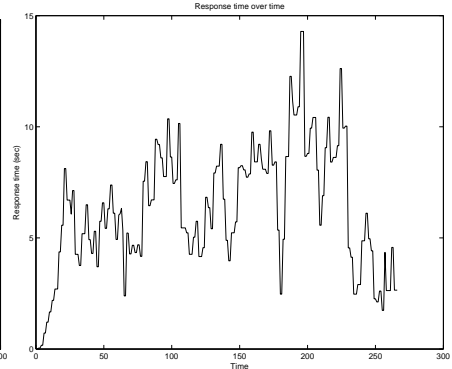
(a)



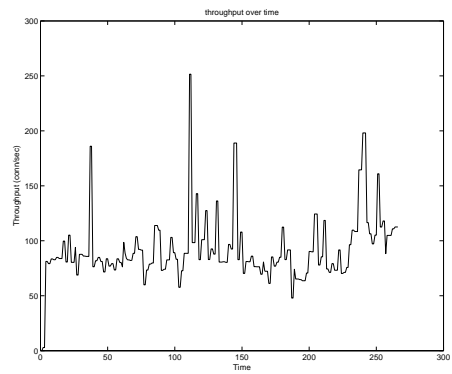
(b)



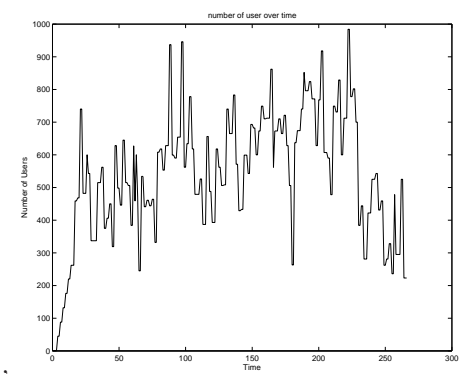
(c)



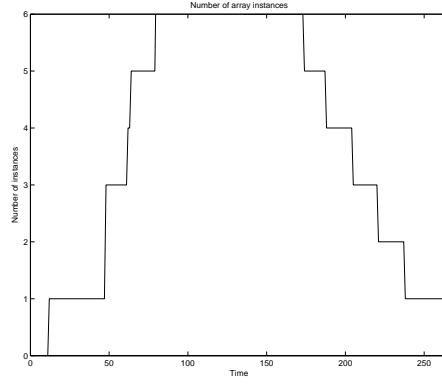
(d)



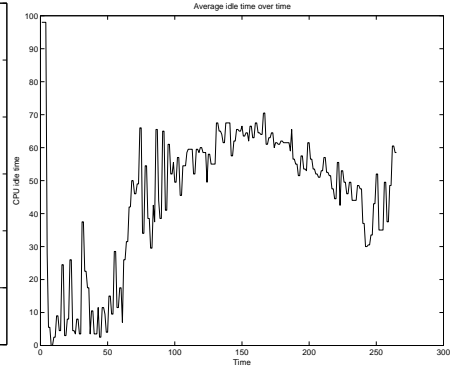
(e)



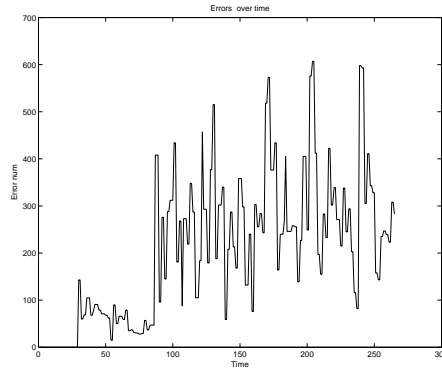
(f)



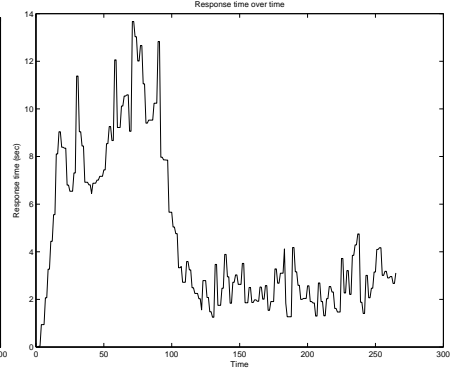
(a)



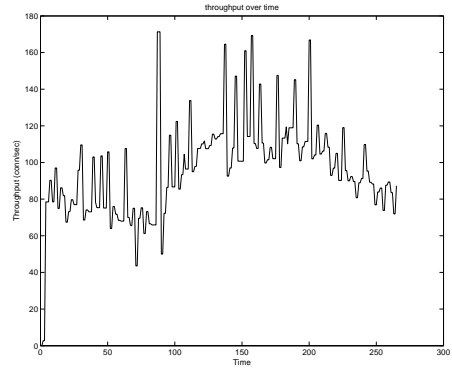
(b)



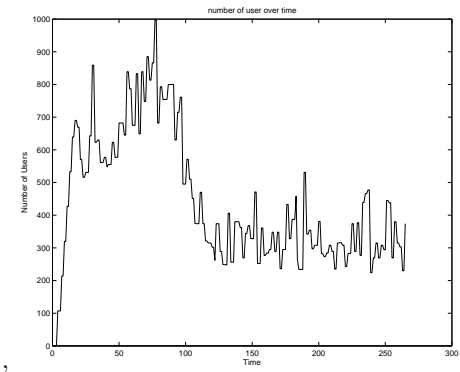
(c)



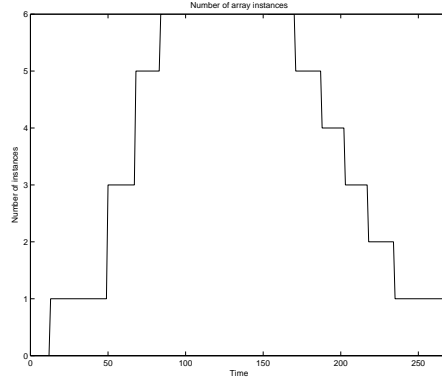
(d)



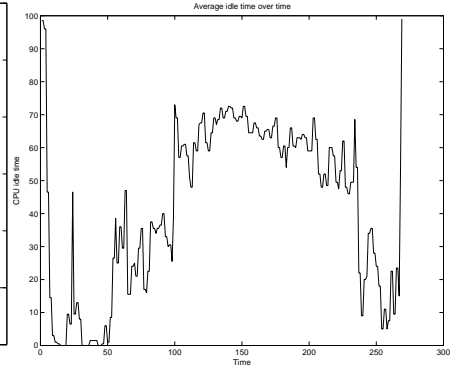
(e)



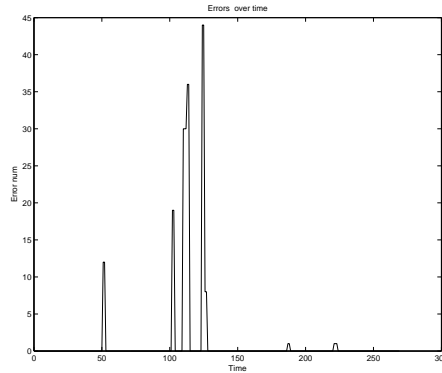
(f)



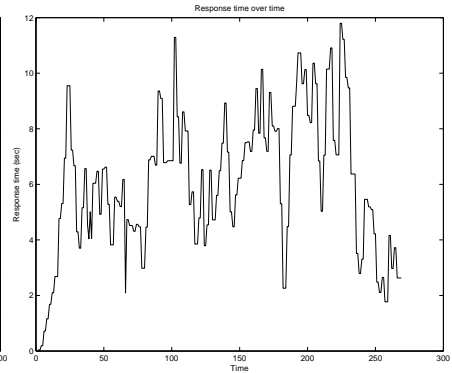
(a)



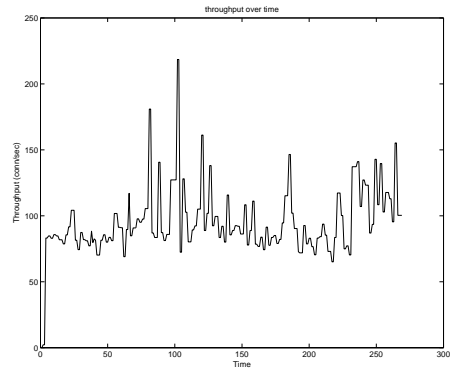
(b)



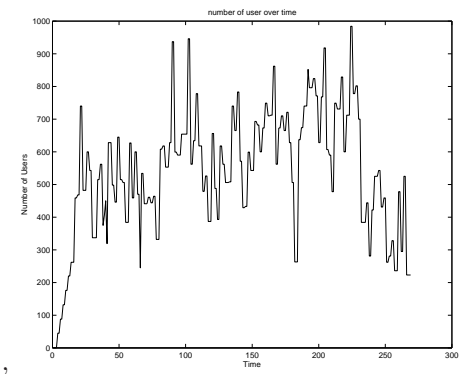
(c)



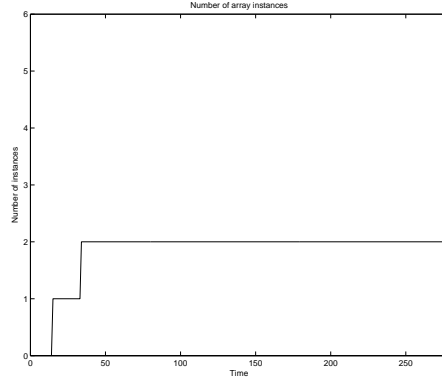
(d)



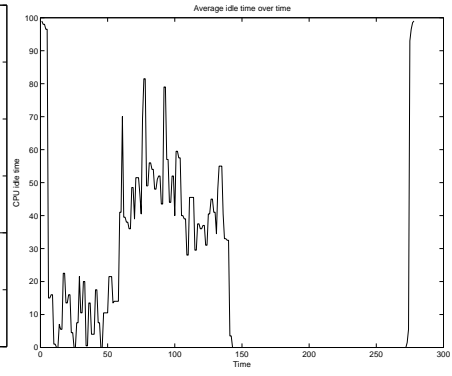
(e)



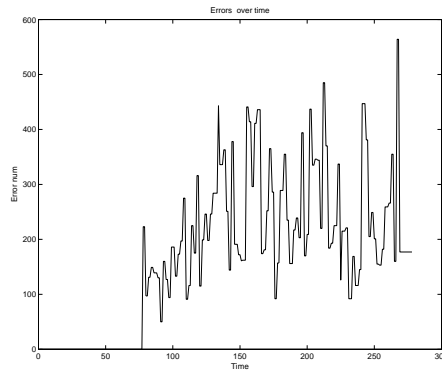
(f)



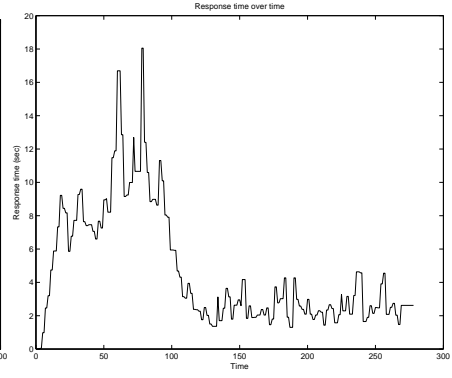
(a)



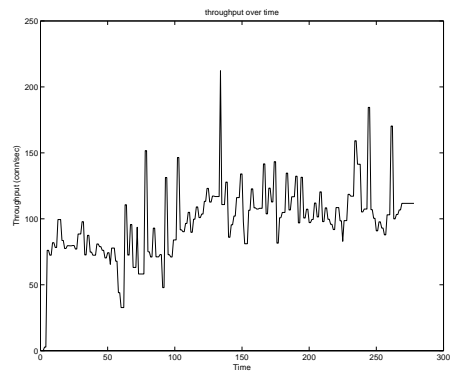
(b)



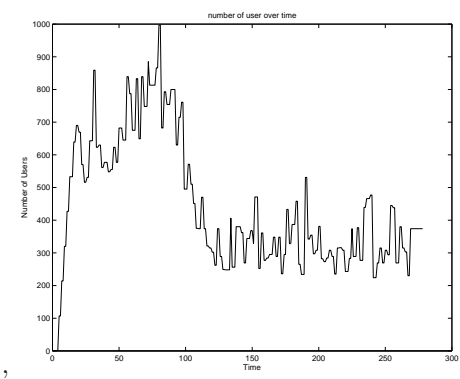
(c)



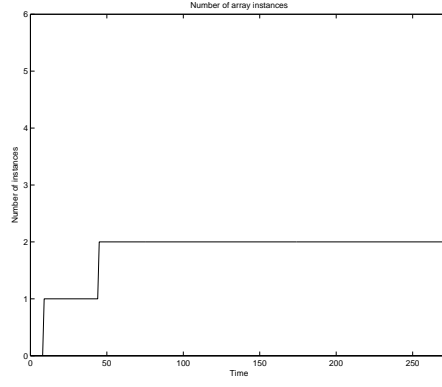
(d)



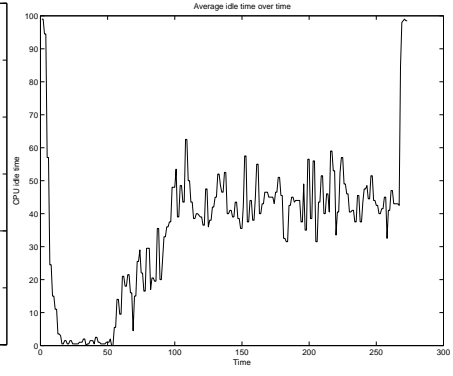
(e)



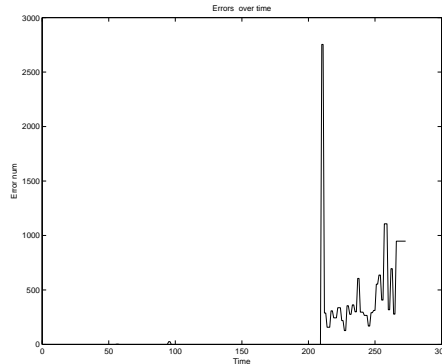
(f)



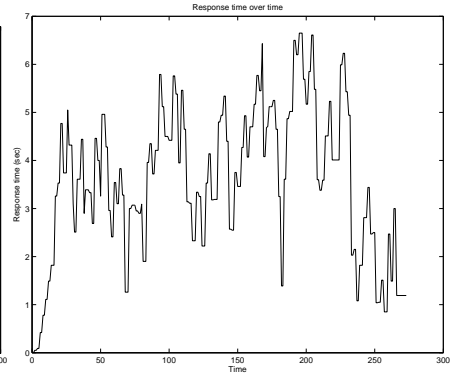
(a)



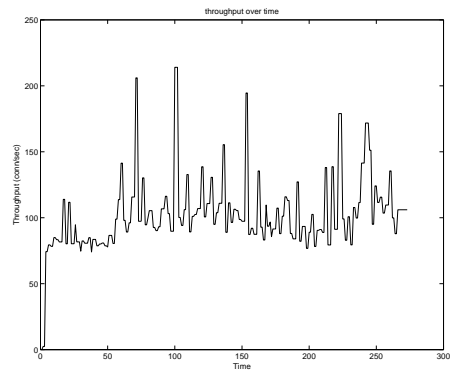
(b)



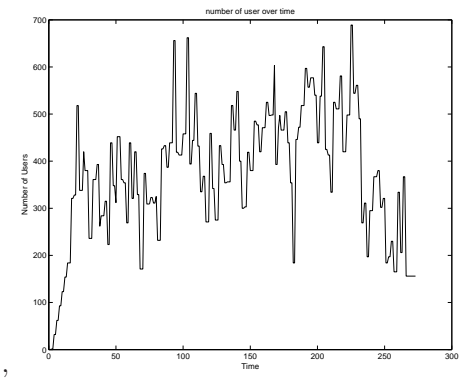
(c)



(d)



(e)



(f)