

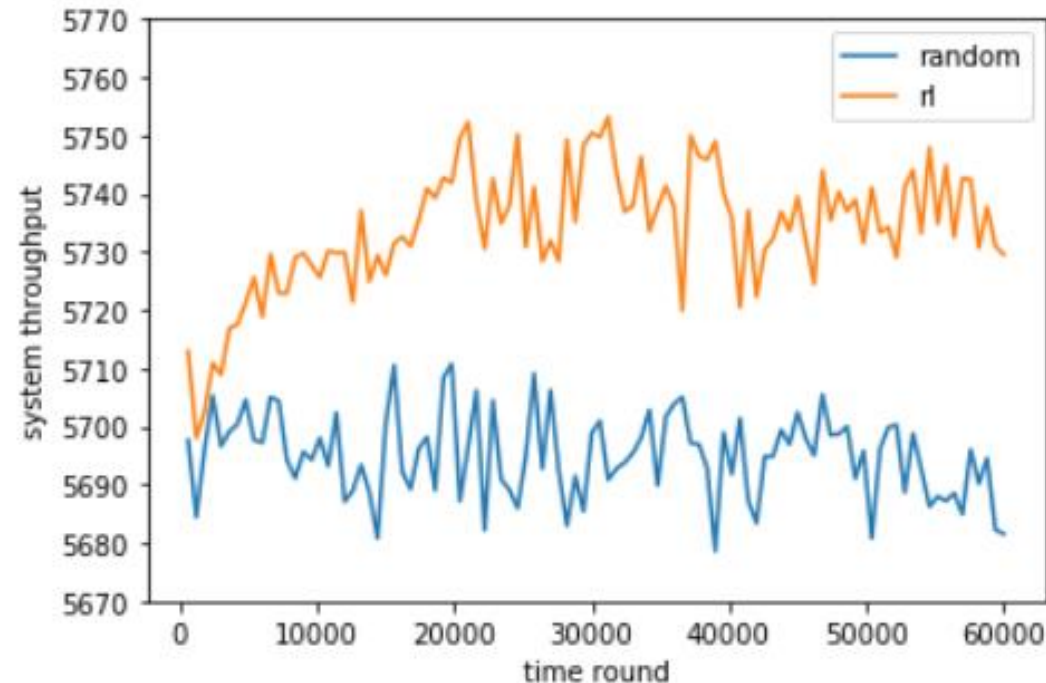
Experiment Modification

2018 1.2

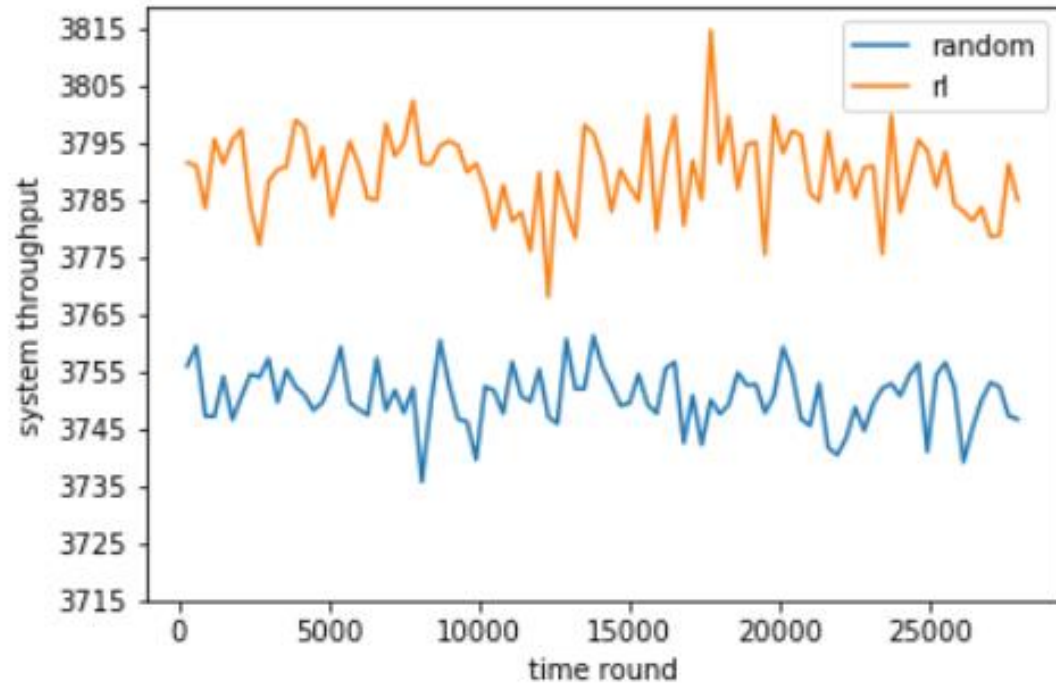
In order to make the experiment converges to a stable state:

- Change the link load following vertical hierarchical relationship.
- Apply ϵ – **greedy** to choose an action.
 - ϵ set to be 0.1
- Apply **experience replay** to the learning process. Randomly sample from 10 latest $\langle s, a, r, s' \rangle$ pairs.

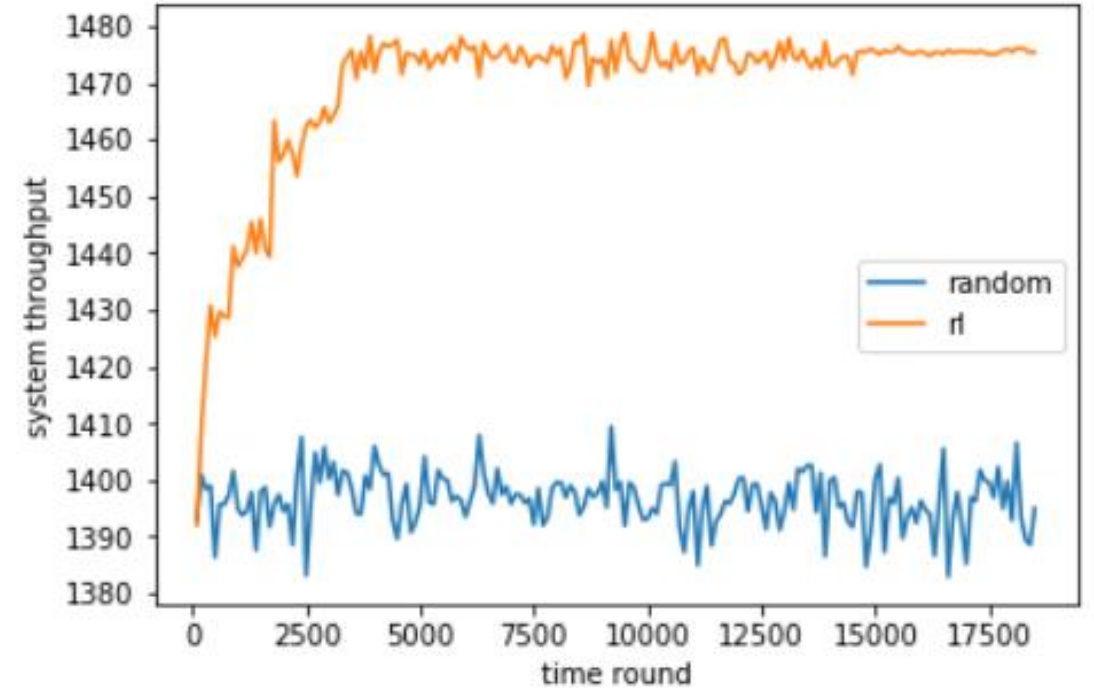
Try network topology with 1000 flows:



Try network topology with 500 flows:



Try network topology with only 100 flows:



When the number of flows is around 100. It takes one-day's training to converge to the stable state with tiny oscillations.