- 1. The PMs in the paper are movable and can connected to any switches but the PMs in our work are fixed. Different PMs are attached to different edge switches and in different PODs.
- 2. The VNFs in the paper are dynamic and can be removed or added based on the users' demand. However, in our work, the VNFs are randomly generated at the initial stage and are fixed in the switches.
- 3. The VNFs in the paper must be deployed into a data center and the data center is locally attached to a switch. In our work, the VNFs(or middleboxes) are attached directly into switches.
- 4. In the paper, each VNF can serve limited number of users. In our work, the number of users of each VNF is unlimited.
- 5. In the pater, each data center can install several different VNFs but in our work each switch will attach only one middlebox.
- 6. The paper considers VNF types and limit the number of types within each topology.Our work don't consider VNF types.
- 7. The paper simulates the profit of each service and our work don't consider it.
- 8. This paper consider the operational overhead(e.g. the overhead for deploying new VNFs in data centers), our work don't consider that.
- 9. In the paper, the cost consists of Bandwidth and IT resources in the Data center.

 Our work just consider the hops between two pairs.
- 10. The algorithm in the paper is more complexity and the simulation for bandwidth,
 IT resource, and operation overhead is over simple compared with our work.