I need to use a p2p network simulator to adapt my supervisor's conference key protocol these days.  
At first she recommended me using OMNet++, I thus downloaded it and successfully found a P2P network simulation framework in OMNet++, which is called Oversim. So far so good.   
However, this discrete-event simulator is not compatible with the new version, I found other people in India that has the same problem as I do in Omnet++ mailing list or Oversim mailing list, but there are few responses about itt, and I don't see this problem would be fixed soon. Thus I decided to research popular network simulator tools, either switch to that platform or use previous Omet++ version(I don't quite want this one).  
At first I search network simulator using python, I found a python module called fnss, which stands for fast network simulator setup[here](https://fnss.github.io/). Description looks fancy, but I still don't quite understand what it does. After checking its example files, I found out this is like a parser compile several parameters of network topology to different xml files according to different network simulator, not suitable for me requirement. But I do find a lot of references of network simulator there. I like its website, simple and orgnized.  
Then I found another open source python module for p2p network [here](https://github.com/heikoheiko/p2p-network-simulator) using [simpy](https://simpy.readthedocs.io/en/latest/). This quite attracts me. I think I may investigate it. There're two examples in its [slide](https://stefan.sofa-rockers.org/downloads/simpy-ep14.pdf). Seems interesting!  
The other network simulator I've seen often is ns2 or [ns3](https://www.nsnam.org/). I found a chinese reference [here](http://read.pudn.com/downloads77/ebook/295351/NS2-new.pdf) and a lot of introduction of it. n23 seems to be a well-maintained network simulator, but it is based on c++. Since I prefer to use python, this could be my plan B.  
And a parser of a python file compiler called [autonetkit](http://autonetkit.org/) for [Netkit](http://wiki.netkit.org/index.php/Main_Page)