Zookeeper on same node as kafka?



I am setting up a kafka+zookeeper cluster. Let's say I want 3 kafka brokers. I am wondering if I can setup 3 machines with kafka on them and then run the zookeeper cluster on the same nodes. So each machine has a kafka+zookeeper node in the cluster, instead of having 3 machines for kafka and 3 machines for zookeeper (6 in total).



What are the advantages and disadvantages? These machines will most probably be dedicated to running kafka/zookeeper. I am thinking if I can reduce costs a bit without sacrificing performance.





We have been running zookeeper and kafka broker on the same node in production environment for years without any problems. The cluster is running at very very high qps and IO traffics, so I dare say that our experience suits most scenarios.



The advantage is quite simple, which is saving machines. Kafka brokers are IO-intensive, while zookeeper nodes don't cost too much disk IO as well as CPU. So they won't disturb each other in most occasions.



But do remember to keep watching at your CPU and IO(not only disk but also network) usages, and increase cluster capacity before they reach bottleneck.



I don't see any disadvantages because we have very good cluster capacity planning.



Thank you for your reply:) If I may ask, do you have any idea how powerful (estimate) machines you have your kafka+zookeeper running on? - KTrum Jun 24 '17 at 15:57