## **Plot**

rand\_spec: c-1000-1

Choice of number of servers: 5

The chart shows a relationship between number of unhappy clients and number of servers. If there is only two servers, one for database, and on for initial server, there are lots of unhappy clients. As increasing the number of server, less unhappy clients occur. Number of unhappy clients maintain the same for over five servers, thus, launching five servers is a good choice for minimizing both number of unhappy clients and resources used by the system. From the plot, we can also know that adding the third and forth server help reducing number of unhappy clients a lots. However, adding the fifth server only reduce 2 unhappy clients. This also indicates five servers is enough for the load, since the fifth does not help as much as previous does.

