

## Plot

rand\_spec: c-1000-1

Choice of number of servers: 5

The chart shows a relationship between the number of unhappy clients and the number of servers. If there are only two servers, one for the database, and one for the initial server, there are lots of unhappy clients. As increasing the number of servers, fewer unhappy clients occur. The number of unhappy clients maintains the same for over five servers, thus, launching five servers is a good choice for minimizing both the number of unhappy clients and resources used by the system. From the plot, we can also know that adding the third and fourth server help reducing the number of unhappy clients a lot. 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 the previous does.

