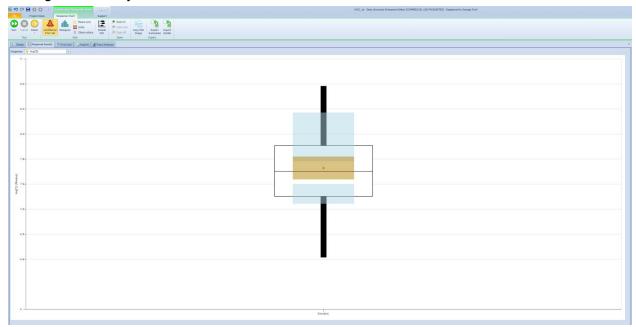
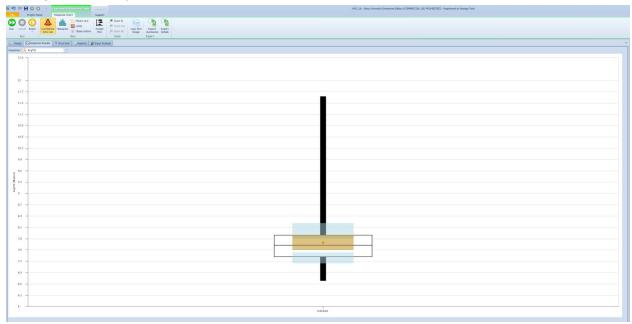
ISyE 4803: Advanced Simulation Charu Thomas 903126680

1. AVERAGE TIME IN SYSTEM

Average Time in System, Rule A:



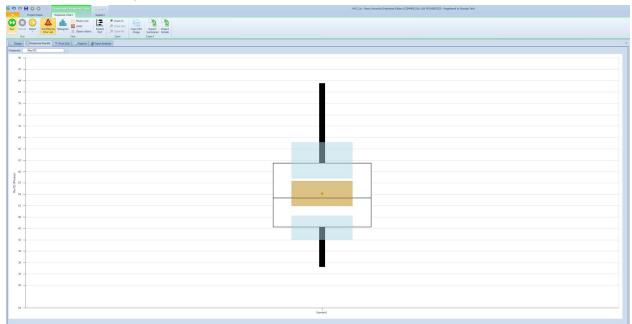
Average Time In System, Rule B:



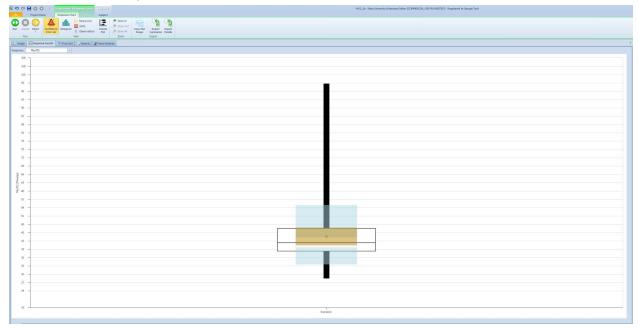
In regards to Average Time in System of Entities, Rule B is shifted slightly downwards, but has a larger maximum. Also, while looking at skew, Rule A and Rule B have very different histogram shapes and skews.

2. MAXIMUM TIME IN SYSTEM

Maximum Time in System, Rule A:



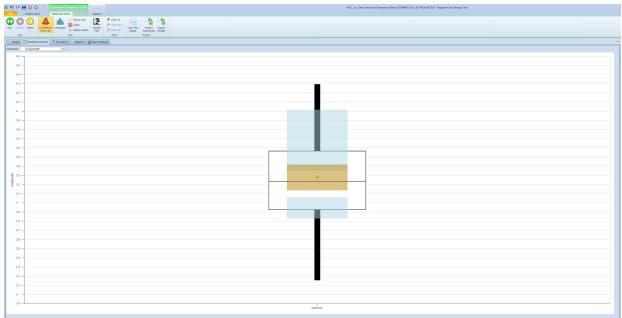
Maximum Time in System, Rule B:



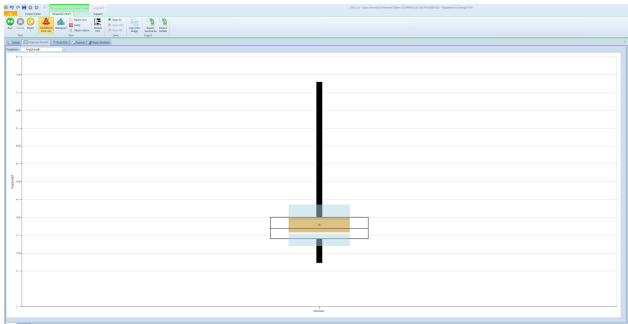
In regards to Maximum Time in System, while Rule B has a higher Max, the quartile estimates are less in Rule B than Rule A. For example, for Rule B, we are 95% confident that Q1 lies within the range ~ 34 - 40, while for Rule A, we are 95% confident that Q1 lies within the range ~ 42 - 48. In addition, for Rule B, we are 95% confident that Q3 lies within the range ~ 47 - 55, while for Rule A, we are 95% confident that Q3 lies within the range ~ 58 - 68. The box is lower for Rule B, which implies that Rule B is better in terms of Maximum TIS.

3. AVERAGE LENGTH OF QUEUE

Average Length of Queue, Rule A:



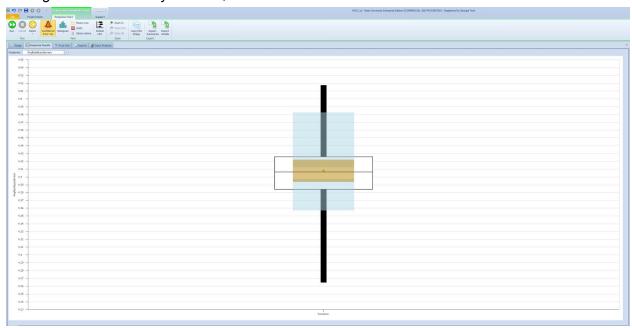
Average Length of Queue, Rule B:



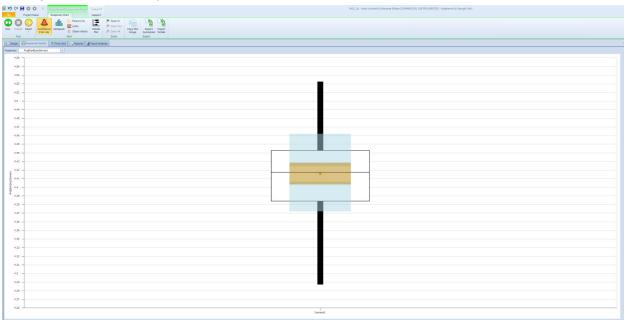
The range for Rule B is quite large compared to Rule A, but both rules have relatively similar box plots. The Q3 for Rule 3 is slightly less than Rule A, but the Confidence Interval for Q3 is similar for both Rules.

4. AVERAGE NUMBER OF BUSY SERVERS

Average Number of Busy Servers, Rule A:



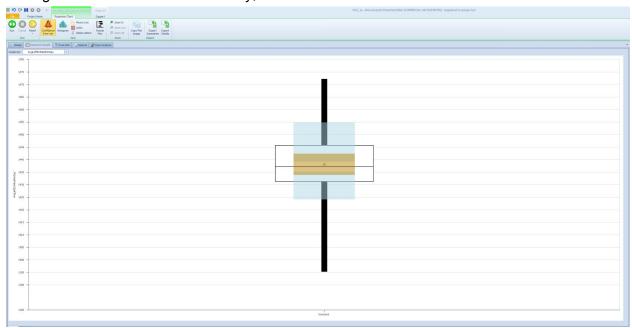
Average Number of Busy Servers, Rule B:



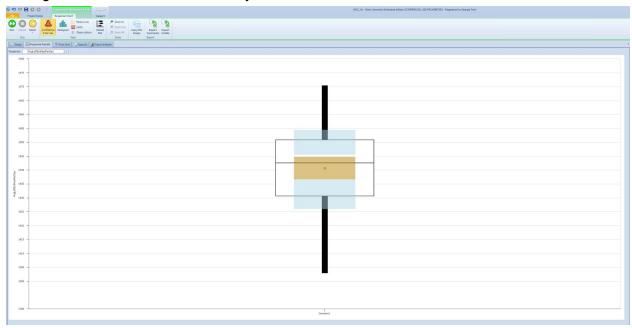
Q3 for Rule A is slightly lower than Q3 for Rule B. The ranges are fairly similar though. The histograms look similar and although one is skewed left and the other is skewed right, the skewness is small.

5. AVERAGE NUMBER ENTITIES LEFT PER DAY

Average Number Entities Left Per Day, Rule A:



Average Number Entities Left Per Day, Rule B:



The interquartile range for Rule A is shorter than the same for Rule B. Rule B is skewed left while Rule A is skewed right. The shapes of the histograms looks fairly similar, but the mode for Rule A is ~1435 while the mode for Rule B is ~1445.