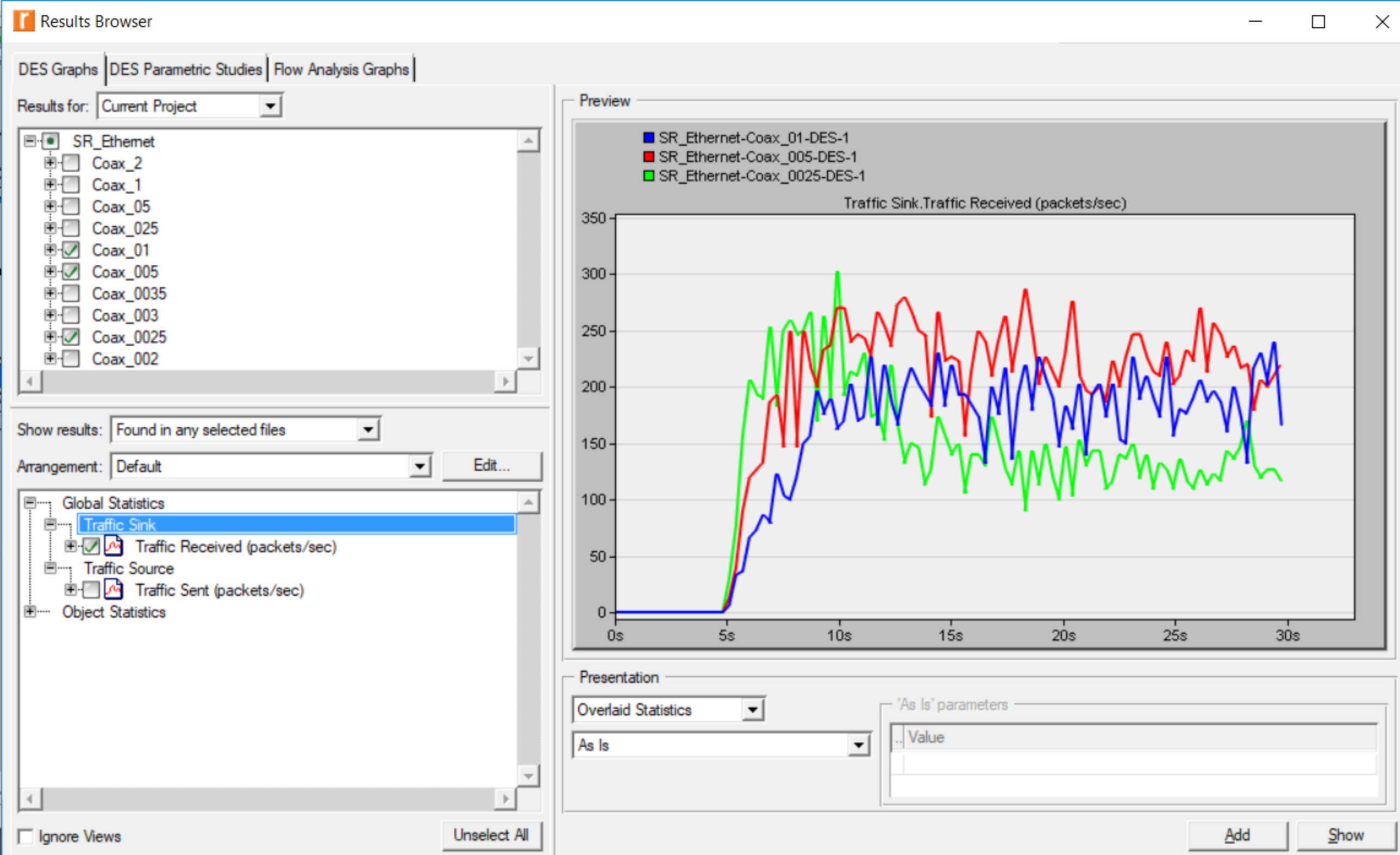
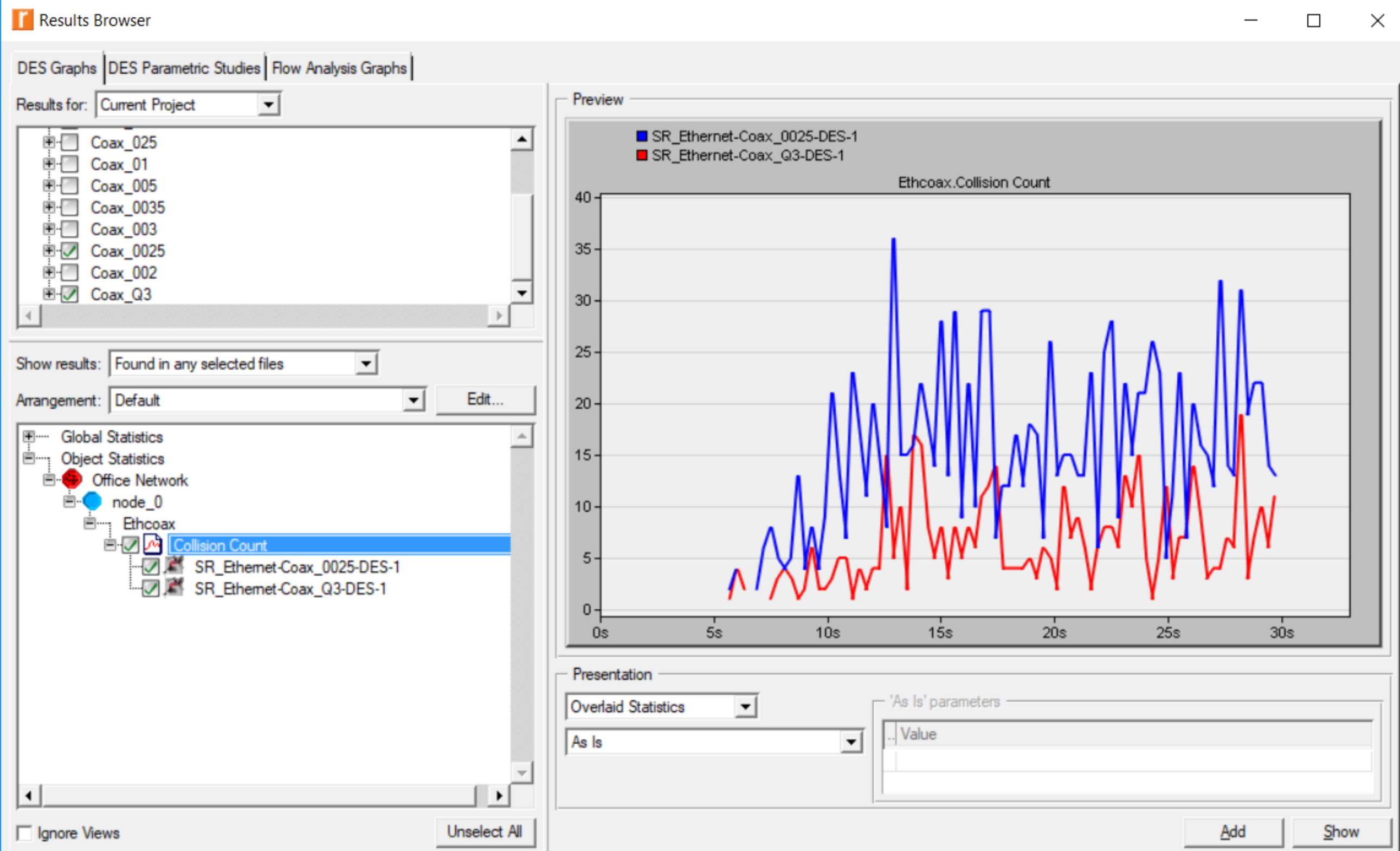


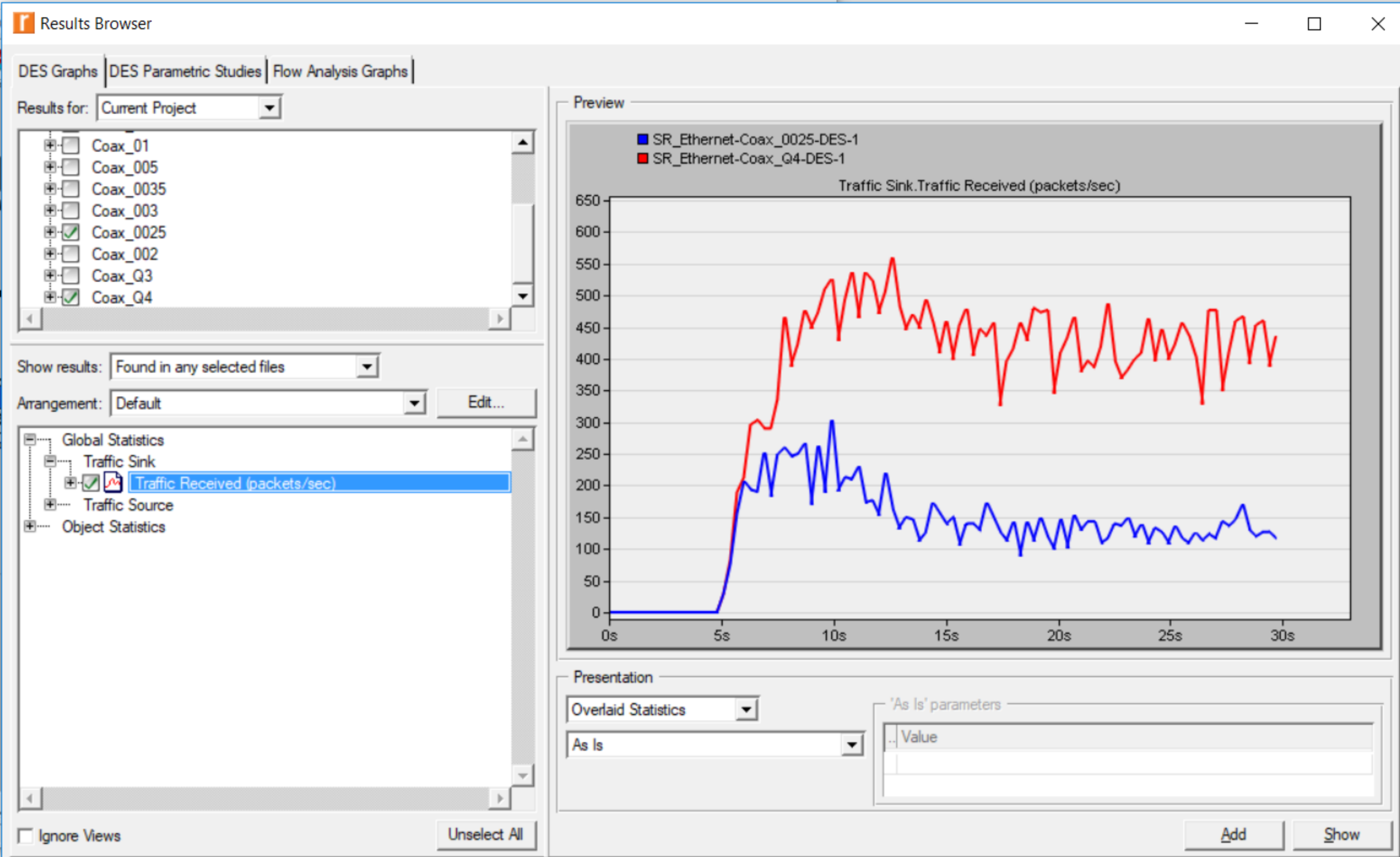
2a) The collision graph shows the conditions of the smaller number of exponential (Coax_01, Coax_005, Coax_0025) with the larger number of collision count. As the exponential is smaller, the times of sending packets are larger than before. At the same time, numerous other machines try to send their own packets, as a result, more conflicts happen. It is observed that Coax_0025 has higher collision counts when compared to other scenarios.



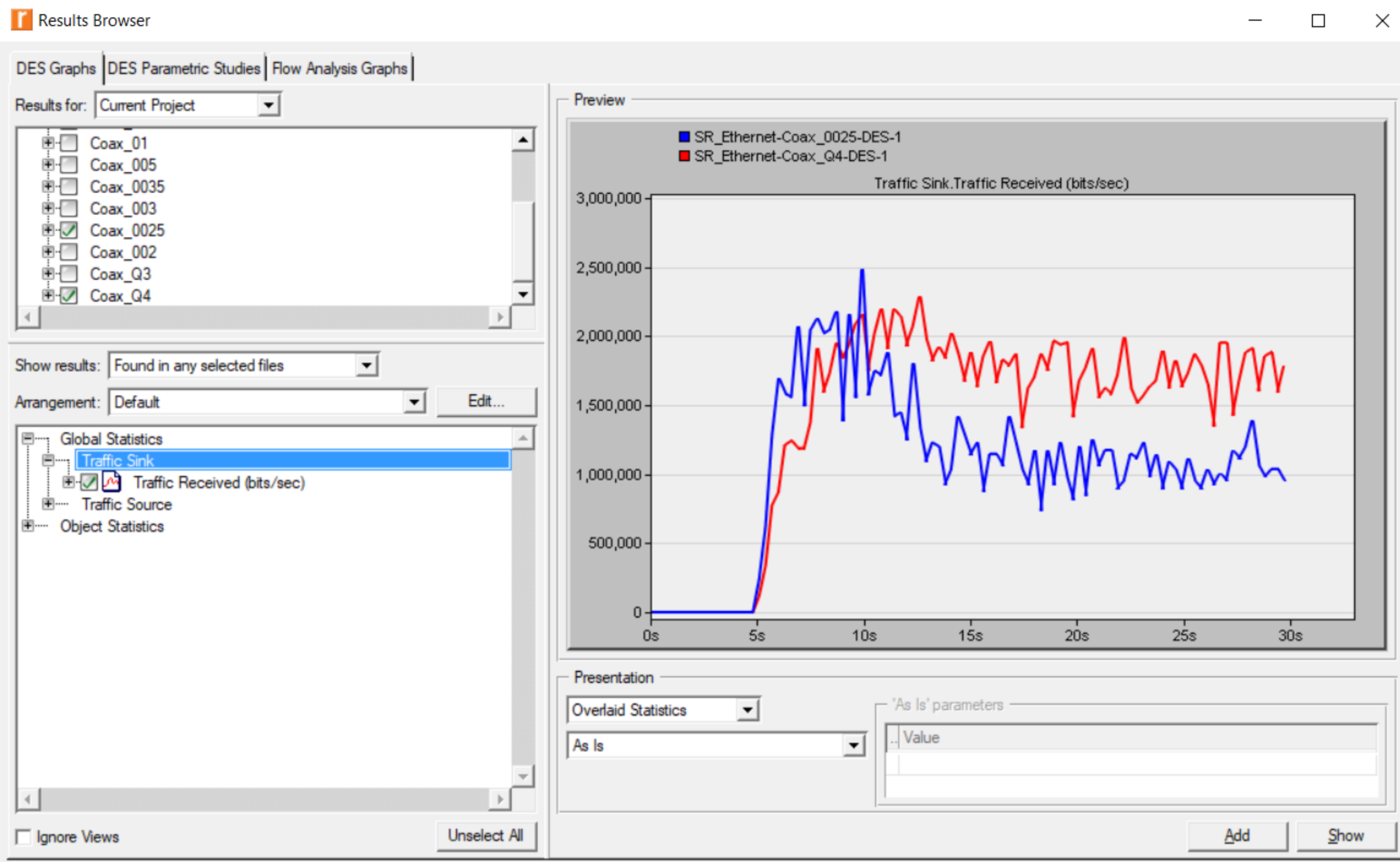
2b) The graph shows that at the beginning, Coax_01 has the lowest traffic received speed. However, when the load becomes heavier, the speed increases. The highest point of curve Coax_0025 is at the beginning. However, the speed drops a little as the traffic load becomes heavier. The graph for Coax_005 keeps increasing during the entire duration, and it reaches its maximum when the traffic load is heavy. These three curves show that different exponential will affect the efficiency of the networks. Hence, a suitable value of exponential is required.



3) Coax_Q3 has only 15 nodes when compared to Coax_0025 which has 30 nodes. Thus, fewer the number of nodes the lesser the collision count and this is reflected in the graph beside.



4a) Coax_Q4 has a packet size of 512 bytes when compared to Coax_0025 which has packet size of 1024 bytes. Hence due to smaller size of packets more number of packets are generated which contributes to increased traffic at sink.



4b) The scenario with packets size 512 Bytes (Coax_Q4) has smaller speed at the beginning. But, as time increases, the speed maintains a certain level, which is more than the scenario (Coax_0025) with packet size (1024 Bytes). This is due to the difference of the number of packets generated in both scenarios. With more packets to be sent, the time efficiency decreases. Thus, it is smaller when the load of network is light and as the network load is increasing, the scenario with more sending packets will be efficient. It is because the smaller size packet will decrease the collision count.