

Report of Video CDN Project

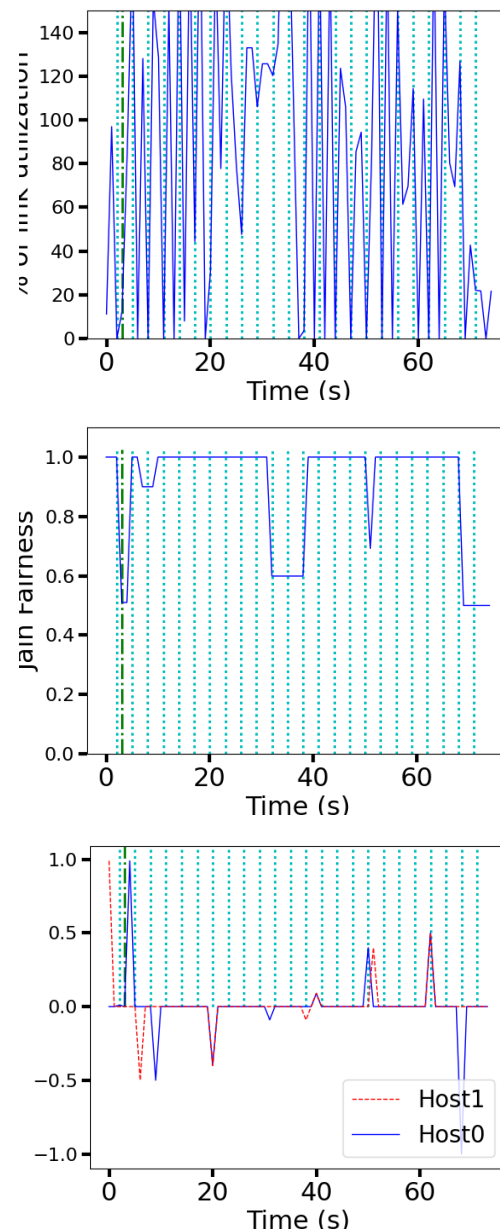
1. Group Members & Our Contribution:

Member:

Contribution: 33% 33% 33%

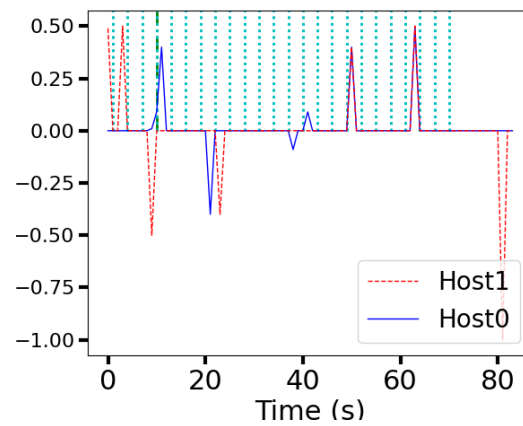
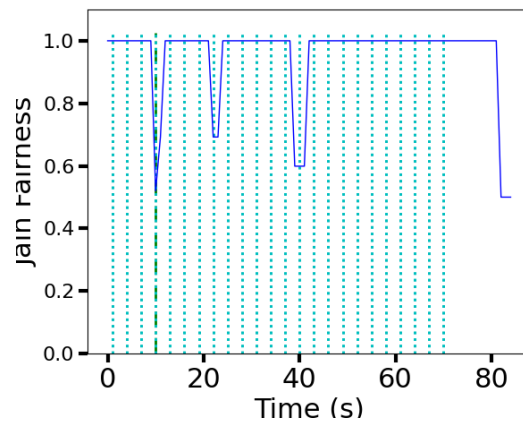
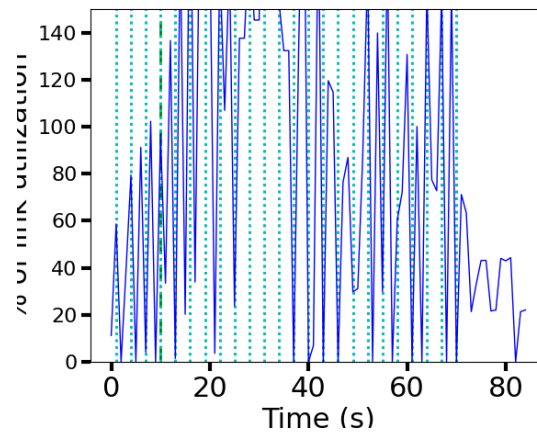
2. Analysis of proxy:

Twolink alpha = 0.1:



Here we can see that the percentage of utilization is varying in a big range. Also sometimes there are 0% because of the proxy cannot get to server due to busy porting. Since it is twolink, the fairness is nearly 1.0 except for some small cases. At last we can see both Host0 and Host1 are quite smoothness.

Twolink alpha = 0.5:

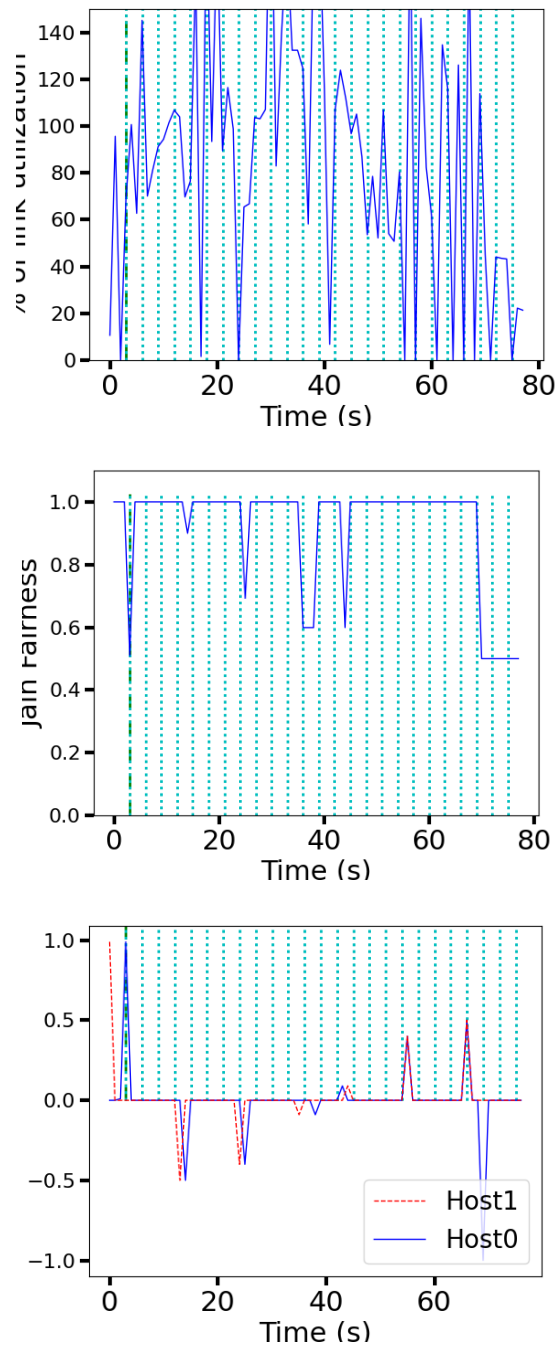


Here we can see that the percentage of utilization is varying in a big range. Also sometimes there are 0% because of the proxy cannot get to server due to busy porting.

Since it is twolink, the fairness is nearly 1.0 except for some small cases

At last we can see both Host0 and Host1 are not so smooth because sometimes proxy has a problem with sending the data.

Twolink alpha = 0.9:

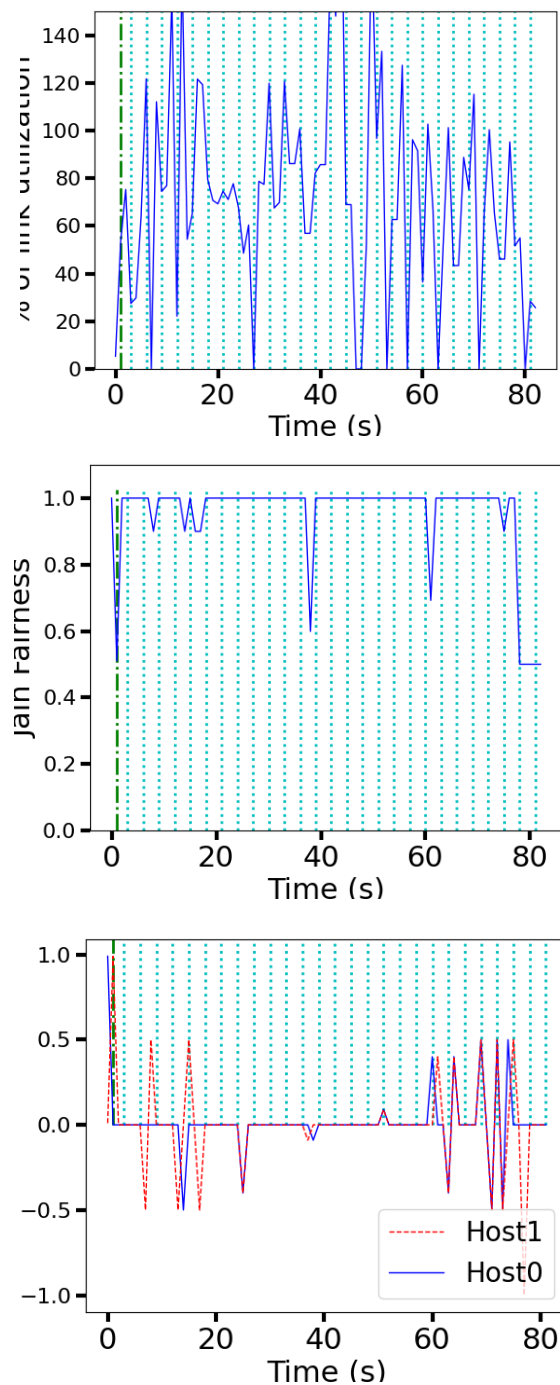


Here we can see that the percentage of utilization is varying in a big range. Also sometimes there are 0% because of the proxy cannot get to server due to busy porting.

Since it is twolink, the fairness is nearly 1.0 except for some small cases

At last we can see both Host0 and Host1 are not so smooth because sometimes proxy has a problem with sending the data.

Sharelink alpha = 0.1:

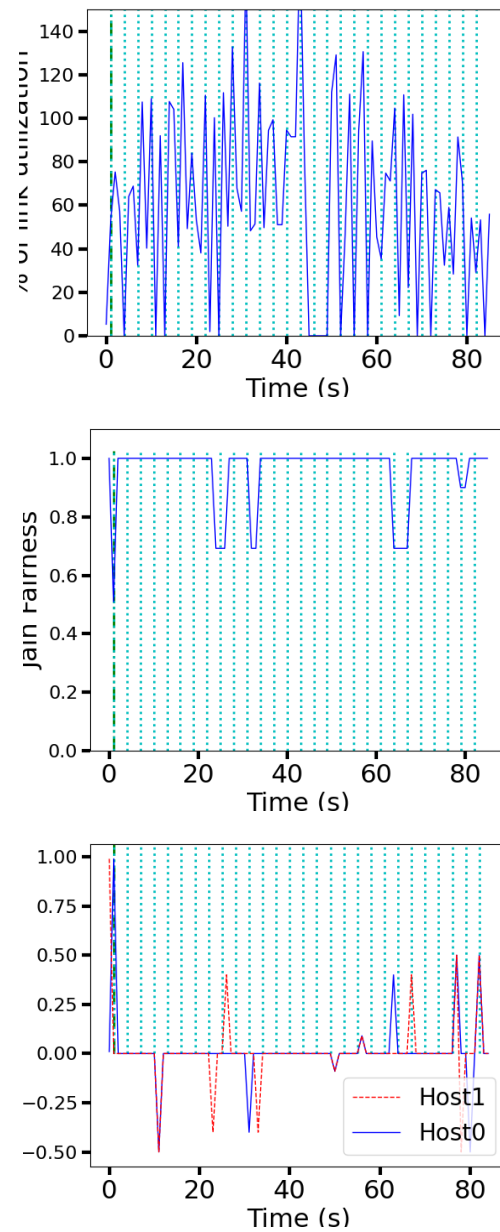


Here we can see that the percentage of utilization is varying in a big range. Also sometimes there are 0% because of the proxy cannot get to server due to busy porting.

Since it is sharelink, the fairness is nearly 1.0 except for some small cases

At last we can see both Host0 and Host1 are not so smooth because sometimes proxy has a problem with sending the data.

Sharelink alpha = 0.5:

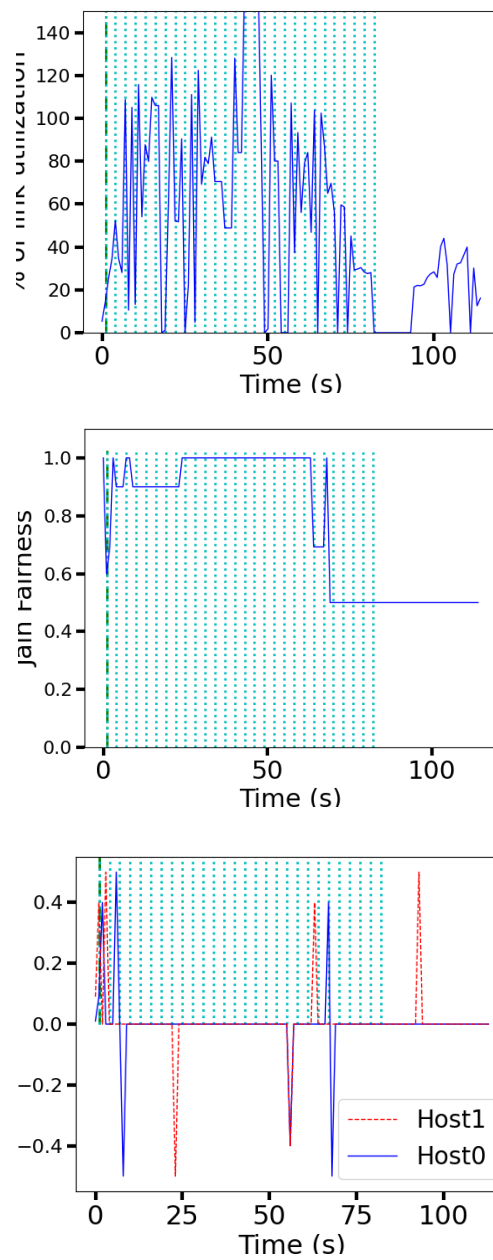


Here we can see that the percentage of utilization is varying in a big range. Also sometimes there are 0% because of the proxy cannot get to server due to busy porting.

Since it is sharelink, the fairness is nearly 1.0 except for some small cases

At last we can see both Host0 and Host1 are not so smooth because sometimes proxy has a problem with sending the data.

Sharelink alpha = 0.9:

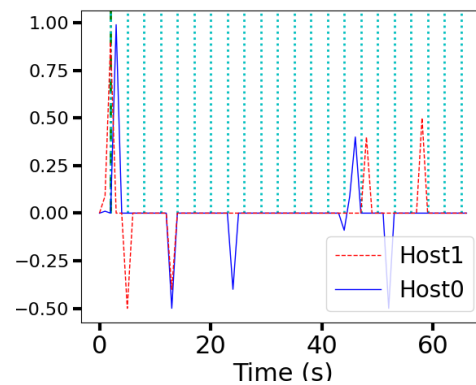
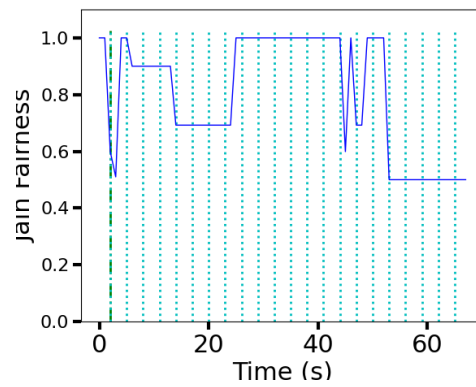
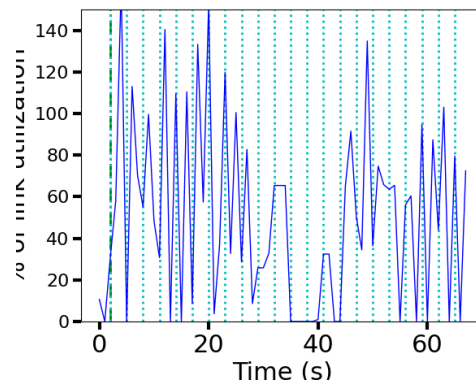


Here we can see that the percentage of utilization is varying in a big range. Also sometimes there are 0% because of the proxy cannot get to server due to busy porting.

Since it is sharelink, the fairness is nearly 1.0 except for some small cases

At last we can see both Host0 and Host1 are not so smooth because sometimes proxy has a problem with sending the data.

Onelink alpha = 0.1:

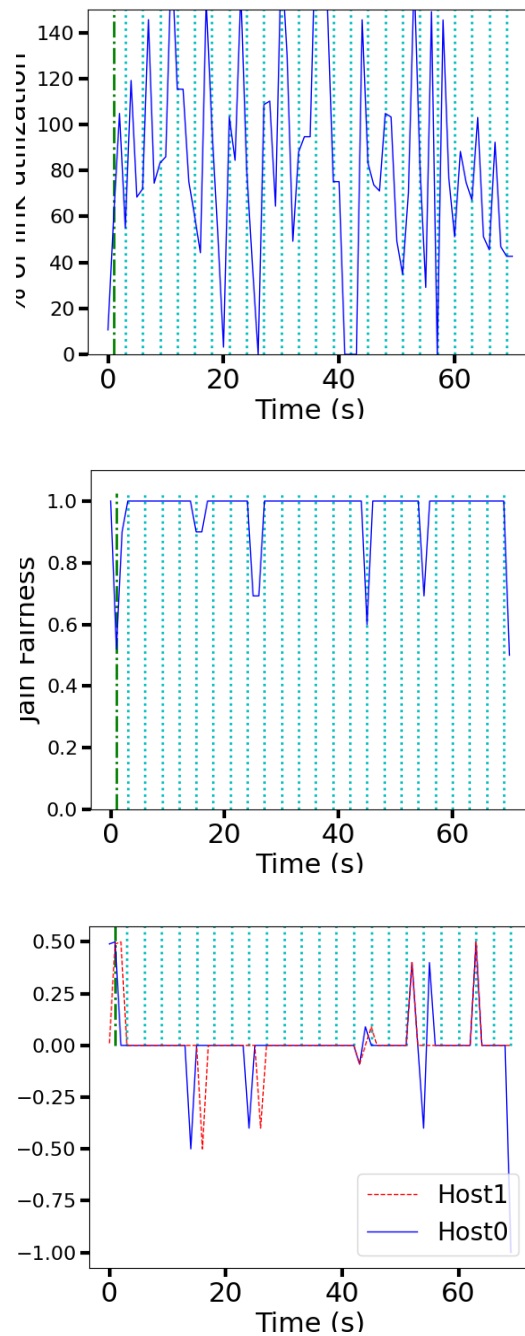


Here we can see that the percentage of utilization is varying in a big range. Also sometimes there are 0% because of the proxy cannot get to server due to busy porting.

Since it is sharelink, the fairness is nearly 1.0 except for some small cases

At last we can see both Host0 and Host1 are not so smooth because sometimes proxy has a problem with sending the data.

Onelink alpha = 0.5:

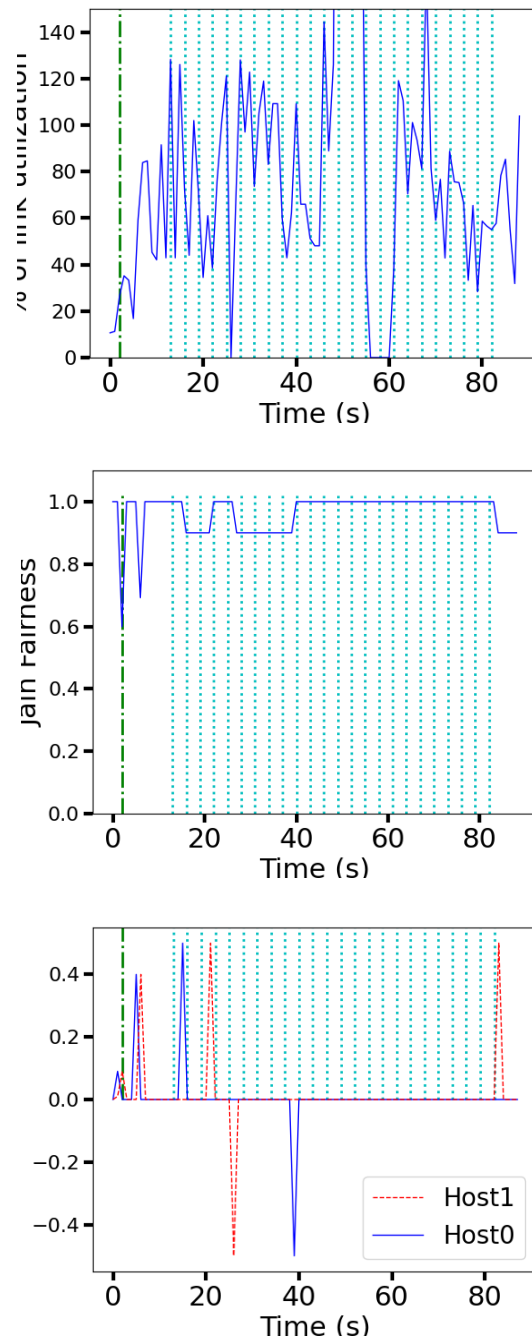


Here we can see that the percentage of utilization is varying in a big range. Also sometimes there are 0% because of the proxy cannot get to server due to busy porting.

Since it is onelink, the fairness is nearly 1.0 except for some small cases

At last we can see both Host0 and Host1 are not so smooth because sometimes proxy has a problem with sending the data.

Onelink alpha = 0.9:



Here we can see that the percentage of utilization is varying in a big range. Also sometimes there are 0% because of the proxy cannot get to server due to busy porting.

Since it is onelink, the fairness is nearly 1.0 except for some small cases

At last we can see both Host0 and Host1 are not so smooth because sometimes proxy has a problem with sending the data

Analysis on trade-off

As α increases, we know that the throughput will be closer to the current bitrate, so we can see from the graphs that the utilization and fairness are becoming higher more or less, but meanwhile the smoothness doesn't change too much.