# MP0: Event Logging Report

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02/08/2020

**Introduction:**

In this mp0, we completed a logging system by creating a server and up to 9 clients. In the logger, events, time delay and bandwidth are recorded in order so as to plot the graphs representing the relationship among these clients. In the server terminal, events are printed as required as the time they are received.

## Code Implementation:

Server:

In the server, we firstly introduced a function to create logger filename, such that once a server is started, we check if the corresponding logger file is created, if not, we build one.

Then, we wrote a function to support us write into the logger. The third function we implemented is used to determine what to do when a message is received by the server. We tried to poll from the clients’ channels, if the channel is a new channel, we use the channel as the key in the map matching with the client. Based on this, when we are polling from the channels, once we find that a channel has no response, we know that the client is disconnected when we will print out the information it disconnected. If not, we calculate the delay and the bandwidth, writing them into the logger.

Client:

In the server, we only have the main function where we request the host port and dialing to the server. By receiving messages generated by the generator.py, the client constantly sending events to the server.

Graph:

To do.

Language used: “Go” for server and client, “Python” for plotting the graph