Analysis of the QUIC protocol

Abstract:

QUIC is a new transport layer designed by Google to replace TCP. It offers reduced latency and higher throughput as compared to TCP. Although the protocol is already widely used by Google’s services and Google’s Chrome the protocol design and deployment is still nascent. The standard of the protocol is being written these days by the IETF. However, it is obvious that the Google implementation has many more details as compared to the standard’s draft in its current form.
Goals:

- Raise QUIC environment (Client, Server) using the CREATE simulation that belongs to Cyber-Defense Technology Experimental Research Laboratory.
- Analyze the open-source code of QUIC and understand the Connection Migration implementation in QUIC.
- Perform various tests to find vulnerability issues and possible performance improvements suggestion – related to connection migration.

Requirements:

Internet Networking Course

Programming Languages:

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