Progress Report 1 (GSOC '16)

Progress report since the midterm evaluations.

The complete status of the project can be seen <u>here</u>.

All the pull requests made can be reviewed <u>here</u>.

Comments regarding the current progress and suggestions can be made in the actual location of the <u>gist</u>.

Scenarios completed

- Blocking calls 2 pull requests merged.
 - Test for blocking read().
 - Test for blocking accept().
- Socket Shutdown 3 pull requests made (merge pending), 1 pull request pending.
 - Test for checking behavior of shutdown (SHUT_RD).
 - Test for checking behavior of shutdown (SHUT_WR).
 - Test for checking behavior of shutdown (SHUT_RDWR).
 - Test for checking behavior of shutdown (SHUT_RD), shutdown (SHUT_WR) PENDING, will be sent today.

All the previous pull requests have also been merged 2 days back. :thumbsup:

Current Scenarios

- Early-Retransmit Will be completed by today.
- Selective Acknowledgements Will be completed by today.

Pending Scenario

• Path MTU Discovery

The current status and discussion on this scenario can be looked up <u>here</u>. There are some limitations as a result of which some other way has to be figured out for this scenario.

- Scenarios left from Linux Repo -
 - fast-recovery
 - inet-diag
 - init-rto
 - initial-window
 - \circ ioctl
 - receiver-rtt

On completion of the above mentioned scenarios, all the scenarios that were mentioned in the proposal will be worked on. Also, some patches will be made in the packetdrill as were mentioned in the proposal. Since focus has to be made on **TCP**, the segment of timeline which was to be given for UDP will be now replaced with additional TCP related tests.

Timeline

Start

28 June 14 July Attempt at completing all the additional TCP based scenarios.

15 July 31 July Attempt at patching packetdrill by adding a new mode of testing in which remote host will not need an instance of packetdrill running.

Task

- 1 Aug 11 Aug Attempt at patching packetdrill to support multiple concurrent connections.
- 12 Aug 14 Aug Code review

End

- 15 Aug End of coding (soft)
- 23 Aug End of coding (hard)