EE / Cpre / SE 492 - sdmay 36

Self Healing 5-G

Week 2 Report

Feb 8 - Feb 22
Faculty Advisor: Mohamed Selim

Team Members:
 Matthew Johnson
Adam Tiedeman
 Parnumart Hanthiradej (Nick)
 Amber Chin
Yuin-Choon Ng (Austin)

Weekly summary

During the past reporting period our group had decided to split up into two teams to explore our possible options for 5-G simulation. One group continued to search for ORBIT documentation while the other group attempted to look into the WITest platform.

Past Week Accomplishments

WITest group - (Nick,Austin,Adam)
- Submitted applications to WITest website for access to testbed
- Attempted to access WITest through GENI
- Read through WITest tutorials to compare to ORBIT platform

ORBIT group - Matt, Amber
- Found a github page that will help develop and goes over predefined applications
- Made contact with Prof.Hongwei who referred us to his research team which may have orbit experience

- Tested on the low level protocols/sockets such as ping and traceroute as a simple representation of wireless communication
- Tested on image loading in ORBIT Testbed
- Started planning out initial orbit test script

Pending Issues

WITest group - (Nick,Austin,Adam)
- WITest platform is currently having hardware issues with their testbed
- Persons in charge if WITest are unable to resolve platform issues due to covid reasons. For this reason we were unable to be given access.

ORBIT group - (Amber, Matt)
- Writing a disk image and running experiments on the ORBIT testbed.
- Noticed that image loading failed on certain sandboxes, which could be the cause of our failed experiments, so we have to contact Professor Hong Wei and his research team or the contact person at ORBIT to aid us.

Individual Contributions

Adam Tiedeman : Testing on the WITest testbed
Parnumart Hanthiradej : Testing on the WITest testbed
Yuin Choon Ng : Testing on the WITest testbed
Amber Chin : Experimenting on the ORBIT Testbed wireless
communications like ping, traceroute and low level protocol/sockets
Matthew Johnson : Experimenting on the ORBIT Testbed wireless
communications like ping, traceroute and low level protocol/sockets

Team Member	Contribution	Weekly hours	Total Hours
Adam Tiedeman	Attempted to work on WItest Platform	3	12
Amber Chin	Searching for assistant to work on ORBIT	5	13
Matthew Johnson	Started writing test script	5	13
Parnumart Hanthiradej	Attempted to work on WItest Platform	4	12.5
Yuin-Choon Ng	Attempted to work on WItest Platform	5	10

*Counted total hours for only this semester

__Plan for coming week__

- WITest Platform no longer going to pursue (Nick, Austin, Adam)
- We have decided to continue forward with the ORBIT testbed. Moving forward with ORBIT we will use the GITHUB that was found as a strong reference platform. In the next reporting period we will attempt to write and successfully run some simple programs on ORBIT. (Entire Group)
- Testing higher level implementations of protocols and sockets like iperf on the ORBIT testbed. (Matt and Amber)