sdmay18-09: Tool Support for Continuous Model-Based Verification of the Linux Kernel

Week 2 Report
September 9 - September 23

Team Members

Srinivas Dhanwada — *Team Lead*
Benjamin Weno — *Automation Lead*
Collin McIntyre — *Tool Integration Lead*
Matthew Wall — *Web Design Lead*

Summary of Progress this Report

Unfortunately, not a lot of progress was made in this report period. In this period, our team gained a deeper understanding of our immediate tasks, learned more about the environment we'll be developing in, and received the client-provided resources that will allow us to begin serious work on the project.

Pending Issues

Until two days ago, we hadn't been given the necessary resources from our client that were needed to begin work on our project. These resources include patches for several versions of the Linux kernel and a copy of the website that holds all of the kernel verification information that we'll need for development.

Plans for Upcoming Reporting Period

For the next period, we plan to begin development on automating the Linux kernel patching process. Automating this procedure will make preparing the kernel for verification much easier. We'll also begin development on a diff tool. This tool will examine the results of different runs of the Linux kernel verification tool and show differences between different runs.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Srinivas Dhanwada	Srinu communicated with Dr. Kothari and helped to facilitate our meeting with him. Srinu also helped the rest of the team gain a deeper understanding of the tasks we need to accomplish.	1.5	6.5
Benjamin Weno	Ben attended our meetings with Dr. Kothari during the past two weeks and has begun drafting plans for kernel patch generation automation.	2.5	7
Collin McIntyre	Collin attended our meetings with Dr. Kothari during the past two weeks and has begun drafting plans for diff tool development.	2.5	7.5

Matthew Wall	Matt attended our meetings with Dr. Kothari. Matt also sought to gain a deeper understanding of the project and worked with Srinu to do so.	1.5	3.5