

Team 06

Project Title: ISEAGE 2.0

Date: 10/24/2021

Members:

Jacob Morrow – Scrum Master

Jon Schnell - Project owner

Evan Hellman - Project Manager

Cameron Isbell- Software Engineer

Nicholas Krabbenhoft- Systems Engineer

What we've accomplished in the past week/what we've been researching

Jacob Morrow – Compiled the codebase, met together to review the codebase to better understand how it works.

Jon Schnell - continue researching IPV6, review source code, plan for refactoring code. Build a virtual machine capable of compiling iseflow.

Evan Hellman - Successfully compiled the source code. Collaborated with the team to begin analyzing the code and identified potential problems. Planned the addition of a pthread-based thread-pool API that will allow us to remove libdispatch without making major modifications to the current code.

Cameron Isbell - Continued digging into the source code. Began researching more about networking. Started planning libdispatch replacement.

Nicholas Krabbenhoft - I was able to compile the ISEFLOW source code after finding the last dependencies that were removed from the ports tree. I also began decoding the configuration file and reviewing the source code of the project.

What we're planning to do in the coming week

Jacob Morrow - Meeting with Jacobson to discuss the codebase and any questions we have, research Ipv6 implementation strategies.

Jon Schnell - continue researching IPV6 by deploying a ipv6 only subnet, review code, deploy other testing virtual machines to test iseflow in practice.

Evan Hellman - Add unit testing framework. Implement a thread-safe generic queue, a thread pool generator, and proper APIs and documentation for each. Meet with clients to discuss some confusion surrounding the code base.

Cameron Isbell - Continue researching IPv6, ARP, and other networking related topics. Continue reviewing ISEAGE code. Began laying out a map of each file's interactions with each other.

Nicholas Krabbenhoft - I will continue to work on decoding how the config file works in order to get a working setup that we can base test cases off of.

Issues we had in the previous week

Jacob Morrow - Due to the codebase not being clear and deprecated ports on freebsd, we had trouble understanding how to move forward.

Jon Schnell - Trouble understanding some of the comments and operations in the iseflow source code. Trouble compiling code because of dependency issues.

Evan Hellman - Issues understanding the code due to poor comments, vague variables naming conventions, and a relative lack of low-level documentation on the code base.

Cameron Isbell- Reading the code is still a challenge. Much of it is uncommented which makes understanding the purpose of some operations difficult.

Nicholas Krabbenhoft - Dealing with deprecated ports on freebsd was the largest problem that I had to fight with. I had to do a lot of archaeology to figure out what was needed and the best place to find it.