

TEAM C ~ PROJECT PLAN

1. Requirement Specifications

Network security: The mechanics of an amplified and reflected denial of service attack

2. System Specification

a. Development platform:

1. Software

All project code will be developed and tested using the NetBeans v8.0 and Eclipse v4.3.2 integrated development environments. Java SE Development Kit v7 (32-bit) and jNetPcap v1.3 will provide the project APIs. Additionally, application testing will require network access to an Open Arena server running v0.8.5 or below.

2. Hardware

Development will occur on hardware running currently supported versions of the Microsoft Windows operating system (Windows Vista, 7, 8, 8.1). The minimum hardware specifications required for development are driven by the potential to develop on a system running Windows 8.1. Windows 8.1 requires a 1 GHz or faster processor, 1 GB or more of RAM, and a minimum of 16 GB of hard disk space. Additionally, the processor must support PAE, NX, and SSE2 instructions. A video device supporting DirectX 9 is also required. A network adapter capable of TCP/IP networking and internet connectivity will be required for application testing.

b. Operating platform:

1. Software

The application will potentially execute on a variety of operating systems to include Microsoft Windows XP SP1 and above (32/64-bit), Linux with kernel v2.6.18 and above, FreeBSD 7.1 and above, and Open Solaris 2009. Execution additionally requires the system to have the Java Runtime Environment v7 (32-bit) installed, as well as the jNetPcap API v1.3. As Mac OS X lacks the required jNetPcap API, it is not supported. On many systems, administrative privileges will be required to execute the application. The application will be tested solely on Windows-based systems. As a result, performance on other platforms is not guaranteed.

2. Hardware

The minimum hardware specifications are determined by the OS hosting the JRE. To execute on a supported Linux distribution, only 64 MB of ram and 58 MB of hard disk space are required. Potentially ARM v6+, Sparc, x86, x86-64, x64 and AMD64 processors are supported. The application will be tested solely on x86-64, and AMD64 hardware. As a result, performance on other platforms is not guaranteed. Finally, to make full use of the application, a network adapter capable of TCP/IP networking and internet connectivity is required.

3. Software Management

Software and documentation version control for the project will be maintained using the GitHub (<https://github.com>) revision control system. The team will use a shared repository model in which the members are owners of the repository and are granted push access to make changes. In addition, topic branches will be used to isolate changes, for review, prior to merging with the master branch or trunk.

4. Project Schedule

Task	Duration (days)	Start Date	End Date	Personnel
1. Project Plan	7	3/23	3/30	Brad, Jamie, Daniel
a. Planning	4	3/23	3/26	
b. Team Peer Review	2	3/27	3/28	
c. Revise document	1	3/29	3/30	
2. Project Analysis	7	3/31	4/06	Brad, Jamie, Daniel
a. Analyzing	3	3/30	4/02	
b. Team Peer Review	2	4/03	4/04	
c. Revise document	2	4/05	4/06	
3. Project Design	7	4/07	4/13	Brad, Jamie, Daniel
a. Designing	3	4/07	4/09	
b. Team Peer Review	2	4/10	4/11	
c. Revise document	2	4/12	4/13	
4. Test Plan	7	4/14	4/20	Brad, Jamie, Daniel
a. Construct Testing	3	4/14	4/16	
b. Team Peer Review	2	4/17	4/18	
c. Revise document	2	4/19	4/20	
5. Coding/Implementation/Testing	21	4/21	5/11	Brad, Jamie, Daniel
a. Coding / Implementation	11	4/21	5/01	
b. Testing	4	5/02	5/05	
c. User Guide	4	5/06	5/9	
d. Final Revisions	2	5/10	5/11	