

**What is the success rate of a Hacker getting past an anti-virus like
Software**

New Mexico

Supercomputing Challenge

Final Report

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Executive Summary:

At first, we needed to find the topic we wanted to find the answer to and begin to work hard to get the task done. We had a few bumps throughout the project, but are so close to completing the project and finding our solution. We worked on this project for many weeks and hope to conclude with helpful results. We began by starting with Netlogo and were a bit unsure of what needed to be done but we finally got onto track for where the project needed to go. We started with many different project names and finally decided on one. We looked at many other options, but decided to go with: *what is the success rate of a hacker getting past an anti-virus-like software*. Although we still have a little bit programming to be done, we are very close to completing the project.

The problem we are investigating is:

Hackers are getting better and better at getting into peoples computers and this will be more and more of a problem as the technology age rises up. Hackers will get better and better at getting information they want. This means that anti-virus software will have to get better and better as well. So we have to work around the complications of anti-virus like software to the best of our abilities. The way we can do this is to combine different systems and make them all work together at once so that there is a more of a chance of the hacker not getting in to the system or taking valuable files.

The Method We Used:

In the very beginning of the school year, we began with the confusing task of figuring out what the top our project would be on, and were also told that we had to model the problem in Netlogo. We then knew that we had great feats to accomplish by April, 2015. We brainstormed for about two weeks, thinking of many different ideas, and finally came to a conclusion: Can an Open WIFI Network Be Secure. We quickly realized that we had huge project, one that could have actually been many projects, and decided that we had to really narrow it down. We had many different topics and finally chose what is the success rate of a hacker getting past an anti-virus-like piece of software.

Once we had finally chosen what our main topic was of the project, we quickly began researching what terminology to use and other various components to make our model look like what we wanted it to. We have been working hard, developing the overall look and feel of the program. We still need more work but have been trying to overcome our problems inside the model. Even though we have a limited amount of time, we have come a very long ways and plan to go further.

Verification Of the Model:

We currently do not have complete results from our model, but are very close to finding them.

The Results:

We are working very hard to find an outcome to which security system is best for the project, but currently do not have a complete set of results.

Conclusion:

We do not have conclusions about our programming yet, but we are very close to analyzing and completing that part of the project.

References:

‘Brian, Marshall. “HowInternetCookisWork” 26 April 2000. HowStuffWorks.com.
<http://computer.howstuffworks.com/cookie.htm> 01 December 2014
Ferro,Greg.”TCP SYN Cookie - DDoS Defence,” Etherealmind.Gre Ferro,n.d. Web. 01 Dec. 2014
Honeypot.”What Is ? Quinstreet Enterprise”,n.d. Web. 01 Dec. D014
“Intrusion Detection FAQ:Whnat Is a Honeypot?” SANS Sans.com,n.d. Web. 01 Dec.
Valentin,Vishnu V. “5 steps wifi Hacking-Cracking WPA2 Passowrds Ethical Hacking Tutorials, Tips and Tricks” Ethical Hacking Tutorial,n.d. Web. 10 Dec. 2014

Significant Achievements:

Nicholas Elkins:

My most significant achievement would be helping everyone out and making the presentations be possible throughout the project.

Quentin Dye:

My most significant achievement was doing most of the research for the team and helping finish the interim report.

Micah Carlen:

My most significant achievement was doing the programming and helping the team get on track with what they were doing during time of struggles in the project.

Acknowledgements:

Some of the people we would like to acknowledge would be the project mentors who helped us out during the rough spots of our programming, Patty Meyers and Neale Pickett, and our teacher who made this all possible to us, Karen Glennon.