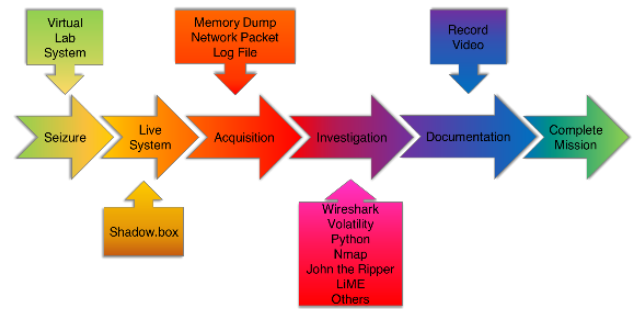


# Digital Corpora

By: Yu Gao, Jun Lu and Minchen Ye

Advisor: Dr. Dax Roberts

Client: Paul Bryant



## INTRODUCTION

Digital corpora is the educational and research field of digital forensics. In digital forensics education, it is important to provide insights into specific technologies and how forensics can be used for thorough and sophisticated analysis. It is also important to provide a rich learning environment where students can use forensic tools to rigorously analyse appropriate test data.

This project is based on the knowledge learned to build a virtual environment to simulate a real hacking process. These activities include the whole process of hackers sniffing, attack the server, privilege escalation, obtaining confidential information, and then leaving the back door.

## DEVELOPMENT

- ◆ Environment setup: Build a virtual environment.
- ◆ Simulated attack: Reproduce the attack process.
- ◆ Collect and examine evidence: Students must collect relevant data and confirm the validity of the data.
- ◆ Analysis: The data collected is used to prove (or disprove) the case that the examiner is establishing. For each relevant data item, the

examiner needs to try to determine its relationship with the case.

- ◆ Reporting: Data and analysis will be synthesized in this process into a form that can be understood by laymen. Being able to create such reports is definitely a crucial skill for examiner.

## CONCLUSION

Digital forensic investigators must have extensive knowledge of forensic methodologies and experience with a variety of tools. This includes multi-purpose forensic kits with advanced features and good availability, as well as gadgets for special tasks that may have medium to low availability. In addition, advances in analytical methods, tools, and techniques require constant learning to remain generic.

SouthPark hope that students can combine these fragmented tools and software in this project, and finally finish a report independently. SouthPark want the students to be able to protect the assets of businesses and organisations from cybercrime when they graduate, and even to help the police with such problems in the future.