A Network Forensics Investigation into Sporting Corruption

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List of Acronyms

PCAP Packet Capture
SMB Server Message Block
IPC Inter-Process Communication
DLL Dynamic Link Library
DPRK Democratic People's Republic of Korea
FTP File Transfer Protocol
HTTP Hypertext Transfer Protocol
TCP Transmission Control Protocol
ASCII American Standard Code for Information Interchange
JSON JavaScript Object Notation
CSV Comma Separated Values
TLS Transport Layer Security

1   Aim of Investigation

In this investigation, the analyst has been tasked with working alongside an undisclosed security agency to perform a network forensic investigation for an international sporting corruption case. They have been tasked with using the three Packet Capture (PCAP) files supplied to recover any information that may be pertinent to the suspected wrongdoing.

In all three cases, an investigation has been carried out thoroughly and in such a way that it could be repeated by any individual with the requisite knowledge and materials. The integrity of these files has been maintained at all times by frequent checking of hash sums and the use of read-only evidence folders.

2 Tools Used During Investigation

What follows is a table containing a list of tools used during the Investigation process, alongside a short description, below that is a short summary of the features found to be useful during this process. Information regarding how the tools helped ascertain how data was communicated can be found in the Critical Evaluation section.

Name of Tool	Description of Tool
Wireshark	The industry standard packet analysis software, it allows a user to capture and analyse network traffic by filtering based on specific parameters (such as protocol, port, source and destination, etc.). It also visualises these packets in a helpful manner.
CyberChef	A web-based tool developed by GCHQ that allows for analysis and decoding of data in an extremely wide array of formats
certutil.exe	A command-line program pre-installed in Windows that allows users to take a SHA256sum of a specified file, amongst other things.
Windows Subsystem for Linux	Tool that allows for users to run a Linux environment within Windows, meaning many Linux command-line tools are still available
Tree	A Linux command-line tool that displays a directory structure like a tree, allowing us to see all files and directories in a given location
Binwalk	Linux command line tool that searches binary files for embedded files of other types, as well as executable code
HxD	Freeware hex editor available on Windows
SilentEye	A software platform used for steganography
Google Earth	Allows for latitude and longitude data imported from a CSV file to be visualised and placed on a map
Vim	A modular Text editor available primarily in Linux, it allows for the creation of macros that can automatically format lots of text quickly
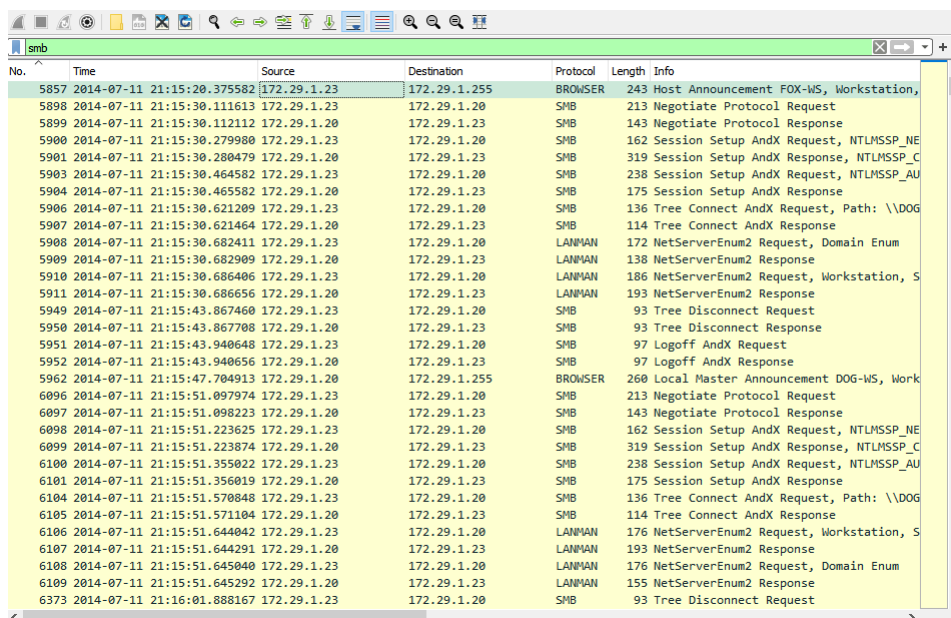
Table 1: A list of tools used for the investigation alongside some descriptions

3 Investigation of Capture 1

3.1 Traffic Analysis

Network traffic in this capture begins `2014-07-11 21:11:26` and ends same date `21:23:52`.

The brief regarding Capture 1 informed the investigator that the files that were acquired by the suspected malicious actor were downloaded/transferred to their device. A common method by which files are transferred on a local network for a large organisation (such as the one concerned here) is via SMB (Mundhenk 2021), and filtering by this protocol in Wireshark (Wireshark n.d.) displays over 900 results, as seen in Figure 1.

Figure 1: Capture 1 filtered by the SMB protocol in Wireshark

Packet number 5875, the Host (172.29.1.23), announces itself as `FOX-WS`, and the Local Master (172.29.1.20) announces its hostname as `DOG-WS` in packet 5962, as such this will be what each device will be referred to herein.

(a) The hostname for the 172.29.1.23 device (FOX-WS)

(b) The hostname for the 172.29.1.20 device (DOG-WS)

Figure 2: The two hostnames being displayed in Wireshark

The first request truly of note is packet number 23838, which was the first protocol request from DOG-WS to FOX-WS. Following this, it can be seen that the account used to access the latter device is test in packet 23844. Two packets later DOG-WS attempts to connect to the Inter-Process Communication (IPC) share, which allows for connections to the server.

From packet 23872 to 23891 it appears as if the DOG-WS device is making several requests to different shares on the shared network, including CUSTOMER_ACCOUNTS, R_AND_D, SECRETSHARES, and SHAREDOCS, this can be seen in Figure 3 below.

4

```
23872 2014-07-11 21:22:11.417938 172.29.1.23      172.29.1.20     SMB      136 Tree Connect AndX Request, Path: \\DOG-WS\BLAH
23873 2014-07-11 21:22:11.418939 172.29.1.20      172.29.1.23     SMB      120 Tree Connect AndX Response
23874 2014-07-11 21:22:11.425433 172.29.1.23      172.29.1.20     SMB      150 Tree Connect AndX Request, Path: \\DOG-WS\DROP FOLDER
23875 2014-07-11 21:22:11.425682 172.29.1.20      172.29.1.23     SMB      120 Tree Connect AndX Response
23876 2014-07-11 21:22:11.426935 172.29.1.23      172.29.1.20     SMB      162 Tree Connect AndX Request, Path: \\DOG-WS\CUSTOMER_ACCOUNTS
23877 2014-07-11 21:22:11.427181 172.29.1.20      172.29.1.23     SMB      120 Tree Connect AndX Response
23878 2014-07-11 21:22:11.427680 172.29.1.23      172.29.1.20     SMB      138 Tree Connect AndX Request, Path: \\DOG-WS\F_M_W
23879 2014-07-11 21:22:11.427689 172.29.1.20      172.29.1.23     SMB      120 Tree Connect AndX Response
23880 2014-07-11 21:22:11.428430 172.29.1.23      172.29.1.20     SMB      146 Tree Connect AndX Request, Path: \\DOG-WS\DOCUMENTS
23881 2014-07-11 21:22:11.428438 172.29.1.20      172.29.1.23     SMB      120 Tree Connect AndX Response
23883 2014-07-11 21:22:11.708458 172.29.1.23      172.29.1.20     SMB      148 Tree Connect AndX Request, Path: \\DOG-WS\NEW FOLDER
23884 2014-07-11 21:22:11.708709 172.29.1.20      172.29.1.23     SMB      120 Tree Connect AndX Response
23885 2014-07-11 21:22:11.735437 172.29.1.23      172.29.1.20     SMB      142 Tree Connect AndX Request, Path: \\DOG-WS\R_AND_D
23886 2014-07-11 21:22:11.735687 172.29.1.20      172.29.1.23     SMB      120 Tree Connect AndX Response
23887 2014-07-11 21:22:11.780901 172.29.1.23      172.29.1.20     SMB      152 Tree Connect AndX Request, Path: \\DOG-WS\SECRETSHARES
23888 2014-07-11 21:22:11.785647 172.29.1.23      172.29.1.20     SMB      148 Tree Connect AndX Request, Path: \\DOG-WS\SHAREDDOCS
23890 2014-07-11 21:22:11.793390 172.29.1.20      172.29.1.23     SMB      120 Tree Connect AndX Response
23891 2014-07-11 21:22:11.793398 172.29.1.20      172.29.1.23     SMB      120 Tree Connect AndX Response
```

Figure 3: Several attempts to connect to various shared files on the network

To identify the files that have been transferred between the two devices, we can use Wireshark's export tool (File → Export Objects → SMB). As can be seen in Figure 4 a total of 9 files were transferred, five `desktop.ini` files which serve as settings files for their respective directories, one file called `srvsvc`, which is a Dynamic Link Library (DLL) that allows for SMB Service Enumeration (Tenable n.d.). As well as this we can see that three zip files of the same size were transferred that seemingly contain documents of some sort.


Figure 4: The list of files transferred via SMB across the network as seen in the Wireshark exports window

To make sure the integrity of the evidence is maintained, they have been placed in a read-only file on the analyst's device, and a SHA256 sum was generated for each of the zip files, seen in Figure 5. This was incidentally also done across the remainder of the files in the investigation to ensure the integrity of the evidence.

One of the archives could not be opened, however, the other two were openable, and as such the contents were extracted. The `desktop.ini` files contained no information relevant to the investigation, and the `srvsvc` file was 0 bytes in size, and hence contained no information whatsoever.

Figure 5: A SHA256 Sum of each of the Documents zip files using certutil.exe (Gerend et al. n.d.)

3.2   Evidence Analysis

The two recovered zip files contained several subdirectories and documents, as shown in Figure 6. These directories included 'Actual Documents', 'Chess Boxing', 'Enter the WuTang', and 'More Documents'. Upon looking into these files in the `tree` util (Baker n.d.), the investigator found that the files in the DOCUME~1(1) directory (Figure 6b) were empty. The full contents of the documents are in Appendix A.

(a) The output of the Linux `tree` command on the Documents directory, showing its entire contents

(b) The output of the Linux `tree` command on the DOCUME~1(1) directory, showing its entire contents

Figure 6: The contents of both accessible directories, showing that they are superficially identical

The contents of these directories are valuable to establish context in a number of areas, but particularly the identification of a possible perpetrator.

Firstly, each of the `.docx` files recovered from the PCAP contained Base-64 encoded text that the investigator decoded through the use of CyberChef (GCHQ n.d.) and the result was summarily placed in Appendix A.

Some of these files were of little or no seeming relevance, for example, the file 'GoT Spoilers.docx' within the 'Actual Documents' directory, contains fictional spoilers for the television show Game of Thrones.

Some files may provide context on alleged perpetrator(s), such as directories referencing North Korea three times - twice as images of its flag and once as a Base-64 encoded `.docx` file. The file contained a Russian-language message about North Korean leader Kim Jong-un's time travel program.

Further to the this North Korean hypothesis, the file `Enter the WuTang/` `track6.docx`, when decoded, revealed a list of usernames, the majority of which are names of members of the American hip-hop group Wu-Tang Clan

with the word 'Mr.' prepended to them, but one name without this prefix, 'Kim Ill-Song', stands out, as this is a Korean name, remarkably similar to the name of the founder of the Democratic People's Republic of Korea (DPRK), Kim Il-Sung.

When running binwalk (devttys0 et al. 2022) on the flag file, a zip archive called D7D.zip containing a python file called broken.py was found (see Appendix B). Upon extraction, the zip contained 5 nested sub-directories, the final of which was named SilentEye, which is a cross-platform steganography application (Anselme 2022).

4   Investigation of Capture 2

4.1   Traffic Analysis

Network traffic in this capture begins `2014-07-03 21:33:35` and ends same
date `21:40:03`.

The supplied brief for this packet suggests that suspicious File Trans-
fer Protocol (FTP) traffic on the network is noteworthy. Filtering by FTP
shows that user `Ill_Song`, identified previously, successfully logged in at
`21:36:35` and downloaded two zip files, `sandofwhich.zip` in packet 5885,
and `ojd34.zip` in packet 5932.


```
Request: CWD /home/Ill_Song ◄──────────────
Response: 250 Directory successfully changed.
Request: TYPE I
Response: 200 Switching to Binary mode.
Request: PASV
Response: 227 Entering Passive Mode (172,29,1,21,216,252).
Request: RETR sandofwhich.zip ◄──────────────
Response: 150 Opening BINARY mode data connection for sandofwhich.zip (24792 bytes).
Response: 226 Transfer complete.
Request: TYPE I
Response: 200 Switching to Binary mode.
Request: PASV
Response: 227 Entering Passive Mode (172,29,1,21,121,89).
Request: RETR ojd34.zip ◄──────────────
Response: 150 Opening BINARY mode data connection for ojd34.zip (24714 bytes).
Response: 226 Transfer complete.
```

Figure 7: The home directory proving Ill Song has logged on, followed by
evidence of a user on that account downloading the two zip archives

By using the `ftp-data` filter and Follow → TCP Stream, the tester was
able to recover the two zip files, which will be contextualised in the following
section.

Searching for variations of the name 'Ill Song' revealed an email conversa-
tion between accounts named `kim.illsong@aol.com` and `da.genius36@aol
.com`. The former can reasonably be believed to be the same Kim Ill Song
that has appeared previously.

Figure 8: A window in Wireshark showing that an email was sent from one email to another

The first email, sent by `da.genius`, reads "You have made a bold claim but i'd [sic.] like to see some proof.", to which Kim Ill-Song responds "Ask and you shall receive. You know where to find it.". Looking at other packets with the string `aol` in them, three other zip archives (`34jdsioj.zip`, `breaking_bad_season_6.zip`, and `canc3l.zip`) were also found in the capture but were not recoverable in the same way.

The investigator saved the relevant Hypertext Transfer Protocol (HTTP) stream using the same method as earlier and then used the HxD Hex Editor tool (Hörz n.d.) to manually copy the hex dump of each of the zip archives (which each started with `P K 0x3 0x4`, the local file header signature, and ended with 29 dashes and 29 numbers in ASCII) into a new file, which they named according to the names specified in Wireshark. They then extracted the files from the archive in the normal way.
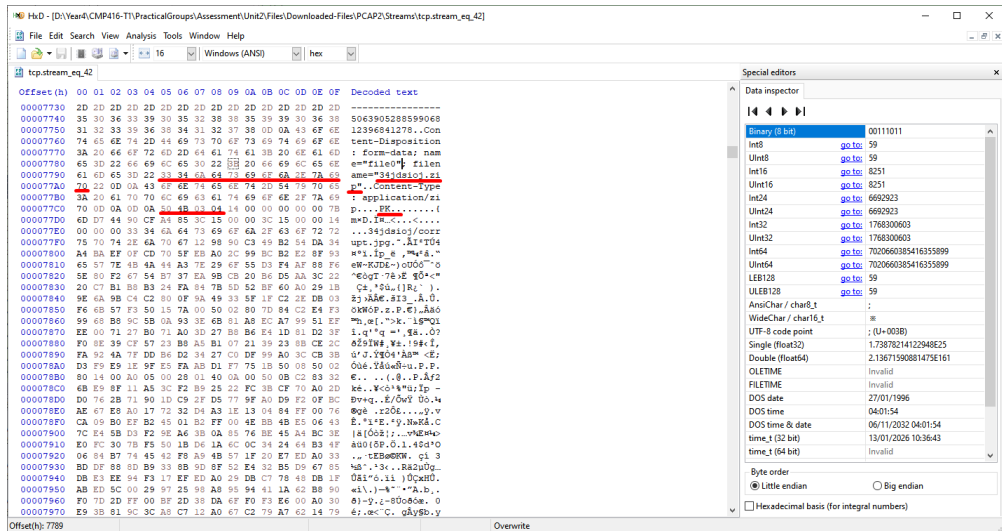
Figure 9: The start of one zip archive as represented in hex in the HxD editor, with the filename and local file header signature highlighted

4.2 Evidence Analysis

In total, from this analysis, 54 files were recovered from 5 archives sent over the network. each of these files are .jpg images named with a single word that appears to form part of a sentence.
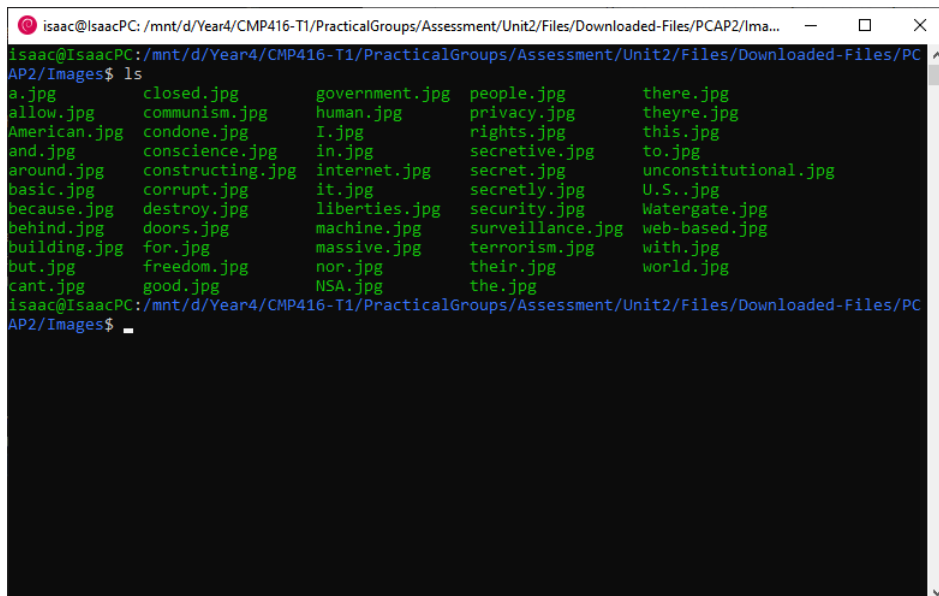
Figure 10: A list of all of the image files recovered from the packet capture

When attempting to open and view these images, however, the investigator was unable to (note at this point that these images will therefore not be in the appendix). At this stage, they considered the possibility that combining the files in some fashion may yield a full image output.

An anonymous tip suggested that a quote from Edward Snowden may be relevant. After searching for the relevant words the investigator discovered the quote "I can't in good conscience allow the U.S. government to destroy privacy, internet freedom and basic liberties for people around the world with this massive surveillance machine they're secretly building." (Greenwald, MacAskill, and Poitras 2013), which fits the list of words.

The investigator combined all of the files in the order that their filenames appeared in the quote using the `cat` command in Linux, and output it to a file called `snowden.jpg`. The command in question is shown in Figure 11, and the recovered image is shown in Figure 12.

Figure 11: The command used to combine the image fragments

Figure 12: The image recovered from the image fragments found in Wireshark and assembled using the cat command in Linux

The vertical line artefacts that can be seen in the above image suggest steganography has been used. Using SilentEye, the previously mentioned steganography platform, with the default passphrase, a message was uncovered that can be seen below.
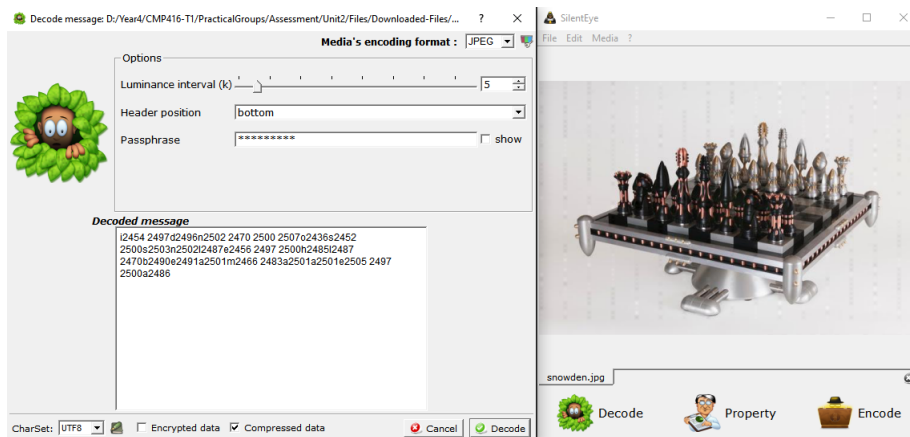
Figure 13: The Chessboard image ran through the steganographic decoder SilentEye, showing a value has been returned

When this is decoded message is put through a fixed version of the python script found in `NorthKorea.jpeg`, it returns the message "Dont-Try2BruteForceThisPassword". This is seemingly not directly related to the investigation at this stage although this method is one that is frequently used to hide data.
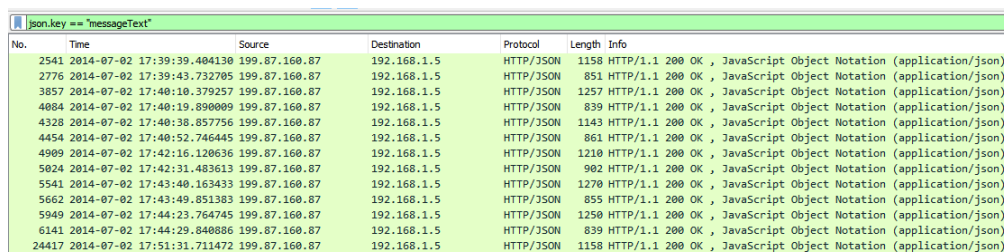
5 Investigation of Capture 3

5.1 Traffic Analysis

Network traffic in this capture begins `2014-07-02 17:38:50` and ends same date `17:52:32`.

From the briefing, it can be understood that the investigator is to uncover secret communications between Ill-Song and a second individual named Ann Dercover. As we are unaware of what protocol they are using, the investigator searched Wireshark for instances of 'Ann Dercover', which they found in an HTTP/JSON packet between `199.87.160.87` and `192.168.1.5`.

A filter was applied, `json.key == "messageText"`, which coupled with the `senderName` field within the JavaScript Object Notation (JSON) allows us to construct an accurate image of was said between the two.

Figure 14: A list of packets with the key "messageText" within them, this allows the investigator to see the full list of messages

The GET request following some of the messages found herein indicates Dercover has a Nexus (Android) device.

The investigator discovered 116 requests targeting `mob.mapquestapi.com` by searching "location" in the packet search function. Filtering using this host allowed the data to be exported as a CSV file containing latitude and longitude information. This is available in Appendix D.

Figure 15: A list of packets showing GET requests to the `/geocoding/...` API endpoint, with latitude and longitude data shown at the end of each packet

5.2   Evidence Analysis

Each of the packets had their bytes exported into a large number of separate JSON files (readable in totality in Appendix C), from which a timeline could be constructed. These files also contained a large quantity of extra information, such as user IDs, massage statuses, and whether the messages were sent over the phone.

When these JSON files are stripped to their essentials (sender, time, and contents), the results are seen in Table 2.

Sender	Time	Contents of Message
Ann Dercover	22:34:13	this is a test
Kim Ill-Song	22:38:55	Good afternoon, Ann
Ann Dercover	22:39:15	who is this?
Kim Ill-Song	22:39:31	Castling.
Ann Dercover	22:39:46	where are you?
Kim Ill-Song	22:40:05	I know I can't tell you that
Ann Dercover	22:41:25	Do you know that there are people investigating Kim Ill-Song?
Kim Ill-Song	22:41:47	Of course. However, they will never know it is me behind the bribes
Ann Dercover	22:42:54	Still we should be careful. Pay attention. I want to meet in September at 5 PM.
Kim Ill-Song	22:43:06	At our old meetup spot?
Ann Dercover	22:43:28	yes
Kim Ill-Song	22:43:44	What day?
Ann Dercover	22:50:32	I told you to pay attention.

Table 2: The contents of the messages sent between Ann Dercover and Kim Ill-Song on 2014-07-02

The investigator used the `mapquestapi` Comma Separated Values (CSV) to plot out points on Google Earth (Google n.d.) in Missoula, Montana, USA. The points formed the shape of a "17", leading to the inference that the meeting will take place on September 17th, which can be seen in Figure 16.
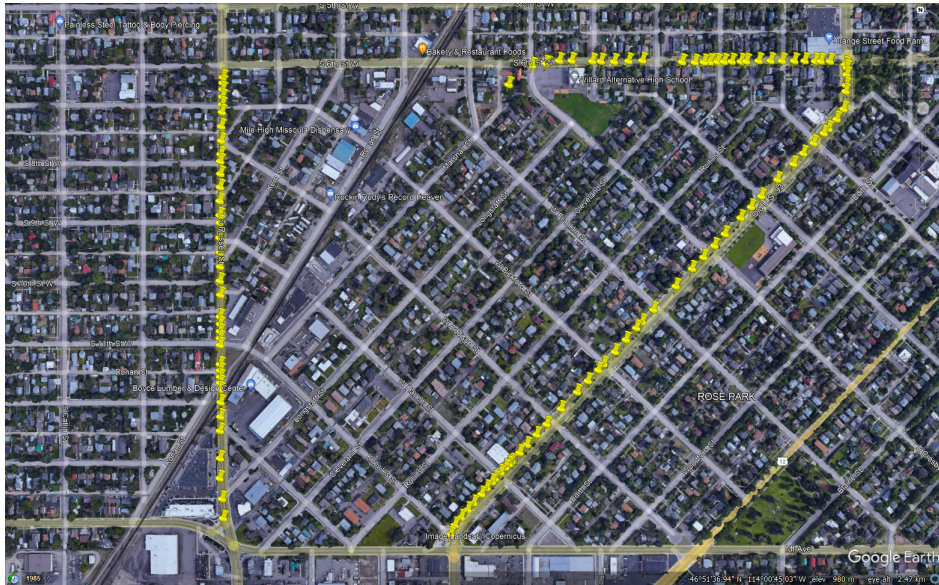
Figure 16: A number of points in Google Earth making the shape of a number 17.

6 Critical Evaluation and Reflection

6.1 Capture 1

A particularly challenging aspect of investigating this PCAP was initially locating specific packets of note. This difficulty was alleviated by the use of both the search function and display filters in Wireshark, allowing the investigator to locate tens of packets of interest from over 30,000.

Additionally, however, determining which of the recovered files were of relevance and which were not was particularly challenging for this packet due to the quantity of information supplied, this was alleviated somewhat by the clear instructions supplied by the brief for this PCAP as well as critical thinking skills, this challenge was overcome.

6.2 Capture 2

Recovery of the three extra zip archives was particularly challenging in this capture. This was due to the fact that all three were located in the same stream and as such could not be individually recovered in the standard way. The investigator overcame this by making use of the HxD editor and some prerequisite knowledge around zip file headers to copy each of the zip archives manually into new files from the raw stream provided by Wireshark. The ability for the editor to create new files of all types, including zip, and accept copied hex input, was invaluable.

6.3 Capture 3

The primary challenge of this final capture regarded the location and proper formatting of data, concerning both the text messages and the latitude and longitude data. The investigator was able to successfully leverage two tools available to them in these instances, these being CyberChef and Vim (**brammolenaaarWelcomeHomeVim**).

CyberChef is an excellent tool for formatting for a number of reasons (including its ability to swiftly decode information encoded in any number of formats and using any number of algorithm), in this case the use of the 'JSON beautifier' was able to convert a difficult-to-read string of text into an easily parsed series of files.

Vim, additionally, is an excellent modal text editor that, relevant here, allows users do define so-called 'macros', which are comprised of a series of inputs that are repeatable an arbitrary number of times. The investigator used this to great effect (after copying the relevant files into new areas to

preserve data integrity) to strip the data seen in Appendix D into something that could be parsed by Google Earth.

6.4   Reflective Component

Malicious hackers can impede digital forensic network investigations in several ways, primarily using obfuscation techniques to make it difficult for investigators to understand the data in packet captures. This could include encryption, steganography, or other methods to disguise the data. These techniques were used in the three packet captures studied, including Base-64 encoding in the first, zip archives in the same data stream that required manual carving in the second, and obscuring dates in a complex Google Earth process in the third packet capture.

A malicious actor could use end-to-end encryption to hide further information from an investigator. If the documents were end-to-end encrypted, and the communications made use of Transport Layer Security (TLS), and investigation of this nature may not have been possible at all.

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Appendices

A Appendix A - Capture 1.pcap Recovered Files

NOTE: due to the fact the documents are base64 encoded, this section wil supply the decoded versions for the sake of intelligibility.

Actual Documents

GoT Spoilers.docx
Jon Snow burns down Winterfell (again) and the Wall.
Hodor kills Theon.
Daenerys gets eaten by a dragon.
Stannis falls in love with Tyrion.

NorthKorea.docx
(Translated from Russian)
To whom it may concern:
I have witnessed that Kim Jong Un and the North Korean government have developed a program that allows them to travel through time. With the use of this technology, I believe they intend to move forward and change the outcome of the Korean War.
Please, Obi-Wan, you are my only hope.

PiD.docx
Dear Ed,
Yeah I totally took over for Paul after he died in '66. You got me. As you can see, we don't even look that much alike:

Before(Paul)   After(Me)

Before(Paul) After(Me)
We aren't even the same height! What can I say, people are stupid.
Thanks for the inquiry,
William Campbell (Paul McCartney)

Chess Boxing

NK.jpg

Rules 1.docx
1. SUMMARY OF RULES. MAIN POINTS.

TOUCH MOVE rule strictly applies.
- If a piece is touched, then it must be moved (if a legal move is available)
- If an opponent's piece is touched, it must be taken (if legal).

COUNTDOWN IF STALLING FOR TIME.In general a player manages how much or little time to take for each move, and this is fine! However, if a player clearly plays far too slowly for the specific position, for example when he is facing unavoidable checkmate, the arbiter will do a countdown. He will point at the board, and warn the player by counting to 10 with his hands (just like a boxing referee). If the player has not moved by the count of 10, he loses the game and the match. Note there is no minimum time to make a move! Also, even if there is only 1 legal move, the player should be allowed some time to psychologically compose themselves. It should be considered that a weak player may not realise he only has 1 legal move.

CHESS CLOCK PROTOCOL. The chess clock must be pressed with the SAME HAND that moves the piece.

PRESSING CHECK CLOCK. It is the player's responsibility to press his or her clock between chess moves. The competitors may agree in advance to allow the arbiter to issue reminders – especially if both fighters are new to chessboxing.

PIECES KNOCKED DOWN OR NOT PROPERLY ON A SQUARE. If a player knocks down a piece whilst making a move or does not put it properly on a square, he should properly re-position or re-centre the piece in HIS OWN clock time. An offence that puts off the opponent could be punished by adding time to the opponent's clock.

OTHER RULES to NOTE
- Resignation protocol. For the benefit of the audience, players are strongly encouraged to play until checkmate. If you want to resign (submit) prior to checkmate, do this by knocking over your king and offering a handshake.
- Illegal move. An illegal move must be retracted. The arbiter has the discretion to punish with a time penalty, or disqualify after 3 illegal moves. Extra allowances can be made for novice players.
- Speaking to the arbiter. If a player needs to speak to the arbiter during the chess game, he should remove his headphones. The arbiter will then stop the clock to listen.
- Playing to win on time. If a position is a completely drawn position, and the arbiter believes a player is quickly moving pieces only to win on time, then the arbiter can declare the game a draw.
- Chess Draw. A chess draw will be followed by one boxing round (unless the maximum number of boxing rounds has already happened). The chessboxing bout will therefore be won by whoever has amassed the most boxing points – judged by punches thrown and overall aggression.

- Drinks Fighters are allowed to bring water to the chess table.
- Cuts In most cases, except for the most superficial examples, a cut will lead to the fight being stopped and a TKO declared.
- General Advice Competitors are reminded that they do not need to move quickly, even if their opponent moves quickly. Adrenaline drastically changes your sense of time. Experience shows that a player is OK until he has 2 minutes of time remaining on the clock, when moves should be speeded up.

Rules 2.docx

2. ENFORCEMENT OF CHESS RULES

In the event of a breach of the rules a penalty can be imposed at the arbiter's discretion.

Rules 3.docx

3. PENALTIES FOR RULE BREACHES

A chess penalty could take the form of:
- The offence will act as a tie-break if both the boxing and chess are drawn. This is the minimum (default) penalty and applies if there is no other penalty.
- 30 seconds is subtracted from the offender's clock.
- Forfeit of the bout. This could occur for a serious disciplinary offence, deliberate foul play or a repeated breach (e.g. a total of 3 illegal moves).

Rules 4.docx

4. CHESS CLOCK MALFUNCTION

In the unlikely event the electronic chess clock ceases to operate during a chess round, the arbiter will do one of following, depending on the estimated disruption to the players and spectators:
- Stop the clock and resolve the problem.
- Stop the clock and replace it with a new clock. This action is most likely if there is a repeated malfunction, or it's one of the later chess rounds where a player is short of time.

Rules 5.docx

5. WCBA CHESS RULES FOR CHESSBOXING

Chess tournament rules have legal points that casual players may be unfamiliar with. The official laws of chess are on the website of FIDE, the chess governing body http://www.fide.com/component/handbook/?id=32andview=category. Highlighted below are legal points that cause most disputes in tournament chess situations.

In addition, some chessboxing laws differ from FIDE rules in order to (i.) ensure the paying public is entertained, (ii.) keep the game flowing with minimal disruption, and (iii.) minimise verbal communication with the competitors. These differences are highlighted where they occur.

Touch move

• Once a piece is touched it MUST be moved, unless "J'adoube" is indicated before touching the piece. If no legal move is admissible, then any other piece can be moved without punishment.

• Once an opponent's piece is touched it must be captured if there is such a legal move. If it cannot be captured the offender receives no penalty and is free to move without restriction.

Castling touch move

When castling you MUST touch the king first. If you touch the rook first, then you cannot castle, but you must move the rook because of the touch-move rule.

Hand is taken off a piece

When a piece is moved and the hand taken off the piece, the move cannot be retracted – the piece cannot be moved to a different square.

Illegal move

The arbiter will point out the illegal move if it goes unnoticed. Since the punishment for an illegal move is not as severe in chessboxing as in FIDE blitz chess laws, the arbiter will not allow the possibility of an illegal move going uncorrected.

"J'Adoube" rule.

Normal Chess Rules

• If a piece is off centre and is annoying you, state "j'adoube" or "I adjust" BEFORE adjusting its position on the square. One of these phrases should be used regardless of the player's home language.

• If you state "j'adoube" after or during the piece adjustment, then it counts as a touch move.

• You should only adjust pieces whilst your clock is running. Adjusting during your opponent's time is forbidden as it is a distraction.

Chessboxing Rules (adapted because both players have headphones)

• With headphones on it is simplest if players don't try to J'adoube. Pieces will be nicely centred by the arbiter between each chess round. However, if the urge to J'adoube becomes irresistible, follow the below procedure...

• Clearly turn to the arbiter and mouth "J'adoube" AND give the J'adoube hand signal specially developed for chessboxing. Then adjust the piece as in a normal chess game.

• The j'adoube hand signal is the 'OK' hand gesture, creating a circle with the thumb and first finger.

Pawn promotion

A key difference between casual chess and tournament rules. When promoting a pawn to a second queen, do NOT use an upside-down rook (as the electronic chessboard will not recognise it). Even if you shout "queen" as

you do so, it is still a rook! The chessboxing arbiter will ensure a spare queen is on the table for you to use.

Clock

• The clock MUST be pressed with the same hand that makes the move

• Running out of time. If a player has no time remaining, then he is lost if his opponent can checkmate him assuming the most unskilled play, otherwise the game is a draw. For example, if Player A has three queens and a king, and Player B has one pawn and a king, then Player B wins if Player A runs out of time.

• A player should not start to make his move until the opponent has physically pressed his clock.

• Time scramble – disputes can arise when 1 or both players are short of time and moving extremely quickly:

o A player should not start to make his move until the opponent has physically pressed his clock. i.e. you should not rush to move a piece in the brief time between your opponent moving his piece and pressing his clock.

o If a player knocks down pieces during a move, he should reset them in his own time before pressing his clock. If he presses his clock without resetting the pieces on their squares, then the opponent can immediately bounce the clock back without making a move, whilst pointing to the offending piece(s) that have been knocked down. The first player should then properly reset the pieces in his own time. [This completely differs from FIDE laws, where the innocent party should stop the clocks and inform the arbiter]. The same action can be performed if a piece is not clearly on a square but significantly overlaps another square such that its position is ambiguous. The arbiter can stop the clocks if there is a flurry of poorly placed pieces, and intervene to reset the board. The arbiter can penalise the offender.

o Drawn position – playing to win on time

• If the arbiter judges the position is a dead draw (e.g. opposite colour bishop ending, or R+K vs R+K), then the arbiter can intervene and declare a draw if a player is simply trying to win on time and not making a concerted effort to win the game. The defender does not need to request the arbiter to make such a judgement; the arbiter will assume the request exists as soon as a player has less than 2 minutes remaining. [This differs from the FIDE laws, which requires the defender to stop the clocks BEFORE he gets into critical time trouble, and ask the arbiter to observe whether the attacker is making a concerted effort to win the game or is just aiming to win on time in a dead drawn position.]

• Losing position – playing to win on time

• Note that if a player is in a winning position but is close to losing on time, the arbiter will not intervene in his favour. If he loses on time before he

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checkmates the opponent, this is more a consequence of time mismanagement than having to make countless moves shuffling pieces in a dead drawn position.

• Slow playing a lost position – a rule developed for chessboxing to prevent stalling for time.

• If a player takes too much time in a lost position where he would be expected to play much quicker in a normal chess game, the arbiter can give him a count of 10. The arbiter will visually count with his hands. If no move is made on the count of 10, the player forfeits the game.

Draw by threefold repetition

• If the same position occurs 3 times (and with the same player to move), the player can claim a draw ONLY WHEN IT IS HIS MOVE. He should stop the clock after the opponent's last move, remove his headphones and TELL the arbiter what move he WOULD play to get into the 3rd repetition. DO NOT PLAY THE MOVE, DO NOT PRESS THE CLOCK. If the player is unsure how to pause the clock, then he can take off his headphones and claim the draw. The arbiter will stop the clock as the headphones come off. If the draw claim is correct and the claimant runs out of time after removing his headphones, the draw will hold.

• A draw by repetition normally occurs by perpetual check so is easy to identify.

50 move rule

A draw can be claimed if neither a piece is taken nor a pawn moved in 50 moves (i.e. 50 White and 50 Black moves). As players are not writing a game score, the arbiter will monitor on their behalf – this is most likely to occur in an ending B+N+K vs. K.

Draw Offer

• Contrary to FIDE rules, players will not be able to offer a draw unless the position is a 'dead draw', as judged by the arbiter.

• The offer of a draw must be made through the arbiter. Make your move, do not press your clock, and then remove the headphones to speak to the arbiter. The arbiter will stop the clock and judge whether a draw offer is acceptable. If so, he will convey to the opponent for consideration and restart the clock (as the opponent can consider the draw offer until he makes his next move).

Verbal Communication with the arbiter

• If a player wants to speak to the arbiter during the game he should remove his headphones. The arbiter will stop the clock to talk. The other player can remove his headphones to listen to the conversation.

Arbiter's decision

• The arbiter's decision is final. The finer rules of chessboxing will no doubt evolve with the sport. Any unanticipated circumstances will be judged con-

sidering the official FIDE chess laws, the need for sporting fair play in relation to the tournament chess experience of the chessboxers, and the need to entertain a paying audience.

Rules 6.docx

6. CHESS DRAW IN RELATION TO THE CHESSBOXING BOUT

If a chess draw is declared in any round, there will be at most only one boxing round thereafter. If the chess draw occurs in the final round, then there will be no further boxing round, in line with the original schedule.

In the unlikely event that the chess game is drawn AND the boxing is a tie on points, then the player with the fewest chess penalties is the winner. If these are equal the bout will be declared a draw.

Rules 7.docx

7. HOW CHESS PIECES MOVE – FINER POINTS THAT CONFUSE BEGINNERS

The complete official laws of chess are on the website of FIDE, the chess governing body.

The Appendix on the above link explains chess notation, and instances where 'blitz' or 'rapid' chess rules differ from normal 'long play' time controls.

Castling

• Castling is one move

• The king always moves 2 squares, and the rook then goes next to the king on the other side.

• All squares between king and rook must be clear. Castling cannot capture a piece.

• White Kingside castling moves the King from e1 to g1, and the Rook from h1 to f1.

• White Queenside castling moves the King from e1 to c1, and the Rook from a1 to d1.

Castling is not a legal move when. . .

• . . . the king is in check

• . . . the king moves into check

• . . . the king crosses over a square that is attacked (many players are unaware of this subtle point)

• . . . a piece is on a square between king and rook

• . . . the king has previously moved, even if it has since returned to its original square

• . . . the rook to be castled has previously moved, even if it has since returned to its original square

Pawn Promotion

A pawn reaching the eighth rank is 99% of times promoted to a queen, but it can also be 'under-promoted' to a knight, bishop or rook.

En Passant
A special type of pawn capture. A pawn attacking a square crossed by an opponent's pawn which has advanced two squares in one move from its original square may capture this opponent's pawn as though the latter had been moved only one square. This capture is only legal on the move following this advance and is called an 'en passant' capture. 'En passant' is French for 'as it passes'. See http://en.wikipedia.org/wiki/En_passant for visual examples.

Enter the WuTang

track6.docx
The Mystery of Chess Boxing:
(usernames)
Mr. Method
Kim Ill-Song
Mr. Razor
Mr. Genius
Mr. G. Killah
Matt Cassel
Mr. I. Deck
Mr. M Killa
Mr. O.D.B.
Mr. Raekwon
Mr. U-God
Mr. Cappadonna (possibly)
John Woo?
Mr. Nas
track10.docx
"Protect Ya Neck"
"So what's up man?
Cooling man"
"Chilling chilling?"
"Yo you know I had to call, you know why right?"
"Why?"
"Because, yo, I never ever call and ask, you to play something right?"
"Yeah"
"You know what I wanna hear right?"
"What you wanna hear?
I wanna hear that Wu-Tang joint"
"Wu-Tang again?"

"Ah yeah, again and again!"
[sounds of fighting]
[RZA] Wu-Tang Clan coming at you, protect your neck kid, so set it off the
Inspector Deck
[Meth] watch your step kid [8X]
[Inspector Deck]
I smoke on the mic like smoking Joe Frazier
The hell raiser, raising hell with the flavor
Terrorize the jam like troops in Pakistan
Swinging through your town like your neighborhood Spiderman
So uhh, tic toc and keep ticking
While I get you flipping off the shit I'm kicking
The Lone Ranger, code red, danger!
Deep in the dark with the art to rip charts apart
The vandal, too hot to handle
you battle, you're saying Goodbye like Tevin Campbell
Roughneck, Inspector Deck's on the set
The rebel, I make more noise than heavy metal
[Raekwon]
The way I make the crowd go wild, sit back relax won't smile
Rae got it going on pal, call me the rap assassinator
Rhymes rugged and built like Schwarzenegger
And I'm gonna get mad deep like a threat, blow up your project
Then take all your assets
Cause I came to shake the frame in half
With the thoughts that bomb, shit like math!
So if you wanna try to flip go flip on the next man
Cause I grab the clip and
Hit you with sixteen shots and more I got
Going to war with the melting pot hot
[Method]
It's the Method Man for short Mr. Meth
Moving on your left, ah!
And set it off, get it off, let it off like a gat
I wanna break full, cock me back
Small change, they putting shame in the game
I take aim and blow that nigga out the frame
And like Fame, my style'll live forever
Niggaz crossing over, but they don't know no better
But I do, true, can I get a "sue"
Nuff respect due to the one-six-oh

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I mean oh, you check out the flow
like the Hudson or PCP when I'm dusting
Niggaz off because I'm hot like sauce
The smoke from the lyrical blunt makes me [cough]
[U-God]
Oh, what, grab my nut get screwed
Ow, here comes my Shaolin style
Sloop, B. A. Buh-B. Y. U
to my crew with the "sue"
[Interlude]
watch your step kid [8X]
[Ol Dirty Bastard] c'mon baby baby c'mon [4X]
[RZA] Yo, you best protect your neck
[Ol Dirty Bastard]
First things first man you're fucking with the worst
I'll be sticking pins in your head like a fucking nurse
I'll attack any nigga who's slack in his mack
Come fully packed with a fat rugged stack
Shame on you when you stepped through to
The Ol Dirty Bastard straight from the Brooklyn Zoo
And I'll be damned if I let any man
Come to my center, you enter the winter
Straight up and down that shit packed jam
You can't slam, don't let me get fool on him man
The Ol Dirty Bastard is dirty and stinking
Ason, unique rolling with the night of the creeps
niggaz be rolling with a stash
ain't saying cash, bite my style I'll bite your motherfucking ass!
[Ghostface Killah]
For crying out loud my style is wild so book me
Not long is how long that this rhyme took me
Ejecting, styles from my lethal weapon
My pen that rocks from here to Oregon
Here's Mordigan, catch it like a psycho flashback
I love gats, if rap was a gun, you wouldn't bust back
I come with shit that's all types of shapes and sounds
And where I lounge is my stomping grounds
I give a order to my peeps across the water
To go and snatch up props all around the border
And get far like a shooting star
'cause who I am is dim in the light of Pablo Escobar

Point blank as I kick the square biz
There it is you're fucking with pros and there it goes
[RZA]
You chill with the feedback black we don't need that
It's ten o'clock hoe, where the fuck's your seed at?
Feeling mad hostile, ran the apostle
Flowing like Christ when I speaks the gospel
Stroll with the holy roll then attack the globe with the buckus style
the ruckus, ten times ten men committing mad sin
Turn the other cheek and I'll break your fucking chin
Slaying boom-bangs like African drums (we'll be)
Coming around the mountain when I come
Crazy flamboyant for the rap enjoyment
My clan increase like black unemployment
Yeah, another one dare,
Tuh-took a genius (to) take us the fuck outta here
[Genius]
The Wu is too slamming for these Cold Killing labels
Some ain't had hits since I seen Aunt Mabel
Be doing artists in like Cain did Abel
Now they money's gettin stuck to the gum under the table
That's what you get when you misuse what I invent
Your empire falls and you lose every cent
For trying to blow up a scrub
Now that thought was just as bright as a 20-watt light bulb
Should've pumped it when I rocked it
niggaz so stingy they got short arms and deep pockets
This goes on in some companies
With majors they're scared to death to pump these
First of all, who's your A&R
A mountain climber who plays an electric guitar
But he don't know the meaning of dope
When he's looking for a suit and tie rap
that's cleaner than a bar of soap
And I'm the dirtiest thing in sight
Matter of fact bring out the girls and let's have a mud fight
[sounds of fighting]
[RZA] You best protect your neck [4X]

More Documents

NorthKorea.jpeg

BillOfRights.txt

The Bill of Rights: A Transcription

The Preamble to The Bill of Rights

Congress of the United States begun and held at the City of New-York, on Wednesday the fourth of March, one thousand seven hundred and eighty nine.

THE Conventions of a number of the States, having at the time of their adopting the Constitution, expressed a desire, in order to prevent misconstruction or abuse of its powers, that further declaratory and restrictive clauses should be added: And as extending the ground of public confidence in the Government, will best ensure the beneficent ends of its institution.

RESOLVED by the Senate and House of Representatives of the United States of America, in Congress assembled, two thirds of both Houses concurring, that the following Articles be proposed to the Legislatures of the several States, as amendments to the Constitution of the United States, all, or any of which Articles, when ratified by three fourths of the said Legislatures, to be valid to all intents and purposes, as part of the said Constitution; viz.

ARTICLES in addition to, and Amendment of the Constitution of the United States of America, proposed by Congress, and ratified by the Legislatures of the several States, pursuant to the fifth Article of the original Constitution.

Note: The following text is a transcription of the first ten amendments to the Constitution in their original form. These amendments were ratified December 15, 1791, and form what is known as the "Bill of Rights."

Amendment I

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

Amendment II

A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

Amendment III

No Soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

Amendment IV

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

Amendment V

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

Amendment VI

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defence.

Amendment VII

In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

Amendment VIII

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

Amendment IX

The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

Amendment X

The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

AMENDMENT XI

Passed by Congress March 4, 1794. Ratified February 7, 1795.

Note: Article III, section 2, of the Constitution was modified by amendment 11.

The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.

AMENDMENT XII

Passed by Congress December 9, 1803. Ratified June 15, 1804.

Note: A portion of Article II, section 1 of the Constitution was superseded by the 12th amendment.

The Electors shall meet in their respective states and vote by ballot for President and Vice-President, one of whom, at least, shall not be an inhabitant of the same state with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice-President, and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which lists they shall sign and certify, and transmit sealed to the seat of the government of the United States, directed to the President of the Senate; – the President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates and the votes shall then be counted; – The person having the greatest number of votes for President, shall be the President, if such number be a majority of the whole number of Electors appointed; and if no person have such majority, then from the persons having the highest numbers not exceeding three on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by states, the representation from each state having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the states, and a majority of all the states shall be necessary to a choice. [And if the House of Representatives shall not choose a President

whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the Vice-President shall act as President, as in case of the death or other constitutional disability of the President. –]* The person having the greatest number of votes as Vice-President, shall be the Vice-President, if such number be a majority of the whole number of Electors appointed, and if no person have a majority, then from the two highest numbers on the list, the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice-President of the United States.

*Superseded by section 3 of the 20th amendment.

AMENDMENT XIII

Passed by Congress January 31, 1865. Ratified December 6, 1865.

Note: A portion of Article IV, section 2, of the Constitution was superseded by the 13th amendment.

Section 1. Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

Section 2. Congress shall have power to enforce this article by appropriate legislation.

AMENDMENT XIV

Passed by Congress June 13, 1866. Ratified July 9, 1868.

Note: Article I, section 2, of the Constitution was modified by section 2 of the 14th amendment.

Section 1. All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

Section 2. Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice-President of the United States, Representatives in Congress, the Executive and Judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male inhabitants of such State, being twenty-one years of age,* and citizens of the United States, or in any way abridged, except for participation in rebellion, or other crime, the basis of representation therein shall be

reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

Section 3. No person shall be a Senator or Representative in Congress, or elector of President and Vice-President, or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may by a vote of two-thirds of each House, remove such disability.

Section 4. The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.

Section 5. The Congress shall have the power to enforce, by appropriate legislation, the provisions of this article.

*Changed by section 1 of the 26th amendment.

AMENDMENT XV

Passed by Congress February 26, 1869. Ratified February 3, 1870.

Section 1. The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude–

Section 2. The Congress shall have the power to enforce this article by appropriate legislation.

AMENDMENT XVI

Passed by Congress July 2, 1909. Ratified February 3, 1913.

Note: Article I, section 9, of the Constitution was modified by amendment 16.

The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

AMENDMENT XVII

Passed by Congress May 13, 1912. Ratified April 8, 1913.

Note: Article I, section 3, of the Constitution was modified by the 17th amendment.

The Senate of the United States shall be composed of two Senators from each State, elected by the people thereof, for six years; and each Senator

shall have one vote. The electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State legislatures.

When vacancies happen in the representation of any State in the Senate, the executive authority of such State shall issue writs of election to fill such vacancies: Provided, That the legislature of any State may empower the executive thereof to make temporary appointments until the people fill the vacancies by election as the legislature may direct.

This amendment shall not be so construed as to affect the election or term of any Senator chosen before it becomes valid as part of the Constitution.

AMENDMENT XVIII

Passed by Congress December 18, 1917. Ratified January 16, 1919. Repealed by amendment 21.

Section 1. After one year from the ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

Section 2. The Congress and the several States shall have concurrent power to enforce this article by appropriate legislation.

Section 3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

AMENDMENT XIX

Passed by Congress June 4, 1919. Ratified August 18, 1920.

The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of sex.

Congress shall have power to enforce this article by appropriate legislation.

AMENDMENT XX

Passed by Congress March 2, 1932. Ratified January 23, 1933.

Note: Article I, section 4, of the Constitution was modified by section 2 of this amendment. In addition, a portion of the 12th amendment was superseded by section 3.

Section 1. The terms of the President and the Vice President shall end at noon on the 20th day of January, and the terms of Senators and Representatives at noon on the 3rd day of January, of the years in which such terms would have ended if this article had not been ratified; and the terms of their successors shall then begin.

Section 2. The Congress shall assemble at least once in every year, and such meeting shall begin at noon on the 3d day of January, unless they shall

by law appoint a different day.

Section 3. If, at the time fixed for the beginning of the term of the President, the President elect shall have died, the Vice President elect shall become President. If a President shall not have been chosen before the time fixed for the beginning of his term, or if the President elect shall have failed to qualify, then the Vice President elect shall act as President until a President shall have qualified; and the Congress may by law provide for the case wherein neither a President elect nor a Vice President shall have qualified, declaring who shall then act as President, or the manner in which one who is to act shall be selected, and such person shall act accordingly until a President or Vice President shall have qualified.

Section 4. The Congress may by law provide for the case of the death of any of the persons from whom the House of Representatives may choose a President whenever the right of choice shall have devolved upon them, and for the case of the death of any of the persons from whom the Senate may choose a Vice President whenever the right of choice shall have devolved upon them.

Section 5. Sections 1 and 2 shall take effect on the 15th day of October following the ratification of this article.

Section 6. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the several States within seven years from the date of its submission.

AMENDMENT XXI

Passed by Congress February 20, 1933. Ratified December 5, 1933.

Section 1. The eighteenth article of amendment to the Constitution of the United States is hereby repealed.

Section 2. The transportation or importation into any State, Territory, or Possession of the United States for delivery or use therein of intoxicating liquors, in violation of the laws thereof, is hereby prohibited.

Section 3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by conventions in the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

AMENDMENT XXII

Passed by Congress March 21, 1947. Ratified February 27, 1951.

Section 1. No person shall be elected to the office of the President more than twice, and no person who has held the office of President, or acted as President, for more than two years of a term to which some other person was elected President shall be elected to the office of President more than once. But this Article shall not apply to any person holding the office of President when this Article was proposed by Congress, and shall not prevent

any person who may be holding the office of President, or acting as President, during the term within which this Article becomes operative from holding the office of President or acting as President during the remainder of such term.

Section 2. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the several States within seven years from the date of its submission to the States by the Congress.

AMENDMENT XXIII

Passed by Congress June 16, 1960. Ratified March 29, 1961.

Section 1. The District constituting the seat of Government of the United States shall appoint in such manner as Congress may direct:

A number of electors of President and Vice President equal to the whole number of Senators and Representatives in Congress to which the District would be entitled if it were a State, but in no event more than the least populous State; they shall be in addition to those appointed by the States, but they shall be considered, for the purposes of the election of President and Vice President, to be electors appointed by a State; and they shall meet in the District and perform such duties as provided by the twelfth article of amendment.

Section 2. The Congress shall have power to enforce this article by appropriate legislation.

AMENDMENT XXIV

Passed by Congress August 27, 1962. Ratified January 23, 1964.

Section 1. The right of citizens of the United States to vote in any primary or other election for President or Vice President, for electors for President or Vice President, or for Senator or Representative in Congress, shall not be denied or abridged by the United States or any State by reason of failure to pay any poll tax or other tax.

Section 2. The Congress shall have power to enforce this article by appropriate legislation.

AMENDMENT XXV

Passed by Congress July 6, 1965. Ratified February 10, 1967.

Note: Article II, section 1, of the Constitution was affected by the 25th amendment.

Section 1. In case of the removal of the President from office or of his death or resignation, the Vice President shall become President.

Section 2. Whenever there is a vacancy in the office of the Vice President, the President shall nominate a Vice President who shall take office upon confirmation by a majority vote of both Houses of Congress.

Section 3. Whenever the President transmits to the President pro tempore of the Senate and the Speaker of the House of Representatives his written declaration that he is unable to discharge the powers and duties of his office, and until he transmits to them a written declaration to the contrary, such powers and duties shall be discharged by the Vice President as Acting President.

Section 4. Whenever the Vice President and a majority of either the principal officers of the executive departments or of such other body as Congress may by law provide, transmit to the President pro tempore of the Senate and the Speaker of the House of Representatives their written declaration that the President is unable to discharge the powers and duties of his office, the Vice President shall immediately assume the powers and duties of the office as Acting President.

Thereafter, when the President transmits to the President pro tempore of the Senate and the Speaker of the House of Representatives his written declaration that no inability exists, he shall resume the powers and duties of his office unless the Vice President and a majority of either the principal officers of the executive department or of such other body as Congress may by law provide, transmit within four days to the President pro tempore of the Senate and the Speaker of the House of Representatives their written declaration that the President is unable to discharge the powers and duties of his office. Thereupon Congress shall decide the issue, assembling within forty-eight hours for that purpose if not in session. If the Congress, within twenty-one days after receipt of the latter written declaration, or, if Congress is not in session, within twenty-one days after Congress is required to assemble, determines by two-thirds vote of both Houses that the President is unable to discharge the powers and duties of his office, the Vice President shall continue to discharge the same as Acting President; otherwise, the President shall resume the powers and duties of his office.

AMENDMENT XXVI

Passed by Congress March 23, 1971. Ratified July 1, 1971.

Note: Amendment 14, section 2, of the Constitution was modified by section 1 of the 26th amendment.

Section 1. The right of citizens of the United States, who are eighteen years of age or older, to vote shall not be denied or abridged by the United States or by any State on account of age.

Section 2. The Congress shall have power to enforce this article by appropriate legislation.

AMENDMENT XXVII

Originally proposed Sept. 25, 1789. Ratified May 7, 1992.

No law, varying the compensation for the services of the Senators and

Representatives, shall take effect, until an election of representatives shall have intervened.

B Appendix B - Scripts and Assorted Code

broken.py

```python
def fileToString(pathToFile):
        f = open(pathToFile, "r")
        strs = ""
        #adds each line of the file to the strs string
        for line in f.readlines():
                strs+=line
        return strs
def ASCII():
        #number of ASCII characters
        NumOfASCII == 0
        #returns list of all ASCII characters
        return "".join([chr(i) for i in range(NumOfASCII)])
def sumName(name):
        sums=0
        #sums the indices in ASCII of all the characters in name
        for x in name:
                sums+=ord(x
        return sums
def indexInFile(password):
        indices = []
        ASCIIArray = ASCII()
        #populates an array of indices to be used by the encoder
        for chrs in password:
                indices.append(ASCIIArray.index(chrs)+sumName(name)*2
        return indices
def indexInASCII(name):
        indices = []
        ASCIIArray = ASCII()
        #split on all non-numeric characters
        #remove first index because it is blank
        indexList = re.split("[^\d]",encoded)[1:]
        #converts encoded characters to ASCII
        for index in indexList:
                indices.append(ASCIIArray[int(index) - (sumName(name)*2)])
        #returns decoded message
        return "".join(indices)
```

```python
def encode(name):
        #returns a list of indices to be used for encoding
        indices = indexInFile(password,name)
        #convert file associated with name to a string
        bill = fileToString("./%s.txt"%name)
        encoded = ""
        #add letter in file plus index of the letter in the file to the encoded
        for index in indices:
                encoded+=bill[index]+str(index)

        return encoded
```

fixed.py

Note: This is broken.py but fixed and refactored to look nicer and conform
to PEP-8

```python
#!/usr/bin/python
# -*- coding: utf-8 -*-

import re
import sys

def fileToString(pathToFile):
    f = open(pathToFile, 'r')
    strs = ''

    # adds each line of the file to the strs string

    for line in f.readlines():
        strs += line
    return strs


def ASCII():

    # number of ASCII characters

    NumOfASCII = 150
```

```python
    # returns list of all ASCII characters

    return ''.join([chr(i) for i in range(NumOfASCII)])


def sumName(name):
    sums = 0

    # sums the indices in ASCII of all the characters in name

    for x in name:
        sums += ord(x)
    return sums


def indexInFile(password,name):
    indices = []
    ASCIIArray = ASCII()

    # populates an array of indices to be used by the encoder

    for chrs in password:
        indices.append(ASCIIArray.index(chrs) + sumName(name) * 2)
    return indices


def indexInASCII(name,encoded):
    indices = []
    ASCIIArray = ASCII()

    # split on all non-numeric characters
    # remove first index because it is blank

    indexList = re.split("[^\d]", encoded)[1:]

    # converts encoded characters to ASCII

    for index in indexList:
        indices.append(ASCIIArray[int(index) - sumName(name) * 2])
```

```python
    # returns decoded message

    return "".join(indices)


def encode(name,password):

    # returns a list of indices to be used for encoding

    indices = indexInFile(password, name)

    # convert file associated with name to a string

    bill = fileToString("./%s.txt" % name)
    encoded = ""

    # add letter in file plus index of the letter in the file to the encoded s

    for index in indices:
        encoded += bill[index] + str(index)

    return encoded

if __name__ == "__main__":
    name="BillOfRights" # the other file in this zip archive
    if (sys.argv[1] == "-d"):
        print(indexInASCII(name, sys.argv[2]))
    elif (sys.argv == "-e"):
        print(encode(name, sys.argv[2]))
    else:
        print("use -d to decode and -e to encode a message")
```

C Appendix C - Evidence of Communication Between Ill-Song and Dercover

Packet 2541

```
{
"success": "messages retrieved",
"result": {
    "recMessages": [
        {
            "messageId": "45b537c51e5cf2f90f31779e9ec8fc46",
            "messageType": "normal",
            "messageText": "Good afternoon,  Ann.",
            "recipientType": "phone",
            "recipientId": "14068522589",
            "senderType": "phone",
            "senderId": "14069243754",
            "senderName": "Kim Ill-song",
            "time": "2014-07-02 22:38:55",
            "messageStatus": "unread",
            "deliveryMethod": "onnet"
        }
    ],
    "sentMessages": [
        {
            "messageId": "d275712ce4c2b1b420bd1ba0728b79af",
            "messageType": "normal",
            "messageText": "this is a test",
            "recipientType": "phone",
            "recipientId": "14069243754",
            "senderType": "phone",
            "senderId": "14068522589",
            "senderName": "Ann Dercover",
            "time": "2014-07-02 22:34:13",
            "messageStatus": "read",
            "deliveryMethod": "onnet"
        }
    ],
    "brandedSystemMessages": [],
    "calls": [],
    "voicemails": [],
```

```json
        "now": "2014-07-02 22:38:57",
        "largestCount": 1,
        "smsCreditBalance": 0,
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

Packet 2776

```json
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "45b537c51e5cf2f90f31779e9ec8fc46",
                "messageType": "normal",
                "messageText": "Good afternoon,  Ann.",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:38:55",
                "messageStatus": "read",
                "deliveryMethod": "onnet"
            }
        ],
        "sentMessages": [],
        "brandedSystemMessages": [],
        "calls": [],
        "voicemails": [],
        "now": "2014-07-02 22:38:57",
        "largestCount": 1,
        "smsCreditBalance": 0,
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
```

```
        "inviteCount": 0
    }
}


Packet 3857

    {
      "success": "messages retrieved",
      "result": {
        "recMessages": [
            {
                "messageId": "45b537c51e5cf2f90f31779e9ec8fc46",
                "messageType": "normal",
                "messageText": "Good afternoon,  Ann.",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:38:55",
                "messageStatus": "read",
                "deliveryMethod": "onnet"
            },
            {
                "messageId": "c113ed366ab0fba64f6215f41d6fb127",
                "messageType": "normal",
                "messageText": "Castling.",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:39:31",
                "messageStatus": "unread",
                "deliveryMethod": "onnet"
            }
        ],
        "sentMessages": [
            {
                "messageId": "eb232446d54193d00876830421797030",
```

50

```json
                "messageType": "normal",
                "messageText": "who is this?",
                "recipientType": "phone",
                "recipientId": "14069243754",
                "senderType": "phone",
                "senderId": "14068522589",
                "senderName": "Ann Dercover",
                "time": "2014-07-02 22:39:15",
                "messageStatus": "read",
                "deliveryMethod": "onnet"
            }
        ],
        "brandedSystemMessages": [],
        "calls": [],
        "voicemails": [],
        "now": "2014-07-02 22:39:32",
        "largestCount": 2,
        "smsCreditBalance": 0,
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

Packet 4084

```json
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "c113ed366ab0fba64f6215f41d6fb127",
                "messageType": "normal",
                "messageText": "Castling.",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
```

```json
            "time": "2014-07-02 22:39:31",
            "messageStatus": "read",
            "deliveryMethod": "onnet"
        }
    ],
    "sentMessages": [],
    "brandedSystemMessages": [],
    "calls": [],
    "voicemails": [],
    "now": "2014-07-02 22:39:32",
    "largestCount": 1,
    "smsCreditBalance": 0,
    "callingCreditBalance": 0,
    "numTextsSent": 0,
    "numTextsRec": 0,
    "inviteCount": 0
    }
}
```

Packet 4328

```json
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "c113ed366ab0fba64f6215f41d6fb127",
                "messageType": "normal",
                "messageText": "Castling.",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:39:31",
                "messageStatus": "read",
                "deliveryMethod": "onnet"
            }
        ],
        "sentMessages": [
```

```json
        {
            "messageId": "4125737ad17157e816310b4f2f98752a",
            "messageType": "normal",
            "messageText": "where are you?",
            "recipientType": "phone",
            "recipientId": "14069243754",
            "senderType": "phone",
            "senderId": "14068522589",
            "senderName": "Ann Dercover",
            "time": "2014-07-02 22:39:46",
            "messageStatus": "read",
            "deliveryMethod": "onnet"
        }
    ],
    "brandedSystemMessages": [],
    "calls": [],
    "voicemails": [],
    "now": "2014-07-02 22:39:54",
    "largestCount": 1,
    "smsCreditBalance": 0,
    "callingCreditBalance": 0,
    "numTextsSent": 0,
    "numTextsRec": 0,
    "inviteCount": 0
    }
}
```

Packet 4454

```json
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "dc821c4eeacd713cfef5cea15e803040",
                "messageType": "normal",
                "messageText": "I know I can't tell you that.",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
```

```
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:40:05",
                "messageStatus": "unread",
                "deliveryMethod": "onnet"
            }
        ],
        "sentMessages": [],
        "brandedSystemMessages": [],
        "calls": [],
        "voicemails": [],
        "now": "2014-07-02 22:40:06",
        "largestCount": 1,
        "smsCreditBalance": 0,
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

Packet 4909

```
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "dc821c4eeacd713cfef5cea15e803040",
                "messageType": "normal",
                "messageText": "I know I can't tell you that.",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:40:05",
                "messageStatus": "read",
                "deliveryMethod": "onnet"
            }
```

```
        ],
        "sentMessages": [
            {
                "messageId": "bdc2b81acb8e3bff28a1e87ff44ee5d7",
                "messageType": "normal",
                "messageText": "Do you know that there are people investigating
                "recipientType": "phone",
                "recipientId": "14069243754",
                "senderType": "phone",
                "senderId": "14068522589",
                "senderName": "Ann Dercover",
                "time": "2014-07-02 22:41:25",
                "messageStatus": "read",
                "deliveryMethod": "onnet"
            }
        ],
        "brandedSystemMessages": [],
        "calls": [],
        "voicemails": [],
        "now": "2014-07-02 22:41:31",
        "largestCount": 1,
        "smsCreditBalance": 0,
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

Packet 5024

```
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "8197385d4b4222e32ec474fa497b70d8",
                "messageType": "normal",
                "messageText": "Of course.  However,  they will never know it is
                "recipientType": "phone",
```

55

```json
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:41:47",
                "messageStatus": "unread",
                "deliveryMethod": "onnet"
            }
        ],
        "sentMessages": [],
        "brandedSystemMessages": [],
        "calls": [],
        "voicemails": [],
        "now": "2014-07-02 22:41:48",
        "largestCount": 1,
        "smsCreditBalance": 0,
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

Packet 5541

```json
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "8197385d4b4222e32ec474fa497b70d8",
                "messageType": "normal",
                "messageText": "Of course.  However,  they will never know it is
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:41:47",
                "messageStatus": "read",
```

```json
                "deliveryMethod": "onnet"
            }
        ],
        "sentMessages": [
            {
                "messageId": "700b4051723f212b979cf068e59067b9",
                "messageType": "normal",
                "messageText": "still we should be careful. Pay attention. I wan
                "recipientType": "phone",
                "recipientId": "14069243754",
                "senderType": "phone",
                "senderId": "14068522589",
                "senderName": "Ann Dercover",
                "time": "2014-07-02 22:42:54",
                "messageStatus": "read",
                "deliveryMethod": "onnet"
            }
        ],
        "brandedSystemMessages": [],
        "calls": [],
        "voicemails": [],
        "now": "2014-07-02 22:42:58",
        "largestCount": 1,
        "smsCreditBalance": 0,
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

Packet 5662

```json
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "e5d6be661c5ed90cfb27a0fb50b33bf2",
                "messageType": "normal",
```

```json
                "messageText": "At our old meetup spot?",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:43:06",
                "messageStatus": "unread",
                "deliveryMethod": "onnet"
            }
        ],
        "sentMessages": [],
        "brandedSystemMessages": [],
        "calls": [],
        "voicemails": [],
        "now": "2014-07-02 22:43:07",
        "largestCount": 1,
        "smsCreditBalance": 0,
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

Packet 5949

```json
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "e5d6be661c5ed90cfb27a0fb50b33bf2",
                "messageType": "normal",
                "messageText": "At our old meetup spot?",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
```

```json
            "time": "2014-07-02 22:43:06",
            "messageStatus": "read",
            "deliveryMethod": "onnet"
        },
        {
            "messageId": "b5860bdea833df4231c31dfbecbedf0d",
            "messageType": "normal",
            "messageText": "What day?",
            "recipientType": "phone",
            "recipientId": "14068522589",
            "senderType": "phone",
            "senderId": "14069243754",
            "senderName": "Kim Ill-song",
            "time": "2014-07-02 22:43:44",
            "messageStatus": "unread",
            "deliveryMethod": "onnet"
        }
    ],
    "sentMessages": [
        {
            "messageId": "9854f7107287ad4d6a6a69b25fc3da57",
            "messageType": "normal",
            "messageText": "yes",
            "recipientType": "phone",
            "recipientId": "14069243754",
            "senderType": "phone",
            "senderId": "14068522589",
            "senderName": "Ann Dercover",
            "time": "2014-07-02 22:43:28",
            "messageStatus": "read",
            "deliveryMethod": "onnet"
        }
    ],
    "brandedSystemMessages": [],
    "calls": [],
    "voicemails": [],
    "now": "2014-07-02 22:43:45",
    "largestCount": 2,
    "smsCreditBalance": 0,
    "callingCreditBalance": 0,
    "numTextsSent": 0,
```

```
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

Packet 6141

```
    {
    "success": "messages retrieved",
    "result": {
        "recMessages": [
            {
                "messageId": "b5860bdea833df4231c31dfbecbedf0d",
                "messageType": "normal",
                "messageText": "What day?",
                "recipientType": "phone",
                "recipientId": "14068522589",
                "senderType": "phone",
                "senderId": "14069243754",
                "senderName": "Kim Ill-song",
                "time": "2014-07-02 22:43:44",
                "messageStatus": "read",
                "deliveryMethod": "onnet"
            }
        ],
        "sentMessages": [],
        "brandedSystemMessages": [],
        "calls": [],
        "voicemails": [],
        "now": "2014-07-02 22:43:45",
        "largestCount": 1,
        "smsCreditBalance": 0,
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

Packet 24417

```
{
"success": "messages retrieved",
"result": {
    "recMessages": [
        {
            "messageId": "b5860bdea833df4231c31dfbecbedf0d",
            "messageType": "normal",
            "messageText": "What day?",
            "recipientType": "phone",
            "recipientId": "14068522589",
            "senderType": "phone",
            "senderId": "14069243754",
            "senderName": "Kim Ill-song",
            "time": "2014-07-02 22:43:44",
            "messageStatus": "read",
            "deliveryMethod": "onnet"
        }
    ],
    "sentMessages": [
        {
            "messageId": "3ceeadc119a0225656c73b3fbfd3418f",
            "messageType": "normal",
            "messageText": "I told you to pay attention.",
            "recipientType": "phone",
            "recipientId": "14069243754",
            "senderType": "phone",
            "senderId": "14068522589",
            "senderName": "Ann Dercover",
            "time": "2014-07-02 22:50:32",
            "messageStatus": "read",
            "deliveryMethod": "onnet"
        }
    ],
    "brandedSystemMessages": [],
    "calls": [],
    "voicemails": [],
    "now": "2014-07-02 22:50:45",
    "largestCount": 1,
    "smsCreditBalance": 0,
```

```
        "callingCreditBalance": 0,
        "numTextsSent": 0,
        "numTextsRec": 0,
        "inviteCount": 0
    }
}
```

D   Appendix D - Raw CSV Location Data

Location Data CSV

"No.","Time","Source","Destination","Protocol","Length","Info" "7087","2014-07-02 17:45:54.778546","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"7349","2014-07-02 17:45:58.690915","192.168.1.5","207.200.102.1","HTTP","255","GET /geocoding/v1/reverse?key=Cmjtd"7577","2014-07-02 17:46:01.272751","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"7790","2014-07-02 17:46:04.566788","192.168.1.5","207.200.102.1","HTTP","259", /geocoding/v1/reverse?key=Cmjtd"7897","2014-07-02 17:46:08.873488","192.168.1.5","207.200.102.1","HTTP","259","GET /geocoding/v1/reverse?key=Cmjtd"7982","2014-07-02 17:46:10.409779","192.168.1.5","207.200.102.1","HTTP","257","GET /geocoding/v1/reverse?key=Cmjtd"8140","2014-07-02 17:46:12.793430","192.168.1.5","207.200.102.1","HTTP","259", /geocoding/v1/reverse?key=Cmjtd"8260","2014-07-02 17:46:15.529776","192.168.1.5","207.200.102.1","HTTP","259","GET /geocoding/v1/reverse?key=Cmjtd"8333","2014-07-02 17:46:15.812780","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"8425","2014-07-02 17:46:16.218130","192.168.1.5","207.200.102.1","HTTP","259", /geocoding/v1/reverse?key=Cmjtd"8516","2014-07-02 17:46:17.051677","192.168.1.5","207.200.102.1","HTTP","259","GET /geocoding/v1/reverse?key=Cmjtd"8610","2014-07-02 17:46:19.011753","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"8714","2014-07-02 17:46:22.178213","192.168.1.5","207.200.102.1","HTTP","259", /geocoding/v1/reverse?key=Cmjtd"8788","2014-07-02 17:46:22.429991","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"8899","2014-07-02 17:46:23.329981","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"9080","2014-07-02 17:46:24.447993","192.168.1.5","207.200.102.1","HTTP","258", /geocoding/v1/reverse?key=Cmjtd"9177","2014-07-02 17:46:25.518872","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"9286","2014-07-02 17:46:28.827738","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"9374","2014-07-02 17:46:30.790902","192.168.1.5","207.200.102.1","HTTP","258", /geocoding/v1/reverse?key=Cmjtd"9473","2014-07-02 17:46:32.532080","192.168.1.5","207.200.102.1","HTTP","259","GET /geocoding/v1/reverse?key=Cmjtd"9567","2014-07-02 17:46:34.371928","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"9663","2014-07-02 17:46:36.428637","192.168.1.5","207.200.102.1","HTTP","259", /geocoding/v1/reverse?key=Cmjtd"9758","2014-07-02 17:46:37.949441","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"9871","2014-07-02 17:46:40.113236","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"10000","2014-07-02 17:46:42.481987","192.168.1.5","207.200.102.1","HTTP","258" /geocoding/v1/reverse?key=Cmjtd"10043","2014-07-02 17:46:43.170518","192.168.1.5","207.200.102.1","HTTP","259","GET /geocoding/v1/reverse?key=Cmjtd"10133","2014-07-02 17:46:45.221722","192.168.1.5","207.200.102.1","HTTP","259","GET /geocoding/v1/reverse?key=Cmjtd"10229","2014-07-02 17:46:47.194648","192.168.1.5","207.200.102.1","HTTP","258" /geocoding/v1/reverse?key=Cmjtd"10317","2014-07-02 17:46:48.803178","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"10552","2014-07-02 17:46:50.672832","192.168.1.5","207.200.102.1","HTTP","257","GET /geocoding/v1/reverse?key=Cmjtd"10646","2014-07-02 17:46:52.464750","192.168.1.5","207.200.102.1","HTTP","257" /geocoding/v1/reverse?key=Cmjtd"10747","2014-07-02 17:46:54.247624","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"10843","2014-07-02 17:46:55.463594","192.168.1.5","207.200.102.1","HTTP","255","GET /geocoding/v1/reverse?key=Cmjtd"10955","2014-07-02 17:46:56.969100","192.168.1.5","207.200.102.1","HTTP","258" /geocoding/v1/reverse?key=Cmjtd"11047","2014-07-02 17:46:57.732168","192.168.1.5","207.200.102.1","HTTP","258","GET /geocoding/v1/reverse?key=Cmjtd"11142","2014-

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Location Data (Stripped) CSV

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