

DIGITAL FORENSIC REPORT

Investigation #3

EVIDENCE ITEM

Lab 7.E01_1Host

11/14/2022

PREPARED BY: ALEXANDER SMETANA

REVISION SUMMARY

| <i>DATE</i> | <i>REVISION HISTORY</i> | <i>COMMENTS</i> |
|-------------------|-------------------------|--------------------------|
| 11/14/2022 | 1.0 | Creation of the document |
| 11/16/2022 | 1.1 | Finalization of document |

Current version

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INVENTORY

| Hardware | Details | |
|-----------------|--------------|--|
| Lab 7.E01 | Hostname | Lab7.E01 |
| | Timezone | America/Chicago |
| | HDD/SSD | 64.42 GB (64424509440 bytes) |
| | OS | Windows 8 |
| | Version | Windows 8.1 Pro |
| | Device ID | 3dfeddca-d6ea-4fdb-bdcc-a07440bbfad3 |
| GIMP | Version | GIMP v.2.8.10 |
| Google Chrome | Version | Google Chrome v.31.0.1650.63 |
| WinRAR | Version | WinRAR 5.01 (64-bit) v.5.01.0 |
| Accounts | Details | |
| Local Account | Craig Tucker | /Users/Craig |
| Outlook Account | Craig Tucker | Coupon-king@outlook.com |
| Outlook Account | Stan Marsh | stan_marshall27@yahoo.com |

| Hardware | Details | |
|------------------------|------------------|---|
| Kingston Data Traveler | Make | Toshiba Corp. |
| | Model | Kingston DataTraveler 102/2.0 / HEMA Flash Drive 2 GB / PNY Attache 4GB Stick |
| | Device ID | 000FEAFB938CECC027E200F6 |
| | Source File Path | /img_Lab 7.E01/vol vol2/Windows/System32/config/SYSTEM |

SOFTWARE USED FOR ANALYSIS

| | |
|------------------------------|--------|
| Recent Activity | 4.19.3 |
| File Type Identification | 4.19.3 |
| Extension Mismatch Detector | 4.19.3 |
| Embedded File Extractor | 4.19.3 |
| Picture Analyzer | 4.19.3 |
| Keyword Search | 4.19.3 |
| Email Parser | 4.19.3 |
| Encryption Detection | 4.19.3 |
| Interesting Files Identifier | 4.19.3 |
| PhotoRec Carver | 7.0 |
| Virtual Machine Extractor | 4.19.3 |
| Plaso | 4.19.3 |

EXECUTIVE SUMMARY

As part of a normal business practice, Walmart security receives Counterfeit Coupon Alerts from the Coupon Information Corporation. Within the past month, Walmart security has received specific information regarding fraudulent coupons being passed at their store. Using the information they received, they conducted an internal investigation using video surveillance footage to identify the customers who are engaged in this activity.

One of the suspects was an unknown white, male adult, approximately 28 years old, brown hair, 5' 9", 200 pounds, no facial hair, and no visible tattoos. A photograph of this suspect was circulated to the employees in the store. On December 22, 2013, Craig Tucker was detained by Walmart security as he matched the description and he had just passed 2 fraudulent coupons for Monster energy drink and Arizona Iced Tea beverages while paying for other items.

Walmart security contacted the Santa Monica Police Department to arrest and prosecute Tucker for theft. Santa Monica PD Officer Smith interviewed Tucker and he denied knowing the coupons were fraudulent. He claimed to have received the coupons after completing an online survey for students at Santa Monica Community College. Although Tucker gave consent to the search of his personal computer, a search warrant was obtained to search his computer for evidence as it may be an instrument to committing a crime.

OBJECTIVES

It is determined beyond a reasonable doubt that fraudulent coupons were used by Craig Tucker. The objective is not to determine if the individual used the coupons, rather the origin of the source. Was foul play involved? Or did Craig Tucker not knowingly use fake coupons?

Main objectives:

- Find enough evidence to determine as to how the origin of the fraudulent coupons.
- Determine if there is enough evidence to prove whether malicious intent was conducted.
- Determine the information or communication accounts with the creation, downloading, distribution, and possession of the fraudulent coupons.
- Execute the steps by following procedure to hold the perpetrators accountable based off the evidence conducted.

It must be determined beyond a reasonable doubt that Craig Tucker knowingly used fraudulent coupons. Evidence of past crimes might be uncovered. However, it might lead to a much bigger operation so we must leave no stone unturned.

EVIDENCE

| Images | Details | |
|----------|---------|--|
| Lab7.E01 | Start | 2022/11/16 13:58:52 |
| | End | 2022/11/16 20:20:52 |
| | MD5 | 4e1832956d635ec4e4feba8775a83661 |
| | SHA1 | 12db0624b2c740f3b5195761ab86a85730550a45 |

EXAMINATION OF EVIDENCE

Item #1 – Can be described a image taken from Craig Tuckers computer.

HASH OF ORIGINAL EVIDENCE

The hash values obtained from the original evidence were as follows:

| | |
|------|--|
| MD5 | 4e1832956d635ec4e4feba8775a83661 |
| SHA1 | 12db0624b2c740f3b5195761ab86a85730550a45 |

DRIVE GEOMETRY

64.42 = (64424509440/512 BYTES/SECTOR)

VIRUS SCAN RESULTS

N/A

EXAMINATION OF FILES

21,620 Documents
7,371 Other
8,390 Images
76 Videos

28,764 Executables
7,371 Unknown
162 Audio
455 Not Analyzed

ANALYSIS

The image was analyzed. Crucial email evidence was found, with relevant attachments including fraudulent coupons and coupons making guides. Hundreds of fraudulent coupons were found on Craig Tuckers PC. Two files made use of encryption, which most likely have fraudulent coupons stored on them. Multiple instances of child pornography were found on the computer in both JPEG and WMV files.

FILE ANALYSIS

| <i>MyCoupons.zip</i> | |
|---|--|
| A zip file found on the desktop. Makes use of encryption and is locked with a password. The coupons believed to be created by Craig Tucker. | |
| Metadata | |
| Name: | /img_Lab 7.E01/vol_vol2/Users/Craig/Desktop/MyCoupons.zip |
| Type: | File System |
| MIME Type: | application/zip |
| Size: | 8057474 |
| File Name Allocation: | Allocated |
| Metadata Allocation: | Allocated |
| Modified: | 2013-12-21 13:08:18 CST |
| Accessed: | 2013-12-21 13:08:17 CST |
| Created: | 2013-12-21 13:08:17 CST |
| Changed: | 2013-12-21 13:08:26 CST |
| MD5: | 341a22590c8bec1f227549ba7c994135 |
| SHA-256: | de001d18ee5224ada40ada51ce889256143647bf00c61676b1e775d5d2d35cff |
| Hash Lookup Results: | UNKNOWN |
| Internal ID: | 10916 |

| <i>COUPONS.zip</i> | |
|--|--|
| A zip file containing 128 coupons. Illegal coupons that were downloaded by Craig Tucker. | |
| Metadata | |
| Name: | /img_Lab 7.E01/vol_vol2/Users/Craig/Downloads/Coupons.zip |
| Type: | File System |
| MIME Type: | application/zip |
| Size: | 145954735 |
| File Name Allocation: | Allocated |
| Metadata Allocation: | Allocated |
| Modified: | 2013-12-21 13:01:13 CST |
| Accessed: | 2013-12-21 13:01:10 CST |
| Created: | 2013-12-17 21:02:50 CST |
| Changed: | 2013-12-21 13:01:11 CST |
| MD5: | cd79de0a0fc5658cbb69de71bbbe7c68 |
| SHA-256: | a778fa113ba3dcc97d0f67a2e3bd5ac39bfc742cfd5c604c45e939d91f97897f |
| Hash Lookup Results: | UNKNOWN |
| Internal ID: | 11056 |

AWESOME COUPONS.DOCX

Can be identified as a document found on Craig Tuckers computer. Makes use of encryption.

Metadata /img_Lab 7.E01/vol_vol2/Users/Craig/AppData/Local/Packages/microsoft.windowscommunicationsapps_8wekyb3d8bbwe/LocalState/LiveComm/ba871ed4e8a350e0/120712-0049/Att/20000275/AWESOME COUPONS.docx

Name: 0049/Att/20000275/AWESOME COUPONS.docx

Type: File System

MIME Type: application/x-ooxml-protected

Size: 632320

File Name Allocation: Allocated

Metadata Allocation: Allocated

Modified: 2013-12-29 21:58:17 CST

Accessed: 2013-12-29 21:58:17 CST

Created: 2013-12-29 21:58:17 CST

Changed: 2013-12-29 21:58:17 CST

MD5: 6c9d3ff0af82e9b24e842e6c4bcee39d

SHA-256: 7908952346ee1009485d67473d702c3939ca6ce4e3a559fd98b0e3ec863d96ad

Hash Lookup Results: UNKNOWN

Internal ID: 5320

6CommandmentsofCouponMaking.docx

A document detailing the process on how to make coupons. Attachment from the email stan.marsh27@yahoo.com.

MetaData

Name: /img_Lab 7.E01/vol_vol2/Users/Craig/Documents/Guides/6CommandmentsofCouponMaking.docx

Type: File System

MIME Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document

Size: 371041

File Name Allocation: Allocated

Metadata Allocation: Allocated

Modified: 2013-12-20 15:27:33 CST

Accessed: 2013-12-20 15:27:33 CST

Created: 2013-12-20 15:27:33 CST

Changed: 2013-12-20 15:27:42 CST

MD5: ff47d22743ca6b48034263b24a9a6baf

SHA-256: 6c986e314115eeb2892eea30f775cab1f6fce003729ab3e0437313db6182969d

Hash Lookup Results: UNKNOWN

Internal ID: 10927

\$R8MHF6S.jpg

Can be identified as a jpg of child pornography that was found in the recycling bin.

Metadata

Name: /img_Lab 7.E01/vol_vol2/\$Recycle.Bin/S-1-5-21-1049150138-4017234595-3791460656-1001/\$R8MHF6S.jpg

Type: File System

MIME Type: image/jpeg

Size: 562101

| | |
|----------------------|--|
| File Name | Allocated |
| Allocation: | |
| Metadata | Allocated |
| Allocation: | |
| Modified: | 2013-12-20 23:50:16 CST |
| Accessed: | 2013-12-21 13:32:57 CST |
| Created: | 2013-12-21 13:32:57 CST |
| Changed: | 2013-12-27 01:27:06 CST |
| MD5: | fb248599cee84f77e409b2b65407fe10 |
| SHA-256: | d5948f2c4e0a101abc73f0706b42c0341a8cdac6c7cf5b397291739c2c3f9284 |
| Hash Lookup Results: | UNKNOWN |
| Internal ID: | 11583 |

\$RGQWXSJ.jpg

Can be identified as a jpg of child pornography that was found in the recycling bin.

Metadata

| | |
|----------------------|--|
| Name: | /img_Lab 7.E01/vol_vol2/\$Recycle.Bin/S-1-5-21-1049150138-4017234595-3791460656-1001/\$RGQWXSJ.jpg |
| Type: | File System |
| MIME Type: | image/jpeg |
| Size: | 626337 |
| File Name | Allocated |
| Allocation: | |
| Metadata | Allocated |
| Allocation: | |
| Modified: | 2013-12-20 23:56:30 CST |
| Accessed: | 2013-12-21 13:32:57 CST |
| Created: | 2013-12-21 13:32:57 CST |
| Changed: | 2013-12-27 01:27:09 CST |
| MD5: | 9050b5cb16c4e554c18e37a7be64bc84 |
| SHA-256: | 4e235025729c1254183fd87b7ce884eab1e7fe3033d5a2244450fa031aae60d2 |
| Hash Lookup Results: | UNKNOWN |
| Internal ID: | 11585 |

underage daughter R2ygold.wmv

File of child pornography found underneath Craig/Videos

Metadata

| | |
|-----------------------|--|
| Name: | /img_Lab 7.E01/vol_vol2/Users/Craig/Videos/underage daughter R@ygold.wmv |
| Type: | File System |
| MIME Type: | video/x-ms-wmv |
| Size: | 8076724 |
| File Name Allocation: | Unallocated |
| Metadata Allocation: | Unallocated |
| Modified: | 2013-12-27 02:45:34 CST |
| Accessed: | 2013-12-21 13:43:02 CST |
| Created: | 2013-12-21 13:43:02 CST |
| Changed: | 2013-12-27 02:45:34 CST |
| MD5: | Not calculated |

| | |
|----------------------|----------------|
| SHA-256: | Not calculated |
| Hash Lookup Results: | UNKNOWN |
| Internal ID: | 224202 |

Underage lolita r@ygold 001.jpg

Deleted child pornography jpg found on computer

Metadata

| | |
|-----------------------|--|
| Name: | /img_Lab 7.E01/vol_vol2/Users/Craig/Pictures/Underage_lolita_r@ygold_001.jpg |
| Type: | File System |
| MIME Type: | image/jpeg |
| Size: | 562101 |
| File Name Allocation: | Unallocated |
| Metadata Allocation: | Unallocated |
| Modified: | 2013-12-27 01:27:06 CST |
| Accessed: | 2013-12-21 13:32:57 CST |
| Created: | 2013-12-21 13:32:57 CST |
| Changed: | 2013-12-27 01:27:06 CST |
| MD5: | Not calculated |
| SHA-256: | Not calculated |
| Hash Lookup Results: | UNKNOWN |
| Internal ID: | 224198 |

Underage lolita r@ygold 002.jpg

Deleted child pornography jpg found on computer

Metadata

| | |
|-----------------------|--|
| Name: | /img_Lab 7.E01/vol_vol2/Users/Craig/Pictures/Underage_lolita_r@ygold_002.jpg |
| Type: | File System |
| MIME Type: | image/jpeg |
| Size: | 626337 |
| File Name Allocation: | Unallocated |
| Metadata Allocation: | Unallocated |
| Modified: | 2013-12-27 01:27:09 CST |
| Accessed: | 2013-12-21 13:32:57 CST |
| Created: | 2013-12-21 13:32:57 CST |
| Changed: | 2013-12-27 01:27:09 CST |
| MD5: | Not calculated |
| SHA-256: | Not calculated |
| Hash Lookup Results: | UNKNOWN |

TIMELINE

| Table 4-1 Timeline | | |
|-------------------------------|--|--------------------|
| Timestamp (UTC 24hr) | Event | Evidence Source |
| 2013-12-17 17:34:26 CST | <p>To: coupon-king@outlook.com; From: member_services@outlook.com; Subject: Please sign in to your Outlook.com account</p> <p>Hello Craig Tucker, To continue sending messages, please sign in and validate your Outlook.com account</p> <p>Conclusion:</p> <ul style="list-style-type: none"> Email sent member services@outlook.com to coupon-king@outlook.com. This email confirms that email address of coupon-king@outlook.com does belong to Craig Tucker. | Lab 7.E01 |
| 2013-12-17 17:43:42 CST | <p>To: stan.marsh27@yahoo.com; From: coupon-king@outlook.com; Subject: Re: Free Coupons</p> <p>I got them at 4chan. Go 2 the random channel and get sum 2 share w/ me!</p> <p>On Tuesday, December 17, 2013 3:33 PM, Craig Tucker <coupon-king@outlook.com> wrote: Cool thx! ❖❖❖❖❖❖ Where did u get these?</p> <p>Sent from Windows Mail</p> <p>From: Stan Marsh Sent: Tuesday, December 17, 2013 12:37 AM To: Craig Tucker</p> <p>Hey, I got sum more free stuff at wallmart 2day! U gotta start using coupons dude. Here's sum 4 u 2 get started.</p> <p>Conclusion:</p> <ul style="list-style-type: none"> Email sent from Craig Tucker to Stan Marsh. Attachments were sent with fraudulent coupons. It identifies the origin of the fraudulent coupons. It is also evidence of Stan Marsh distributing them. | Lab 7.E01 |
| 2013-12-17 17:45:21 CST | Craig Tucker searches “4chan” using google chrome. Based on the prior emails, we can assume that this search history demonstrates intent is to search for fraudulent coupons. | Lab 7.E01 |
| 2013/12/18 14:05:57 CST | <p>Craig Tucker downloads the file “ALL COUPONS.rar” from the domain “mediafire.com”</p> <p>Filepath: C:\Users\Craig\Downloads\ALL COUPONS.rar</p> | Lab 7.E01 |

| | | |
|---|--|-----------|
| 2013-12-18 14:06:19 CST | Craig Tucker searches “ Winrar ” using google chrome | Lab 7.E01 |
| 2013-12-20 15:11:00 CST | Craig Tucker searches “ how to make coupons ” using google chrome | Lab 7.E01 |
| 2013-12-20 15:25:40 CST | <p>Email History</p> <p>To: stan.marsh27@yahoo.com; From: coupon-king@outlook.com; Subject: Re: Coupon Making</p> <p>Here r sum guides but just warning u that u r getting in 2 a whole new deal by making them urself. u get caught using them, not so bad and u can make up an excuse...u get caught making them, u r doomed. So dont be a newb and get caught. BTW u need GIMP 2 make ur own, so go download it.</p> <p>On Friday, December 20, 2013 1:13 PM, Craig Tucker <coupon-king@outlook.com> wrote: Hey Stan, I was trying 2 find stuff on making my own coupons. U got any good guides 4 that?</p> <p>Sent from Windows Mail</p> <p><u>Conclusion:</u> Stan Marsh gave Craig Tucker the tools to start making fraudulent coupons</p> | Lab 7.E01 |
| 2013-12-20 15:27:33 CST | Craig Tucker opens the file “ 6CommandmentsOfCouponMaking ”. Demonstrates intent to start making coupons. | Lab 7.E01 |
| 2013-12-20 15:28:59 CST | Craig Tucker searches “ gimp ” using google chrome. This demonstrates that Craig Tucker had the tools to make the tools. | Lab 7.E01 |
| 2013-12-20 15:43:25 CST | AWESOME COUPONS.docx was created. Encryption was added as a level of security. | Lab 7.E01 |
| 2013-12-21 13:08:17 CST - 2013-12-21 13:08:26 CST | <p>MyCoupons.ZIP was created and changed. Encryption was added</p> <p>Accessed: 2013-12-21 13:08:17 CST Created: 2013-12-21 13:08:17 CST Changed: 2013-12-21 13:08:26 CST</p> | Lab 7.E01 |
| 2013-12-21 15:23:14 CST | <p>A USB Kingstone Device is attached to the computer.</p> <p>Toshiba Corp. Kingston DataTraveler 102/2.0 / HEMA Flash Drive 2 GB / PNY Attache 4GB Stick Device ID: 000FEAFB938CECC027E200F6</p> | Lab 7.E01 |
| 2013/12/21 13:32:38 | File Underage_lolita_r@ygold_001.jpg of child pornography is accessed | Lab 7.E01 |

| | | |
|-------------------------------|---|-----------|
| | File Path: C:\Users\Craig\Pictures\Underage_lolita_r@ygold_001.jpg | |
| 2013/12/21 13:32:45 | File Underage_lolita_r@ygold_002.jpg of child pornography is accessed File Path: C:\Users\Craig\Pictures\Underage_lolita_r@ygold_002.jpg | Lab 7.E01 |
| 2013-12-21 13:32:57 CST | R8MHF6S.jpg and \$RGQWXSI.jpg File of child pornography found in the recycling bin is accessed. | Lab 7.E01 |
| 2013/12/21 13:42:16 | E:\Russian Videos file is accessed. Presumably on the Kingstone device. | Lab 7.E01 |
| 2013/12/21 13:43:02 | Underage child pornography is accessed by the file name “ underage daughter R@ygold.wmv ” | Lab 7.E01 |
| 2013/12/22 | Craig Tucker is detained by Walmart security and arrested. | Lab 7.E01 |
| 2013-12-27 01:53:35 CST | Email History An email sent between Stan Marsh and Craig Tucker. Its evidence of the distribution of child pornography and an attempted cover up. The attachments are found in the recycling bin on Craig Tuckers computer. To: coupon-king@outlook.com ; From: stan.marsh27@yahoo.com ; Subject: Re:More Hot Pics Thx bro! I hid them and deleted your msg Sent from Windows Mail | Lab 7.E01 |

RELEVANT FINDINGS

Based on email history, we can confirm that the email address coupon-king@outlook.com belongs to Craig Tucker. Craig Tucker actively communicating with the email address stan.marsh27@yahoo.com belonging to Stan Mash.

Email logs were found on Craig Tuckers computer, containing fraudulent coupons sent by Stan Marsh to Craig Tucker by via email attachments. Craig Tucker would download these files and store them on his computer. Craig Tucker would go onto download fraudulent coupons from the domain “mediafire.com.” A coupon zip file “COUPONS.zip” was found on Craig Tuckers pc, containing 128 coupons.

Stan Marsh would provide Craig Tucker the means to make coupons. Email logs detail Stan Marsh educating Craig Tucker on how to make fraudulent coupons by himself. Stan Marsh would attach coupon making guides by email with these files stored on Craig Tuckers desktop. One notable coupon guide was the “6Commandmentsofcouponmaking” which was opened by Craig Tucker.

Craig Tucker would download the tools to make fraudulent coupons such as GIMP an WINRAR. Craig Tucker would run these programs. The fraudulent coupons that Craig Tucker made are coupons are store in the zip file “MyCoupons.zip”. and “AWESOME COUPONS.docx” Craig Tucker made use of encryption to hide his coupons an attempt to cover up.

Finally, child pornography was found on the computer. 3 Files were found in the recycling bin detailing child pornography, “R8MHF6S.jpg”, “\$RGQWXS.jpg”, “underage daughter R@ygold.wmv”. A deleted email contains details that Stan Marsh sent child pornography to Craig Tucker. The child pornography was discovered on Craig Tuckers under the path E:/ Russian videos. The files include, “Underage_lolita_r@ygold_001.jpg” and “Underage_lolita_r@ygold_002.jpg.”

SUPPORTING DETAILS

It is believed that Craig Tucker and Stand Marsh are close friends due to the content and number of emails. Stan Marsh potentially could be involved in the coupon making scandal due his distribution of coupons in the attachments. We can infer that Craig Tucker had the intent to not only use illegal coupons but create his own and potentially distribute them. Craig Tucker had illegal coupons downloaded and had the tools installed on his PC to do so.

There is an enormous correlation between the time GIMP was download (2013-12-20 15:28:59 CST) with the creation of AWESOME COUPONS.docx (2013-12-20 15:43:25 CST). Based off this correlation, it is likely that incriminating evidence of Craig Tuckers fraudulent coupons are hidden in the document.

The child pornography location of the recycling bin and the deletion of Stan Marsh’s email, we can infer that Stan Marsh was aware of his wrongdoing and appears to be an attempt of a cover up. It is also believed that there is a connection between a Kingstone USB device and the path to child pornography.

INVESTIGATIVE LEADS

Action must be taken against Craig Tucker. There is enough evidence to prove that beyond a reasonable doubt that Craig Tucker aware of the fraudulent coupons. Craig Tucker took part creating and distributing fraudulent coupons.

There must be an investigation into the encrypted files. It is most likely that it contains crucial evidence into the fraudulent coupons. There are two files “AWESOME COUPONS.DOCX” and “MyCoupons.zip” should be cracked using password cracking software. If coupons are found within the files, it must be determined when, where, and how the coupons were made. It must be determined if Craig Tucker did in fact make the images by analyzing them.

An investigation must occur into the Kingstone device located on the computer. He should be questioned into the Kingstone device that was connected to his PC. Action must child pornography was found on Craig Tuckers PC and based on the timing of the Kingston; it is most likely that it contains child pornography on the drive. Authorities must look for any leads leading to “E:/Russian Videos” on the device. It is also possible that the Kingstone device contains evidence of more fraudulent coupons.

Authorities must be contacted due to the illegal contact that occurred between Stan Marsh and Craig Tucker. Stan Marsh should be called into questioning into the illegal coupon business and the distribution of child pornography. A search warrant should be obtained, and an investigation should occur into Craig Tuckers Kingstone device and Stan Marsh’s PC.