### The Underground Ecosystem Of Credit Card Frauds

### Abhinav Singh

@abhinavbom #malwaremustdie

# black hat ASIA 2015

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SPEAKER

## Agenda

- Brief Introduction to Card based Payment Systems.
- POS Malwares and the Data dumps.
- Understanding the Underground Shopping Mall.
- Money flow, Demand & Supply
- Future Scope, Challenges & Solutions

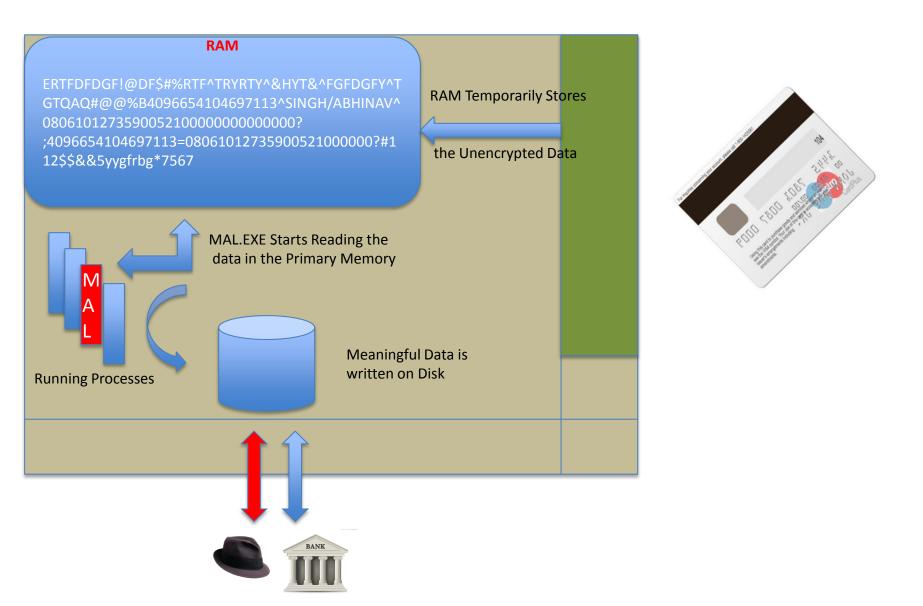
### **Processing Card Payments**



### Key Components



### POS RAM Scrapping Malware In a Nutshell

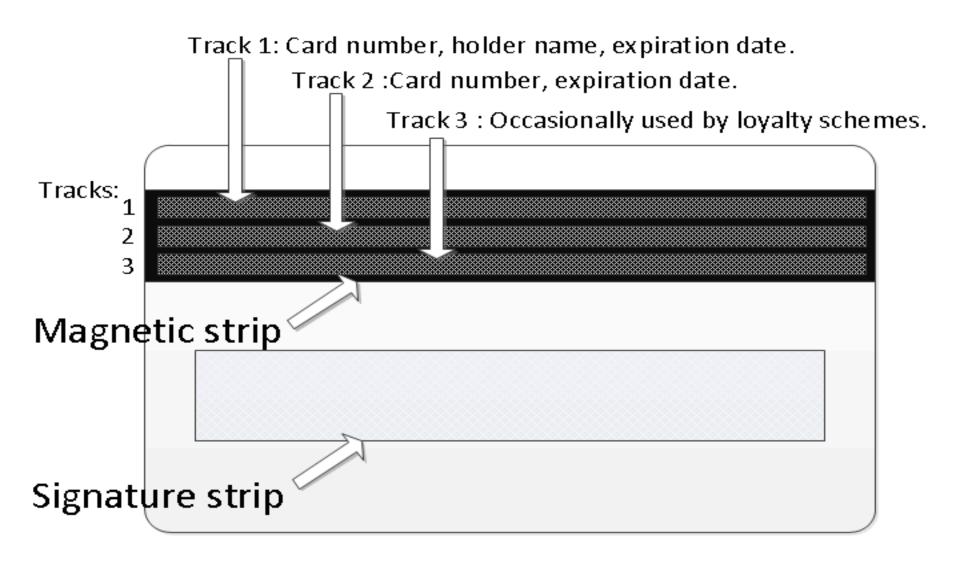


### **Dumped Data**

%B4096654104697113^SINGH/ABHINAV^ 08061012735900521000000000000000?

;4096654104697113=08061012735900521000000?

### Inside the Plastic Card



### Track 1 & 2 Block Diagram

%B4096654104697113^SINGH/ABHINAV^0806101273590052100000000000000?;4096654104697113=08061012735900521000000?

#### SS FC PAN FS CN FS ED SC DD ES LRC

SS: Start sentinel (%) FC: Format code PAN: Primary account number FS: Field separator (^) CN: Cardholder's name (up to 26 characters long) ED: Expiry date (in the form, "YYMM") SC: Service code DD: Discretionary date (may include the Card Verification Value [CVV]/Code, the PIN Verification Value, and the PIN Verification Key Indicator) ES: End sentinel (?) LRC: Longitudinal redundancy check SS PAN FS ED SC DD ES LRC

SS: Start sentinel (;) PAN: Primary account number (up to 19 digits long) FS: Field separator (=) ED: Expiry date (in the form "YYMM") SC: Service code DD: Discretionary data ES: End sentinel (?) LRC: Longitudinal redundancy check

### **3** Steps to Multi Million Dollar Fraud

• Attack

• Sell

• Shop

## The Underground Shopping Mall

- Malware Authors, Phishing Attackers, Skimmers, Exploiters Etc.
- Forums and Online Shops
- Buyers
- Specialized Services

### Malware Authors, Phishing Attackers, Skimmers, Exploiters

• Financially Motivated.

 Insider threat, 3<sup>rd</sup> Party IT Service Provider, Outsider threat

 Background in Payment Processing and related service development

### **Forums and Online Shops**



### Buyers

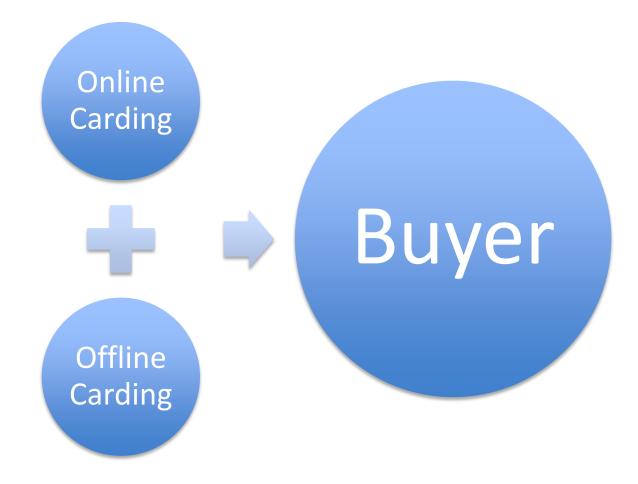
- Profile ranges from Newbies to Regular and experienced customers.
- Can Buy single CC, Dumps of Fullz.
- Can purchase cards with specific options like Country and City of issue, Card Issuer Bank, Brand(Visa, Master, Amex etc), Genre(Classic, Platinum, Gold etc)
- Purchase is made using Crypto currencies, wire transfer or money transfer.
- The price of a single card detail would depend on factors like Brand, Genre, expiry date etc.
- The cost of dump is calculated based on number of CC details it has.
- Fullz can be slightly more expensive than others as it contains more detailed information about the card owner.

Country	CC type	CC mark	Debit/Credit		
✓ <u>AII   USA</u>	All Visa   Master	All  All   Gold   Platinum	DEBIT CREDIT		
Zips & Bins	Bank & State & City	Base	Additional		
111 .:: 6282	Bank: All <ul> <li>State: All</li> <li>City: All</li> </ul>	All	<ul> <li>Expiring 03/15</li> <li>Phone</li> <li>VBV</li> <li>Exp. date (1312)</li> </ul>		

u were looking for? Need more dumps of particular bin? Try our partner's shop - Bulk Orders - Low Prices!

Clear

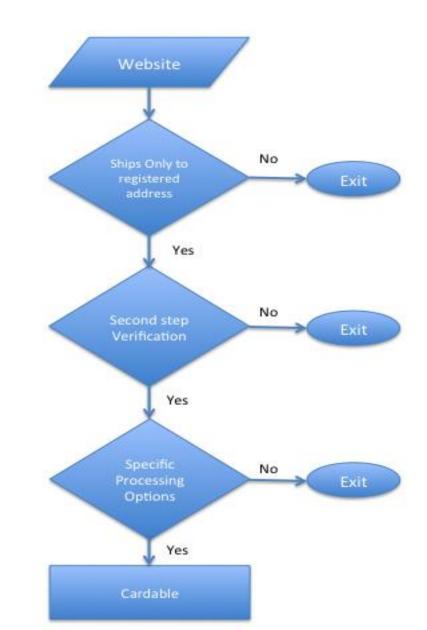
Search



## **Online Carding**

- Process of using the stolen credit card details for purchasing goods online.
- "Fullz" or details including CVV, Registered Address, Phone etc. is required.
- Finding a "Cardable" Website.

### Cardable Website



## **Offline/In-store** Carding

• Generating Counterfeit cards.

• Choose shop/cash-out options.

Pick up specialized services based on fraud options.

### **Generating Counterfeit Cards**



### **Generating Counterfeit Cards**

Software: MSRE, TheJerm, Exeba etc.

🖌 ISRE206 Unique Electronic LTD.				
Message	Magnetic Stripe Card Reader/Writer			
	C Lo-Co C Hi-Co			
Track2 75 BPI 5 BPC Odd Parity	Select DataType f iSO AAMVA C AAMVA C Ca DMV User Type Raw Data			
	Write Read			
Track3 210 BPI 5 BPC Odd Parity	CopyCompareErom FileTo FileSeg. WriteSetupEraseChange Password			
	Exit			

### Specialized Services in Fraud Ecosystem

• Runner

• Dropper

• Shopper

### Runners

- Individual or group specializing in ATM cash withdrawals.
- Often generate multiple counterfeit cards for single card to do multiple withdrawals In a go.
- Have Fake digital wallet, crypto currency, online money transfer accounts to safely withdraw money from stolen cards.
- Runners are the risk bearers; hence their profit margin is also high. They usually charge the carder between 40 to 60 percent of the money stolen in a single run.

#### vAn pErsie •

Westernunion, Bank, Paypal, Moneybookers transfers !!!!!

#### Trusted {{ Western Union , Bank , Paypal & Money Bookers Transfers }}



Seller

### **BlackStuff Top** Level Seller

Join Date: Feb 2011 1,366 Posts:

**Contact Me For Deal** 

Yahoo :van persie619@yahoo.com ICQ 660941907

#### Hello BS members,



I'm a old and experienced carder, i have much data of westernunion, hacked paypal accounts, bank logins and fullz infos. I'm doing this business since last 8 years and also very old seller on blackstuff.net. I have many customers and buyers all over the world and they trust me and i promised to never break this chain till death . I'm offering here many offers to earn online money through black sources like westernunion transfers, bank transfers, moneybookers and paypal transfers through database.

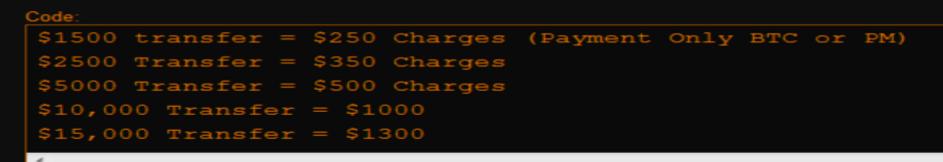
#### **Paypal Transfer Rates :**

Code:										
\$1200	Transfer	=	\$200	Charges	(Payment	Only	BTC	or	PM)	
\$1800	Transfer		\$250	Charges						
\$3000	Transfer	=	\$300	Charges						

\$5000 Transfer = \$500 Charges

```
$10,000 Transfer = $700 Charges
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#### <u>Bank Transfer Rates:</u>



#### Western Union Transfer Rates :

Code:											
\$1400	Transfer		\$250	Charges	(	Payment	only	Via	BTC	or	PM)
\$2500	Transfer		\$350								
\$3500	Transfer		\$400								
\$5000	Transfer		\$500								
\$7000	Transfer		\$700								
ms & Conditions :											

A person can take transfer once in a week and maximum 4 times in a month

If anyone want to do regular business with me then you must have many bank accounts paypal, moneybookers and fake ids for western union because after 2 or 3 transfers

your paypal and Wu ids will be black listed and banned, so think before deal. Make big transactions and get a side and give other peoples chance or try to gather many fake accounts and work with me on regular basis.

### Droppers

- Serves as the drop point for goods purchased online, thus securing the identity of the actual buyer
- Works by renting apartments, finding empty houses, registering PO Boxes on fake IDs.
- Since the Dropper bares a fair amount of risk, his profit percent varies between 30 to 50 percent.

#### CcWorld •



Verified Seller Join Date: Jun 2013 Posts: 359

#### 单 ccworld shipping provider world wide

#### Hello everyone

Today im here to inroduce my shipping services. i have lot of experience in carding business, starts from to card cheap softwares and online poker and casino games etc but when i joined big hacker communities and see big carders then i enhance my carding interest and starts working on carding ipads etc then i fuck amazon first time with 2 ipads and then i start to give 24/7 time to carding and net surfing and no]w i can card even big vehicles from ebay and amazon lol and also carding on walmart and bestbuy.

if you think this is a joke then you dont knows the real carders power.if you peoples trust me then i can show my carding skills.

I have some good drops in USA EU and many other countries.

#### Rules

1: Order only with DHL, Fedex , TCS ,USPS, First flight, Canada post Available.

#### Fees and charges

Normal Shipping - (Shipment delivery direct from store to your house)

- 1: Laptops (Acer, Apple, Hp, Dell only) price starts from \$350 to 500\$
- 2: Iphones Apple (iphone5s for 250\$)
- 3: Blackberry (Starts from 150\$ to 300\$)
- 4: Samsung Galaxy and Tabs (Starts from 150\$ to 350\$)
- 5: Apple lpads or other tablets price \$150

First Ship to drop, Last to customers ( in this way i will ship item to my drop then he send it to you )

- 1: Laptops (Acer, Apple, Hp, Dell only) price starts from 300\$ to 600\$
- 2: Iphones Apple (.iphone5s for 275\$)
- 3: Blackberry (Starts from 200\$ to 350\$)
- 4: Samsung Galaxy and Tabs (Starts from 200\$ to 400\$)
- 5: Apple Ipads or other tablets price \$200

#### Shipment Sites :-

Amazon Ebay Bestbuy Walmart (special offers for USA customers only)

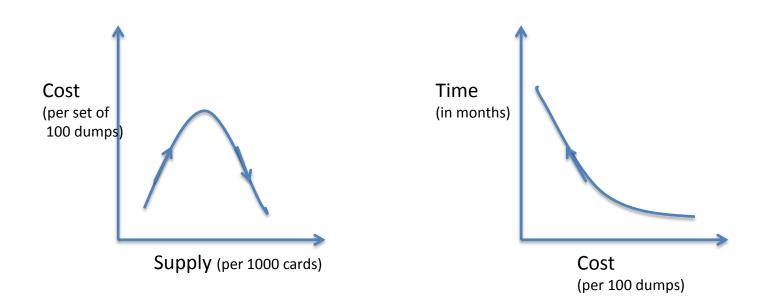
### Shoppers

- Shopper specializes in shopping with the counterfeit cards provide by the carder.
- The Shopper can be an individual or a group that specializes in conducting nervousness-free shopping of goods using the fake cards.
- The shoppers also have Fail-safe techniques to doge the payment supervisor in case the card fails to authenticate.
- Profit cut in the range of 10 to 20 percent.
- The profit margin for Shoppers depends on the type of good the carder wants them to purchase. Expensive luxury items would require a larger profit share to be paid to the shopper.

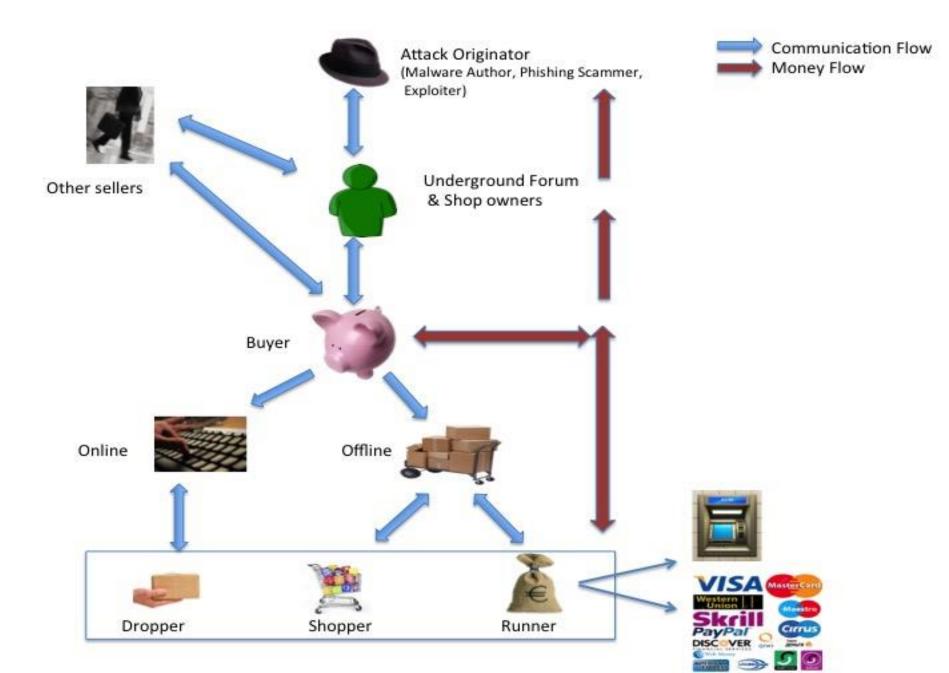
## **Demand & Supply**

- Any new disclosure about POS breach suddenly raises the demand for fresh CC dumps in the market.
- This leads to a rise in price of new dumps.
- The problem arises when the demand is less and supply is huge.
- to keep up the momentum, the shop owners and sellers begin lowering the price of their dumps and cards. This brings down the market valuation thus creating deficit.

### **Demand & Supply**



#### Credit Card fraud Ecosystem in a Nutshell



### Future Scope, Challenges & Solutions

- Credit card fraud has been around for years now and with time, the model has grown stronger and better with each passing day.
- The major challenge that this ecosystem faces is double fraud.
- The payment industry has been dealing with this issue seriously but the problem lies in the widespread reach of card usage.
- Enforcing a global policy is not easy.
- Solutions like EMV or Chip-and-Pin cards and RFID cards exist.

### Questions

