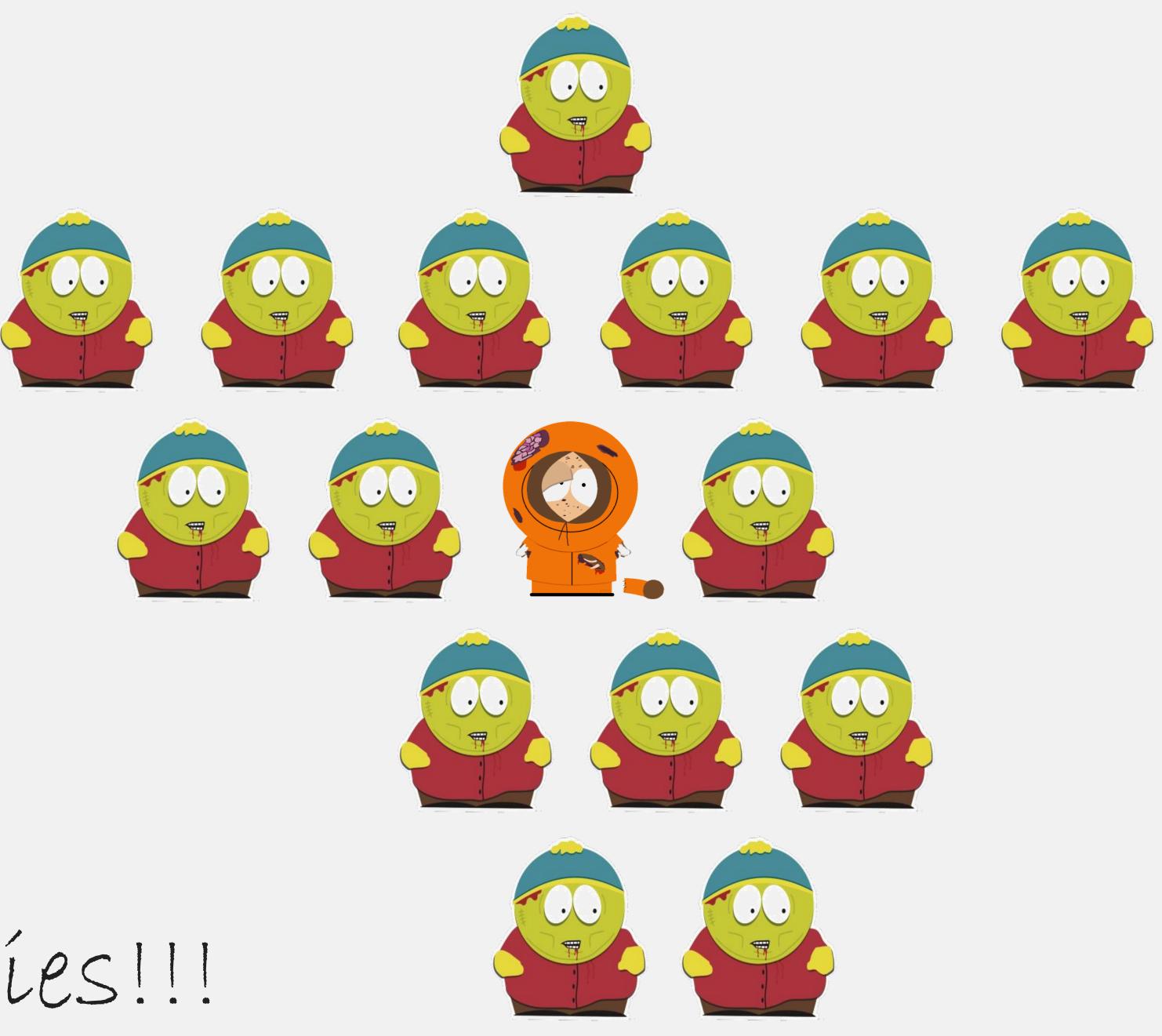
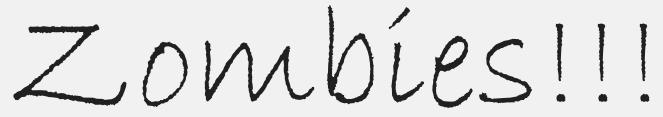
### **Bug Bounty Programs Evolution**

Nir Valtman, CISSP Blog: www.valtman.org Twitter: @ValtmaNir

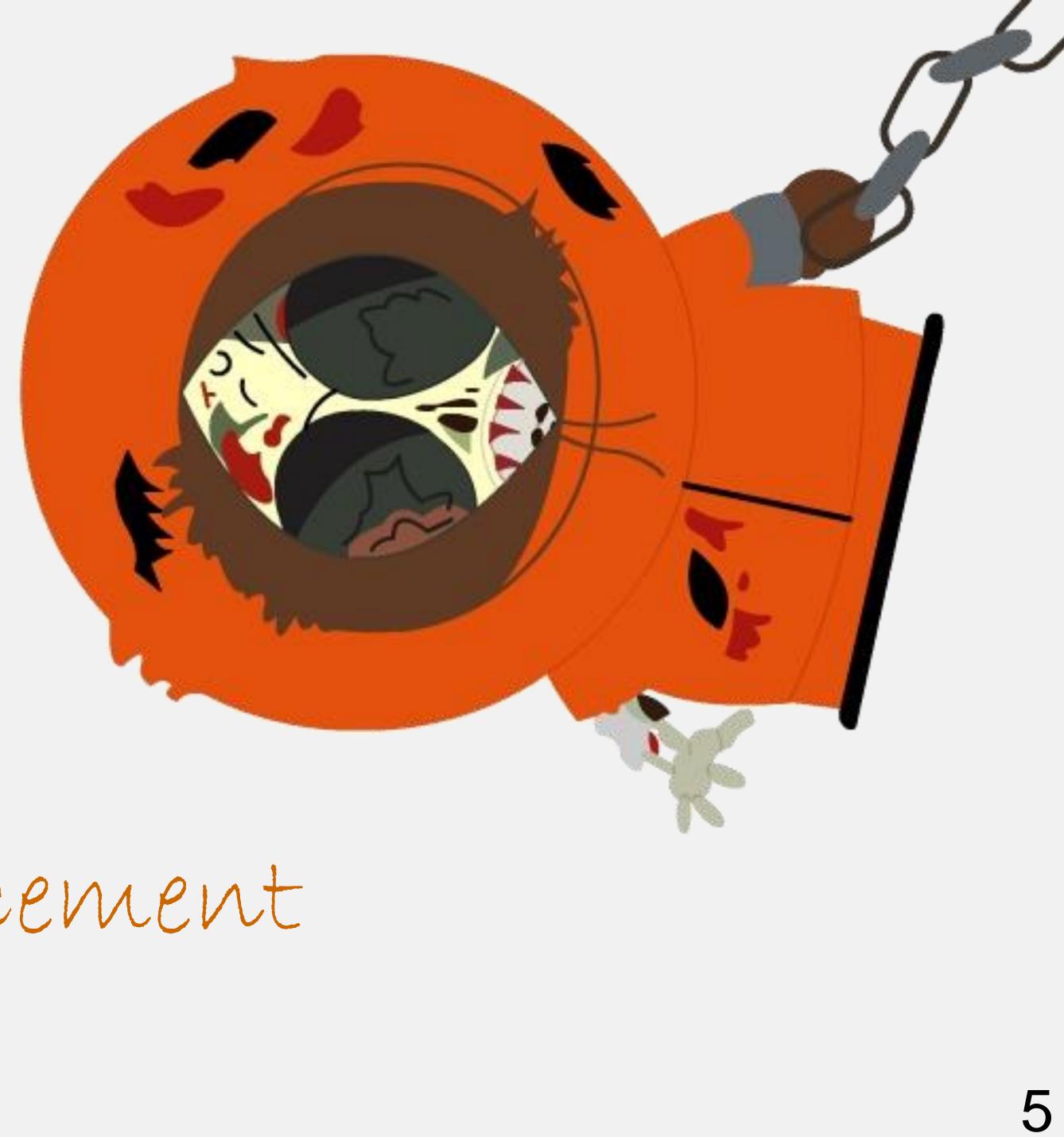








Defacement 





# AntiDef

Memory Scraper

### Secure TDD







# Research Bug Bounty Programs Since 2011



# Academy Final Project





# If you can't beat them, join them!

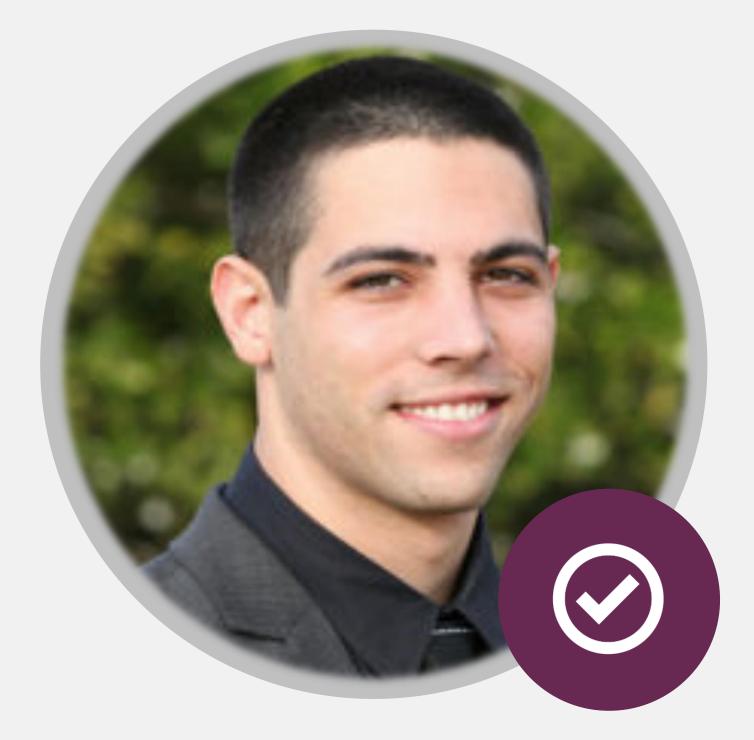
# Not cost-effective

### Virtual Environment

### Bounty Hunter

### Safe Bug Bounty Program





### Shay Fainberg





# safe crowd security testing



# Ideas worth spreading



# The Evolution

# Bounty Hunters in Real Life

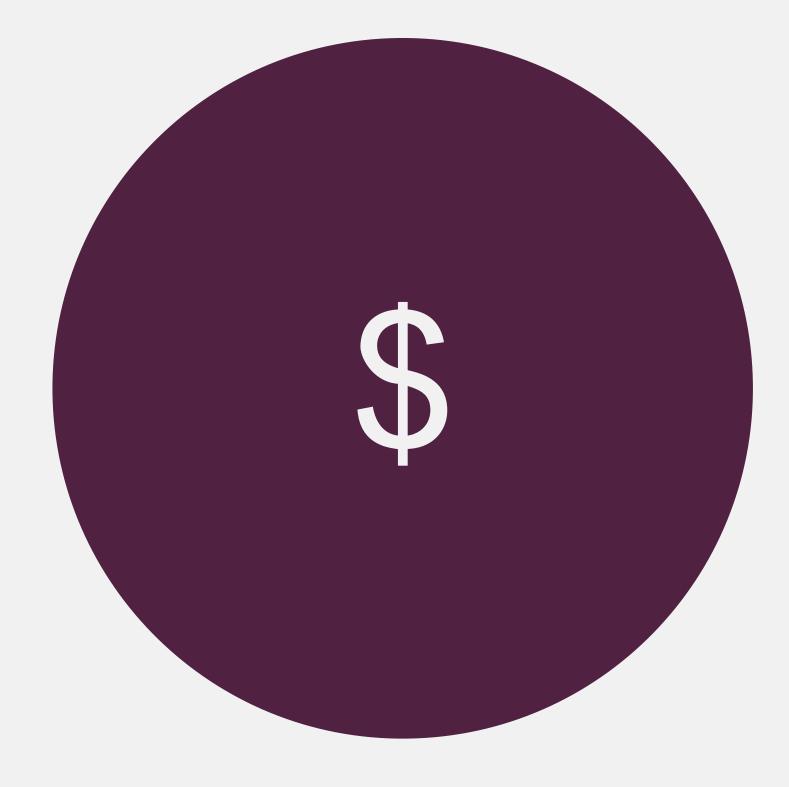


First to say that this is serious, it is not a joke. If you ask yourself why someone would need to hire hitman online, I will tell you simply: because it is anonymous. You can always find examples of criminals who collaborated with cops when they face 20 years of prison, and you can finish in the prison because of that. At other side, you can always find examples that police found who had interest to kill dead person and they can come to you and you can give testimony and hitman can finish in the prison 20 years. So, it is mutual interest to make everything anonymously. This website is hosted at anonymous server, server access to Internet through Tor network, you can access this site anonymously only through Tor network, and I uploaded files to server through Tor network. You make payment with anonymous digital currency called Bitcoin (currently 1 Bitcoin worth about 7 EUR). It means I don't know you and you don't know me. I can't send you in the prison and you can't send me in the prison. Of course you must take a risk when you pay in advance, but there is no interest and profit without risk. You take risk and when you do it anywhere, someone can always cheat you and as I said, many criminals have balls to do many things to the other people but when their ass face 20 years of prison they begin to talk with police. Risk about prison and money is always present. If you are not ready to take a risk, don't contact me. Prices below are in EUR but EUR is facing crisis, so, you should count gold converted in Bitcoins. 5000 EUR is 120gr of gold, 10000 EUR is 240gr of gold and so on. One gram of gold has value of 41,73 EUR or 52,83 US Dollars.

# Terms & Conditions



### Successful Kill



### Successful Kill

### Good Reputation

VIP

# Animals

# Politicians

## Kids



# Women

# Men

# Hit men





# 1<sup>st</sup> Bug Bounty

# Program

# "...REFINE BETA VERSIONS AND ENSURE HIGHEST QUALITY SOFTWARE"

# How did it work?









# Success || Failure Story?







# **mozilla** Foundation





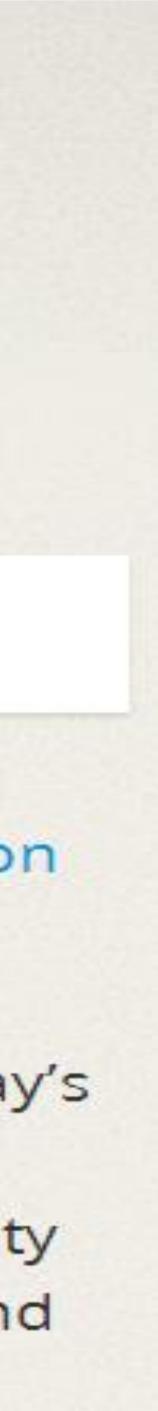
APR

2014

Daniel Veditz

Firefox developer builds ("Nightly") are now using a new certificate verification library we've been working on for some time, and this code is on track to be released as part of Firefox 31 in July. As we've all been painfully reminded recently (Heartbleed, #gotofail) correct code in TLS libraries is crucial in today's Internet and we want to make sure this code is rock solid before it ships to millions of Firefox users. To that end we're excited to launch a special Security Bug Bounty program that will pay \$10,000 for critical security flaws found and reported in this new code before the end of June.

# \$10,000 Security Bug Bounty for Certificate



2

# Perspectives on Bug Bounty Programs



# Bounty Hunter



### Technology

Operations



### Technology

### Handle heavy traffic



### Technology

### Stronger IPS

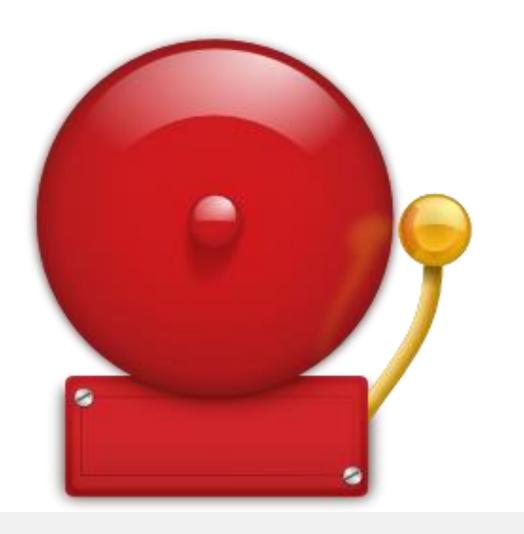


### Technology

### Stronger WAF



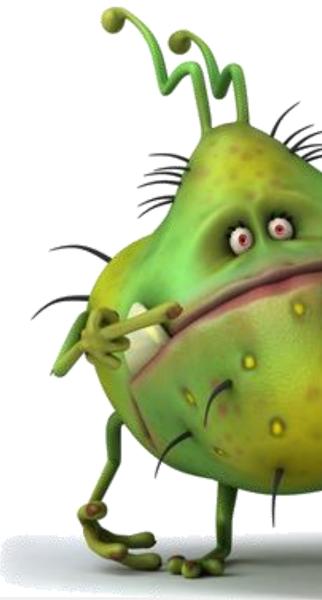
### Incident Response





### Bugs Management

### Operations





### Liability

## ENTER AT YOUR OWN RISK







AT&T Bug Bounty Program



# Google





Self-Dwned



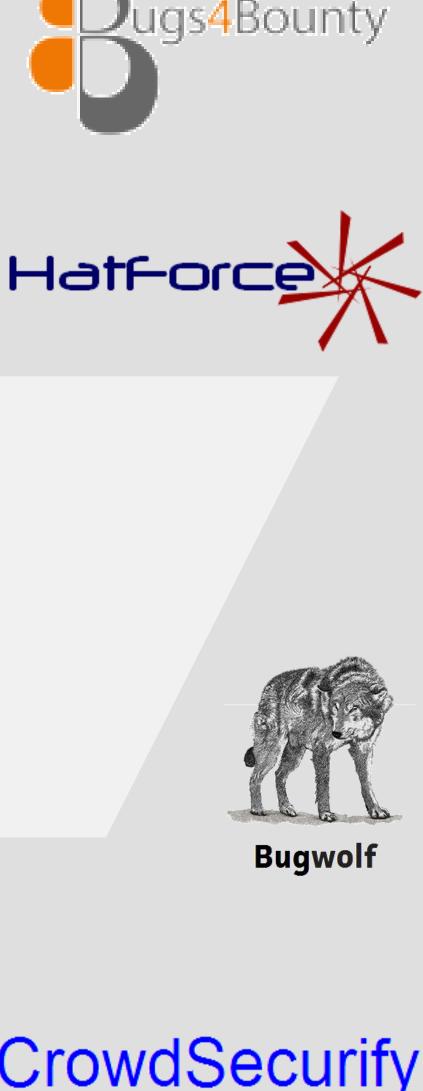






#### **Hack**<sub>a</sub>Server











CrowdSecurify Private Bug Bounty Programs



1

www.crowdcurity.com





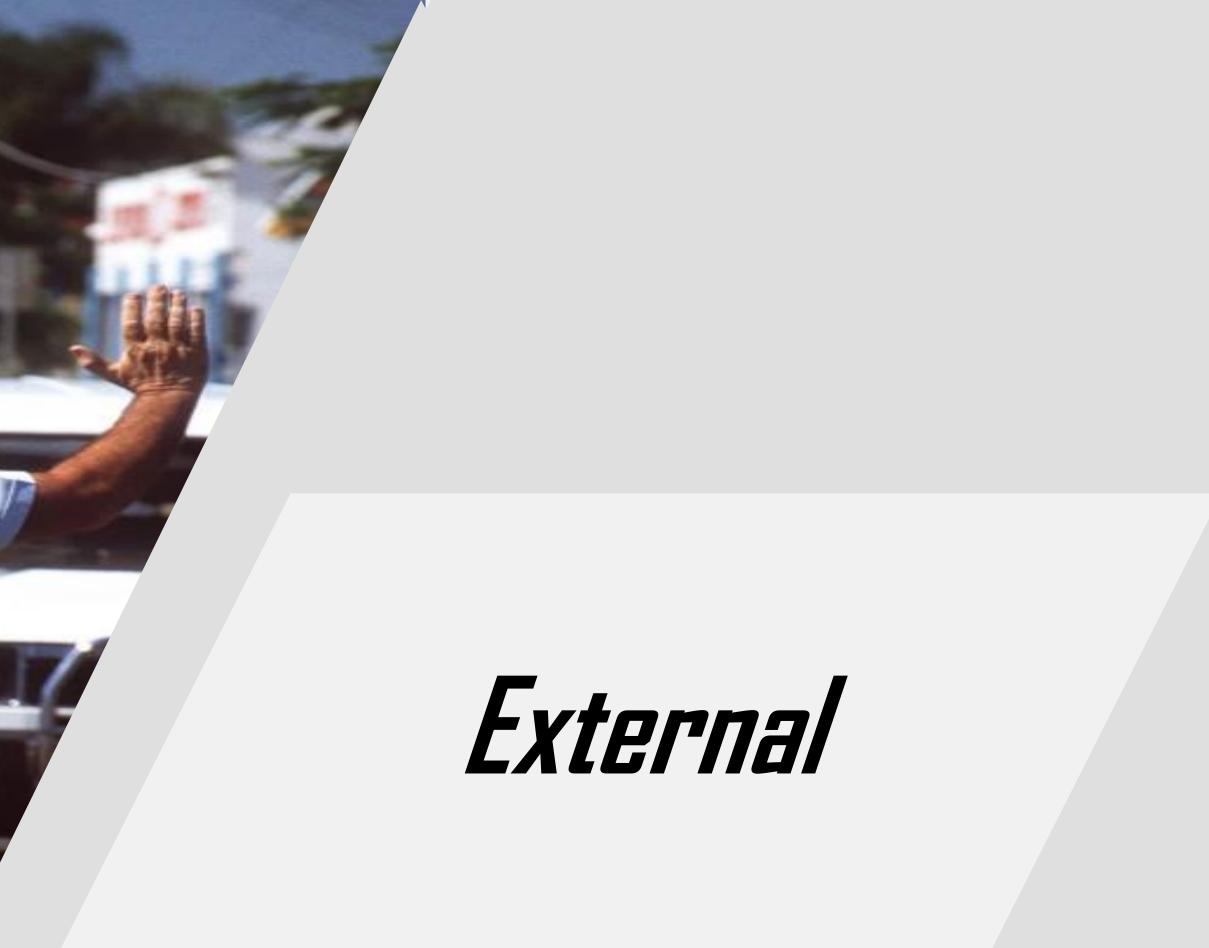
#### Identity Verification



# Post it Here!



#### Traffic Shaping

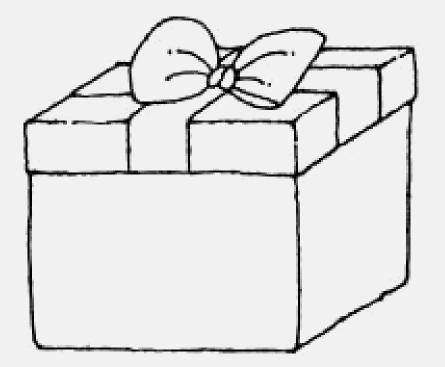




# Concerns



# Payment Models





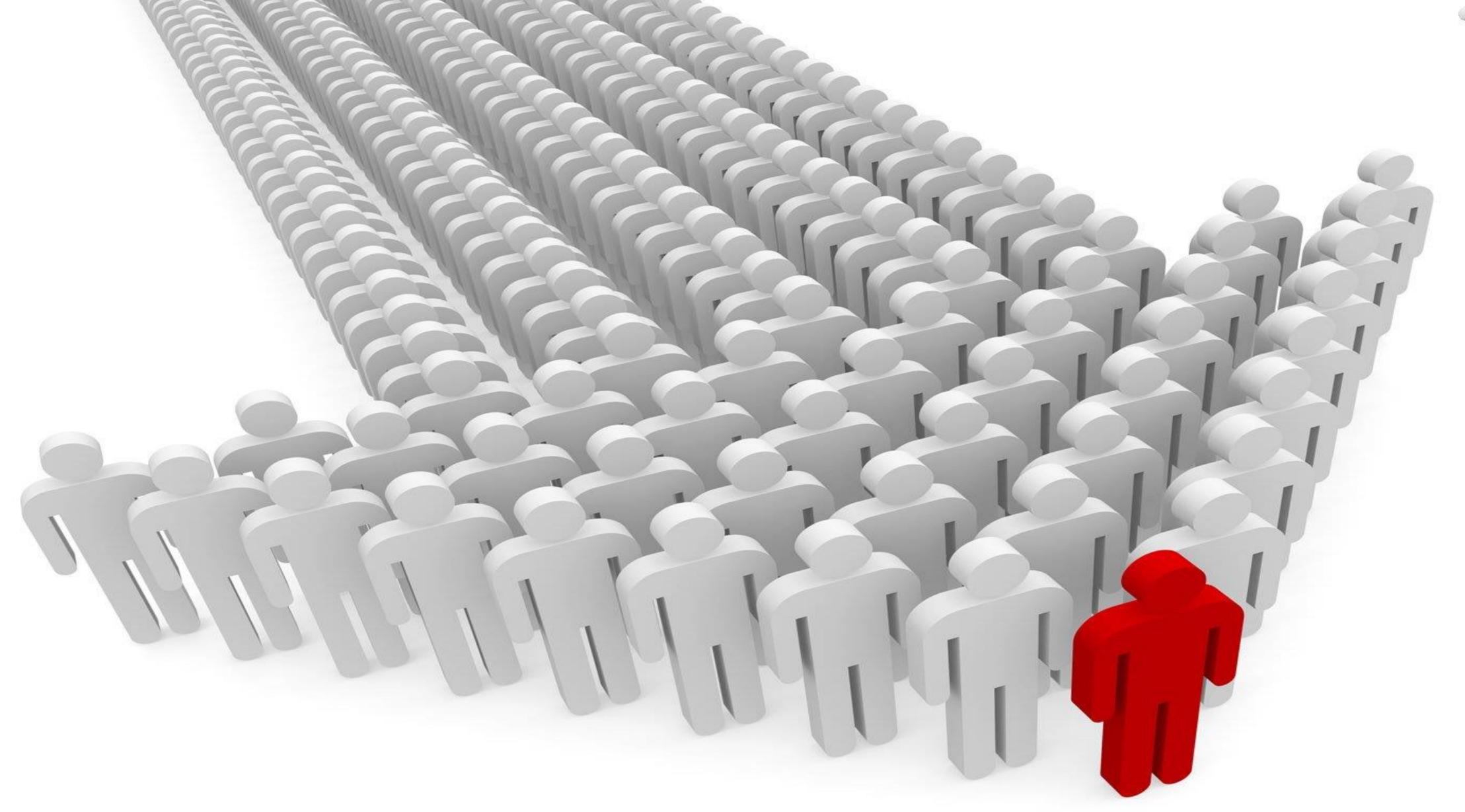
### Special promotions





# **Real-World Hacking Scenario**





# Security Leader Positioning

YouWall.com

# Benefits









### Production



Sensitive Data Leakage





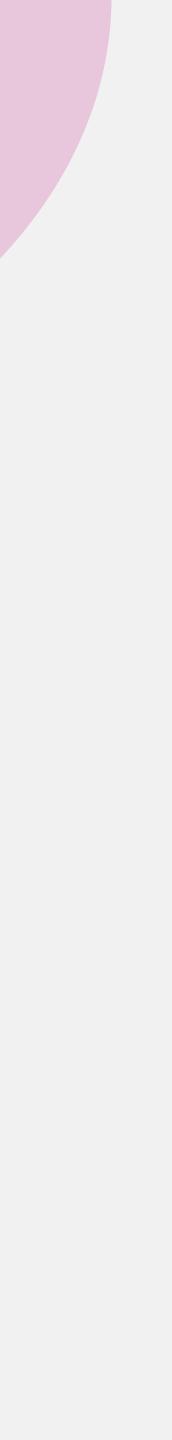
Denial of Service

Black Hats Detection

#### Company's Perimeter







#### Facebook - Delete The Admin Of Any Page Exploit

#### 1337day-2013-21699

[ Important Info ]

| Verified | 🗸 Verifie | ed  |  |
|----------|-----------|-----|--|
| Warnings | 🗸 0       |     |  |
| Rating   |           | √ 2 |  |



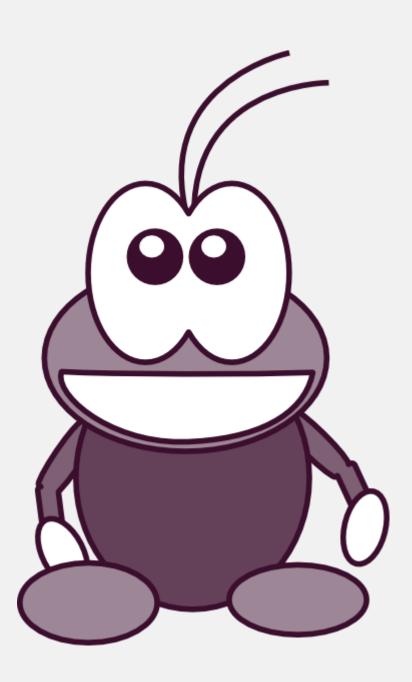
[ Detailed Information ]

| Full title  | Facebook - Delete The Admin Of Any Page Exploit   |
|-------------|---|
| Date add    | 2013-12-23  |
| Category    | web applications  |
| Platform    | tricks  |
| Risk        |   |
| Description | It is possible to delete the admin of any page just with a single click. This can also be converted into a bot or a worm leading to the deletion of admin of thousands of pages. It is also possible to fully automate this worm. It is very effective when we aim for wide spattack. Targeted attacks are also possible. This bug is not available public. This bug is tested against hundred's for pages and is found working 100%. |
| Usage info  | I have automated all the process.Buy it and i will send it.very simple to use.  |
| Tested on   | Main Website Of Facebook  |
| Solution    | Not Yet Fixed By The Facebook Security Team   |
| Tags        | Facebook zero Dec 2013 Deletion of admin of any page UNPATCHED.   |
| Comments    | 17  |
| Views       | 37958   |

#### [ F.A.Q. ]

- How to open Exploit?
- How to buy Exploit?
- How to get Gold? •
- How to get more purchasers?
- How to know that it is works?





# Non-security Bugs Handling

Bugcrowd. Crowdsourced security for web and mobile apps.



Hello Hero

We have noticed the Beta027 target, is experiencing severely degraded performance.

Please limit automated scanning to a bare minimum or not at all.

Thank you

The Bugcrowd Team

# Side Effects

# bugcrowd





Minimize Exposure Time

### Perspectives on Bug **Bounty Programs**

# Business Bounty Hunter



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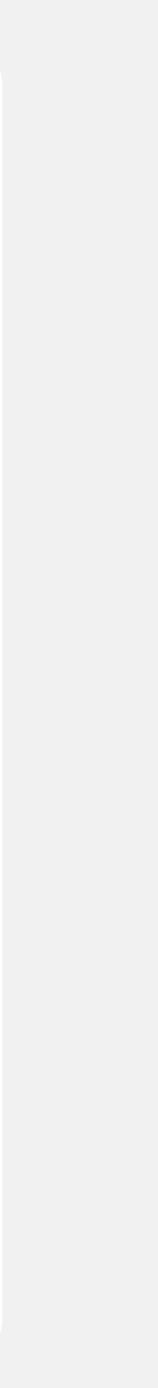


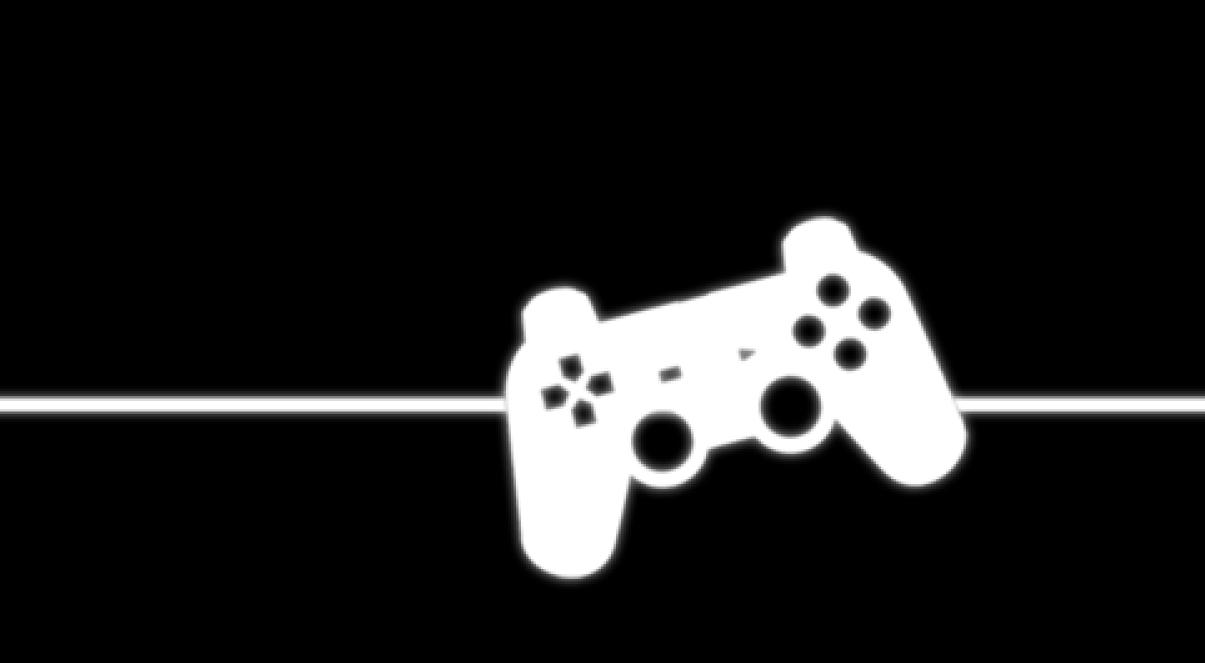










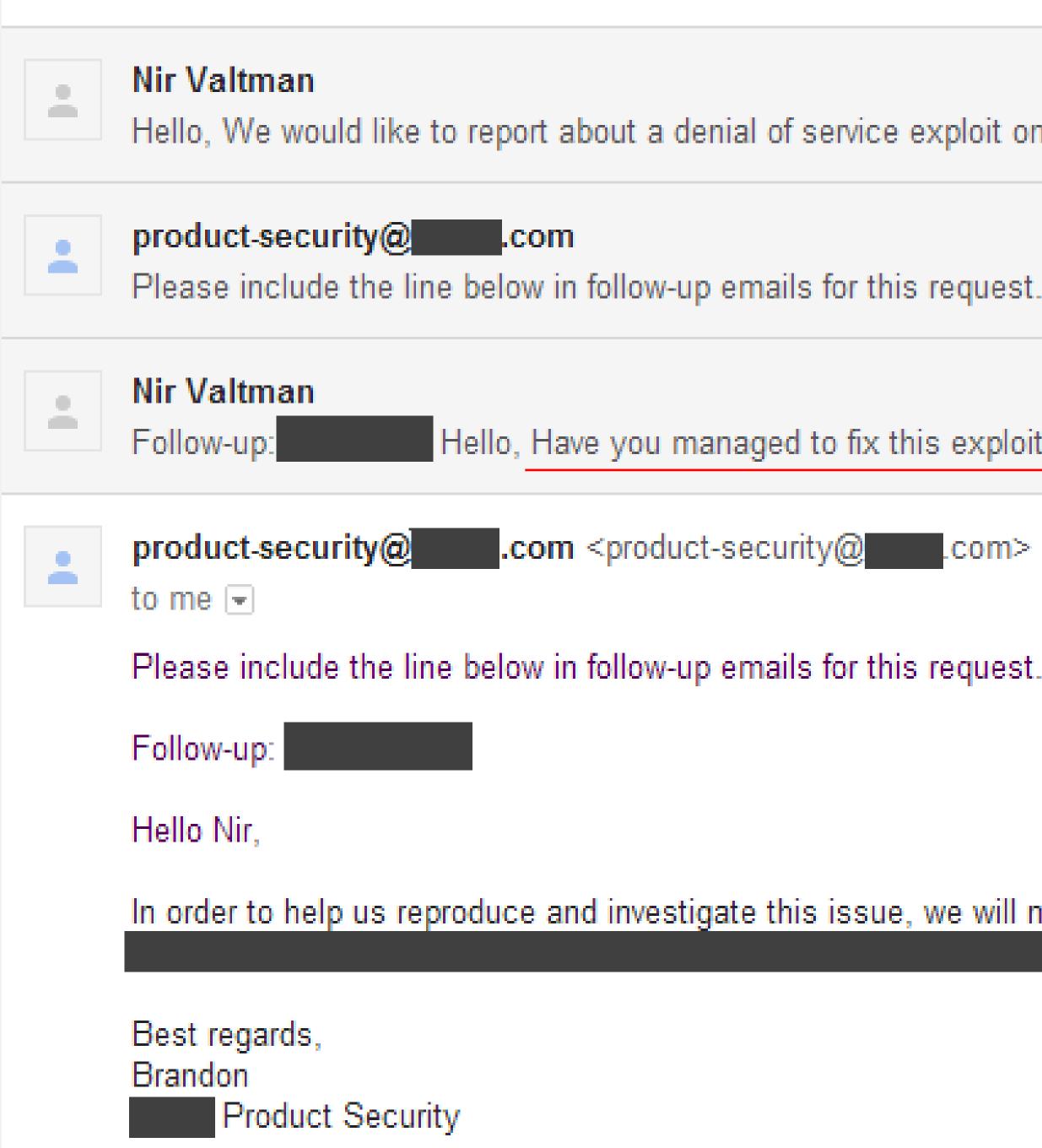




# Frustration

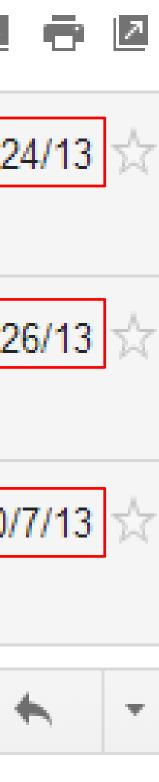
#### Denial of service

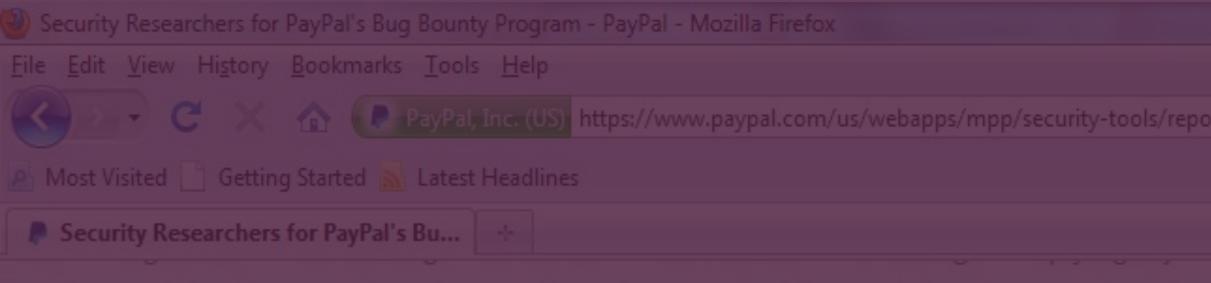
Publications X



| on mobile ap     | 9/24        |
|------------------|-------------|
| t. Follow-up     | 9/20        |
|                  | 10/         |
| oit? Thanks, Nir | 10/9/13 ☆ 📢 |
| t.               |             |
|                  |             |

In order to help us reproduce and investigate this issue, we will need some additional details. Can you please send us a the





#### **Changes to Program Terms**

The Bug Bounty Program is subject to change or cancellation by PayPal at any time, without notice. As such, PayPal may amend these Program Terms at any time by pos revised version on our website. By continuing to participate in the Bug Bounty Program after PayPal posts any such changes, you accept the Program Terms, as modified.

| Changes to Program Terms                                    |
|---|
| The Bug Bounty Program is subject to change                 |
| posting a revised version on our website. By c as modified. |
| What types of bugs are commonly rejected?                   |
| What should I be aware of when testing?                     |
|   |

**Magento Bug Bounty Scope Information** 

Submit a Run to PayPal or Mananto

| rting-security-issues |  |  |  |
|-----------------------|--|--|--|
|                       |  |  |  |
|                       |  |  |  |
|                       |  |  |  |

#### or cancellation by PayPal at any time, without notice. continuing to participate in the Bug Bounty Program af



# Case Study

Name: Oren Hafif Source: www.orenh.com

Actual Risk Exposing all hosted email addresses in Google



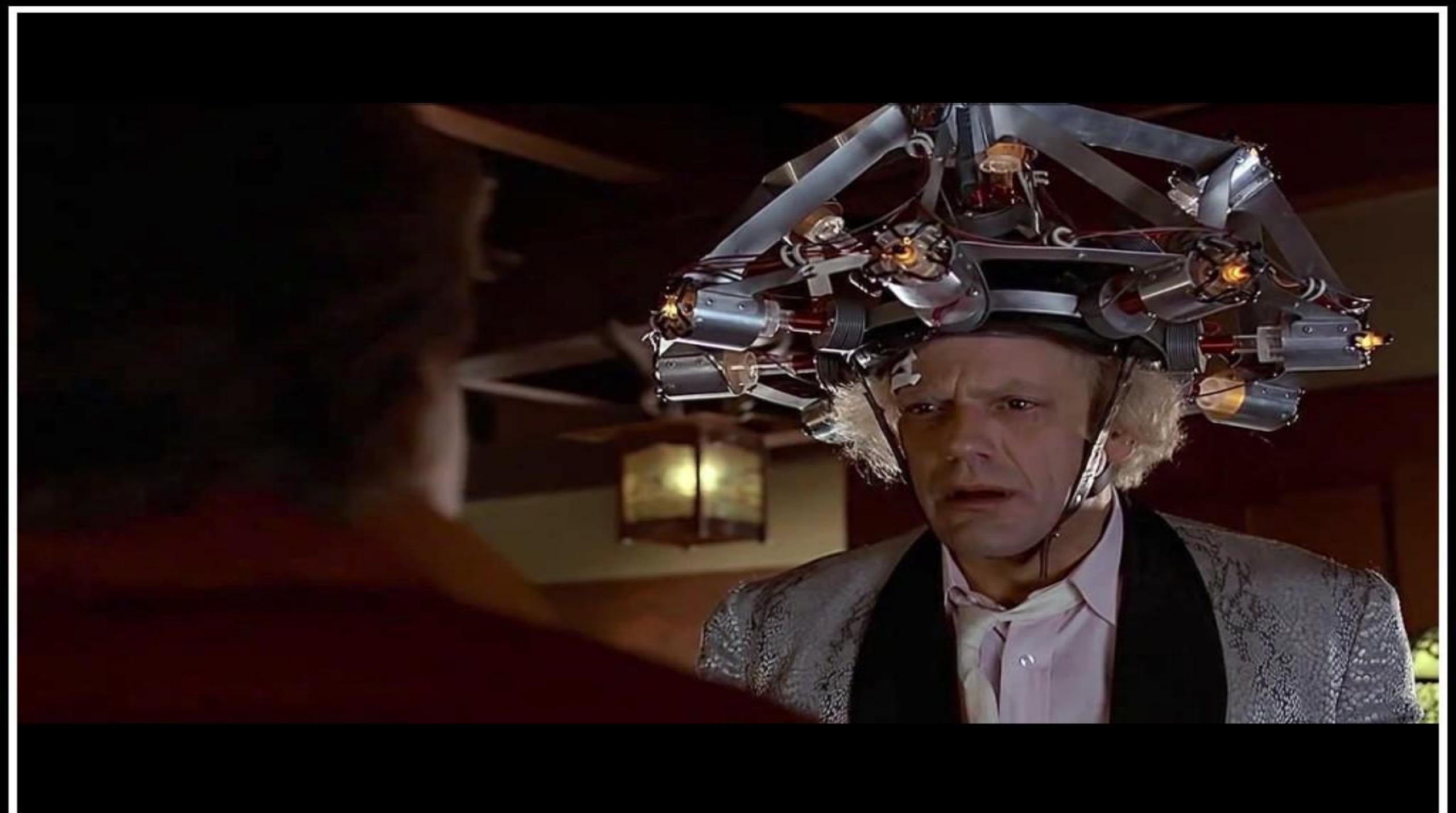
### 1st Response 2<sup>nd</sup> Response

### **DENIED!** \$500 Reward

# FASHONTIMES WIRED

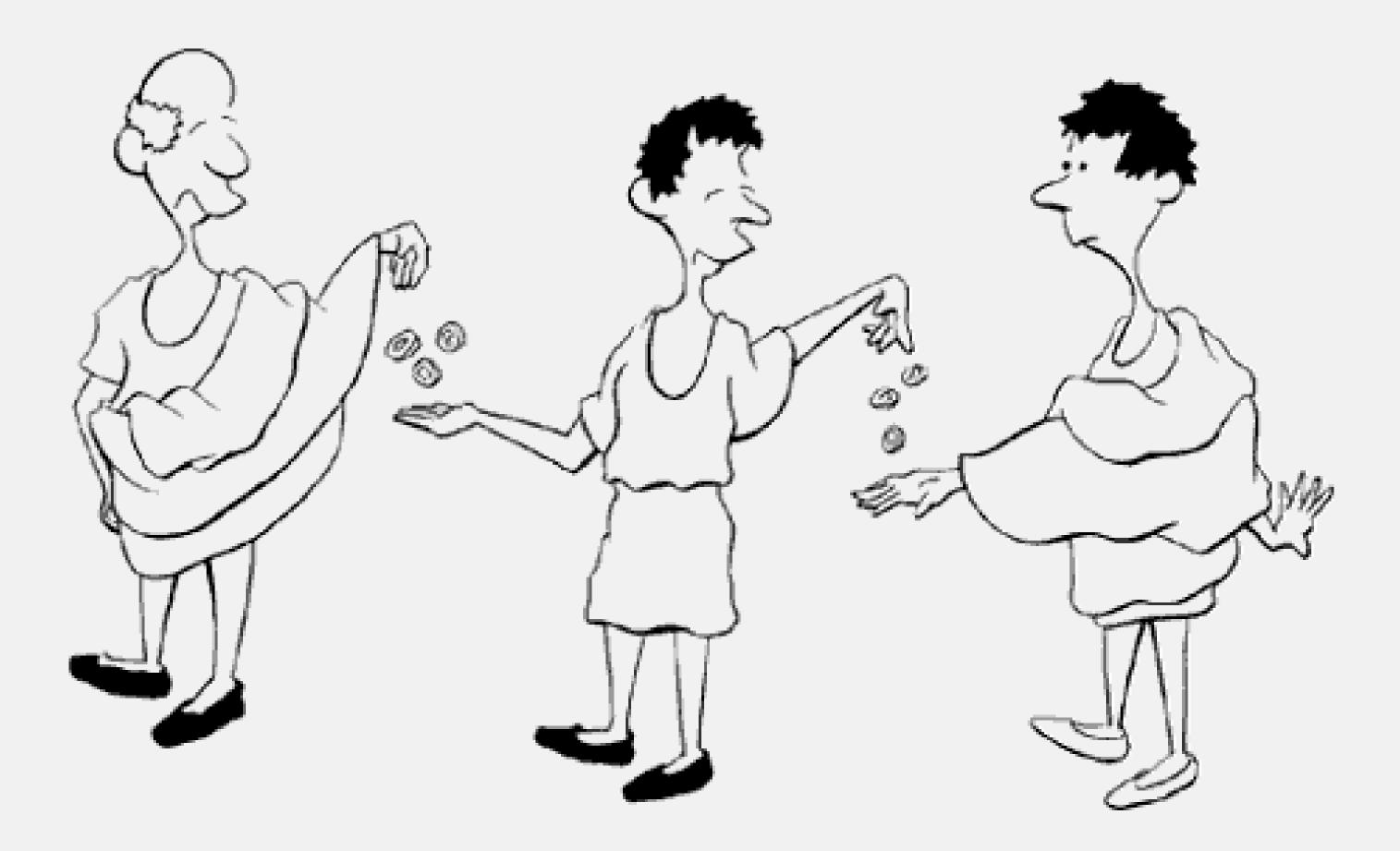
PogoWasRight.org —— Privacy News from Around the World

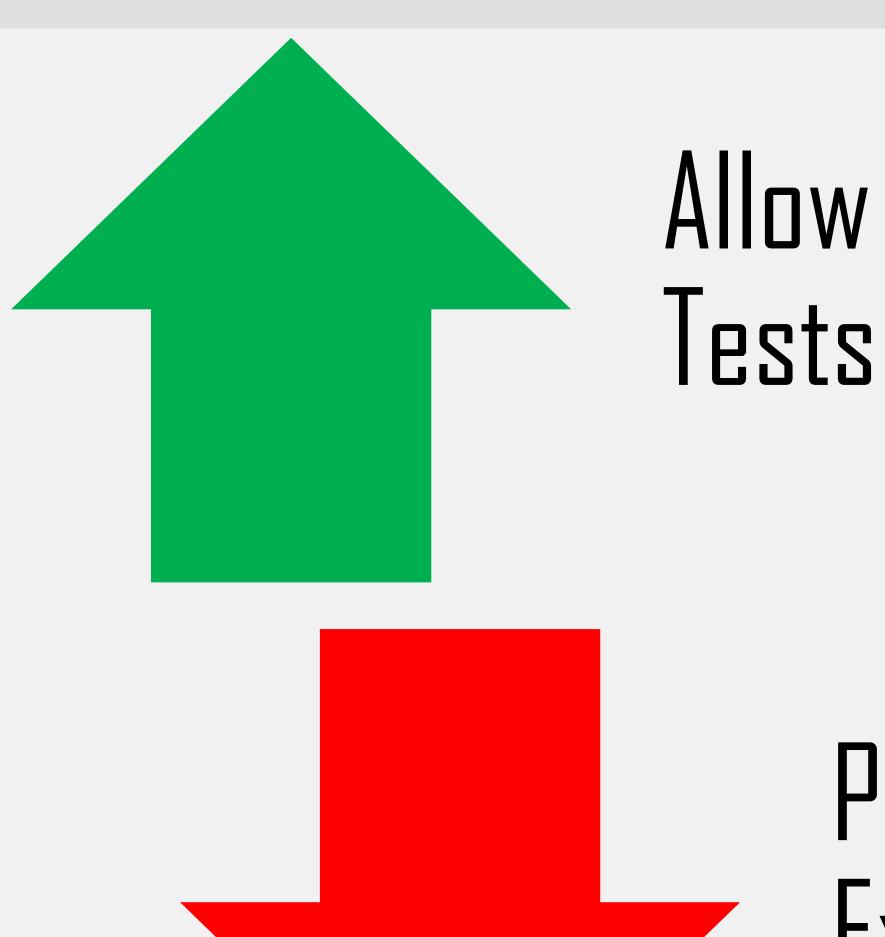
#### **INTERNATIONAL BUSINESS TIMES**





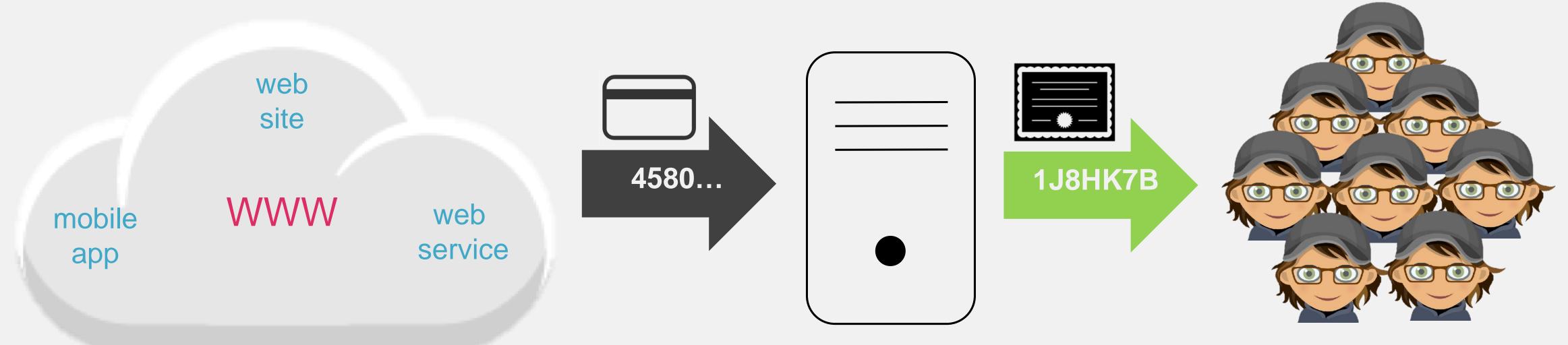
### Next Generation Bug Bounty Programs





### Allow Penetration Tests

### Prevent Malicious Exploitation



Congratulations!

You found sensitive data on the tested application.

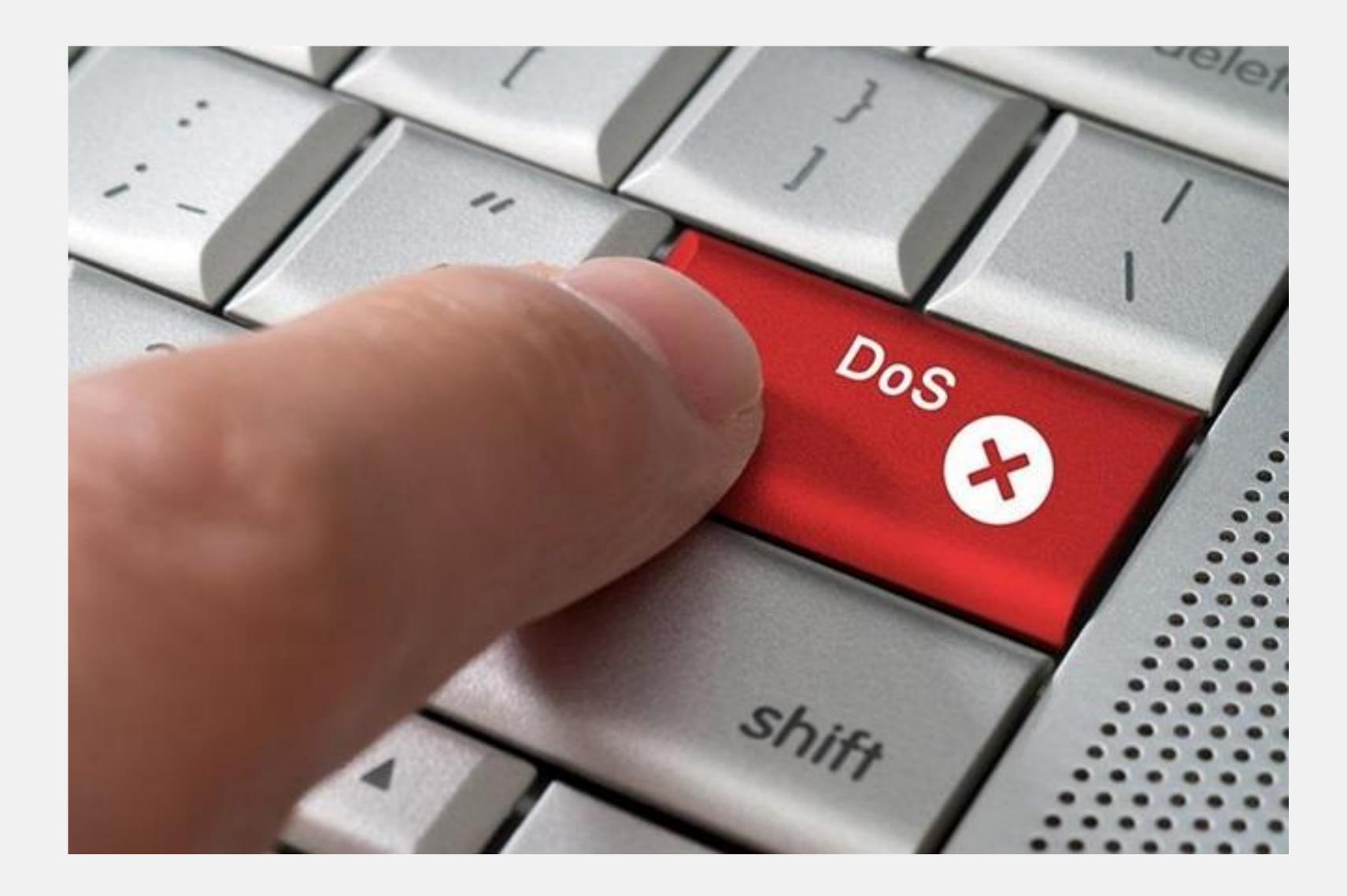
Please copy the following token to the new bug page and fill the required fields.

Your token is [Token]

If you have any questions or comments, please let us know using the contact us form.

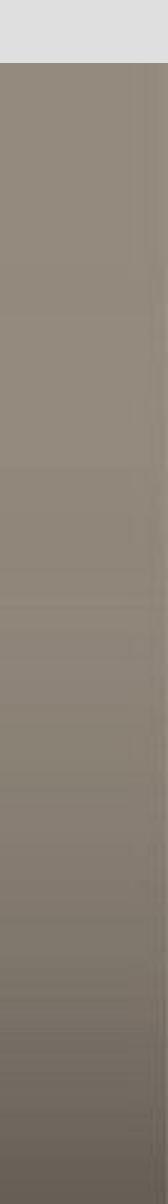
Have a nice bug bounty hunting, Crowdome team



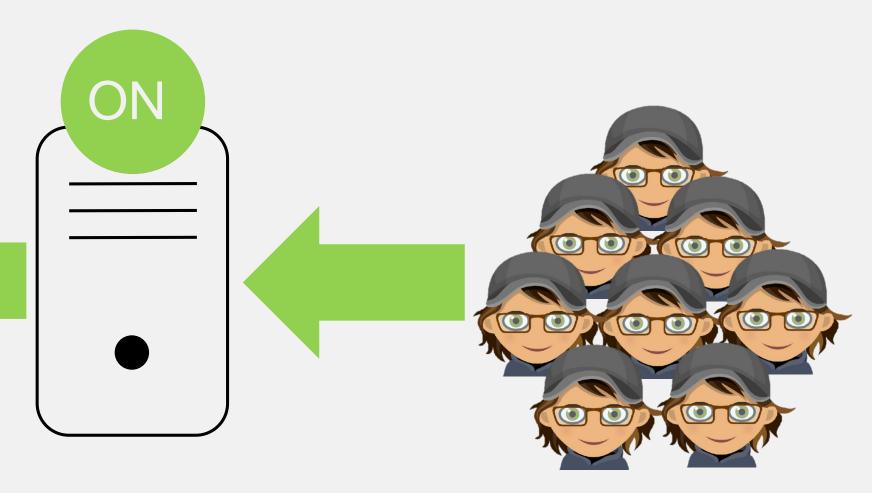














#### HOW TO IDENTIFY BLACK HAT HACKERS?

### DROP myTable;# DR/\*\*/OP/\*bypassing filter\*/myTable;# SELECT LOAD\_FILE(0x633A5C626F6F742E696E69)

MALICIOUS SQL INJECTION

### ' or 'a'<'b';# **SELECT 0x457578**

LEGITIMATE SQL INJECTION





#### HOW TO BAN THEM?



#### Business Analysts

#### ATTRACT NEW TESTER TYPES





#### SME

#### Quality Assurance

### A LONG JOURNEY IN FRONT OF US



Nir Valtman, CISSP Blog: www.valtman.org Twitter: @ValtmaNir

#### Thank You