

**RECENT  
NEWS**

***“HACKER'S WORK  
IS A FORM OF  
PARTICIPATION  
IN THE WORK OF  
GOD IN CREATION.”***

***-BY,***

***FATHER ANTONIO SAPADARO (VATICAN)***

# ***DO YOU?***

- 
- A black bicycle with red accents is parked against a green hedge. The bicycle has a black frame, red handlebars, red fenders, and red wheels. It is parked on a paved surface next to a green hedge. The background shows some trees and a fence.
- + O.S. USER ACCOUNTS***
  - + BROWSE WEB***
  - + USE WEB SERVICES***
  - + USE COMPUTER NETWORKS ANY WAY***
  - + HAVE ANY FORM OF BINARY DATA***

***YOU ARE NOT SECURE IF YOU DONT...***

***+ USE STRONG PASSWORDS 'N KEEP THEM SAFE***

***+ BROWSE WEB IN SAFE BROWSERS***

***+ USE SSL-IFIED WEB SERVICES***

***+ USE PATCHED NAME SERVERS***

***+ KEEP YOUR DATA PROTECTED***







***INSECURITY***



***IN***

***SECURITY***

Security is just maintained... it's never achieved.

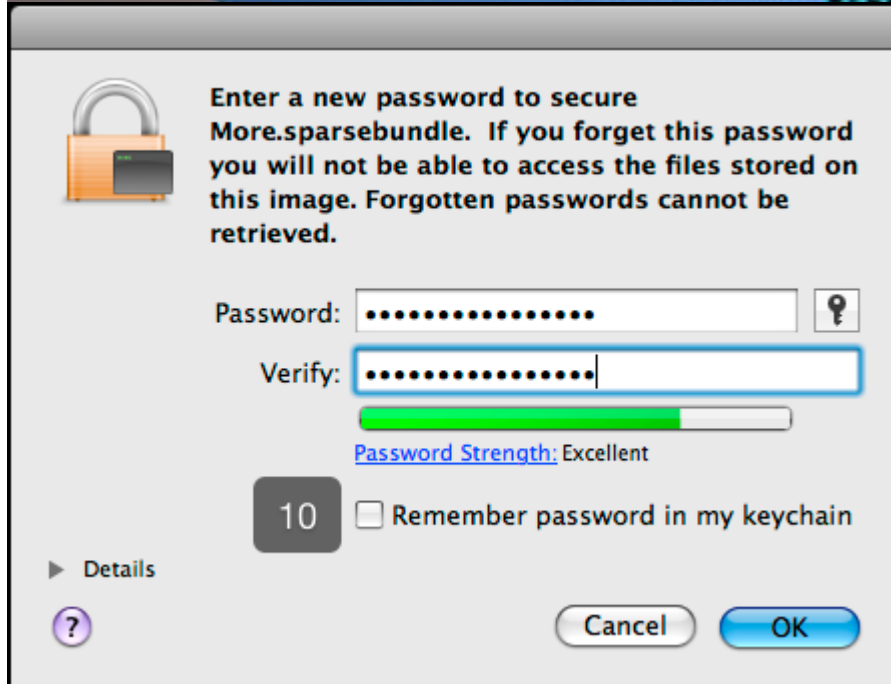
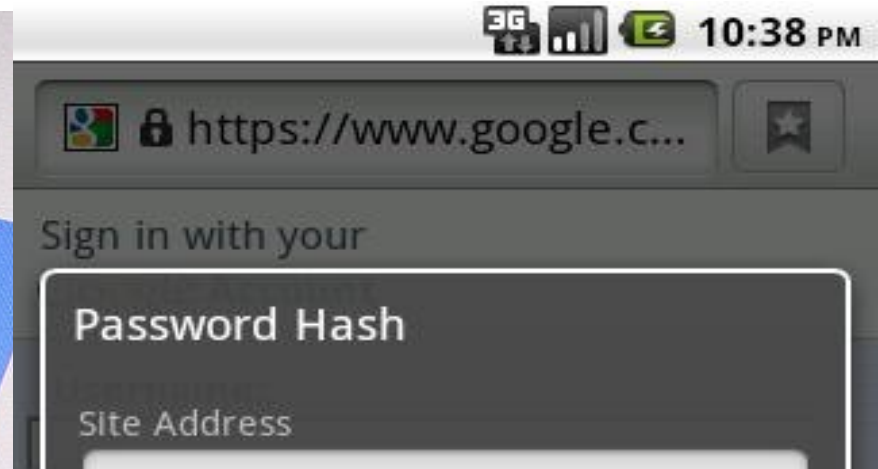


# ***FIRST SOME HISTORY FROM VERSION 1***



**EMERGENCY<sup>®</sup>**  
**first response**

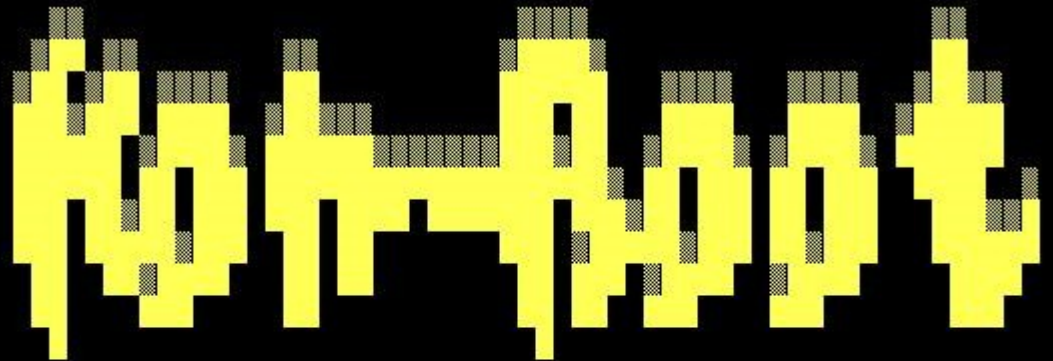
# O.S. USER ACCOUNTS



# ***BYPASS ACCOUNT PROTECTION***

```
C:\run>john-386.exe 127.0.0.1
Loaded 2 password hashes with
PASSWORD (Administrat
D123 (Administrat
guesses: 2 time: 0:00:00:02
C:\run>_
```

# HASHCAT



by Piotr Bania  
[www.kryptoslogic.com](http://www.kryptoslogic.com)

```
» Kon-Boot ver. 1.0 - ready! h4x0Rin uH?
» This software is freeware for not commercial usage!
» Checking SMAP BIOS entries ...
» BIOS seems to be OK.
» Booting up! - EOT █
```



# ***VACCINATED BROWSERS***



**Always use protection.**

# ***BROWSING <UNKNOWN> WWW***

## **[+] SMBEnum**

|=+ using 'file ://', 'res ://', 'resource ://'

Say, if it gains success accessing

'file:///c:/oracle/ora81/bin/orclcontainer.bmp'

## **[+] ResTiming Attack**

|=+ using 'res ://', 'resource ://' to execute

So, gains timing for different binaries &

Identify which exists

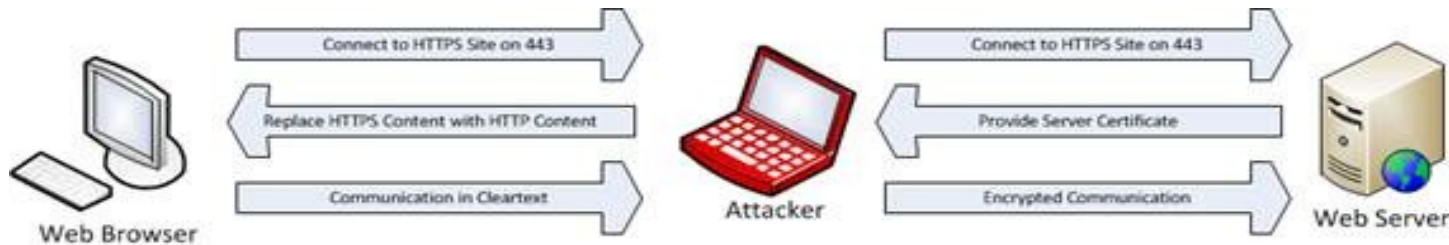


***PROTECTOR OF ALL***



**SECURE SSL**

# DEFEATING SSL



SSL Certificates

GeoTrust

VeriSign

[] “Signing Authority” field in Digital Certificates

[] Tricking SSL Libraries with NULL Mod Certificates

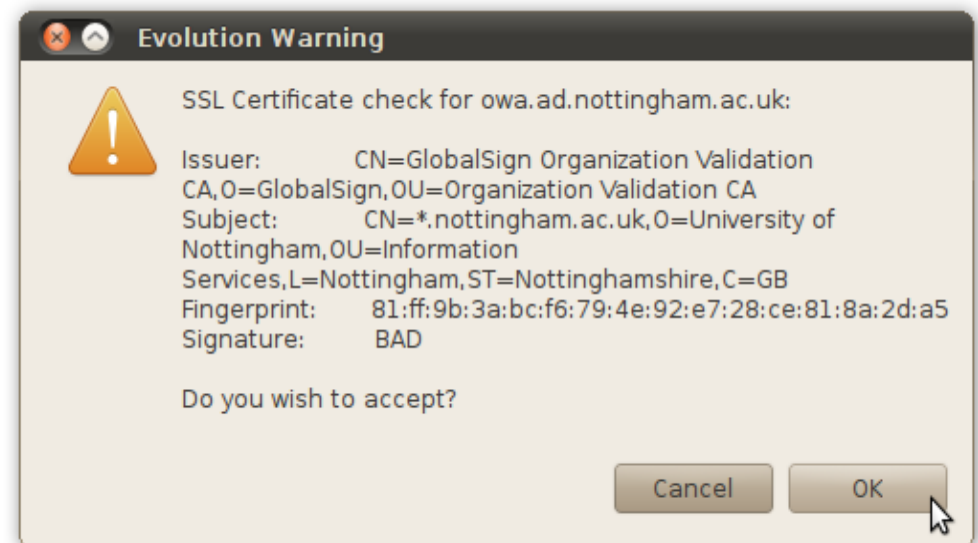
[] Online Certificate Revocation Policy {ResponseStatus=3, ResponseBytes="" || SSL}

## A First Cut Recipe: sslstrip



### The Result:

- The server never knows the difference. Everything looks secure on their end.
- The client doesn't display any of the disastrous warnings that we want to avoid.
- We see all the traffic.





# ***BASIS OF ALL NETWORKS***



# ***DNSSEC AINT ALL GOOD***

*[] Provides 'Origin Auth', 'Integrity Protection', PKI & even Auth. Denial of Data Existence*

*[] Still No 'Confidentiality' {basics of security}  
AND CPU-flooding is possible due to exhaustive cryptography*

*[] Variation of DNS Rebinding Attack  
presented at BH2010 still affected network*



# ***DATA FORENSICS***

## Lost your data?



TestDisk Data Recovery Utility



# ***DATA FORENSIC HACKERS***

*[] Data Carving (Imaging RAM, Dig O.S.)*

*[] Dig Information from Files*

*[] Timestomp, Zipbomb*

*-----*

*[] Mining Network Traffic for Files/Sessions*

***NOW SOME MYSTERY FOR VERSION 2***





# ***HASH-CRACK ON STEROIDS***

## Download latest version

Name	Version	md5sum	Date
oclHashcat	<u>v0.25</u>	7f8cc3e62b15345aa4c3cf6b6ee66374	2011.01.26

## GPU Driver and SDK Requirements:

- NV users require at least ForceWare v260.x
- ATI users require at least Catalyst v10.12 + ATI Stream SDK v2.3 or Catalyst v10.12 APP version

## Features

- **Free**
- **Multi-GPU (up to 16 gpus)**
- **Multi-Hash (up to 24 million hashes)**
- **Multi-OS (Linux & Windows native binaries)**
- **Multi-Platform (OpenCL & CUDA support)**
- **Multi-Algo (MD4, MD5, SHA1, DCC, NTLM, MySQL, ...)**
- **Fastest multihash MD5 cracker on NVidia cards**
- **Fastest multihash MD5 cracker on ATI 5xxx cards**
- **Supports wordlists (not limited to Brute-Force / Mask-Attack)**
- **Combines Dictionary-Attack with Mask-Attack to launch a Hybrid-Attack**
- Runs very cautious, you can still watch movies or play games while cracking
- Supports pause / resume
- The first and only GPU-based Fingerprint-Attack engine
- Includes hashcats entire rule engine to modify wordlists on start



hashcat  
advanced  
password  
recovery



# OpenCL

<http://hashcat.net/oclhashcat/>

# 'RSA' THEFT & THREAT

**SOCIAL  
ENGINEERING**

The clever manipulation  
of the natural human  
tendency to trust.



**RSA**<sup>®</sup>  
The Security Division of EMC



**NETWITNESS**

# COMODO PWN3D CERTS

```
1. Hello
2.
3. I'm writing this to the world, so you'll know more about me..
4.
5. At first I want to give some points, so you'll be sure I'm the hacker:
6.
7. I hacked Comodo from InstantSSL.it, their CEO's e-mail address mfpenco@mfpenco.com
8. Their Comodo username/password was: user: gtadmin password: [trimmed]
9. Their DB name was: globaltrust and instantsslcms
```

```
26. a) I'm not a group of hacker, I'm single hacker with experience of 1000 hackers, I'm single programmer
    with
27.
28. experience of 1000 programmers, I'm single planner/project manager with experience of 1000 project
29.
30. managers, so you are right, it's managed by a group of hackers, but it was only I with experience of
    1000
31.
32. hackers.
```

[http://www.wired.com/threatlevel/2011/03/comodo\\_hack/](http://www.wired.com/threatlevel/2011/03/comodo_hack/)

**COMODO**  
Creating Trust Online®



**JANAM  
FADAYE  
RAHBAR**





# ***OPENBSD 'N BACKDOORS***

*[]10yrs back FBI consulted NETSEC, CTO Perry*

*[]Lotz of code commit by NETSEC developers*

*[]Few daz back, Perry's NDA expired with FBI*

*[]Alleged backdoors in IPSEC Stack*

*[]FreeBSD inherited lotz code from OpenBSD*

# ***SAMSUNG KEY-LOG CONFLICT***



**<http://arstechnica.com/hardware/news/2011/03/samsung-laptop-keylogger-almost-certainly-a-false-positive.ars>**

# ***WHO IS THIS GUY?***

Family Named: AbhishekKr

Friends Call: ABK

g33k Handle: aBionic { @Twitter, @LinkedIn, @Facebook }

Itweet : <http://www.twitter.com/aBionic>

iBlog: <http://abhishekkkr.wordpress.com>

Security Enthusiast; Working for ThoughtWorks Inc.; OpenSource Lover

## ***MY CRIME IS THAT OF CUROSITY***

## ***ANY QUESTIONS?***