

Social Engineering

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A close-up portrait of a man with light blue eyes and a light beard, looking slightly to the left. The image is semi-transparent, allowing text to be overlaid.

Walter Belgers

- Partner and Principal Security Consultant at Madison Gurkha
- Close to 20 years of professional experience in IT security



- Madison Gurkha supports organisations with high quality services to efficiently identify, decrease and prevent IT security risks
- With a focus on *technical* security aspects





Social Engineering

- Persuading people into giving you (access to) confidential information
- From the social sciences, manipulation



LITTLE MALE BRAIN

With this I shall manipulate it

www.jacanaent.com



Credit Card Protection



Has your credit card number been **STOLEN** on the Internet?

card number

expires

Check It

EXIT 107

25

Rd

WARNING

Narcotics Check Point Ahead



1/2 MILE BE PREPARED TO STOP



DRUG DOG IN USE

1/2 MILLA HAY CHEQEO DE DROGAS



<http://www.youtube.com/watch?v=0Uldl8khMkw>



<http://derrenbrown.co.uk/>

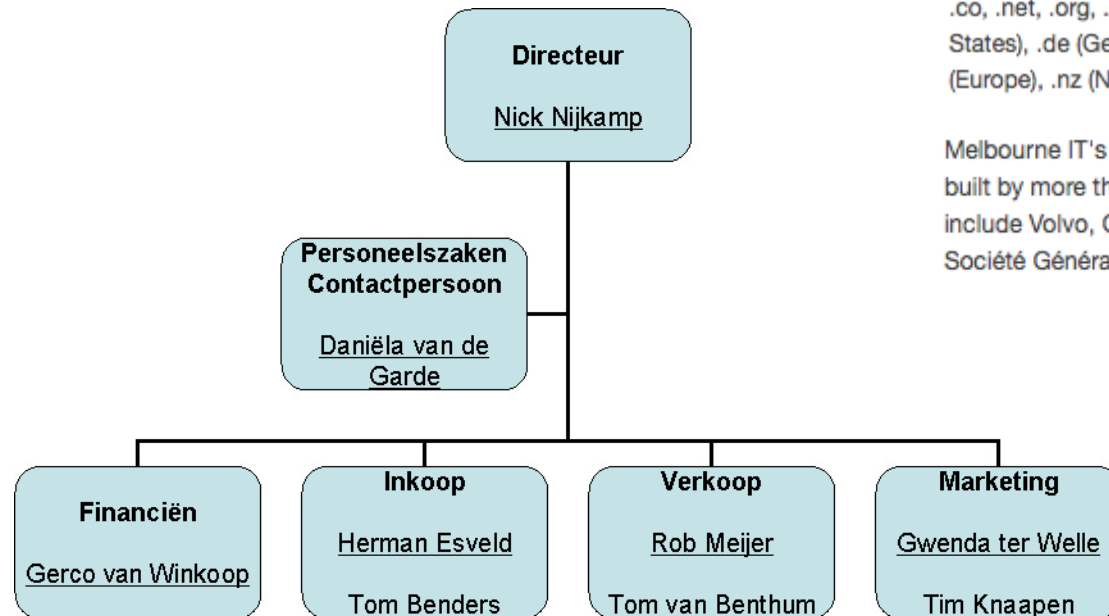


<http://video.google.com/videoplay?docid=5464925144369700635>

Social Engineering

- Become an *insider*!
- Preparation, collecting information
- Talking the talk (learn the jargon)





Melbourne IT's domain name registration services provide a full range of ICANN names (.com, .co, .net, .org, .biz, .info, .name, .eu) and ccTLDs (for over 100 countries), including .us (United States), .de (Germany), .au (Australia), .fr (France), .jp (Japan), .es (Spain), .ca (Canada), .eu (Europe), .nz (New Zealand), .in (India), .uk (United Kingdom).

Melbourne IT's culture of integrity, innovation, collaboration and customer centricity has been built by more than 690 employees spread across 18 offices in 10 countries. Our customers include Volvo, GlaxoSmithKline, LEGO, Queensland Department of Education and Training, Société Générale, Aurecon Asia-Pacific, Coca-Cola Amatil and Twitter. For more information,

Onze vestigingen

Kies een van de vestigingen op onderstaande kaart:

Of kies uit onderstaande lijst met adresgegevens:

Credion Agrarisch Team (Oost)
Slangenburg 11
7608 RS Almelo
T: (0546) 49 19 26
E: salland@credion.nl

Credion Alkmaar
Robijnstraat 10A
1812 RB Alkmaar
T: (072) 820 02 04
E: alkmaar@credion.nl

Credion Amsterdam Oost Noord
Zuideinde 30
1121 CL Landsmeer
T: (020) 482 03 08
E: mfvanden@credion.nl

Credion Amsterdam-Amstelland
Amstedijk Noord 40
1184 TD Amstelveen
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E: amstel@credion.nl

Credion Arnhem
Stationsweg 46
6861 EJ Oosterbeek
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E: arnhem@credion.nl

Credion Assen
Hoofdvaartsweg 109
9405 VC Assen
T: 0592 - 820 002
E: assen@credion.nl

People | Istituto di Informatica e Telematica

<http://www.iit.cnr.it/en/institute/people>

Istituto di Informatica e Telematica Consiglio Nazionale delle Ricerche

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 - People**
 - Collaborations
 - Projects
- Research Fields
- Scientific Results
- Services
- Education & Job
- Events
- Press & Communication
- Easy Science

Events

« May 2012 »

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

PEC

Posta Elettronica Certificata

People

List of all the people of the Institute. Click on names to get full description of the selected person.

A-Z A B C D E F G H I K L M N O P R S T V W A-Z

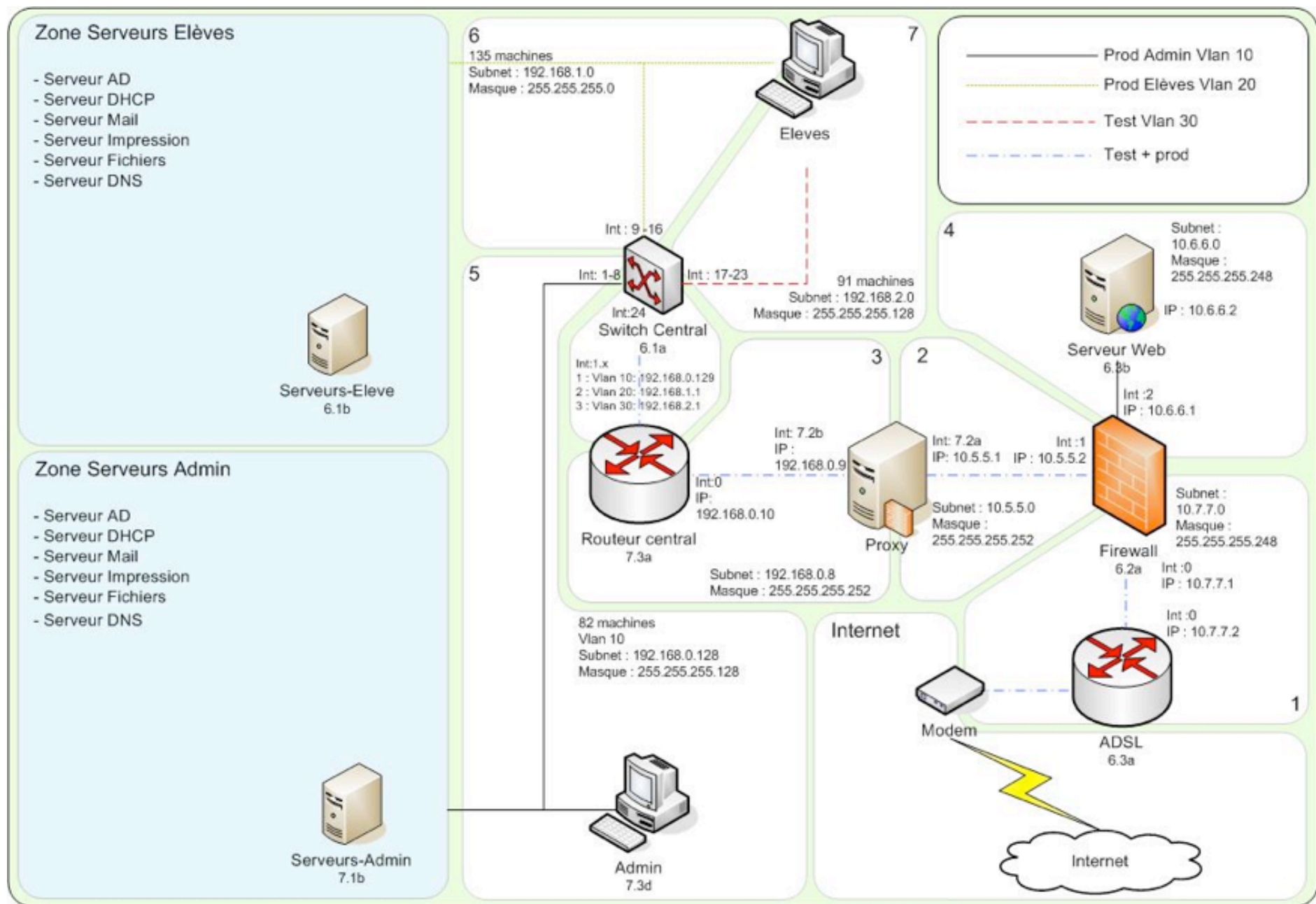
	Email	Phone
Abba Laura	laura.abba@iit.cnr.it	+39 050 315 2633
Abrate Matteo	matteo.abrate@iit.cnr.it	+39 050 315 2083
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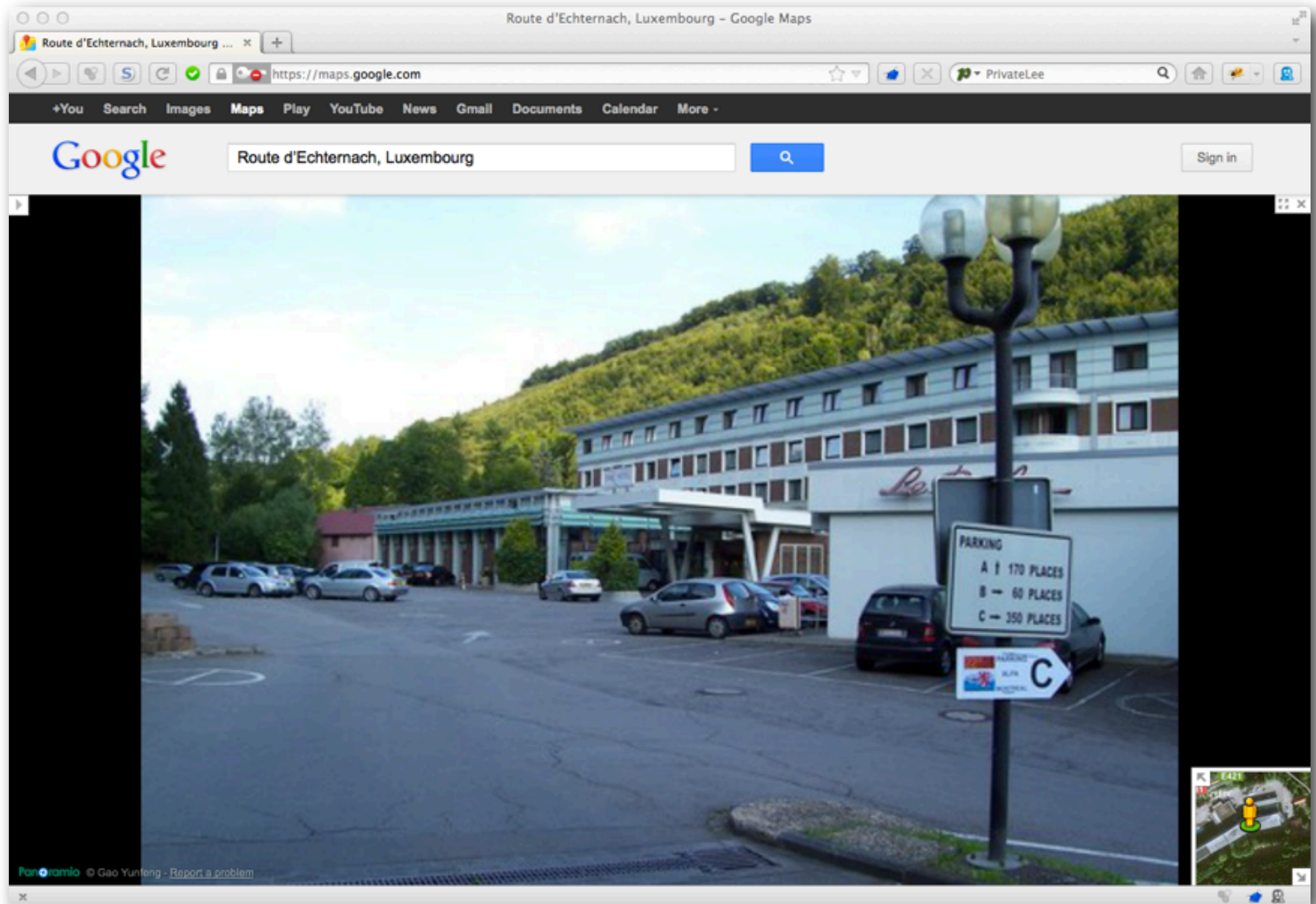
Highlights

- ESORICS 2012 - European Symposium on Research in Computer Security
- SustainIT 2012 - The Second IFIP Conference on Sustainable Internet and ICT for Sustainability
- In ricordo di Pasquale...
- In ricordo di Luca...
- Degree prize "Franco Denoth" - II edition - 2011

Tag Cloud

comunicazione domini .it
Focus .it Future
Internet helpdesk
Internet
Governance
Registro .it
relazioni esterne media e comunicazione Segreteria

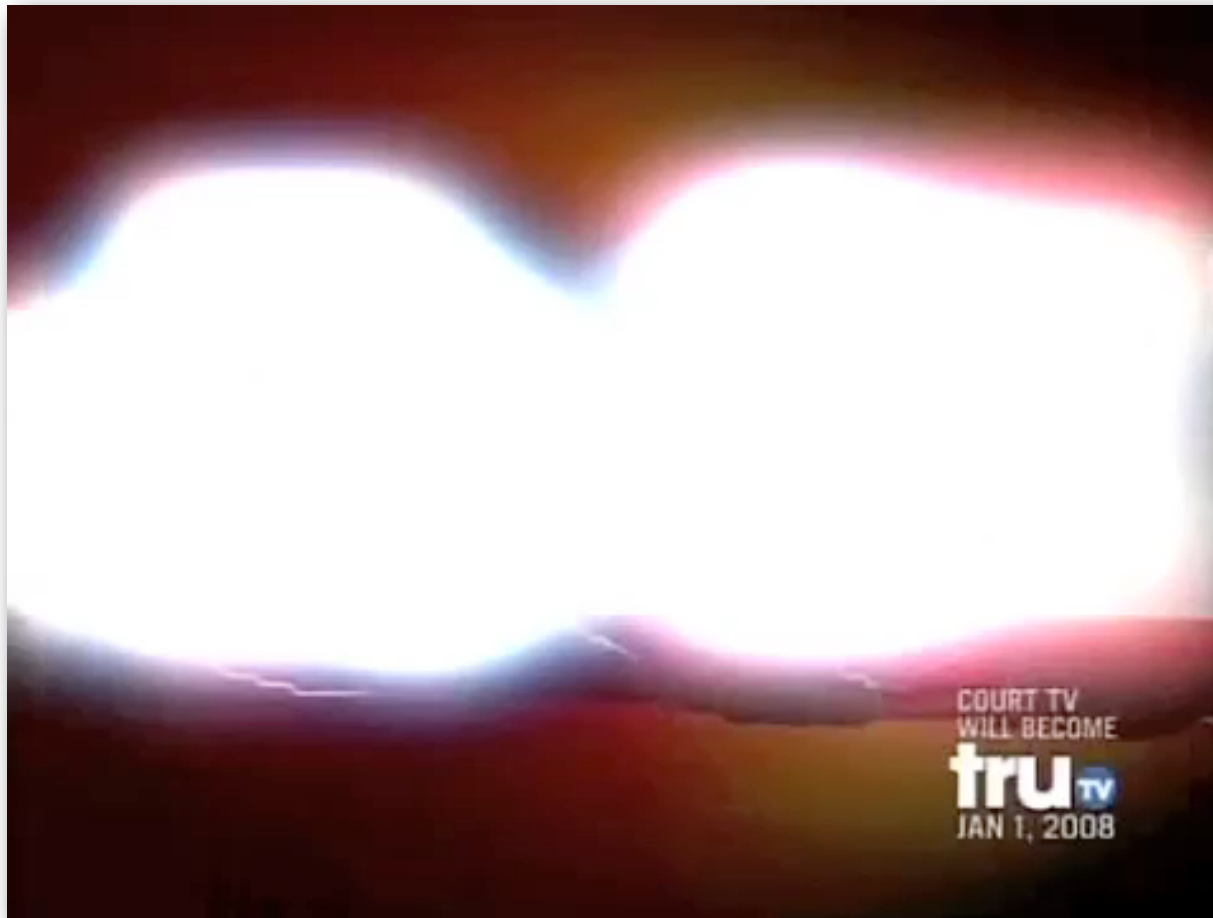




DISCOVERY



Sometimes, the greatest treasures
are found beneath piles of trash.



<http://www.trutv.com/>

Classic examples

- I lost my password and my boss wants me to finish this today, could you please help me?



- Hi, this is the system administrator, we have a technical problem and need you to change your password into “monday”

*"If everything were on the line in a negotiation,
I can't think of anyone I'd rather have advising me than
Bob Cialdini."*

—TOM PETERS, The Tom Peters Group

FIFTH EDITION

INFLUENCE

SCIENCE AND PRACTICE

OVER
2
MILLION
COPIES
SOLD!

ROBERT B. CIALDINI

Social proof



Scarcity



ULTRA RARE VOX BULLDOG MADE FOR ONLY ONE YEAR !!!!!

Item condition: --

Time left: 24d 06h (Aug 19, 2011 13:23:58 PDT)

Price: **US \$1,500.00**

[Buy It Now](#)

or

Best Offer:

[Make Offer](#)

[Add to Watch list](#)

Shipping: **\$49.00** Standard Shipping | [See all details](#)

Delivery: Estimated between **Fri. Jul. 29** and **Thu. Aug. 4**

Returns: No Returns Accepted



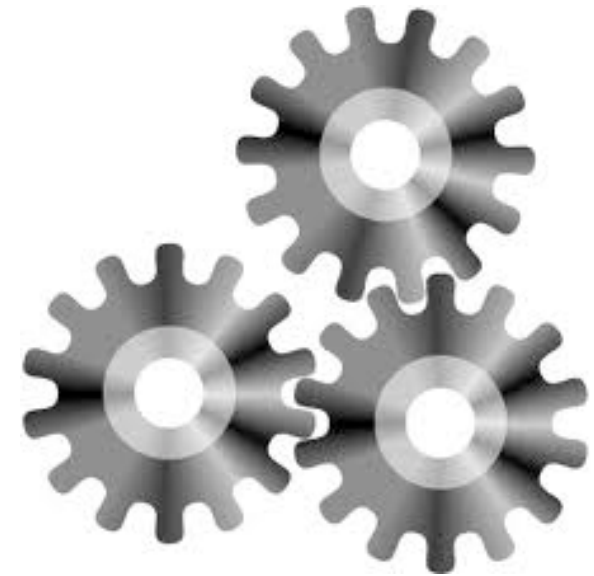
eBay Buyer Protection

Covers your purchase price plus original shipping.
[Learn more](#)

**LIQUIDATION
SALE**

Shortcuts

- “Judgmental Heuristics”
- Automated responses
- It is expensive, therefore, it’s good
- He is an expert, therefore, he is right



A man with short brown hair, wearing a light-colored plaid shirt, is sitting at a desk in an office. He is looking over his shoulder towards the camera with a serious expression. In front of him is a laptop displaying a terminal window with white text on a black background. To his left is a large CRT monitor. The background shows a window with horizontal blinds. A blue diamond logo with the number '2' is in the top right corner.

WALTER BELGERS
ICT-beveiliging Madison Gurkha



**The Dutch Railway is taking action to prevent
skimming**

www.netwerk.tv

www.madison-gurkha.com - info@madison-gurkha.com

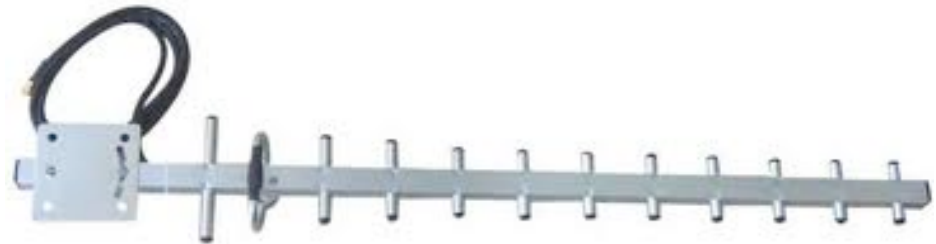






Authority

- Clothing and/or accessories
- Sly sincerity



Liking

- People tend to help people they like better
- You like people that:
 - Are physically attractive
 - Make (fake) compliments
 - Are similar to them



“Have I ever told you what a great attitude you have about all the extra work I’m about to give you?”

Similarity

- Clothing
- (Body) language
- Interests
- Even name similarity



Picture: Hergé

Independent.co.uk

Thief woos bank staff with chocolates - then steals diamonds worth £14m

By Stephen Castle in Brussels
Sunday, 18 March 2007

A thief has evaded one of the world's most expensive hi-tech security systems, and made off with €21m (£14.5m) worth of diamonds - thanks to a secret weapon rarely used on bank staff: personal charm.

In what may be the biggest robbery committed by one person, the conman burgled safety deposit boxes at an ABN Amro bank in Antwerp's diamond quarter, stealing gems weighing 120,000 carats. Posing as a successful businessman, the thief visited the bank frequently, befriending staff and gradually winning their confidence. He even brought them chocolates, according to one diamond industry official.

Now, embarrassed bank staff in Belgium's second city are wondering how they had been hoodwinked into giving a man with a false Argentine passport access to their vaults.

The prime suspect had been a regular customer at the bank for the past year, giving his name as Carlos Hector Flomenbaum from Argentina. The authorities, who have offered a €2m reward for information leading to an arrest, now know that a passport in that name was stolen in Israel a few years ago. Although not familiar to the local diamond dealers, the conman became one of several trusted traders given an electronic card to access the bank vault. The heist, believed to have been more than a year in the planning, has astounded diamond dealers.

Philip Claes, spokesman for the Diamond High Council in Antwerp, said that the area had been fitted with a security system costing more than €1m. The lesson, he said, was that "despite all the efforts one makes in investing in security, when a human error is made nothing can help".

More than half the world's diamonds are traded in Antwerp's gem district. The maze of streets around the city's central station generates a turnover of £12bn a year. To serve this lucrative trade, banks have to accommodate clients who want to store diamonds overnight but withdraw them during the day. That means that special customers are given access to vaults.

Mr Claes said of the thief: "He used no violence. He used one weapon -and that is his charm - to gain confidence. He bought chocolates for the personnel, he was a nice guy, he charmed them, got the original of keys to make copies and got information on where the diamonds were.

Reciprocation

- I give you something
- You give me something



Picture: BBC



Packaging Image for Reference Only

RECEIVE TWO FREE**
SAMPLE-SIZED PACKETS
7/16 OZ. EA.

Perceptual contrast

- Ask for a lot..
.. then for the little you
actually wanted



www.calvinandhobbes.com

Commitment

- People strive to be *consistent*
- When we make a decision, we stick with it
 - Becoming more convinced it is the right one

Commitment

- Would you do me a favor because I need it?
 - Yes.
 - ...
- WIN!!!**
-
- A diagram with the text 'WIN!!!' in bold. Two arrows originate from this text: one points to the word 'Yes.' in the second bullet point, and the other points to the underlined phrase 'because I need it?' in the first bullet point.

Commitment

- Ask for a little...
- ...then for some more...
- ...and some more...

Tips

- Pretexting
 - “Making up a story”
 - Rule #1: make it a simple story

Physical access

- Examine the neighborhood (entrances, exits)
 - Smoker's ~~exit~~ entrance (tailgating)
 - Parking garage
- When do people come in/have lunch?
- Do people wear id badges? Can you copy them?

Preparation

- Be sure to have a “Get Out Of Jail” card
- Name of the customer
- Your name
- Period
- What you are doing







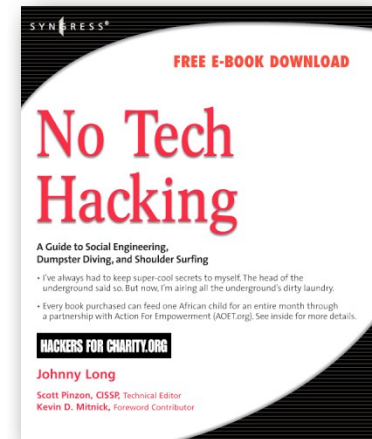
Once inside..

- We have access to confidential information
- More worrisome: installing a base station

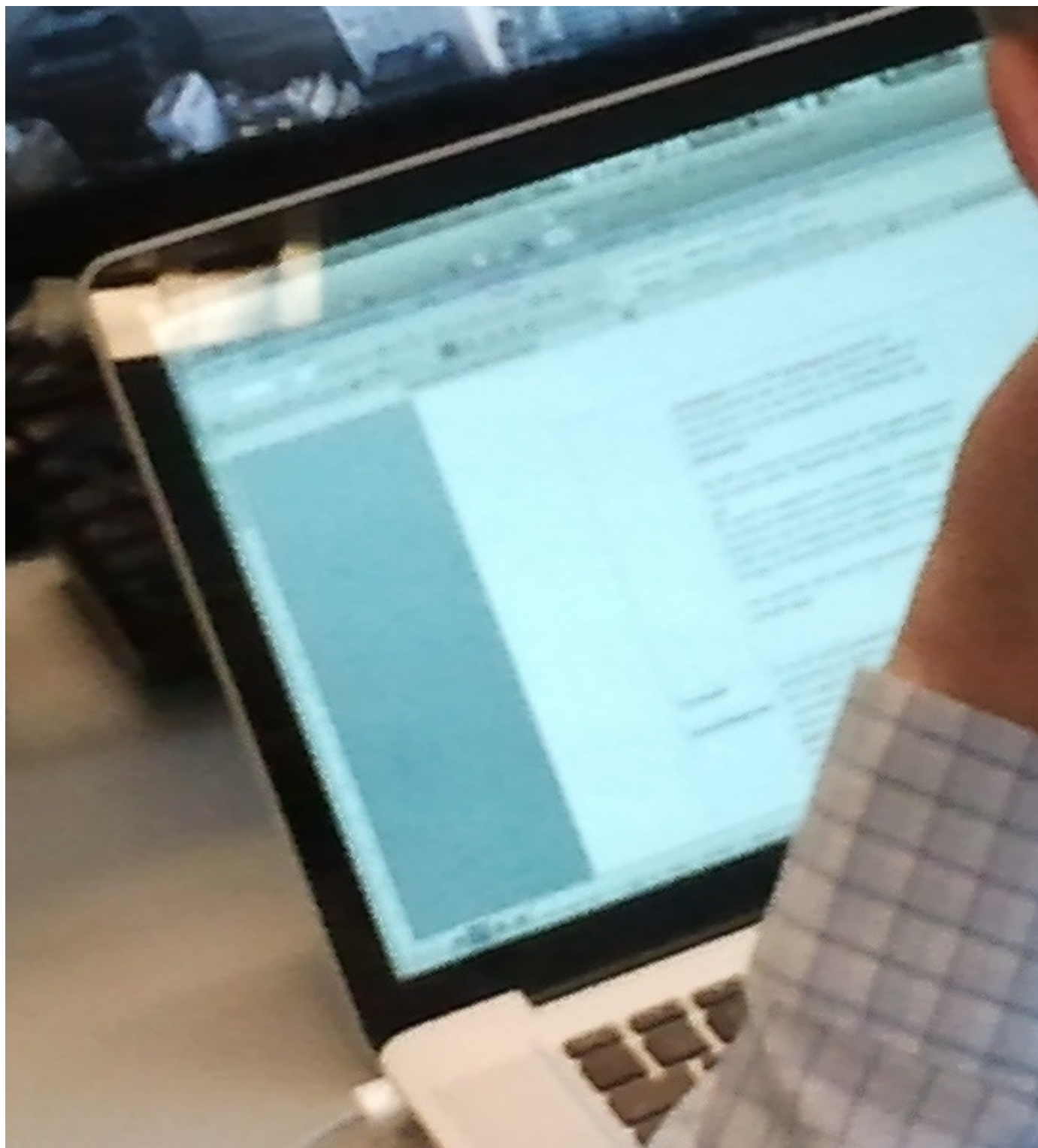


Once inside..

- Not many people dare talk to you directly
 - Fear of being considered impolite
- Make pictures
- Get out (probably easy but might be hard)

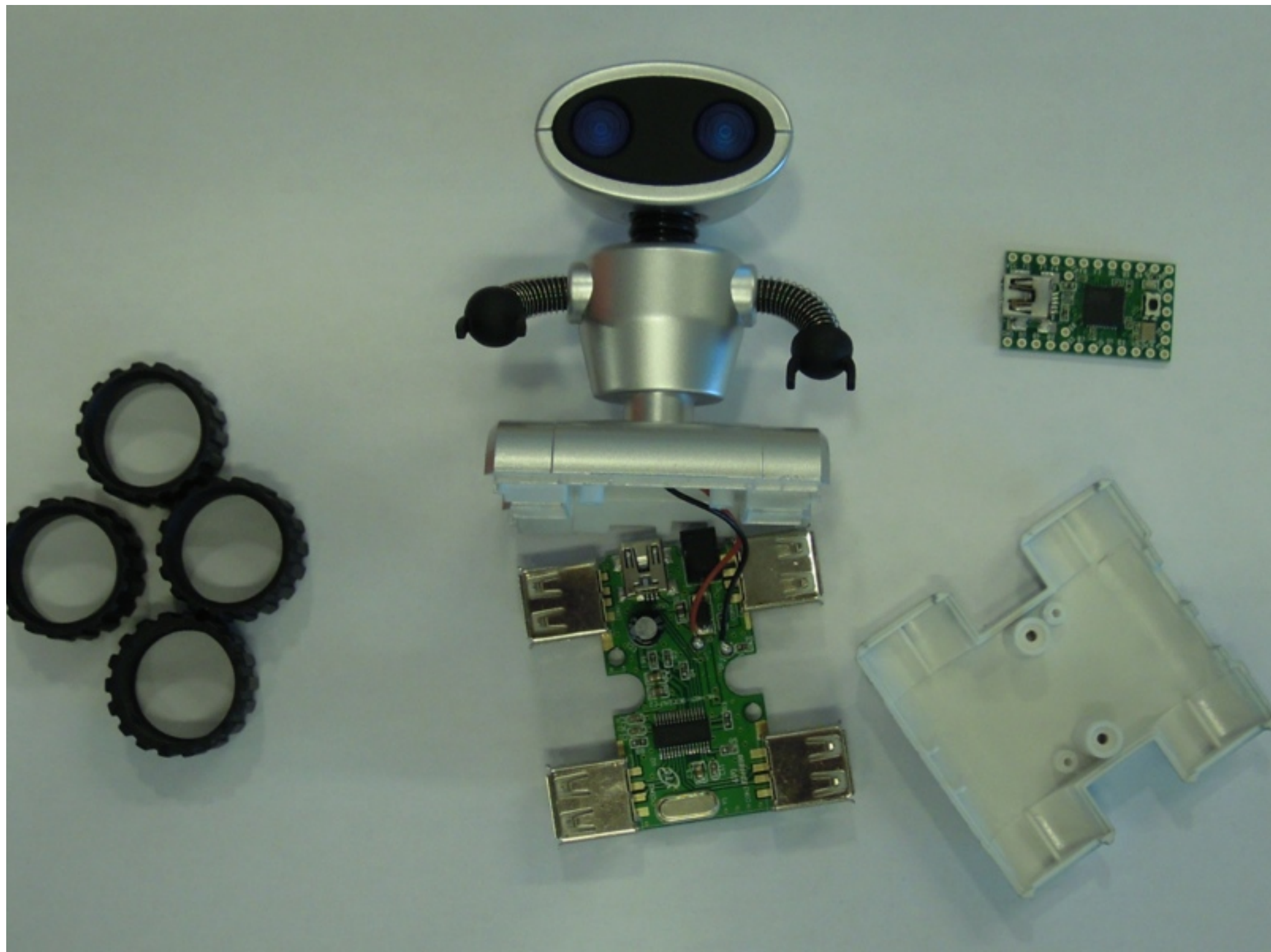


More Examples









SET

Computer Based Social Engineering Tools: Social Engineer Toolkit (SET)

The Social-Engineer Toolkit (SET) is specifically designed to perform advanced attacks against the human element. SET was designed to be released with the <http://www.social-engineer.org> launch and has quickly become a standard tool in a penetration testers arsenal. SET was written by David Kennedy (ReL1K) and with a lot of help from the community it has incorporated attacks never before seen in an exploitation toolset. The attacks built into the toolkit are designed to be targeted and focused attacks against a person or organization used during a penetration test.

Contents

1 Beginning with the Social Engineer Toolkit

2 SET's Menu

3 Attack Vectors

3.1 Spear-Phishing Attack Vector

3.2 Java Applet Attack Vector

3.3 Metasploit Browser Exploit Method

3.4 Credential Harvester Attack Method

3.5 Tabnabbing Attack Method

3.6 Man Left in the Middle Attack Method

3.7 Web Jacking Attack Method

3.8 Multi-Attack Web Vector

3.9 Infectious Media Generator

3.10 Teensy USB HID Attack Vector



Follow Up

- Report with proof (pictures)
 - What has been tested
 - What has been found
 - What can be recommended
- Don't naming individuals



Follow Up

- Results can be used for security awareness training
- Get people involved! They know vulnerabilities best!
- Keep on educating in different ways

**CAUTION
PEDESTRIANS**

**ONLY CROSS
WHEN ROAD
IS CLEAR**

Domestic Health Bank

Top Top COMPUTERS

Top Top
COMPUTERS

Finding the right balance

- Be nice..
but not too nice
- Be paranoid..
but not too paranoid







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