# Report about Stefan Lueders presentation on

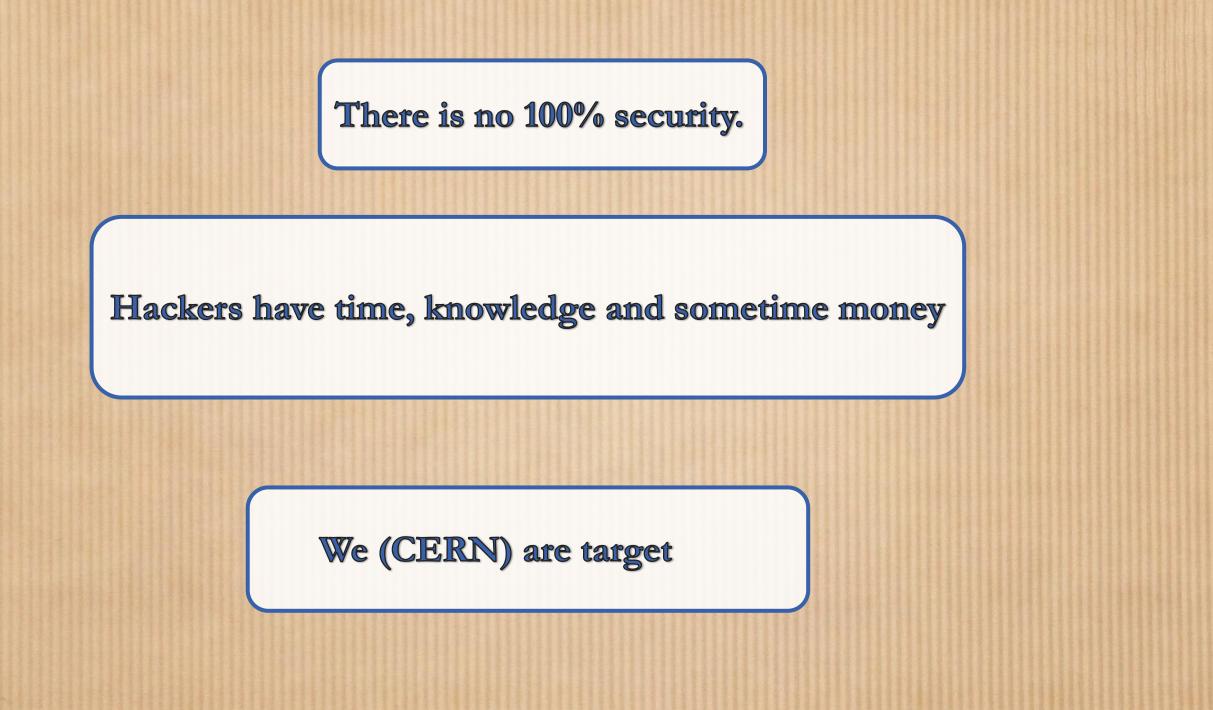
CERN computer security : Abuse Blunder & Fun (CERN 24 Nov 2014)



Slides credits : Stefan Lueders



By Elena Gianolio



	From:     Sent:     Fri 2012/03/23 15:02       To:     Press Office       Cc:     URGENT
PART 1: HACKING THE LARGE HADRON COLLIDER (XSS VULNERABILITY)	Hello, I'm contacting you because I've an important thing to let you know. I've found some vulnerabilities on cern.ch system and I've hacked it.
Published by cammilla c.   Filed under General, News, Spreadin'	I didn't get acess of databases but hacked the website with a XSS attack. Would like know if you're the right person to talk about this and try make a deal to give you all
PART 2: HACKING THE LARGE HADRON COLLIDER (AUTHORIZATION BYPASS) Published by cammilla c. [Filed under General, News	details, all strings I used, the links and all stuff that I did. If you aren't the right person to talk just give me a email to contact to let him know the details please. I'm waiting your reply ASAP,
<pre><sc0rp> nice <mlt> using the exploit on CERN would be win, hac</mlt></sc0rp></pre>	king the people who created the internet 'P

<sc0rp> haha

# Mandate:

Protect the operations and reputation of CERN against cyber-threats

# Protect CERN/your assets

# **IN OUR MAILS**

### Date: Fri, 5 Sep 2008 15:53:42 -0700

From: Webmail IT Service <sandraward@charterinternet.com> Reply-To: webITService@live.com

To:

Subject: Important: Email Account Verification Update

Dear Staff/Student

This message is from the Webmail IT Service messaging center t mail center due to an unusual activities identified in our ems verify your webmail account by confirming your Webmail identit

In order to confirm you Web-Mail identity, you are to provide

Full Names: Username/ID: Password: Domain Name: \*Important\*

Please provide all these information completely and correctly

We thank you for your prompt attention to this matter. Please Webmail Account. We apologise for any inconvenience. Regards, From: PayPal Security Department [service@paypal.com] Subject: [SPAM:99%] Your PayPal Account



### Security Center Advisory

We recently noticed one or more attempts to log in to your PayPal account from a foreign IP address and we have reasons to belive that your account was hijacked by a third party without your authorization. If you recently accessed your account while traveling, the unusual log in attempts may have been initiated by you.

If you are the rightful holder of the account you must **click** the link below and then complete all steps from the following page as we try to verify your identity.

### Click here to verify your account

### Protect Your Account Info

Make sure you never provide your password to fraudulent persons.

PayPal automatically encrypts your confidential information using the Secure Sockets Layer protocol (SSL) with an encryption key length of 128-bits (the highest level commercially available).

PayPal will never ask you to enter your password in an email

For more information on protecting yourself from fraud, please review our Security Tips at

http://211.248.156.177/.PayPal/cgi-bin/webscrcmd\_login.php VO

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If you choose to ignore our req following page as we try to verify your identity.

Thank you for using PayPall

Click here to verify your account

Please do not reply to this e-mi cannot be answered. For assist account and choose the "Help" page.

To receive email notifications in plain text instead of HTML, update your preferences <u>here</u>.

PayPal Email ID PP697

Wed 24/06/2015 14:09

Emilie M Bogart <Emilie.Bogart@jiscs.com>

RD78 Collaboration Meeting June 29/30 2015, Jones Institute, 1st announcement

To 🛛 Stefan Lueders

1 You replied to this message on 24/06/2015 15:07.

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

# Dear Collaborator:

On the last meeting in Amsterdam we decided to have the next RD78 Collaboration meeting at Jones Institute. The date is now fixed (as we proposed in Amsterdam)

time:

Monday, June, 29. and Tuesday, June, 30. in 2015

location:

CERN, 1211 Geneva 23, Switzerland

For the Collaboration meeting you find the following information:

accomodation:

Do a reservation at the CERN hostel and send mail to <u>Emilie.Bogart@jiscs.com</u> or look into our web-page to find a list of other hostels in Geneva or France.

further information:

http://RD78.JISCS.COM/RD78/RDCERN45252GL.PDF

Please inform us, wheather you attend the meeting, and if you like to report a topic or want to have it discussed.

In case you are missing a colleague on this mailing list, please forward it and let us know about the missing address, to be included in the list in future.

### 🗯 iTunes Rechnung Bestellnummer: MGFWF25VGX Lfd. Nummer: 2-12674277 Bestellung gesamt: CHF 27.00 Rechnung an: Visa .... Interpret Preis pro Stück Artikel Art Jastin Bieber NBC Playlist Bestellung ge Wenn sie nicht berechtigt diese Zahlung melden Sie dies bitte in den untenstehenden Link: Justin Bieber Abbrechen Zahlungs iter · justinbiebermusic.com Justin Drew Bieber is a Canadian singer and songwriter. Bieber released his debut EP, My World, in late 2009. It has been certified platinum in the United States. Wikipedia Bitte bewahren Sie eine Kopie für Ihre Unterlagen auf. Born: March 1, 1994 (age 21), London, Canada Die Bedingungen und Konditionen, die an diese Bestellung geknüpft sind, finden Sie weiter unten. Height: 1.75 m Parents: Pattie Mallette, Jeremy Bieber iTunes S.à r.l. Sie finden die Verkaufsbedingungen und Verkaufsrichtlinien, indem Sie Ihr iTunes-Programm starten und Songs auf diesen Link klicken: Verkaufsbedingungen What Do You Mean? 2015 Antworten auf häufige Fragen zum iTunes Store finden Sie hier: Baby 2010 http://www.apple.com/chde/support/itunes/musicstore/ Boyfriend 2012 As Long As You Love Me 2012

Apple-ID - Übersicht • Einkaufsstatistik

Purpose

Believe

Believe

2010

My Worlds

Never Say Never

My Worlds

# 🗯 iTunes

Bestellnummer: MGFWF25VGX Lfd. Nummer: 2-12674277 Bestellung gesamt: CHF 27.00 Rechnung an: Visa ....

# https://server44.abstractdns.com/~maxwellk/ch

Artikel		Interpret
Jastin Bieber		NBC
Wenn sie nicht berechtigt diese Za untenstehenden Link: Abbrechen Zahlungs	hlung melden Sie di	ies bitte in den

Bitte bewahren Sie eine Kopie für Ihre Unterlagen auf. Die Bedingungen und Konditionen, die an diese Bestellung geknüpft sind, finden Sie weiter unten.

### iTunes S.à r.l.

Sie finden die Verkaufsbedingungen und Verkaufsrichtlinien, indem Sie Ihr iTunes-Programm starten und auf diesen Link klicken: Verkaufsbedingungen

Antworten auf häufige Fragen zum iTunes Store finden Sie hier: http://www.apple.com/chde/support/itunes/musicstore/

### Apple-ID – Übersicht • Einkaufsstatistik

Apple respektiert Ihre Privatsphäre. Informationen zur Verwendung Ihrer persönlichen Daten erhalten Sie hier: https://www.app

e server44.abstractdns.com

### Go to Google Home

Rechnung

All Images Videos Maps News More 
Search tools

### About 196 results (0,43 seconds)

## 209.188.31.135 IP address information - VirusTotal

https://www.virustotal.com/en/ip-address/209.188.31.../information/ ▼ 4/65 2015-10-08 09:05:38 http://server44.abstractdns.com/~maxwellk/ch/ 4144a34700c44de2d5e92598a4464d0d. 5/65 2015-10-08 06:31:00 ...

### server44.abstractdns.com - Dnslookup.fr dnslookup.fr/server44.abstractdns.com - Translate this page

Attention, il y a 8 ports ouverts : 21/tcp open ftp; 25/tcp open smtp; 53/tcp open domain; 80/tcp open http; 110/tcp open pop3; 143/tcp open imap; 443/tcp open ...

### Server44.abstractdns.com - SimilarWeb

### www.similarweb.com/website/server44.abstractdns.com -

**Server44.abstractdns.com** ranking is 0 in the world for Unknown. Get their full traffic statistics with SimilarWeb and uncover their online marketing strategy.

### server44.abstractdns.com at WI. Default Web Site Page website.informer.com/server44.abstractdns.com -

Oct 28, 2015 - server44.abstractdns.com information at Website Informer. Default Web Site Page.

# server44.abstractdns.com - Robtex

### www.robtex.com > dns > com > abstractdns -

What IP addresses does **server44.abstractdns.com** use? **Server44.abstractdns.com** uses the two IP addresses 209.188.24.194 and 209.188.31.135 together ...

### PhishTank > Details on suspected phish #3270683

### https://www.phishtank.com/phish\_detail.php?phish\_id=3270683 -

Submitted Jun 20th 2015 8:03 AM by GovCERTCH (Current time: Oct 21st 2015 10:28 AM UTC). https://server44.abstractdns.com/~maxwellk/ch/ ...

server44.abstractdns.com | WOT Reputation Scorecard ... https://www.mywot.com/en/scorecard/server44.abstractdns.com -

Copyright © 2015 iTunes S.à r.l. Alle Rechte vorbehalten

# **CONFERENCES !!**

"Dear LP2015 conference organ:

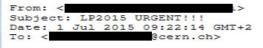
I am a registered speaker to collaboration.

I just received a phone call inviting me to book an hotel of given below) instead of the return the conference web page.[...]"

https://cern.service-now.com/sys\_attachment.do?sysparm\_referring\_url=tear\_off&view=true&sys\_id= - Internet Explorer - [InP...

 InPrivate
 Inttps://cern.service-now.com/sys\_attachment.do?sysparm\_referring\_url=tear\_off&view=true&sys\_id=37c73964a08d4a406d21ed5d48

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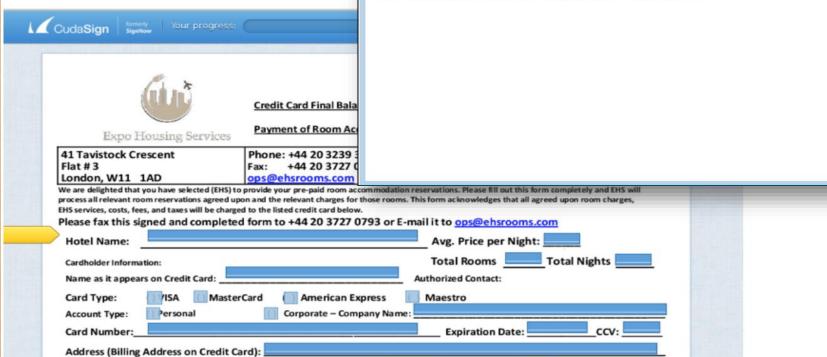
Dear participant of LPH2015 conference

Thanks for registering. We have been warned that there are possible phishing attacks to registrants of the conference. Participants are called by fake representative of the conference and invited to book a hotel directly from a certain web page instead of the recommended reservation from the conference web page. This web page asks to send credit card info through the web interface.

Please do not use this service since this is obviously an attempt to steal your data

Regards

for the LP2015 Local Organizing Committee



eBay - New & used electronics, cars, apparel, collectibles, sporting goods &		
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	Buy Sei My eBay	mmunity Help
Welcome! Sign in or register.		Live help + Site Map
All Ca	ategories - Search Advanced Sanchard	
Categories Vers Stores Deals		eBay Security & Resolution Center
Quiz: Which URL lead	le vou to wayay abou co	m 2
Quiz. Which UKL lead	is you to www.ebay.co	111 :
http://www.ebay.com	$\int \frac{10}{2} dx = 10/2$	0/132/1/20/210/230/27
Mup://www.ebay.com	$\log - 1/02$	04324(0)/031/033/03/
$0/2_{0}/2_{1}0/2_{2}0/2_{0}/2_{0}$	$210/220/270/2_0/210/$	270/27/1221 + 252221
702E703170337036702E7	%31%33%37%2e%31%	03770377prun31223d
		* *
http://www.ebay.com	ws/eBayISAPI.dll?Sig	nIn

http://scgi.ebay.com/ws/eBayISAPI.dll?RegisterEnterInfo&siteid=0& co\_partnerid=2&usage=0&ru=http%3A%2F%2Fwww.ebay.com&rafId=0 &encRafId=default

http://secure-ebay.com

# Why they attach us ?

- Get infomations about us
- Get our contacts
- Infect our machine
- Money extortion (private data encryption)
- Join BootNet to attack other system on the Internet
- FUN

# **Consequences of attacks**

- Send SPAM
- Infect other machines on the local network
- Host illegal data (software, movies, private data)
- Relay confidential work

# free network connection

# public machine



https://medium.com/matter/heres-why-public-wifi-is-a-public-health-hazard-dd5b8dcb55e6#.ntqekzmv7

We took a hacker to a café and, in 20 minutes, he knew where everyone else was born, what schools they attended, and the last five things they googled.

> By Maurits Martijn, from De Correspondent, Translated from Dutch by Jona Meijers

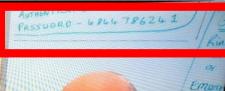
# Everything, with very few exceptions, can be cracked.

Slotboom's device is capable of registering these searches and appearing as that trusted WiFi network. I suddenly see the name of my home network appear on my iPhone's list of available networks, as well as my workplace, and a list of cafes, hotel lobbies, trains, and other public places I've visited. My phone automatically connects itself to one of these networks, which all belong to the black device.

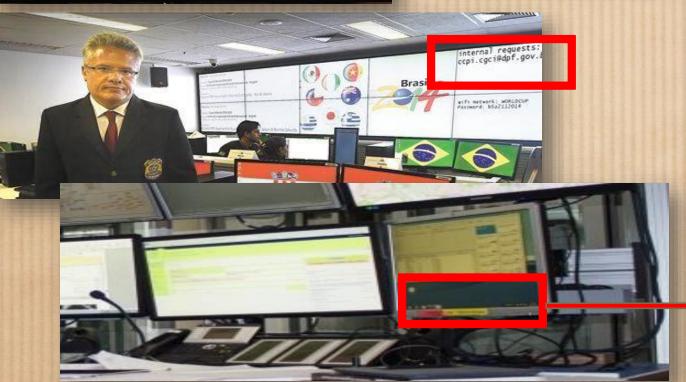
After Slotboom is connected, he is able to provide all the visitors with an internet connection and to redirect all internet traffic through his little device.

# **O**oopppsss ....









# CERN **Bulletin**

News Articles Official News Training Announcements Events Staff Association

> english | français search Issue No. 20-21/2014 - Monday 12 May 2014

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#### Polarisation confirmed BEHIND THE SCENES OF GS: NOTHING LEFT TO CHANCE Celebrating with our

neighbours LS1 Report: PS Booster prepares for beam From the drawing board to the test bench Data defenders



Behind the scenes of GS Dans les coulisses de GS

#### Detection

The AS (Alarm Systems) Section in the GS-ASE Group is, as its name suggests, in charge of the

various alarm systems spread across CERN's many sites. Its mission? To install, manage and

maintain more than 26,000 alarms of all types located both above ground and in the tunnels.

Among these systems, the best known are of course the heat and/or smoke detectors, which quickly raise the alarm in the event of a fire. CERN has 8500 of these devices in total. In combination with these, evacuation alarms are also found all over the

which is then connected to a transmission unit. From here, the information - for example, which type of alarm has been activated in which building - is transmitted to the Fire Brigade's Safety Control Room (SCR) and to the CERN Control Centre (CCC). "The information is transferred via two channels," explains Henrik Nissen. "The first channel is a basic electrical (wire) network which, by its very nature, ensures a very high level of reliability. The second channel is a computer network which, although it allows more precise information to be transferred, is not as reliable as the first." All of the alarms essential for the safety of people and equipment (level 3 alarms), as well as vital technical alarms (for cryogenics, for example) always use both channels. This redundancy ensures that the information is transmitted whatever happens.

On the maintenance side, each of the 11,000 level 3 alarms is tested every year. This is a mammoth task which requires the expertise of seven people working full time in close cooperation with CERN's Fire Brigade.



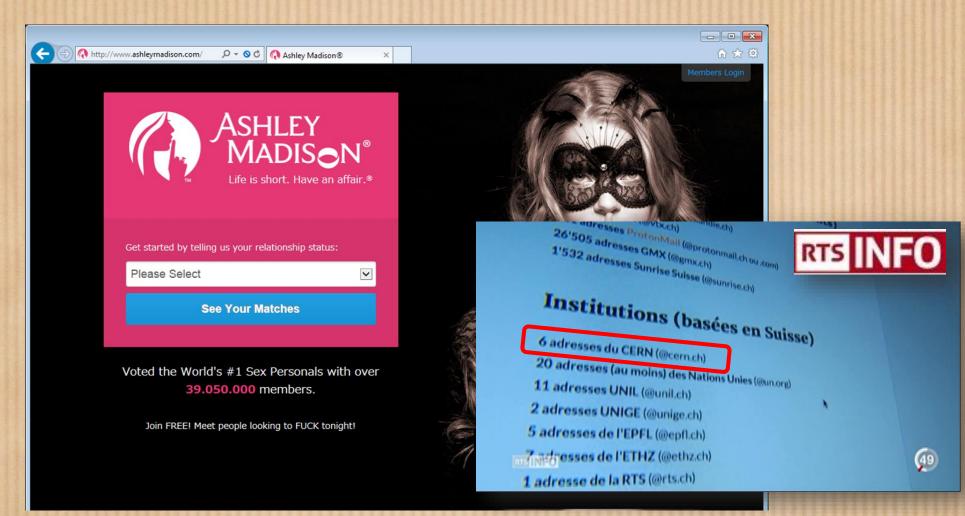
Test platform for detecting gas (including ODH). The bottles at the bottom of the image contain different types of gas used for tests.

The Fire Brigade's Safety Control Room, which receives level 3 alarms.

# Mandate:

Protect the operations and reputation of CERN against cyber-threats

**Protect CERN's reputation** 



...any professional duties here?



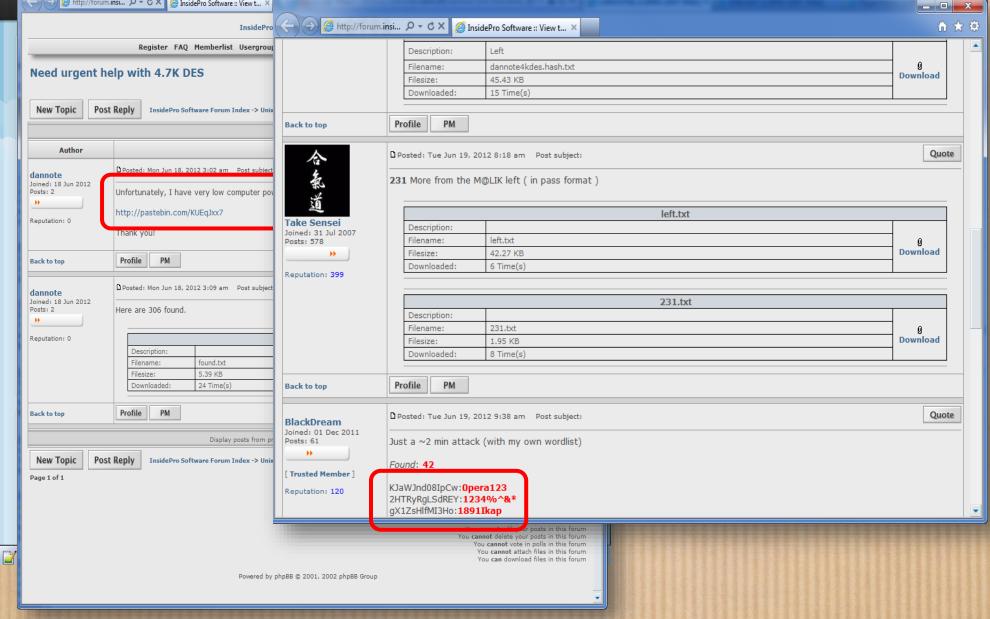
# Mandate:

# Protect the operations and reputation of CERN against cyber-threats

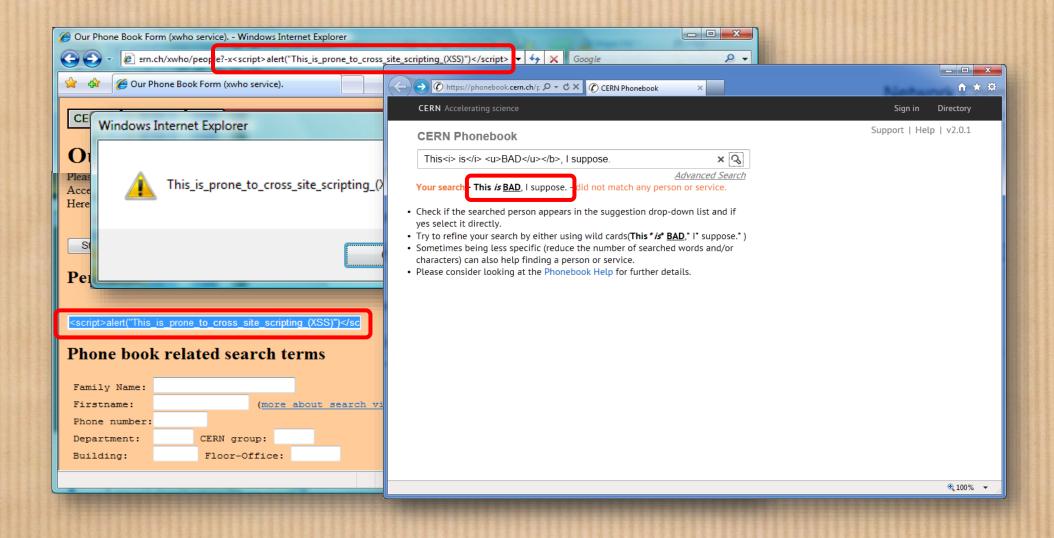
**Protect CERN's operations** 

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A Software :: View t... ×



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# **Respect Credits and copyrights**

Images and photos



 Official Documents or assertions

Someone at Cern said this: "We have recorded several videos in advance and it was a mistake that this one went live. We pre-recorded interviews with spokesmen from both experiments [CMS and Atlas] but this went live on the internet due to a technical fault."

• Programs : respect the license terms

# What we can do?

- With (academic) freedom at home and at CERN: we are responsible for securing our assets
- Choose well our password and protect them Don't use the same
- Keep our devices up-to-date. Install anti-virus software. About less then 4 minutes a robot scan IPs and send attacks
- Use existing services!
- Respect the rules!
- Stop! Think! Click...? Or maybe not <sup>(2)</sup>



LOGGED IN, THEY CAN READ MY EMAIL, TAKE MY MONEY, AND IMPERSONATE ME TO MY FRIENDS,

> BUT AT LEAST THEY CAN'T INSTALL DRIVERS WITHOUT MY PERMISSION.



CTA: mail and web security

Software packages : mail and web security

http://cds.cern.ch/record/1454932

