

European Organization for Particle Physics Exploring the frontiers of knowledge



CERN Computer Security

Abuse, Blunder & Fun

There is no 100% security.

Security is as good as the weakest link: us!

The advantage is with the attackers.





Attackers might come with money, knowledge and time. Focussed ones usually succeed \otimes

Bad things happen...
...and can happen to any of us!







PART 1: HACKING THE LARGE HADRON COLLIDER (XSS VULNERABILITY)

Published by cammilla c. | Filed under General, News, Spread

PART 2: HACKING THE LARGE HADRON COLLIDER (AUTHORIZATION BYPASS)

Published by cammilla c. | Filed under General, New

<scOrp> nice
<MLT> using the exploit on CERN would be win, hacking the people who created the internet :P
<scOrp> haha



Dear Dr.

I regret to inform you that your life may be in danger if you are one of the seven men that have been pushing for higher energy particle collision experiments at CERN.

Due to warnings by prominent theoretical physicists like Dr. Stephen Hawking that your proposed higher energy particle collision experiments could create a singularity that destroys our universe, combined with anonymous theoretical physicists with no financial stake in CERN's continued operations all making the same dire predictions, some anonymous individuals have become convinced that the only way to save our universe from destruction is to kill these 7 men, of which, unfortunately, you may be one.

Some of our members have also run our own highly advanced Temporal Derivative Predictive Modeling calculations which suggest that your new higher energy particle collision.

DobamaFail:
Affordable Insurance
Rates Set To
Skyrocket 50%...
Again





Mandate:

Protect the operations and reputation of CERN against cyber-threats

Protecting Our/Your Assets

Protecting CERN's Reputation

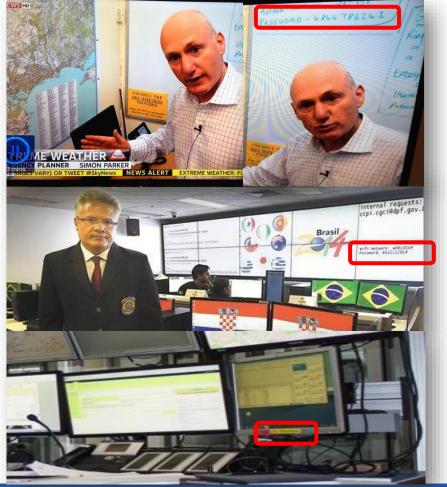
Protecting CERN's Operations



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Protecting Our/Your Assets



CERN Bulletin

News Articles Official News Training Announcements Events Staff Association

english | français

Issue No. 20-21/2014 - Monday 12 May 2014 No printable version available - Subscribe:

Polarisation confirmed

Celebrating with our neighbours

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

Data defenders

The "Karma Level Sexy Bottom" awards are back at CERN Winter Atomiades 2014: CERN skiers win 31 medals!

BEHIND THE SCENES OF GS: NOTHING LEFT TO CHANCE

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.



Detection

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 Uppe 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.

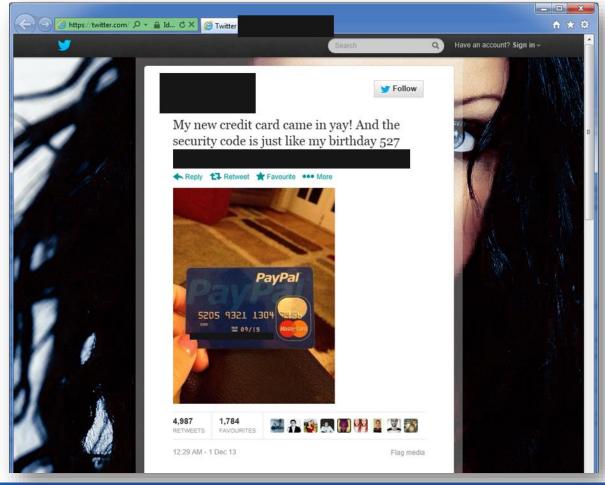


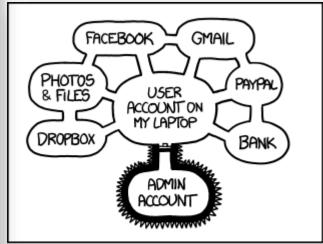
The Fire Brigade's Safety Control Room, which receives level 3 alarms.



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Pass...what?





IF SOMEONE STEALS MY LAPTOP WHILE I'M 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.



Overall Rank		Item	Percentage		2010 Price Ranges
2010	2009		2010	2009	
1	1	Credit card information	22%	19%	\$0.07-\$100
2	2	Bank account credentials	16%	19%	\$10-\$900
3	3	Email accounts	10%	7%	\$1-\$18
4	13	Attack tools	7%	2%	\$5-\$650
5	4	Email addresses	5%	7%	\$1/MB-\$20/MB
6	7	Credit card dumps	5%	5%	\$0.50-\$120
7	6	Full identities	5%	5%	\$0.50-\$20
8	14	Scam hosting	4%	2%	\$10-\$150
9	5	Shell scripts	4%	6%	\$2-\$7
10	9	Cash-out services	3%	4%	\$200-\$500 or 50%-70% of total value

Item	Bulk Prices Observed	Unit Price			
Credit card information	10 credit cards for \$17	\$1.70			
	100 credit cards for \$100	\$1.00			
	1000 credit cards for \$300	\$0.30			
	750 credit cards for \$50	\$0.07			
Credit card dumps	101 dumps for \$50	\$0.50			
Full identities	30 full identities for \$20	\$0.67			
	100 full identities for \$50	\$0.50			

http://securityresponse.symantec.com/en/ca/threatreport/topic.jsp?id=fraud_activit y_trends&aid=underground_economy_servers



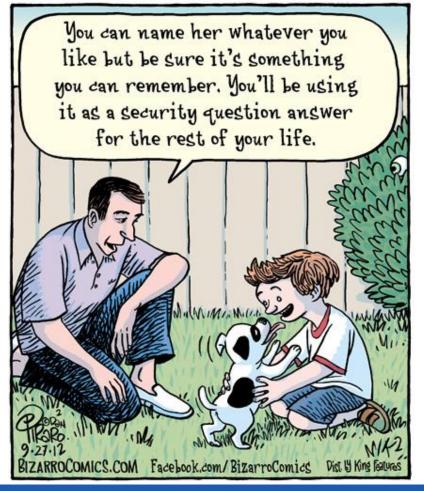
PLASTIQUE SHOP

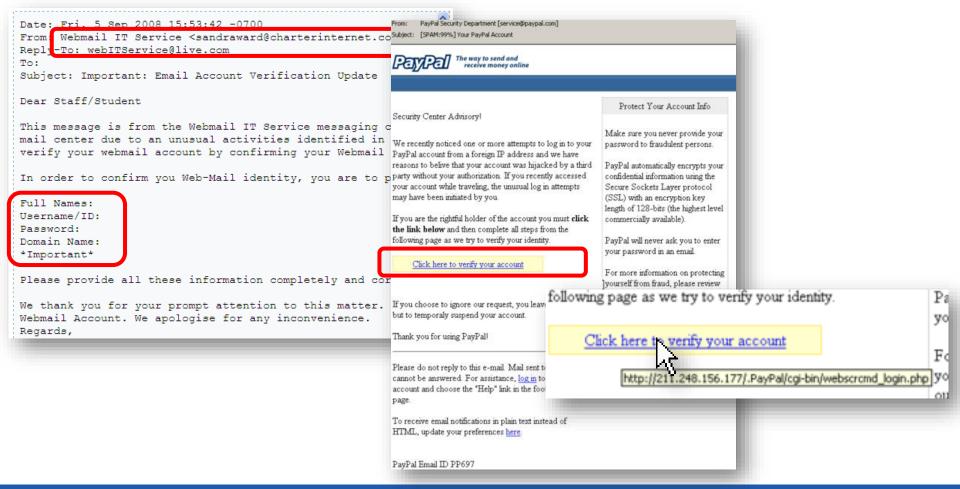
- and h	MAIN CHECKER BALANCE CHECKER Support					\$0.00 💳 my cards 🗓 logo						
				Sort					Sort			
NAME	TYPE	NUMBER	CV2	EXP Co	. Addr1	City	State		ZIP	Country	\$	ı
Vernon *****	Visa	443460********	***	11/2013	** Charles Street	Kew	VIC	Victoria	****	Australia	6\$ show	+0. che
willie *****	VISA	413821*********	***	09/2012	***** old columbia pike #***	silver spring	MD		****	United States	2\$ show	+0. che
Tony ****	AMEX	377232********	****	10/2015	**** Rock Meadow Cir	High Point	NC		****	United States	6\$ show	+0. che
Beth *****	VISA	479370********	***	02/2015	*** N East St	Carlisle	PA		****	United States	3\$ show	+0. che
LB *****	Visa	423954********	***	10/2013	** Fairlie Street	Mount Gambier	SA	South Australia	****	Australia	6\$ show	+0.

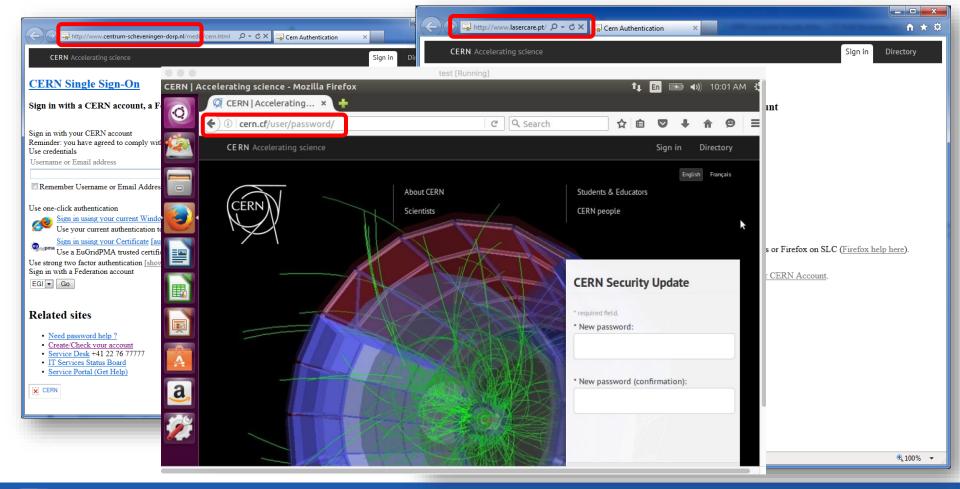


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Underground Economy Value

















Payment will be raised on

Time Left

5/15/2017 16:50:06

02:23:34:22

Your files will be lost on

5/19/2017 16:50:06

Time Left

06:23:34:22

About bitcoin

How to buy bitcoins?

Contact Us

Ooops, your files have been encrypted!

What Happened to My Computer?

Your important files are encrypted.

Many of your documents, photos, videos, databases and other files are no longer accessible because they have been encrypted. Maybe you are busy looking for a way to recover your files, but do not waste your time. Nobody can recover your files without our decryption service.

Can I Recover My Files?

Sure. We guarantee that you can recover all your files safely and easily. But you have not so enough time.

You can decrypt some of your files for free. Try now by clicking <Decrypt>.

But if you want to decrypt all your files, you need to pay.

You only have 3 days to submit the payment. After that the price will be doubled. Also, if you don't pay in 7 days, you won't be able to recover your files forever.

We will have free events for users who are so poor that they couldn't pay in 6 months.

How Do I Pay?

Payment is accepted in Bitcoin only. For more information, click <About bitcoin>.

Please check the current price of Bitcoin and buy some bitcoins. For more information, click <How to buy bitcoins>.

And send the correct amount to the address specified in this window.

After your payment, click <Check Payment>. Best time to check: 9:00am - 11:00am GMT from Mandor to Eridor



Send \$300 worth of bitcoin to this address:

115p7UMMngoj1pMvkpHijcRdfJNXj6LrLn



Сору

English

Check Payment

Decrypt



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Consequence: WannaCry (2017)

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, <mark>29. and Tuesday, June, 30. in 2015</mark>

location:

CERN, 1211 Geneva 23, Switzerland

For the Colaboration meeting you find the following information:

accomodation:

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

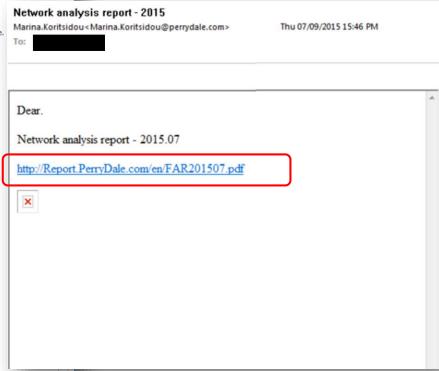
further information.

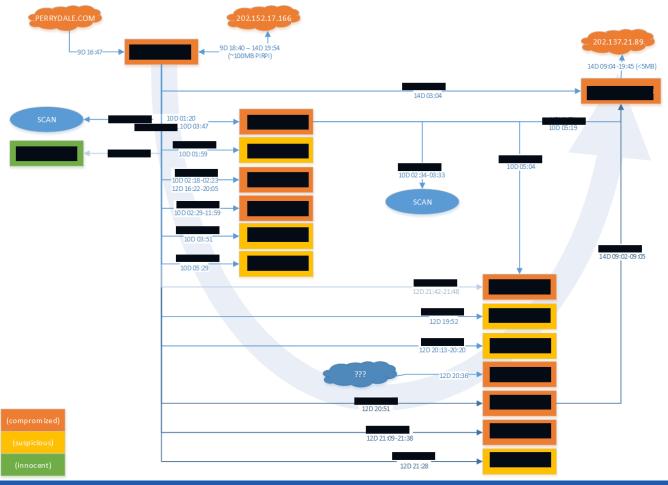
http://RD78.JISCS.COM/RD78/RDCERN45252GL.PDF

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.

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From: CERN support < support@cern.com> Subject: Succesful login attempts Date: 8 January 2016 11:14:11 CET From: CERN support Subject: Testing of new booking system Date: Friday, 8 January 2016 11:14 This is an automated test message from our new emailing system. Click [here] to verify if you've received this email. Date: Fri. 8 Jan 2016 11:13:49 +0100 Subject: Update failure for office : From: CERN support < support@cern.com> Dear <name>. Dear sir/madam. Last night there was an Update for the o We have identified succesful login attempts outside of our local netwerk from the following location: Xiamen, China (IP address=163.177.112.32) on tuesday 5 January 2016 01:33 AM CET Required actions Due to the failure of the update some aci Because we can not determine your cooperation with this incident we are forced to start a investigation. You will therefore be suspens You will also receive a letter detailing the information regarding the investigiation. Once the process is completed, you will ta order to verify and assist the investigation we would like to ask a few question regarding your account usage, please follow the foll Dear Getting help We await your coorperation. Over the years we've gained feedback that the current booking system is In the event of any questions or problem not optimal. Because of this, we wish to replace this booking system Kind regards, Best regards, CERN IT Department CERN Department IT with a system that is more innovative and less tiresome. To make sure we choose a system that's better, we've chosen your department to test this system. Your account has been premade and uses the same account details L'échec de mise à jour pour Office 365 as your old booking system. Cher Monsieur, Madame, La nuit dernière, il y avait une mise à jour pour le sy From: Evelyn [mailto:evelyn@cern.com] actions requises Sent: 11 January 2016 15:29 En raison de l'échec de la mise à jour des comptes i To: Subject: Congratulations David Une fois le processus est terminé, vous serez en m Obtenir de l'aide Dear colleagues, En cas de questions ou de problèmes, s'il vous plaît Cordialement. Some of you might know David as the kind man he is. It has been 20 years ago since he first joined the financial department. To celebrate this moment, We've made a video CERN Département IT for David. Click herehttp://support.x10.bz/?c=8gf3&u=01f4e8c8 to view this video. With kind regards. Head administration Evelvn



Subject: FW: Testing of new booking system
Hello.

I received the email below from the mail address @cern.COM and unfortunately I clicked on the link.
What should I do?

Best Regards

To: computer.security@cern.ch Subject: CERN Internal Audit (fwd)

This is the weirdest thing ever.

Note the domain: cern.COM?????

Subject: Fwd: Testing of new booking system

New spam ? Looks a bit more convincing than usual :(

To: cert-snow@cern.ch

Subject: FW: Succesful login attempts

This seems a very well done phishing email, using the name of "C Regards,

To: Computer.Security@cern.ch
Subject: Fw: Succesful login attempts
Note to supporters: Please check the work notes.

Subject: FW: Congratulations David

Hello!

I have just received this e-mail and I clicked on the link but then I realized that it was a malware.

Could you tell me if something happen Just because I click on the link but I didn't open the video of course.

Thank you for your reply.

。I didn't click, but I forwarded it to a colleague and he clicked it to see the page...

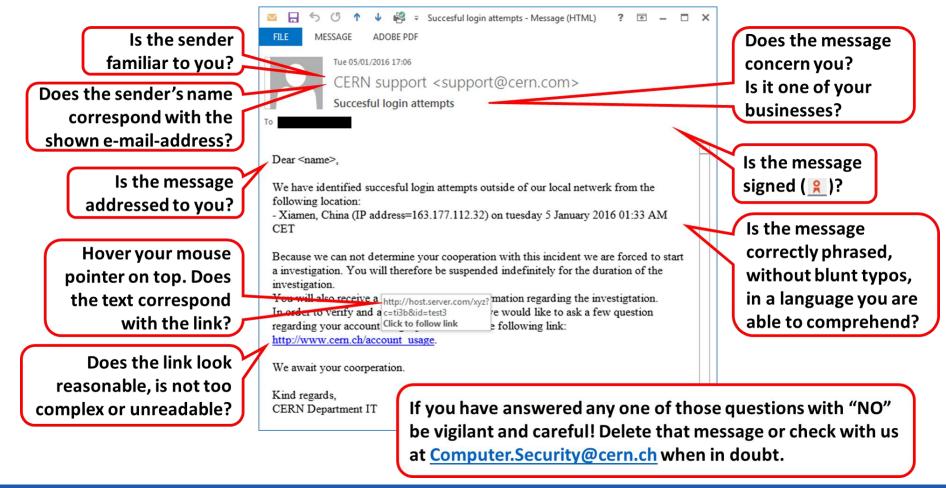
I fell for this one hard! I knew most of the tricks, but somehow I didn't pay enough attention. Thank you for your efforts to keep me safe from hackers and phishing!

All the best!



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Clicking Campaign: Responses



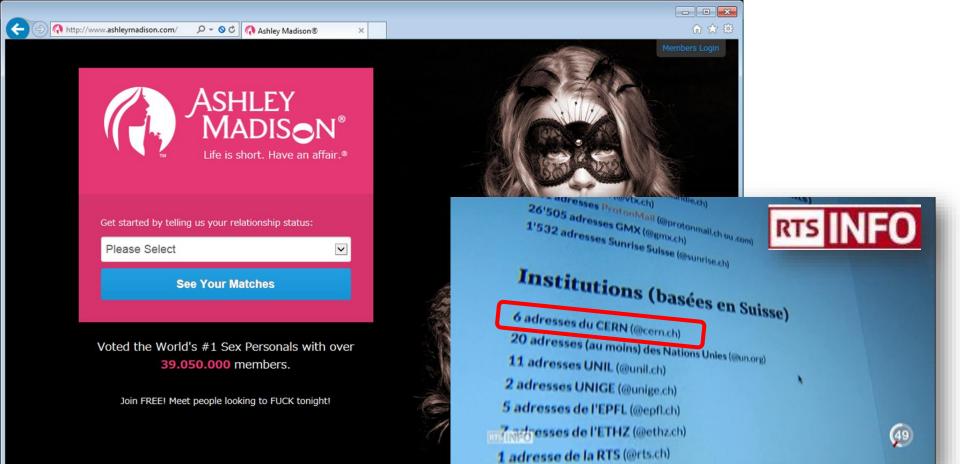


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Protecting Our/Your Assets

Protecting CERN's Reputation

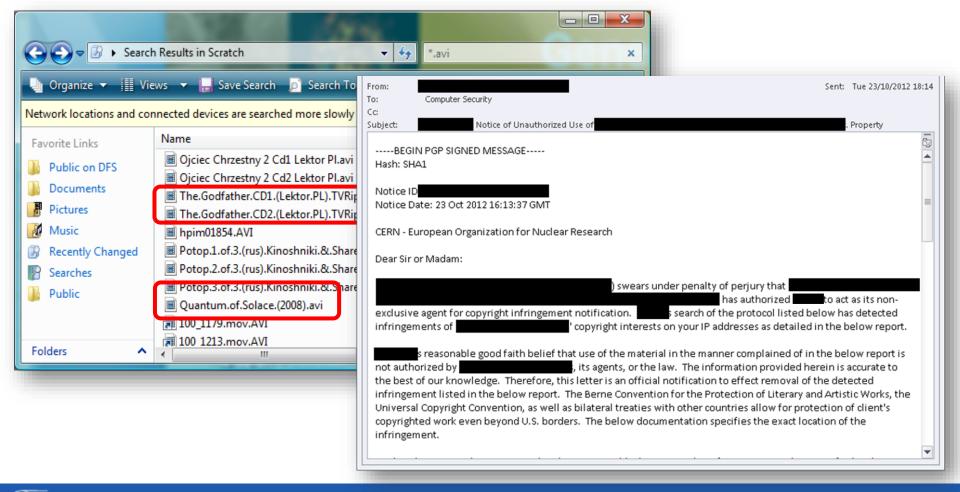




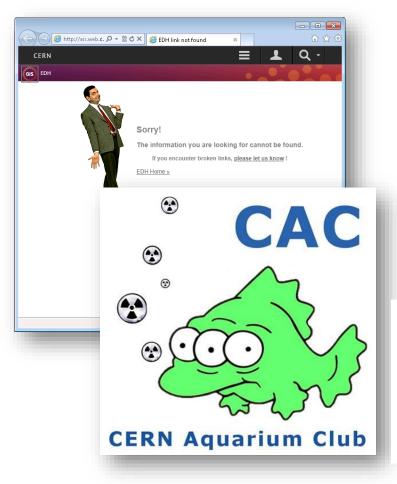
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Any professional duties, here?









Anti-Piracy Compliance Statement

Hereby I confirm that no illegal copies of the software computers / any previously installed have been deleted completely. I am aware that further installation and usage of pirated copies will have strict legal consequences.



As supervisor of the above person I hereby confirm that I have informed my staff and subordinates that the usage of pirated software licenses / activation of unauthorized copies is a criminal act and shall not be tolerated under my supervision. I have taken active measures in my group to prevent software abuse.

Title:

Name:

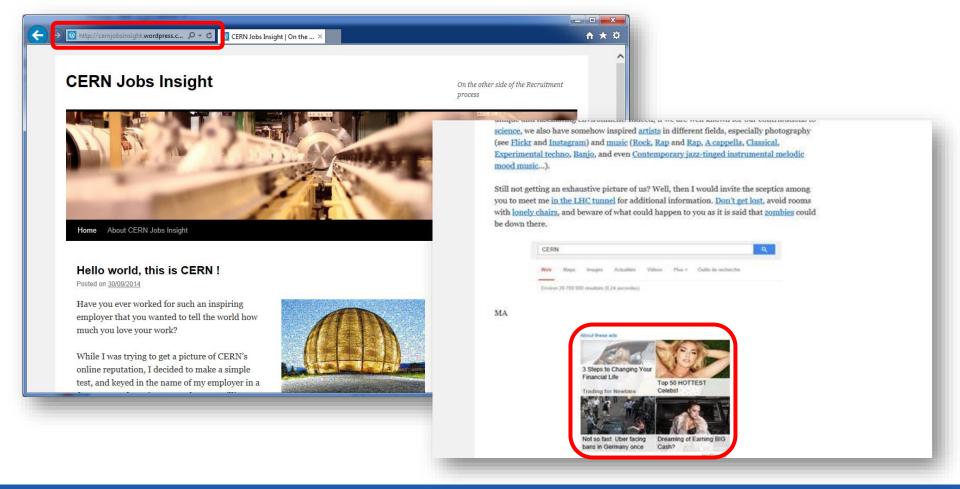
Position:

Phone/E-Mail:

Dr.

Group Head

+41 22 76





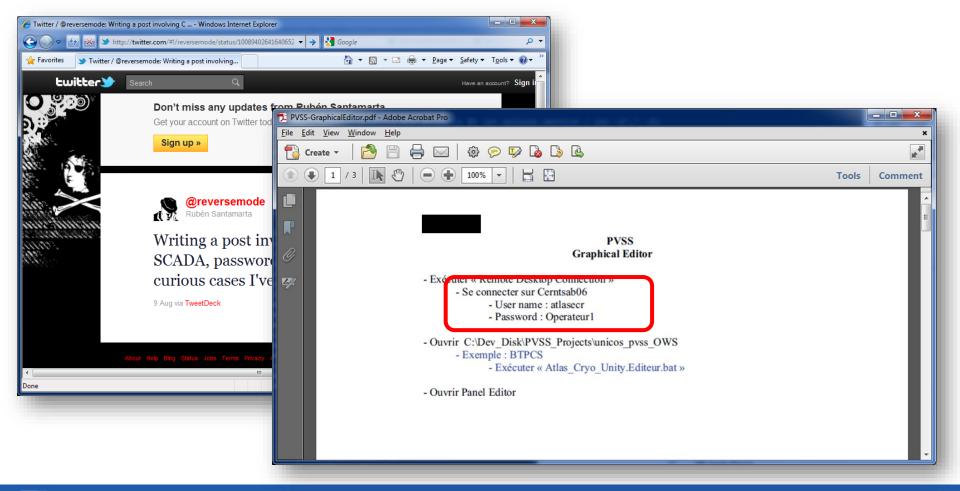
Mandate:

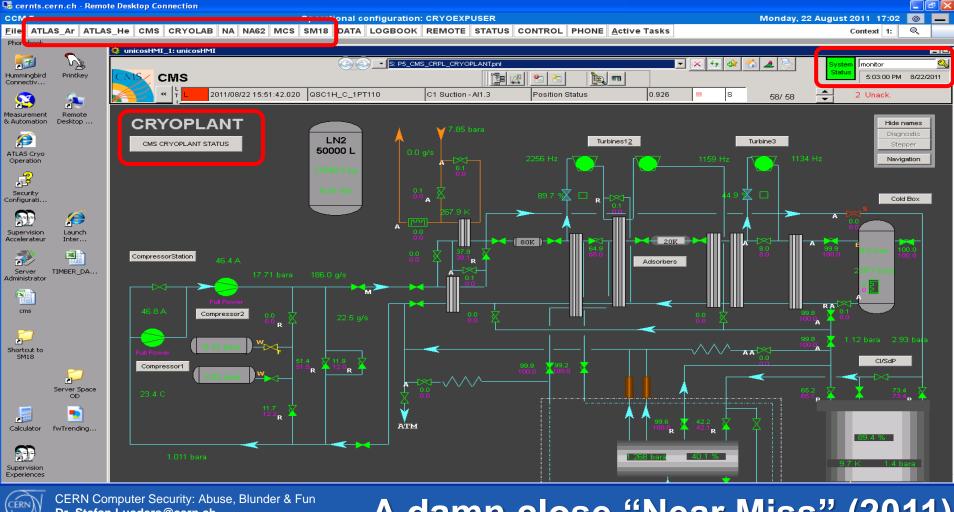
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Protecting Our/Your Assets

Protecting CERN's Reputation

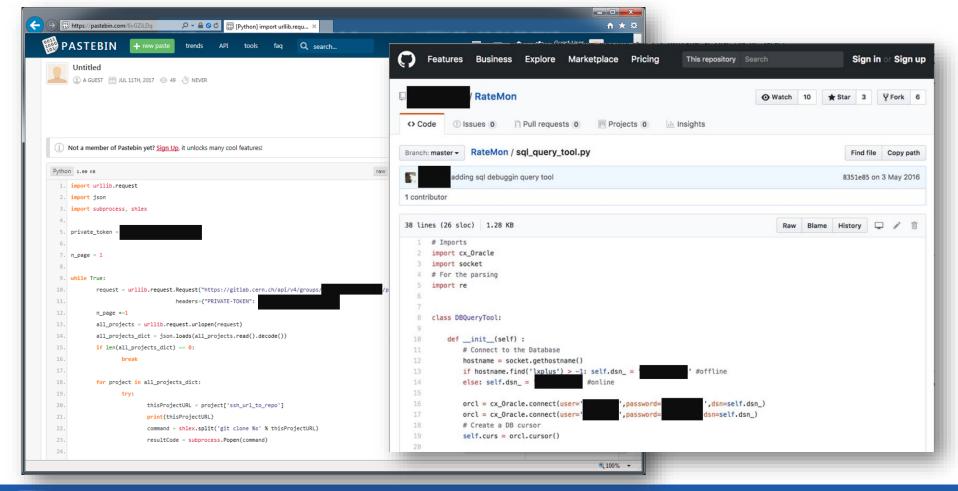
Protecting CERN's Operations



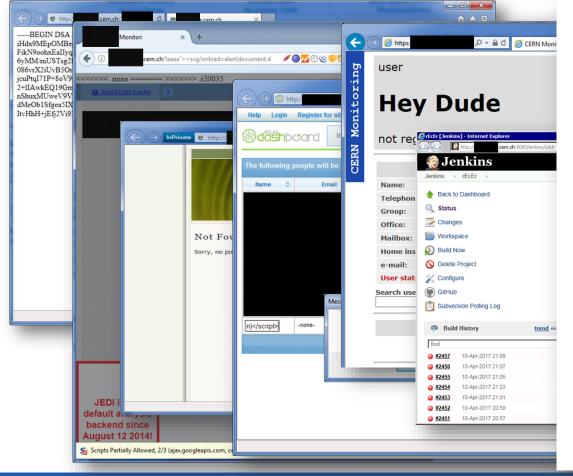


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A damn close "Near Miss" (2011)









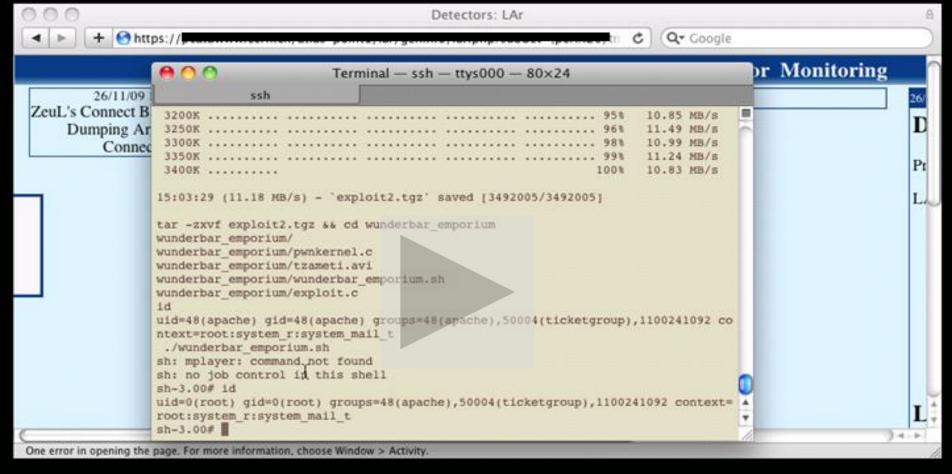
#FDIst: hacking in progress ;-).
@informaticaucm @LibreLabUCM @AsciiFdi
@ucmtic

Follow





£3 10





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Easy blunder, reloaded (2009)



With (academic) freedom at home and at CERN: You are responsible for securing your assets!

Don't share your passwords.

Make it complex: e.g. "DeltaX*DeltaP>=h/2/pi"

Get a hardened PC (soon)! Encrypt your laptop!!!

Stop! — Think! — Don't Click!

Don't reinvent the wheel: Use existing services!

Be reasonable.
Respect the rules!



Ask an expert, get a book, or train yourself!







