



**SECURITY** is not complete without **U**



# Cyber Security Awareness

**Academic Freedom vs. Operations vs. Security**

**CERN Computer Security Team**  
“Protecting Office Computing, Computing Services, GRID & Controls”



# **SECURITY is not complete without U**

- ▶ Security is as strong as the weakest link.  
There is no 100% security.
- ▶ CERN's reputation and operation are at stake...  
...incl. your computer, data & documents.
- ▶ In CERN's academic environment (as at home)  
**You are responsible for the security of your computers, files, programs, services, ... — we are not.**
- ▶ What comes next applies to CERN — and home!



# Protect your passwords

## *Protégez vos mots de passe*



A cybercriminal, who knows your password, will abuse your computing account  
*Un cybercriminel, qui connaît votre mot de passe, abusera de votre compte informatique*

# Protect your passwords

## Protégez vos mots de passe

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 mail center due to an unusual activity. Please verify your webmail account by confirming your password.

In order to confirm your Web-Mail account, please provide the following information:

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

Please provide all these information as soon as possible.

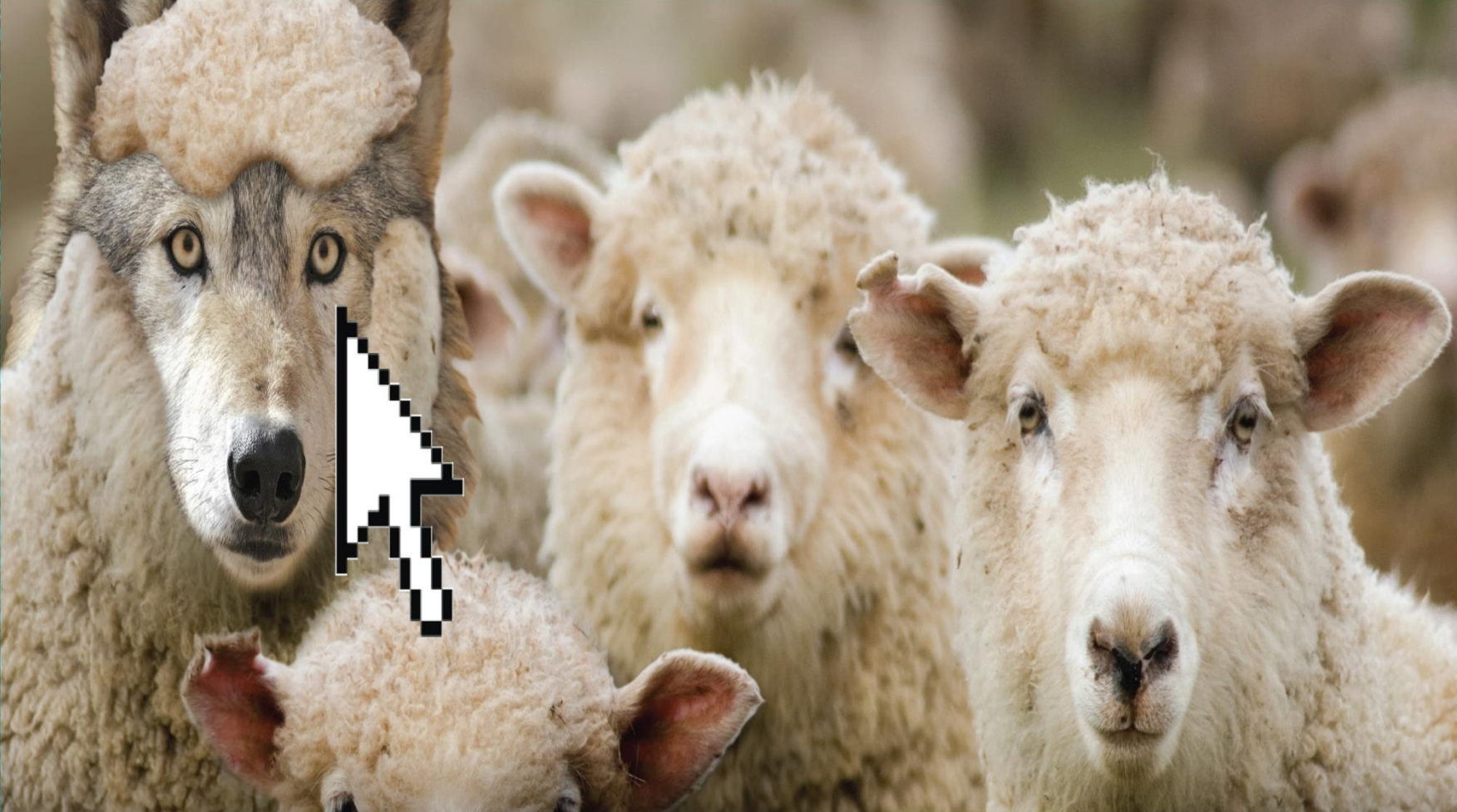
We thank you for your prompt attention to this Webmail Account. We apologise for any inconvenience.

- ▶ **Your password is yours — only yours.**
- ▶ **Make it complex.**
- ▶ **Do not reuse it.**
- ▶ **Change it regularly.**
- ▶ **Also consider other credentials.**



**Be careful with e-mail & Web**

***Soyez prudent avec les e-mails et le Web***



**Cybercriminals are trying to trick you!**  
***Les cybercriminels essaient de vous piéger !***

# Be careful with e-mail & Web

## *Soyez prudent avec les e-mails et le Web*

From: PayPal Security Department [service@paypal.com]  
Subject: [SPAM:99%] Your PayPal Account

**PayPal** The way to send and receive money online

### 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 believe 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](#)

following page as we try to verify your

If you  
but to

[Click here to verify your account](#)

Thank

Please

cannot be answered. For assistance, [log in](#) to your PayPal account and choose the "Help" link in the footer of any page.

### Protect Your Account Info

Make sure you never provide your password to fraudulent persons.

PayPal automatically encrypts your confidential information using the

Secure

(SSL)

length

comme

PayPal

your p

For mo

- ▶ **Stop — Think — Click.**
- ▶ **Do not open unexpected or suspicious links, e-mails or attachments.**
- ▶ **Do not install untrusted software or plug-ins.**

**SECURITY is not complete without** <http://cern.ch/Computer.Security>

# Protect your computers

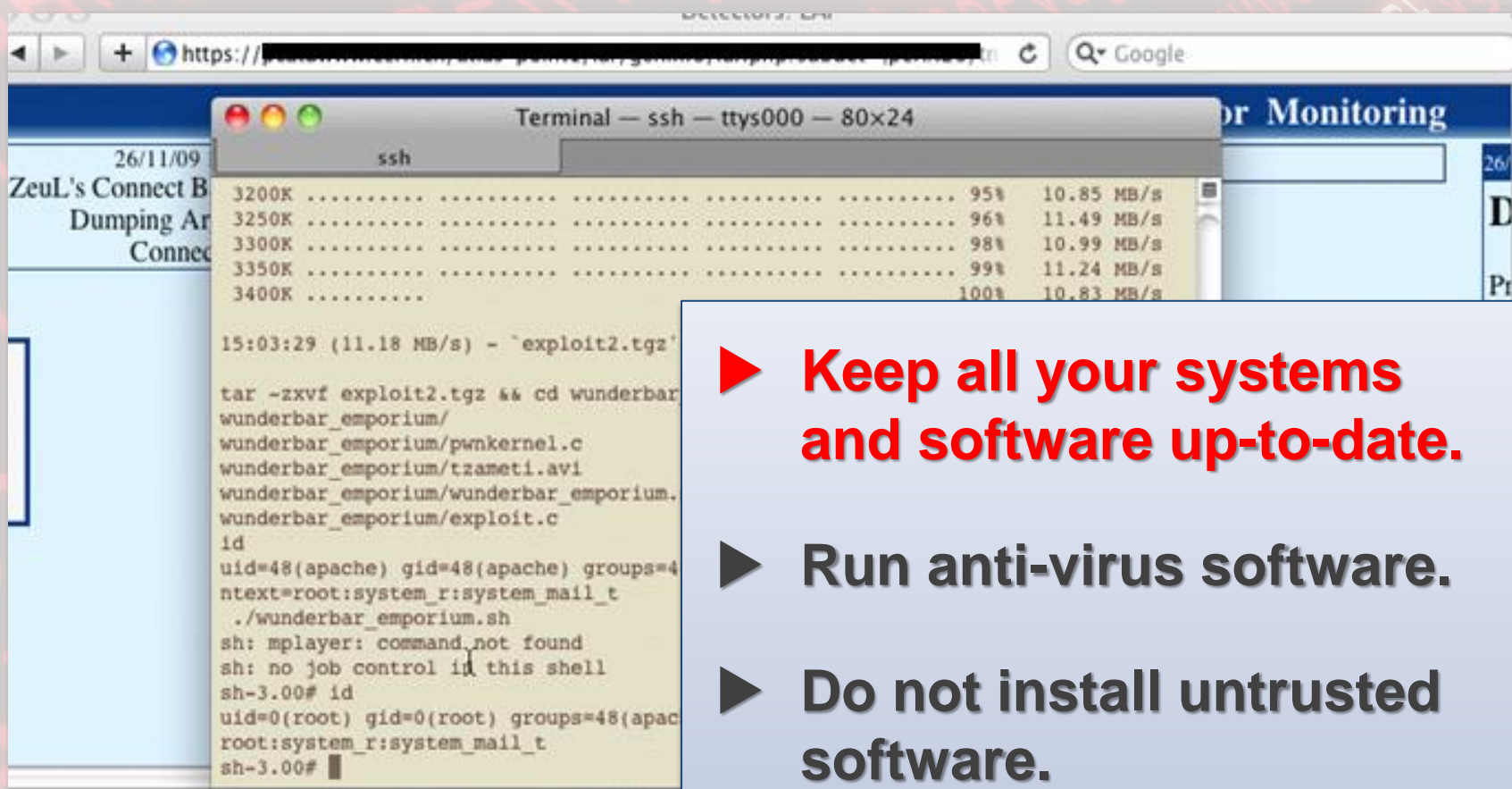
# Protégez vos ordinateurs



Any unprotected computer connected to the Internet is likely to be infected within minutes!  
*Tout ordinateur sans protection connecté à Internet est susceptible d'être infecté en quelques minutes !*

# Protect your computers

## Protégez vos ordinateurs



```
3200K ..... 95% 10.85 MB/s
3250K ..... 96% 11.49 MB/s
3300K ..... 98% 10.99 MB/s
3350K ..... 99% 11.24 MB/s
3400K ..... 100% 10.83 MB/s

15:03:29 (11.18 MB/s) - `exploit2.tgz`

tar -zxvf exploit2.tgz && cd wunderbar
wunderbar_emporium/
wunderbar_emporium/pwnkernel.c
wunderbar_emporium/tzameti.avi
wunderbar_emporium/wunderbar_emporium.
wunderbar_emporium/exploit.c
id
uid=48(apache) gid=48(apache) groups=4
ntext=root:system_r:system_mail_t
./wunderbar_emporium.sh
sh: mplayer: command not found
sh: no job control in this shell
sh-3.00# id
uid=0(root) gid=0(root) groups=48(apac
root:system_r:system_mail_t
sh-3.00#
```

- ▶ **Keep all your systems and software up-to-date.**
- ▶ **Run anti-virus software.**
- ▶ **Do not install untrusted software.**
- ▶ **Lock your screen with a password when leaving.**



Any unprotected computer connect  
Tout ordinateur sans protection connect



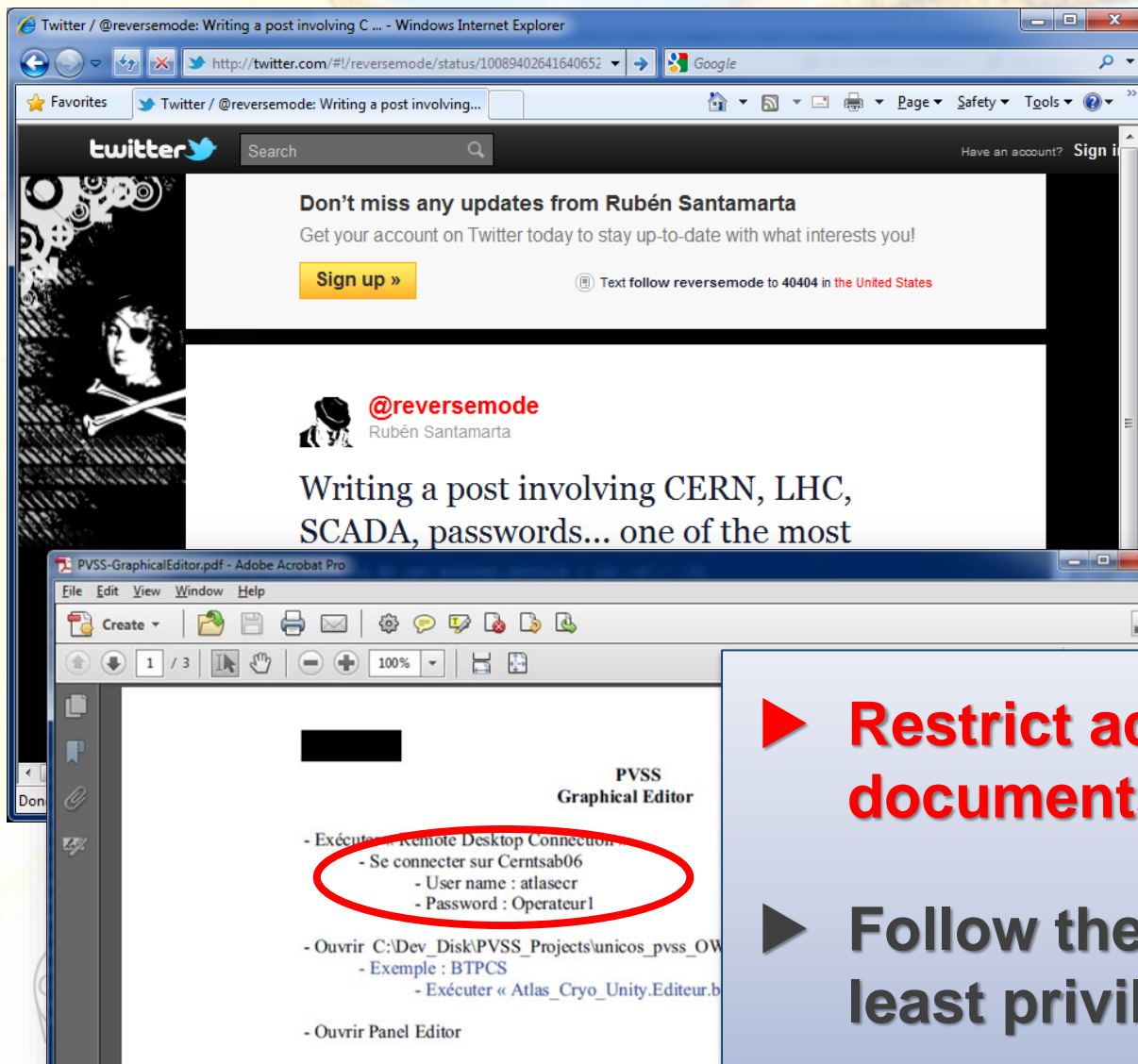
# Protect your files & data *Protégez vos fichiers et données*



Cybercriminals are trying to find condential or sensitive information, also here at CERN  
*Les cybercriminels essaient de trouver des informations condentielles ou sensibles, au CERN aussi*

# Protect your files & data

## Protégez vos fichiers et données



▶ **Restrict access to your documents and folders.**

▶ **Follow the principle of least privilege.**

# Respect copyright

# Respectez le droit d'auteur



Don't break the law!  
N'enfreignez pas la loi!

# Respect copyright

*Respectez le droit d'auteur*

Search Results in Scratch

\*.avi

Organize Views Save Search Search Tools Burn

Network locations and connected devices are searched more slowly than indexed locations. Click to get help...

Name	Date modified	Type
Ojciec Chrzestny 2 Cd1 Lektor PL.avi	15/11/2007 05:31	Video Clip
Ojciec Chrzestny 2 Cd2 Lektor PL.avi	15/11/2007 21:57	Video Clip
The.Godfather.CD1.(Lektor.PL).TVRip.by.Madman.avi	11/11/2007 15:10	Video Clip
The.Godfather.CD2.(Lektor.PL).TVRip.by.Madman.avi	11/11/2007 14:58	Video Clip
hpim01854.AVI	17/09/2008 15:18	Video Clip
Potop.1.of.3.(rus).Kinost		
Potop.2.of.3.(rus).Kinost		
Potop.3.of.3.(rus).Kinost		
Quantum.of.Solace.(200		
100 1179.mov.AVI		
100 1213.mov.AVI		

Favorite Links: Public on DFS, Documents, Pictures, Music, Recently Changed, Searches, Public

Folders

▶ **Do not distribute or share copyrighted material.**

▶ **Refrain from file sharing applications and file hosting services.**



# Follow the computing rules

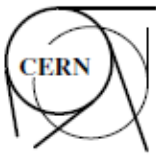
## *Suivez les règles informatiques*



Help us to protect CERN's mission and reputation  
*Aidez-nous à protéger la mission et la réputation du CERN*

# Follow the computing rules

## Suivez les règles informatiques



ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE  
EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

Laboratoire Européen pour la Physique des Particules  
European Laboratory for Particle Physics

### OPERATIONAL CIRCULAR Issued by Human Resources

This operational circular was examined by the Standing Concertation Committee at its meeting of 7 June 2000.

Applicable

concerned

Person resp

Date

*In the interests of readability, this circular has been drafted using the masculine gender should be understood to refer to both sexes. The provision and women except where it is clear from the context that they concern one s*

### USE OF CERN COMPUTING

#### I- Introduction

- ▶ **You committed to adhere to the Rules.**
- ▶ **Your activity must not be illegal, commercial, political, offensive, ...**
- ▶ **Not allowed: consultation of porn or other illicit material.**



# CERN Computer Security

Computer security emergency contact  
✉ [Computer.Security@cern.ch](mailto:Computer.Security@cern.ch) ☎ 70500  
Contact en cas d'incident de sécurité informatique



- Home
- Computing Rules
- Recommendations
- Training
- Services 🏠
- Reports & Presentations 🏠

🇫🇷 Vous préférez le français ?

## Emergency Response

What to do in an emergency

## Contact

How to contact the Computer Security Team

Departmental & experiment contacts 🏠

## About CERN Computer Security

A word from the DG

Security is not complete without you

## CERN Computer Security Announcements

*(Previous announcements are here.)*

### Security needs you

"Academic freedom is a valuable thing, but like any kind of freedom, it comes with responsibility... It is the responsibility of all of us, not just the experts in the IT Department, to protect our IT infrastructure while striking the right balance between security, academic freedom and the unfettered operation of our facilities... At CERN, security is not complete without you."

**A word from the DG**

(Read more in the [CERN Bulletin](#) 📄)

## Overview

At CERN, due to its unique academic environment and the associated academic freedom, **computer security has been delegated to CERN's users:**

**At CERN, the individual users are in first instance responsible for securing their computers, networks, data, systems & services**



# CERN Computer Security

Computer security emergency contact  
✉ [Computer.Security@cern.ch](mailto:Computer.Security@cern.ch) ☎ 70500  
Contact en cas d'incident de sécurité informatique



Home | Computing Rules | Recommendations



HR Training Website

Course

»Office software

Secure e-mail and Web browsing

»Software and system technologies

Developing secure software

Secure coding for Perl

Secure coding for Python

Secure coding in C/C++

Securing Java Applications

Securing Java and Web Applications

Securing PHP Web Applications

Service Level Status overview

Home	Search	KPIs	Tag
<b>All IT Services</b>			
<b>Administrative applications</b>			
<input checked="" type="checkbox"/>	EDH		
<input checked="" type="checkbox"/>	AIS Common Login		
<input checked="" type="checkbox"/>	AISMEDIA		
<input checked="" type="checkbox"/>	Warehouse (BAAN)		
<input checked="" type="checkbox"/>	CET		
<input checked="" type="checkbox"/>	Contracts (CFU)		
<input checked="" type="checkbox"/>	Recruitment (ERT)		
<input checked="" type="checkbox"/>	Foundation application		
<input checked="" type="checkbox"/>	Human Resources (HR)		
<input checked="" type="checkbox"/>	HRT		
<input checked="" type="checkbox"/>	PPT system		
<input checked="" type="checkbox"/>	PPT for LHC		
<input checked="" type="checkbox"/>	WOS system		
<input checked="" type="checkbox"/>	XOTHER		
<b>Windows Services</b>			
<input checked="" type="checkbox"/>	Active Directory		
<input checked="" type="checkbox"/>	Distributed File System		
<input checked="" type="checkbox"/>	Antivirus / Windows		
<input checked="" type="checkbox"/>	Security		
<input type="checkbox"/>	Terminal Services		
<input checked="" type="checkbox"/>	Printing Service		
<b>Mail and Web Services</b>			
<input checked="" type="checkbox"/>	MMM (Mail Services)		
<input checked="" type="checkbox"/>	Mail gateways		
<input checked="" type="checkbox"/>	Web		
<b>Documents and collaborative services</b>			
<input checked="" type="checkbox"/>	CDS		
<input checked="" type="checkbox"/>	Directorate Archive		
<input checked="" type="checkbox"/>	Aleph		
<input checked="" type="checkbox"/>	Bulletin		
<input checked="" type="checkbox"/>	Conversion Server		
<input type="checkbox"/>	Indico		

- ▶ Don't reinvent the wheel.
- ▶ Focus on your core work.
- ▶ Delegate your responsibility!  
**Use central IT services & Let IT take care of security.**
- ▶ Get training and help:  
<https://cern.ch/security>  
[Computer.Security@cern.ch](mailto:Computer.Security@cern.ch)



