



LABORATÓRIO DE INSTRUMENTAÇÃO
E FÍSICA EXPERIMENTAL DE PARTÍCULAS
partículas e tecnologia

Best practices for end-users in IT





Muno Dias

~~*Insecure by nature*~~

1.

Electronic Mail

Or Email

Electronic Mail



From: Good_Intentions@hell.hot
To: 1_Person, 20_Persons
CC: Several_Persons
Subject: This is very Important

- ✓ "Good vs Bad" Forward
- ✓ Lists in To:
- ✓ Disclose internal Emails to outside

Electronic Mail



SPAM

- ✓ Forward all mail
- ✓ SPAMLEARN



Electronic Mail



SPAM

- ✓ Phishing
- ✓ Ransomware



Electronic Mail



SPAM

- ✓ Phishing
- ✓ Ransomware

From: Banco santander <no-reply@santander.pt>
To: Recipients <no-reply@santander.pt>
Subject: Atualizações bancárias on-line
Date: Tue, 19 Feb 2019 09:10:28 +0100 (19/02/19 08:10:28)

Estimado cliente

Actividades Incomuns foram detectadas na sua conta online Banco Santander, colocamos sob restrição. Para recuperar sua conta [Clique Aqui](#) para atualizar e verificar suas informações agora.

Saudações,
Unidade de Prevenção de Fraudes,
© 2019 Banco Santander, S.A

From: info@lip.pt
To: info@lip.pt
Subject: FWD: Comunicado Importante Itau Empresas 22/02/2019 03:16:42
Date: Fri, 22 Feb 2019 15:16:42 +0000 (GMT)

Atencao - Comunicado Importante Itau Empresas N°: 577856063 Prezado Cliente Itau: info@lip.pt



Prezado(a) Cliente Pessoa Jurídica:

Lembramos você que em nosso sistema ainda não consta a sincronização de seu **iToken / iToken no aplicativo**.

O seu prazo para sincronização foi prorrogado e deverá ser efetuado até o dia **22/02/2019**.

Evite o bloqueio do acesso **ONLINE** da sua conta na Internet e também do acesso nos **Caixas eletrônicos Itaú** fazendo agora mesmo a Sincronia Semestral.

Clique no link abaixo para iniciar:

[Clique Aqui](#)

Atenciosamente,
Banco Itaú



O Banco Itaú garante o sigilo dos seus dados. Acesse o site do Banco Itaú e conheça a nossa política de privacidade. Por favor, não retorne este e-mail. Para nos contatar utilize o Fale Conosco do site do Banco Itaú.

Dúvidas, reclamações e sugestões, na sua agência. Se for necessário, utilize SAC Itaú todos os dias, 24h 0800 729 0729. Fale Conosco www.itau.com.br. Se não ficar satisfeito com a solução apresentada, utilize Ouvidoria Corporativa Itaú 0800 670 0011 dias úteis das 9h às 18h, Caixa Postal nº 87 800 - CEP 03162-971. Deficiente auditivo todos os dias 24h 0800 722 1722.

O seu e-mail está cadastrado para receber este tipo de mensagem do Banco Itaú. Para ALTERAR suas preferências ou CANCELAR o recebimento deste tipo de e-mail, acesse o seu Itaú Bankline Empresa na rota Produtos e Serviços > Comunicação Digital Itaú.

Esta mensagem eletrônica é confidencial. Sua utilização, cópia, distribuição ou divulgação são expressamente proibidas, sob pena de responsabilização civil e criminal.

E-mail nº 201846467946475529.

Electronic Mail



SPAM

- ✓ Phishing
- ✓ Ransomware

Assunto: RE: Approved Purchase Order No. 4300023687 / NE-0520
Data: 26 Feb 2019 22:33:00 -0500
De: Sanjeevkumar <manager@artapalace.gr>
Para: ██████████

Good day Dear,
|

With reference to our previous email,

Delivery date mentioned on attached PO was considering the date we generated PO on 28th Jan '19. But due to some internal procedure, it got delayed and this order was released and approved today. No need of any changes in PO as date mentioned was requested date. We request you to improve delivery time and advise if any changes in prices.

Provide proforma invoice for TT payment.

Awaiting for your urgent response.

Regards,

Sanjeevkumar
MEP Division

Tel: +968 24629299, **Fax:** +968 24597511



Microsoft Word Wizard attachment (PO-4300023687.doc)

Electronic Mail



SPAM

- ✓ Phishing
- ✓ Ransomware

Assunto:RE: Approved Purchase OI
Data:26 Feb 2019 22:33:00 -05
De:Sanjeevkumar <manager@
Para: [REDACTED]

Good day Dear,
 |
 With reference to our previous email

Delivery date mentioned on attached
 No need of any changes in PO as dat

Provide proforma invoice for TT payr

Awaiting for your urgent response.

Regards,
 Sanjeevkumar
 MEP Division
Tel: +968 24629299, **Fax:** +968 245

20 engines detected this file

SHA-256 742e8b89226e7ab2dbaa2bdf998a80ec84c5b999a82512cdc8c9ae83915edae0/...
 File size 110.25 KB
 Last analysis 2019-02-27 10:25:11 UTC
 Community score -35

20 / 55

Detection	Details	Relations	Behavior	Community
AegisLab	▲ Hacktool.MSOffice.Generic.31c			Antly-AVL
Avast	▲ RTF:CVE-2012-0158-CA [Expl]			AVG
Avira	▲ W97M/Abnormal.sbcd			CAT-QuickHeal
Cyren	▲ RTF/CVE1711882			ESET-NOD32
F-Prot	▲ RTF/CVE1711882			F-Secure
GData	▲ Script.Trojan.Agent.PCFV2P			Ikarus
Kaspersky	▲ HEUR:Exploit.MSOffice.Generic			Microsoft
NANO-Antivirus	▲ Exploit.Rtf.Heuristic-rtf.dlnbqn			Qihoo-360
Symantec	▲ Trojan.Gen.MBT			TACHYON
Tencent	▲ Office.Exploit.Generic.PhgJ			ZoneAlarm
Ad-Aware	✓ Clean			Ahnlab-V3
ALYac	✓ Clean			Arcabit
Avast Mobile Security	✓ Clean			Babable
Baidu	✓ Clean			BitDefender
Bkav	✓ Clean			ClamAV
CMC	✓ Clean			Comodo
DrWeb	✓ Clean			Emsisoft
eScan	✓ Clean			Fortinet
Jiangmin	✓ Clean			K7AntiVirus
K7GW	✓ Clean			Kingsoft
Malwarebytes	✓ Clean			MAX
McAfee	✓ Clean			McAfee-GW-Edition
Panda	✓ Clean			Rising
				Trojan[Exploit]/RTF.Obsecure.Gen
				RTF:CVE-2012-0158-CA [Expl]
				Exp.RTF.Heur.Gen.A
				a variant of DOC/Abnormal.C
				Malware.W97M/Abnormal.sbcd
				Exploit.CVE-2017-11882
				Trojan/O97M/Obfuse.AC
				susprtf.objupdate.gen
				Trojan-Exploit/RTF.CVE-2017-11882
				HEUR:Exploit.MSOffice.Generic

Electronic Mail



SPAM

- ✓ **Phishing**
- ✓ **Ransomware**

From: [REDACTED]
To: [REDACTED]
Subject: Caution! Attack hackers to your account!
Date: Tue, 26 Feb 2019 13:00:22 +0100 (26/02/19 12:00:22)

Hi!

As you may have noticed, I sent you an email from your account.
This means that I have full access to your account.

I've been watching you for a few months now.
The fact is that you were infected with malware through an adult site that you visited.

If you are not familiar with this, I will explain.
Trojan Virus gives me full access and control over a computer or other device.
This means that I can see everything on your screen, turn on the camera and microphone, but you do not know about it.

I also have access to all your contacts and all your correspondence.

Why your antivirus did not detect malware?
Answer: My malware uses the driver, I update its signatures every 4 hours so that your antivirus is silent.

I made a video showing how you satisfy yourself in the left half of the screen, and in the right half you see the video that you watched.
With one click of the mouse, I can send this video to all your emails and contacts on social networks.
I can also post access to all your e-mail correspondence and messengers that you use.

If you want to prevent this,
transfer the amount of \$768 to my bitcoin address (if you do not know how to do this, write to Google: "Buy Bitcoin").

My bitcoin address (BTC Wallet) is: 1GoWy5yMzh3XXBiYxLU9tKCBMgibpznGio

After receiving the payment, I will delete the video and you will never hear me again.
I give you 48 hours to pay.
I have a notice reading this letter, and the timer will work when you see this letter.

Filing a complaint somewhere does not make sense because this email cannot be tracked like my bitcoin address.
I do not make any mistakes.

If I find that you have shared this message with someone else, the video will be immediately distributed.

Best regards!

2.

Passwords

Or other secrets

Passwords



- Unique Credentials
- Password (Min. 8 Characters)
- Public Resources (Pcs, Wifi, others)
- SSH Keys
- Encryption with GPG/PGP
- Theft/Loss of equipment
- Encryption of partition with EncFS



Passwords



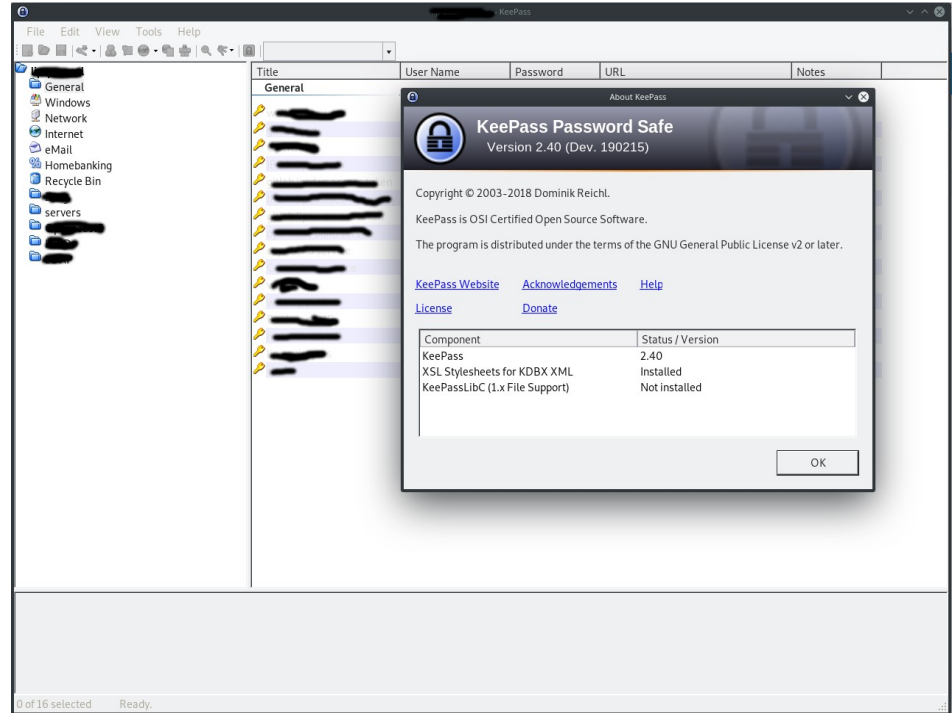
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Passwords



- KeePass
- Keepassx
- Keepassx0
- Keepassx2
- keepassxc



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SSH Keys



```
[ndias@lnlip01 ~]$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/csys/ndias/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/csys/ndias/.ssh/id_rsa.
Your public key has been saved in /home/csys/ndias/.ssh/id_rsa.pub.
```

```
[ndias@lnlip01 ~]$ scp .ssh/id_rsa.pub fermi:
[ndias@fermi ~]$ cat id_rsa.pub >> .ssh/authorized_keys
[ndias@fermi ~]$ ls -la .ssh/id_rsa
-rw----- 1 xxxxx users 1766 Jan 25 2017 .ssh/id_rsa
```

And protect your **HOME**

```
drwxrwxrwx+ 214 xxxxx users 28672 Jan 30 16:35 .
drwxr-xr-x+ 214 xxxxx users 28672 Jan 30 16:35 .
```



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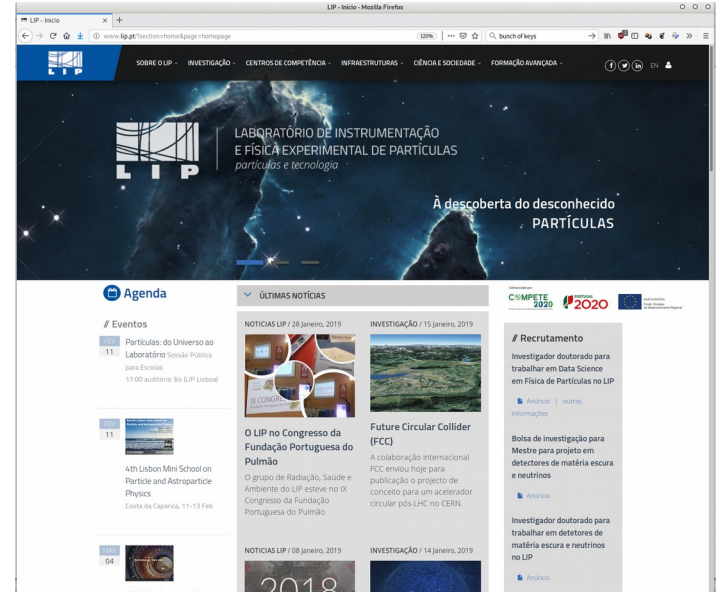
3.

Web Pages

Web Pages



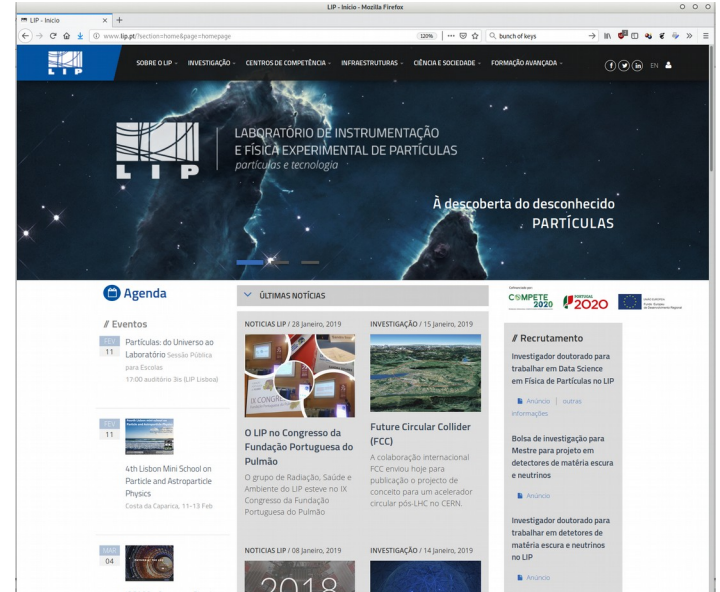
- Sensitive information
Personal webpage or Social Networks
- Http ou https?
- `.../index.[html|php|*]` (`../fotos/`; `../secret/`)
- API's, libs, code
- Copyright!
- Databases



Web Pages



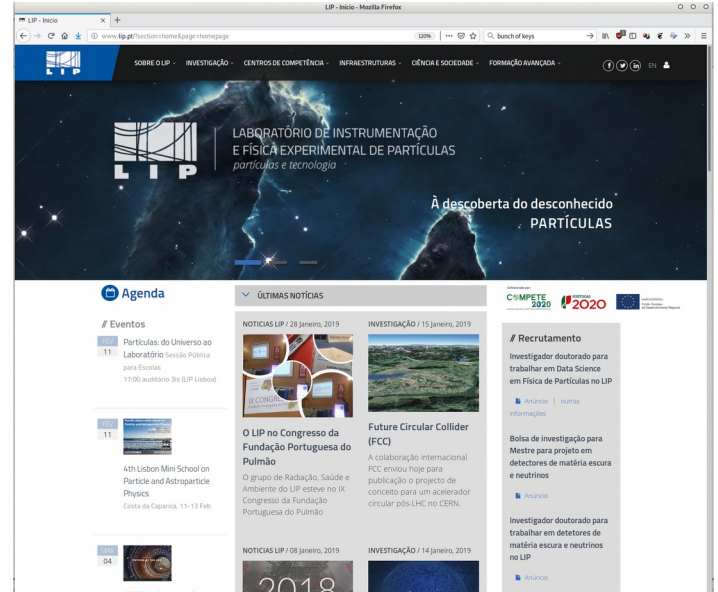
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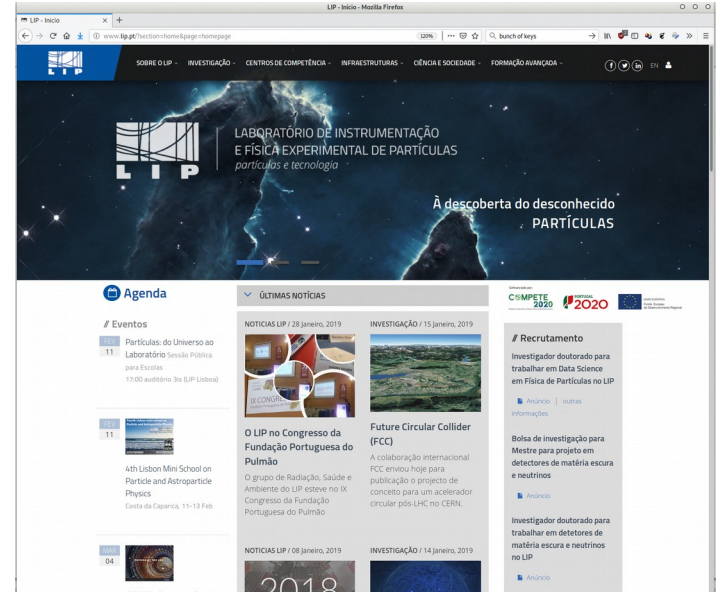
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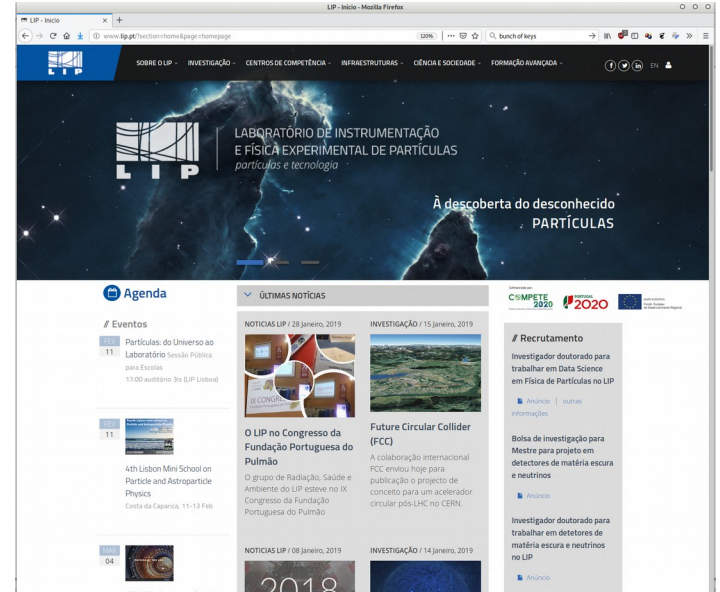
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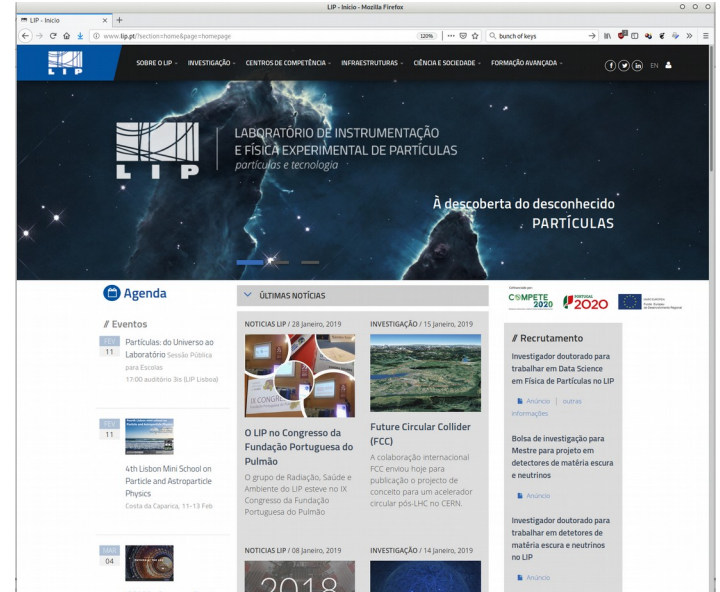
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4.

Software

Software



- Proprietary, Licence!
- Open Source
- Updates
- Anti-Virus
- Browsers
- Mobile equipments
Phone, Tablet, others
- P2P
- VM/Containers
- Firewall
- Services
- VPN



Software



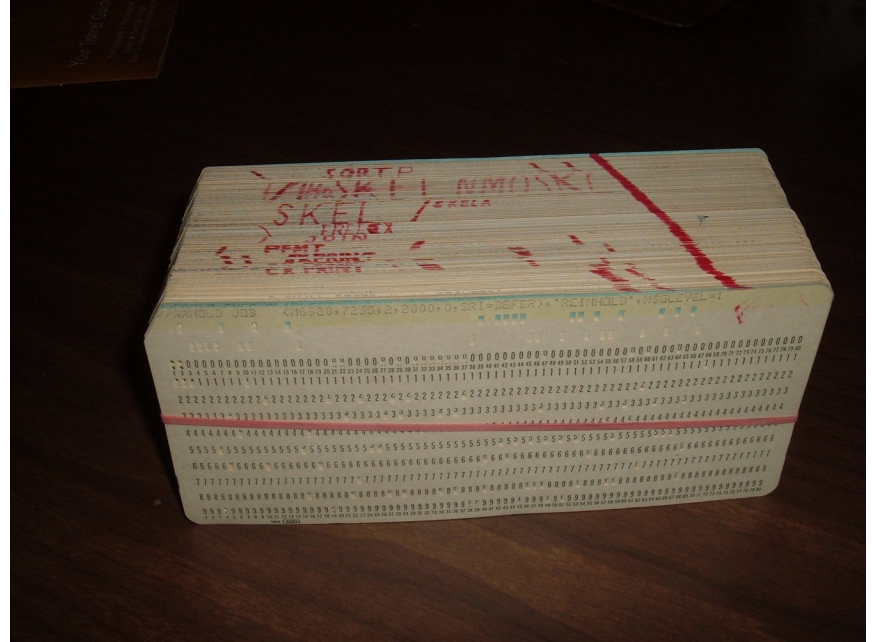
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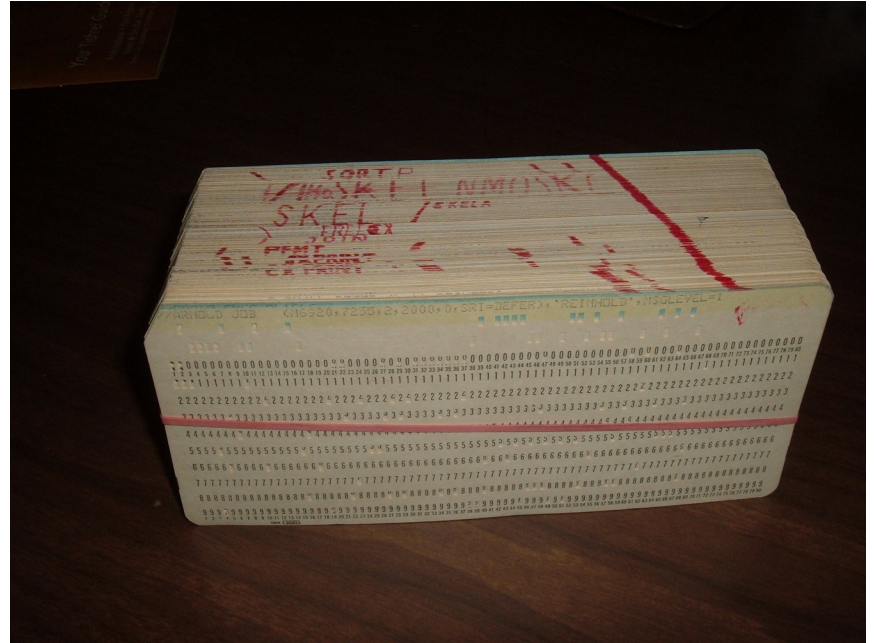
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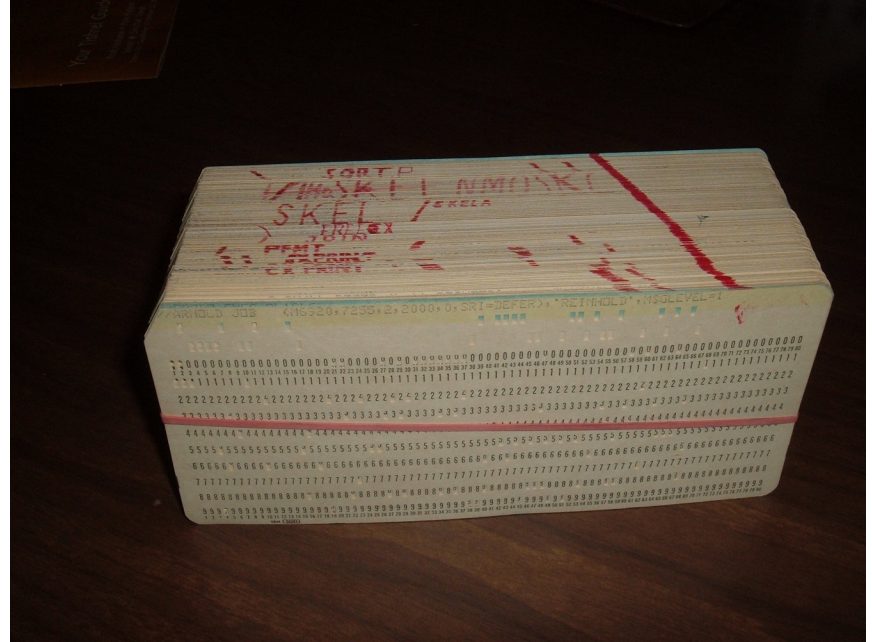
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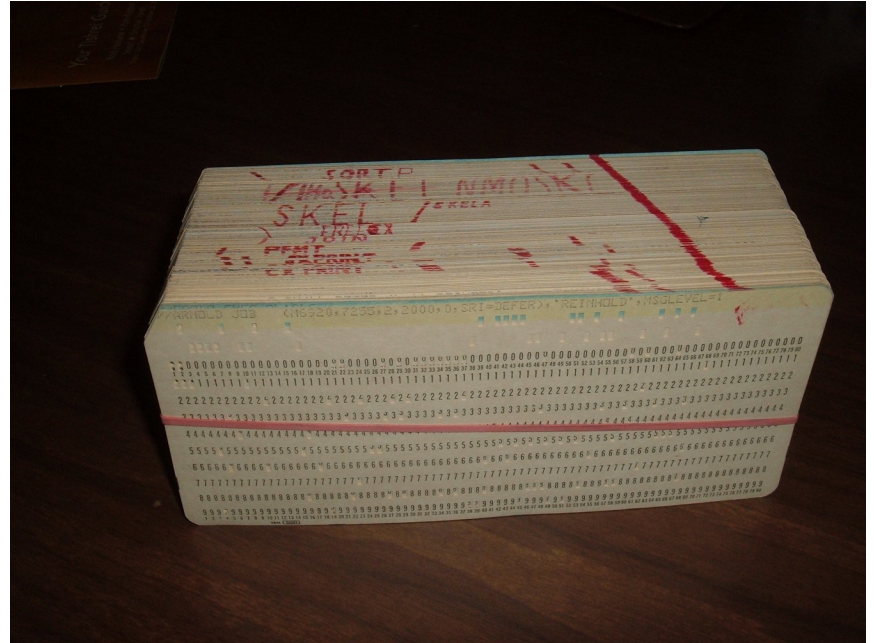


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5.

Backup

Backups



- Passwords
- Computer
- Phone/Tablet
- Incremental
- Cloud/Offsite



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- Computer
- Phone/Tablet
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Backups



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Backups



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Thanks!

Questions?

Always use helpdesk@lip.pt :)