



The Future of User Authentication

Make Your Organization Even More Secure Without Passwords





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Who are Pointsharp?

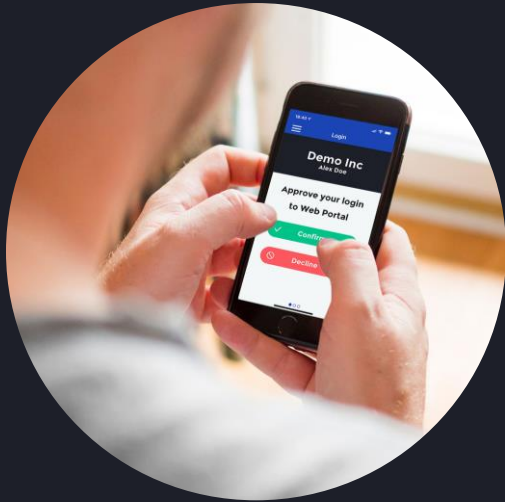
European security company

Software & SaaS

Founded 2006



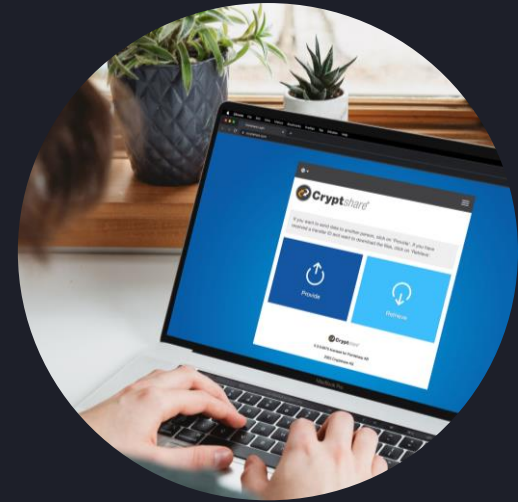
Pointsharp solution areas



**User
Authentication**



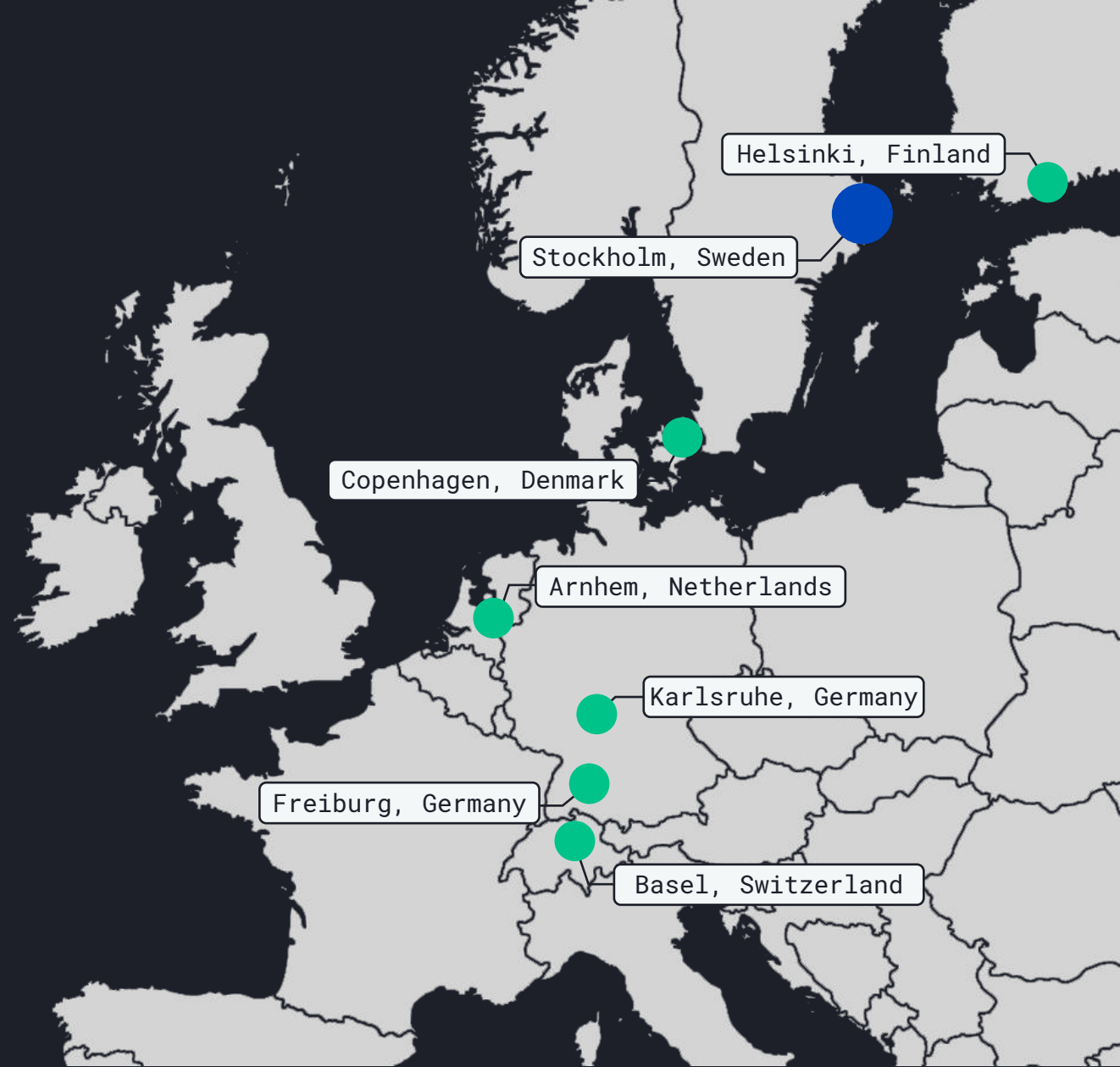
**Access
Management**



**Data & Email
Security**

Pointsharp in numbers

7 Offices
200 Employees
€30 Revenue
3500 Customers
35+ Countries

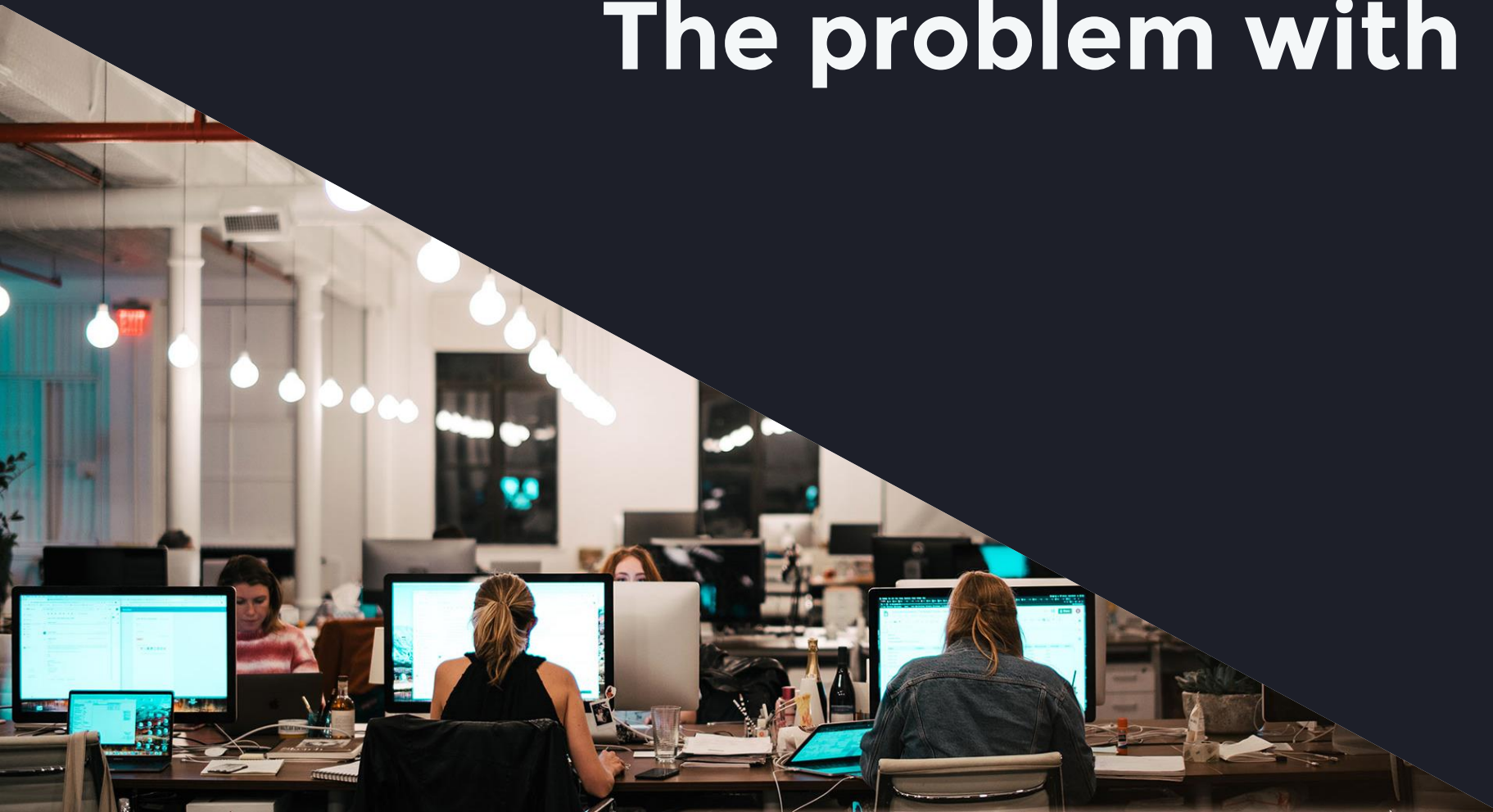


● Head-quarter ● Office

The Future of User Authentication

- **The rise of user authentication in the era of digital threats**
- **Real-world applications of security keys for user authentication**
- **Future trends in secure communication**

The problem with passwords



First of all
security

The problem with passwords

Short passwords

Long passwords

Big leaks



3min 21s

8 character with uppercase and number

The problem with passwords

Short passwords

Long passwords

Big leaks



Password_123!

The problem with passwords

Short passwords

Long passwords

Big leaks

```
viernes 9 novembre 01:31:32 2018 ]-[ ~/Lampor
$ gcc lamport.c base64.c -o lamport -lcrypto

viernes 9 novembre 01:31:34 2018 ]-[ ~/Lampor
$ ./lamport -g
[+] Calculating Lamport keypair . . .
[+] Obtaining random data from a secure source
[+] Calculating the public key from the private one

-----BEGIN LAMPOR PRIVATE KEY BLOCK-----
Dnuw/2KD0ifxuigGdIJIj9rfhkJauc0afAhsjB/YVfQVCNSi1EmKf
USQbcc0cn++tFEs8kVRMlgCYHhfT5AdlV3eKo1ZmXT/lQcPfnv6tc
W46wFWRV0hCjZzv6hNo0101nZldsceQXqQmcy8/gtg+cJB+nZ0GLk
RHdtcU8VlUhU3/9rPVya/ijltz9ec2XblARA90a8LQ012MhAfh0Bn
K0HMrUV3hVgjyns5sy7ss2mevH35GF19XTZwHJ4hWYqDsfgTb3K1n
s8RqgaEhbVdCPRPQQFNKVBI1GBSgVbhx0bgTDdFYlsPXWroUhxGYc
ZuFAxog3tD15EF0gL135RzpEaRH6D8GrS3oEqPfdgSw7ZJ4rb9fk
NI8Nv3EYJ7XG6iJVPiCExvpC38fhkaLNb8lgXVBNORlue6DvHCKS
RhDQlRMZwEjLJPthq5bq7Y7v+h1w+86H1MLHh3DLBfA6xLWtraz0W
Hkqzs406XQwfruzHZI0gTEU1Wq1w+MeKJXE7Cw6KFFVbGQ8bwhME
0ubZv06CZ4r8AhZQvQ6ZmpfQZ9vtWpo+z21uT07L5+4LXKJUNFrDf

what the fuck should I do

message

ation" of the signature
IZE_BYTES; i++)

MS-bit of the byte 10000000b
+ j * HASH_SIZE_BYTES, privkey[j][1], HIGH_SIZE_BYTES);
+ j * HASH_SIZE_BYTES, privkey[j][0], HIGH_SIZE_BYTES);
+ j * HIGH_SIZE_BYTES, privkey[j][1], HIGH_SIZE_BYTES);
+ j * HIGH_SIZE_BYTES, privkey[j][0], HIGH_SIZE_BYTES);
```

12,465,082,651

leaked account details



Colonial Pipeline

**second
usability**

Password: X037LG7Fab9!

Are you **users** happy
with using passwords?

And lastly
regulation



EU NIS-2

Cybersecurity measures

**Authentication:
Multi Factor Authentication
and SSO**

**Access Control
(Physical Access)**



Real world applications of user authentication



Passwordless logon for all common tokens, platform independent



Mobile app



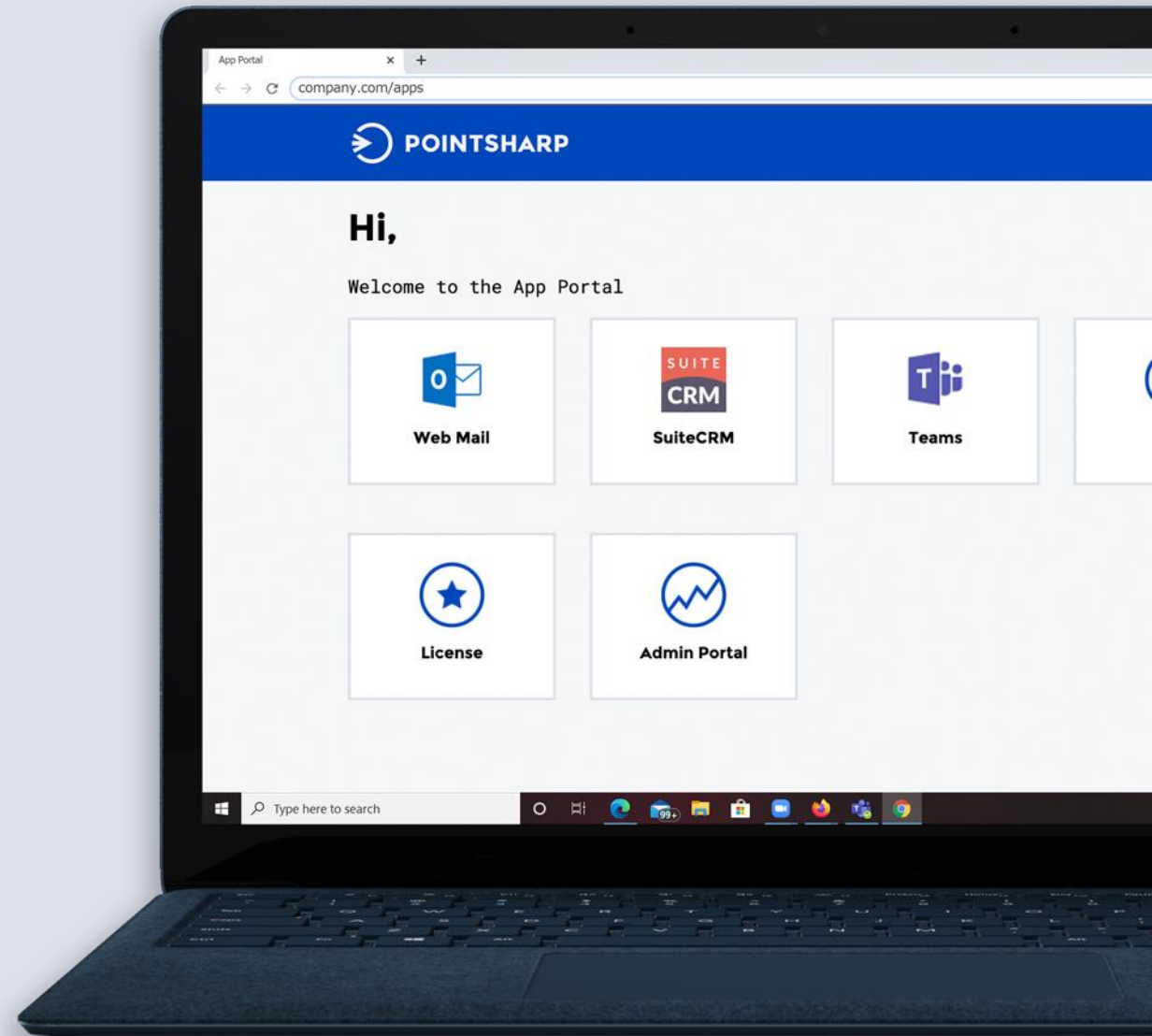
Security key





**Shared
workstations
without any risk**

App Portal with single sign on



Secure mail and data transfer

The screenshot shows the 'E-Mail-Klassifizierung' (E-Mail Classification) menu in Microsoft Word. The menu is open, displaying four options with corresponding shield icons:

- No classification**: The e-mail text and the attachments are sent without classification. You can send them with or without Cryptshare.
- internal communication**: The e-mail text is sent unencrypted. Attachments are sent encrypted via Cryptshare. You do not need to set a password.
- X-ray files**: The e-mail text and the attachments are sent encrypted via Cryptshare. You need to set a password.
- Patient data**: All contents (subject, e-mail text and attachments) are sent encrypted via Cryptshare. You need to set a password. The message must be retrieved by the recipient within 3 days. You will be notified instantly when the recipient downloads the message.

The background shows the Word ribbon with 'Message' selected, and the 'Send securely' button is visible on the left. The document content includes 'Hi Gill,' and 'attached yo'.



**Secure work from
anywhere**

**Our vision is to give everyone
access to a safe and modern
digital workplace.**

Future Trends

- **Security Threats**
- **Digital identities**
- **Ease of Use**
- **Talents are rare**



Thanks for listening!

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