

FIDO based Authentication in modern enterprise MFA scenarios

How a German car manufacturer and a bank utilize U2F for employee MFA



2. July 2018

Maritim ProArte Hotel, Berlin

Malte Kahrs | CEO MTRIX GmbH

Who is MTRIX?

- Founded in 2006
- Over 4 million EUR turnover in 2017
- 13 Employees (growing)
- Focus on Germany (Austria, Switzerland)
- Pure focus on Authentication



Portfolio



Member of



Our Customers



In general

What do we face at most of our clients?

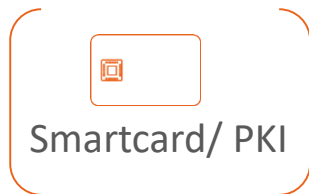
5 years ago

Simplified ;)

Internal Network



Desktop



Smartcard/ PKI

Firewall



Username + Password

Internet

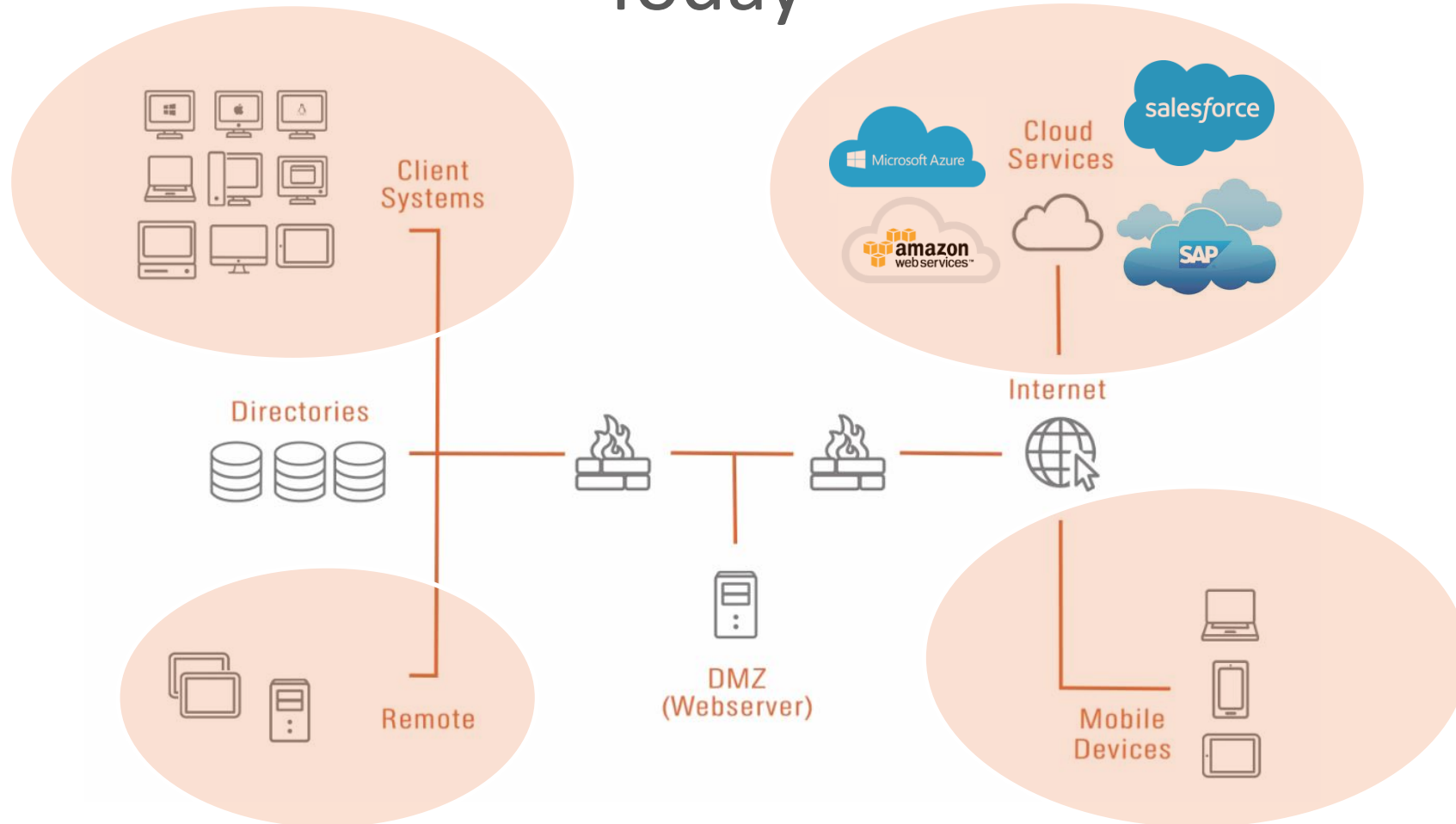


VPN Client



OTP

Today



81%

of hacking-related breaches leveraged either stolen and/or weak passwords.

Source: 2017 DBIR @ <http://www.verizonenterprise.com>

The initial situation @ Client X

Who is the client?

Unfortunately I'm not able to disclose the names
(yet)

What did one client use?

Token (OTP) based Solution:

- ☛ Pre Shared Key weakness
- ☛ Limited user experience
- ☛ Limited usecases
- ☛ Limited lifetime
- ☛ Proprietary
- ☛ Costs



What are the alternatives?

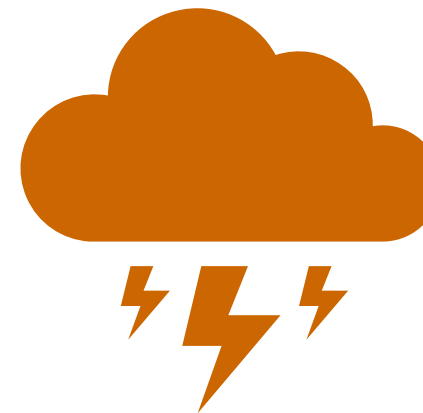


About 30

OATH, Fingerprint, Voice, PKI, RFID, SMS, Push, Iris, etc.....

What are the issues with those?

- Technical weaknesses
- Limited user experience
- Driver dependencies
- Hardware dependencies
- Limited interoperability
- Limited lifetime
- Proprietary technology
- Costs

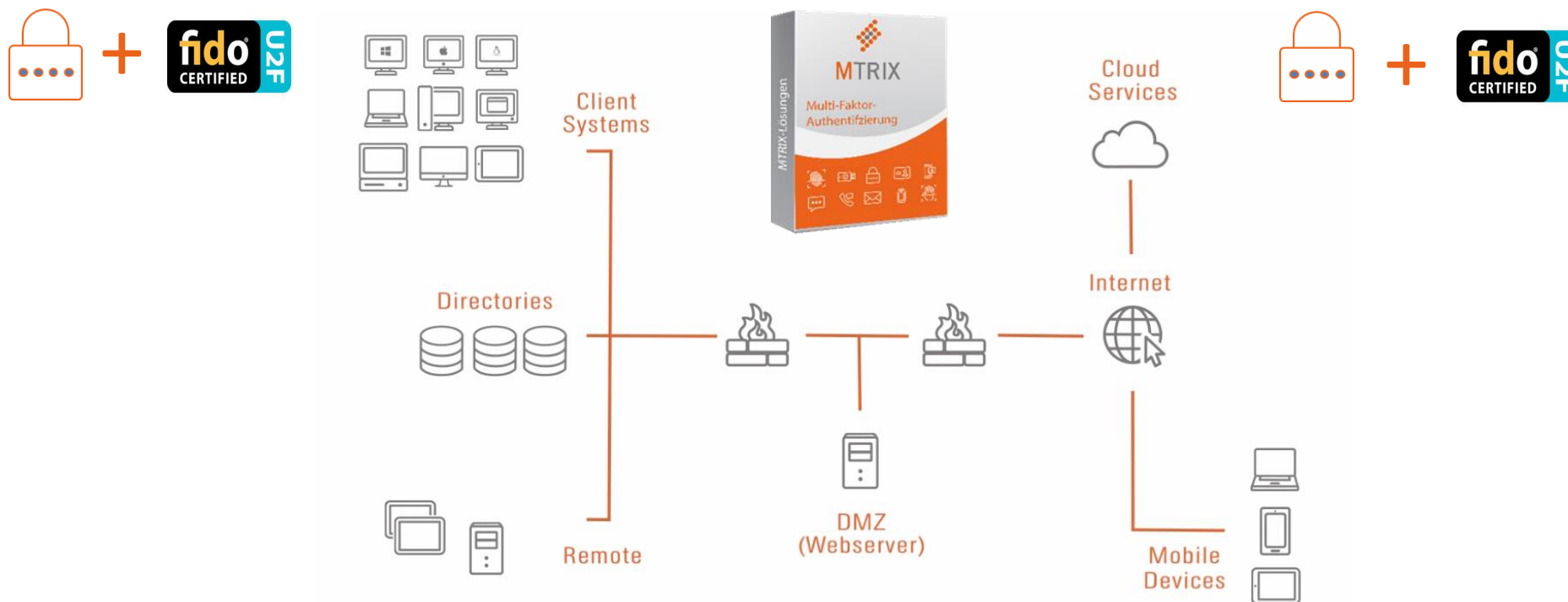


Why did they chose FIDO?

- ❖ Superior Security
- ❖ Enhanced user experience
- ❖ Easy enrolment
- ❖ Works on various platforms
- ❖ Various vendors in the market
- ❖ Highly interoperable
- ❖ Future prove investment
- ❖ Standards based technology



How do they use U2F today?



Can they use FIDO everywhere today?

Not yet! ;)

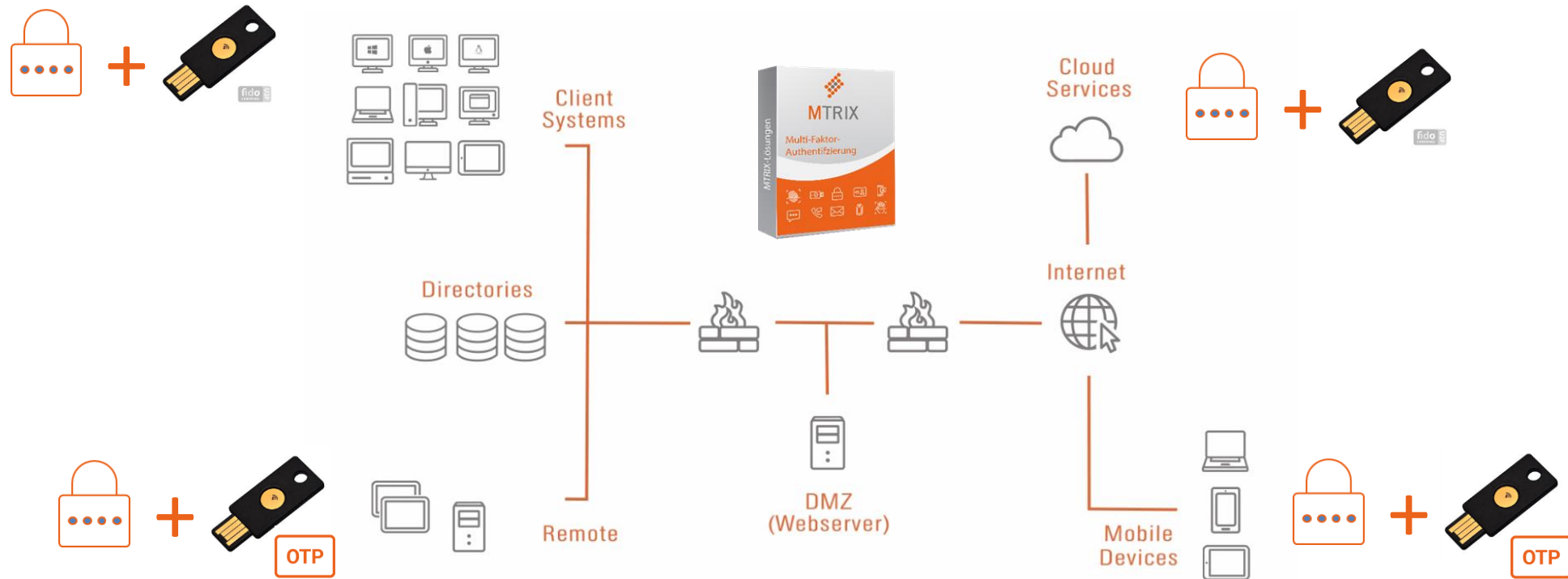
What did they buy?



A multi protocol token

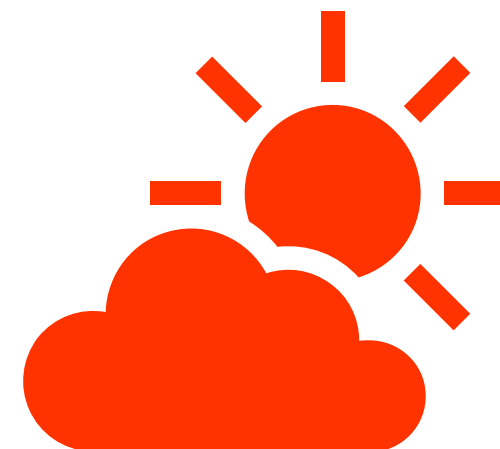
OTP, PIV, FIDO, PWD, C&R

How they use it today



What is the future?

- ☀️ Expand the endpoints in use
- ☀️ Integrate FIDO into own apps
- ☀️ Expand FIDO to mobile
- ☀️ Expand to B to C use cases
- ☀️ Define FIDO as the standard



Questions



Thank You!

www.mtrix.de