Cost-effective secure mobile work with storage and authentication device approved for classification levels EU Restricted and NATO Restricted

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DIGITTRADE GmbH

RV-Nr. 21413
Verfügbar
im KdB

EU RESTRICTED
NATO RESTRICTED
VS-NfD

SecurITy
made
in
Germany
Trust Seal
www.teletrust.de/itsmig

DIGITTRADE GmbH

- founded: 2005 headquarter: Teutschenthal
- since 2005 development and production of external encrypted hard drives to protect business and personal data
- since 2013 development of the communication platform Chiffry for tap-proof telephony and encrypted sending of pictures, videos, contacts as well as voice and text messages via smartphones

HS256S
ULD
2013

Insert this side up
in Pfeilrichtung einschieben
VOM DATENSCHUTZ EMPFOHLEN*
03-03/2013 / Valid till 2015-03

HS256 S3
BSI-DSZ-CC-0825-2017
2017

Bundesamt für Sicherheit in der Informationstechnik
Deutsches IT-Sicherheitszertifikat
Zertifikat Nummer: BSI-DSZ-CC-0825-2017
Gültig bis: 05.10.2022

KOBRA Drive VS
VS-NfD approved (NATO / EU)
2020

KOBRA DRIVE
Zugelassen durch das BSI bis VS-NfD
RESTREINT UE / EU RESTRICTED
NATO RESTRICTED
BSI-VSA-10338
Gültig bis: 30.04.2023

KOBRA Stick VS
VS-NfD approved (NATO / EU)
2020

DIGITTRADE
DIGITTRADE - ATOS CardOS 5.3, CC EAL4+
Zugelassen durch das BSI bis VS-NfD
RESTREINT UE / EU RESTRICTED
NATO RESTRICTED
BSI-VSA-10338
Gültig bis: 30.04.2023

IT Security Made in Germany (TeleTrusT)

Trustmark„IT Security made in Germany“ confirms that:

- the company headquarters is located in Germany
- the company offers trusted IT security solutions
- the products do not contain any hidden entrances
- IT security research and development of the company takes place in Germany
- the company meets the requirements of German data protection law

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KOBRA VS storage devices: Security mechanisms

Encryption:

256-bit AES full-disk hardware encryption in XTS mode using two 256-bit crypto keys

Access control:

Two-factor authentication via smart card and 4 to 8-digit PIN according to the principle „having and knowing“

Zugelassen durch das BSI
bis VS-NfD
RESTREINT UE / EU RESTRICTED
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BSI-VSA-10338
Gültig bis: 30.04.2023

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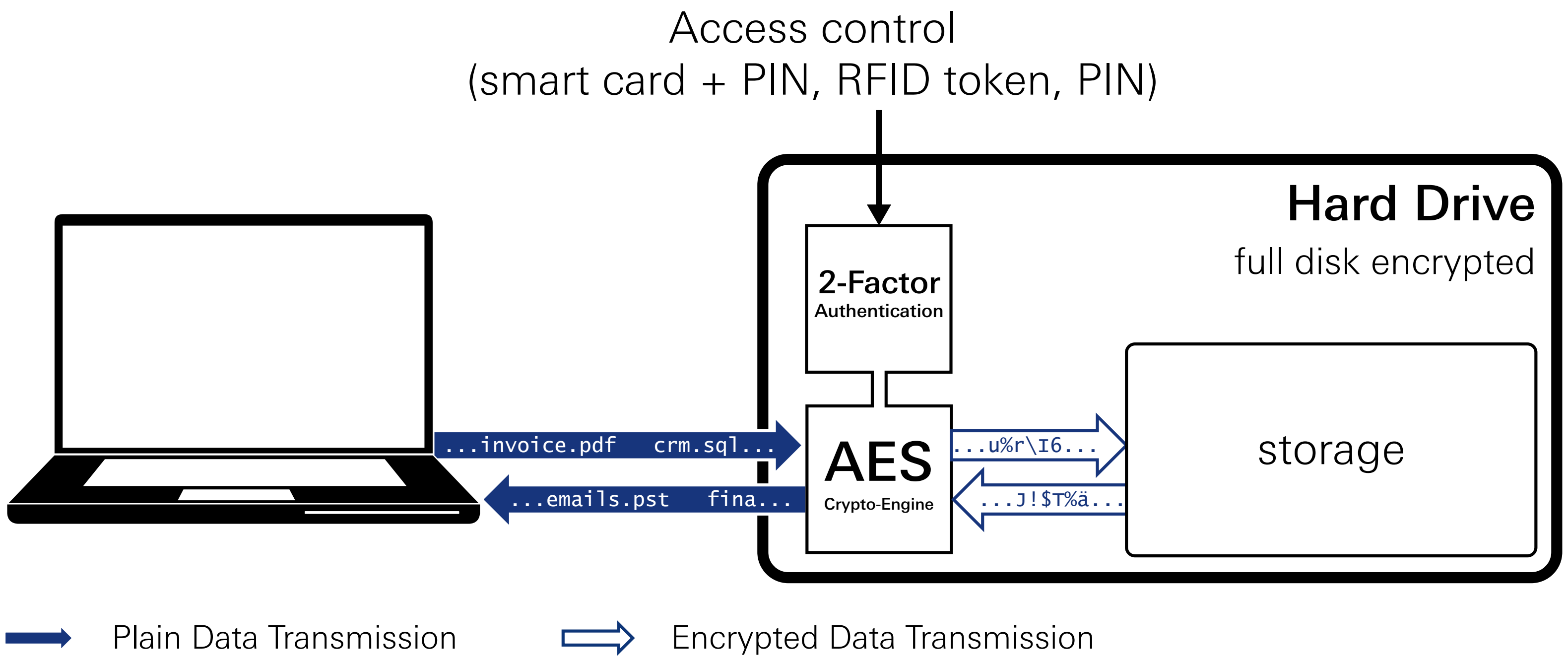
Management of the encryption key:

- Creation, modification and destruction by user
- HW-based random number generator
- External generation and calculation

User management by administrator

- Integrate and delete users
- Read / write authorisation
- Time-out, lock-out, number of failed attempts
- Locking the administrator functions

Mobile access to EU Restricted / NATO Restricted data



Access control
(smart card + PIN, RFID token, PIN)

Hard Drive
full disk encrypted

2-Factor
Authentication

AES
Crypto-Engine

storage

...invoice.pdf crm.sql...

...emails.pst fina...

...u%r\I6...

...J!$T%ä...

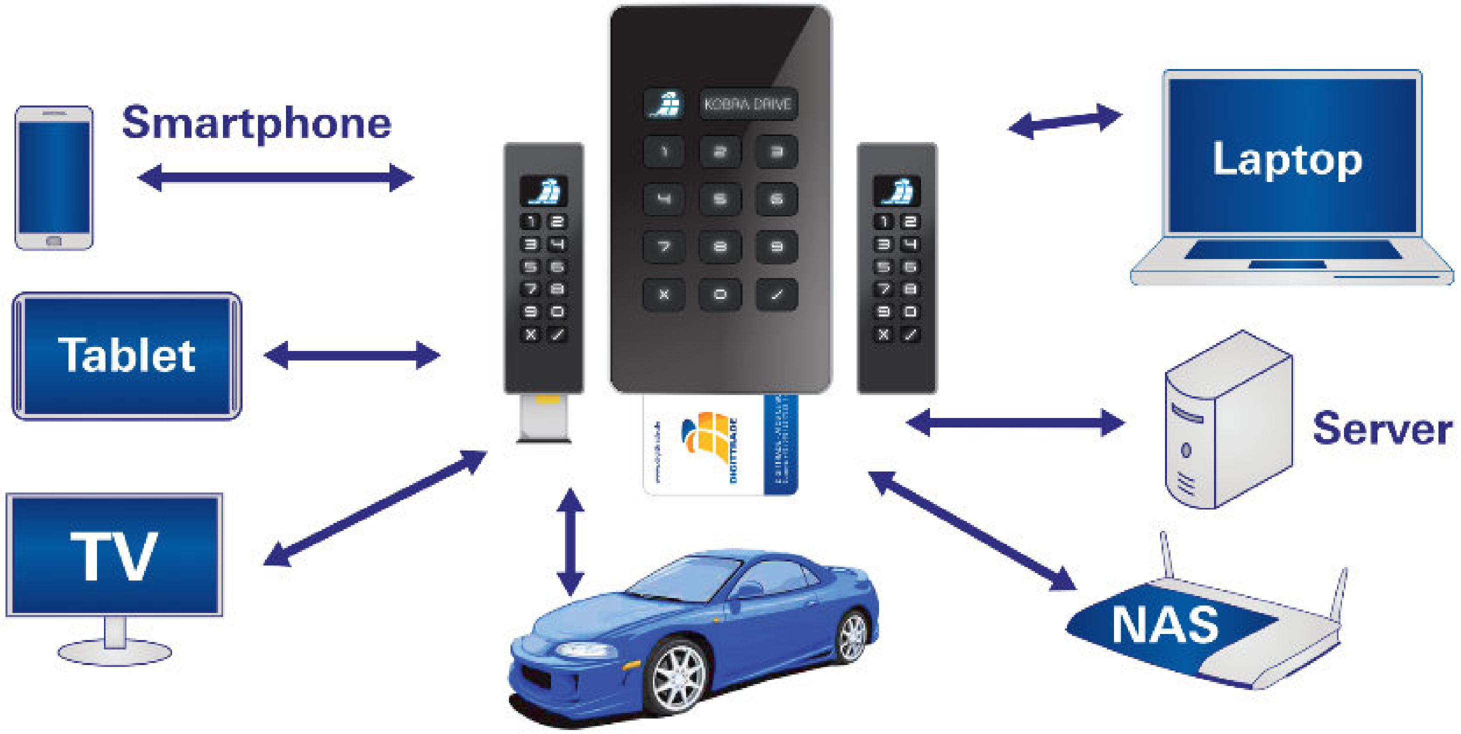
Plain Data Transmission

Encrypted Data Transmission

Simple and safe

Transparent and operating system independent

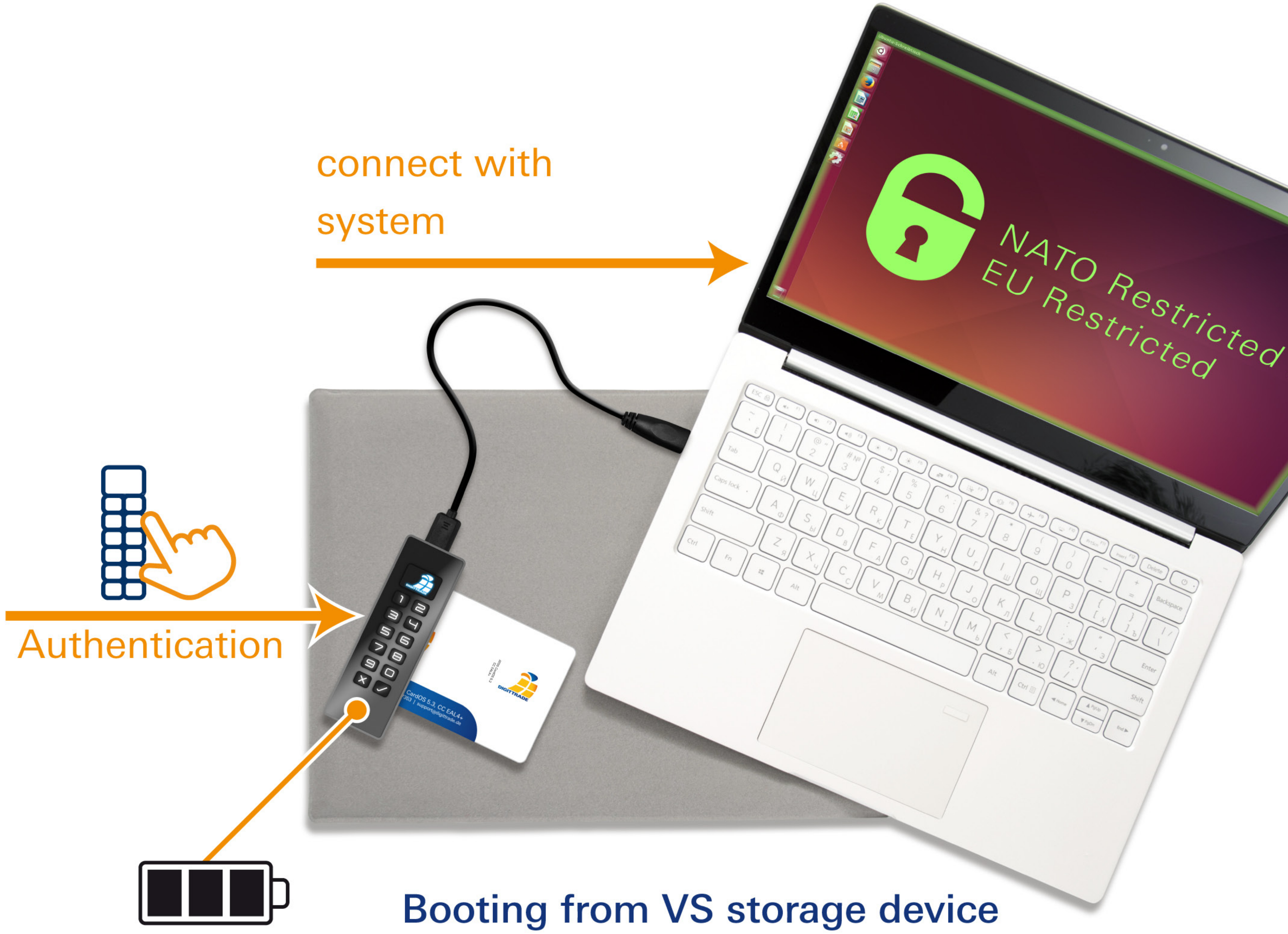
Users cannot bypass encryption



Use as an encrypted boot device

Client: German machine builder

- Integrated power supply enables pre-boot authentication
- Encrypted installation of operating systems on Kobra VS storage devices
- Flexible change of purpose from laptop/PC
- pSLC memory recommended to ensure longest possible lifetime
- When the storage device is disconnected from the PC, the data remains encrypted and is stored only on the Kobra VS storage device.



Compare Igel UD-Pocket with Kobra VS

√	Igel UD-Pocket	Kobra VS
Mobil Workspace on every PC/Notebook	√	√
Long operation life time	√	√
Lower cost than fat- and thin-clients and PC/notebook	√	√
Secure 2FA Authentication	-	√
Supports PKI based Smartcards	-	√
Integrity protection by HW Write protection	-	√
Encrypted Storage for OS and User Data	-	√
Approved by BSI for for EU Restricted and NATO Restricted content	-	√

Advantages of using the Kobra Stick VS with IGEL OS

Two-factor Pre-Boot authentication

- Protects Igel OS from manipulation and prevents attackers from starting the operating system
- Protects configuration information

Passwortless Single Sign On

- User only has to remember his PIN, all further authentication can be done by the smartcard
- Kobra VS driver is already fully integrated into Igel OS
- Smartcard reader of Kobra VS can be used for PKI-based authentication of the VPN connection
- Smartcard reader can be forwarded to target VM and used for further authentication procedures
- Smartcard can be Employee ID Card

The combination of Kobra Stick VS and IGEL OS has been well tested and works out of the box

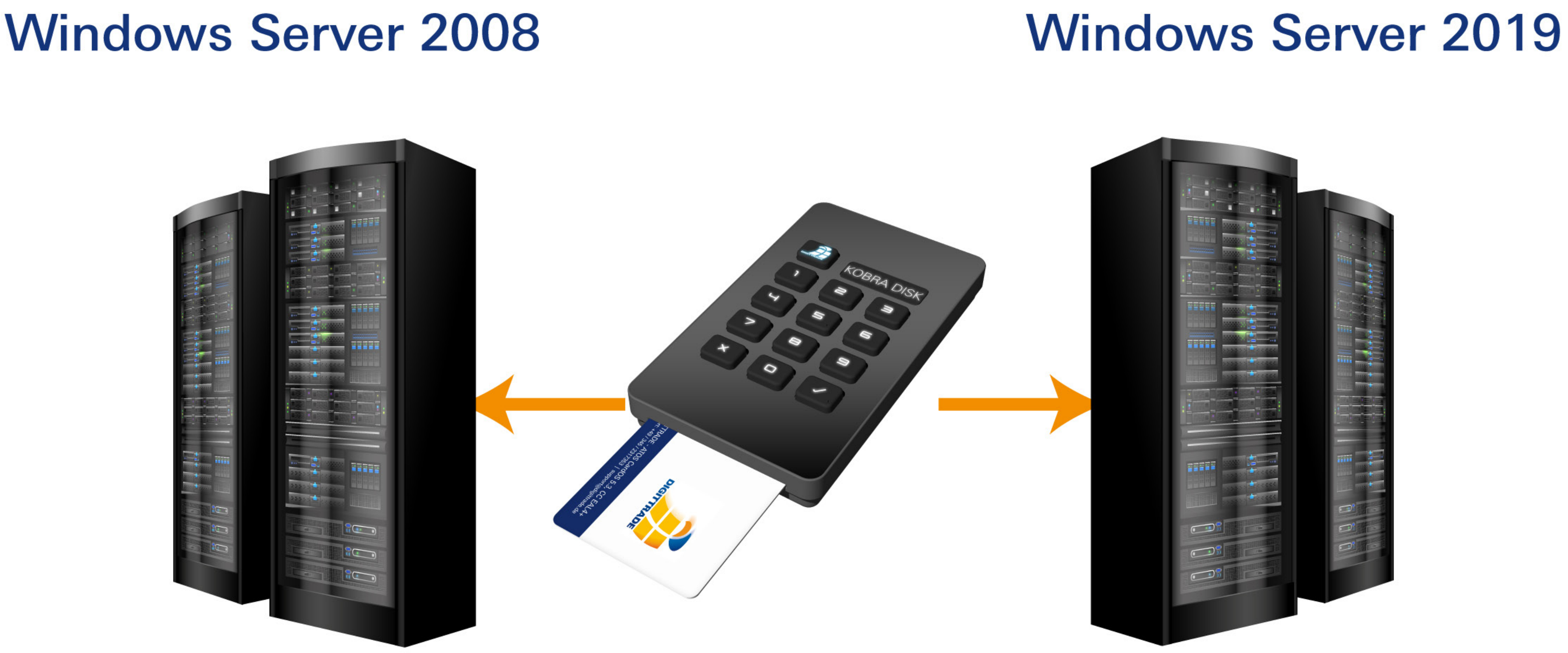
Secure backup storage

Client: German aviation company

- Protects data against unauthorised access
- Offers full control over sensitive and personal data
- Several Kobra VS storage devices can be operated with one smartcard
- Secure backups of e.g. project-based developer laptops with NATO Restricted and EU Restricted content
- Cost-effective secure geo-redundant storage of backups for disaster recovery

Server system migration

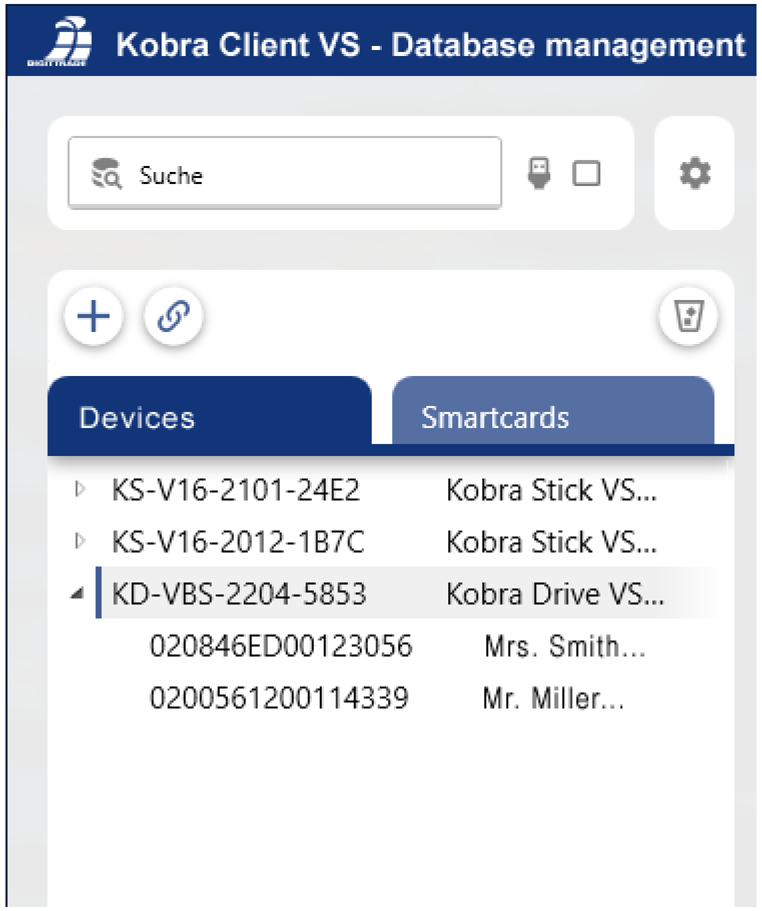
Client: Federal authority



- Kobra Drive VS with up to 16TB storage on one storage device
- Protects data against unauthorised access
- Offers full control over sensitive and personal data
- Several Kobra VS storage devices can be operated with one smart card
- Secure transport of data to new location

Simplified data transport

Client: Federal authority

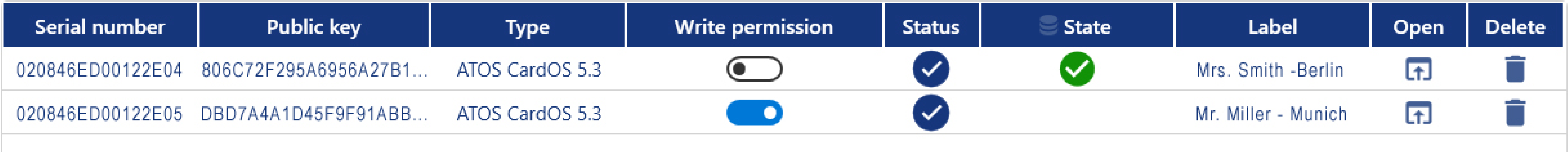


Kobra Client VS - Database management

KS-V16-2101-24E2	Kobra Stick VS...
KS-V16-2012-1B7C	Kobra Stick VS...
KD-VBS-2204-5853	Kobra Drive VS...
020846ED00123056	Mrs. Smith...
0200561200114339	Mr. Miller...

- Storage device is prepared by admin for access by sender and recipient.
- Cost-effective transport by parcel service provider instead of own staff

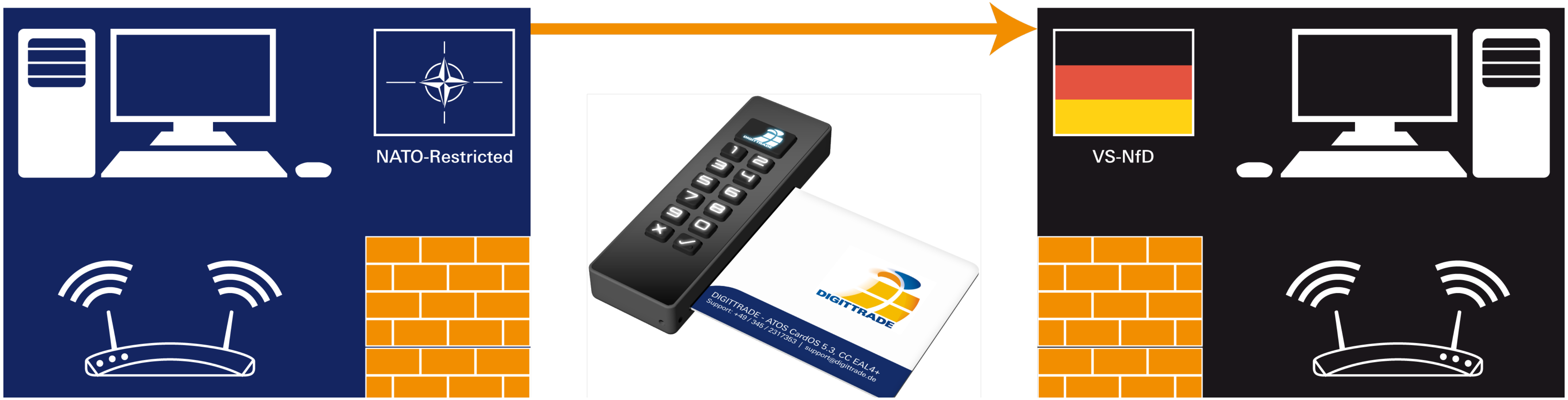
SHIPPING of the KOBRA VS-storage device



Serial number	Public key	Type	Write permission	Status	State	Label	Open	Delete
020846ED00122E04	806C72F295A6956A27B1...	ATOS CardOS 5.3	○	✓	✓	Mrs. Smith -Berlin	⇪	🗑
020846ED00122E05	DBD7A4A1D45F9F91ABB...	ATOS CardOS 5.3	●	✓		Mr. Miller - Munich	⇪	🗑

Airgap bypass

Client: Federal authority


NATO-Restricted
VS-NfD
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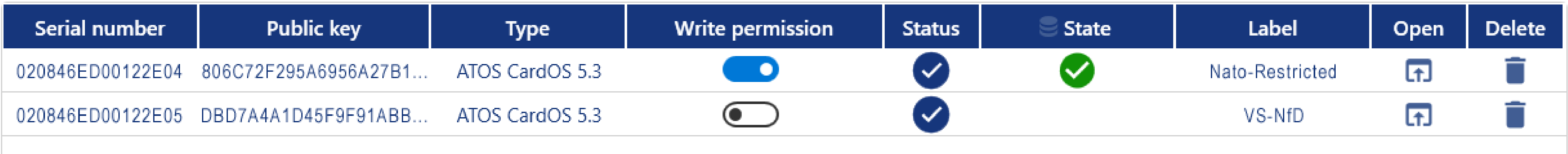
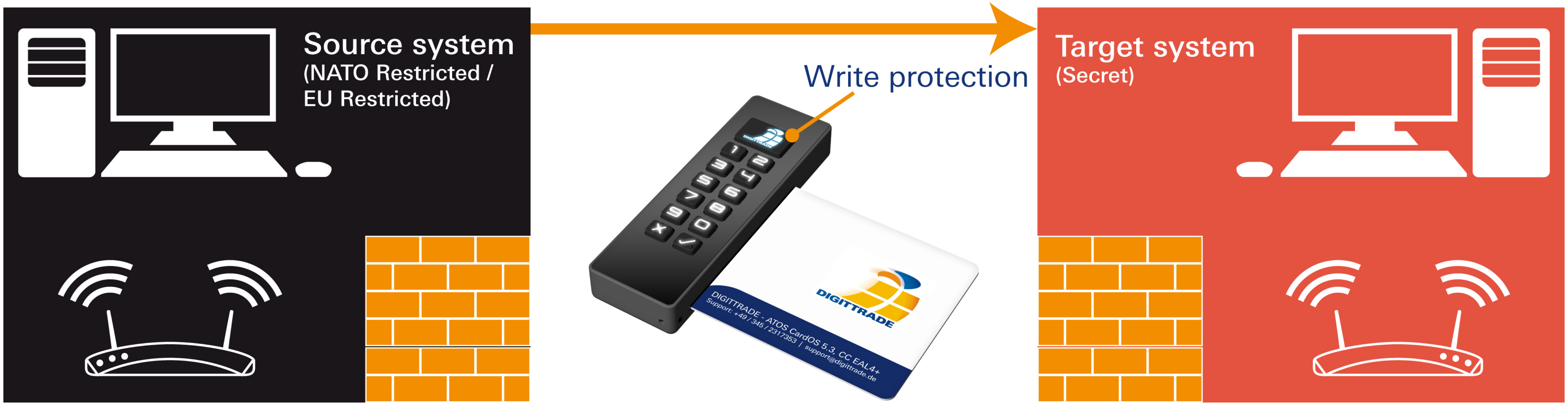
- Activated write protection against unwanted leakage of information
- Administrator can define two smartcards: Smartcard 1 for work in the NATO Restricted Area (read and write) and Smartcard 2 for VS-NfD Area (read only).



Serial number	Public key	Type	Write permission	Status	State	Label	Open	Delete
020846ED00122E04	806C72F295A6956A27B1...	ATOS CardOS 5.3	●	✓	✓	Nato-Restricted	⇧	🗑
020846ED00122E05	DBD7A4A1D45F9F91ABB...	ATOS CardOS 5.3	○	✓		VS-NfD	⇧	🗑

Use as data diode

Client: Federal authority



Source system
(NATO Restricted /
EU Restricted)

Write protection

Target system
(Secret)

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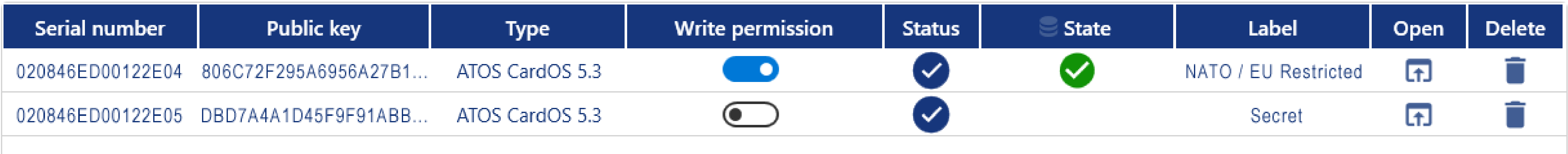
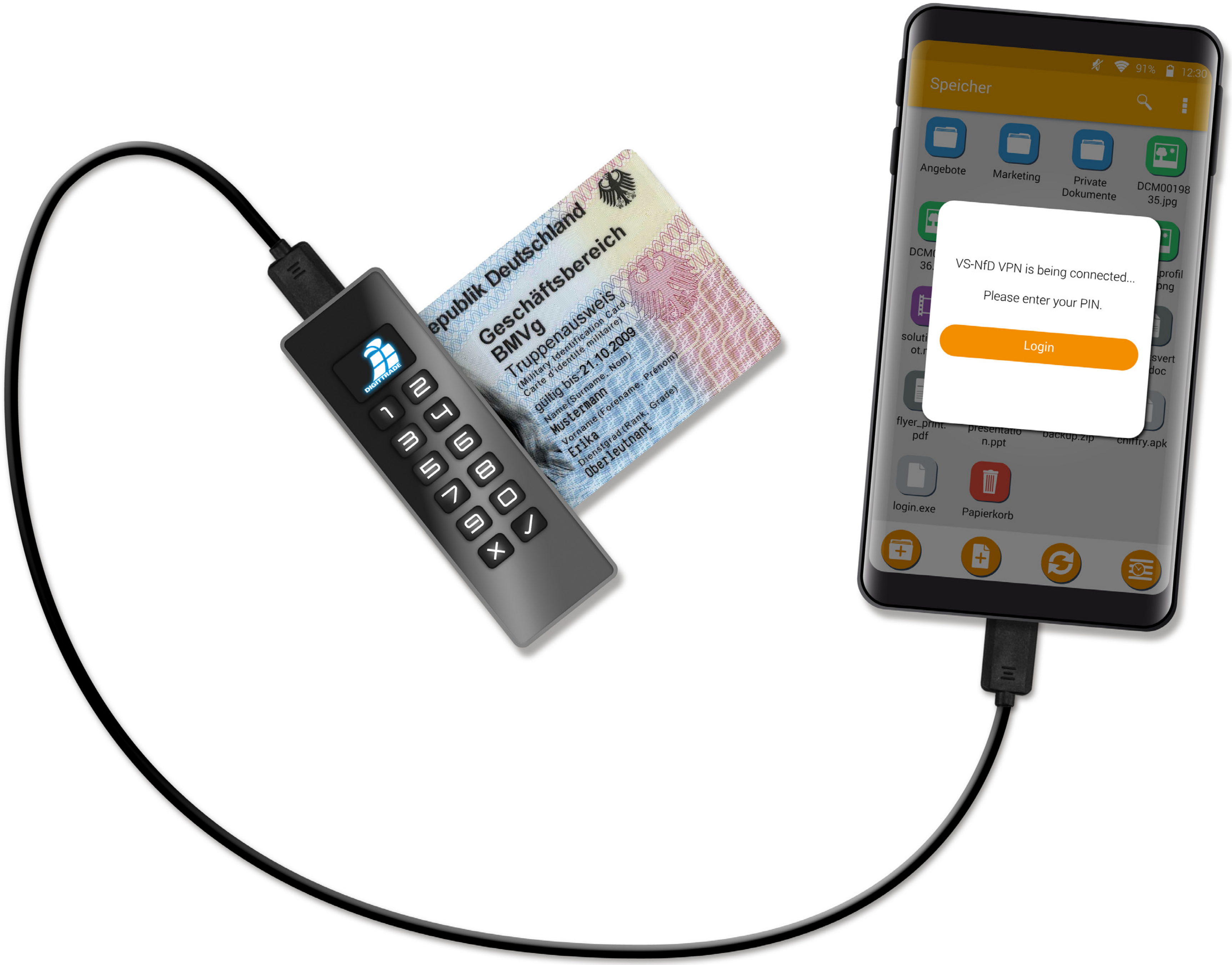
- Activated write protection against unwanted leakage of information from higher classified systems to lower classified systems.
- Administrator can define two smartcards: Smartcard 1 for work in the NATO Restricted and EU Restricted area (read and write) and Smartcard 2 for secret area (read only).



Serial number	Public key	Type	Write permission	Status	State	Label	Open	Delete
020846ED00122E04	806C72F295A6956A27B1...	ATOS CardOS 5.3	◉	✓	✓	NATO / EU Restricted	⇧	🗑
020846ED00122E05	DBD7A4A1D45F9F91ABB...	ATOS CardOS 5.3	○	✓		Secret	⇧	🗑

Use on smartphones as a data storage device

Client: State Police Authority, Technology Partner



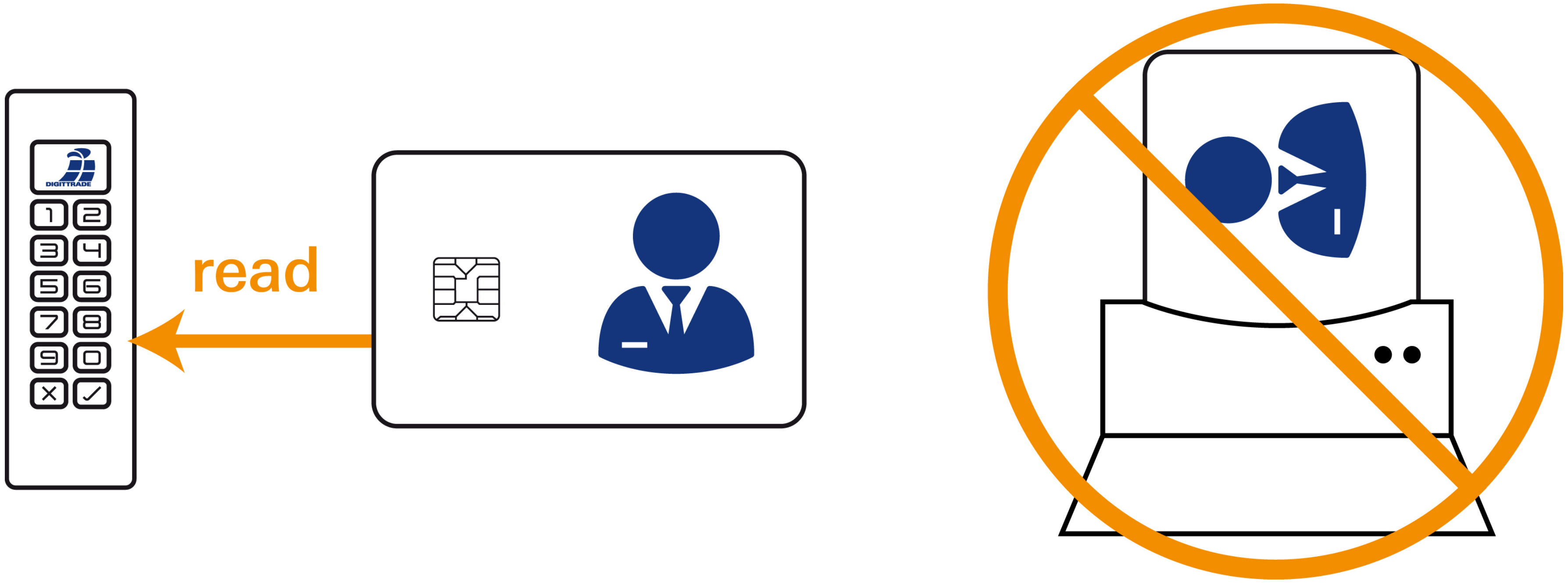
VS-NfD VPN is being connected...

Please enter your PIN.

- Use on smartphones, tablets, notebooks as NATO Restricted and EU Restricted data storage device
- Authentication via smartcard and PIN, e.g. for VPN or cloud access

Two-factor authentication for:

- E-mail encryption
- VPN access
- Cloud access
- Windows or Linux login
- Digital signing of documents and files



Thank you for your attention

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