

Trust infrastructure for Industrie 4.0

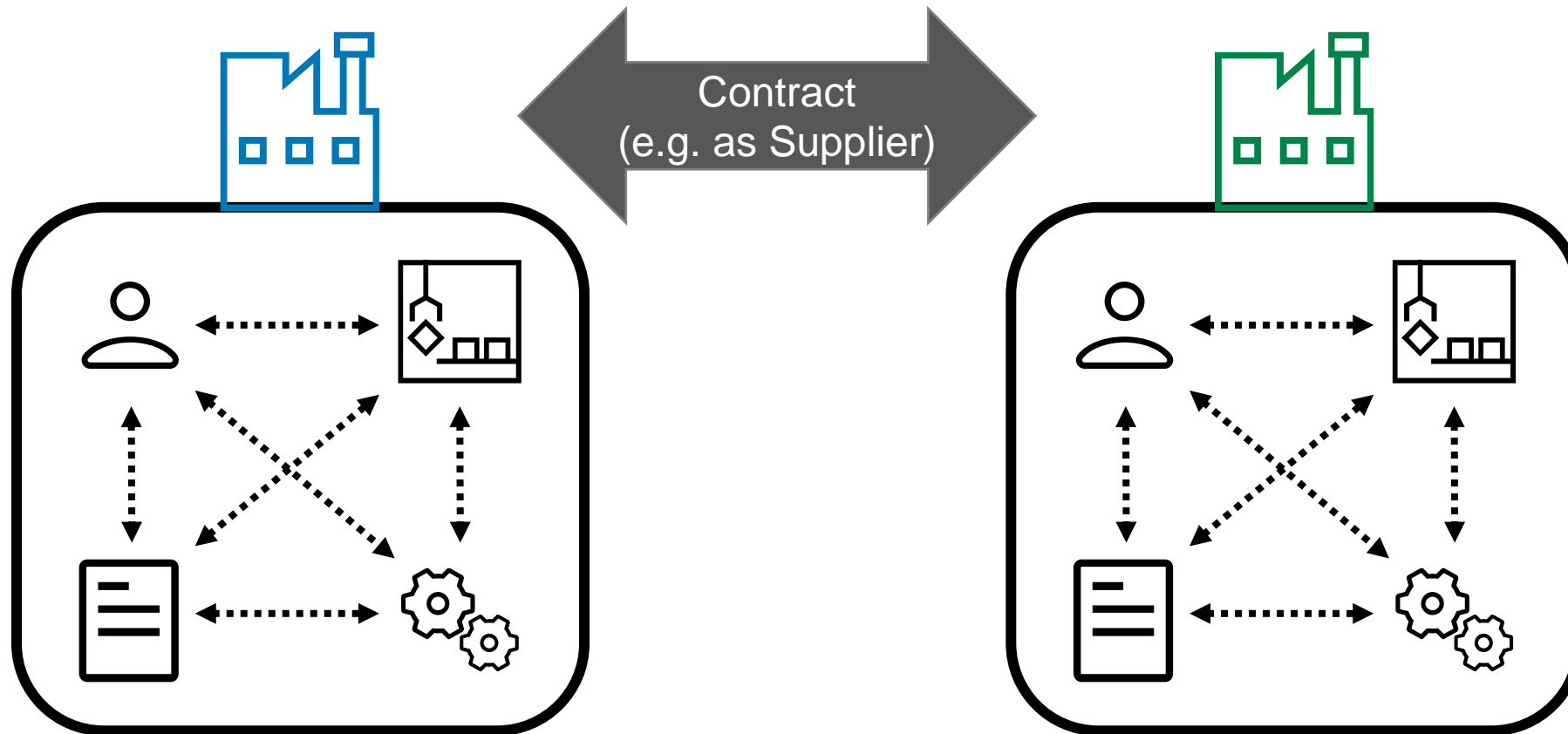
Jens Mehrfeld

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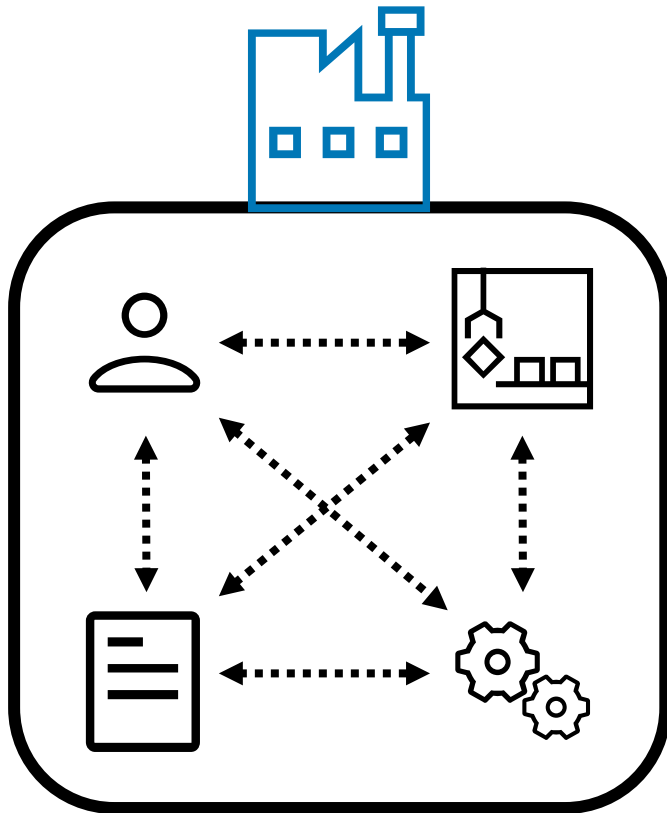


Scenario



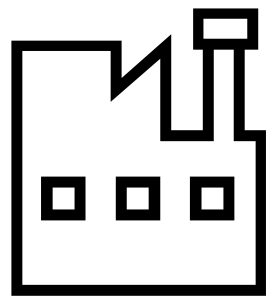
Goal: Establish trust fully digital and automated

Requirements



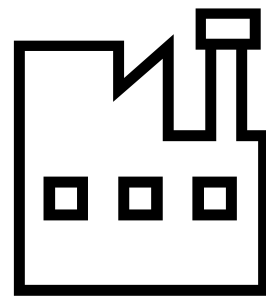
1. Identification of organizations

Identification (1)



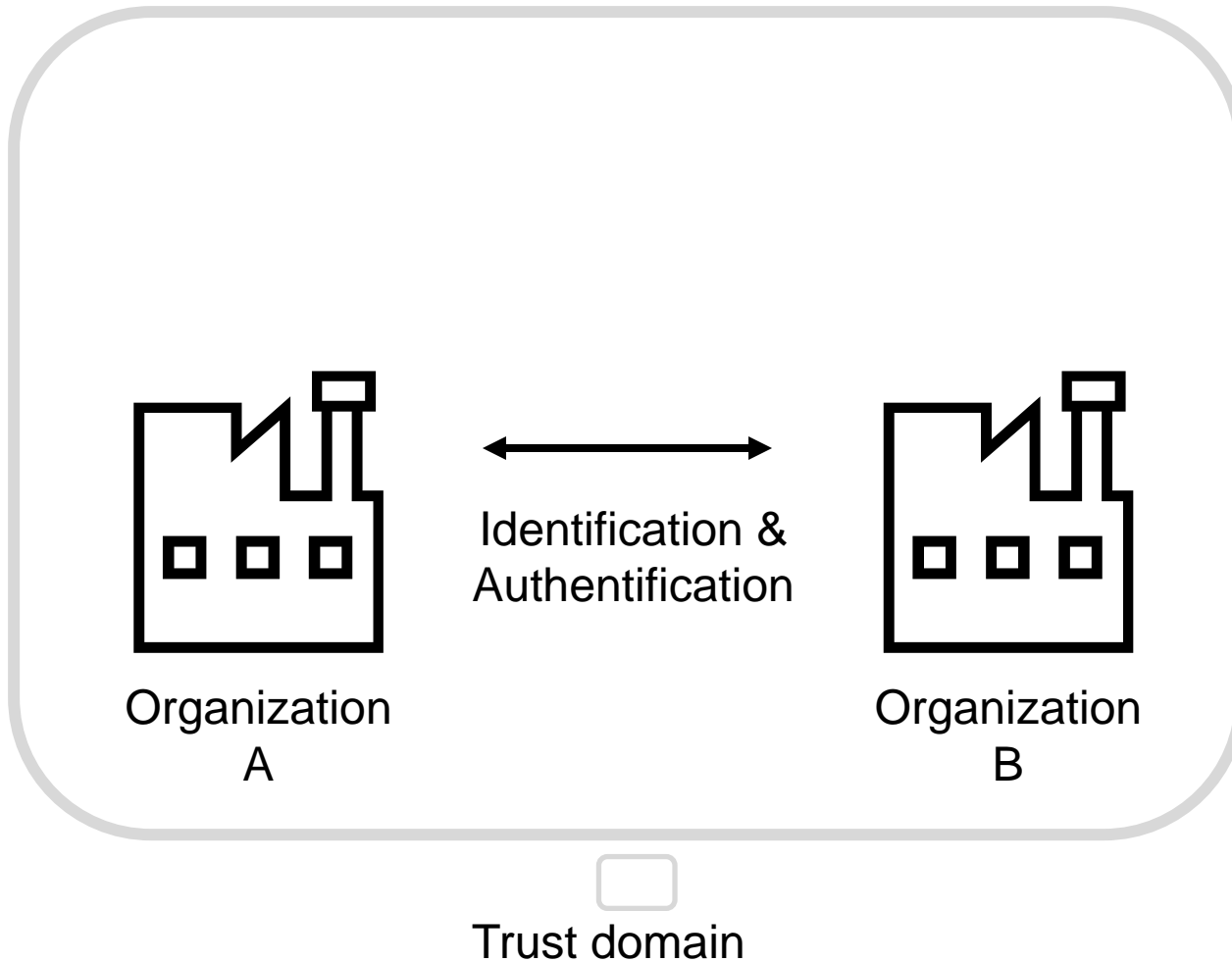
Organization
A

←→
Identification &
Authentication



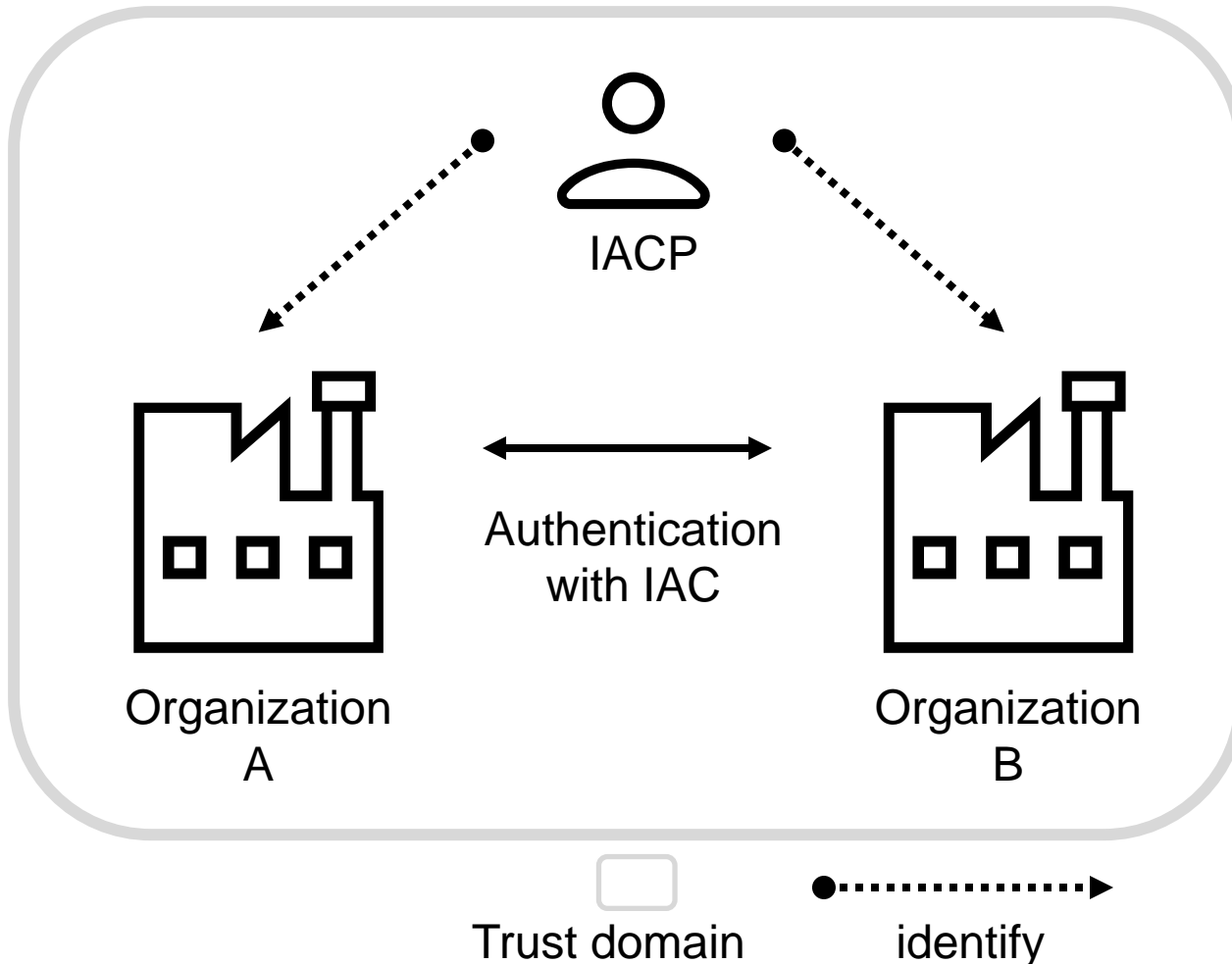
Organization
B

Identification (2)



- Agreement on common requirements with regard to identity information and evidence
-> creation of trust domain

Identification (3)



Identity Authentication Certificate Provider (IACP) checks the identity and confirms it with an Identity Authentication Certificate (IAC).

The IAC can be used for authentication.

Reality & Challenges

Reality

- Public key infrastructures offer the technical basis.
- In Europe eIDAS has created a trust domain with defined common requirements according to the security and reliability of the processes and environment.

Reality & Challenges

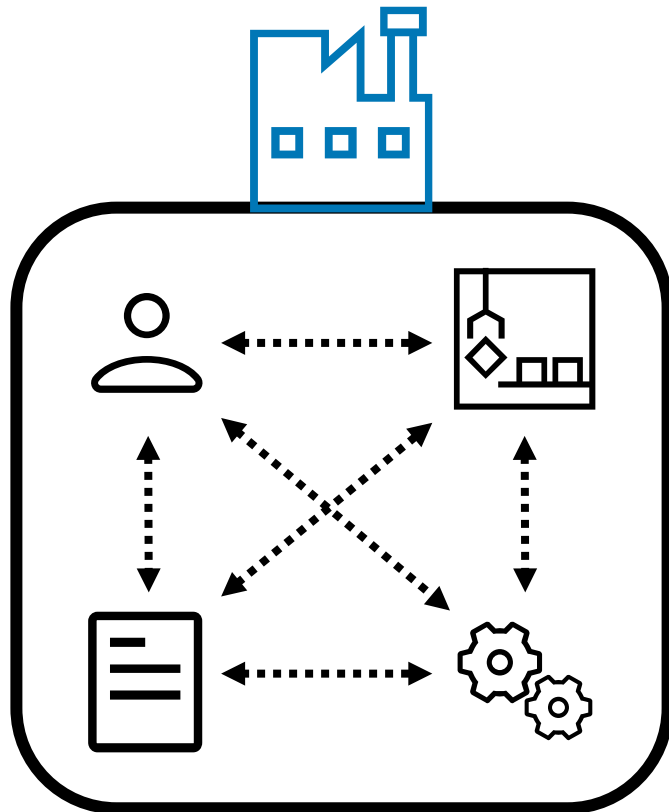
Reality

- Public key infrastructures offer the technical basis.
- In Europe eIDAS has created a trust domain with defined common requirements according to the security and reliability of the processes and environment.

Challenges

- Integration of PKI in organizational processes and software
- Common security requirements across countries and continents
- Evaluate unique identification of organizations with Self Sovereign Identities (SSI)

Requirements - processes



- Proof of security processes and capabilities has already been discussed in session „Trustworthiness“

Outlook

- A document describing concepts of trust infrastructures more in detail is coming soon.
- Mentioned challenges will be addressed during this year.



Thank you very much!

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Plattform Industrie 4.0

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