WoN Design – High Level

SAT

CoE

eSPARK

PCA

IOS

MINE

The Web as a Marketplace

Supply   **Demand**

Marketplace Functions

Publish intention (supply, demand, and others (!))

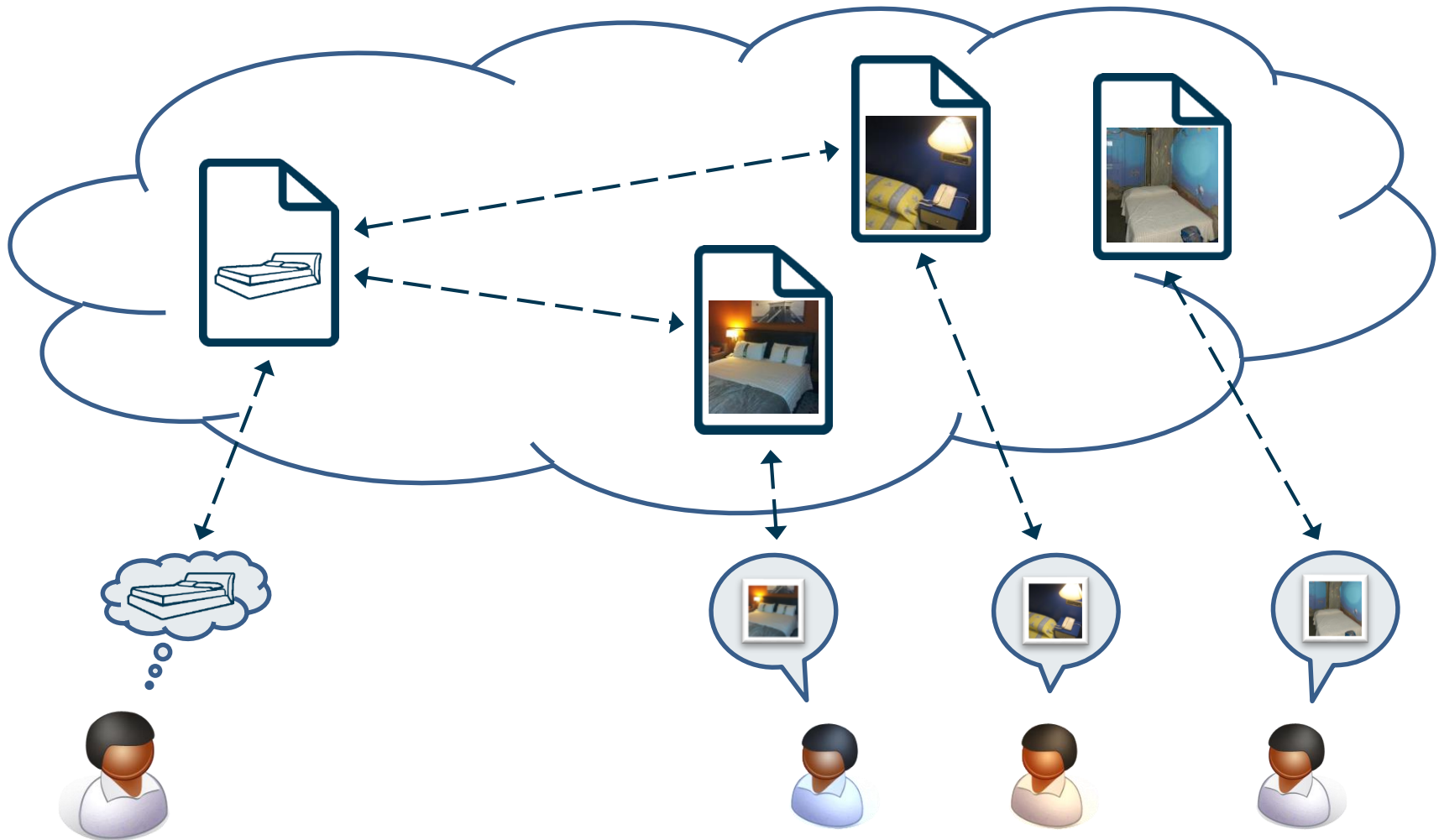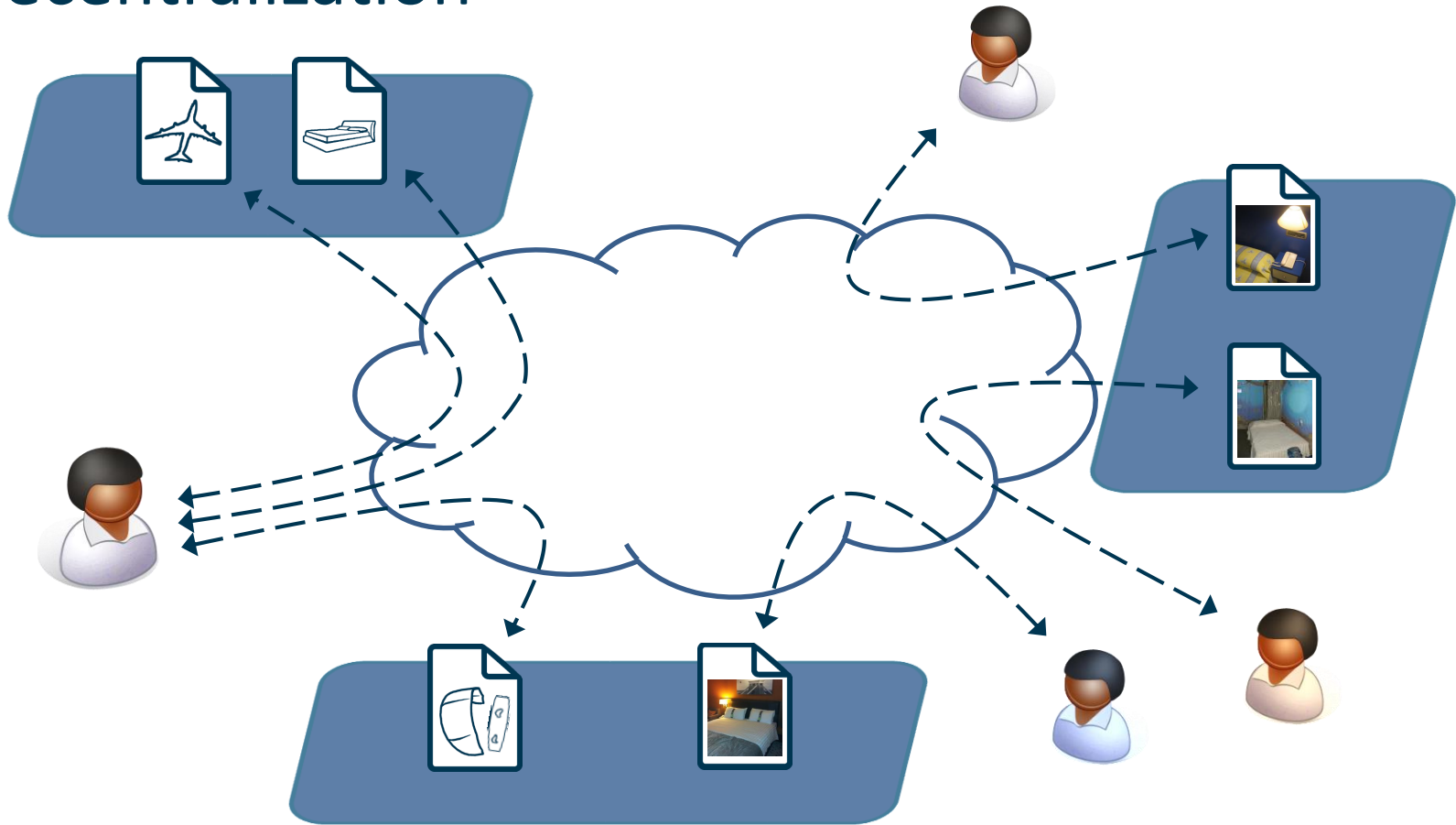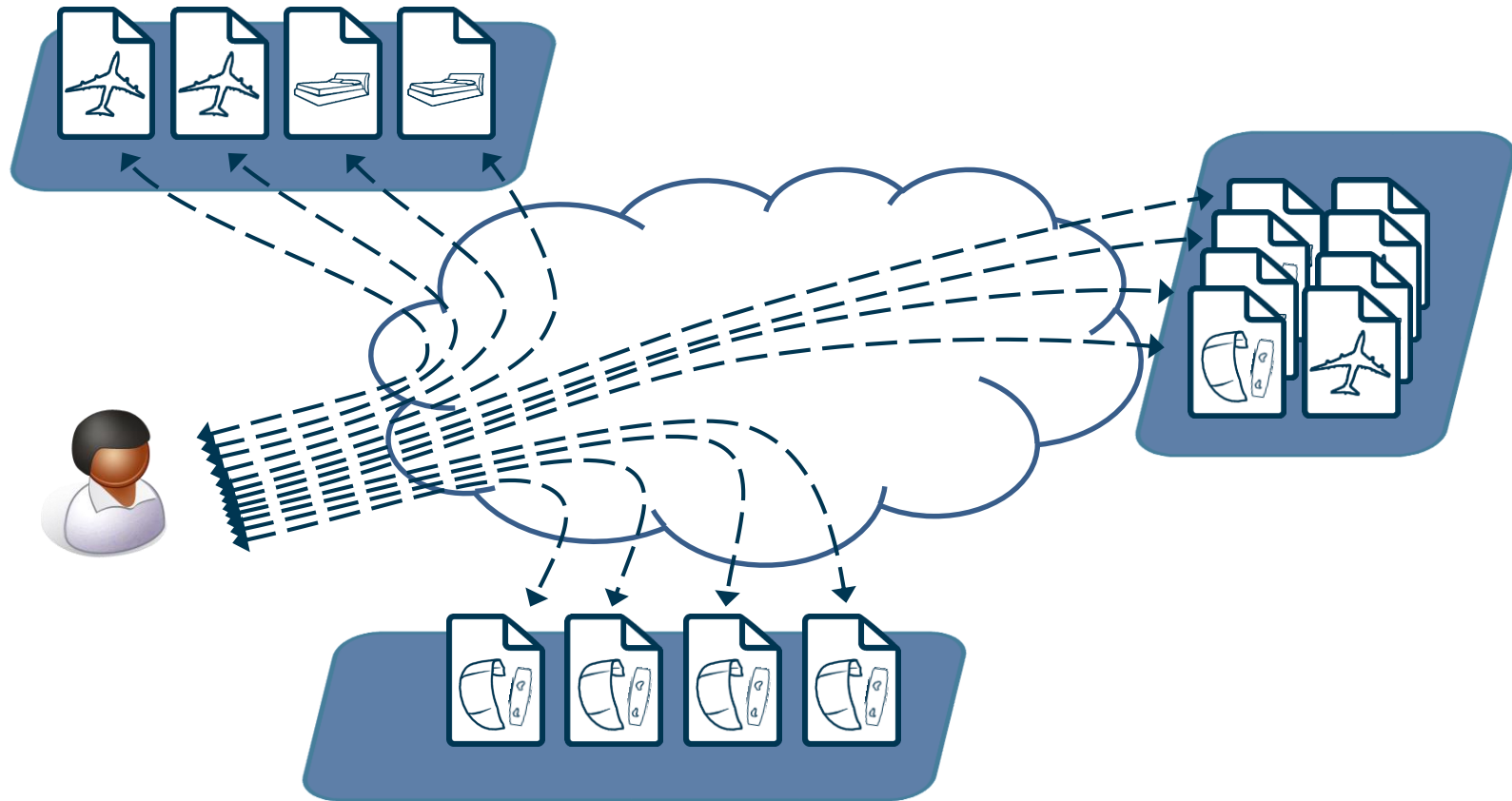Find Partners
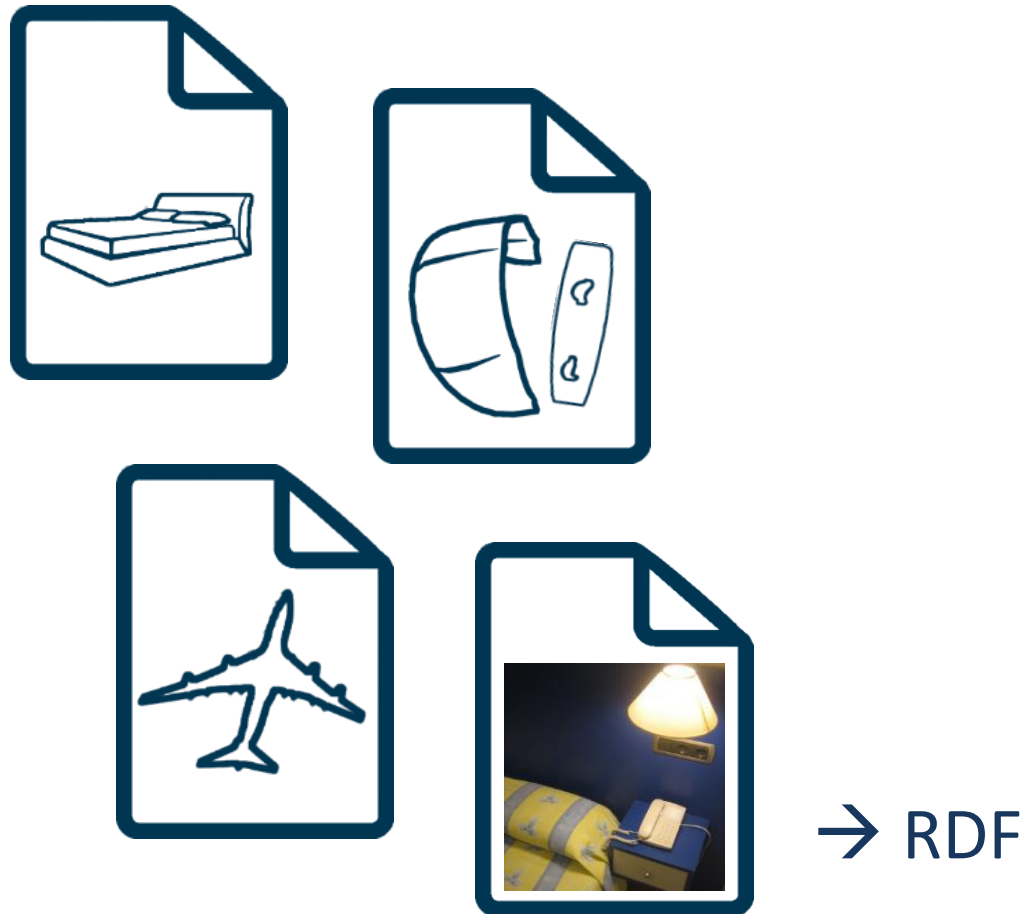
Perform Transactions

Example: Rent a Hotel Room

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Representation

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Decentralization

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Simple Unit Creation

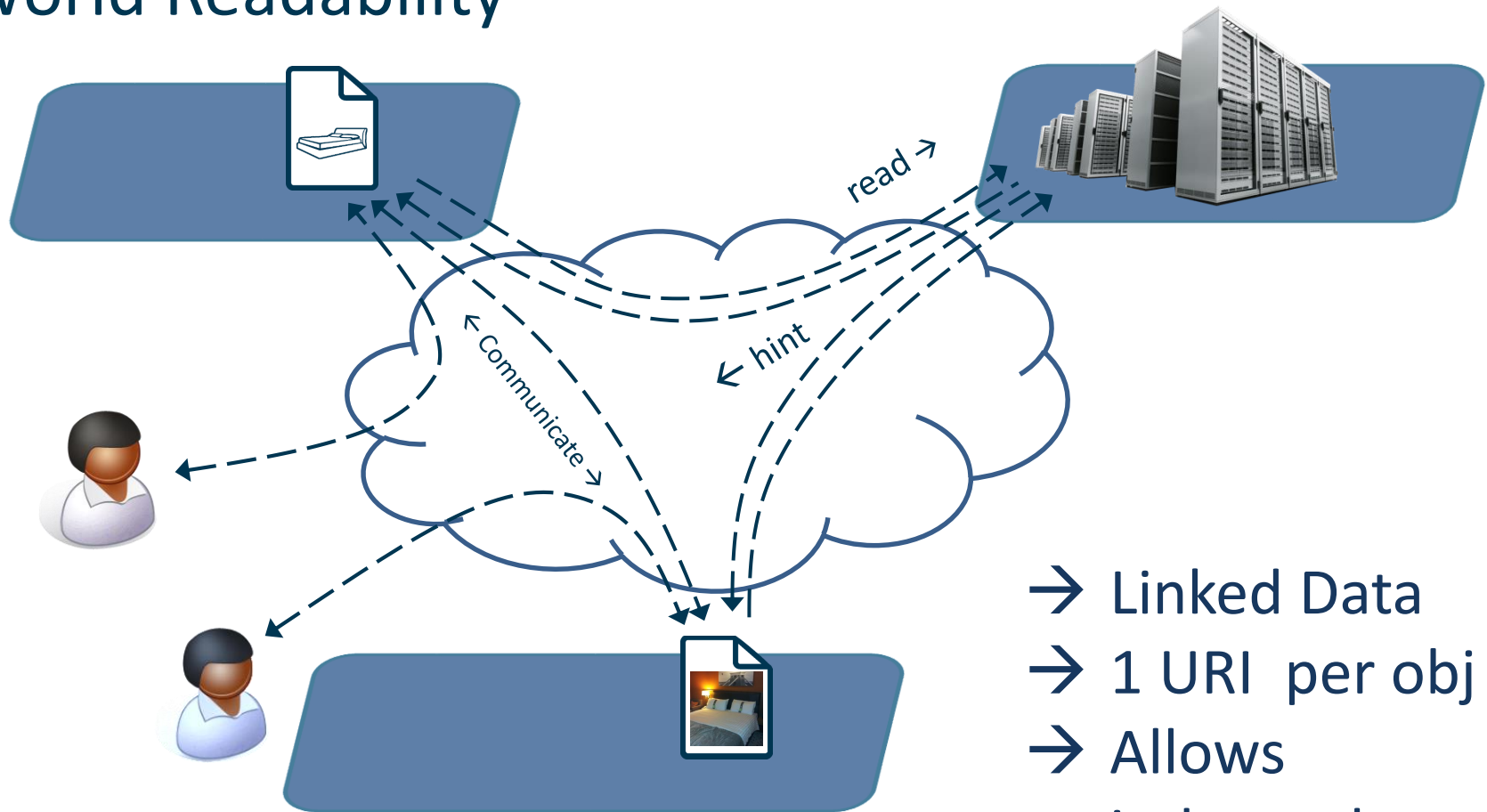Managing Innovations
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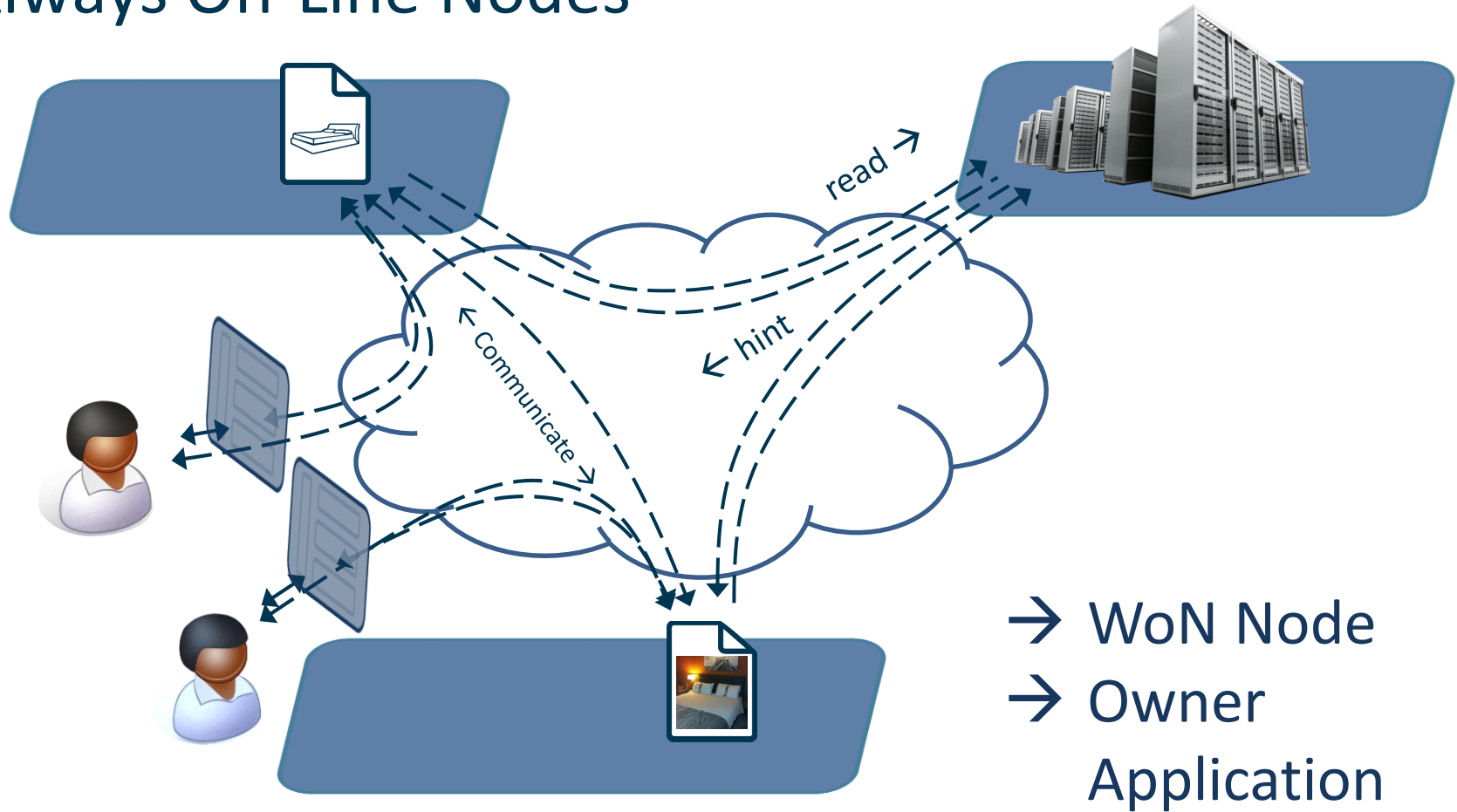
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Flexible Description Language

→ RDF

World Readability

→ Linked Data
→ 1 URI per obj
→ Allows independent matching

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Always On-Line Nodes

→ WoN Node
→ Owner
  Application

read →

← hint

Communicate →

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Standardized CRUD Protocol

Create
Read
Update
Delete

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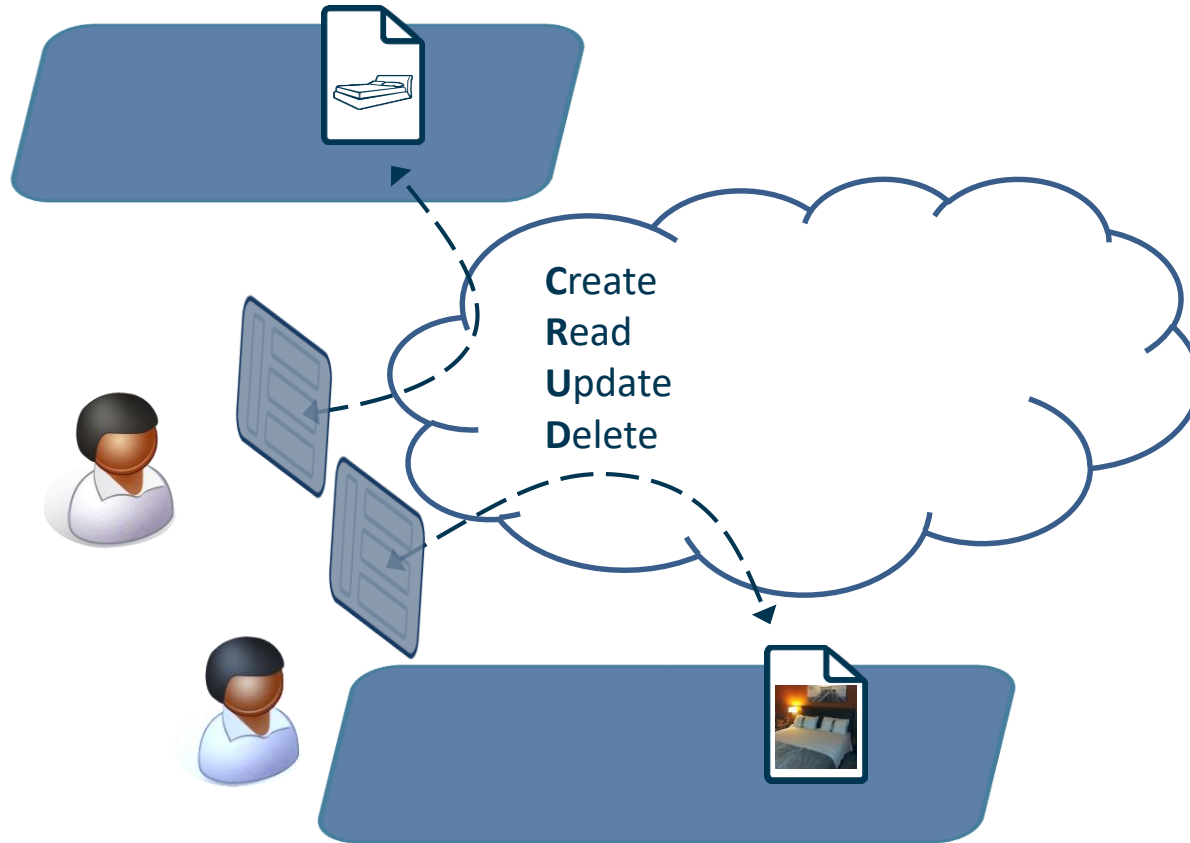
Standardized Discovery Protocol

read →

← hint
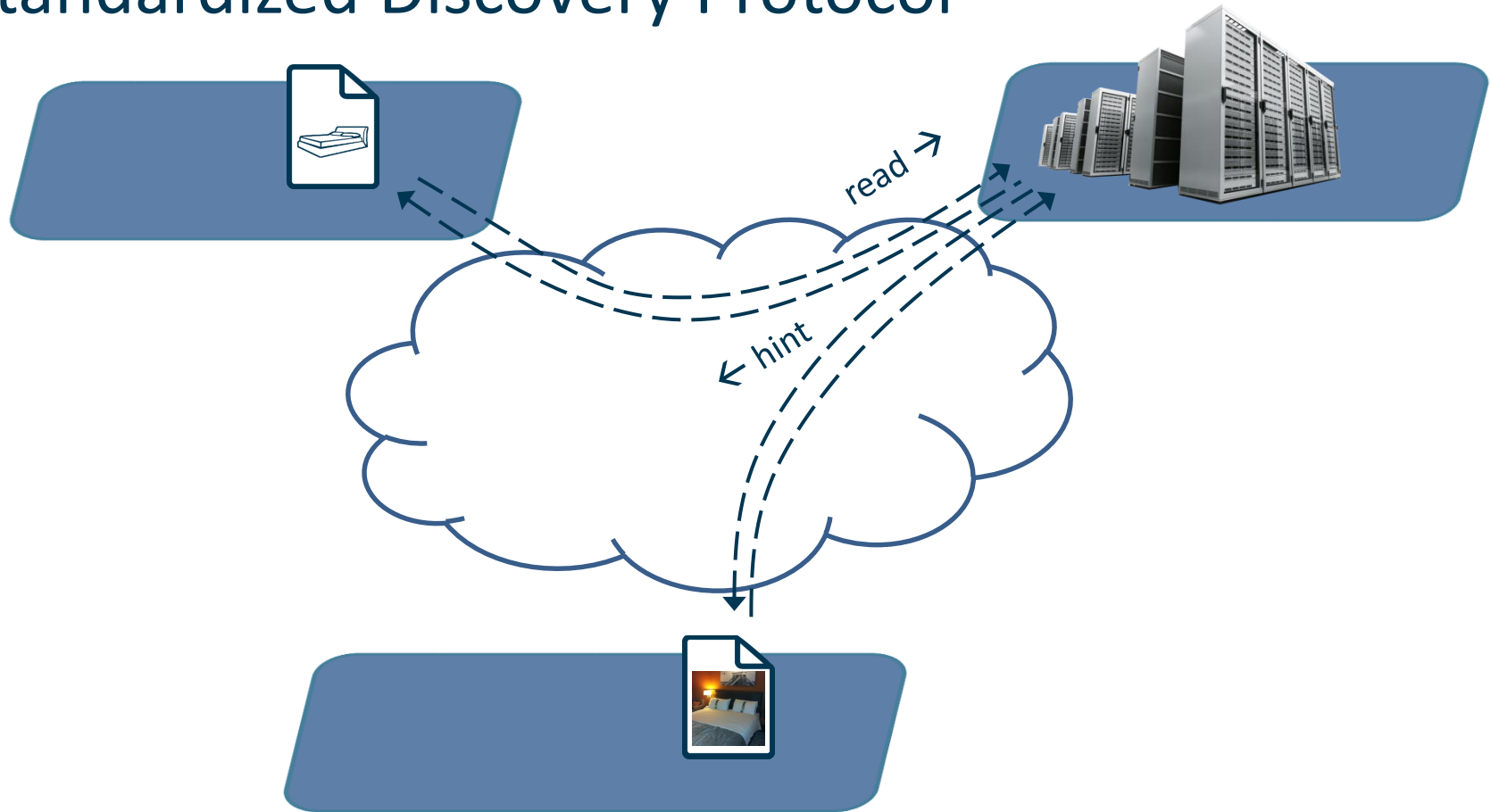
Standardized Protocol for Making Connections

connect →

← connect

← communicate →

close →

Layered Communication Protocol

connect →

← connect

← communicate →

close →

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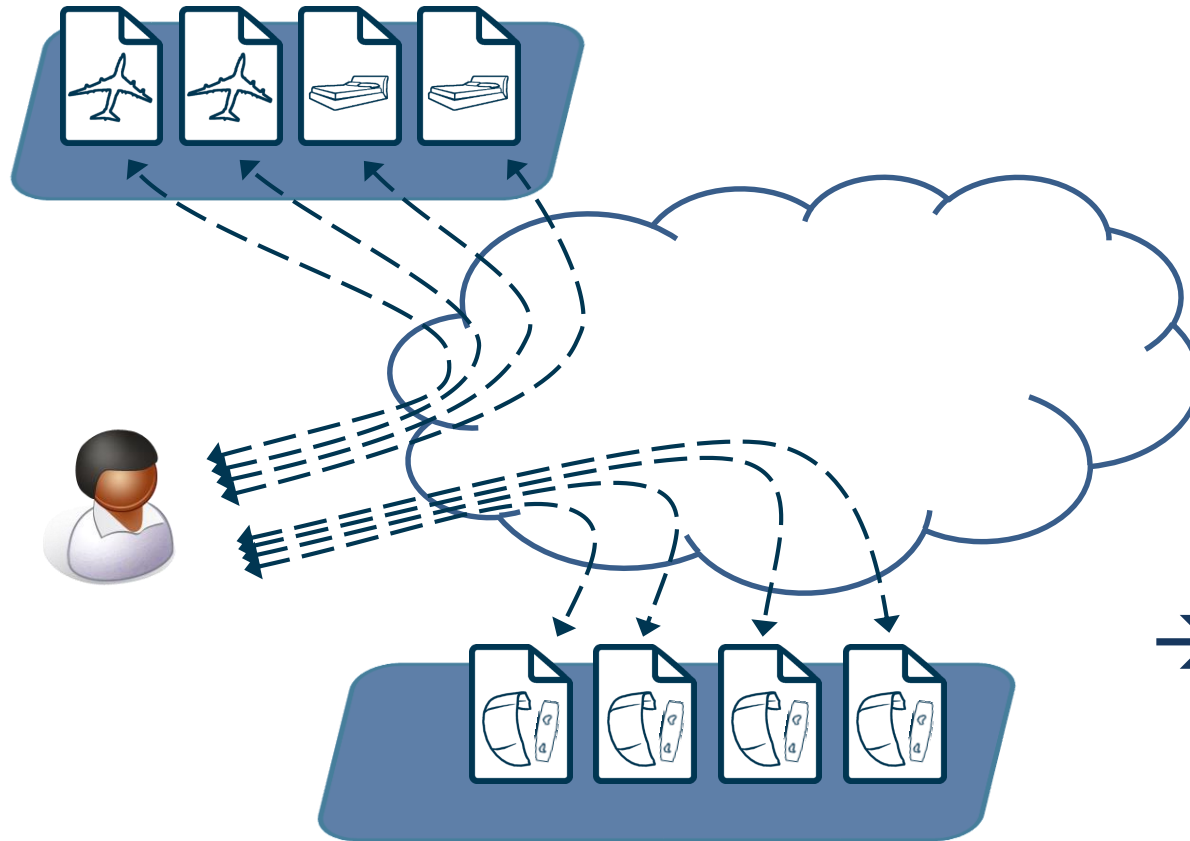
Layered Communication Protocol

Chat Socket

Chat Socket
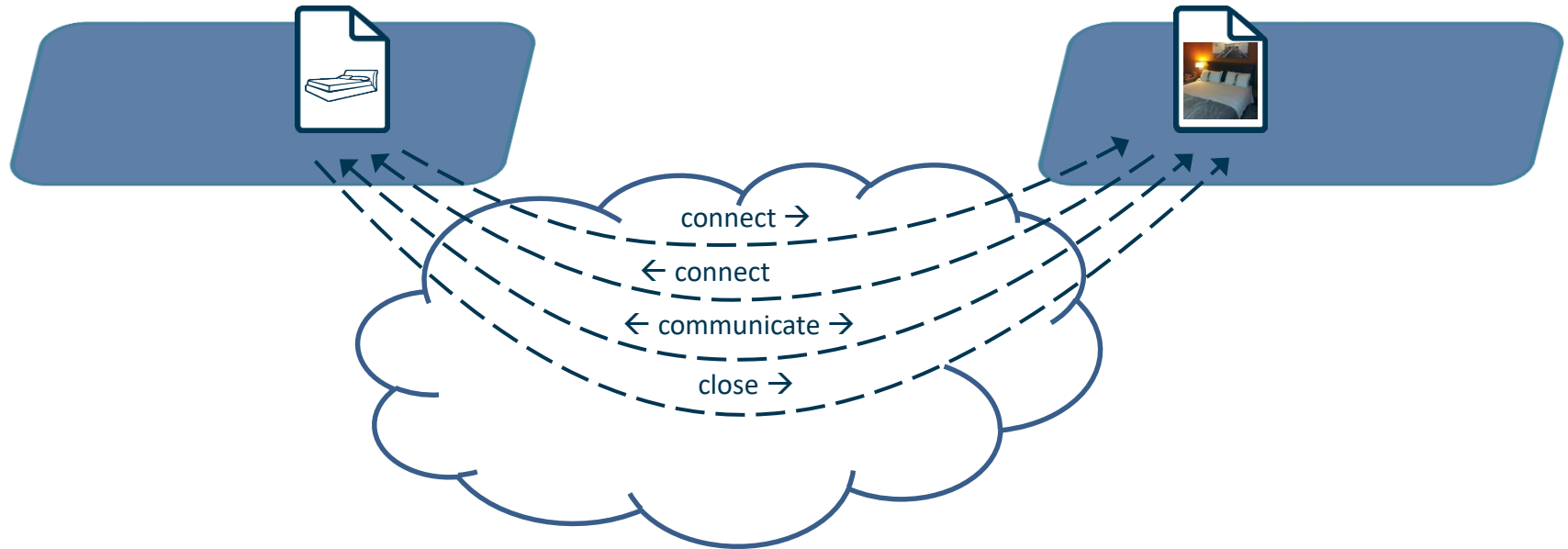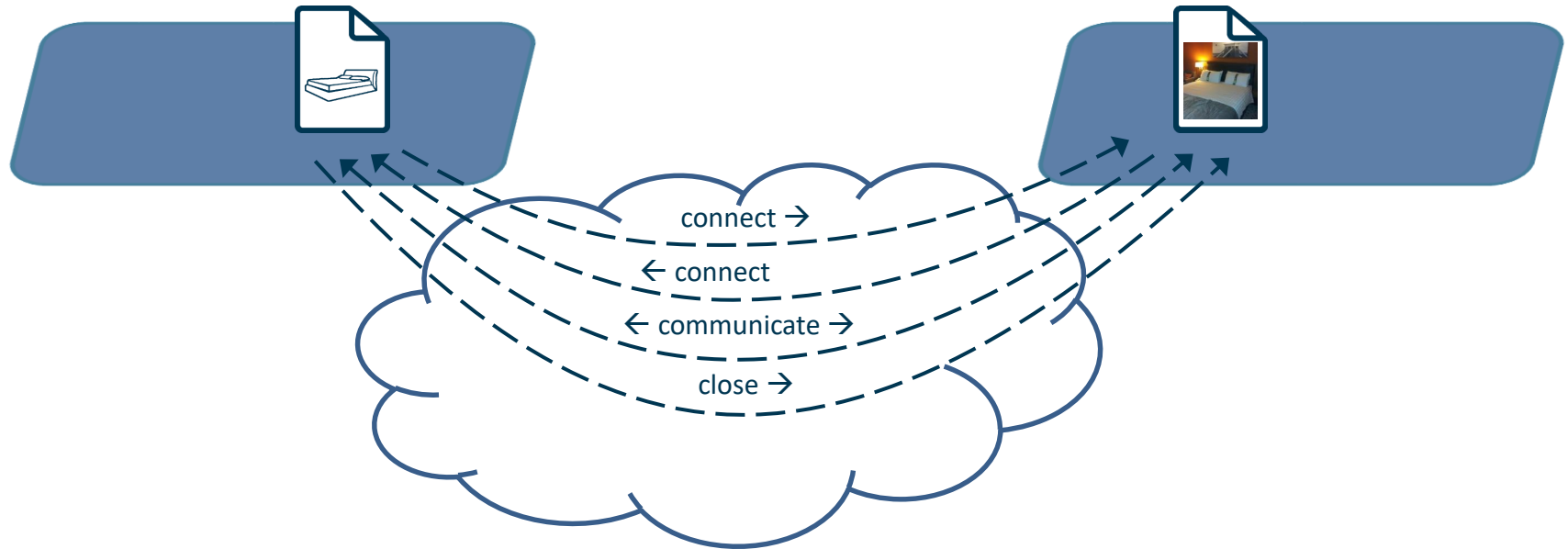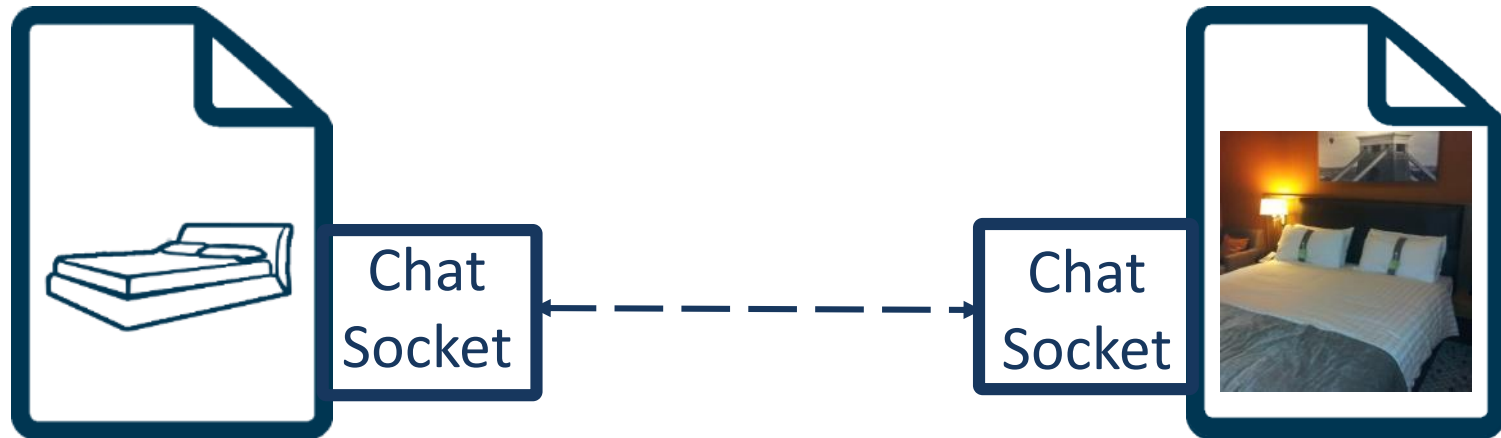
„socket" ≈ higher-level protocol

→ Chat, group chat
→ Object relationships
→ Agreements
→ more can be defined

World-Readable Connection Information

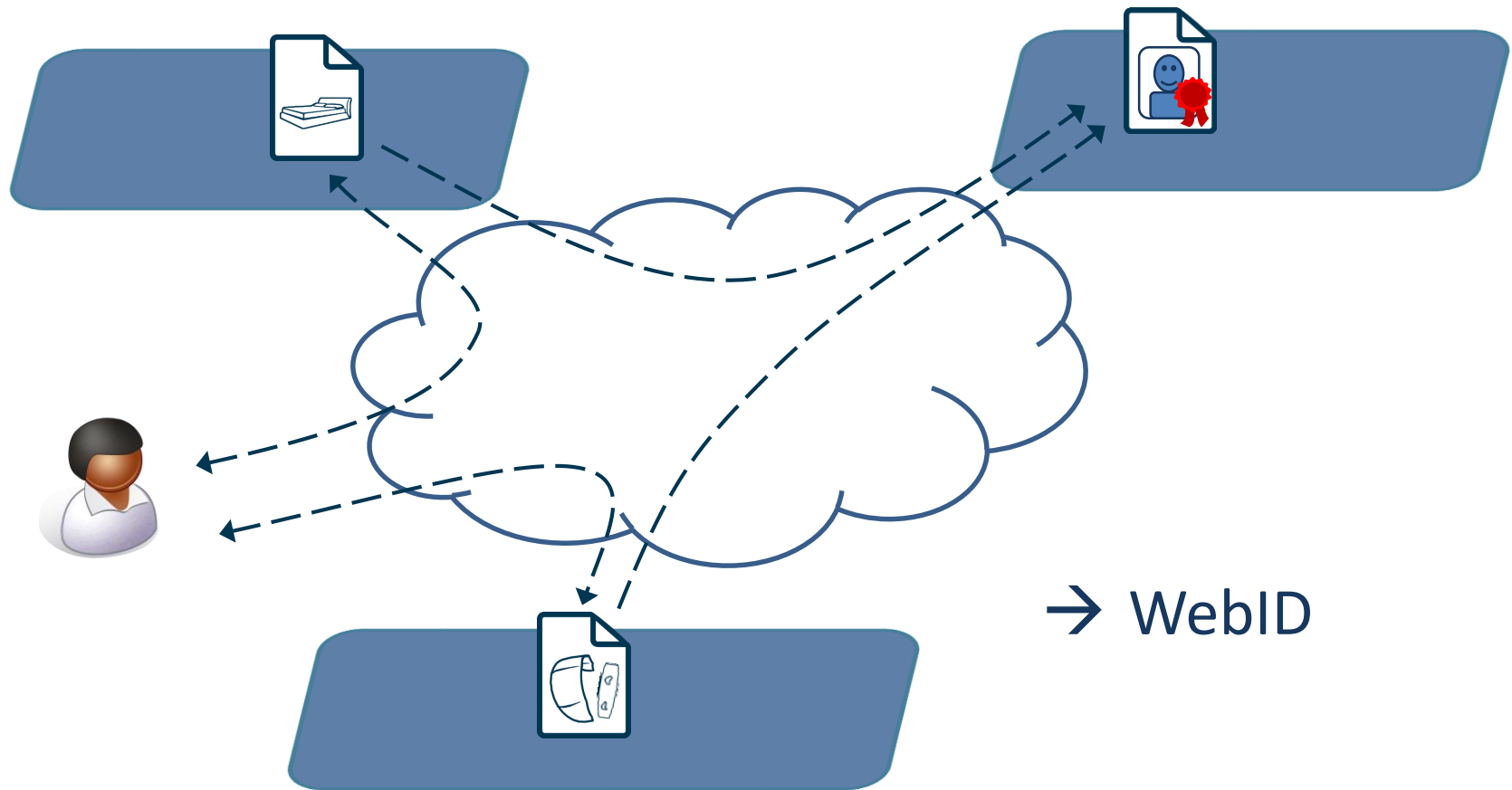Managing Innovations
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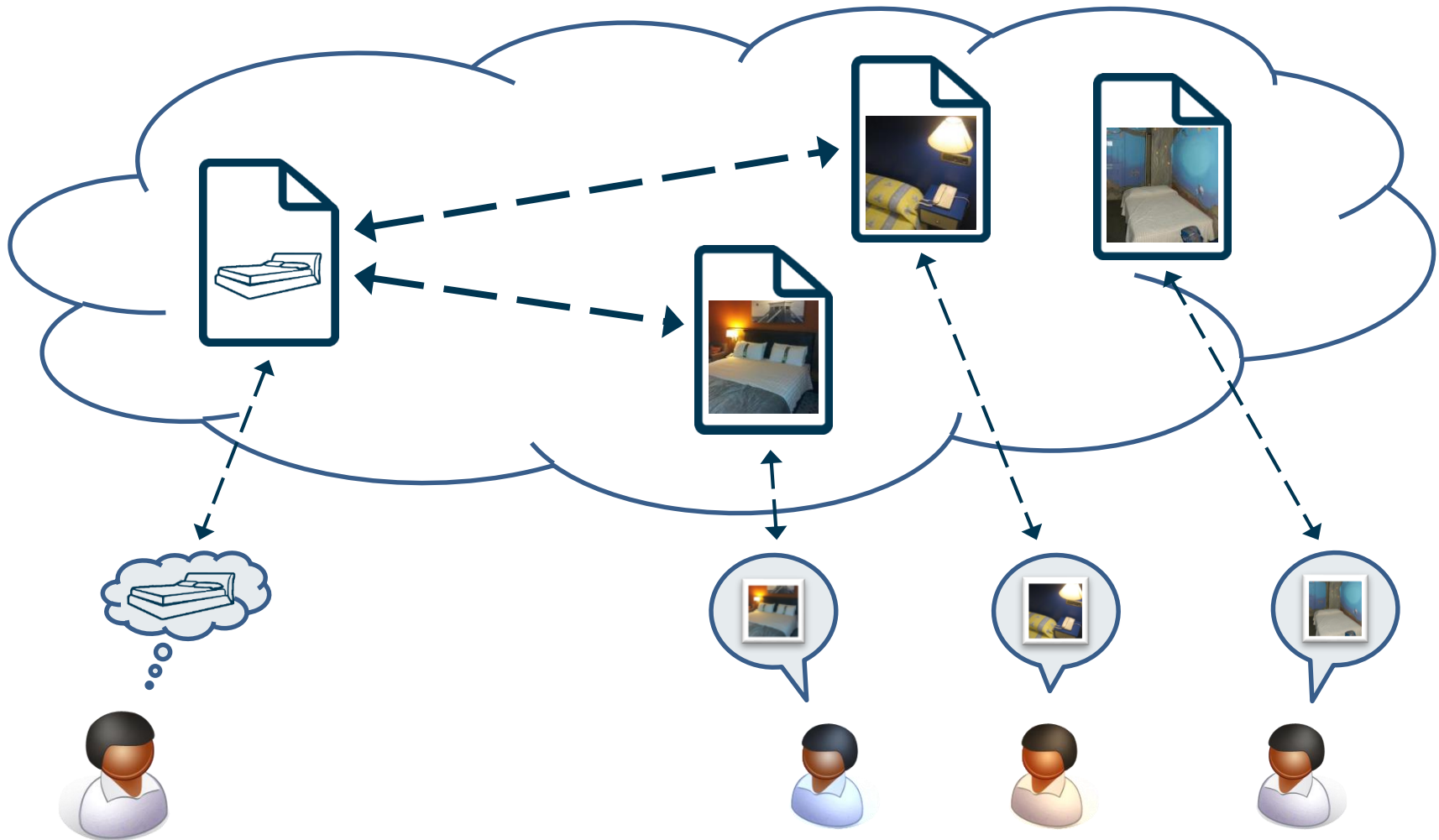
Anonymity (weak)

→ No personal information (unless you want to)

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Identity

→ WebID

Access Control

	public	restricted access

Demand:
- when
- where
- how
- …

Transaction-related:
- invoice address
- email
- phone
- bank connection

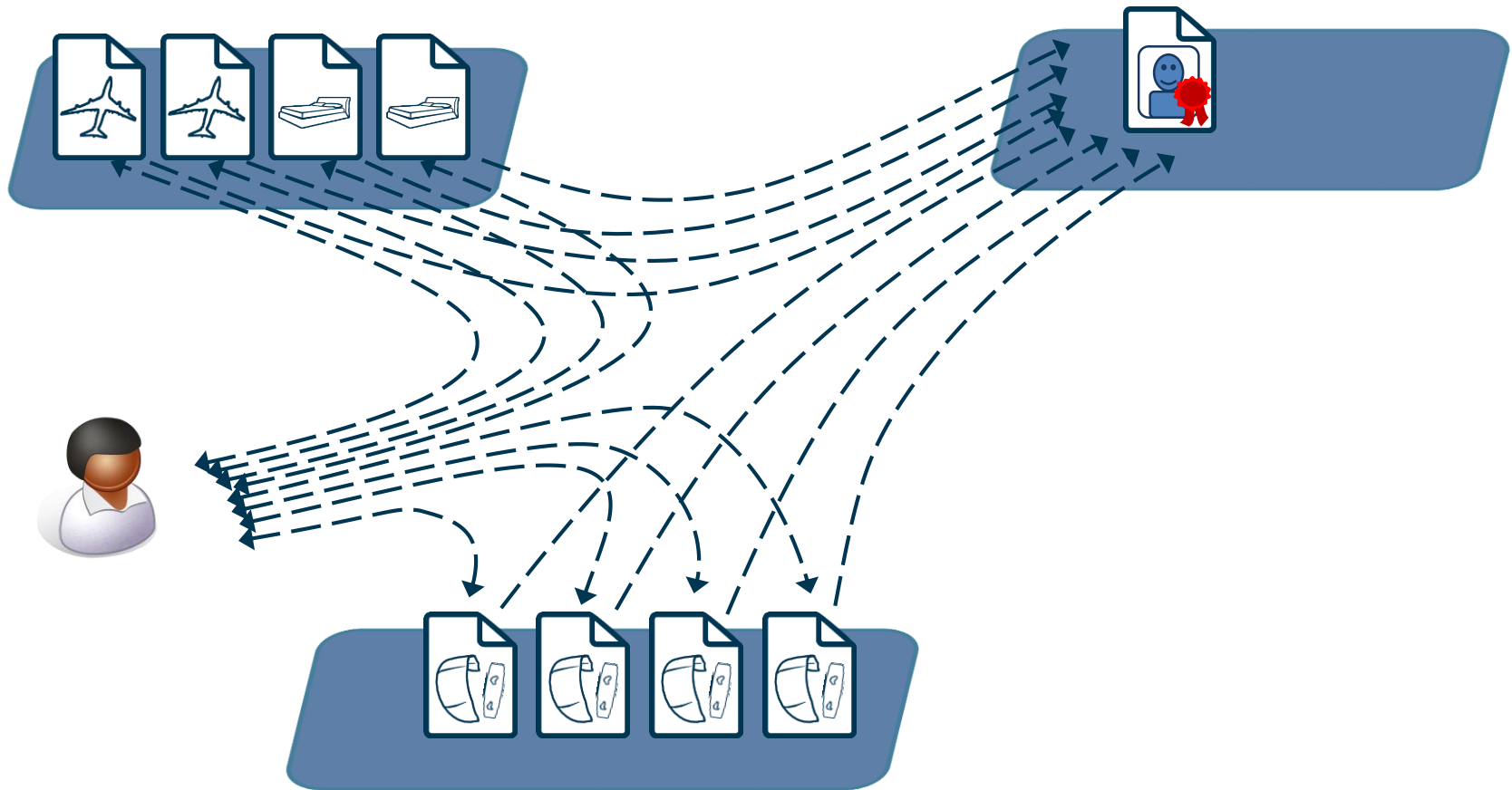**Supply**:
- when
- where
- how
- ...

Transaction-related:
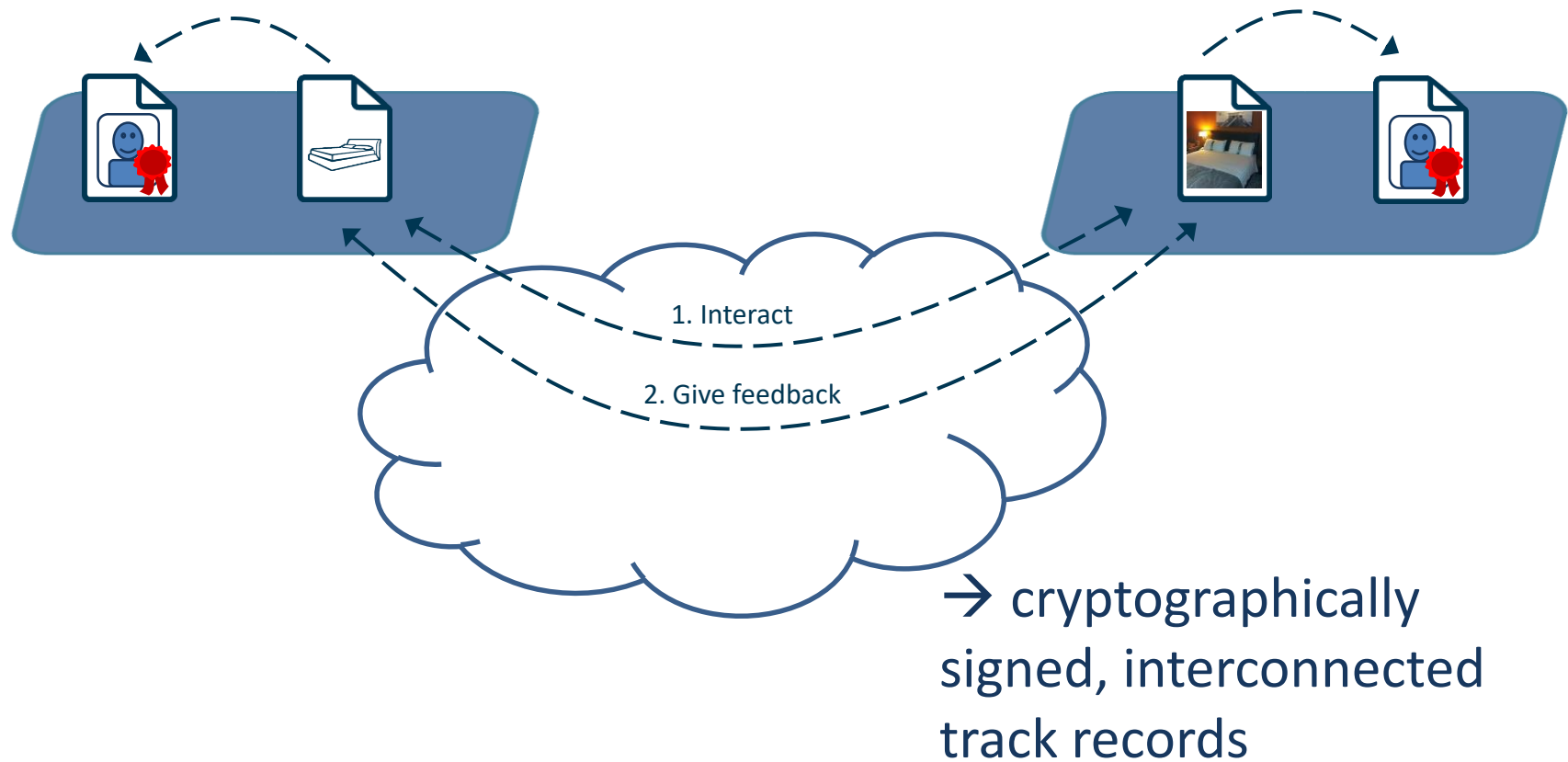- invoice address
- bank connection

Contact:
- email
- phone

→ WebAccessControl

Trust Layer

Trust Layer

1. Interact

2. Give feedback

→ cryptographically signed, interconnected track records

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Thin Clients

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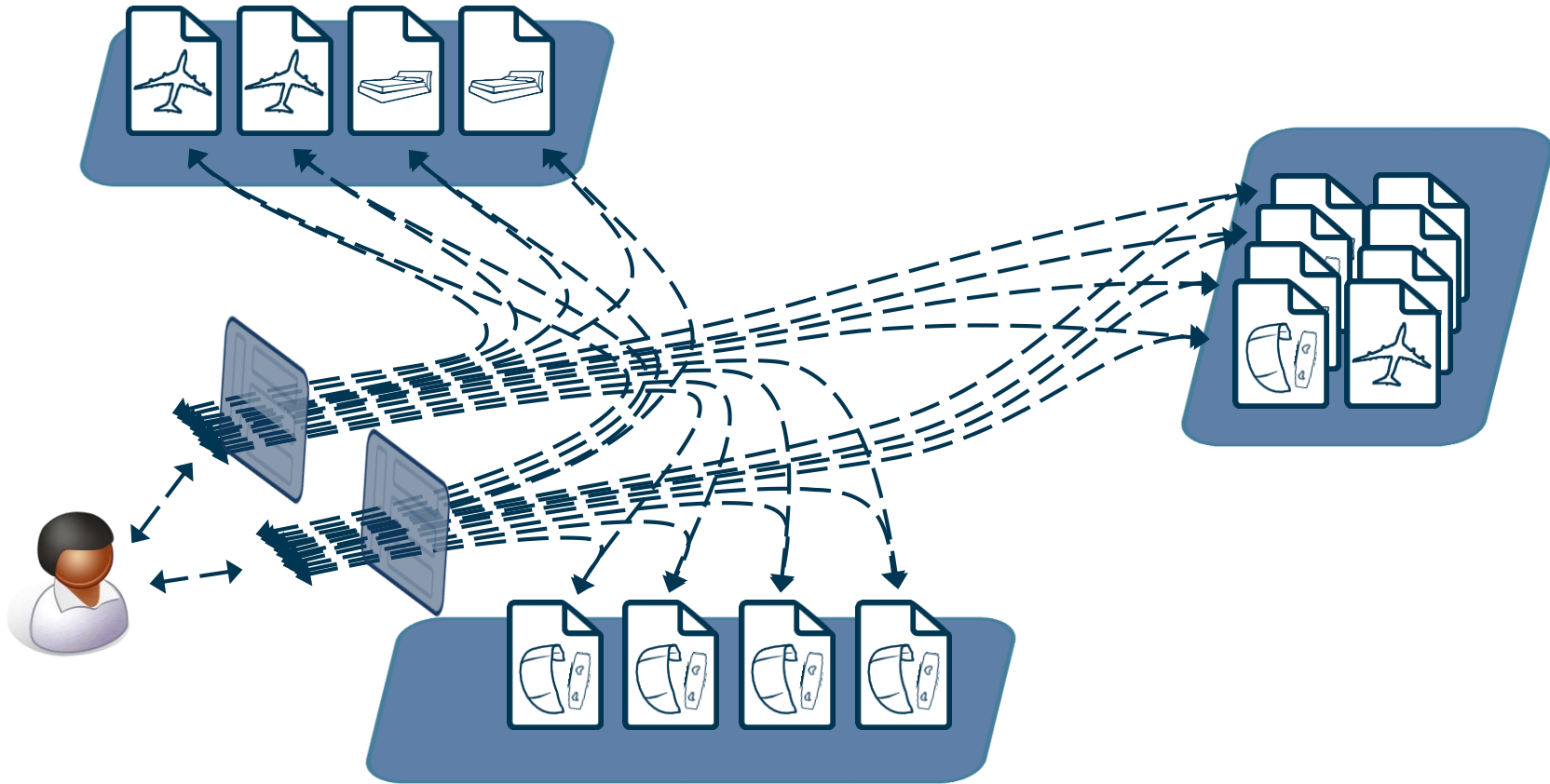
Management of Combinations

distributed
transactions

AND

shared
properties

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