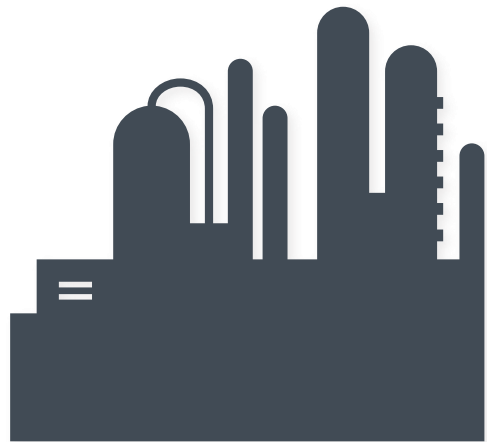


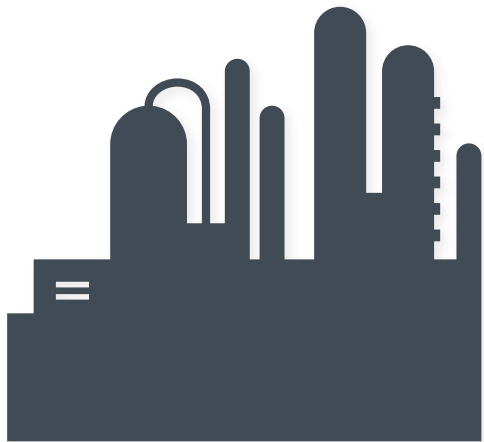
Demonstration of interoperability of data



SIEMENS



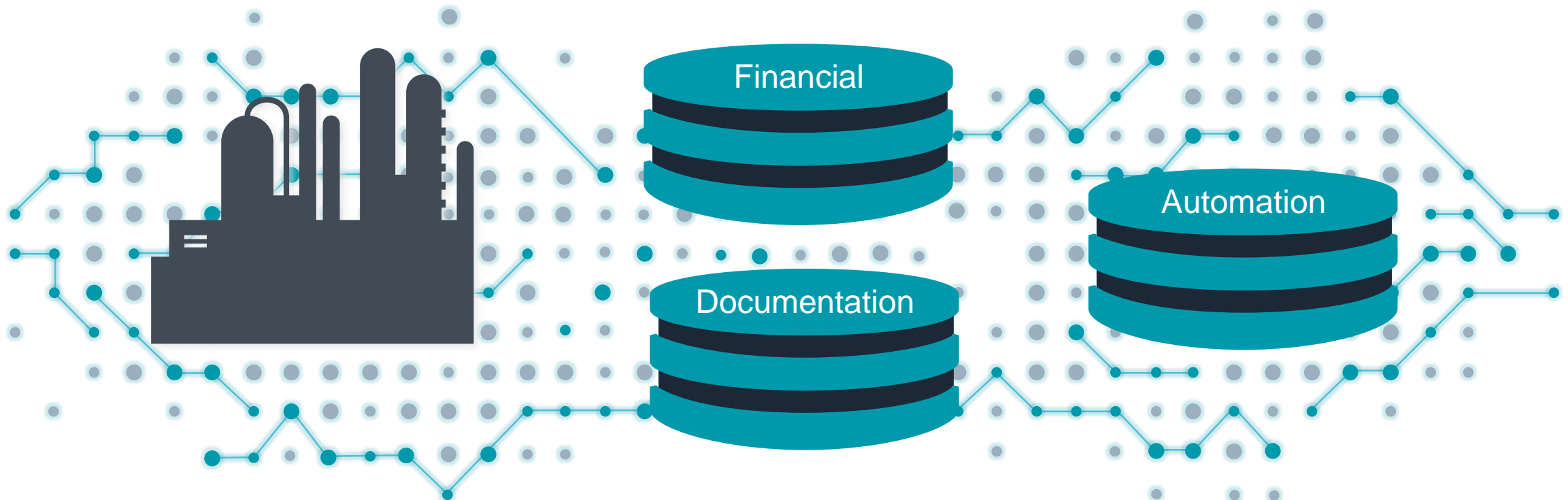
Demonstration of interoperability of data



How can information be shared between parties of an modification with minimum effort and data loss leveraging from standardization?

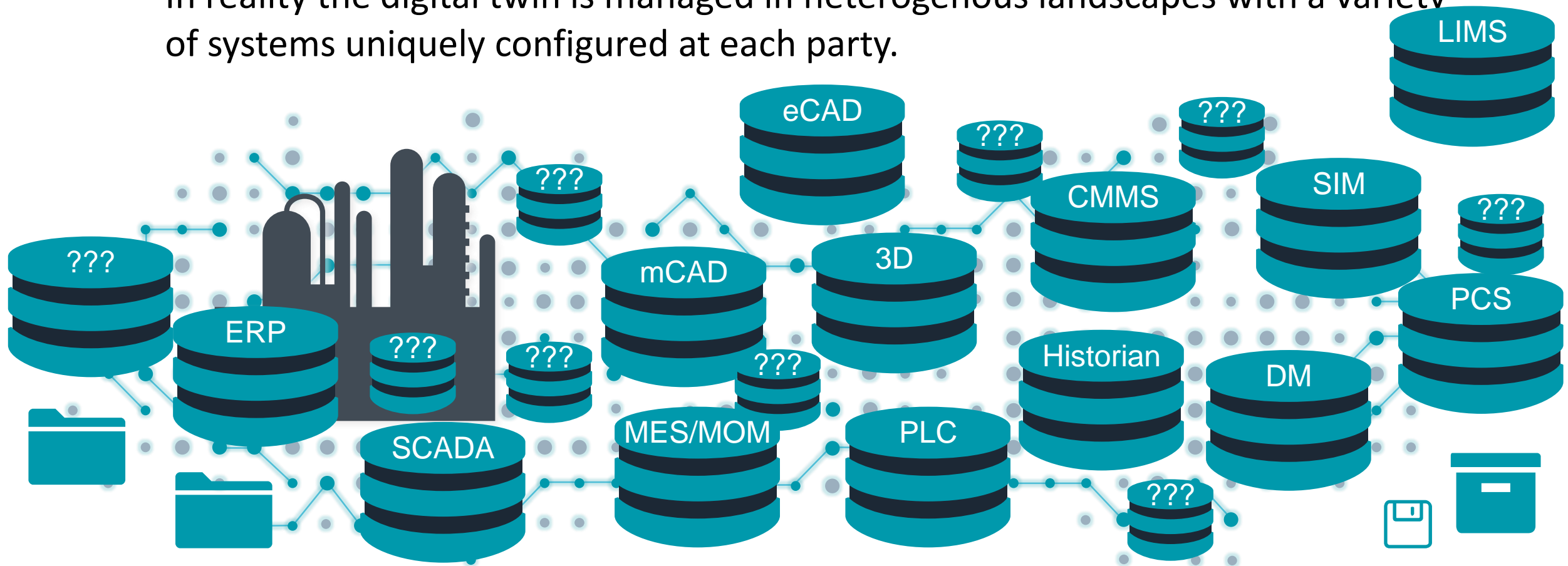
Demonstration of interoperability of data

The various sources of information together shapes the complete “digital twin” at each party involved in projects.



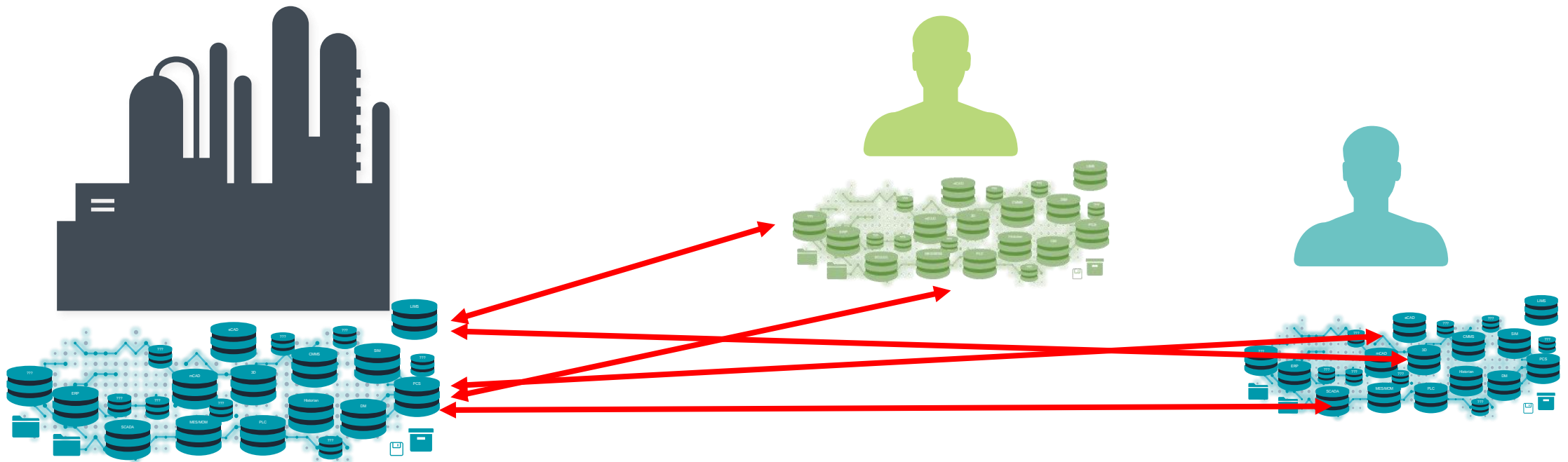
Demonstration of interoperability of data

In reality the digital twin is managed in heterogenous landscapes with a variety of systems uniquely configured at each party.



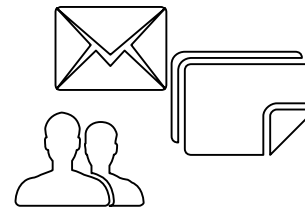
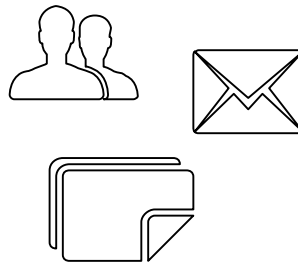
Demonstration of interoperability of data

The heterogenous set up of the digital twin at each asset requires each information exchange to uniquely be defined per transaction.

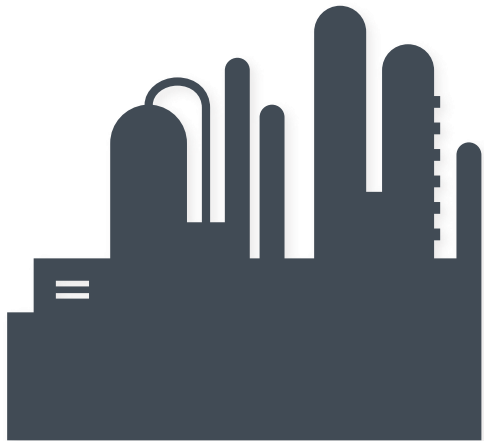


Demonstration of interoperability of data

Or we even sometimes fall back to using static documents, mail, meetings to exchange information.



Demonstration of interoperability of data

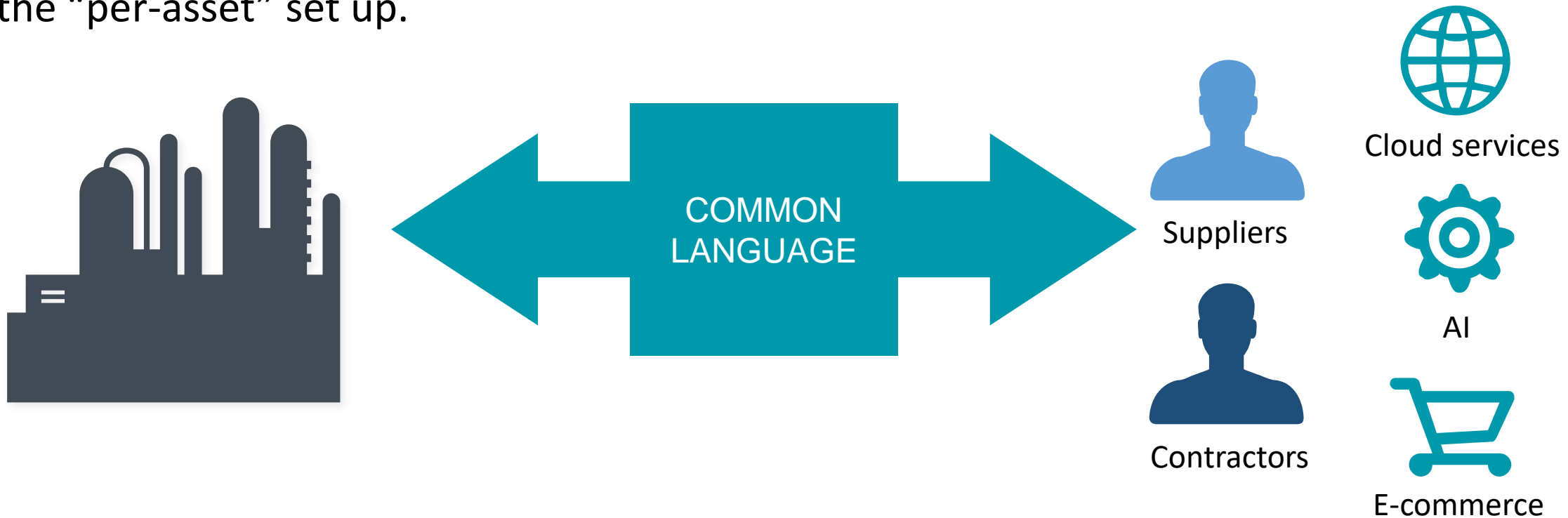


Leveraging from standardization where each asset has mapped its uniquely structured information to a standard can simplify this.

Next we will show how...

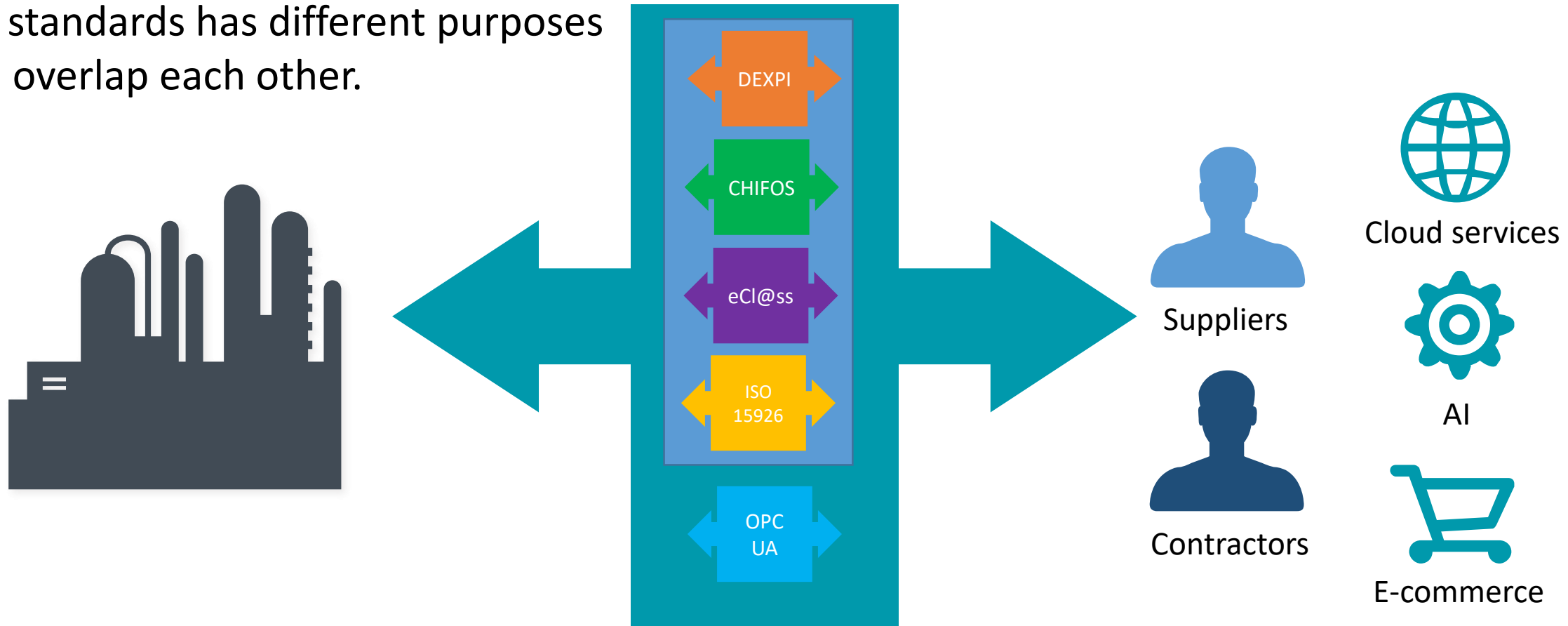
Demonstration of interoperability of data

Leveraging from standardization where each asset is mapped reduces the “per-asset” set up.



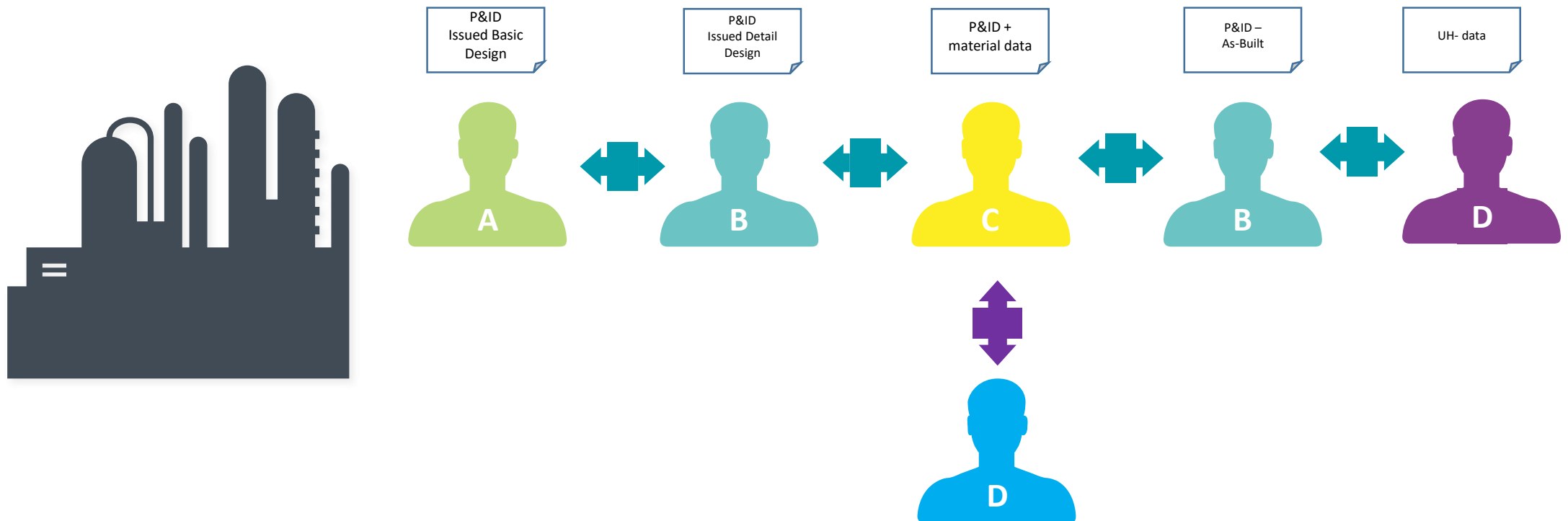
Demonstration of interoperability of data

Several standards are available to be used as common reference between parties. Different standards has different purposes and even overlap each other.

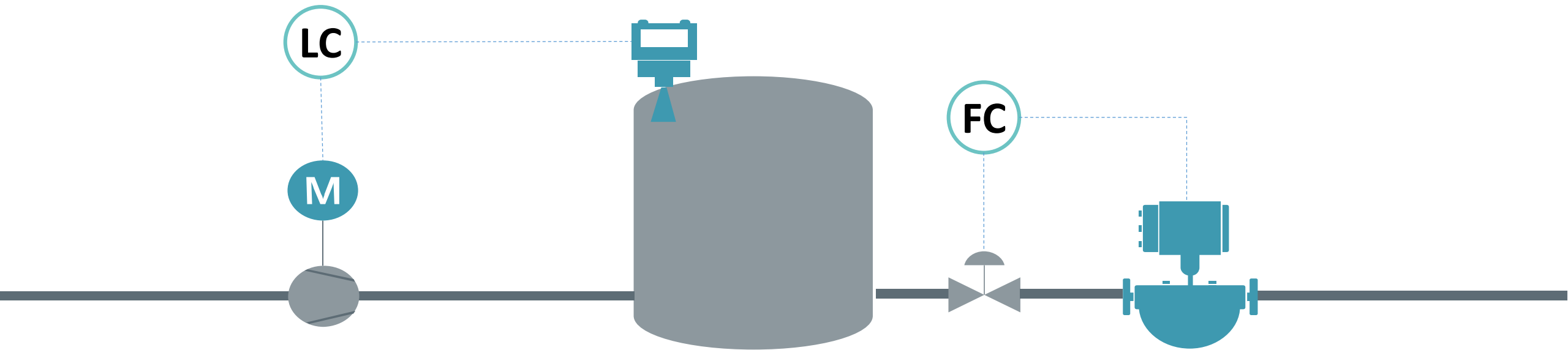


Demonstration of interoperability of data

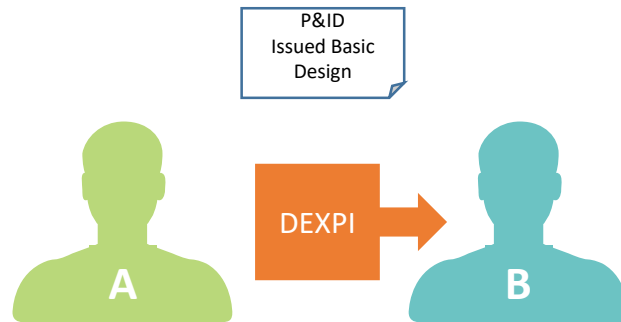
How can this be done in reality
between project parties?



The simplified use case

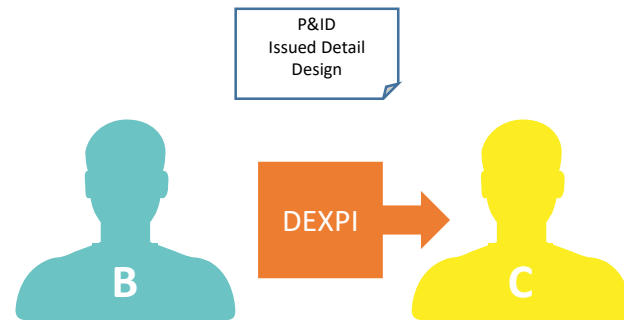


A transfer the P&ID to B



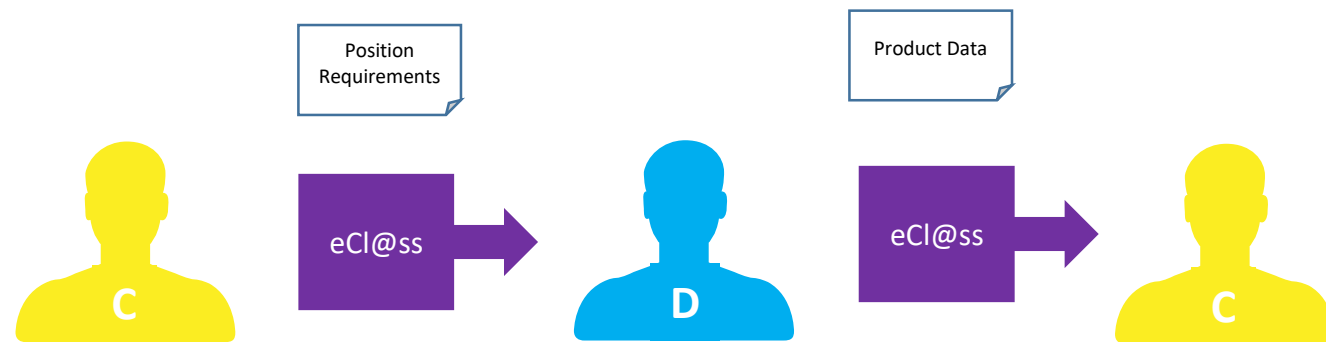
The draft PFD is transferred from the tools of A to B via the proteus format

B the P&ID to C



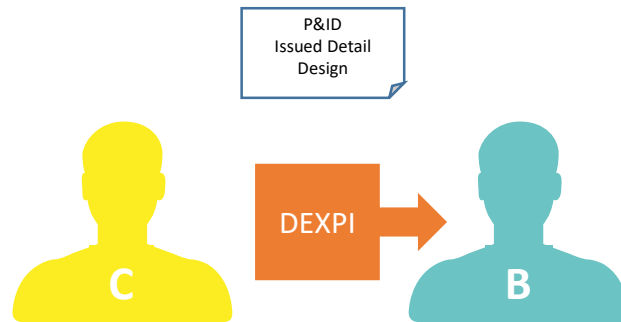
The PFD is detailed by B and then transferred to C for further design and material sourcing using Proteus format.

C to D



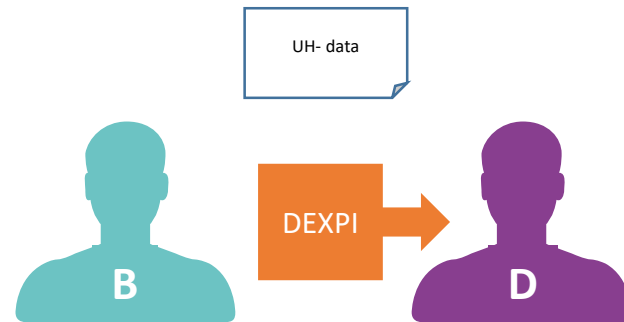
C sources components and uses standard eCl@ss format to publish requirements and retrieve product data.

C to B



C transfer the information back from his system to B again using proteus format,

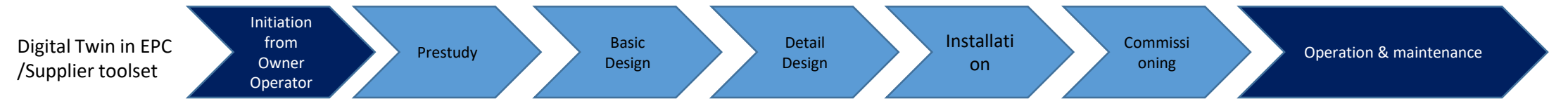
B to D



D uses the Proteus export to retrieve parts of the information required for maintenance.

Conclusions

- It is possible to use the initiatives today but it requires work.
 - Configuration to map information models to standards
 - Alignment of what information to be transferred
 - Agreement of which standards to be used
 - Trial & error and participation in development of standards
 - ...

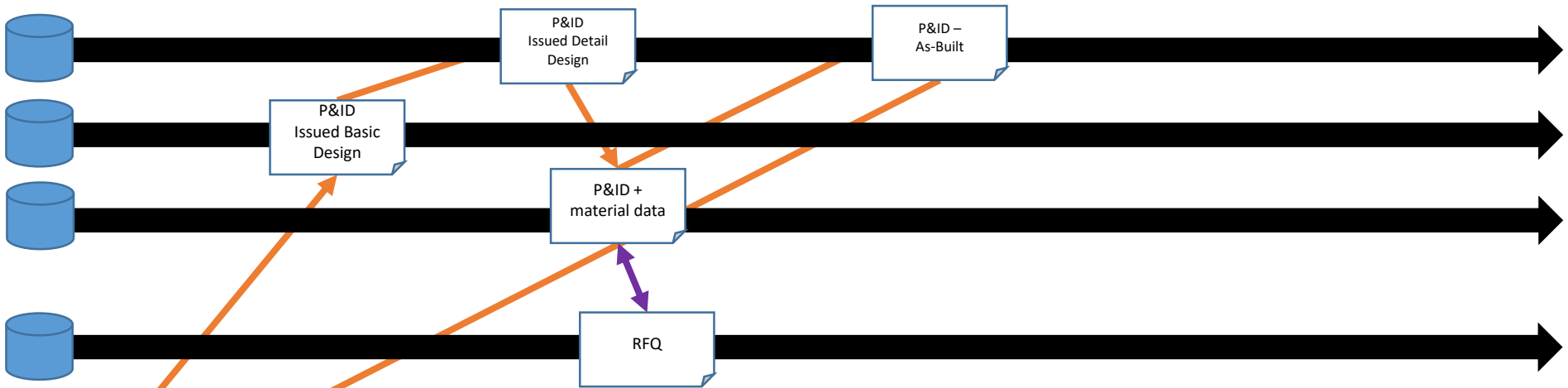


SIEMENS

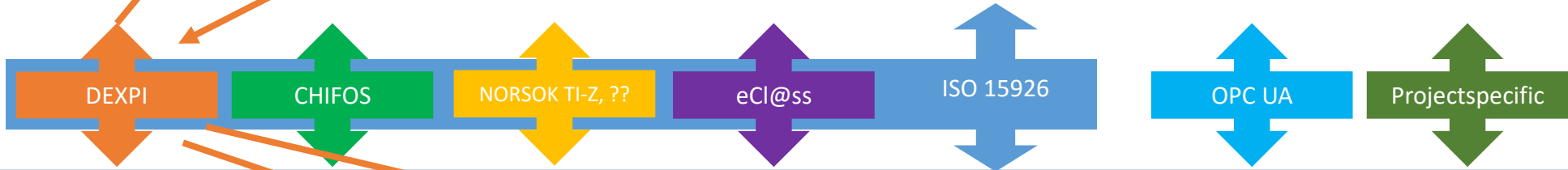
HEXAGON

sitebase

EH



Common library of transfer formats

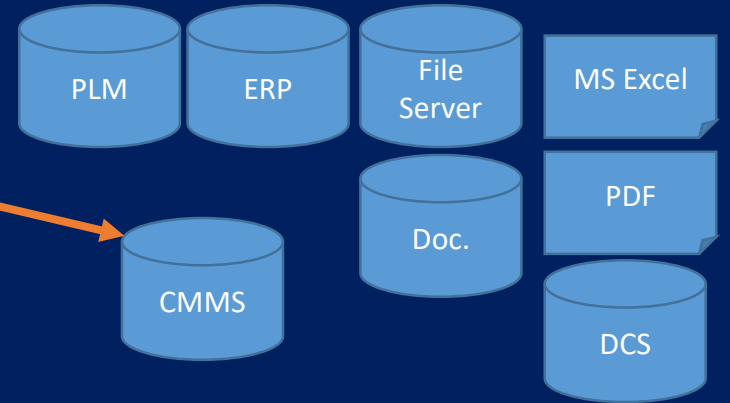


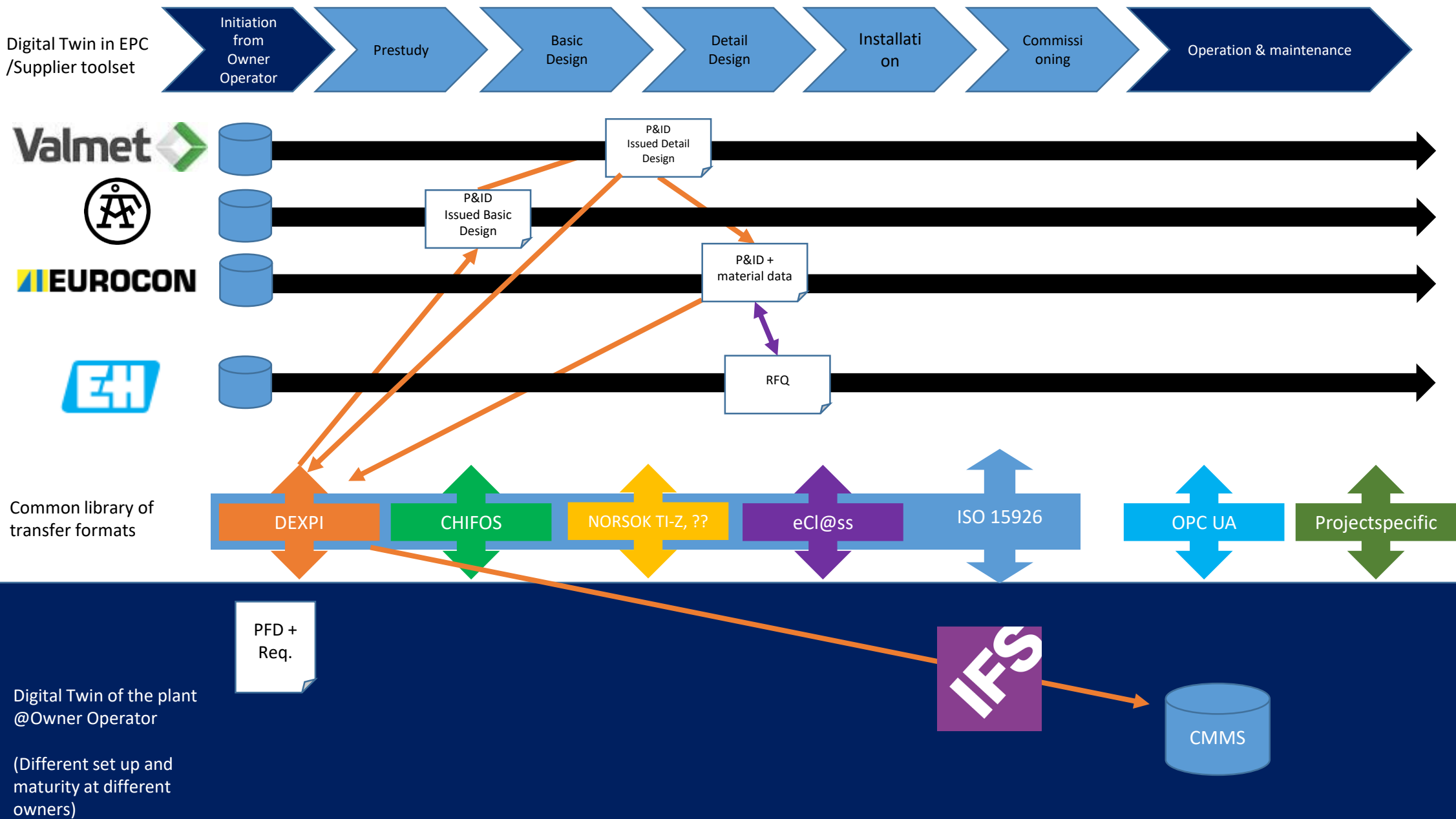
Digital Twin of the plant @Owner Operator

(Different set up and maturity at different owners)

PFD + Req.

IFS





Digital Twin in EPC /Supplier toolset

Valmet



EUROCON



Common library of transfer formats

Digital Twin of the plant @Owner Operator

(Different set up and maturity at different owners)