TwinEU Connector short history

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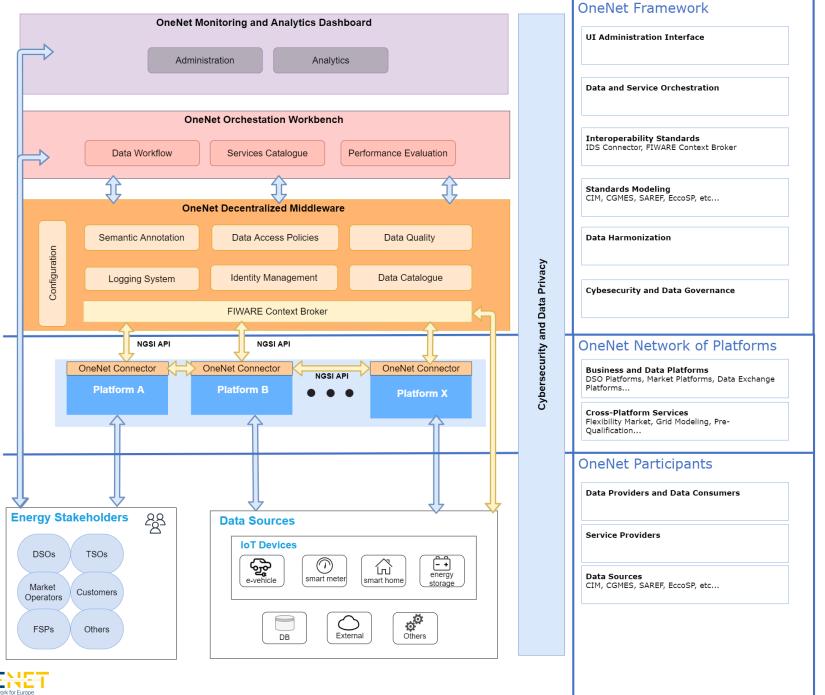


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Main concept

- Data spaces enable new ways for data sharing
- Connectors are the key technology enabling the process
- It is critical to develop connectors that facilitate use cases in the energy sector
- Main goal is to facilitate a data economy that thanks to the interaction of different stakeholders makes possible new use cases for the energy sector



OneNet Connector... Story







Starting Point: OneNet V1.0 First Evolution: Interstore V1.5

DTs Federation V2.0

- Fully decentralized Data
 Space Framework
- IDS and FIWARE standards
- Tailored for Energy Context
- Open-Source GUI
- Blockchain Transaction
 Notarization
- External Application Integration
- IEEE2030.5 integration

- Technical Interoperability: Data
 Space Protocol
- Semantic Interoperability:
 Extension of Vocabulary and
 Standards
- DT support: **Data and Models Exchange**



OneNet Framework



An LF Energy Project

OneNet Framework

OneNet Middleware

- Identity Management (identification, authentication, and authorisation of data space participants)
- Data Catalogue and Service Creation (incorporate publishing and discovery mechanisms for data resources and services, making use of common descriptions of resources, services, and participants)
- Vocabularies (domain-specific vocabularies for semantic annotation and description)
- Data Access Management (Data Access Control Policy definition)

OneNet Connector

- IDS Services (Trust Framework, Transaction Log and Access/Usage Control)
- Context Broker (end-to-end data exchange, NGSI-LD Standard)
- Open API and Data App (standardized interfaces for integrating legacy platforms and Middleware)





Conclusions

The original OneNet connector is evolving with always new functionalities

The creation of an open-source community within LF makes possible a long-term sustainability and an open cooperation

Thank you for your attention

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