Decentralized Access Control (DAC) in C4IIoT

o Taking a **hybrid approach** for handling data

o Enjoying the benefits of both **blockchain** end **encryption**
  - Blockchain provides **immutability** ("system of proofs") and **transparency**
  - Encryption provides **secrecy, privacy** and is **scalable**

o Utilizing **Attribute-Based Encryption (ABE)**
  - Control and restrict access to data using **privacy-aware policies**
  - Mechanism with **decentralized** nature

o Utilizing **Hyperledger Fabric**
  - Enable **auditability** of events and policies, **integrity** of data

Aiming at enabling privacy principles
- Purpose limitation
- Data minimization
- Storage limitation
- Integrity and confidentiality
- Accountability

```
(role:analyzer AND purpose:security_anomaly_detection) OR
(purpose:data_visualization AND domain:sensor_readings) OR
((role:admin OR role:supervisor) AND org:IBM)
```