



KOMPETENZ GEWINNBRINGEND EINSETZEN.

DATA NATIVES

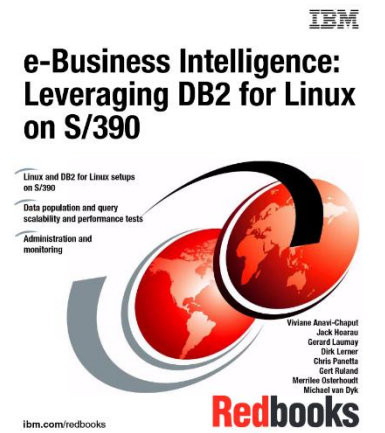
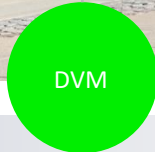
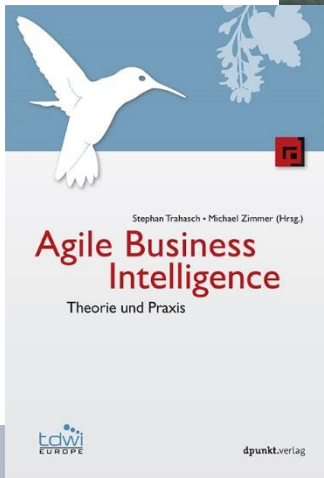
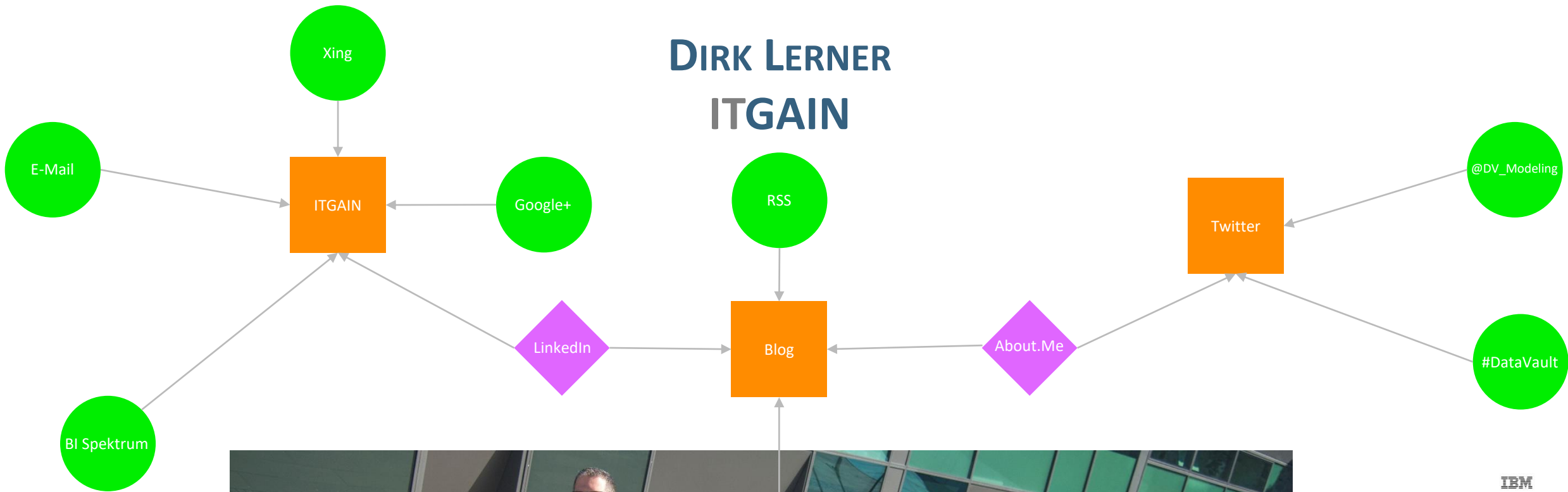
A CONFERENCE FOR THE DATA-DRIVEN GENERATION

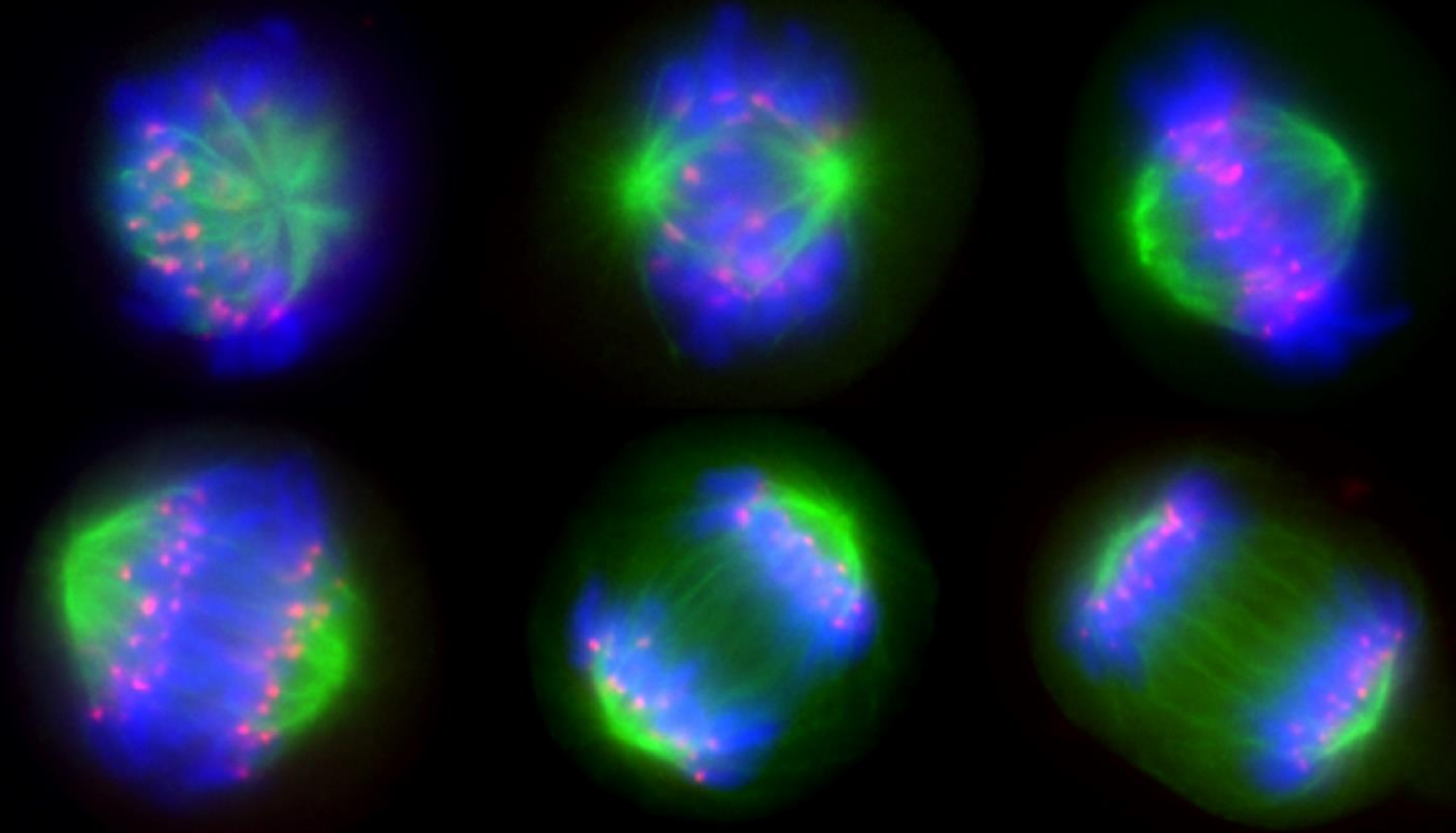
2016

DATA, DATA, METADATA – DNA OF DATA ARCHITECTURE?



DIRK LERNER ITGAIN







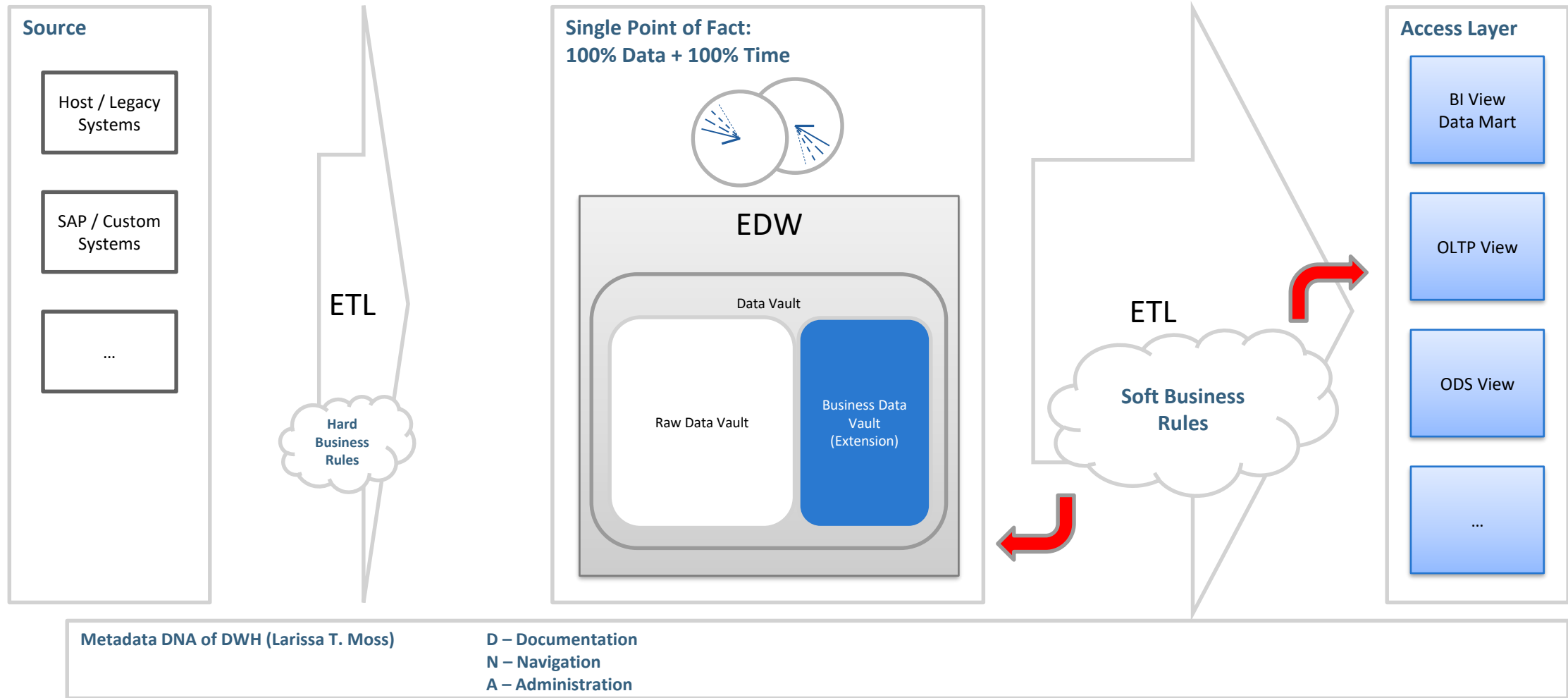
Metadata

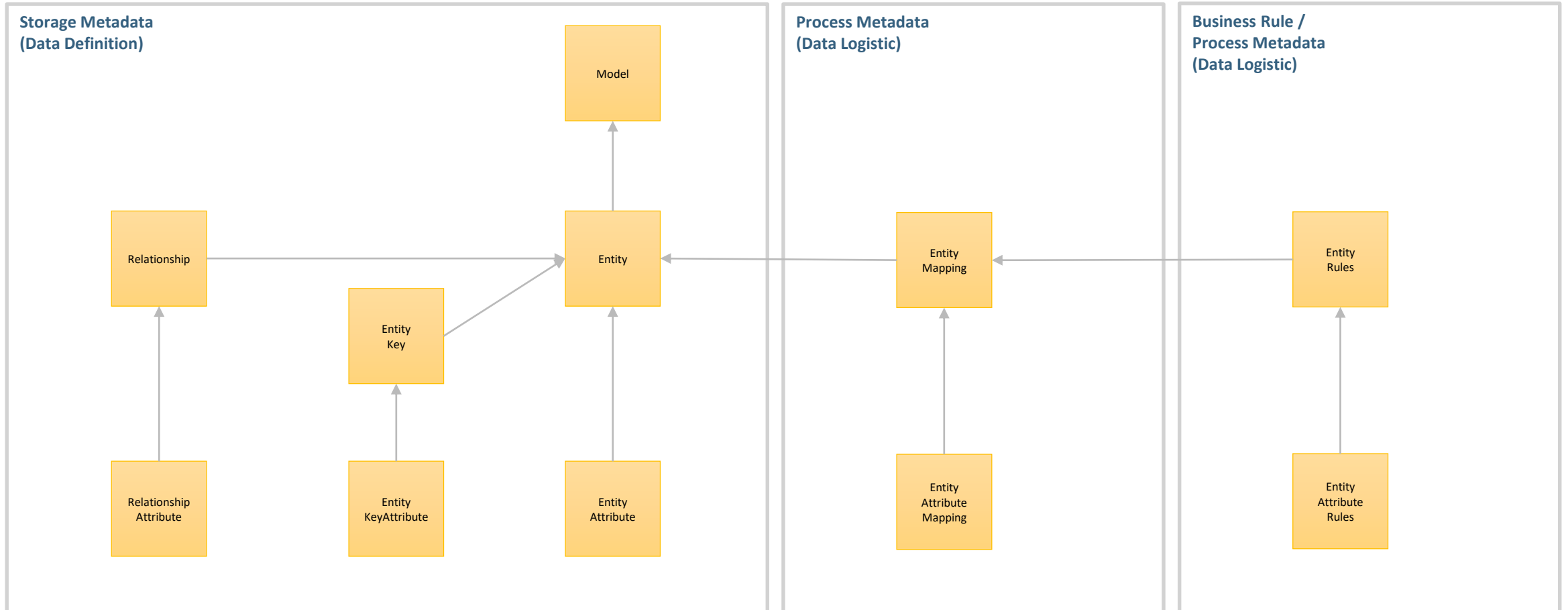
DNA

METADATA DNA

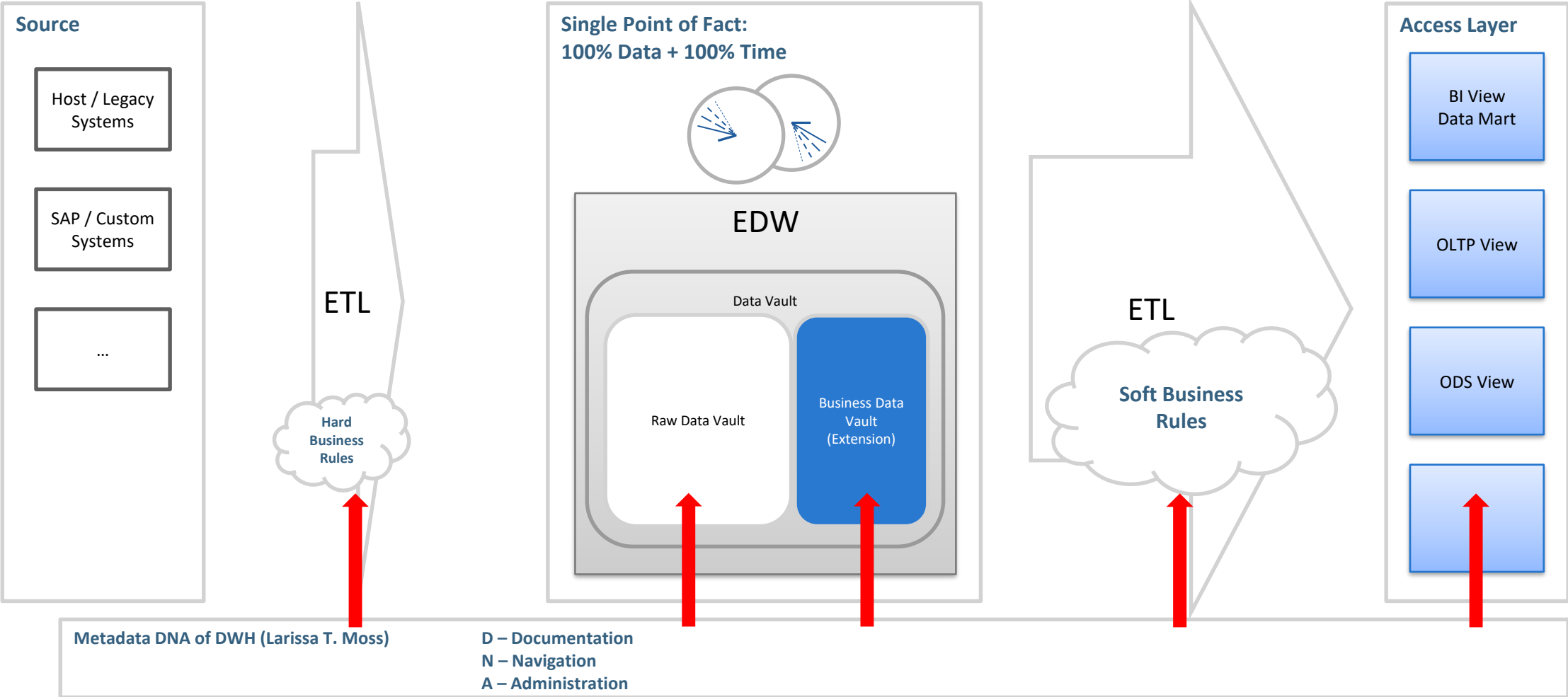
- Business
- Storage
- Process
- Display
- Project
- Program

DATA WAREHOUSE DESIGN ARCHITECTURE – METADATA





DATA WAREHOUSE DESIGN ARCHITECTURE – AUTOMATION



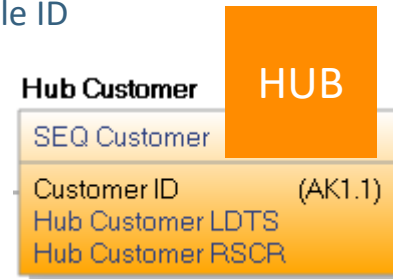
Patterns Cells

DATA VAULT

BASIC ELEMENTS

HUB

- Only Business Key & nothing else
- E.g. customer ID or article ID
- Surrogate-Key (PK)
- Business-Key
- Audit-Information



LINK

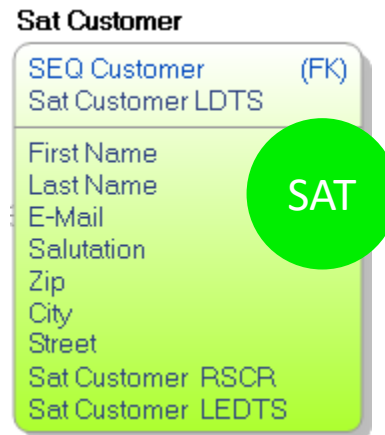
- Only Relationship & nothing else
- E.g. sales order (customer and article)
- Surrogate-Key (PK)
- SKs of Hubs (FK)
- Audit-Information



Separation of business keys, relationships and context

SAT(ellite)

- Only Context & nothing else (History)
- E.g. address
- SK of Hub or LINK (FK) + date
- Audit-Information
- Contextattributes

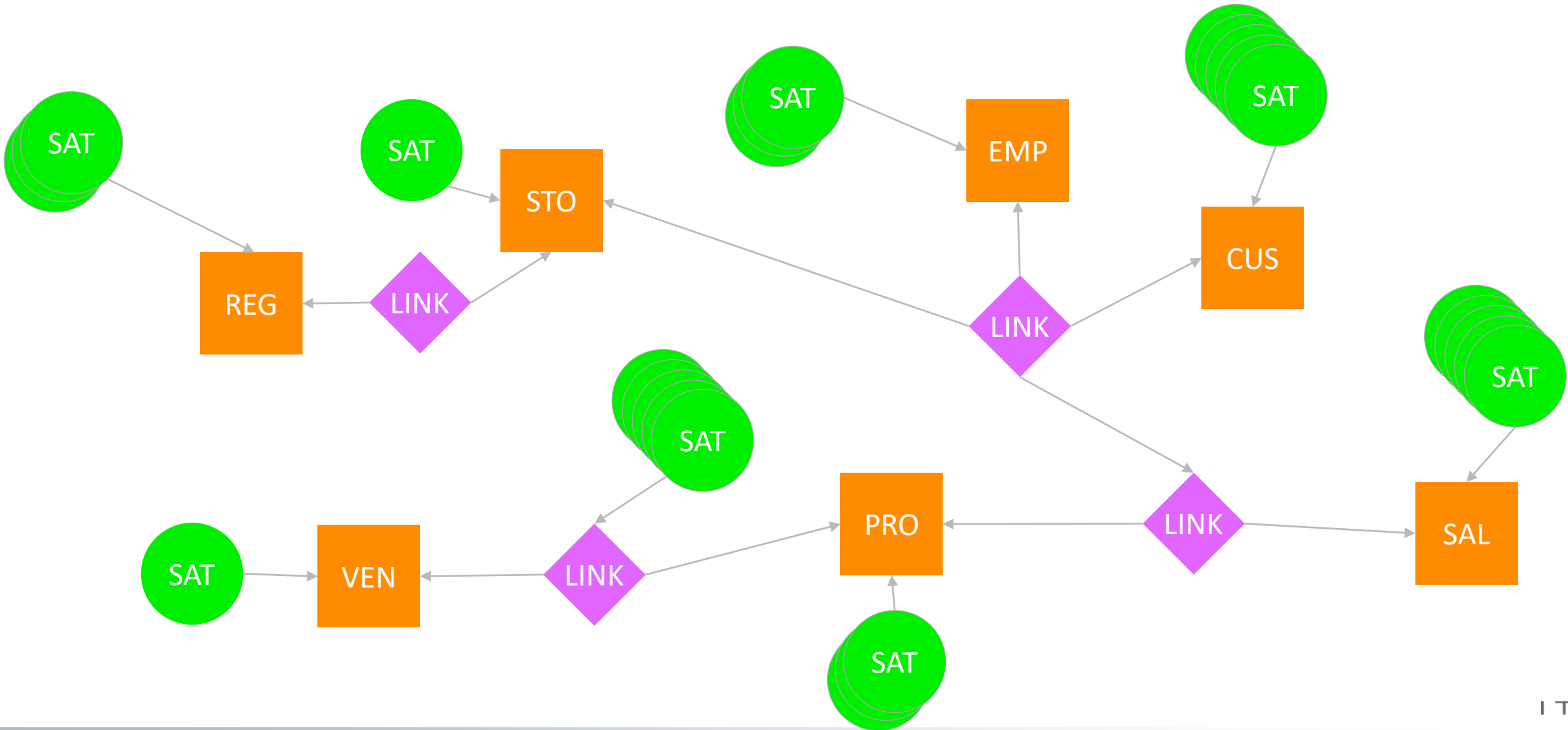


Reference

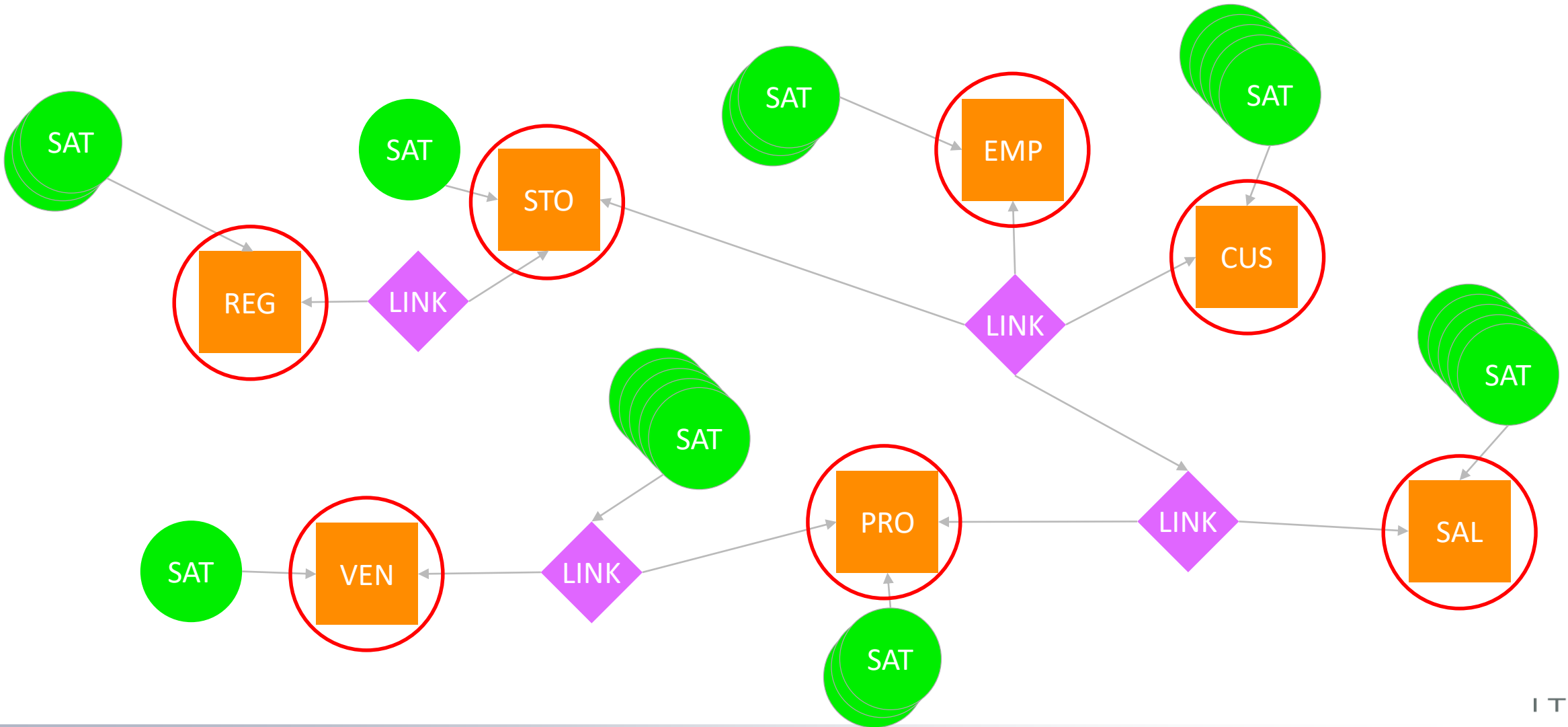
- Only Reference Data
- Tables like calendar, time, description of code
- Referenced many times



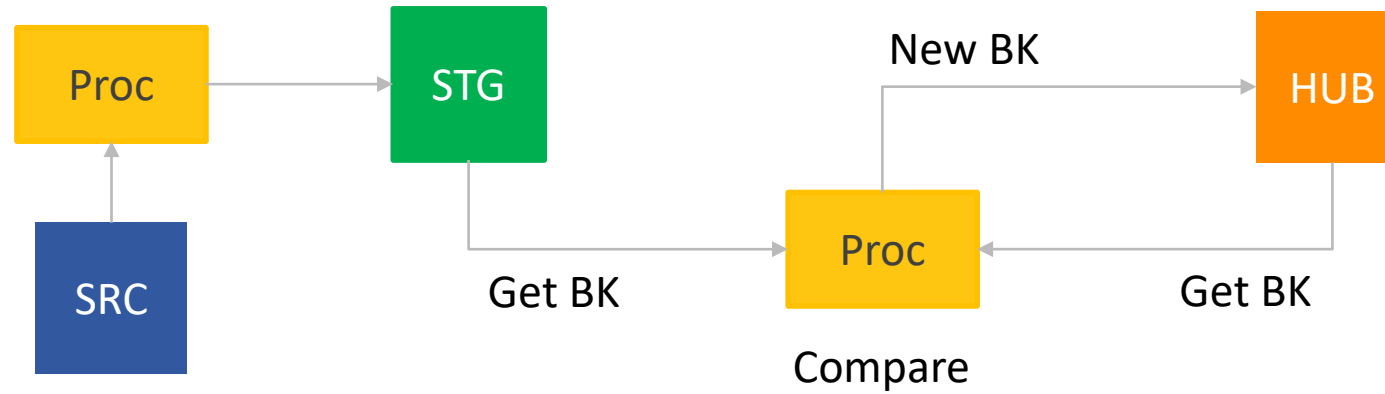
DATA VAULT MODEL



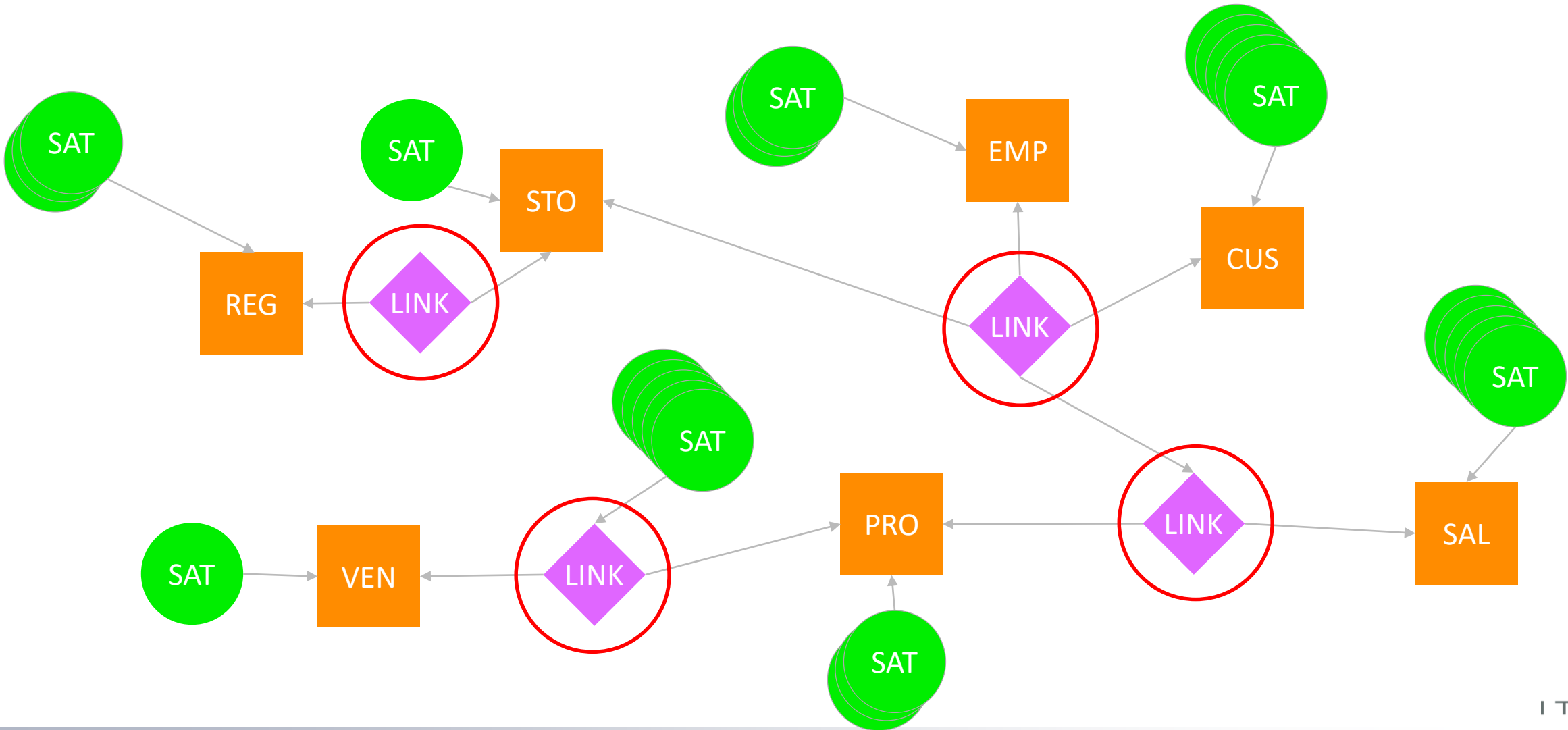
DATA VAULT MODEL



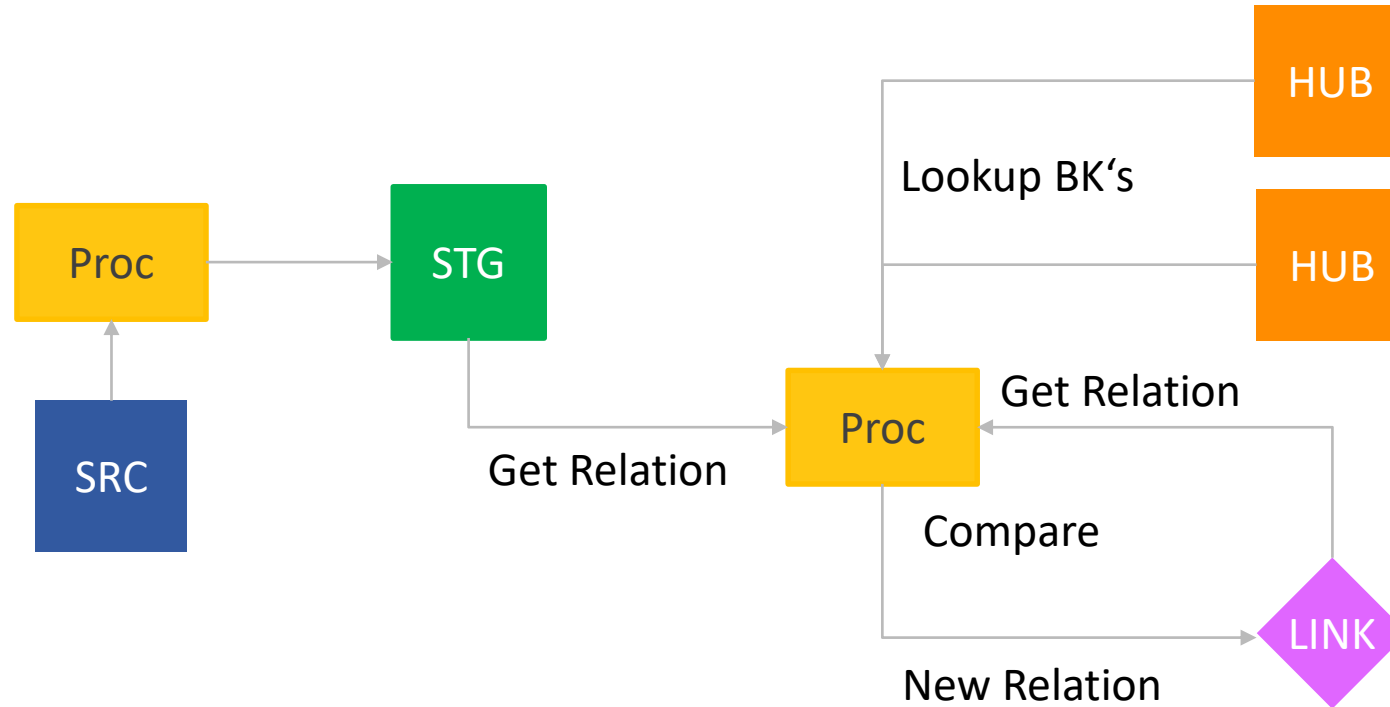
DATA VAULT HUB – ETL PROCESS



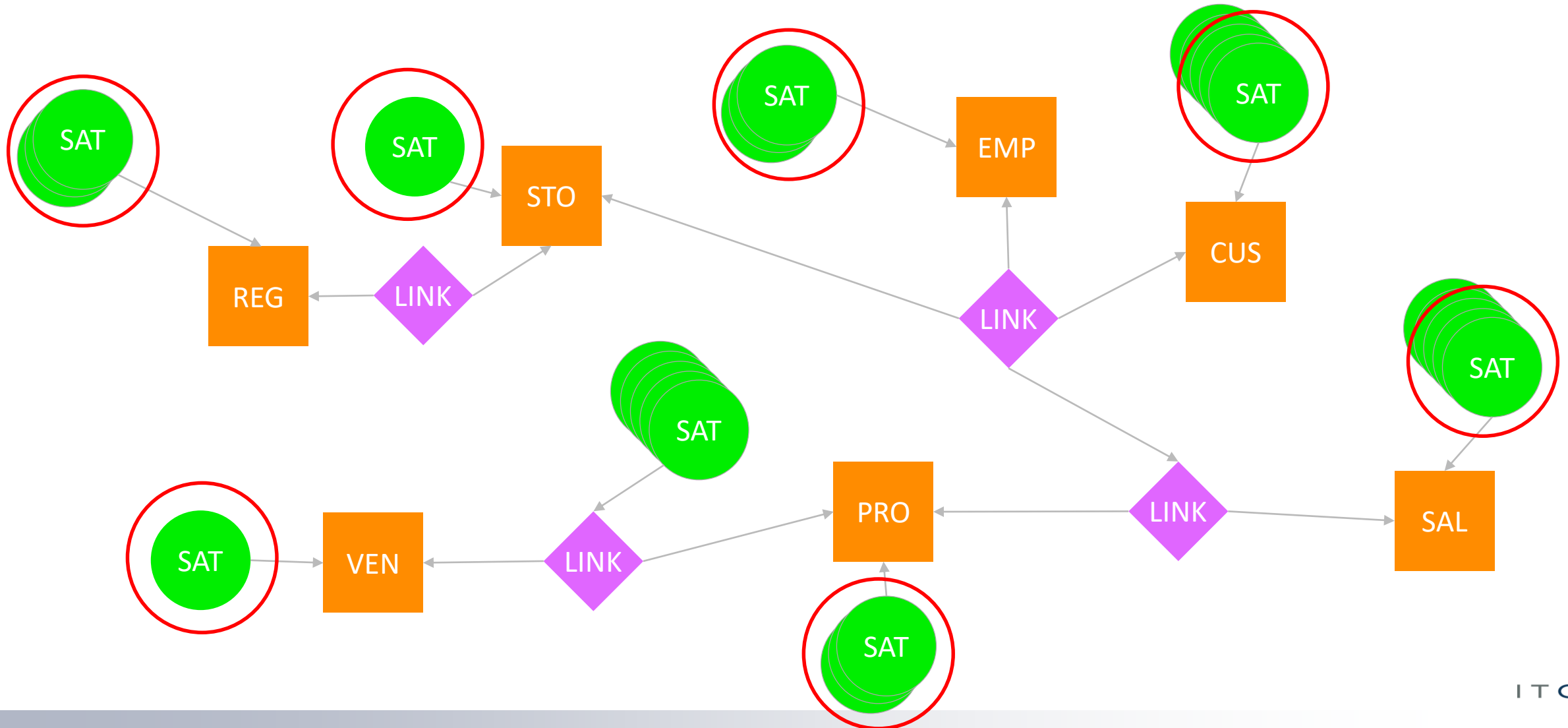
DATA VAULT MODEL



DATA VAULT LINK – ETL PROCESS

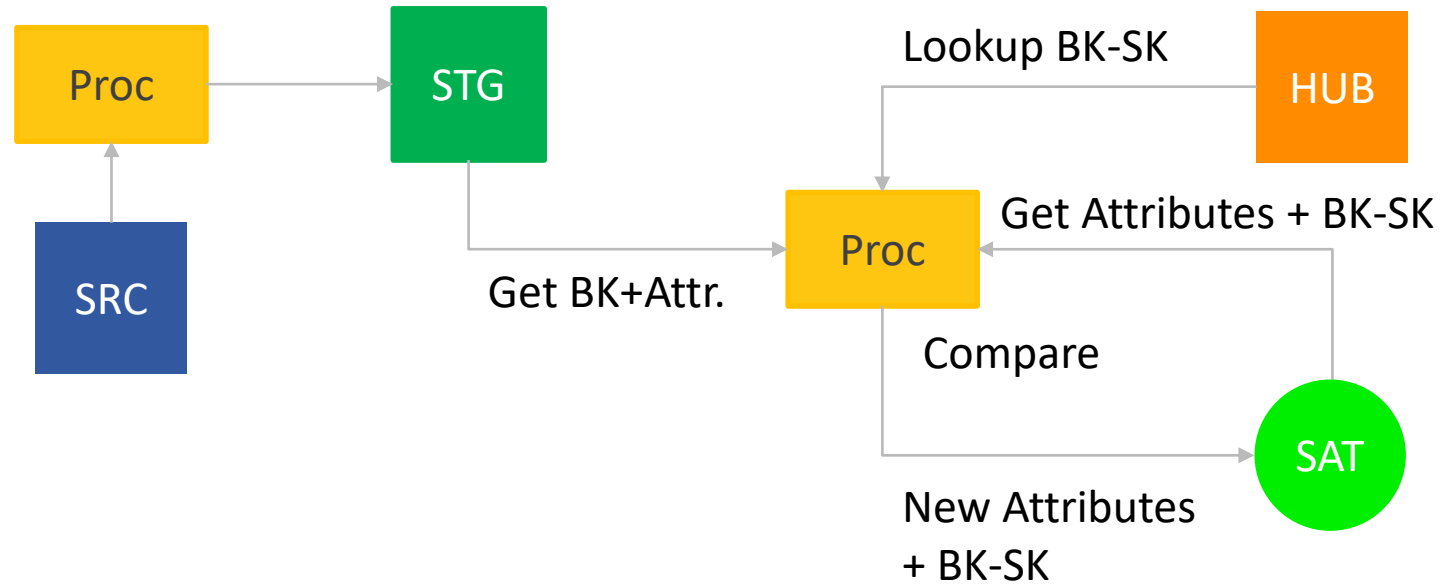


DATA VAULT MODEL



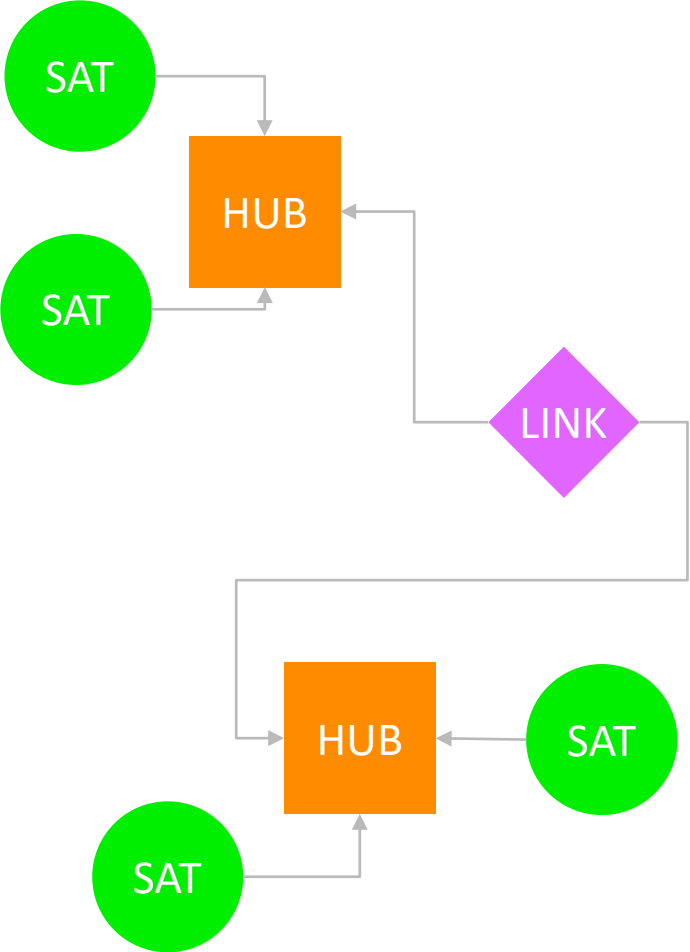
DATA VAULT

SAT(ELLITE) – ETL PROCESS

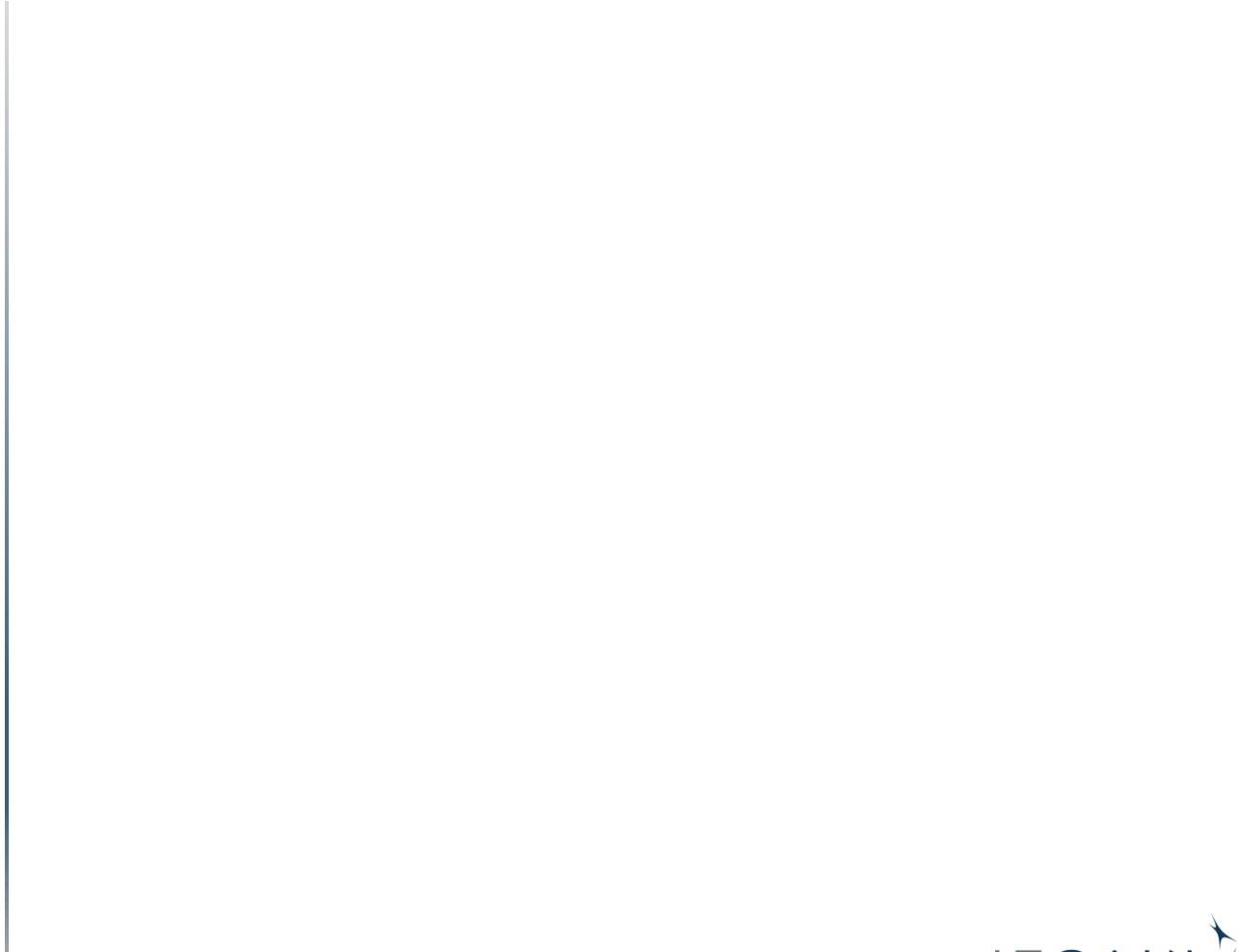


VIRTUALIZATION

Core Data Warehouse

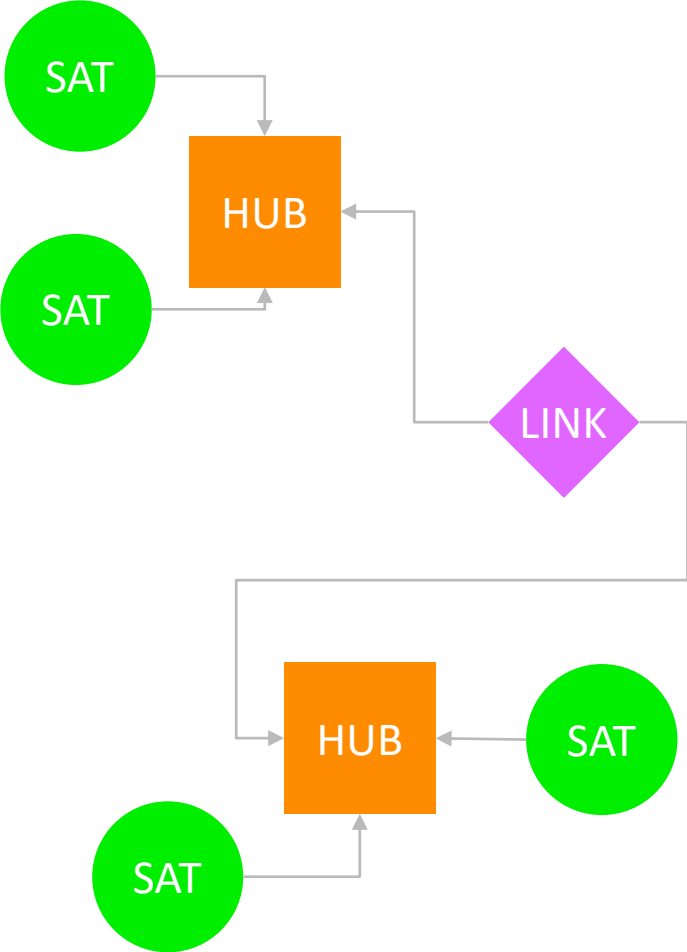


Data Mart Star Schema

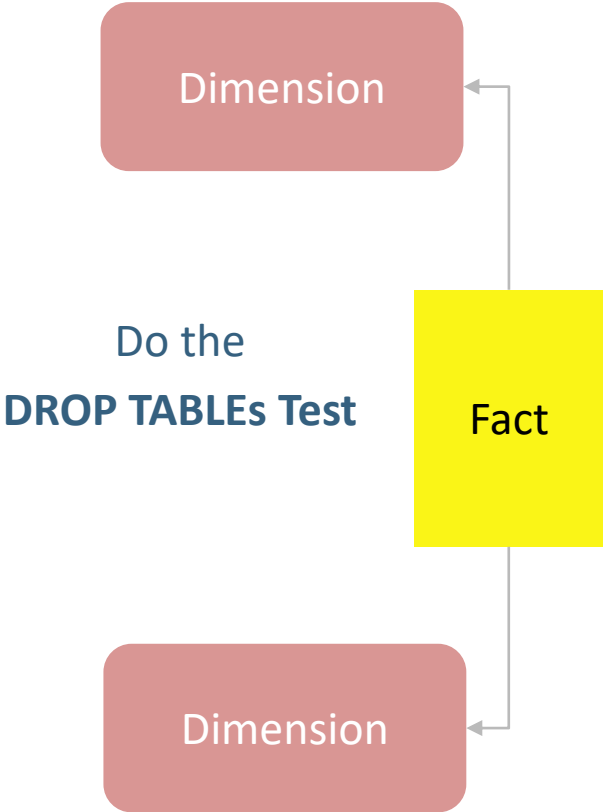


VIRTUALIZATION

Core Data Warehouse



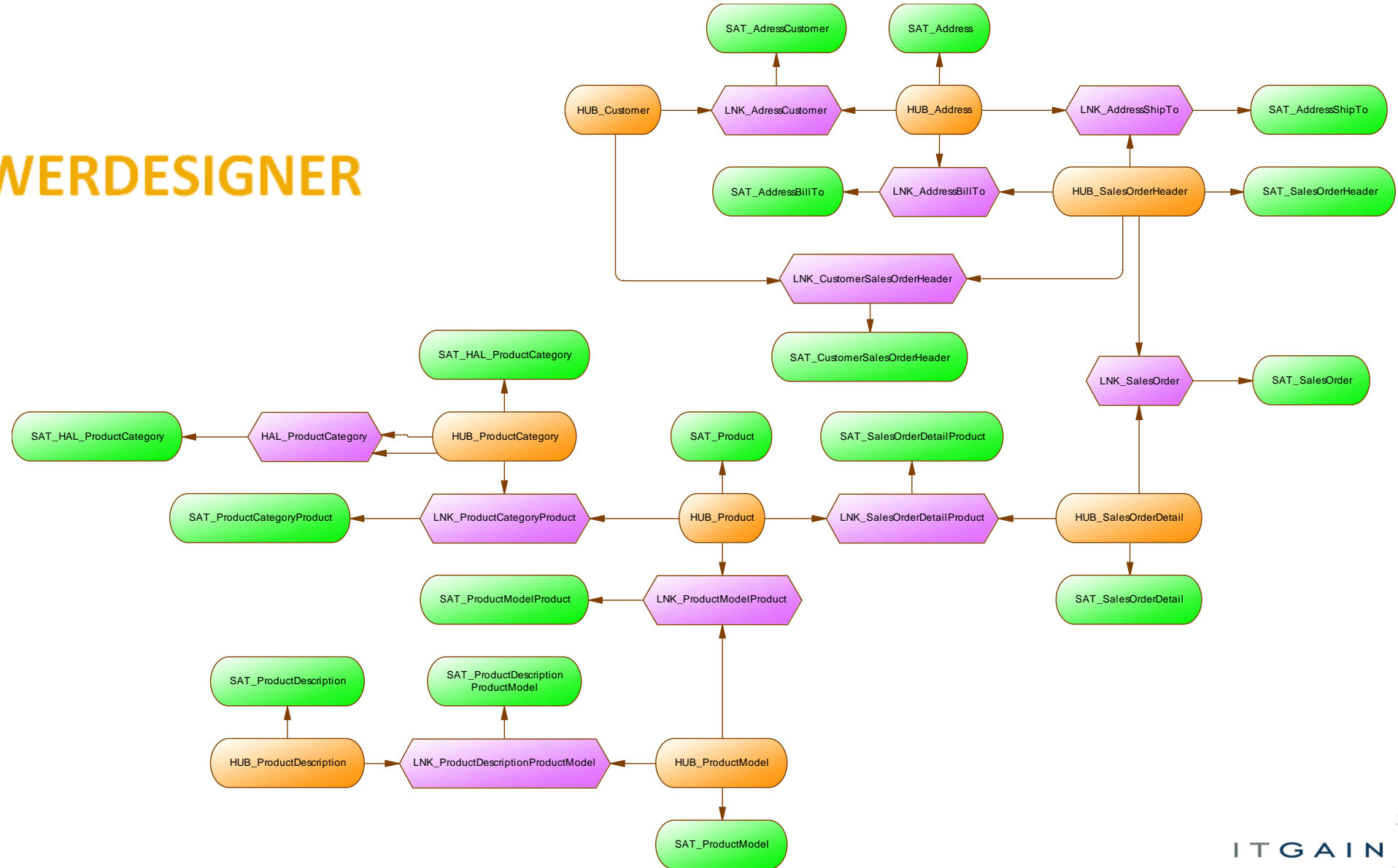
Data Mart Star Schema



Generate and Use DNA

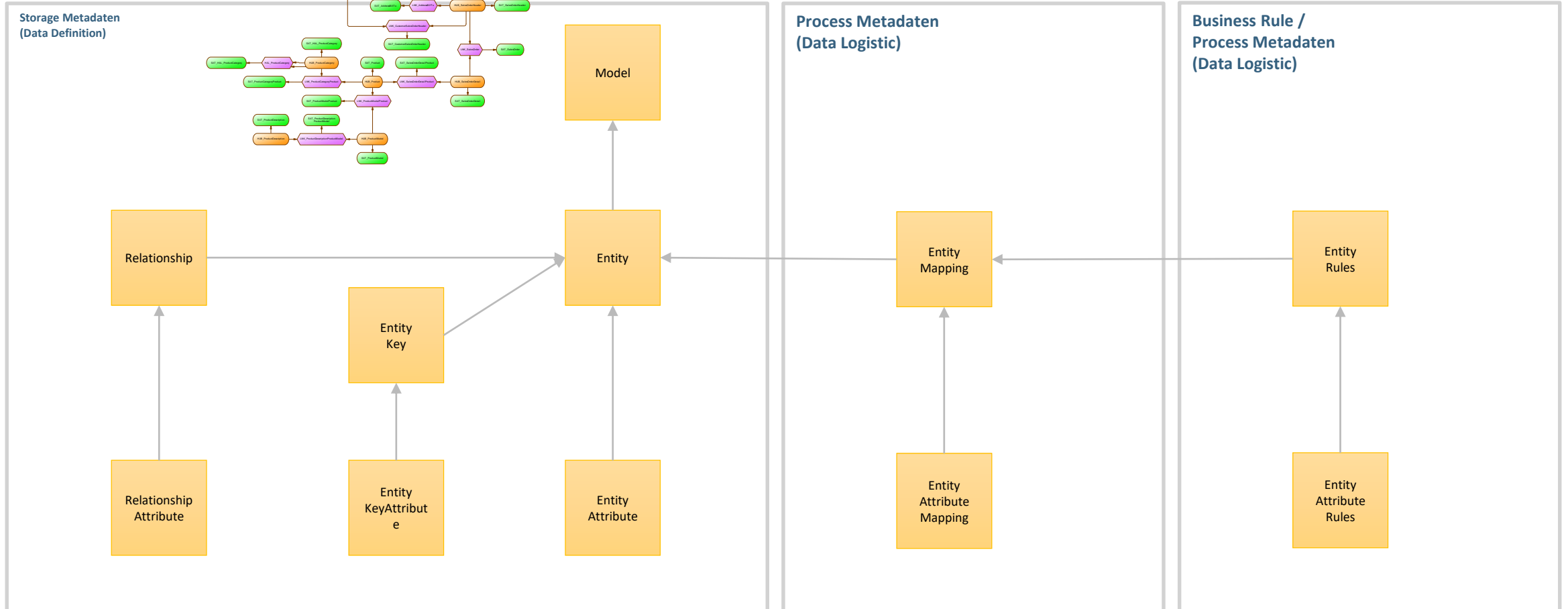


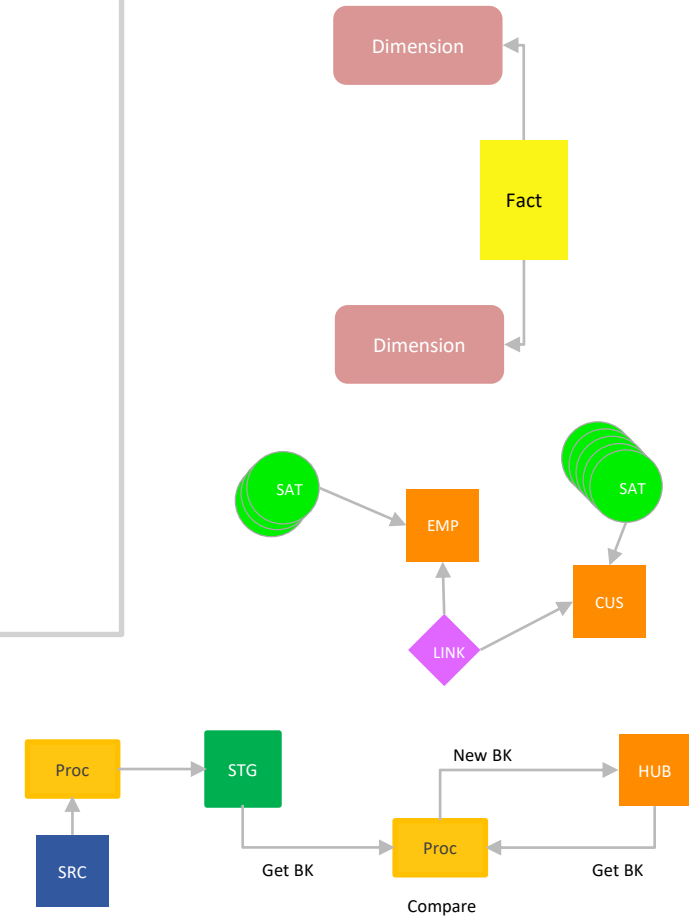
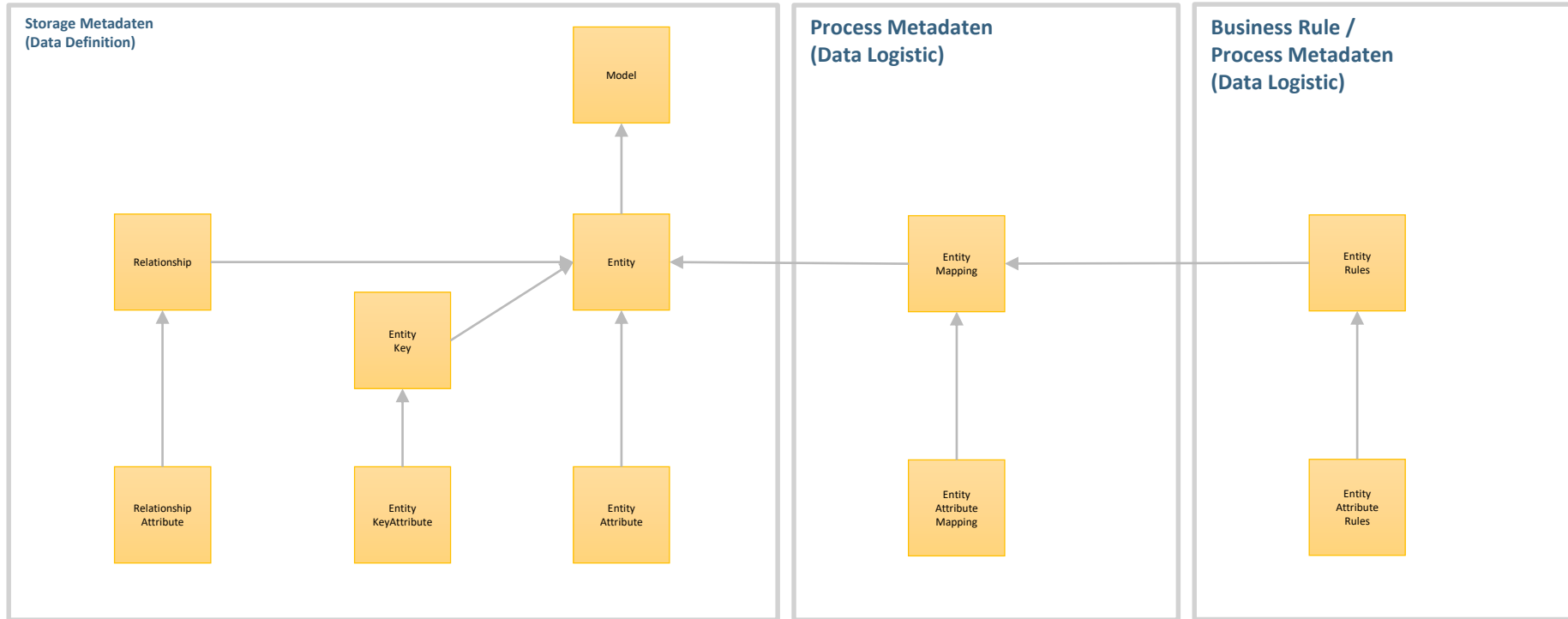
POWERDESIGNER





POWERDESIGNER





Summary

Data Warehouse

- **Patterns**
- **Metadata**
 - How to build
 - Where to build
 - When to build
- **Data Vault, ELT processes**
- **Virtualize**

Human

- **Cells**
- **DNA**
 - How to build
 - Where to build
 - When to build
- **Muscles , bones, ...**
- **Skin**

DATA, DATA, METADATA – DNA OF DATA ARCHITECTURE?

YES!



YOUR BUSINESS IS OUR CHALLENGE

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