



Acceliance October 15th 2025

Choosing Data Vault for seamless SAP Integration



Business expectations

Dasiness expectation

Customer situation

Both common software are used

- SAP ECC 6 Is used for accounting management.
- SAP Ariba, a Procure-to-Pay system, is connected to improve sourcing, supplier collaboration, and purchasing efficiency while providing greater visibility into procurement activities.

Procure to pay accounting rules and impacts

- 401 (PO supplier invoice received) accounts are transmitted as soon as possible to have a global situation and allows payments.
- · 4456 accounts manage VAT amount.
- 6 (NPO out of purchase order) accounts, manage excluding VAT services and goods amounts for Non-Purchase orders process.
- 408 (PO supplier invoice not yet received) accounts manage excluding services and goods amounts for Purchase order process.

Stakes and objectives

As Procurement process is not yet deployed on all group entities, **the Spend Analysis** reporting can only be done directly on SAP ECC 6.

Data Organization of the entire accounting.

Expected Customer Benefits

Leverage accounting schemas for 401/408 & 6 class (not in Ariba) accounts, whole only available in ECC

Accelerate Spend reporting (don't wait for process or incoming documents, real-time financial situation & decision making)





Main data rules to manage





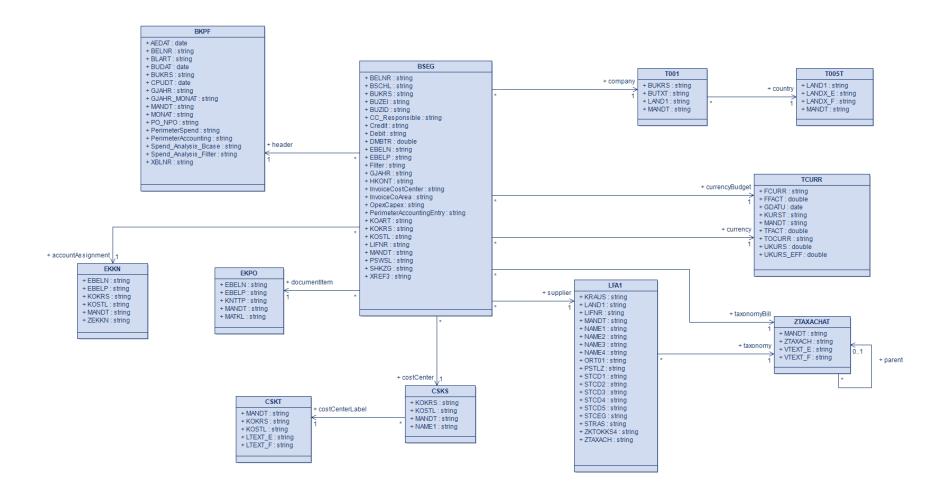
Data reshaping

- Texts and language transformation.
- Hierarchy organization (purchase taxonomy).
- Exchange organization and time management.

Accounting identification

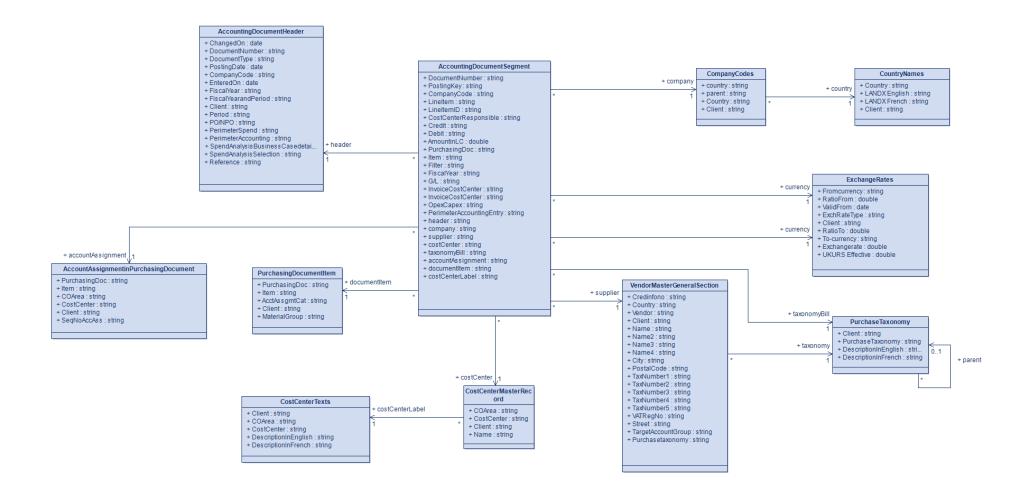
- Supplier, spend analysis and ledger perimeter are defined by tag system.
- Reshaping supplier codification from the 401 account to the 408 or 6 accounts.
- Depending on the sourcing process PO or NPO, the cost center is not defined by the same structure.
- Opex / Capex definition
- Other accounting SAP rules.

The SAP Model





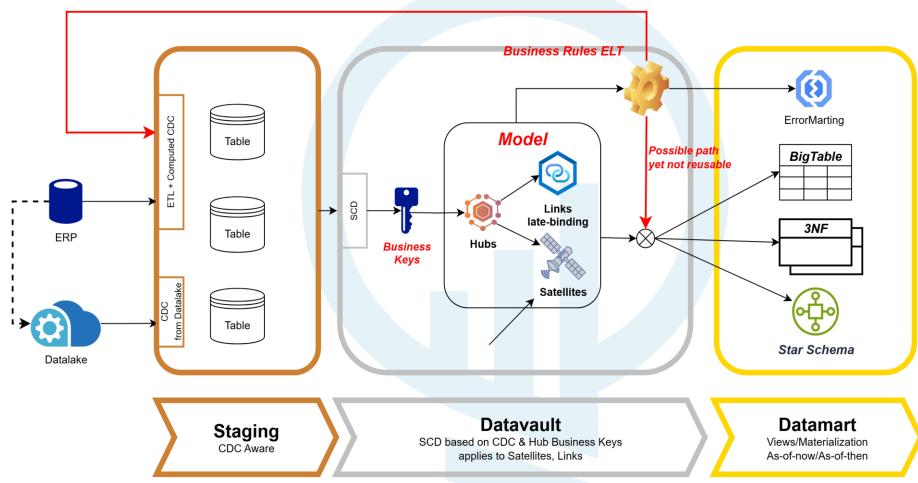
The Functional Model





Functional Architecture

Because Business Value is not Single-Use (Relations & Columns)





Functional Architecture – Key Elements

3-zone Bronze, Silver & Gold Medallion architecture

Pipeline Cinematic clearly pathed

No risk of chaotic stretching

Business Rules

- Centralized & auditable knowledge
- Recycled

Incremental Architecture

- Multi-source
- Perimeter extensions

Model-Centric

• Support for knowledge

Late binding relationships and decoupling of the Model

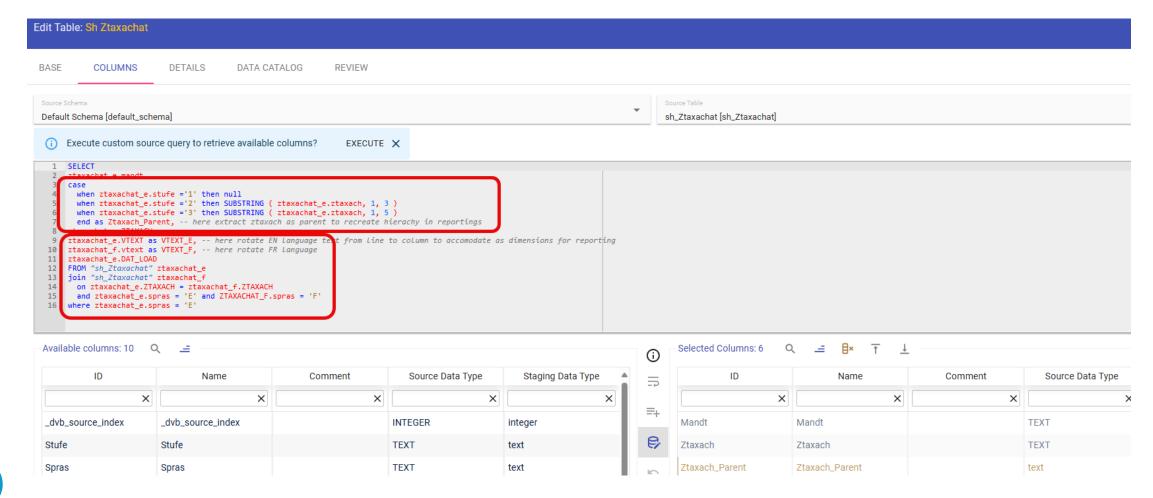
Historization

Technical adjustments ETL

- Some technical adjustments
- Datavault
- Examples
 - ZTAXACHAT table languages badly organized
 - The TCURR.GDATU column is malformed in the source
- Some ones possible in Datavault Builder
 - ZTAXACHAT can be ETLized
 - TCURR.GDATU must be handled by by ingestion platform



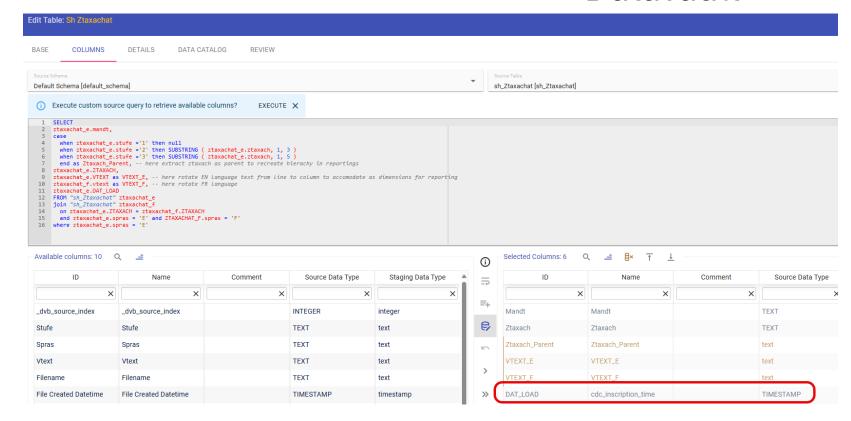
Possible technical adjustments





Datalake (fed with SAP ODATA) & Historization

- Datalake
- Bringing the historization in the Datavault





Business Keys

- Late binding relationships
 - Decoupled from Modeling
- Stored in the HUB

Business Key

Mandt, Bukrs, Belnr, Gjahr, Buzei



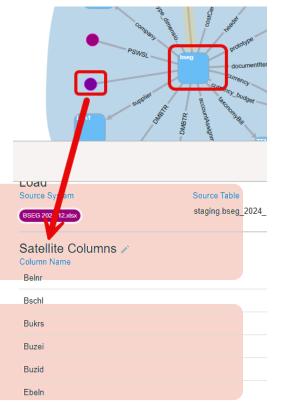
Feeding the Satellites



From the Staging area



Named Raw Datavault





Mapping by configuration

Possible renaming
Possible type change



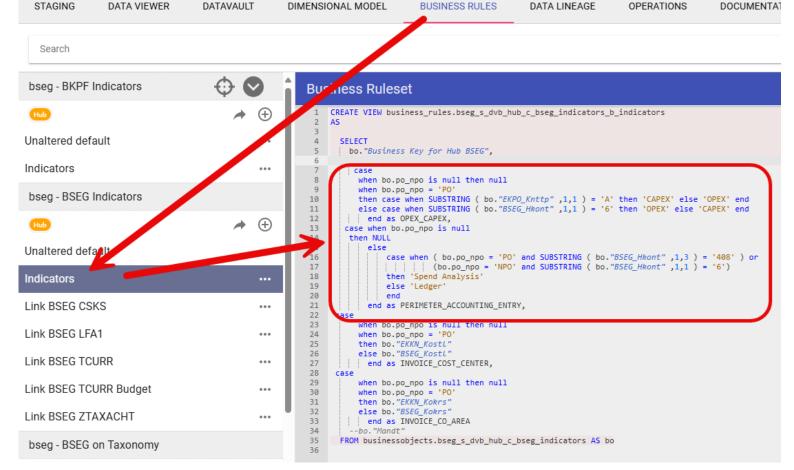
No Business Value



Business Rules

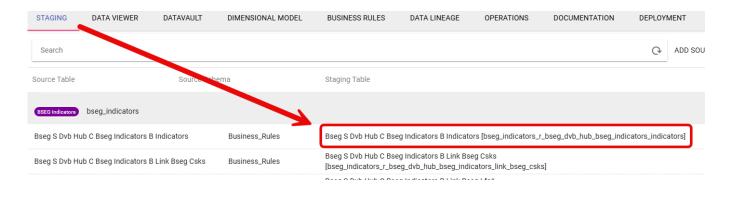
Carries the Business Value (talk later slide)

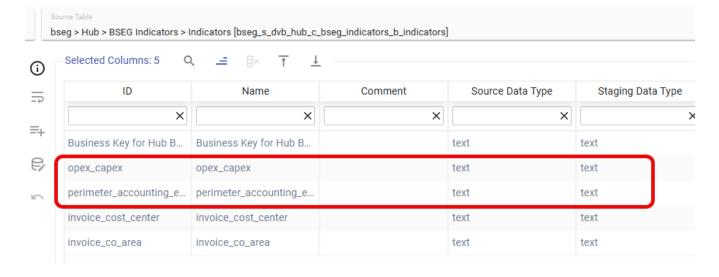
Decoupling from the Model



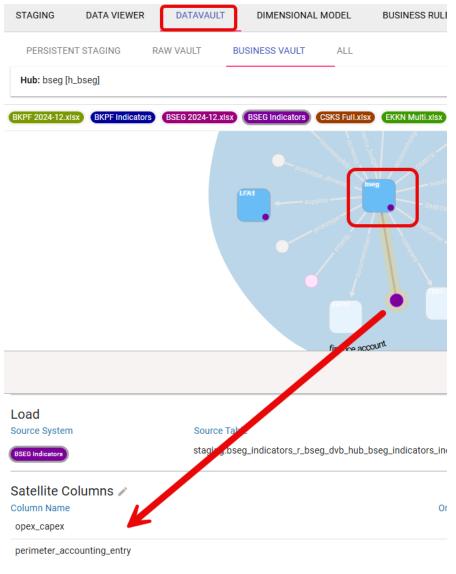


Recycling Business Rules



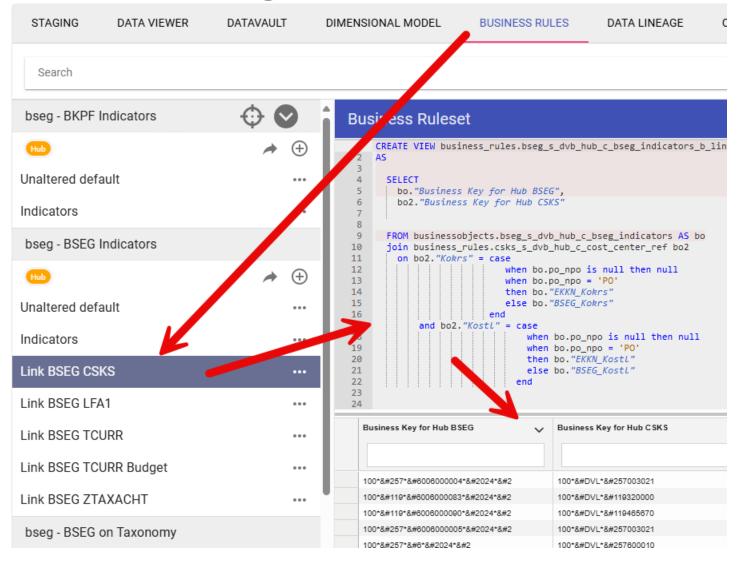






Datavault Links in late binding

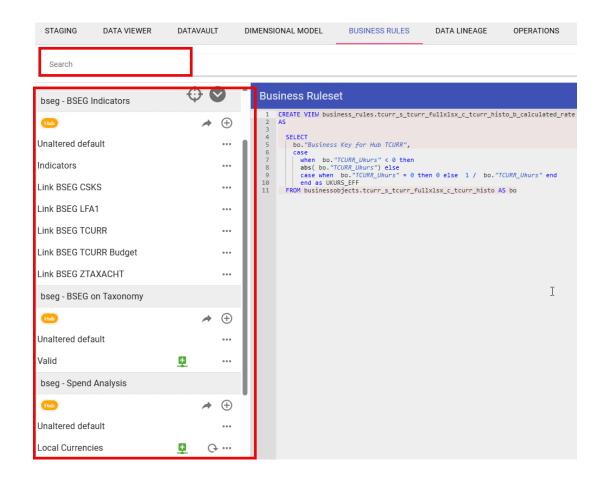
- Link Rebuilding
- Chaotic Source





Business Rules & Centralization of Knowledge

- Pipeline organized in a predictable and standardized manner
- Rules available in one place
- Rules not buried in the middle of scripting code





The Business expertise: Indicators for BSEG

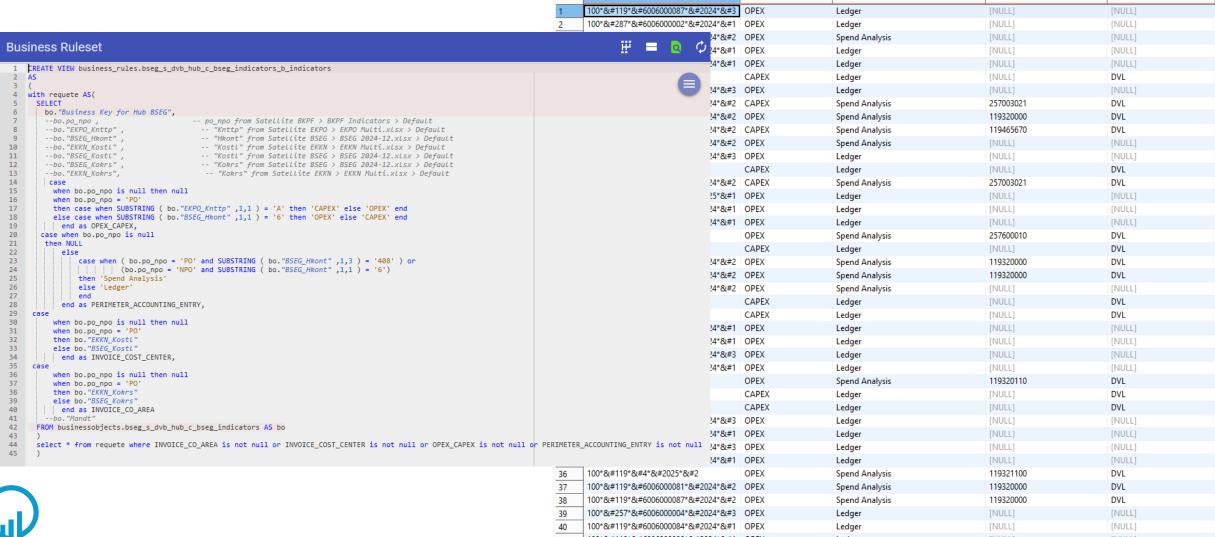
Business Key for Hub BSEG

A-Z perimeter_accounting_entry

A-Z invoice cost center

A-Z invoice co area

A·Z opex capex ▼





The Business expertise: Cost Center

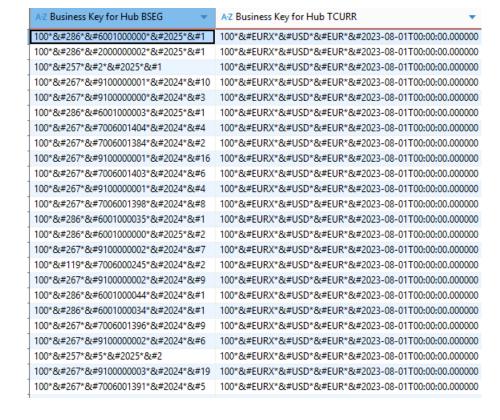
```
Business Ruleset
 1 CREATE VIEW business_rules.bseg_s_dvb_hub_c_bseg_indicators_b_link_bseg_csks
       SELECT
        bo. "Business Key for Hub BSEG",
        bo2. "Business Key for Hub CSKS"
       FROM businessobjects.bseg_s_dvb_hub_c_bseg_indicators AS bo
       join business_rules.csks_s_dvb_hub_c_cost_center_ref bo2
10
        on bo2. "Kokrs" = case
11
12
                             when bo.po_npo is null then null
13
                             when bo.po npo = 'PO'
                            then bo. "EKKN Kokrs"
14
15
                             else bo. "BSEG_Kokrs"
16
17
             and bo2. "Kostl" = case
18
                                 when bo.po_npo is null then null
19
                                 when bo.po_npo = 'PO'
20
                                 then bo."EKKN_Kostl"
21
                                 else bo. "BSEG Kostl"
22
23
24
```

)	AZ Business Key for Hub BSEG	A-Z Business Key for Hub CSKS	•
	100*ā*�*ߨ*	100*&#DVL*�</th><th></th></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*ā*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*ā**ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w**ߩ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w**ߩ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w**ߩ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*ā**ߩ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*w*�*ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*ā**ߨ*</td><td>100*&#DVL*�</td><td></td></tr><tr><th></th><td>100*ā**ߨ*</td><td>100*&#DVL*�</td><td></td></tr></tbody></table>	



The Business expertise: Currency rate as bitemporal

```
Business Ruleset
    CREATE VIEW business rules.bseg s dvb hub c bseg indicators b link bseg tcurr
    AS
       SELECT
         bo. "Business Kev for Hub BSEG".
         bo3. "Business Kev for Hub TCURR"
       FROM businessobjects.bseg_s_dvb_hub_c_bseg_indicators bo
       ioin
 9
10
             select bo2."TCURR Fcurr", max(bo2."TCURR Gdatu") AS datmax
11
                   FROM business rules.tcurr s tcurr fullxlsx c tcurr histo bo2
12
                   WHERE bo2. "TCURR Kurst" = 'EURX'
13
                     AND bo2. "TCURR ToCurr" = 'EUR'
14
                     Group by bo2. "TCURR Fcurr"
15
         thedat
16
             on bo. "BSEG Pswsl" = thedat. "TCURR Fcurr"
                and thedat.datmax <= bo."BKPF Budat"
17
18
      join business_rules.tcurr_s_tcurr_fullxlsx_c_tcurr_histo bo3
19
        on bo3."TCURR Kurst" = 'EURX'
20
             AND bo3."TCURR_ToCurr" = 'EUR'
21
             and bo. "BSEG Pswst" = bo3. "TCURR Fcurr"
             and bo3."TCURR Gdatu" = thedat.datmax
```





Data Product Spend Analysis

Source Business Model



No Code



DATA LINEAGE

OPERATIONS

DOCUMENTATION

DEPLOYMENT

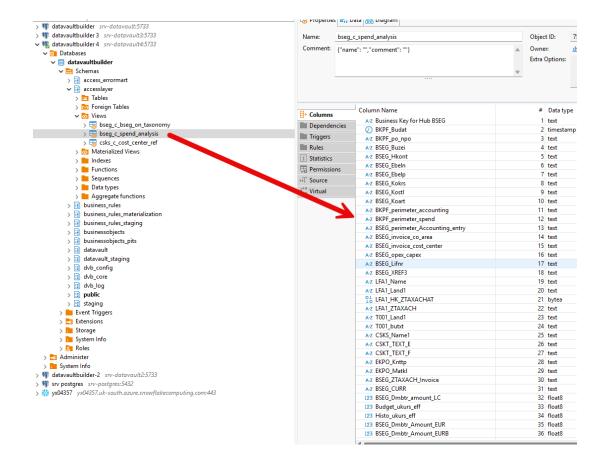
CREATE BUSINESS OBJECT

ADD RELATED BUSINESS OBJECT Menu



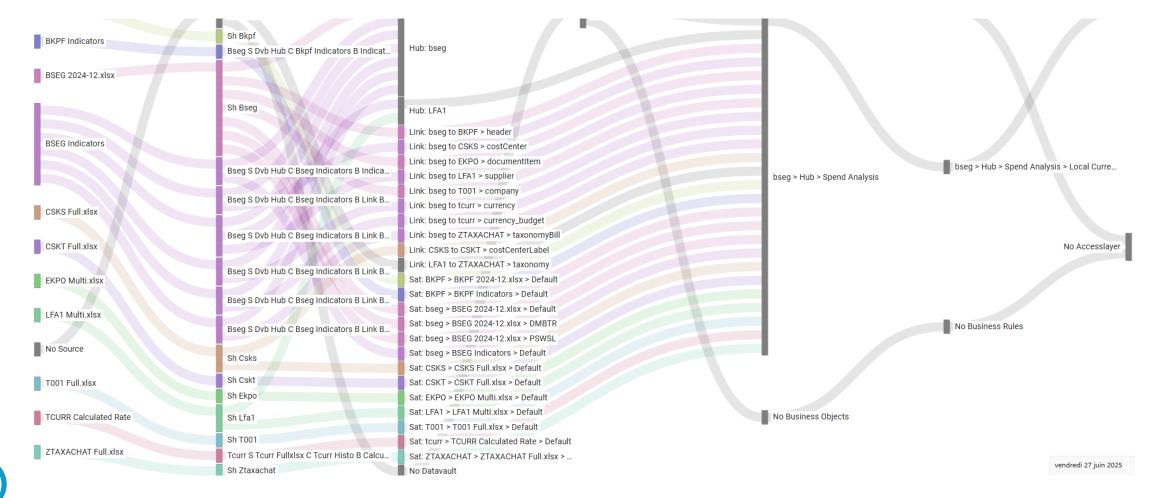
The database is automatically driven

- Staging
- Datavault (Model)
- Datamart Views (Raw, Star, 3NF)





The Data Lineage of the Datavault Pipeline





Data Vault Automation : Resuming the Benefits

Value-added cost centers

- Modeling
 - Business objects
 - Relations
 - Attributes
- Business Rules
- Business Keys

Cost centers with no value

- Datawarehouse Architecture
 - Medalion Architecture déployed
- Good Practices
 - Defined by the Medallion Architecture
- · Good practices governance
 - Guided by the Tool
- Technical Coding
 - Automation provides coding
- Business Rules & Recycling in the Model
- Business Rules & Error Marting
- APIfied platform invokable from outside
- TERRAformes configuration & GIT support
- Multi User / Multi Domain
- Automation reduces the Data Engineering
- Simplified Governance & Risk Reduction
- Reduced Budget & Boosted Productivity

- Transforming cost centers into profit centers
- Complexity of implementation is encapsulated
 - Risk reduction
 - Reduction of Time to Product
- IT department footprint reduced to minimum



How long?

Less than 2 days





Thank you for listening.



