SAP BW/4HANA Business Content
Simon Kranig, Andreas Tenholte

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SAP BW/4HANA Content

Introduction

Discover the application components covered by SAP BW/4HANA content

Learn the deployment options of standard content in SAP BW/4HANA

Understand the key design principles

What's New

In a heterogenous system landscape a data warehouse enables customers to integrate and harmonize data from various sources. Providing Business Content as a part of our EDW solutions has been a differentiator for SAP since the early releases of SAP Business Warehouse (BW). **Business Content enables quick and cost-effective implementation as it provides a model that can be used as a guideline during implementation.**
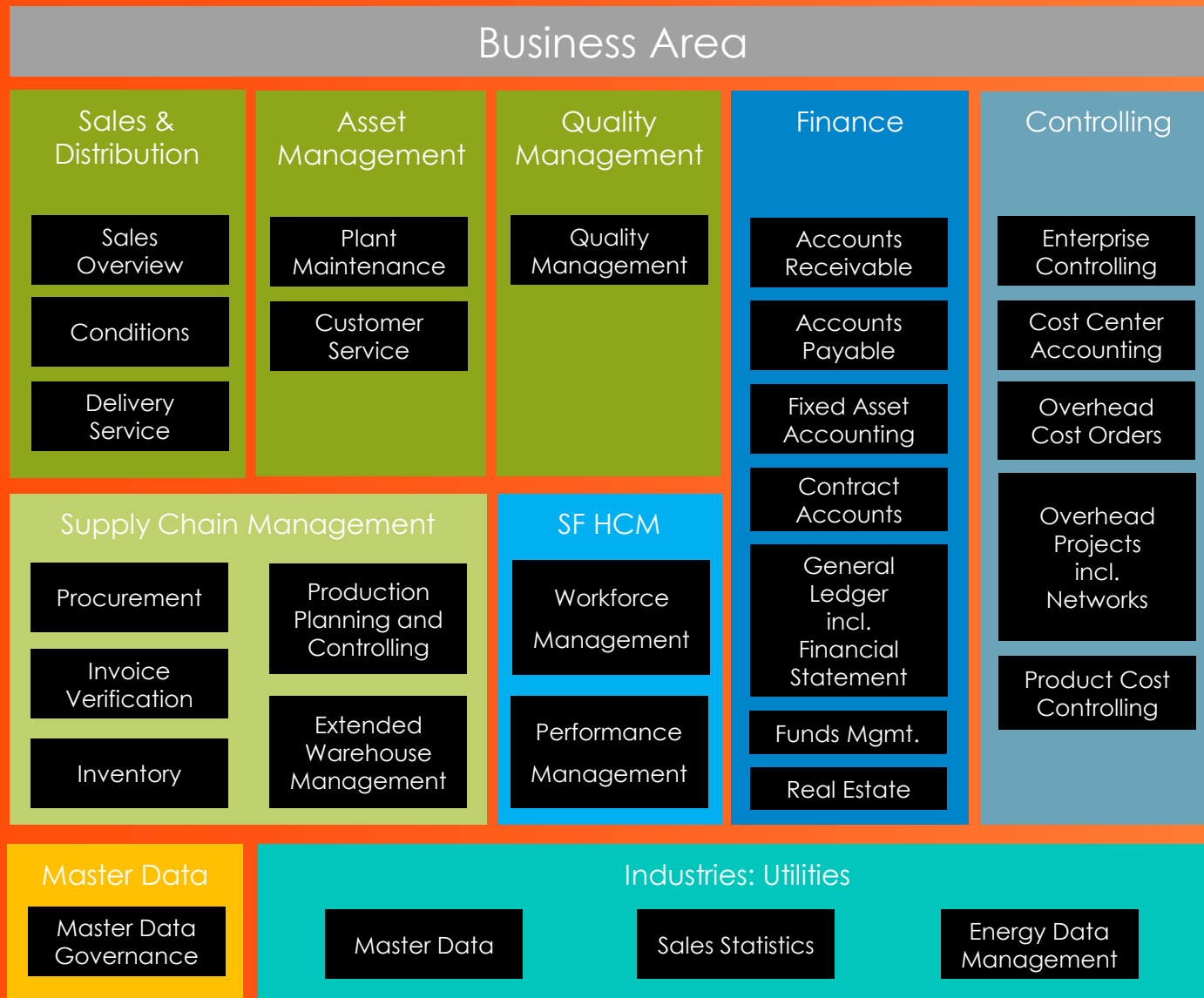
The delivered standard data models are **intended as a foundation** for designing, modeling, and building your EDW, and while often adapted to customer needs, they **provide a jump start that facilitates faster and more consistent delivery of EDW projects**.

The SAP BW/4HANA Content was specifically designed to **leverage the SAP HANA capabilities in SAP BW/4HANA** following a consistent EDW reference architecture called LSA++ (Layered Scalable Architecture).

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SAP BW/4HANA Content Overview

SAP BW/4HANA Content Overview 2.0

Business Area

Sales & Distribution
- Sales Overview
- Conditions
- Delivery Service

Asset Management
- Plant Maintenance
- Customer Service

Quality Management
- Quality Management

Finance
- Accounts Receivable
- Accounts Payable
- Fixed Asset Accounting
- Contract Accounts
- General Ledger incl. Financial Statement
- Funds Mgmt.
- Real Estate

Controlling
- Enterprise Controlling
- Cost Center Accounting
- Overhead Cost Orders
- Overhead Projects incl. Networks
- Product Cost Controlling

Supply Chain Management
- Procurement
- Invoice Verification
- Inventory
- Production Planning and Controlling
- Extended Warehouse Management

SF HCM
- Workforce Management
- Performance Management

Master Data
- Master Data Governance

Industries: Utilities
- Master Data
- Sales Statistics
- Energy Data Management

Predefined business data models based on SAP's business applications (e.g. SAP ECC, SAP S/4HANA, SuccessFactors)

11,300+ prebuild objects including

- Data extraction (DataSource)

- InfoObjects

- Staging (InfoSources, Transformations, DataStore Objects)

- Virtual Layer (CompositeProvider and Queries)

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SAP BW/4HANA Content Source System Overview

	SAP ERP (ABAP DataSources)	SAP S/4HANA onPrem (ABAP DataSources)*	SAP S/4HANA onPrem & Cloud (CDS View Extraction)**	SuccessFactors BizX (oData)
FI - Accounts Receivable	X	X		
FI - Accounts Payable	X	X		
FI - General Ledger	X	X		
FI - Fixed Asset Accounting	X	X		
FI - Contract Accounts	X	X		
FI- Funds Management (PSM)	X	X	under construction	
FI - Real Estate	X	X		
Controlling - Profit Center Accounting	X	X		
Controlling - Cost Center Accounting	X	X		
Controlling - Overhead Cost Orders	X	X		
Controlling - Overhead Projects incl. Networks	X	X		
Controlling - Product Cost Controlling	X	X		
SD - Sales Overview	X	X	X	
SD - Conditions	X	X	X	
SD - Delivery Service	X	X	X	
SCM - Procurement	X	X		
SCM - Invoice Verification	X	X		
SCM - Inventory Management	X	X	under construction	
SCM - Production Planning and Controlling	X	X		
SCM - Extended Warehouse Management	X	X		
Asset Management - Plant Maintenance	X		X	
Asset Management - Customer Service	X	X		
Quality Management	X	X	under construction	
Master Data Governance	X	X		
IS-U - Master Data	X	X		
IS-U - Sales Statistics	X	X		
IS-U - Energy Data Management	X	X		
HCM - Workforce Management				X
HCM - Performance Management				X

* Full list of ABAP DataSources whitelisted for SAP S/4HANA in SAP Note 2500202

** List of CDS Views for extraction available in SAP S/4HANA CE can be listed via the View Browser (View Blog Post)

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SAP BW/4HANA Content InfoProvider and Query Overview

>1,700 Metrics

	CompositeProvider Description	Technical Name Metric	KYF / RKF / CKF	Metric Name	First shipped with SAP BW/4HANA 1.0 >=	First shipped with SAP BW/4HANA 2.0 >=
649	PM: Fleet - Vehicle Consumption	0FLEET_DIST	KYF	Distance covered	SP02	SP00
650	PM: Fleet - Vehicle Consumption	0FUEL_MASS	KYF	Fuel Mass Quantity	SP02	SP00
651	PM: Fleet - Vehicle Consumption	0FUEL_VOL	KYF	Fuel Volume Quantity	SP02	SP00
652	PM: Fleet - Vehicle Consumption	0USINGTIME	KYF	Operating Time of the Capacity	SP02	SP00
653	PM: Order Costs and Asset Utilization	/IMO/V_PM07_CK0001	CKF	Cost/Util MPoint 1	SP02	SP00
654	PM: Order Costs and Asset Utilization	/IMO/V_PM07_CK0002	CKF	Cost/Util MPoint 2	SP02	SP00
655	PM: Order Costs and Asset Utilization	/IMO/V_PM07_RK0001	RKF	Actual External Procurement	SP02	SP00
656	PM: Order Costs and Asset Utilization	/IMO/V_PM07_RK0002	RKF	Actual Internal Activities	SP02	SP00
657	PM: Order Costs and Asset Utilization	/IMO/V_PM07_RK0003	RKF	Actual Warehouse Issue	SP02	SP00
658	PM: Order Costs and Asset Utilization	/IMO/V_PM07_RK0004	RKF	Total Actual Cost	SP02	SP00
659	PM: Order Costs and Asset Utilization	/IMO/V_PM07_RK0005	RKF	Plan External Procurement	SP02	SP00
660	PM: Order Costs and Asset Utilization	/IMO/V_PM07_RK0006	RKF	Plan Internal Activities	SP02	SP00
661	PM: Order Costs and Asset Utilization	/IMO/V_PM07_RK0007	RKF	Plan Warehouse Issue	SP02	SP00
662	PM: Order Costs and Asset Utilization	/IMO/V_PM07_RK0008	RKF	Total Planned Cost	SP02	SP00
663	PM: Order Costs and Asset Utilization	0AMOUNT	KYF	Amount	SP02	SP00
664	PM: Order Costs and Asset Utilization	0READSI1	KYF	Measured Value/Total Counter Reading in SI Unit 1	SP02	SP00
				Measured Value/Total Counter Reading in SI Unit 2	SP02	SP00
				Planned Work for Operation	SP02	SP00
				Number of Breakdowns		SP03	SP00
				Downtime for equipment		SP03	SP00
				Lead time of the notification		SP03	SP00
				Number of notifications		SP03	SP00
				No. of notifications with status outstanding		SP03	SP00
				Number of notifications completed on schedule		SP03	SP00
				Number of tasks with status 'outstanding' or 'released'		SP03	SP00
				No. of tasks with status successful		SP03	SP00

>120 Queries

	CompositeProvid	CompositeProvider Description	Query	Query Description	First shipped with BW4CONT 1.0 >=	First shipped with BW4CONT 2.0 >=
35	/IMO/V_EWM21	EWM: Storage Bins	/IMO/V_EWM21_Q0001	EWM: Warehouse Capacity Level - Occupied Bins	SP05	SP00
36	/IMO/V_EWM30	EWM: Transportation Units	/IMO/V_EWM30_Q0001	EWM: TUs - Total, Weight, Volume, and Time	SP05	SP00
37	/IMO/V_EWM40	EWM: Measurement Service Results	/IMO/V_EWM40_Q0001	EWM: Results Measurement Services	SP05	SP00
38	/IMO/V_EWM50	EWM: Executed Workload	/IMO/V_EWM50_Q0001	EWM: Executed Workload	SP05	SP00
39	/IMO/V_FIAA01	FI-AA: Transactions, Annual and Period Values	/IMO/V_FIAA01_Q0001	FI-AA: Asset History Sheet (per Period)	SP00	SP00
40	/IMO/V_FIAA01	FI-AA: Transactions, Annual and Period Values	/IMO/V_FIAA01_Q0002	FI-AA: Transaction Data Report	SP00	SP00
41	/IMO/V_FIAA01	FI-AA: Transactions, Annual and Period Values	/IMO/V_FIAA01_Q0003	FI-AA: Depreciations Posted	SP00	SP00
42	/IMO/V_FIAA01	FI-AA: Transactions, Annual and Period Values	/IMO/V_FIAA01_Q0004	FI-AA: Comparison of Values	SP00	SP00
43	/IMO/V_FIAP01	FI-AP: Accounts Payable	/IMO/V_FIAP01_Q0001	FI-AP: Overdue Analysis	SP00	SP00
44	/IMO/V_FIAP01	FI-AP: Accounts Payable	/IMO/V_FIAP01_Q0002	FI-AP: Vendor Due Date Analysis	SP00	SP00
45	/IMO/V_FIAR03	FI-AR: FI Accounts Receivable (BW replicated)	/IMO/V_FIAR03_Q0001	FI-AR: Payment History	SP00	SP00
46	/IMO/V_FIAR03	FI-AR: FI Accounts Receivable (BW replicated)	/IMO/V_FIAR03_Q0002	FI-AR: Payment Reliability Trend	SP00	SP00
47	/IMO/V_FIAR03	FI-AR: FI Accounts Receivable (BW replicated)	/IMO/V_FIAR03_Q0003	FI-AR: Overdue	SP00	SP00
48	/IMO/V_FICA04	FI-CA: Invoicing Data	/IMO/V_FICA04_Q0001	FI-CA: Analysis of Billing Data	SP00	SP00
49	/IMO/V_FICA05	FI-CA: Business Partner Items	/IMO/V_FICA05_Q0001	FI-CA: Open Items 30-60-90	SP00	SP00
50	/IMO/V_FICA06	FI-CA: Returns	/IMO/V_FICA06_Q0001	FI-CA: Returns	SP00	SP00
51	/IMO/V_FICA07	FI-CA: Payments	/IMO/V_FICA07_Q0001	FI-CA: Payments	SP00	SP00
52	/IMO/V_FIGL01	FI-GL: General Ledger	/IMO/V_FIGL01_Q0001	FI-GL: Actuals Balance and Flow Comparison	SP00	SP00
53	/IMO/V_FIGL01	FI-GL: General Ledger	/IMO/V_FIGL01_Q0002	FI-GL: Actuals/Plan/Budget: Balance and Flow Comparison	SP00	SP00
54	/IMO/V_FIGL02	FI-GL: General Ledger (New)	/IMO/V_FIGL02_Q0001	FI-GL: New GL Actuals Balance and Flow Comparison	SP00	SP00
55	/IMO/V_FIGL02	FI-GL: General Ledger (New)	/IMO/V_FIGL02_Q0002	FI-GL: New GL Actuals/Plan/Budget: Balance & Flow Comparison	SP00	SP00
56	/IMO/V_FIGL03	FI-GL: Financial Statements	/IMO/V_FIGL03_Q0001	FI-GL: Financial Statement	SP03	SP00
57	/IMO/V_UCDM01	UCDM: Meter Reading Data	/IMO/V_UCDM01_Q0001	UCDM: Meter Readings Historical View	SP00	SP00

Where can I find this overview list?

Attachment in SAP Note

2785514 - FAQ: SAP BW/4HANA Content

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Differences to SAP HANA optimized BI Content delivered with BI CONT 7.57

SAP BW/4HANA Content includes Business Content for additional business areas:

- Plant Maintenance (including CDS based extraction for S/4HANA OP)

- Customer Services

- Quality Management

- Production Planning and Controlling

- Extended Warehouse Management

- Product Cost Controlling

- Controlling - Overhead Projects

- Real Estate Management (including IFRS16)

- Success Factors – Workforce Management, Performance Management

- SD Sales, Billing and Condition Content (for SAP S/4HANA Cloud)

- Funds Management, including Retraction of Budget Plan data

Further differences can be found in SAP Note 2397520.

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SAP BW/4HANA Content Add-Ons

SAP BW/4HANA Content **Add-Ons**

SAP BW/4HANA Content consists of 2 Add-Ons:
quarterly delivery of Support Packages incl. new content

SAP BW/4HANA **Content** Add-On
(BW4CONT)

- SAP HANA-opt. BW Content
- InfoSources, Transformations for data provisioning for the InfoObjects

SAP BW/4HANA **Content BASIS** Add-On
(BW4CONT**B**)

SAP BW/4HANA

- InfoObjects
- InfoAreas, Variables
- Conversion exits, Master data read classes

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SAP BW/4HANA Content Content Usage

	Customer usage of SAP delivered Business Content	Custom-built Content	Required
Scenario A	BW DataSources	InfoObjects, Open ODS Views, ADSOs, Transformations, CompositeProviders, Variables, Queries	Enable BW DataSources for ODP (SAP Note 2232584) S/4HANA Whitelisted BW DataSources (SAP Note 2500202)
Scenario B	BW DataSources, InfoObjects ,as is' or ,as template'	Open ODS Views, ADSOs, Transformations, CompositeProviders, Variables, Queries	In addition: SAP BW/4HANA Content BASIS Add-On (BW4CONT**B**)
Scenario C	BW DataSources, InfoObjects, ADSOs, Transformations, CompositeProviders, Variables, Queries ,as is' or ,as template'	As required	In addition: SAP BW/4HANA Content Add-On (BW4CONT)

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SAP BW/4HANA Content Features

SAP BW/4HANA Content Key Design Principles

Objectives	Realization
Less persistencies, less data	- Virtualize logic in Virtual Data Mart Layer (e.g. CompositeProvider) - Skip unnecessary persistencies / DataMart DSOs - Virtualize Time Characteristics based on 0CALDAY - Use of transitive attributes
Better data load performance	- Enable HANA-push down e.g. by using formulas instead of ABAP in Transformations
Better report performance	- Keeping performance in mind when implementing queries - Filter selection to reduce result set - High aggregation of first query result set
More flexibility in reporting	- Virtualize logic in Virtual Data Mart Layer - Provide document level information instead of aggregates - Use of Restricted and Calculated KeyFigures instead of persisted KeyFigures
More flexibility in data acquisition	- Add field-based Staging / Corporate Memory Layer - Define Business Logic only in Transformation between InfoSource and Integrated DWH Layer aDSOs
Simple and easy to understand	- Good documentation (SAP Online Help and ABAP Code in-place commentary) - Skip „nice-to-have" features in straight forward content - More transparent transformations (no 3.x migrated update rules)

SAP BW/4HANA Content Features - Variables

The Content Add-on offers a comprehensive set of variables (characteristic variables, SAP Exit variables, text variables) with consistent naming conventions (SAP Note 2395579). Distributed among DW4CORE, BW4CONTB and BW4CONT.

	Technical Name	Variable Description	Firs
52	0CXPO_CQQ1CY	First Qua
53	0CURMEM_CALWEEK	CURREN
54	0CWEEK	Current
55	0CIIO_CALYEAR	Calenda
56	0CURMEM_CALYEAR	CURREN
57	0CYEAR	Current
58	0CXPM_CHRT_ACCTS	Chart of

		Type of Variable	Processing Type	Select Parameters	Entry Required	Underscore	Meaningful Name/Description
Position (max 20)		1 2	3	4	5	6	7-20 (14 char)
		0			M [Mandatory Variable Entry, Initial Value allowed]	_	dddddddddddddd
		C [Characteristic Value]	I [User Entry / Default Value]	P [Single Value (Parameters)]			
		N [Hierachy Node]	R [Replacement Path]	S [Selection Option]	O [Optional Variable Entry]		
		T [Text]	E [SAP exit - Input Ready]	I [Interval]	N [Mandatory, Initial Value not allowed]		
		F [Formula]	X [SAP exit - No Input]	M [Several Single Values]			
		H [Hierarchy]	A [Authorization - No Input]				
			B [Authorization - Input Ready]				
Examples	0CISM_CALMONTH	0 C	I	S	M	_	CALMONTH
	0NIPO_WBS_ELEMT	0 N	I	P	O	_	WBS_ELEMT
	0TXPO_FIBUCKET0	0 T	X	P	O	_	FIBUCKET0

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SAP BW/4HANA Content Features – Time Characteristics

Streamlined persistence for time characteristics by making use of 0CALDAY navigational attributes. No need to decide which date characteristic is mapped into 0CALDAY/ -MONTH / -YEAR as each date characteristic can support all time granularities by navigation attributes. For 0FISC* characteristics, this needs to be done on customer basis due to fiscal year variant.
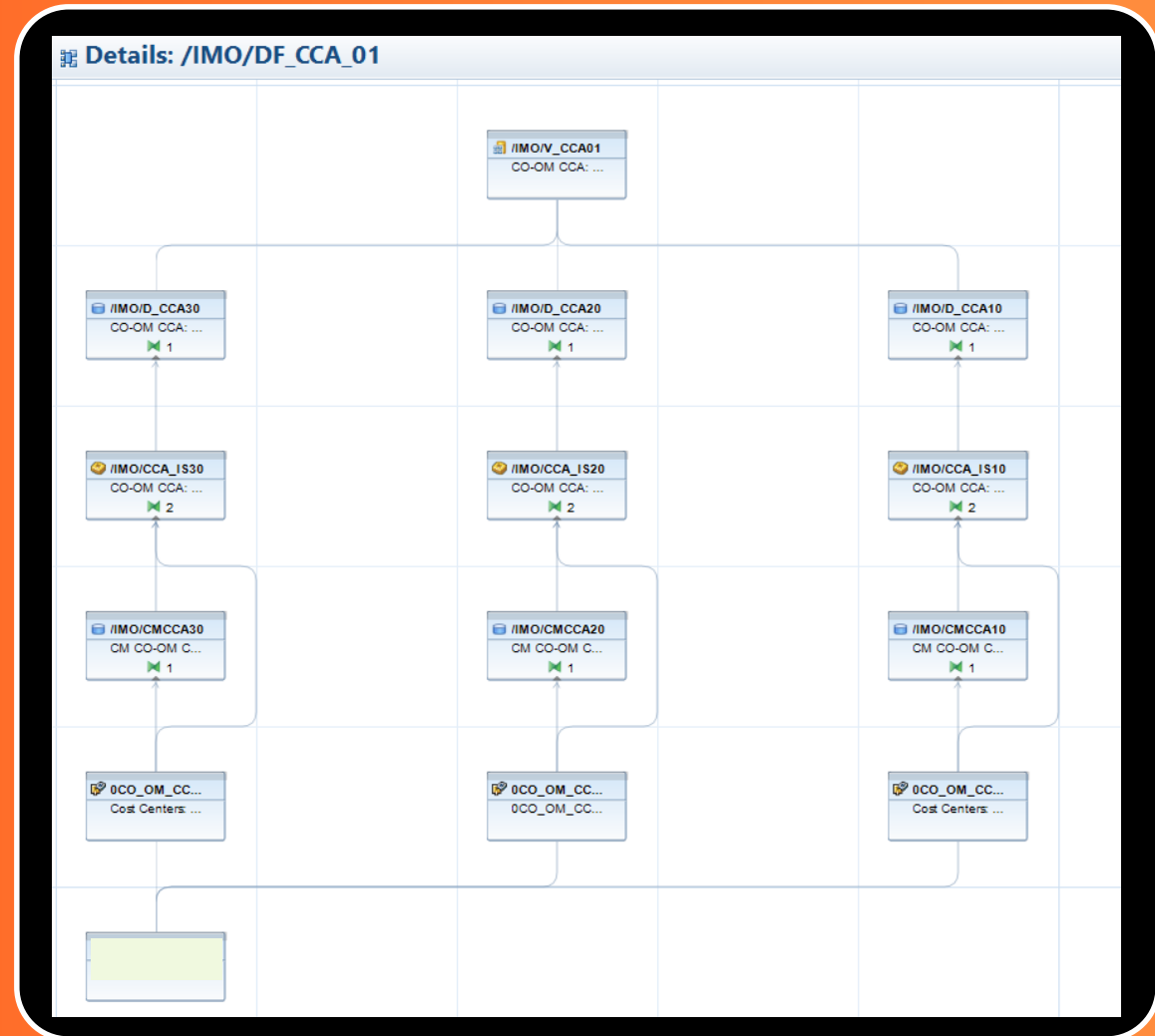
Data Flows delivered as Content objects

Business Content areas grouped into Data Flows.

Data Flows delivered for all Content areas.

Easy identification of related objects.

Faster Content installation in Transaction RSOR by directly selecting a Data Flow object. Only necessary objects for the Data Flow are collected for installation.

DTPs hidden in screenshot

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Data Flows delivered as Content objects

Generate Process Chain from Data Flow

(new feature in SAP BW/4HANA 2.0 SP04)
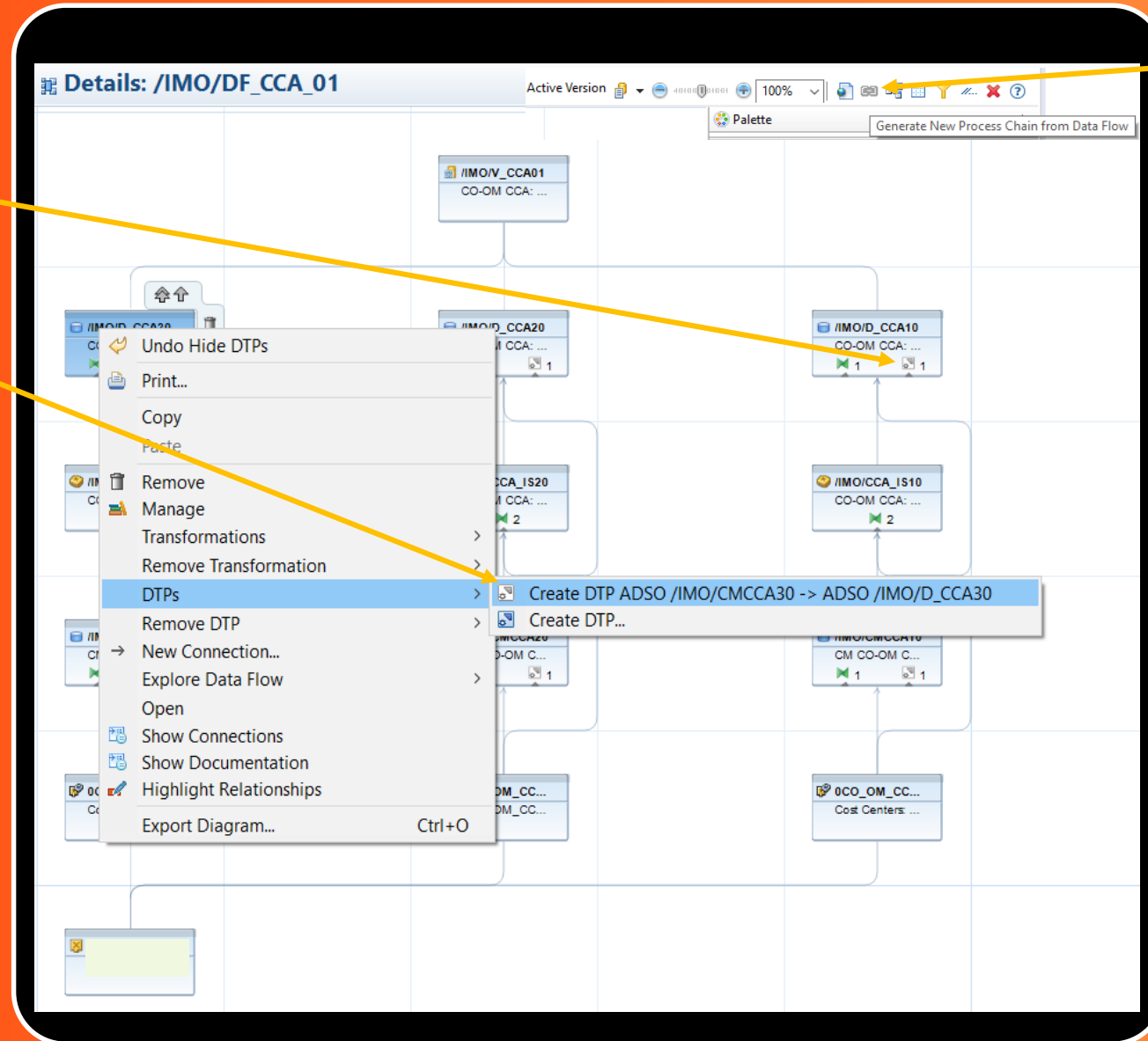
Non-persistent DTPs included as proposals

Create DTPs from this proposal per right mouse click

Details: /IMO/DF_CCA_01

Active Version | 100%

Generate New Process Chain from Data Flow

Palette

/IMO/V_CCA01
CO-OM CCA: ...

/IMO/D_CCA20
CCA: ...

/IMO/D_CCA10
CO-OM CCA: ...

Undo Hide DTPs
Print...
Copy
Paste
Remove
Manage
Transformations
Remove Transformation
DTPs
Remove DTP
New Connection...
Explore Data Flow
Open
Show Connections
Show Documentation
Highlight Relationships
Export Diagram...   Ctrl+O

Create DTP ADSO /IMO/CMCCA30 -> ADSO /IMO/D_CCA30
Create DTP...

/IMO/CCA_IS20
CO-OM CCA: ...

/IMO/CCA_IS10
CO-OM CCA: ...

/IMO/CMCCA10
CM CO-OM C...

0CO_OM_CC...
Cost Centers: ...

SAP BW/4HANA Content What's New

SAP BW/4HANA Content Overview 2.0

Business Area

Sales & Distribution
- Sales Overview **1**
- Conditions **4**
- Delivery Service

Asset Management
- Plant Maintenance
- Customer Service

Quality Management
- Quality Management

Finance
- Accounts Receivable
- Accounts Payable
- Fixed Asset Accounting
- Contract Accounts
- General Ledger incl. Financial Statement
- Funds Mgmt. **3**
- Real Estate

Controlling
- Enterprise Controlling
- Cost Center Accounting
- Overhead Cost Orders
- Overhead Projects incl. Networks
- Product Cost Controlling

Supply Chain Management
- Procurement
- Invoice Verification
- Inventory
- Production Planning and Controlling
- Extended Warehouse Management

SF HCM
- Workforce Management **2**
- Performance Management **2**

Master Data
- Master Data Governance

Industries: Utilities
- Master Data
- Sales Statistics
- Energy Data Management

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1. New SD-Billing Content for SAP S/4HANA Cloud delivered with BW4CONT 200 SP01, SD Sales Content for SAP S/4HANA Cloud with BW4CONT 200 SP02

2. New Performance Management Content for SAP SuccessFactors with BW4CONT 200 SP01

   Enhanced Workforce Management Content for SAP SuccessFactors with BW4CONT 200 SP01

3. Public Sector – Funds Management Content with BW4CONT 200 SP02, Retractor planned delivery with BW4CONT200 SP03

4. New SD Conditions Content (for Sales and Billing) for SAP S/4HANA Cloud planned delivery with BW4CONT 200 SP03

SAP BW4CONT/B 2.0 requires SAP BW/4HANA 2.0 SP01

For BW/4HANA Content 1.0 availability please check the appendix

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SAP S/4HANA CDS View based extraction

S/4HANA

- CDS view based extraction out of SAP S/4HANA Cloud Edition and SAP S/4HANA onPremise systems

- CDS views provided by SAP or custom CDS views (OP)

- Two delta mechanisms available: generic (date/time-stamps) or on change data capture (CDC)

- DataSources with broad structures enable enhanced modeling in SAP BW/4HANA

- CDS Extraction blog available: Overview in Part I, Delta Handling in Part II and Miscellaneous Topics in Part III

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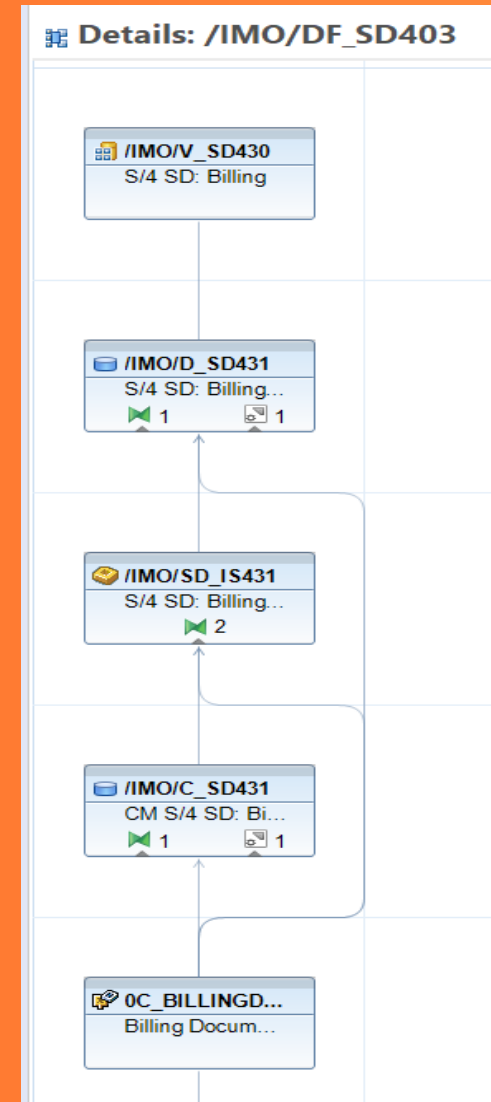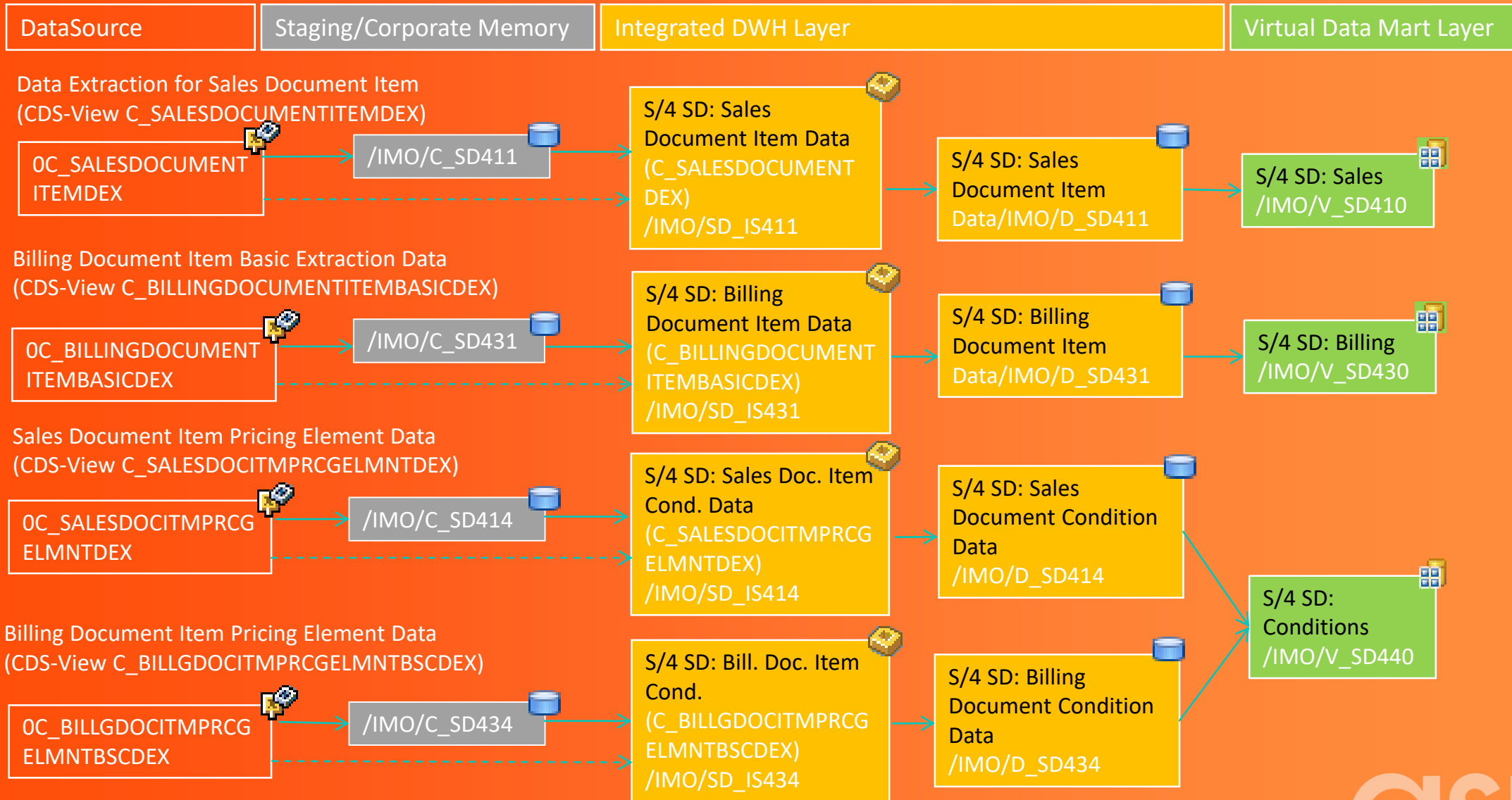# Business Content Sales & Distribution (SAP S/4HANA CE)

Streamlined data model for
SAP S/4HANA SD-Sales, Billing and Conditions

- Based on CDS view extraction

- Comprehensive DataSource allows for more detailed analyses

- Enhanced delta mechanism (CDC-Delta)

- No filling of initial setup tables needed -> no system block required

- Provided keyfigures:
  Sales volume, sales profit margin, sales cost, customer credit memo amount, canceled sales volume, quantities, sales profit margin ratio, condition amount

For additional information about SAP BW/4HANA Content for SD-Sales and SD- Billing (SAP S/4HANA Cloud extraction) see SAP Note 2832702 and 2796370

Details: /IMO/DF_SD403

/IMO/V_SD430
S/4 SD: Billing

/IMO/D_SD431
S/4 SD: Billing...
⚑ 1   ⊡ 1

/IMO/SD_IS431
S/4 SD: Billing...
⚑ 2

/IMO/C_SD431
CM S/4 SD: Bi...
⚑ 1   ⊡ 1

0C_BILLINGD...
Billing Docum...

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Dataflow SD – Sales and Billing for SAP S/4HANA Cloud

DataSource	Staging/Corporate Memory	Integrated DWH Layer		Virtual Data Mart Layer

Data Extraction for Sales Document Item
(CDS-View C_SALESDOCUMENTITEMDEX)

0C_SALESDOCUMENT
ITEMDEX
→ /IMO/C_SD411
→ S/4 SD: Sales Document Item Data (C_SALESDOCUMENT DEX) /IMO/SD_IS411
→ S/4 SD: Sales Document Item Data/IMO/D_SD411
→ S/4 SD: Sales /IMO/V_SD410

Billing Document Item Basic Extraction Data
(CDS-View C_BILLINGDOCUMENTITEMBASICDEX)

0C_BILLINGDOCUMENT
ITEMBASICDEX
→ /IMO/C_SD431
→ S/4 SD: Billing Document Item Data (C_BILLINGDOCUMENT ITEMBASICDEX) /IMO/SD_IS431
→ S/4 SD: Billing Document Item Data/IMO/D_SD431
→ S/4 SD: Billing /IMO/V_SD430

Sales Document Item Pricing Element Data
(CDS-View C_SALESDOCITMPRCGELMNTDEX)

0C_SALESDOCITMPRCG
ELMNTDEX
→ /IMO/C_SD414
→ S/4 SD: Sales Doc. Item Cond. Data (C_SALESDOCITMPRCG ELMNTDEX) /IMO/SD_IS414
→ S/4 SD: Sales Document Condition Data /IMO/D_SD414
→ S/4 SD: Conditions /IMO/V_SD440

Billing Document Item Pricing Element Data
(CDS-View C_BILLGDOCITMPRCGELMNTBSCDEX)

0C_BILLGDOCITMPRCG
ELMNTBSCDEX
→ /IMO/C_SD434
→ S/4 SD: Bill. Doc. Item Cond. (C_BILLGDOCITMPRCG ELMNTBSCDEX) /IMO/SD_IS434
→ S/4 SD: Billing Document Condition Data /IMO/D_SD434

Billing - delivered with BW4CONT 1.0 SP11 and BW4CONT 2.0 SP01
Sales - delivered with BW4CONT 1.0 SP12 and BW4CONT 2.0 SP02
Conditions – delivered with BW4CONT 1.0 SP13 and planned for BW4CONT 2.0 SP03

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Business Content Plant Maintenance (SAP S/4HANA)

SAP S/4HANA on Premise + Cloud

Streamlined data model for
SAP S/4HANA Plant Maintenance

- Based on CDS view extraction

- Comprehensive DataSource allows for more detailed analyses

- Timestamp based delta mechanism

- CDS Views for maintenance notification (items, causes, activities, tasks), maintenance orders and associated master data

- Extracting into the existing Data Models

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Business Content SuccessFactors – Workforce Management

Workforce Management

Master Data

- Employment History (User ID)
- Person
- Job
- Position

Delivered with BW4CONT 200 SP00

Headcount and Employment Events

- Headcount Reporting
- Employment Event Reporting

Delivered with BW4CONT 200 SP01

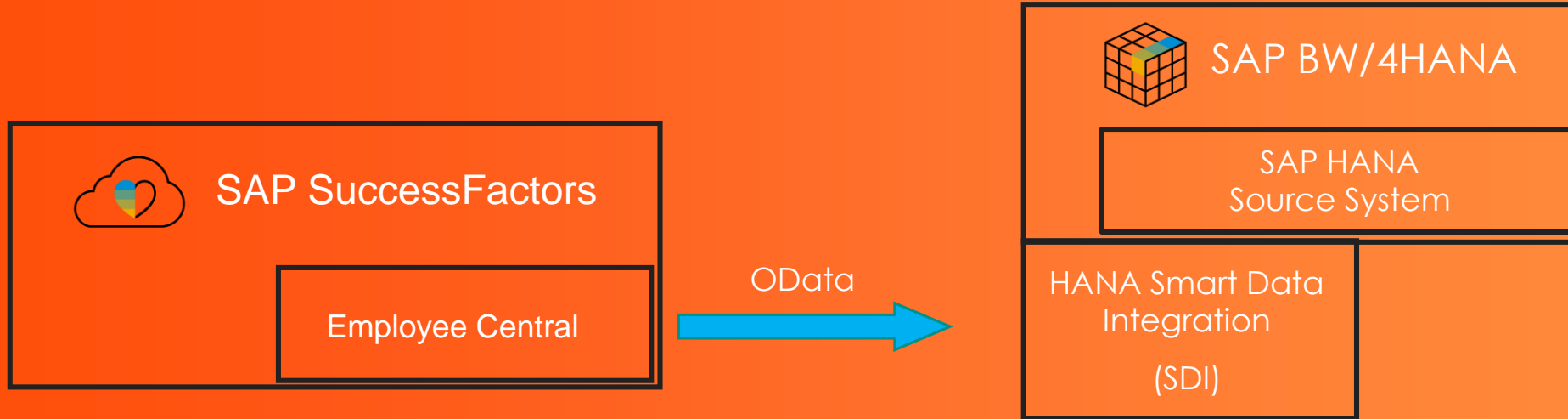- LSA++ Architecture incl. Staging/Corporate Memory

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Dataflow SuccessFactors – Workforce Management Master Data

DataSource	Staging	Integrated DWH Layer

See SAP Note 2776343 → EmpJob /SFA/SWFM01V2 → EmpJob /SFA/EMPJOB

Reads ADSO /SFA/SWFM02V2
Reads IOBJ /SFA/Event

See SAP Note 2776343 → EmpEmployment /SFA/SWFM02V2

Employment History /SFA/EMPL_ATTR → ATTR → Employment (User ID) /SFA/EMPL ← TEXT

Reads IOBJ -TEXTS /SFA/PERSON

See SAP Note 2776343 → PerPersonal /SFA/SWFM03V2 → Person (Attributes / Texts) /SFA/PERPERSONAL_ATTR_TEXT

Reads ADSO /SFA/SWFM04V2

See SAP Note 2776343 → PerPerson /SFA/SWFM04V2

ATTR
TEXT
Global User ID /SFA/PERSON

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Dataflow SuccessFactors – Workforce Management Headcount and Event

Integrated DWH Layer

Virtual Data Mart Layer

Global User ID
/SFA/PERSON

Employment
(User ID)
/SFA/EMPL

WFM Extraction Provider:
Spliced EMPL & PERSON Attr
for Headcount & FTE
/SFA/DV_WFM01

WFM: Spliced EMPL &
PERSON Attr for
Headcount & FTE
/SFA/WFM_IS01

WFM: Headcount &
FTE
/SFA/D_WFM01

WFM: Headcount &
Events
/SFA/V_WFM01

Reads IOBJ
/SFA/PERSON

WFM: Events
/SFA/WFM_IS02

WFM: Events
/SFA/D_WFM02

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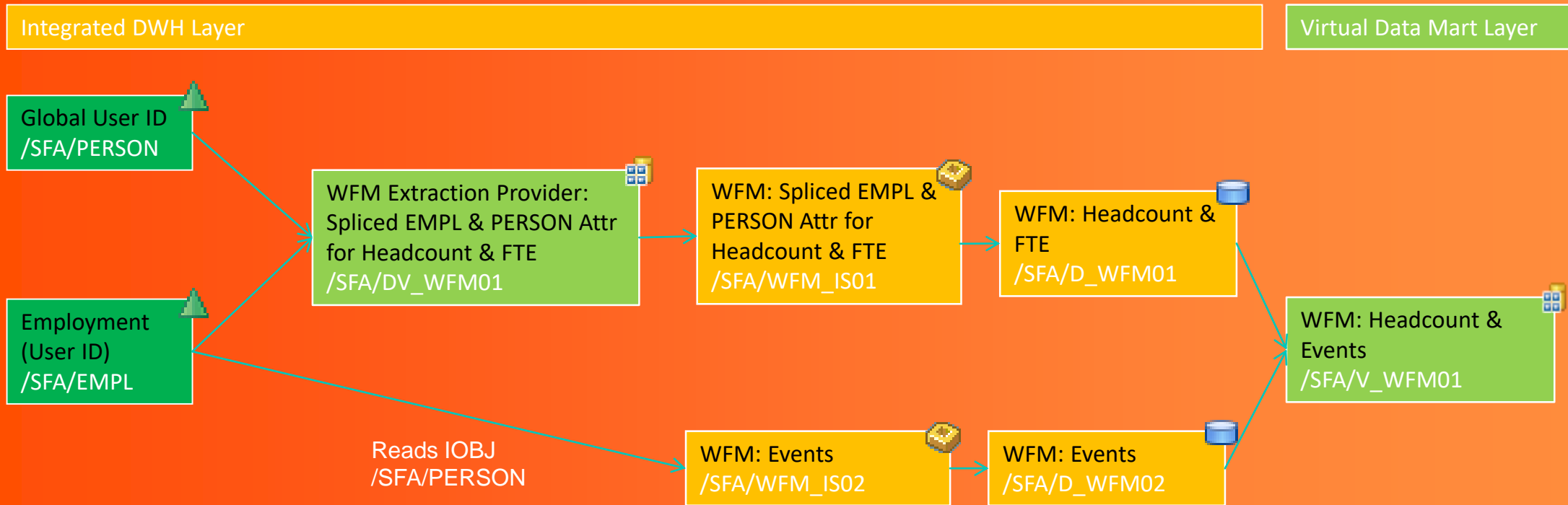
Business Content Success Factors Data Integration

SAP SuccessFactors

Employee Central

OData →

SAP BW/4HANA

SAP HANA
Source System

HANA Smart Data
Integration

(SDI)

- For data integration, see SAP Note 2776343

Business Content SuccessFactors –
Key Feature Employment History

The raw information extracted from SuccessFactors API EmpJob is transformed in the Integrated DataWarehouse Layer to cleanse and compute the employment history for each employee.
The result is then loaded into the InfoObject /SFA/EMPL *Employment (User ID)*.
This is a necessary step to provide the foundation for meaningful headcount or event reporting.

Based on the data set provided by EmpJob the following is applied in a transformation (start routine):
- Update attributes based on last sequence number for a given EffectiveFromDate
- Update Event and Event Reason attributes by applying movement logic
- Update Internal Event Flag to distinguish between external and internal events (External Hire vs Internal Hire)

Raw Data EmpJob (Data Sample)

Data Browser: Table /B1S/ASWFM01V22 Select Entries   10

USER	STARTDATE	SEQNUMBER	RECORDMODE	ENDDATE	EMPLSTATUS	EVENT	EVENTREASON	FTE	MANAGERID	GN_R3_SSY	UPD_DATE
1010	201306240200000000000	1	N	201306240200000000000	4595	3669	HIRNEW	1,0000000000000000E+00	NO_MANAGER	SF	29.03.2019
1010	201306240200000000000	2	N	201412310100000000000	4595	3669	HIRNEW	1,0000000000000000E+00	NO_MANAGER	SF	29.03.2019
1010	201501010100000000000	1	N	201501010100000000000	4595	3666	DATACHG	1,0000000000000000E+00	101047	SF	29.03.2019
1010	201501010100000000000	2	N	201610070200000000000	4595	3666	DATACHG	1,0000000000000000E+00	101047	SF	29.03.2019
1010	201610080200000000000	1	N	201610080200000000000	4598	3680	TERERLRT	1,0000000000000000E+00	101047	SF	29.03.2019
1010	201610080200000000000	2	N	201610080200000000000	4595	3669	HIRNEW	1,0000000000000000E+00	101047	SF	29.03.2019
1010	201610080200000000000	3	N	201610150200000000000	4595	3666	DATACHG	1,0000000000000000E+00	101047	SF	29.03.2019
1010	201610160200000000000	1	N	201610310100000000000	4595	3681	PAYXFR	1,0000000000000000E+00	101047	SF	29.03.2019
1010	201611010100000000000	1	N	201612310100000000000	4595	3681	PAYXFR	1,0000000000000000E+00	101047	SF	29.03.2019
1010	201701010100000000000	1	N	999912310100000000000	4595	3672	PAYOTH	1,0000000000000000E+00	101047	SF	29.03.2019

Transformed Data /SFA/EMPL Employment (UserID)

Data Browser: Table /B1S/QEMPL Select Entries   3.341

/B1S/S_EMPL	OBJVERS	DATETO	DATEFROM	/B1S/S_EVENT	/B1S/S_EVENT_EX	/B1S/S_REASON	/B1S/S_INT_EVENT	/B1S/S_DEPARTMNT	/B1S/S_REGRTERM	/B1S/S_EMPL_FTE
SF 101064	A	31.12.2014	24.06.2013	3669	H	HIRNEW		SF 50120010		1,000
SF 101064	A	07.10.2016	01.01.2015	3666	5	DATACHG	X	SF 50120010		1,000
SF 101064	A	15.10.2016	08.10.2016	3666	H	HIRNEW	X	SF 50120010		1,000
SF 101064	A	31.10.2016	16.10.2016	3681	6	PAYXFR	X	SF 50120011		1,000
SF 101064	A	31.12.2016	01.11.2016	3681	6	PAYXFR	X	SF 50120010		1,000
SF 101064	A	31.12.9999	01.01.2017	3672	12	PAYOTH	X	SF 50120010		1,000
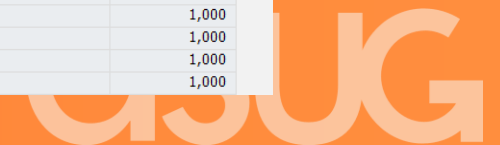
Business Content SuccessFactors –
Key Feature Source-System-Dependent InfoObjects

Loading data from different SuccessFactors instances into one single SAP BW/4HANA system is made possible by using source-system-dependent objects.

The key of the source-system-dependent InfoObjects is concatenated in the transformations of the Integrated DataWarehouse Layer and has the following structure:
- Source System ID (as stored in table RSSOURCESYSTEM in field SOURSYSID)
- A blank character
- Local InfoObject key

This composed key is unique across the different SuccessFactors instances and will prevent to overwrite data with concurrent local keys.

There might be still the business case that for example the same logical Business Area might exist in different SuccessFactors instances with different keys.

An additional attribute "Group ID" is provided, that can be used to consolidate different local keys by the same group IDs in reporting.

Source-system-dependent InfoObjects

InfoObject	Description
/SFA/EMPL	Employment (User ID)
/SFA/PERSON	Person
/SFA/POSITION	Position
/SFA/JOBCODE	Job Code
/SFA/BUSAREA	Business Area
/SFA/COMPANY	Company
/SFA/COSTCTR	Cost Center
/SFA/DEPARTMNT	Department
/SFA/LOCATION	Location

Concatenated Key	Source System	Local Key	Description	Group ID
S1 1000	SF Instance 1 (S1)	1000	Hotel Business	A
S1 9500	SF Instance 2 (S1)	9500	Restaurant Business	B
S2 1000	SF Instance 2 (S2)	3000	Hotel Business	A
S3 1000	SF Instance 3 (S3)	1000	Apartment Business	C

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Business Content Key Features –
Dealing with Language dependent text columns

Some of the SuccessFactors APIs such as PicklistValueV2 provide language dependent texts in locale text
columns (e.g. NAME_en_US, NAME_pt_PT)

Therefore, it is necessary to transform the column-based language texts into a structure that can be loaded into the text tables of BW
characteristics. This is handled by the BW/4HANA Content in start routines in the corresponding transformations.
The logic provides the following functionality and could be reused in similar custom transformations:

1. Read the installed languages in the SAP BW/4HANA system.
2. Provide a mapping between the 'SAP' language code (e.g. 'EN') and the 'locale' language codes (e.g. 'en_US').
3. Pivot the data from the source structure with the language columns into multiple rows for the installed languages.

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Business Content SuccessFactors – Performance Management

Performance Rating Analysis

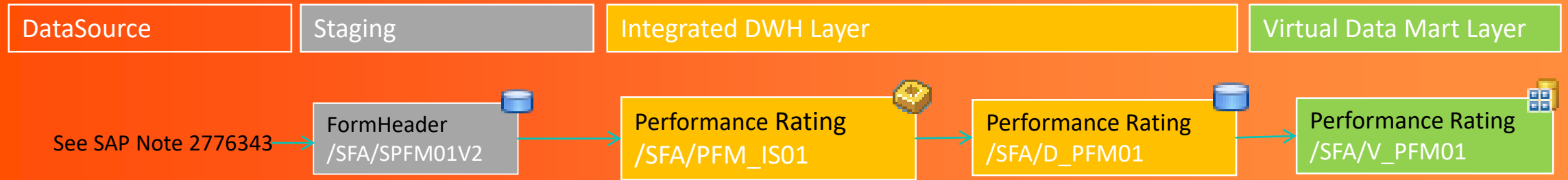- Current Rating
- Previous Rating
- Performance Improvement

Delivered with BW4CONT 200 SP01

- LSA++ Architecture incl. Staging/Corporate Memory
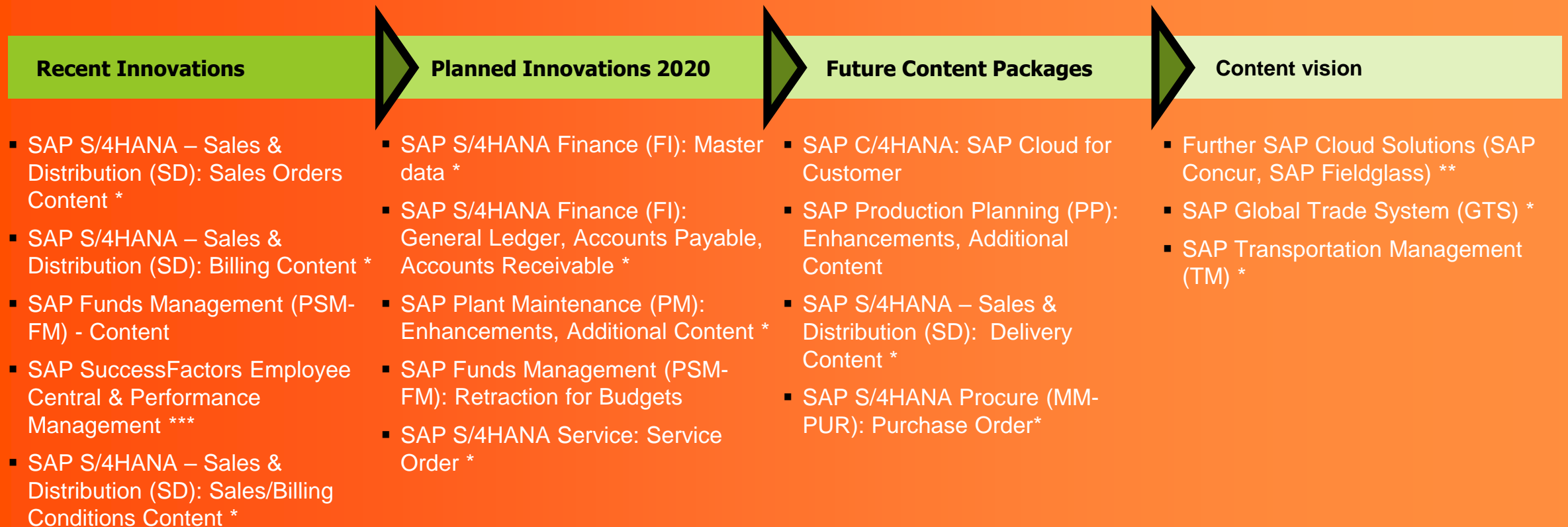- For data integration, see SAP Note 2776343

Dataflow SuccessFactors – Performance Management

DataSource	Staging	Integrated DWH Layer	Virtual Data Mart Layer

See SAP Note 2776343 →

FormHeader
/SFA/SPFM01V2

→ **Performance Rating**
/SFA/PFM_IS01

→ **Performance Rating**
/SFA/D_PFM01

→ **Performance Rating**
/SFA/V_PFM01

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SAP BW/4HANA Content Roadmap

SAP BW/4HANA Content Roadmap

Recent Innovations	Planned Innovations 2020	Future Content Packages	Content vision

Recent Innovations

- SAP S/4HANA – Sales & Distribution (SD): Sales Orders Content *
- SAP S/4HANA – Sales & Distribution (SD): Billing Content *
- SAP Funds Management (PSM-FM) - Content
- SAP SuccessFactors Employee Central & Performance Management ***
- SAP S/4HANA – Sales & Distribution (SD): Sales/Billing Conditions Content *

Planned Innovations 2020

- SAP S/4HANA Finance (FI): Master data *
- SAP S/4HANA Finance (FI): General Ledger, Accounts Payable, Accounts Receivable *
- SAP Plant Maintenance (PM): Enhancements, Additional Content *
- SAP Funds Management (PSM-FM): Retraction for Budgets
- SAP S/4HANA Service: Service Order *

Future Content Packages

- SAP C/4HANA: SAP Cloud for Customer
- SAP Production Planning (PP): Enhancements, Additional Content
- SAP S/4HANA – Sales & Distribution (SD): Delivery Content *
- SAP S/4HANA Procure (MM-PUR): Purchase Order*

Content vision

- Further SAP Cloud Solutions (SAP Concur, SAP Fieldglass) **
- SAP Global Trade System (GTS) *
- SAP Transportation Management (TM) *

* based on Core Data Services (CDS) view extraction

** based on Cloud Data Integration (CDI)

*** available in BW/4HANA 2.0 only

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SAP BW/4HANA Content Further Information

SAP BW/4HANA Content - SAP Help Online Documentation

Documentation:
http://help.sap.com/bw4content

Further information Important Notes

Documentation: http://help.sap.com/bw4content

SAP Note 2395579 – "SAP BW/4HANA Content - Additional information on delivered variables"

SAP Note 2395613 – "SAP BW/4HANA Content - Additional information on delivered InfoObjects"

SAP Note 2397520 – "SAP BW/4HANA Content - Differences to SAP HANA optimized BI Content delivered with BI CONT 7.57"

SAP Note 2232584 – "Release of SAP extractors for operational data provisioning (ODP)"

SAP Note 2400585 – "Collective Note: SAP BW/4HANA Content 1.0 (BW4CONT 100 & BW4CONTB 100)"

SAP Note 2785525 – "Collective Note: SAP BW/4HANA Content 2.0 (BW4CONT 200 & BW4CONTB 200)"

SAP Note 2785514 – "FAQ: SAP BW/4HANA Content (BW4CONT & BW4CONTB)"

SAP Note 2400685 – "SAP BW/4HANA Content 1.0 - Recommended SAP BW/4HANA 1.0 support package and SAP Notes"

SAP Note 2785708 – "SAP BW/4HANA Content 2.0 - Recommended SAP BW/4HANA 2.0 support package and SAP Notes"

SAP Note 2500202 – "S4TWL - BW Extractors in SAP S/4HANA"

SAP Note 2289424 – "S4TWL - SAP S/4HANA and SAP Business Warehouse Content - BI_CONT / BW4CONT"

SAP Note 2548065 – "SAP HANA-optimized BI Content and SAP S/4HANA"

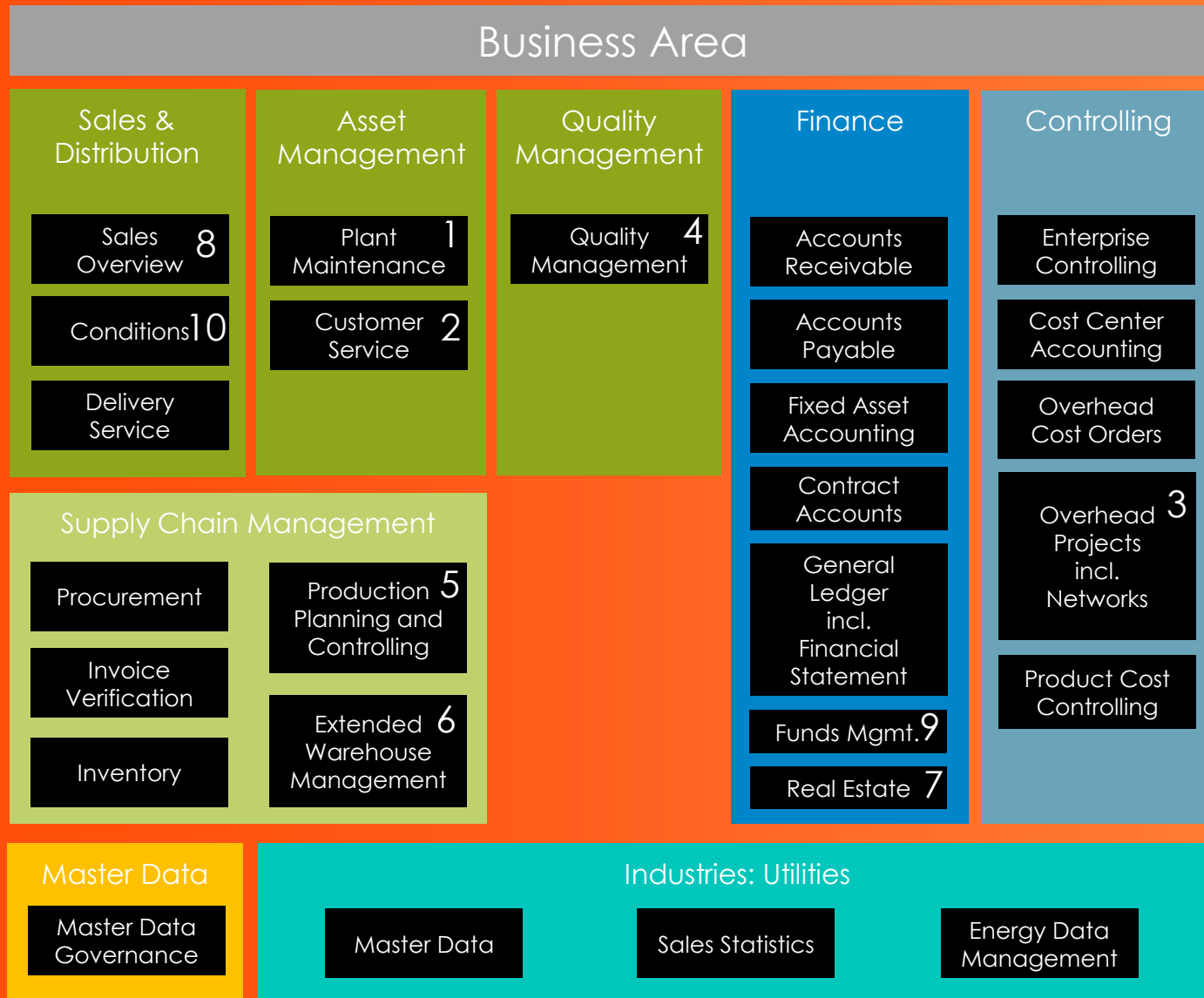For suggestions for next development areas please contact: Natascha.Marienfeld@sap.com

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Questions?

For questions after this session, contact us at Simon.Kranig@sap.com and Andreas.Tenholte@sap.com.
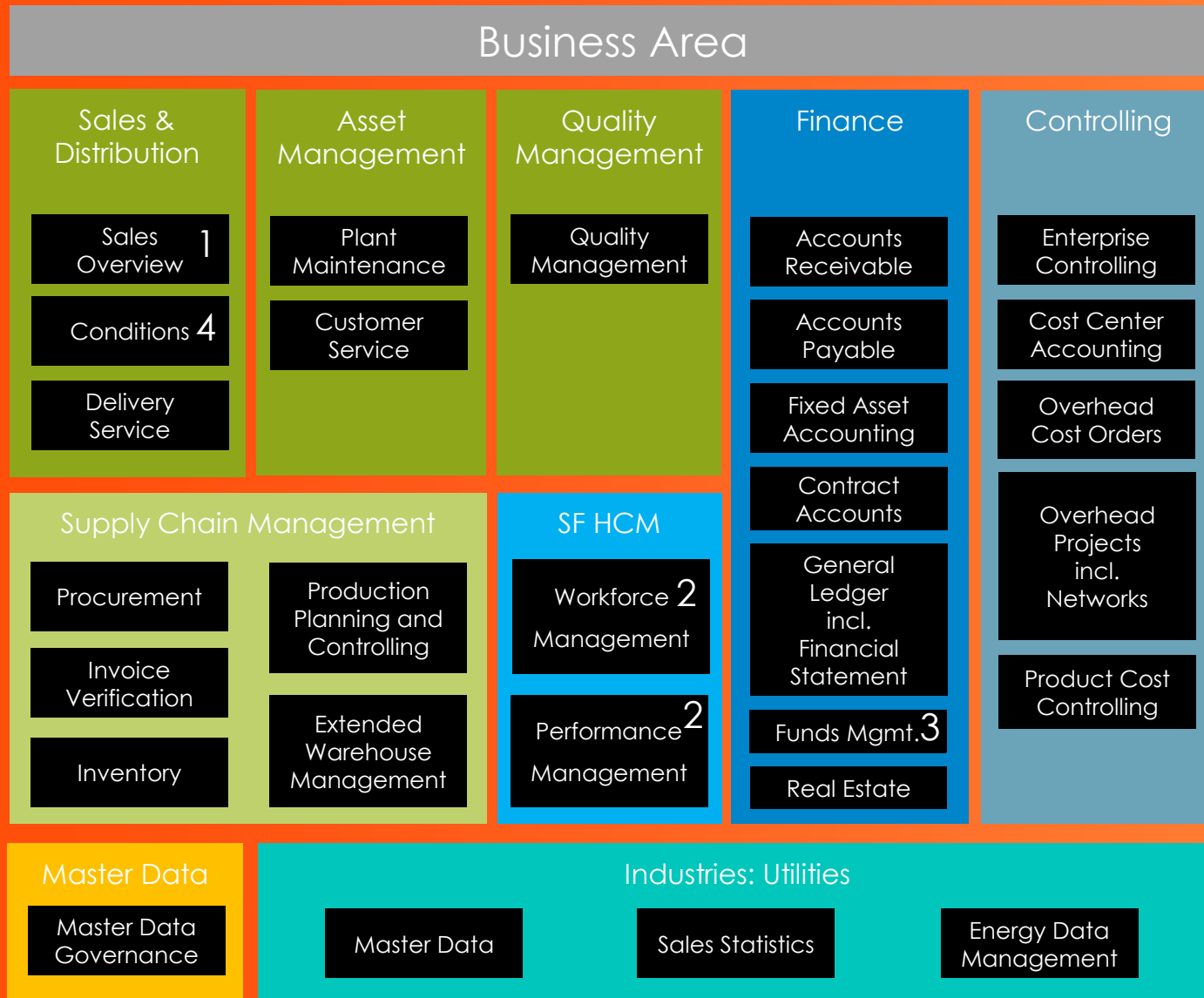
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Appendix

SAP BW/4HANA Content Overview 2.0

Business Area

Sales & Distribution
- Sales Overview **1**
- Conditions **4**
- Delivery Service

Asset Management
- Plant Maintenance
- Customer Service

Quality Management
- Quality Management

Finance
- Accounts Receivable
- Accounts Payable
- Fixed Asset Accounting
- Contract Accounts
- General Ledger incl. Financial Statement
- Funds Mgmt. **3**
- Real Estate

Controlling
- Enterprise Controlling
- Cost Center Accounting
- Overhead Cost Orders
- Overhead Projects incl. Networks
- Product Cost Controlling

Supply Chain Management
- Procurement
- Invoice Verification
- Inventory
- Production Planning and Controlling
- Extended Warehouse Management

SF HCM
- Workforce Management **2**
- Performance Management **2**

Master Data
- Master Data Governance

Industries: Utilities
- Master Data
- Sales Statistics
- Energy Data Management

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1. New SD-Billing Content for SAP S/4HANA Cloud delivered with BW4CONT 200 SP01, SD Sales Content for SAP S/4HANA Cloud with BW4CONT 200 SP02

2. New Performance Management Content for SAP SuccessFactors with BW4CONT 200 SP01

   Enhanced Workforce Management Content for SAP SuccessFactors with BW4CONT 200 SP01

3. Public Sector – Funds Management Content with BW4CONT 200 SP02, Retractor planned delivery with BW4CONT200 SP03

4. New SD Conditions Content (for Sales and Billing) for SAP S/4HANA Cloud planned delivery with BW4CONT 200 SP03

SAP BW4CONT/B 2.0 requires SAP BW/4HANA 2.0 SP01

For BW/4HANA Content 1.0 availability please check the appendix

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Consolidated InfoObjects used by SAP HANA - optimized Content

Consolidated InfoObjects are provided to integrate and harmonize information from multiple source systems and different SAP components in a standardized (consolidated) data model.

The consolidated InfoObjects can store information about duplicates in the master data, and therefore enable consolidated reporting using a group ID.

- Customer 0GN_CUSTOM
- Vendor 0GN_VENDOR
- Product 0PRODUCT
- Sales Category 0GN_CAT_SAL
- Purchase Category 0GN_CAT_PUR
- Location 0GN_LOCATIO
- Source System for Entity 0GN_R3_SSY

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Thank you.

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