


The background of the slide is a dark blue gradient with a dense field of 3D-rendered numbers in various sizes and orientations. The numbers are light blue and appear to be floating or standing on a surface, creating a sense of depth and data. The overall aesthetic is clean and modern, typical of a corporate presentation.

# SAP Datasphere

James Gilpin

Hilcorp

The background features a complex, abstract pattern of numerous thin, red, wavy lines that flow and swirl across a solid black field. The lines vary in density and curvature, creating a sense of dynamic movement and depth. The overall effect is reminiscent of a data visualization or a digital art piece.

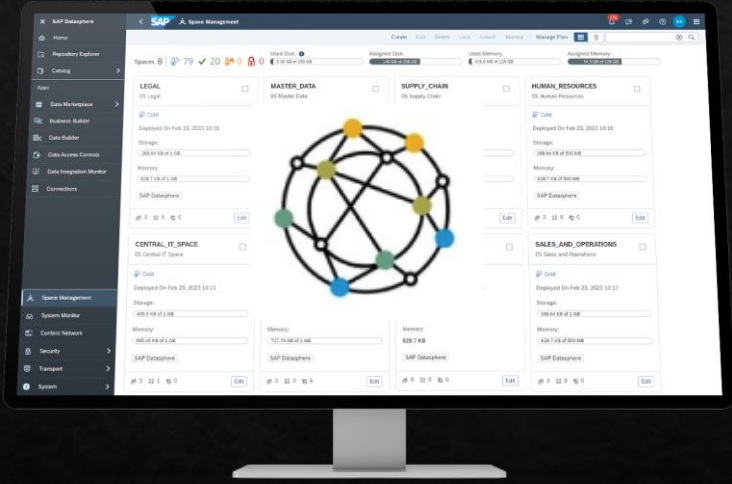
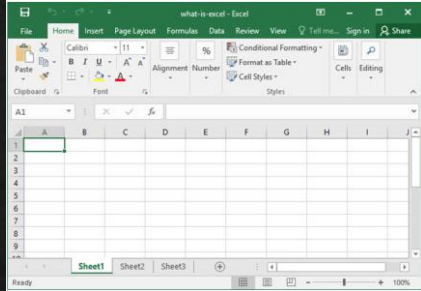
What 'the hell' is DataSphere?

# Start HERE...

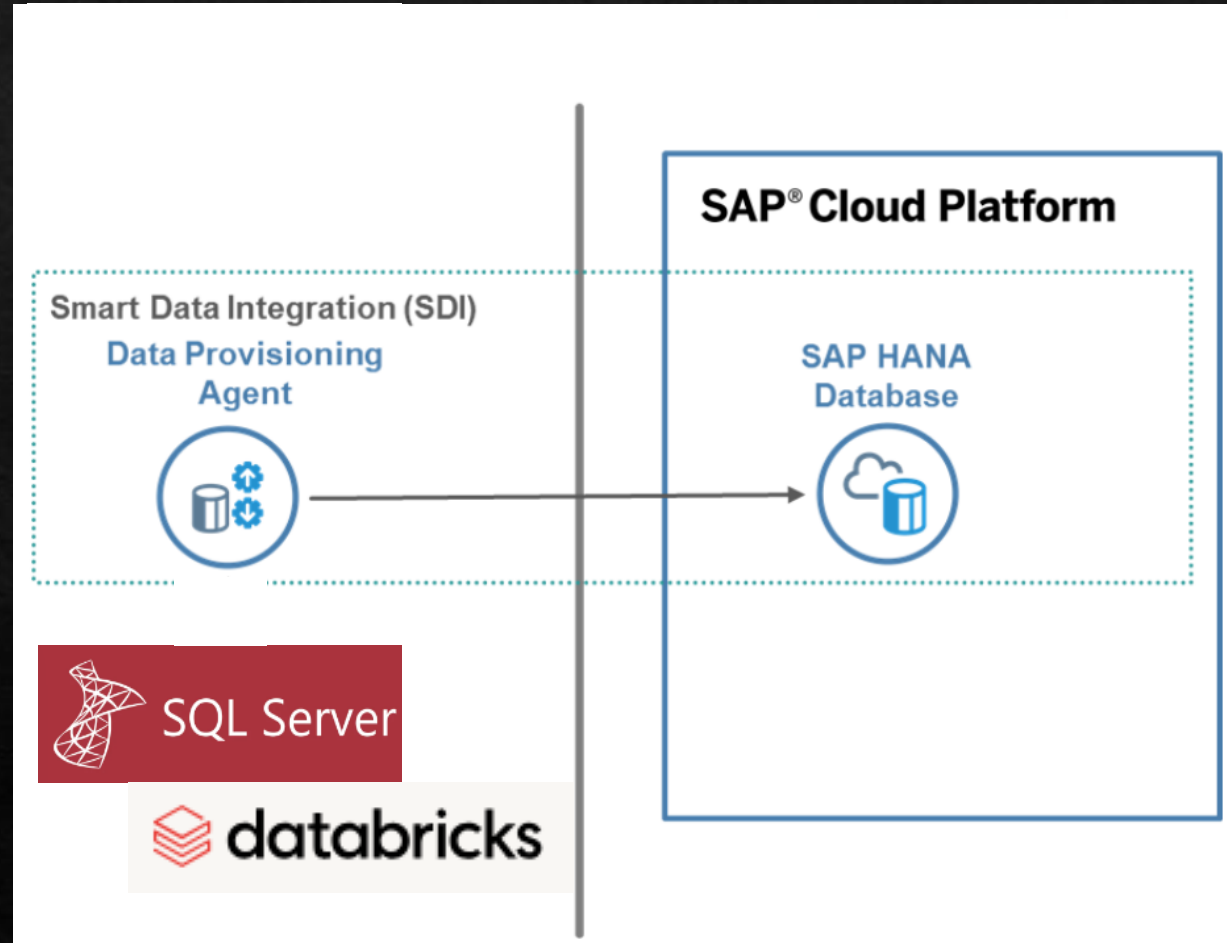
- ◇ <https://learning.sap.com/learning-journeys/explore-sap-datasphere>
- ◇ <https://open.sap.com/courses/dsp1-1>

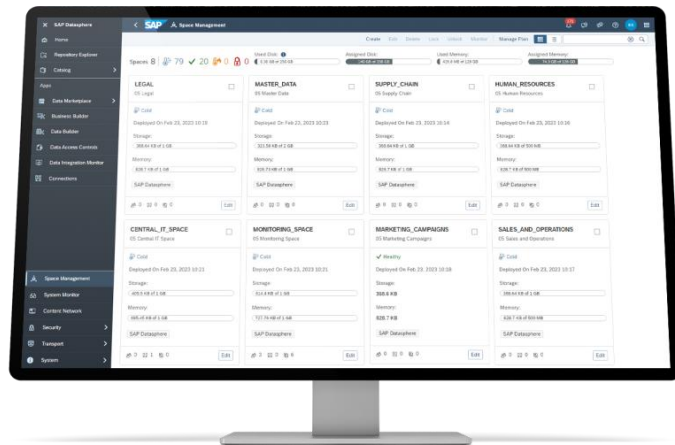


# SAP DataSphere



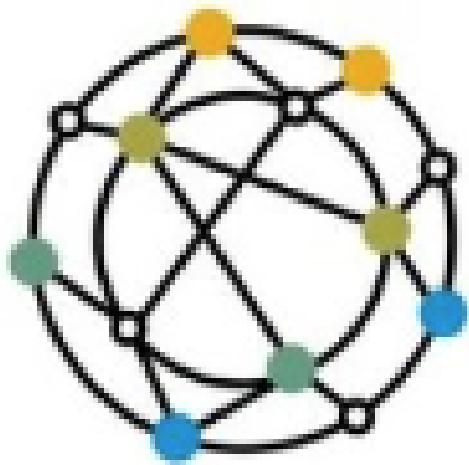
# Connecting JDBC?





# SAP DataSphere

- ◇ Multiple Data Sources
- ◇ Single Data Model
- ◇ Multiple Presentation Tools



Can you build reports in DataSphere?



# Then why do we need DataSphere?

- ◆ Datasphere is a modeling tool
  - ◆ Replace CDS Views (no ABAP required)
  - ◆ Combine CDS Views and HANA data
  - ◆ Direct access to HANA data
  - ◆ Combine SQL, HANA, and other sources
  - ◆ Create data models, analytical datasets
- ◆ Other tools (like AFO, SAC, PowerBI) consume that data and provide the visualizations

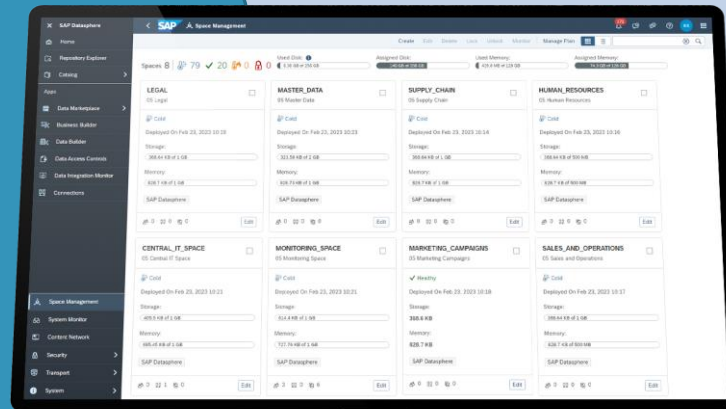




# Roles and responsibilities

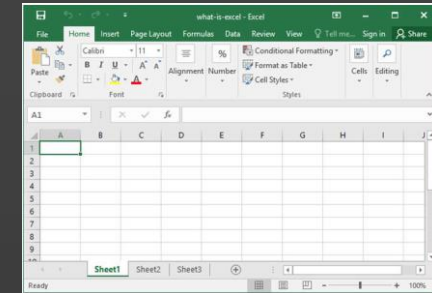


Technical Team adds Remote table definitions



Data Modelers  
Create Views and Presentable Data

Data Consumers  
use Views and Presentable Data  
to build Reports  
and Dashboards




SAP® Analytics Cloud

# SAP DataSphere

- ◆ Note: A live demonstration will be performed – what follows are the notes and associated screen shots

Hello, James Gilpin  
 Jan 31, 2024

Auto Refresh Data  OFF [Customize](#)



**Welcome to SAP Datasphere**

SAP Datasphere enables a business data fabric architecture that uniquely harmonizes mission-critical data across the organization, unleashing business experts to make the most impactful decisions. It combines previously discrete capabilities into a unified service for data integration, cataloging, semantic modeling, data warehousing, and virtualizing workloads across SAP and non-SAP data.

[Learn More](#)

**SAP Datasphere Blog**  
 Recent posts - Top 5

[Walkthrough of different Enterprise Scenarios via Community Content...](#)  
 jaigupta | 2 weeks ago

Introduction This blog is part of the blog series as mentioned below: An Introduction to Hierarchy with Directory Modeling a basic Hierarchy with Directory...

[Modeling an advanced Hierarchy with Directory in SAP Datasphere](#)  
 slinders | 2 weeks ago

In our previous blog , we covered the basics of creating a Hierarchy with Directory . Now, we're taking a step further in this blog by enhancing our model with an...

[Open Blog](#)

**Data Integration Tasks**  
 Recently started - Top 5

Show Only Errors  OFF

SOD_vs_Monthly	Completed
Jan 31, 2024 14:00:32	Next Run: 15:00
vwVolume_Allocation_Report	Completed
Jan 31, 2024 14:00:04	Next Run: 15:00
HANA_Table_Information	Completed
Jan 31, 2024 13:15:03	Next Run: 14:15
SOD_vs_Monthly	Completed
Jan 31, 2024 13:00:31	Next Run: 15:00
vwVolume_Allocation_Report	Completed
Jan 31, 2024 13:00:04	Next Run: 15:00

[Open Data Integration Monitor](#)

**Spaces** [+](#)  
 Storage / Status - Top 5

Name	Priority	Storage	Status
BISERVS	5	Used 285.93 MB of 2 GB	Working
DATA	8	Used 896.18 MB of 32 GB	Cold
UOM	5	Used 595.76 MB of 32 GB	Cold
S4Q	5	Used 14.61 MB of 2 GB	Cold
HARVEST	5	Used 5.64 MB of 2 GB	Cold

**Data Builder** [+](#)  
 Recently accessed - Top 5

Show Only Errors  OFF

Invoices	Deployed
Jan 31, 2024	
Invoices	Deployed
Jan 31, 2024	
Invalid PO Numbers	Deployed
Jan 25, 2024	
vw FS2 Dashboard Invalid ASC...	Deployed
Jan 11, 2024	
FS2AP Blank Vendor	Deployed

**Quick Actions**

No quick action selected  
 Add quick actions to display them here.


[Add Quick Actions](#)

Home - SAP Datasphere

https://53c4e534-ab2a-499f-88ee-9872ced8020e.us10.hcs.cloud.sap

SAP Home

Hello, James Gilpin  
Jan 31, 2024



**Welcome to SAP Datasphere**

SAP Datasphere enables a business to connect and integrate data across the organization, unleash the power of data, and combine previously discrete capabilities for data modeling, data warehousing, and virtualization.

[Learn More](#)

**Spaces**  
Storage / Status


Name	Priority
BISERVS	5
DATA	8
UOM	5
S4Q	5
HARVEST	5

Home - SAP Datasphere

https://53c4e534-ab2a-499f-88ee-9872ced8020e.us10.hcs.cloud.sap

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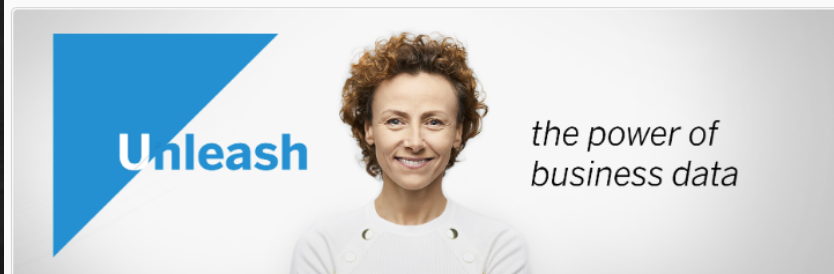
**Spaces**  
Storage / Status - Top 5

Name	Priority
BISERVS	5
DATA	8
UOM	5
S4Q	5
HARVEST	5

- Home
- Repository Explorer
- Catalog
- Apps
- Data Marketplace
- Semantic Onboarding
- Business Builder
- Data Builder
- Data Access Controls
- Data Integration Monitor
- Connections
- Space Management
- System Monitor
- Security
- Transport
- Data Sharing Cockpit
- System

**SAP Datasphere**

- Home
- Repository Explorer
- Catalog
- Apps
  - Data Marketplace
  - Semantic Onboarding
  - Business Builder
  - Data Builder
  - Data Access
  - Data Integr
  - Connection



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**SAP Datasphere Blog**

Recent posts - Top 10

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[Open Blog](#)

**Data Integration Tasks**

Recently started - Top 5

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	vwVolume_Allocation_Report	Jan 31, 2024 14:00:04	Completed	Next Run: 15:00
	HANA_Table_Information	Jan 31, 2024 13:15:03	Completed	Next Run: 14:15
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	vwVolume_Allocation_Report	Jan 31, 2024 13:00:04	Completed	Next Run: 15:00

[Open Data Integration Monitor](#)

**Spaces** +

Storage / Status - Top 5

Name	Priority	Storage	Status
BISERVS	5	Used 285.93 MB of 2 GB	Working

**Data Builder** + v

Recently accessed - Top 5

Show Only Errors  OFF

	Invoices	Jan 31, 2024	Deployed
	Invoices	Jan 31, 2024	Deployed
	Invalid PO Numbers	Jan 25, 2024	Deployed
	vw FS2 Dashboard Invalid ASC...	Jan 11, 2024	Deployed
	FS2AP Blank Vendor		Deployed

**Quick Actions**

No quick action selected  
Add quick actions to display them here.

[Add Quick Actions](#)

- Space Management
- System Monitor
- Security
- Transport
- Data Sharing Cockpit
- System

- Users
- Roles
- Activities

	BIS	2 GB	Cold
	2 GB		Cold
	DAT	1 GB	Cold
	3		Cold
	UO		
	S40		
	HAR		

- SAP Datasphere
- Home
- Repository Explorer
- Catalog
- Apps
  - Data Marketplace
  - Semantic Onboarding
  - Business Builder
  - Data Builder
  - Data Access Controls
  - Data Integration Monitor
  - Connections
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- Transport
- Data Sharing Cockpit
- System

**SAP** Home

Hello, James Gilpin  
Jan 31, 2024

Auto Refresh Data  OFF [Customize](#)

### Unleash the power of business data

#### Welcome to SAP Datasphere

SAP Datasphere enables a business data fabric architecture that uniquely harmonizes mission-critical data across the organization, unleashing business experts to make the most impactful decisions. It combines previously discrete capabilities into a unified service for data integration, cataloging, semantic modeling, data warehousing, and virtualizing workloads across SAP and non-SAP data.

[Learn More](#)

#### Spaces

Storage / Status - Top 5

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#### Data Integration Tasks

Recently started - Top 5

Show Only Errors  OFF

- SOD\_vs\_Monthly  
Jan 31, 2024 14:00:32 Completed  
Next Run: 15:00
- vwVolume\_Allocation\_Report  
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Jan 31, 2024 13:15:03 Completed  
Next Run: 14:15
- SOD\_vs\_Monthly  
Jan 31, 2024 13:00:31 Completed  
Next Run: 15:00
- vwVolume\_Allocation\_Report  
Completed

#### Help Topics

Search Help Topics

Welcome to SAP Datasphere

**Navigating in SAP Datasphere**  
The apps contained in SAP Datasphere are available in the side navigation area.

**Administration and Reference Tools**  
Administration tools are available from the lower part of the side navigation area.

**The Shell Bar**  
General tools are available in the shell bar.

**Welcome Card**  
Click Learn More to watch our getting started video and access useful links.

**SAP Datasphere Blog**  
See recent posts from the SAP Datasphere Blog.

**Spaces**  
See the storage and status of up to five spaces.

**Data Builder**  
See your most recently-accessed Data Builder objects.

**Business Builder**  
See your most recently-accessed Business Builder objects.

**Data Integration Tasks**  
See your most recently-accessed data integration task runs.

**Quick Actions**  
Click a button to create an object.

**Customization**  
To reorganize the cards in your homepage, click a card header and drag it to reposition it.

# Consuming the data

- ◆ SAP Analytics Cloud

RAW (Delta), RAW (Main) per Table | Schema name SAPHANADB | Table name /PRAIACCD... | Memory Size (Delta), Memory Size (Main) per Table

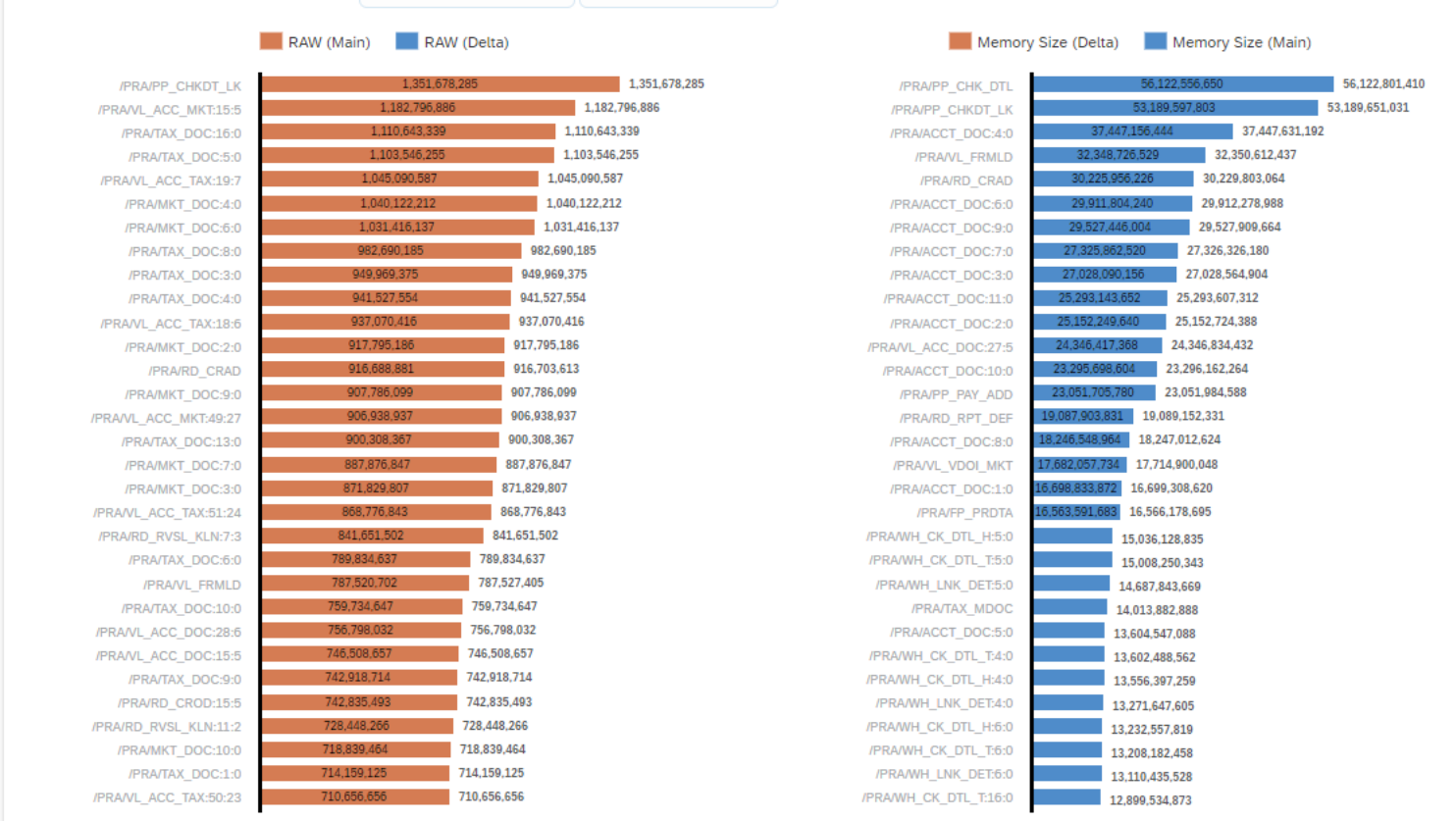


Table Information 1

Table	Last Merge	Last Consistency Check
/PRA/FP_PRDT	Jan 31, 2024 1:25:39 PM	Jan 31, 2024 6:06:28 AM
/PRA/VL_ACC_TAX:69:42	Jan 31, 2024 12:26:34 PM	Jan 31, 2024 6:04:51 AM
/PRA/REV_DEL_LOG	Jan 31, 2024 12:26:28 PM	Jan 31, 2024 6:01:12 AM
/PRA/VDOI_DEL_LG	Jan 31, 2024 12:26:28 PM	Jan 31, 2024 6:02:55 AM
/PRA/TXM_DEL_LOG	Jan 31, 2024 12:26:28 PM	Jan 31, 2024 6:05:10 AM
/PRA/FP_RUN_PP	Jan 31, 2024 12:26:28 PM	Jan 31, 2024 6:00:17 AM
/PRA/ACD_AR_LNK	Jan 31, 2024 8:25:46 AM	Jan 31, 2024 6:00:55 AM
/PRA/VL_UNIT_MKT	Jan 31, 2024 8:25:16 AM	Jan 31, 2024 6:08:09 AM
/PRA/RD_BK_HSTRY	Jan 31, 2024 8:25:05 AM	Jan 31, 2024 6:08:26 AM
/PRA/FP_PRDT_ADJ	Jan 31, 2024 7:26:13 AM	Jan 31, 2024 6:06:00 AM
/PRA/FP_RAD_LOCK	Jan 31, 2024 4:25:08 AM	Jan 31, 2024 6:10:26 AM
/PRA/VL_ACC_DOC:46:12	Jan 31, 2024 1:13:15 AM	Jan 31, 2024 6:00:17 AM
/PRA/VL_ACC_TAX:105:1	Jan 30, 2024 11:13:25 PM	Jan 31, 2024 6:03:27 AM
/PRA/TP_BALANCE	Jan 30, 2024 11:12:10 PM	Jan 31, 2024 6:06:09 AM
/PRA/AR_REC_BAL	Jan 30, 2024 11:12:10 PM	Jan 31, 2024 6:00:19 AM
/PRA/QUE_AD_LINK	Jan 30, 2024 11:12:10 PM	Jan 31, 2024 6:05:24 AM
/PRA/P2_ACCT_DOC	Jan 30, 2024 10:12:19 PM	Jan 31, 2024 6:00:17 AM

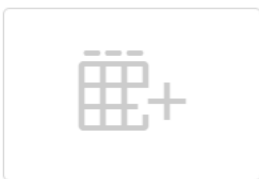


- SAP Datasphere
- Home
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- Data Builder**
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- System

## Welcome to the Data Builder

Create views and tables to prepare data for your stories, and use entity-relationship models to visualize and make associations between artifacts.

All Files Tables Views E/R Models Analytic Models Flows Intelligent Lookups Task Chains



New Table



New Graphical View



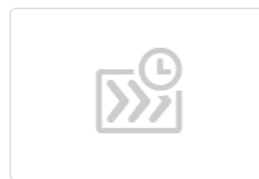
New SQL View



New Entity - Relationship Model



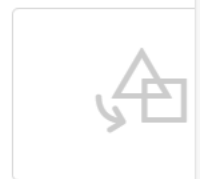
New Analytic Model



New Data Flow



New Replication Flow



New Transformation

### Files (3)

	Business Name	Technical Name	Type	Status	Deployed On	Changed By	Changed On
<input type="checkbox"/>	HANA Table Information	HANA_Table_Information	View (Fact)	Deployed	Oct 2, 2023 11:18:46	James Gilpin	Oct 2, 2023 11:18:31
<input type="checkbox"/>	SAPHANADB Table Information	vwSAPHANADB_Table_Information	View (Relational Dataset)	Deployed	Jan 10, 2024 16:58:46	James Gilpin	Jan 10, 2024 16:58:28
<input type="checkbox"/>	HANA Table Information	amHANA_Table_Information	Analytic Model (Cube)	Deployed	Sep 29, 2023 13:48:38	James Gilpin	Sep 29, 2023 13:45:40

SAP Datasphere Data Builder Analytic Model - HANA Table Inform...

Repository

- Tables
- Views
- Shared Objects

Record count SUM

Dimensions (10)

- Last Consistency Check
- Last Merge
- Load Unit
- Loaded
- Partition ID
- Range
- Schema name
- Subpartition ID
- Subrange
- Table name

HANA Table Information Properties

HANA Table Information

Name: \*  
HANA Table Information

Technical Name: \*  
amHANA\_Table\_Information

Status:  
Deployed

Measures (6)

- Memory Size (Delta) SUM
- Memory Size (Main) SUM
- Merge Count SUM
- RAW (Delta) SUM
- RAW (Main) SUM
- Record count SUM

Dimensions (10)

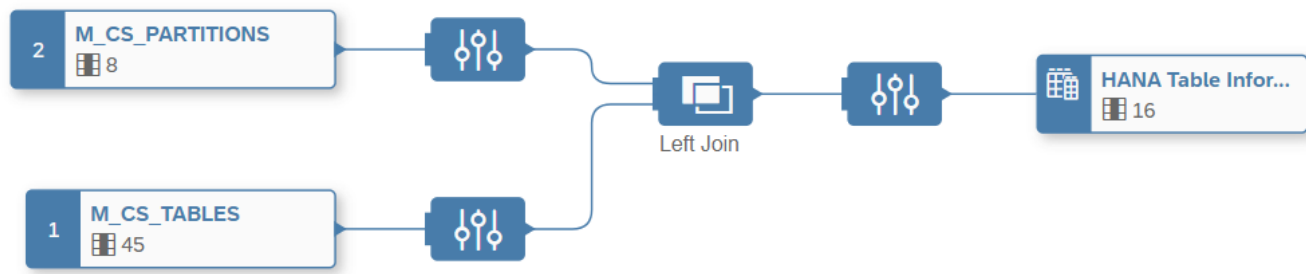
- Last Consistency Check
- Last Merge
- Load Unit
- Loaded

General View Edit Tools

Repository Sources

Search

- > Tables
- > Views
- > Intelligent Lookups
- > Shared Objects



Model Properties

HANA Table Information 16

Business Name: HANA Table Information

Technical Name: HANA\_Table\_Information

Semantic Usage: Fact

Expose for Consumption OFF Create Analytic Model

Run in Analytical Mode: OFF

Status: Deployed

Deployed On: Oct 2, 2023 11:18:46

Search

Measures (6)

Record count	SUM
Merge Count	SUM
RAW (Main)	SUM
RAW (Delta)	SUM
Memory Size (Main)	SUM
Memory Size (Delta)	SUM

```

SELECT
  "M_CS_TABLES_0"."SCHEMA_NAME",
  "M_CS_TABLES_0"."TABLE_NAME",
  "M_CS_TABLES_0"."PART_ID",
  "M_CS_TABLES_0"."LOAD_UNIT",
  "M_CS_PARTITIONS_1"."SUBPARTITION",
  "M_CS_TABLES_0"."LOADED",
  "M_CS_TABLES_0"."RECORD_COUNT",
  "M_CS_PARTITIONS_1"."RANGE",
  "M_CS_PARTITIONS_1"."SUBRANGE",
  "M_CS_TABLES_0"."MERGE_COUNT",
  "M_CS_TABLES_0"."RAW_RECORD_COUNT_IN_MAIN",
  "M_CS_TABLES_0"."RAW_RECORD_COUNT_IN_DELTA",
  "M_CS_TABLES_0"."MEMORY_SIZE_IN_MAIN",
  "M_CS_TABLES_0"."MEMORY_SIZE_IN_DELTA",
  "M_CS_TABLES_0"."LAST_MERGE_TIME",
  "M_CS_TABLES_0"."LAST_CONSISTENCY_CHECK_TIME"
FROM (SYS.M_CS_TABLES AS "M_CS_TABLES_0" LEFT JOIN SYS."M_CS_PARTITIONS" AS "M_CS_PARTITIONS_1" ON "M_CS_TABLES_0"."SCHEMA_NAME" = "M_CS_PARTITIONS_1"."SCHEMA_NAME" AND
"M_CS_TABLES_0"."TABLE_NAME" = "M_CS_PARTITIONS_1"."TABLE_NAME" AND "M_CS_TABLES_0"."PART_ID" = "M_CS_PARTITIONS_1"."PART_ID")
order by "M_CS_TABLES_0"."RECORD_COUNT" DESC

```

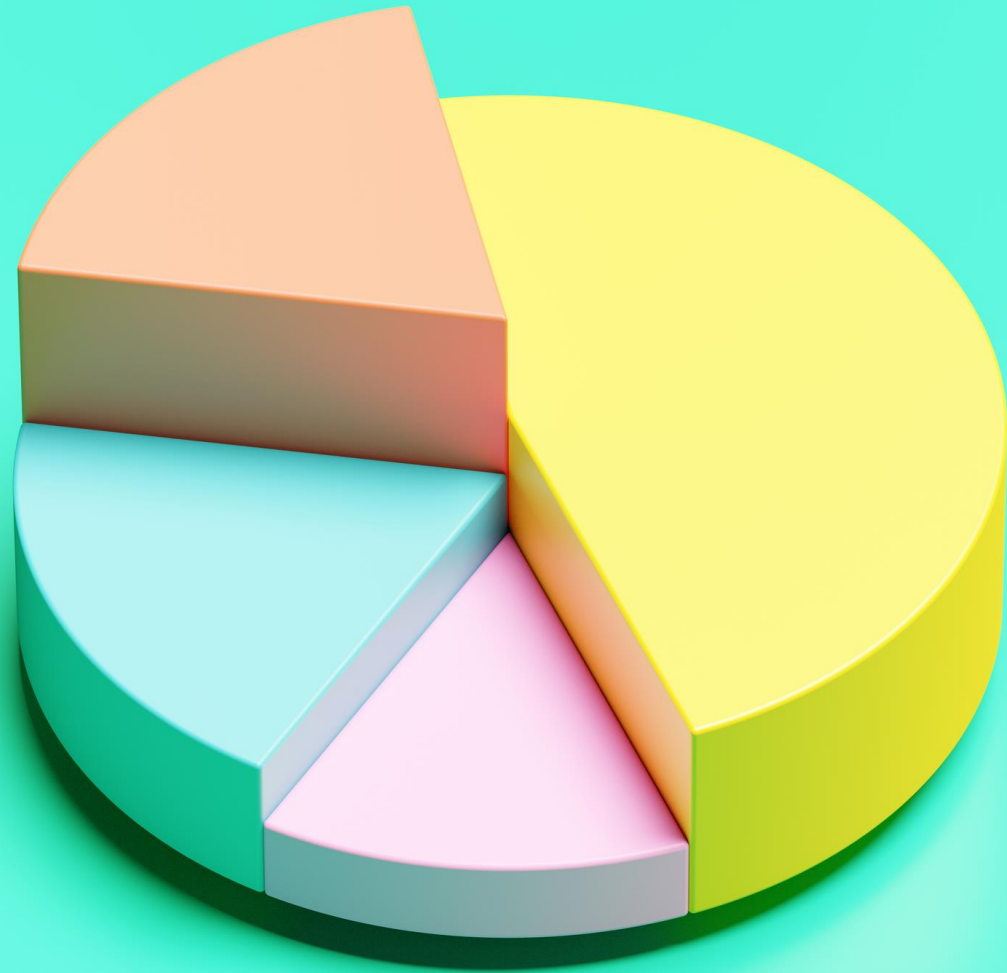
	SCHEMA_NAME	TABLE_NAME	PART_ID	LOAD_UNIT	SUBPARTITION	LOADED	RECORD_COUNT	RANGE	SUBRANGE	MERGE_COUNT	RAW_RECORD_COUNT_IN_MAIN	RAW_RECORD_COUNT_IN_DELTA	MEMORY_SIZE_IN_MAIN	MEMORY_SIZE_IN_DELTA
1	SAPHANADB	/PRA/PP_C...	0	COLUMN	0	PARTI...	1,526,091,694			15	1,526,075,133	16,561	59,951,767,076	
2	SAPHANADB	/PRA/VL_A...	15	PAGE	5	PARTI...	1,165,391,435	2022	00000000...	18	1,165,391,435	0	7,657,148,928	
3	SAPHANADB	/PRA/TAX_...	16	PAGE	0	PARTI...	1,122,011,079	2023...		0	1,122,011,079	0	4,410,118,460	
4	SAPHANADB	/PRA/TAX_...	5	PAGE	0	PARTI...	1,103,546,255	2021...		0	1,103,546,255	0	489,328,632	
5	SAPHANADB	FAGL_SPLIN...	0	COLUMN	0	FULL	1,087,117,626			22	1,086,953,448	164,178	28,477,215,680	
6	SAPHANADB	OIURV_DOC...	0	COLUMN	0	FULL	1,047,042,526			28	1,047,010,512	57,693	30,781,985,931	
7	SAPHANADB	/PRA/MKT_...	4	PAGE	0	PARTI...	1,040,122,212	2021...		0	1,040,122,212	0	634,371,460	
8	SAPHANADB	/PRA/MKT_...	6	PAGE	0	PARTI...	1,031,416,137	2022...		0	1,031,416,137	0	629,918,632	
9	SAPHANADB	/PRA/VL_A...	19	PAGE	7	PARTI...	1,024,427,155	2022	00000000...	18	1,024,427,155	0	7,896,760,856	
10	SAPHANADB	ACDOCA	0	COLUMN	0	FULL	1,016,539,485			22	1,015,280,780	6,178,150	38,880,377,495	
11	SAPHANADB	/PRA/TAX_...	8	PAGE	0	PARTI...	982,690,185	2022...		0	982,690,185	0	621,833,104	
12	SAPHANADB	/PRA/MKT_...	11	PAGE	0	PARTI...	956,298,384	2023...		0	956,298,384	0	3,578,637,468	
13	SAPHANADB	/PRA/TAX_...	3	PAGE	0	PARTI...	949,969,375	2021...		0	949,969,375	0	2,395,201,236	
14	SAPHANADB	/PRA/VL_FR...	0	COLUMN	0	FULL	947,862,035			50	947,854,841	43,211	38,355,673,136	
15	SAPHANADB	/PRA/TAX_...	4	PAGE	0	PARTI...	941,527,554	2021...		0	941,527,554	0	371,256,196	
16	SAPHANADB	/PRA/VL_A...	18	PAGE	6	PARTI...	925,626,369	2022	00000000...	18	925,626,369	0	5,988,426,644	
17	SAPHANADB	/PRA/RD_C...	0	COLUMN	0	FULL	924,259,988			28	924,183,252	192,863	30,419,383,154	
18	SAPHANADB	/PRA/MKT_...	2	PAGE	0	PARTI...	917,795,186	2021...		0	917,795,186	0	890,159,680	
19	SAPHANADR	/PRA/MKT_...	9	PAGE	0	PARTI...	907,786,099	2023...		0	907,786,099	0	4,046,593,552	

Statement 'SELECT "M\_CS\_TABLES\_0"."SCHEMA\_NAME", "M\_CS\_TABLES\_0"."TABLE\_NAME", "M\_CS\_TABLES\_0"."PART\_ID", ...'

successfully executed in 10.870 seconds (server processing time: 10.850 seconds)

Fetches 1000 row(s) in 26 ms 481 μs (server processing time: 3 ms 517 μs)

Result limited to 1000 row(s) due to value configured in the Preferences



# How do you connect Datasphere to DATA?

The screenshot displays the 'Create Connection' wizard in SAP Datasphere. The interface is divided into three main sections: a left sidebar for filters, a central grid of connection types, and a right sidebar for search and navigation.

**Left Sidebar: Filters**

Business Name	Type
<input type="checkbox"/> S4Q ABAP	SAP ABAP
<input type="checkbox"/> S4Q HANA	SAP HANA

**Filters (Left Panel):**

- Features:**
  - Data Flows: 26
  - Model Import: 3
  - Remote Tables: 21
  - Replication Flows: 11
- Categories:**
  - Cloud: 26
  - On-Premise: 11
- Sources:**
  - Non-SAP: 16
  - Partner Tools: 2
  - SAP: 14

**Central Panel: Connection Types (32)**

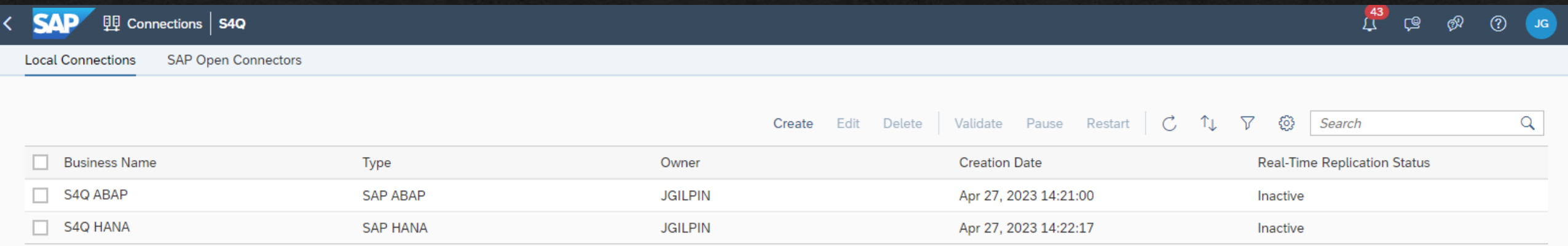
The central panel displays a grid of 32 connection types, each with a logo and name. The visible options include:

- SAP ABAP
- Microsoft Azure Data Lake Storage Gen1 (deprecated)
- Microsoft Azure Data Lake Storage Gen2
- Adverity
- Precog
- Amazon Athena
- Microsoft Azure SQL Database
- Google BigQuery
- Cloud Data Integration
- Google Cloud Storage
- Generic JDBC
- SAP HANA

**Right Panel: Search and Navigation**

The right panel includes a search bar, a search icon, and a dropdown arrow. At the bottom right, there is a 'Cancel' button.

# How do you connect Datasphere to DATA?




The screenshot shows the SAP S4Q Connections interface. At the top, there is a navigation bar with the SAP logo, 'Connections | S4Q', and a notification bell with '43' alerts. Below the navigation bar, there are two tabs: 'Local Connections' and 'SAP Open Connectors'. The main area contains a table with columns: Business Name, Type, Owner, Creation Date, and Real-Time Replication Status. Above the table, there are action buttons: Create, Edit, Delete, Validate, Pause, Restart, and a search bar. The table lists two connections: 'S4Q ABAP' and 'S4Q HANA', both owned by 'JGILPIN' and created on 'Apr 27, 2023'. Both connections are currently 'Inactive'.

<input type="checkbox"/>	Business Name	Type	Owner	Creation Date	Real-Time Replication Status
<input type="checkbox"/>	S4Q ABAP	SAP ABAP	JGILPIN	Apr 27, 2023 14:21:00	Inactive
<input type="checkbox"/>	S4Q HANA	SAP HANA	JGILPIN	Apr 27, 2023 14:22:17	Inactive

## Welcome to the Data Builder

Create views and tables to prepare data for your stories, and use entity-relationship models to visualize and make associations between artifacts.



It looks like you haven't selected a space.

Different files that were created in specific business contexts are managed inside spaces. Select a space to create, maintain or view your files. No spaces available? Please contact your administrator.

### Spaces (19) Search

<b>BI Services</b> BISERVS Disk for Storage: 307.17 MB of 2 GB	<b>External Financial Reporting</b> EFR Disk for Storage: 536.58 KB of 2 GB	<b>Finance and Controlling</b> FICO Disk for Storage: 1.43 MB of 2 GB
<b>Harvest</b> HARVEST Disk for Storage: 5.64 MB of 2 GB	<b>Joint Interest Billing</b> JIB Disk for Storage: 786.43 KB of 2 GB	<b>Land</b> LAND Disk for Storage: 4.78 MB of 2 GB
<b>Materials Management</b> MM Disk for Storage: 4.59 MB of 2 GB	<b>Oil and GAS</b> UOM Disk for Storage: 595.77 MB of 32 GB	<b>Operations</b> OPER Disk for Storage: 4.81 MB of 2 GB
<b>Ownership</b> DOI Disk for Storage: 401.41 KB of 2 GB	<b>Production Revenue Accounting</b> PRA Disk for Storage: 5.14 MB of 2 GB	<b>Project Systems</b> PS Disk for Storage: 4.46 MB of 2 GB
<b>QA DNU</b> S4Q Disk for Storage: 14.61 MB of 2 GB	<b>S4Q DATA</b> Disk for Storage: 896.18 MB of 32 GB	<b>S4Q Harvest DATA</b> HMDATA Disk for Storage: 9.84 MB of 16 GB
<b>SAP &amp; Partner Content</b> SAP_CONTENT	<b>Technical</b> TECH	<b>Tutorial</b> TUTORIAL



# Welcome to the Data Builder

Create views and tables to prepare data for your stories, and use entity-relationship models to visualize and make associations between artifacts.

- All Files
- Tables
- Views
- E/R Models
- Analytic Models
- Flows
- Intelligent Lookups
- Task Chains



New Table



New Graphical View



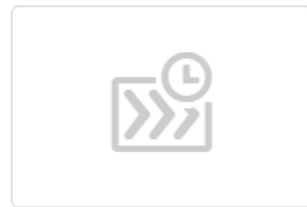
New SQL View



New Entity - Relationship Model



New Analytic Model



New Data Flow



New Replication Flow



New Transformation

Files (370)



Search

<input type="checkbox"/>	Business Name	Technical Name	Type	Status	Deployed On	Changed On
<input type="checkbox"/>	V_CALC_PROD_EXT	V_CALC_PROD_EXT	Remote Table (Relational ...	Deployed	Dec 12, 2023	Dec 12, 2023 12:16:09
<input type="checkbox"/>	/DOL/AP_T03S	DOLAP_T03S	Remote Table (Relational ...	Deployed	Jan 26, 2024	Jan 26, 2024 9:15:41
<input type="checkbox"/>	V_CALC_PROD_WC_STATUS	V_CALC_PROD_WC_STATUS	Remote Table (Relational ...	Deployed	Jun 2, 2023	Jun 2, 2023 14:46:29
<input type="checkbox"/>	/DOL/AP_T02	DOLAP_T02	Remote Table (Relational ...	Deployed	Jan 25, 2024	Jan 25, 2024 11:13:13

- Import CSV File
- Import Objects from CSN/JSON File
- Import Entities
- Import Remote Tables
- Validate Remote Tables

# Import Remote Tables

**1** Import Remote Tables

1 Connections — 2 Tables — 3 Review

Connections (2)

Business Name	Technical Name
S4Q ABAP	ABAP
S4Q HANA	HANA

**3** Review

Import Remote Tables

1 Connections — 2 Tables — 3 Review

Connections (2)

Business Name	Technical Name
S4Q ABAP	ABAP
S4Q HANA	HANA

[Next Step](#) [Close](#)

# Import Remote Tables

1 Connections

2 Tables

3 Review

S4Q HANA

Search in SAPHANADB/Tables



- > HODBC
- > JGILPIN
- ▼ SAPHANADB
  - Tables
  - > Views
- > SYS
- > \_SYS\_BI
- > \_SYS\_DI
- > \_SYS\_PLAN\_STABILITY
- > \_SYS\_REPO
- > \_SYS\_RT
- > \_SYS\_SQL\_ANALYZER
- > \_SYS\_TASK

Remote Tables (9)

CSKS



**i** There are more than 1000 items in this folder. Please use the search to find items not yet listed.

- Technical Name
- CSKS
- CSKSTPL
- CSKS\_DRAFT
- CSKS\_MAP
- MMPUR\_EXT\_CSKS
- OIFOCSKS
- OIRBOCSKS
- RTC\_EXT\_CSKS
- VIXCSKSDANP

Go Back

Next Step

Close

## Remote

Connection:

HANA

Remote Table:

"SAPHANADB"."CSKS"

Load New Snapshot

Remove Replicated Data

Enable Real-Time Access

Change Remote Table Source

Semantic Usage:

Filters (0) Associations (0) Business Purpose Table Services Dependent Objects (?)

## Columns (100)

<input type="checkbox"/>	<input type="checkbox"/>	Business Name	Technical Name	Data Type	Not Null
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Client	MANDT	String(3)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Controlling Area	KOKRS	String(4)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cost Center	KOSTL	String(10)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Valid To Date	DATBI	String(8)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Valid From Date	DATAB	String(8)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Lock Indicator for Actual Primary Postings	BKZKP	String(1)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Lock Indicator for Plan Primary Costs	PKZKP	String(1)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Company Code	BUKRS	String(4)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Business Area	GSBER	String(4)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>			String(1)	<input checked="" type="checkbox"/>

## Filters (1)

MANDT

Equal to

200

✕ +

### Share Table "CSKS"

Add Spaces:



Access:

Read

[Share](#) [Cancel](#)

▼ Shared to 4 Spaces

[Unshare](#)



<input type="checkbox"/>	Name	≡	Access
<input type="checkbox"/>	Finance and Controlling (FICO)		Read
<input type="checkbox"/>	Land (LAND)		Read
<input type="checkbox"/>	Production Revenue Accounting (PRA)		Read
<input type="checkbox"/>	Project Systems (PS)		Read

[Close](#)

## Welcome to the Data Builder

Create views and tables to prepare data for your stories, and use entity-relationship models to visualize and make associations between artifacts.

[All Files](#) [Tables](#) [Views](#) [E/R Models](#) [Analytic Models](#) [Flows](#) [Intelligent Lookups](#) [Task Chains](#)



New Table



New Graphical View



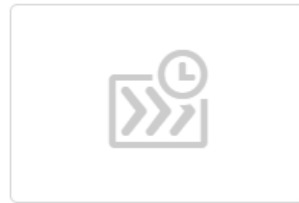
New SQL View



New Entity - Relationship Model



New Analytic Model



New Data Flow



New Replication Flow



New Transformation

Files (2)

+ v ↘ ↻ ✎ 🔄 🔗 🗑️ M\_CS\* 🔍

<input type="checkbox"/>	Business Name	Technical Name	Type	Status	Deployed On	Changed By	Changed On
<input type="checkbox"/>	🔗 M_CS_TABLES 🔗	M_CS_TABLES	Remote Table (Relational ...	🕒 Deployed	Sep 29, 2023 8:30:27	James Gilpin	Sep 29, 2023 8:30:12
<input type="checkbox"/>	🔗 M_CS_PARTITIONS 🔗	M_CS_PARTITIONS	Remote Table (Relational ...	🕒 Deployed	Sep 29, 2023 8:30:21	James Gilpin	Sep 29, 2023 8:30:06

## Welcome to the Data Builder

Create views and tables to prepare data for your stories, and use entity-relationship models to visualize and make associations between artifacts.

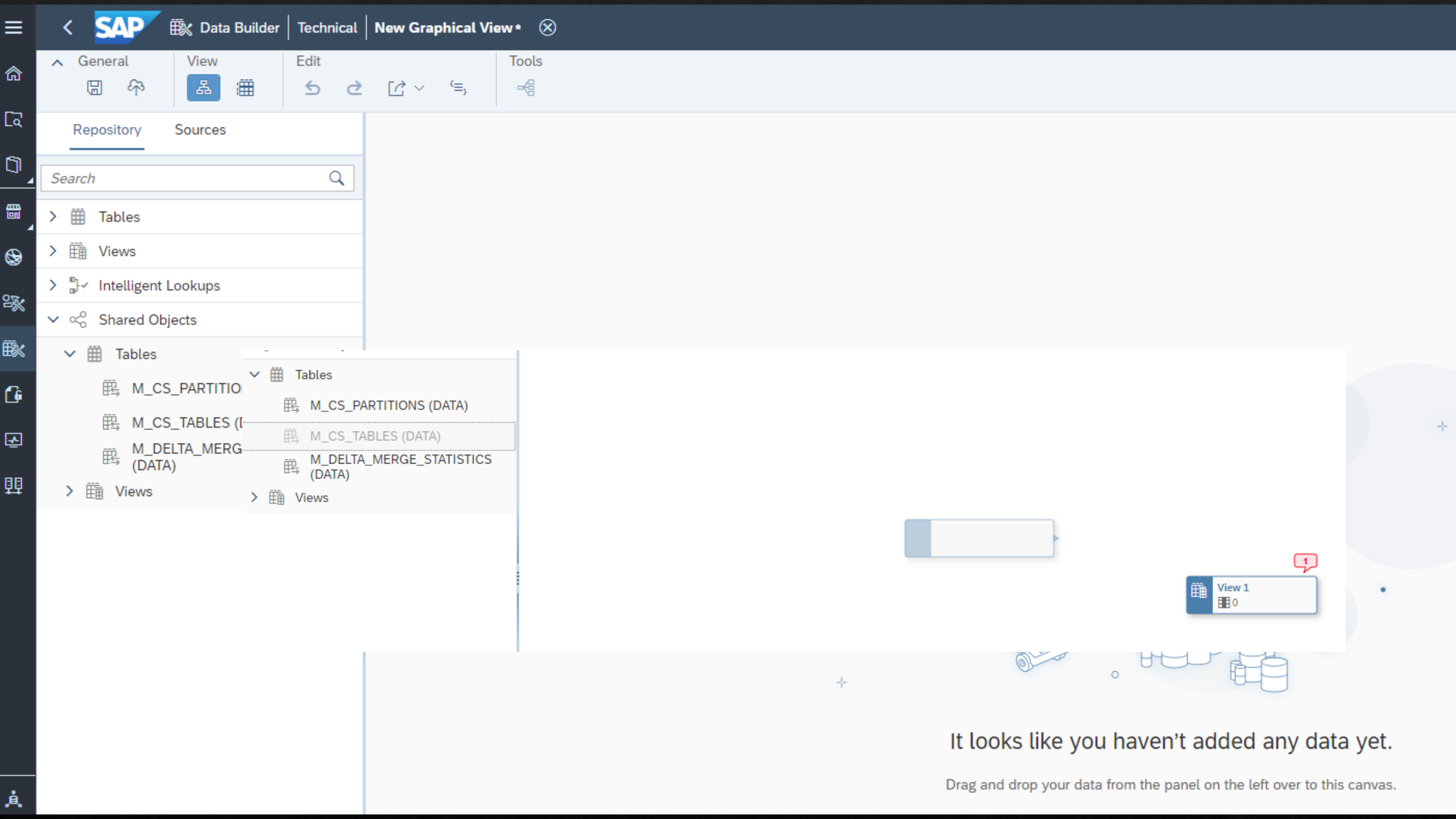


It looks like you haven't selected a space.

Different files that were created in specific business contexts are managed inside spaces. Select a space to create, maintain or view your files. No spaces available? Please contact your administrator.

### Spaces (19)

5.64 MB of 2 GB	786.43 KB of 2 GB
<b>Materials Management</b> MM Disk for Storage: 4.59 MB of 2 GB	<b>Oil and GAS</b> UOM Disk for Storage: 595.77 MB of 32 GB
<b>Ownership</b> DOI Disk for Storage: 401.41 KB of 2 GB	<b>Production Revenue Accounting</b> PRA Disk for Storage: 5.14 MB of 2 GB
<b>QA DNU</b> S4Q Disk for Storage: 14.61 MB of 2 GB	<b>S4Q</b> DATA Disk for Storage: 896.12 MB of 32 GB
<b>SAP &amp; Partner Content</b> SAP_CONTENT Disk for Storage: 532.48 KB of 2 GB	<b>Technical</b> TECH Disk for Storage: 4.62 MB of 2 GB



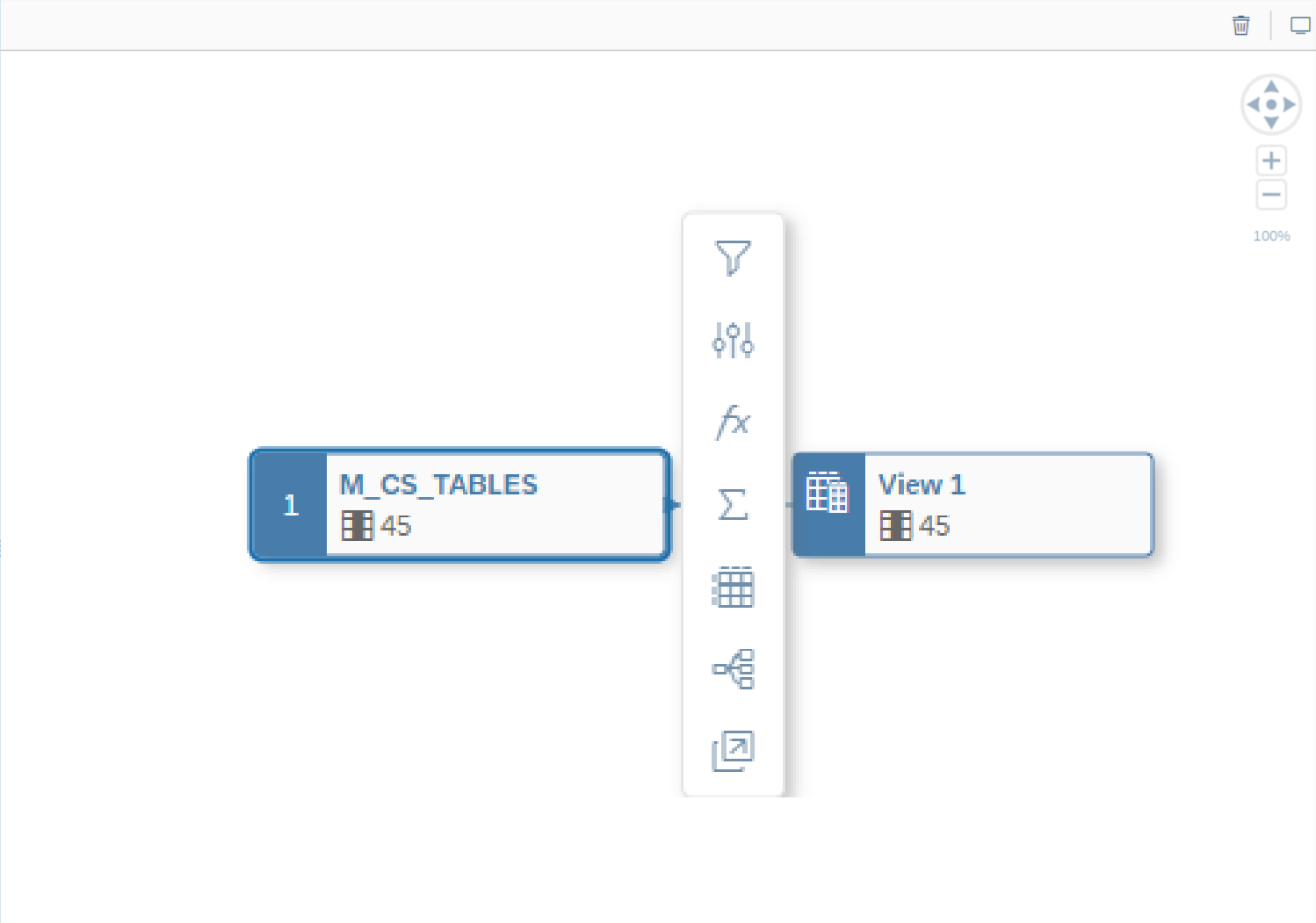


General View Edit Tools

Repository Sources

Search

- > Tables
- > Views
- > Intelligent Lookups
- > Shared Objects
  - > Tables
    - M\_CS\_PARTITIONS (DATA)
    - M\_CS\_TABLES (DATA)
    - M\_DELTA\_MERGE\_STATISTICS (DATA)
  - > Views



Remote Table Properties

M\_CS\_TABLES 45

General

Business Name:

Technical Name:

Alias:

Space Name:

Connection:

Remote Table:

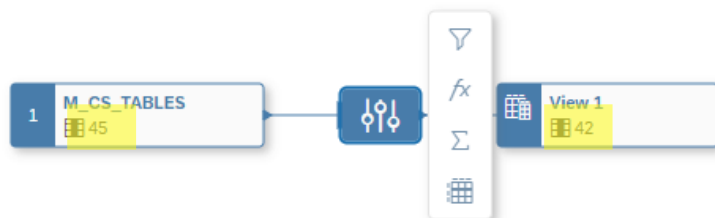
Data Access:

Distinct Values:  OFF

Status: Deployed



100%



Projection 1



45

Name\*

Projection 1

Columns (45)



Select All



Search Columns



AA Host name

22 Internal port

AA Schema name

AA Table name

22 Partition ID. 0 for non-partitioned and ...

22 Total memory size is the sum of memo...

22 Current memory consumption in main;...

22 Current memory consumption in delta

22 Current memory consumption in histor...

22 Current memory consumption in histor...

22 Currently resident paged memory

22 Current memory consumption by meta...

22 Current persistent memory consumption

22 Estimated maximum memory consum...

22 Last estimated memory consumption f...



- 
- 
- 
- 

- 
- 
- 
- 100%

Data: View 1 (157131) Errors (0)

Export Debug CSN

Schema name	Table name	Partition ID. 0 for non-p	Current memory consu	Current memory consu	Record count	Current number
SAPHANADB	/1BS/TEST_TABLE	0	0	0	0	0
SAPHANADB	/1BS/TEST_T_FK	0	0	0	0	0
SAPHANADB	/1CN/CBPSAP001	0	0	0	0	0
SAPHANADB	/1CN/CBPSAP016	0	0	0	0	0
SAPHANADB	/1CN/CBPSAP019	0	0	0	0	0
SAPHANADB	/1CN/CBPSAP068	0	0	0	0	0
SAPHANADB	/1CN/CBPSAP118	0	0	0	0	0
SAPHANADB	/1CN/CCASAP00001	0	2,768	84,556	0	0
SAPHANADB	/1CN/CCASAP00002	0	2,768	100,220	0	0
SAPHANADB	/1CN/CCASAP00003	0	2,768	88,472	0	0
SAPHANADB	/1CN/CCASAP00004	0	2,768	84,556	0	0
SAPHANADB	/1CN/CCASAP00005	0	2,768	88,472	0	0
SAPHANADB	/1CN/CCDSAP12000	0	2,768	104,136	0	0
SAPHANADB	/1CN/CCDSAP12001	0	2,768	104,136	0	0
SAPHANADB	/1CN/CCDSAP12002	0	2,768	104,136	0	0

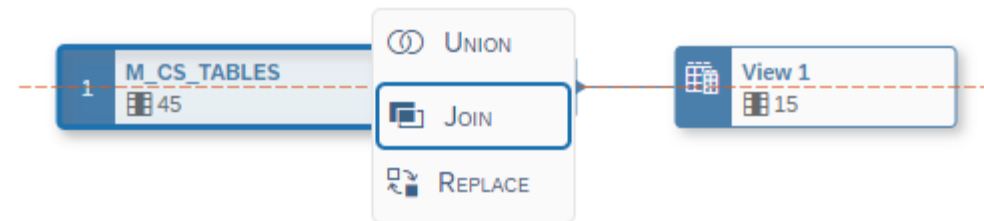
Tables

M\_CS\_PARTITIONS (DATA)

M\_CS\_TABLES (DATA)

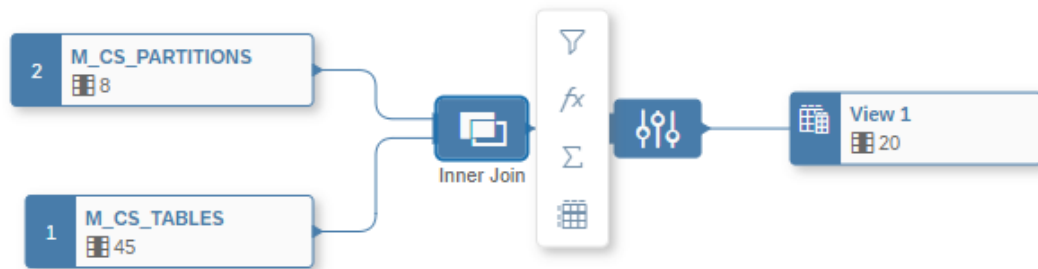
M\_DELTA\_MERGE\_STATISTICS (DATA)

Views





100%



Join 1



53

Name\*

Join 1

Join Type

Inner



Distinct Values

Cardinality

M\_CS\_TABLES (45)

M\_CS\_PARTITIONS (8)

To

### Mappings

All

Mapped

Unmapped

M\_CS\_TABLES (45)



M\_CS\_PARTITIONS (8)

Search...



Search...



AA Host name

22 Internal port

AA Schema name

AA Table name

22 Partition ID. 0 for non-

22 Total memory size is the sum

22 Current memory consumption in

22 Current memory

22 Current memory

AA Schema Name

AA Table Name

22 Partition ID. 0 for non-partitioned

22 Partition ID. 0 for non-partitioned

22 Subpartition ID. 0 for non-partitioned

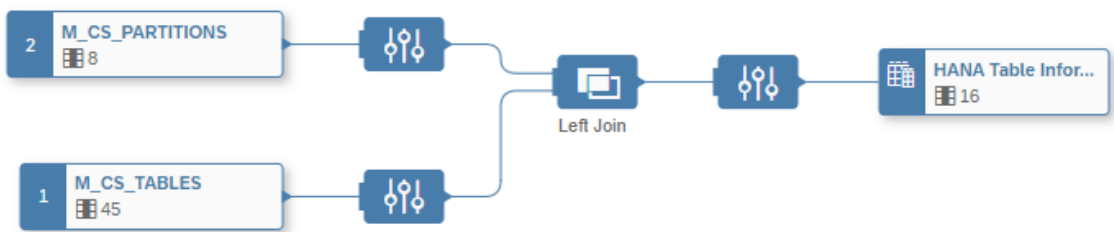
AA Range definition of partition/subpartitio

AA Subrange definition of

22 Dynamic option for OTHERS



100%



### HANA Table Information

16

Business Name:

HANA Table Information

Technical Name:

HANA\_Table\_Information

Semantic Usage:

Fact

Expose for Consumption

OFF ?

Create Analytic Model

Run in Analytical Mode:

OFF

Status:

Deployed

Deployed On:

Oct 2, 2023 11:18:46

Search

#### Measures (6)

Record count	SUM
Merge Count	SUM
RAW (Main)	SUM
RAW (Delta)	SUM
Memory Size (Main)	SUM
Memory Size (Delta)	SUM

Repository

Search

- Tables
- Views
- Shared Objects

Reset

100%

Fact Sources (1)

HANA Table Information  
HANA Table Information

HANA Table Information Properties

HANA Table Information  
HANA Table Information / HANA Table Information

Alias: \*  
HANA Table Information

Source:  
HANA Table Information

- Measures (6)
- Record count
  - Merge Count
  - RAW (Main)
  - RAW (Delta)
  - Memory Size (Main)
  - Memory Size (Delta)

Associated Dimensions (0)  
No associated dimension found.

- Attributes (10)
- Schema name >
  - Table name >
  - Partition ID >
  - Load Unit >

Measures	RECORD_COUNT	MERGE_COUNT	RAW_RECORD_COUNT_IN_MAIN	RAW_RECORD_COUNT_IN_DELTA
	Record count	Merge Count	RAW (Main)	RAW (Delta)
	108,171,778,376	242,692	108,172,473,621	50,255,115

Available Objects

Search

- Measures
  - Select All
  - Memory Size (Delta)
  - Memory Size (Main)
  - Merge Count
  - RAW (Delta)
  - RAW (Main)
  - Record count

Dimensions

- Last Consistency Check
- Last Merge
- Load Unit
- Loaded
- Partition ID
- Range
- Schema name
- Subpartition ID
- Subrange
- Table name

Builder Available Objects

Rows

Columns

- Measures
  - Record count
  - Merge Count
  - RAW (Main)
  - RAW (Delta)
  - Memory Size (Main)
  - Memory Size (Delta)



General | Tools

Model Preview

Schema name	Table name	Partition ID	Subpartition ID	Measures	RECORD_COUNT	MERGE_COUNT
					Record count ↑↓	Merge Count ↑↓
FDT_CP_BR_SOURCE_5054#DI	BLOB_STORE_	0	0		6	0
	BLOB_STORE_HELPER	0	(Null)		0	0
	CONFIGURATION_	0	0		5	0
	DEPLOYED_FILESYSTEM_	0	0		6	0
	DEPLOYED_FILESYSTEM_TEMP_	0	(Null)		0	0
	DEPSTORE_COMPILEUNITS_	0	0		5	0
	DEPSTORE_DEPENDENCIES_	0	0		0	0
	DEPSTORE_DEPENDENCYEDGES_	0	0		0	0
	DEPSTORE_DEPENDENCYIDENTIFIERS_	0	0		7	0
	DEPSTORE_HELPER_1_COLUMN_	0	(Null)		0	0
	DEPSTORE_HELPER_2_COLUMNS_	0	(Null)		0	0
	DTC_LOCK_	0	0		0	0
	EXPANSION_FILESYSTEM_	0	0		0	0
	EXPANSION_FILESYSTEM_TEMP_	0	(Null)		0	0
	LIBRARY_CONFIGURATION_	0	0		29	0
	LOCK_	0	0		0	0
	MERGE_FILESYSTEM_	0	0		0	0
	MERGE_FILESYSTEM_TEMP_	0	(Null)		0	0
	PLUGIN_DIRECTORY_	0	0		41	0
	PREMAKE_CONFIGURATION_	0	0		1	0
	PREMAKE_NAMESPACES_	0	0		0	0
	WORK_FILESYSTEM_	0	0		6	0
	WORK_FILESYSTEM_TEMP_	0	(Null)		0	0
	com.sap.hana.di.logicalschemamapping#S...	0	0		3	0
	com.sap.hana.di.projectionview#CONFIG	0	0		0	0

Available Objects

Search

Builder Available Objects

Rows

- Schema name
- Table name
- Partition ID
- Subpartition ID

Measures

- Select All
- Memory Size (Delta)
- Memory Size (Main)
- Merge Count
- RAW (Delta)
- RAW (Main)
- Record count

Dimensions

- Last Consistenc...
- Last Merge
- Load Unit
- Loaded
- Partition ID
- Range
- Schema name
- Subpartition ID
- Subrange
- Table name

Columns

- Measures
- Record count
- Merge Count
- RAW (Main)
- RAW (Delta)
- Memory Size (Main)
- Memory Size (Delta)

RAW (Delta), RAW (Main) per Table Schema name: SAPHANADB Table name: /PRA/ACCD...

Memory Size (Delta), Memory Size (Main) per Table

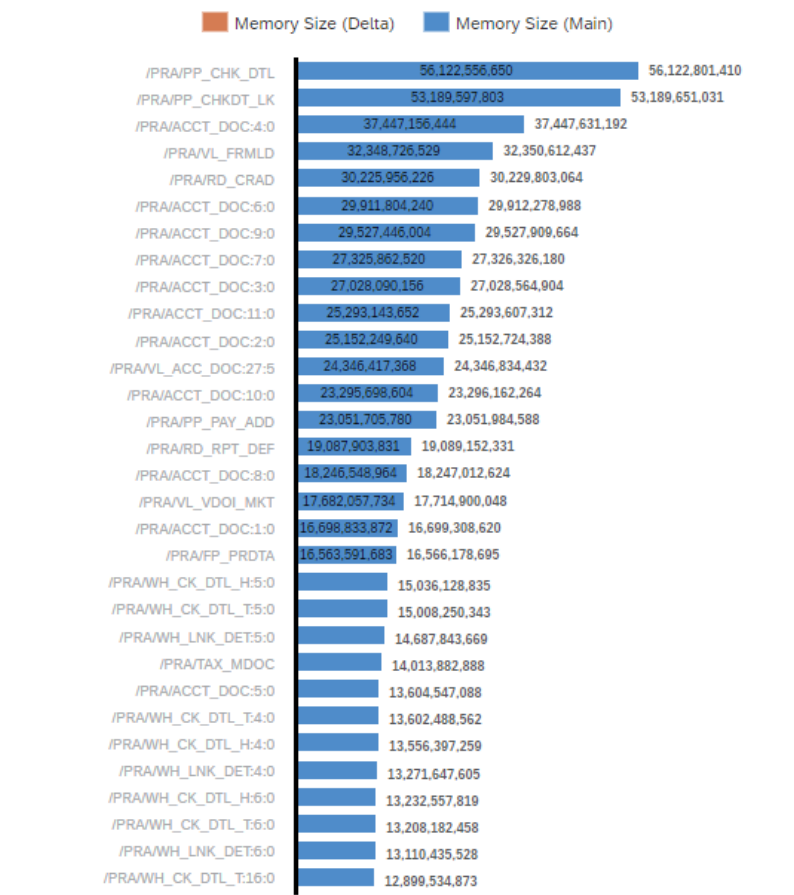
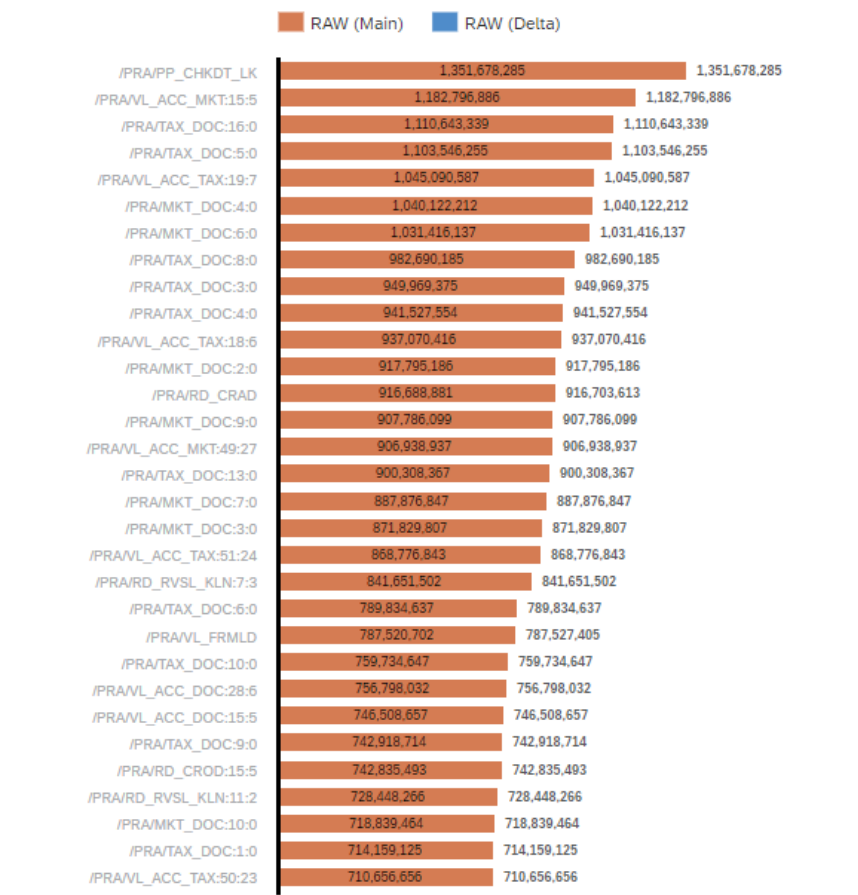


Table	Last Merge	Last Consistency Check
/PRA/FP_PRDT	Jan 31, 2024 1:25:39 PM	Jan 31, 2024 6:06:28 AM
/PRA/VL_ACC_TAX:69:42	Jan 31, 2024 12:26:34 PM	Jan 31, 2024 6:04:51 AM
/PRA/REV_DEL_LOG	Jan 31, 2024 12:26:28 PM	Jan 31, 2024 6:01:12 AM
/PRA/VDOI_DEL_LG	Jan 31, 2024 12:26:28 PM	Jan 31, 2024 6:02:55 AM
/PRA/TXM_DEL_LOG	Jan 31, 2024 12:26:28 PM	Jan 31, 2024 6:05:10 AM
/PRA/FP_RUN_PP	Jan 31, 2024 12:26:28 PM	Jan 31, 2024 6:00:17 AM
/PRA/ACD_AR_LNK	Jan 31, 2024 8:25:46 AM	Jan 31, 2024 6:00:55 AM
/PRA/VL_UNIT_MKT	Jan 31, 2024 8:25:16 AM	Jan 31, 2024 6:08:09 AM
/PRA/RD_BK_HSTRY	Jan 31, 2024 8:25:05 AM	Jan 31, 2024 6:08:26 AM
/PRA/FP_PRDT_ADJ	Jan 31, 2024 7:26:13 AM	Jan 31, 2024 6:06:00 AM
/PRA/FP_RAD_LOCK	Jan 31, 2024 4:25:08 AM	Jan 31, 2024 6:10:26 AM
/PRA/VL_ACC_DOC:46:12	Jan 31, 2024 1:13:15 AM	Jan 31, 2024 6:00:17 AM
/PRA/VL_ACC_TAX:105:1	Jan 30, 2024 11:13:25 PM	Jan 31, 2024 6:03:27 AM
/PRA/TP_BALANCE	Jan 30, 2024 11:12:10 PM	Jan 31, 2024 6:06:09 AM
/PRA/AR_REC_BAL	Jan 30, 2024 11:12:10 PM	Jan 31, 2024 6:00:19 AM
/PRA/QUE_AD_LINK	Jan 30, 2024 11:12:10 PM	Jan 31, 2024 6:05:24 AM
/PRA/P2_ACCT_DOC	Jan 30, 2024 10:12:19 PM	Jan 31, 2024 6:00:17 AM

# Thanks!

◇ <https://open.sap.com/courses/dsp1-1>