Webinar
Solution Update
APOS Live Data Gateway
APOS

Today's Session

Key Topics

- Live Connectivity for Analytics
- Live Data Gateway Overview
- Solution Features Update
- Q&A – see webinar console

APOS

Today's Presenters

ALLAN PYM

Chief Operating Officer
APOS

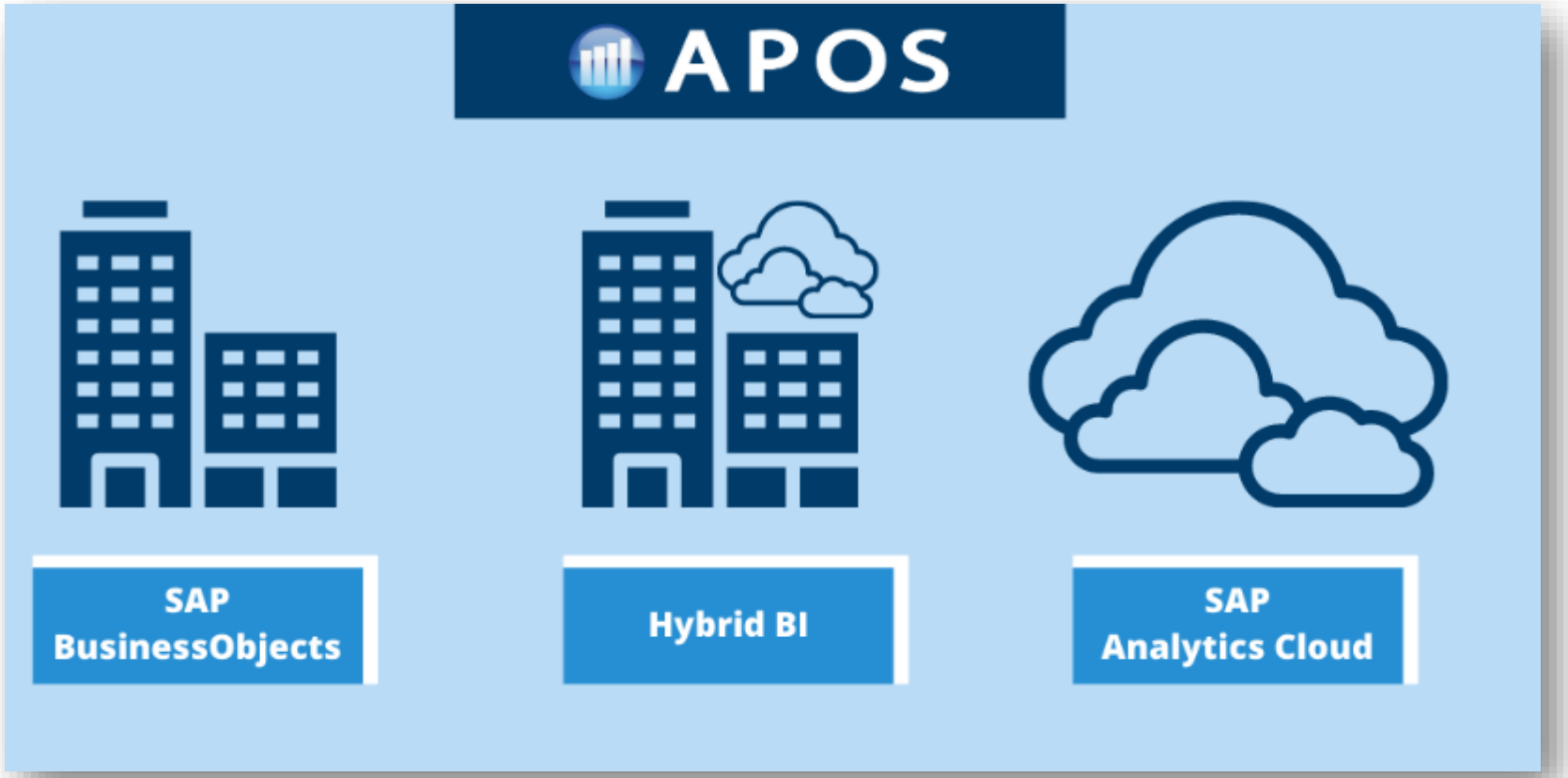
ALAN GOLDING

Solution Consulting Manager
APOS

Who is APOS?

- Formed in 1992
- Enabling BI data connectivity, platform management, administration, migration, governance and compliance
- Simplifying, automating, extending SAP BusinessObjects and SAP Analytics Cloud
- Strategic SDK development and consulting
- Hundreds of customers globally

SAP Partner



EXTEND
SAP ANALYTICS

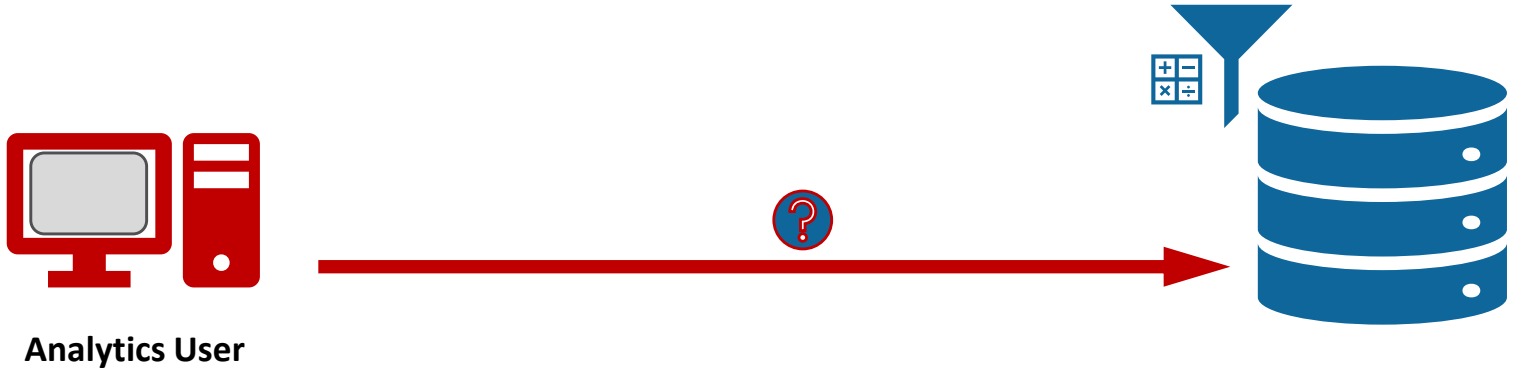
HOUSEKEEPING

You will have access to the slides via email

You will get the recording within 24 hours

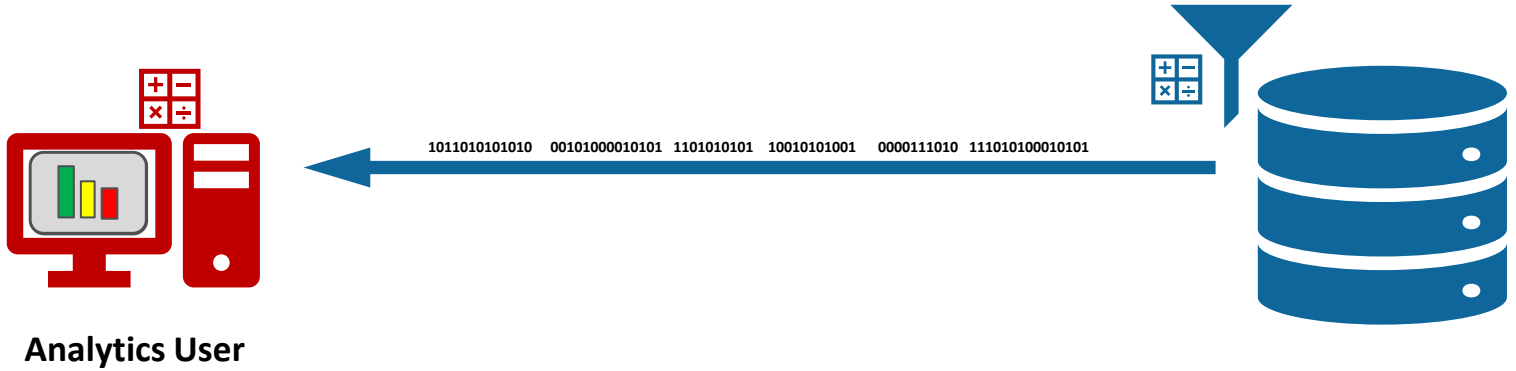
Tell us how we did in the survey

Live Data Analytics

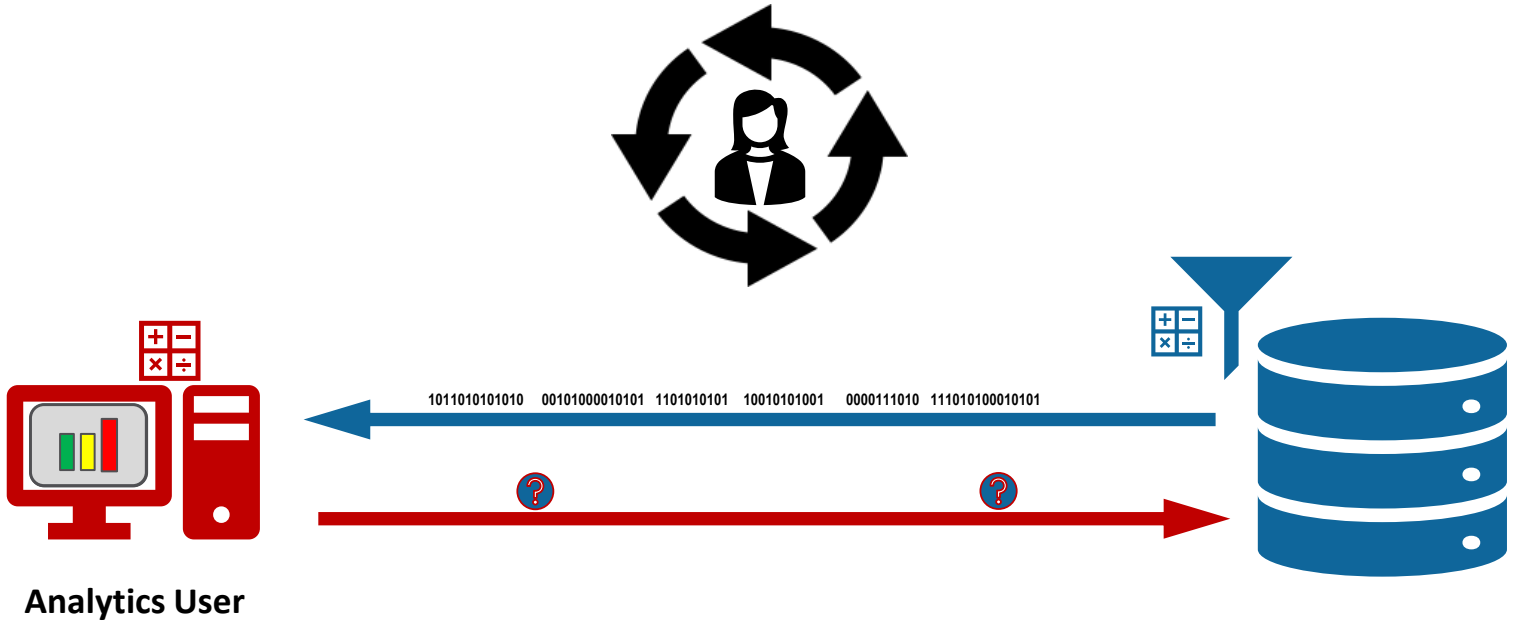


Live Data Analytics

Live Data Analytics



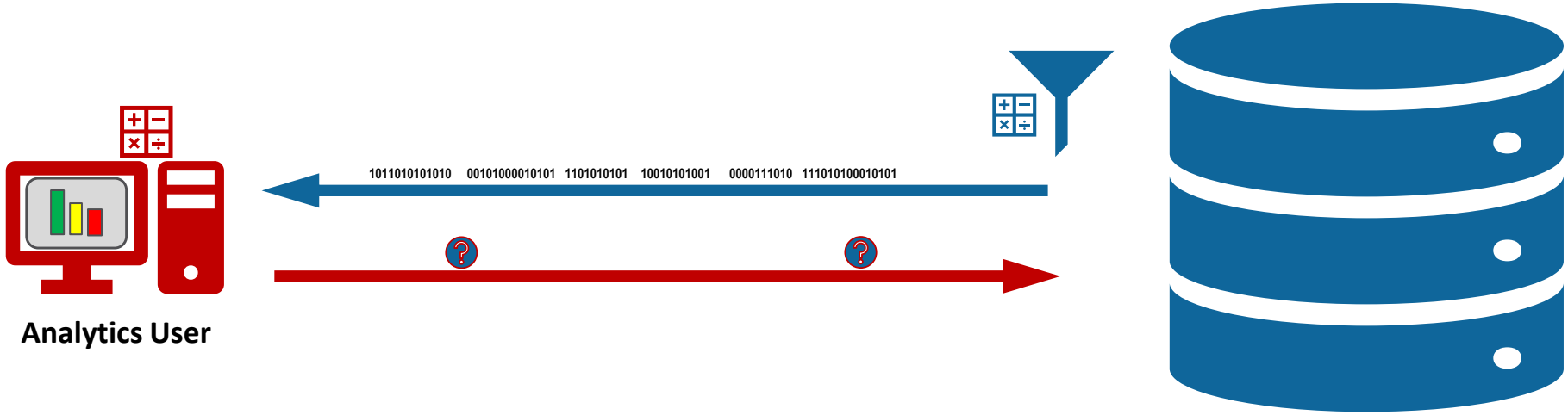
Live Data Analytics



Key Benefits:

- No unnecessary movement of data
- Only focused queries requested, only focused data returned
- Reduced data transaction costs
- Database security controls are retained
- No need to remodel data within analytics solution

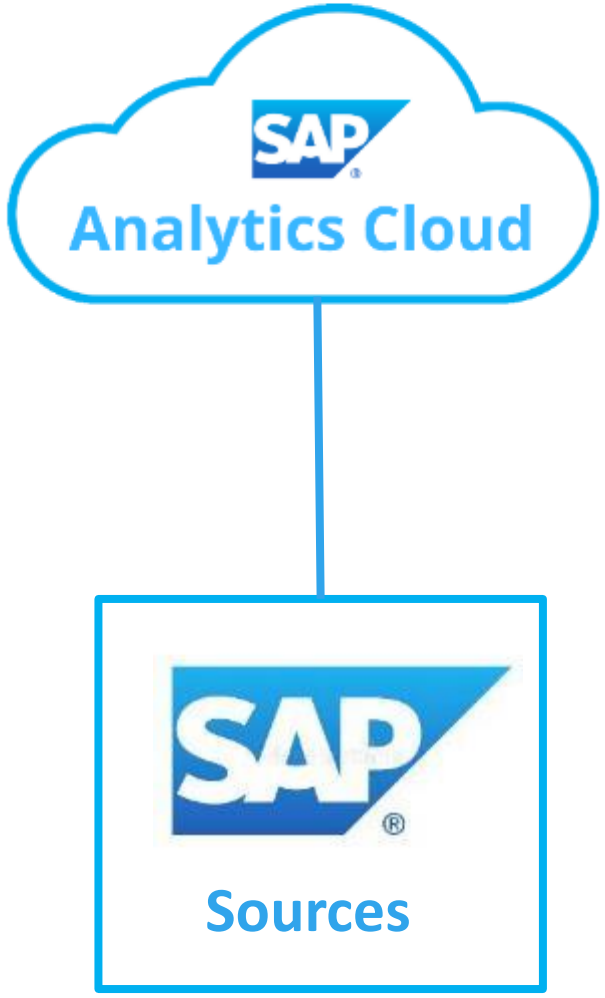
Live Data Analytics – Important Factors



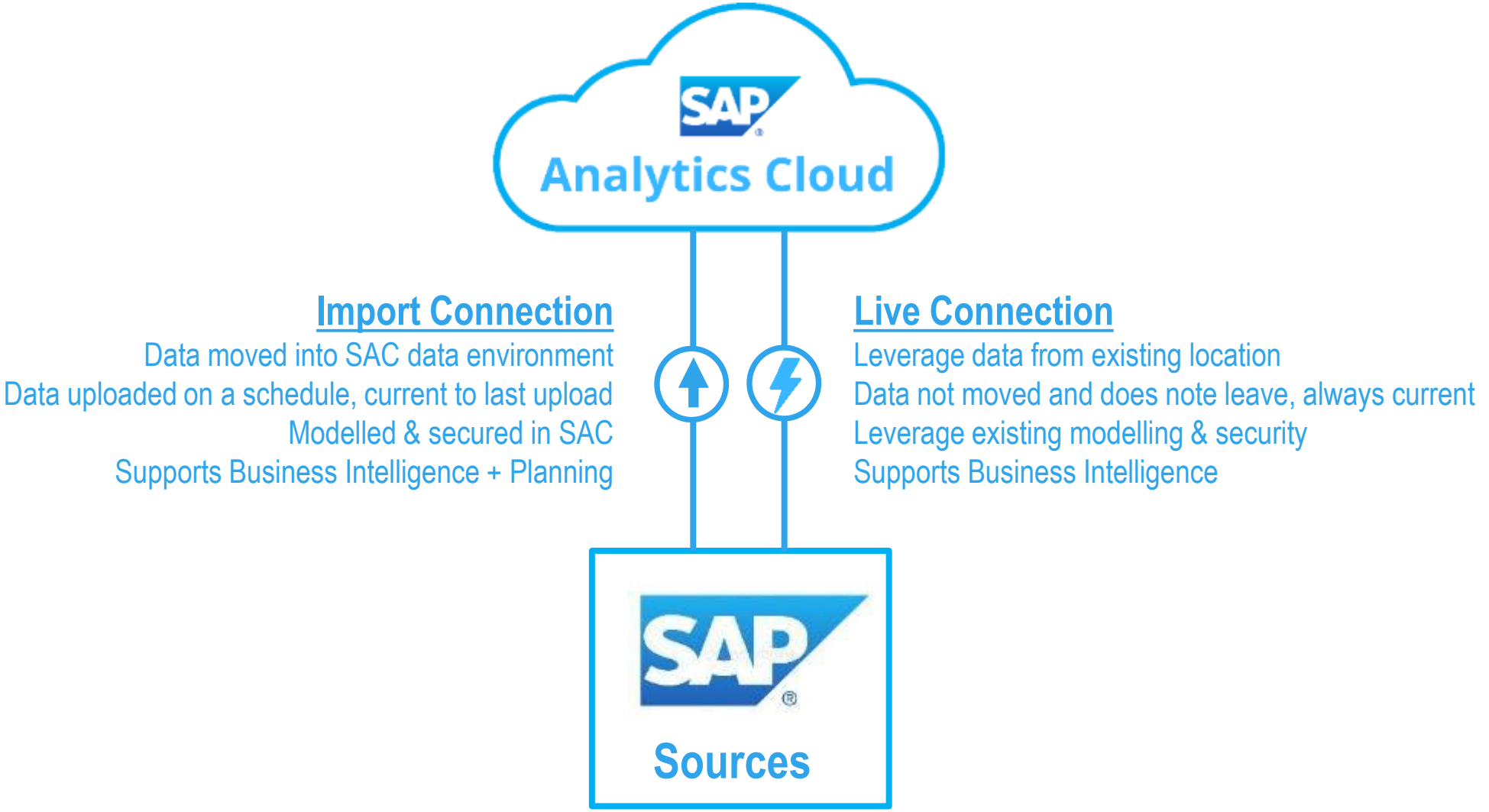
Important Factors:

- Data volumes too large for data download or replication
- Significant changes in data technologies for high-performance
  - Cloud data platforms; In-memory platforms
  - Extremely fast & highly responsive
- Live connectivity now very viable with strong performance
- Live connectivity removes data latency
- Live connectivity can enable unified security

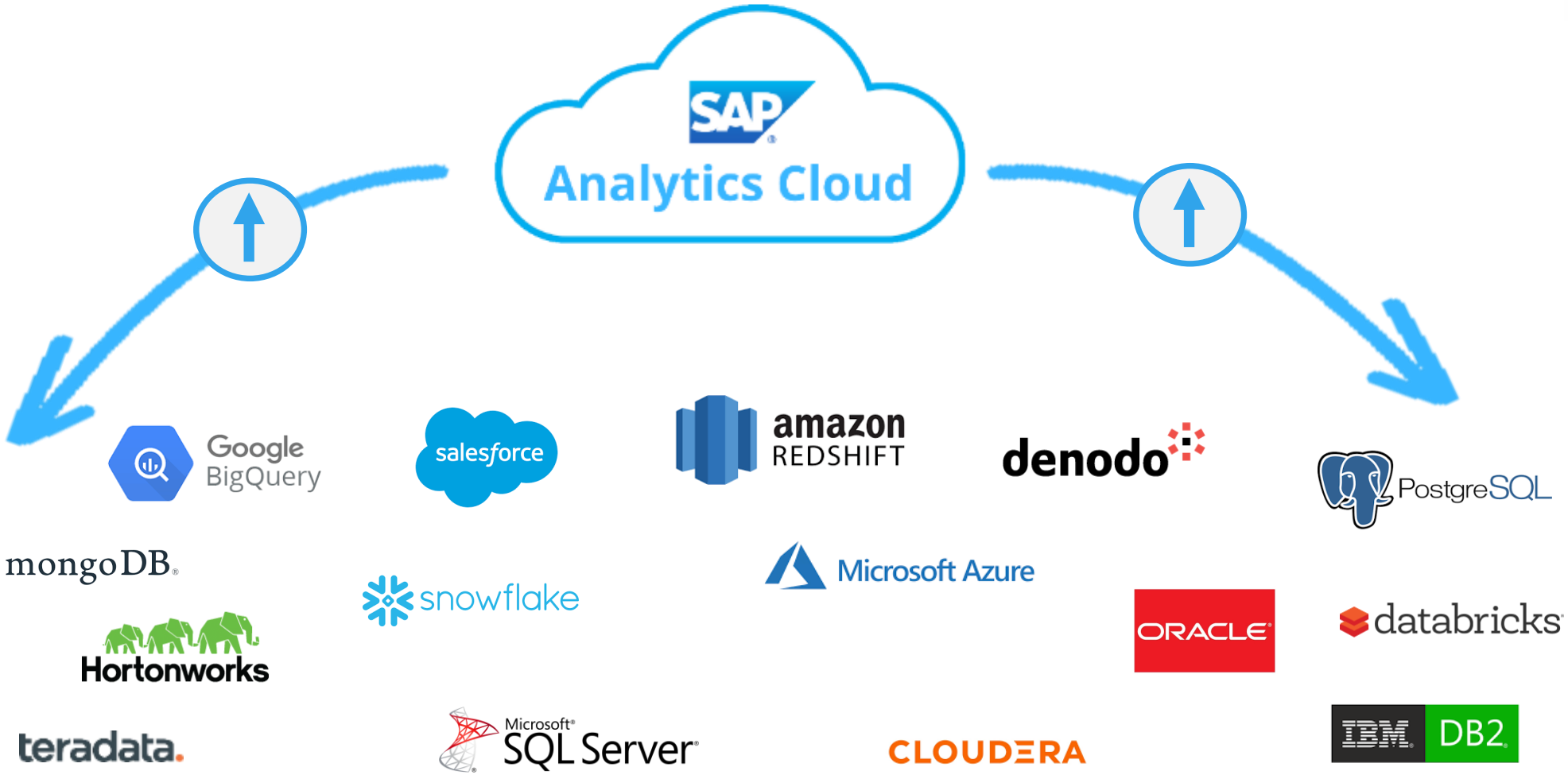
SAC Connectivity



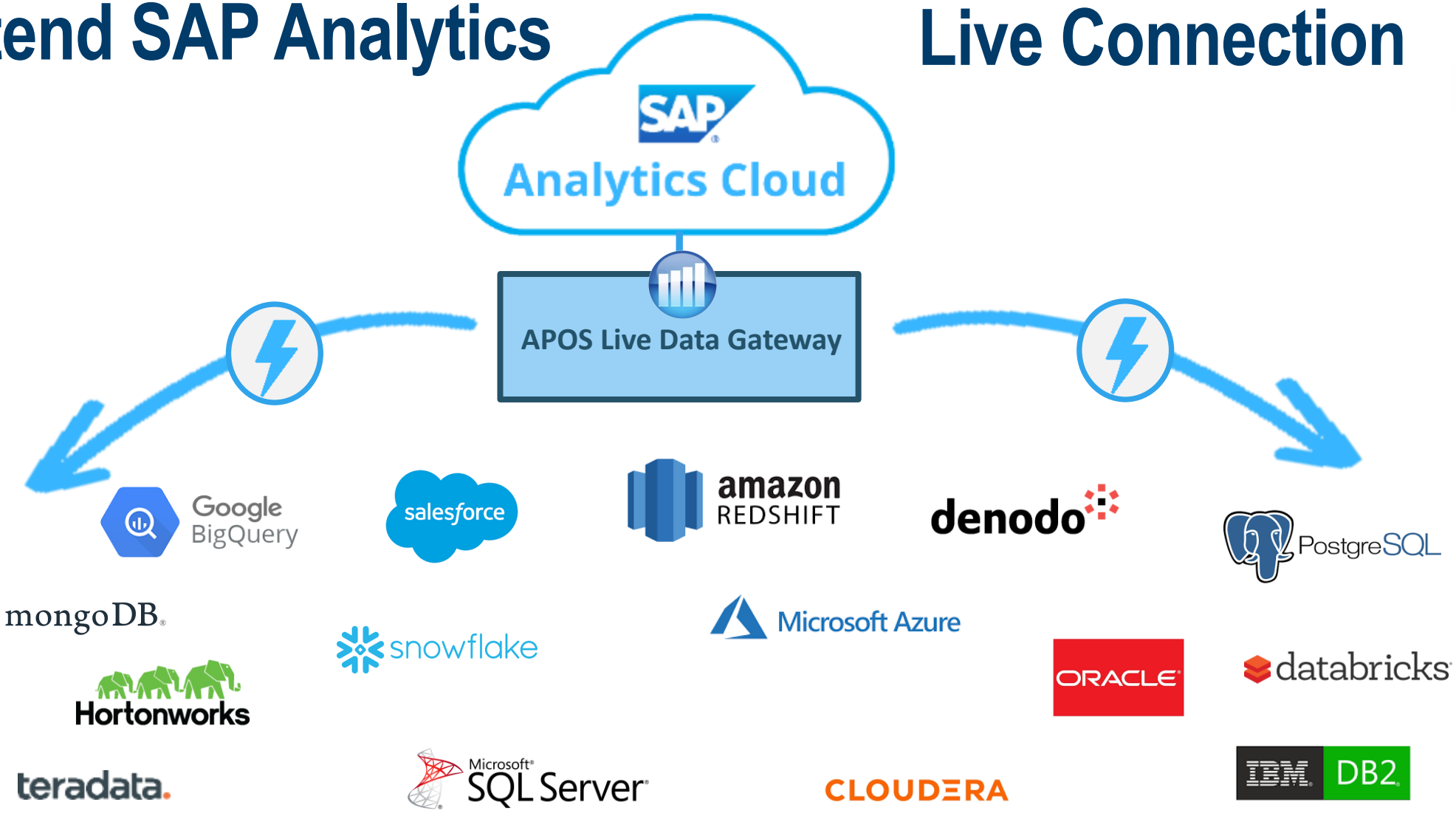
Live & Import Connectivity



SAC Connectivity to Non-SAP Sources - Import



Extend SAP Analytics Live Connection



APOS Live Data Gateway – Unlock Live Data

APOS Live Data Gateway is a middleware platform which provides virtualized data connection and data transformation to enable live data connectivity and expanded data source options for SAP Analytics Cloud, with a primary focus on **non-SAP data sources**.

- Leverage data from its current location
- No movement or importing of data
- Leverage existing data modelling
- Leverage existing security models
- Data is always current
- Data never leaves the firewall
- No added data storage requirements
- Reduce data bandwidth requirements

Available on SAP Store

APOS Live Data Gateway

Core Supported Data Sources

- Amazon Athena
- Amazon Aurora
- Amazon EMR
- Amazon Redshift / Redshift Spectrum
- Amazon S3
- Azure Analysis Services
- Azure Cosmos DB
- Azure Data Lake
- Azure SQL Database
- Azure SQL Data Warehouse
- Cloudera
- Databricks
- DB2
- Denodo
- Google BigQuery
- Google Cloud Platform
- Hortonworks
- Informix
- Microsoft SQL Server
- Microsoft Analysis Services
- Azure Blob
- Mongo DB, Mongo DB Atlas
- MySQL
- Netezza
- Oracle
- Oracle Essbase
- Oracle Exadata
- Postgres
- Presto
- Salesforce
- Snowflake
- Sybase IQ, Sybase SQL Anywhere
- Teradata

- SAP BusinessObjects Universes (UNV, UNX)
- SAP BW - version 7.3 and higher

- JDBC connectivity

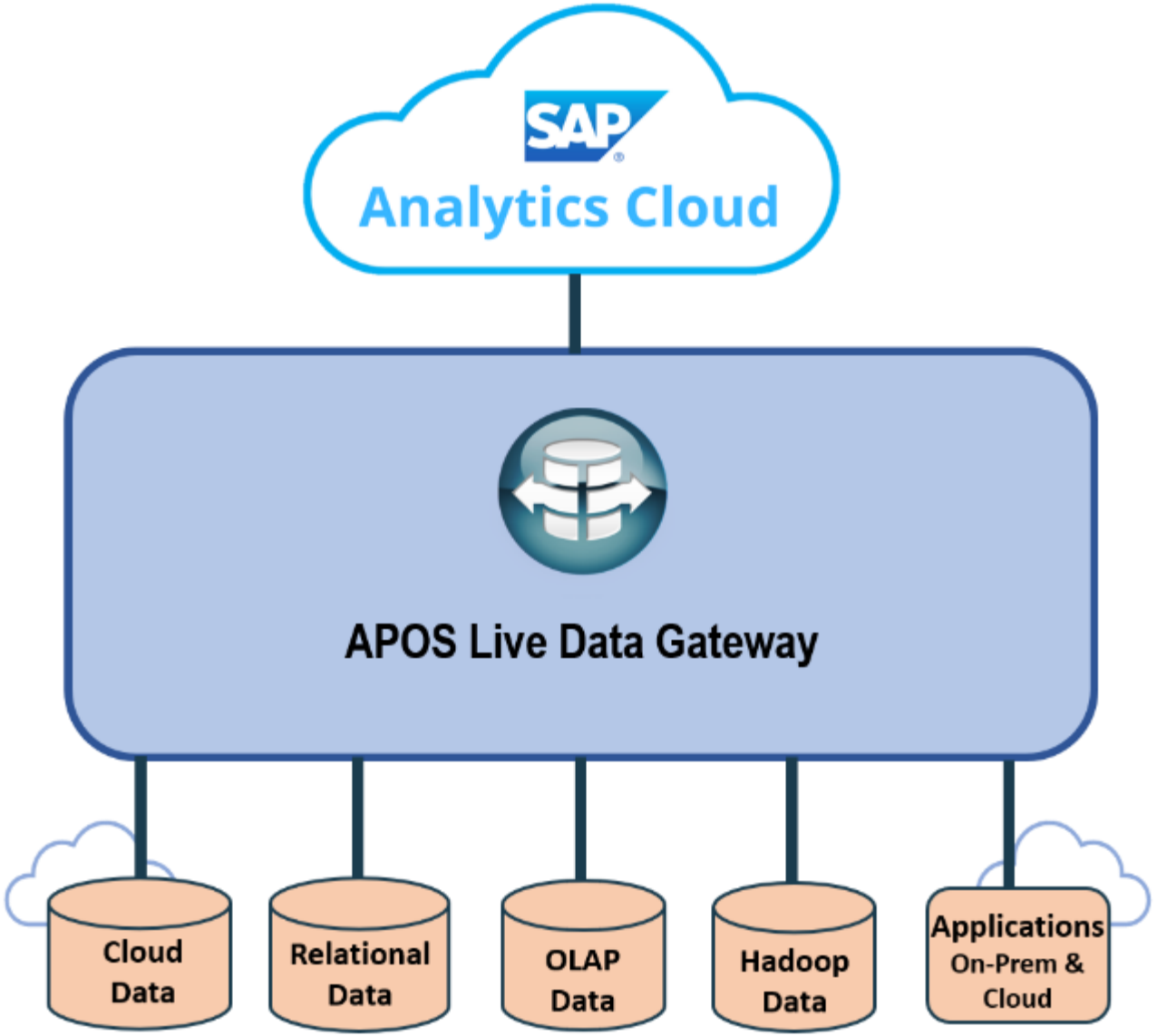
Extended Data Sources: 100+ Additional data source and application connection options

https://www.apos.com/content/apos-live-data-gateway-data-sources-supported

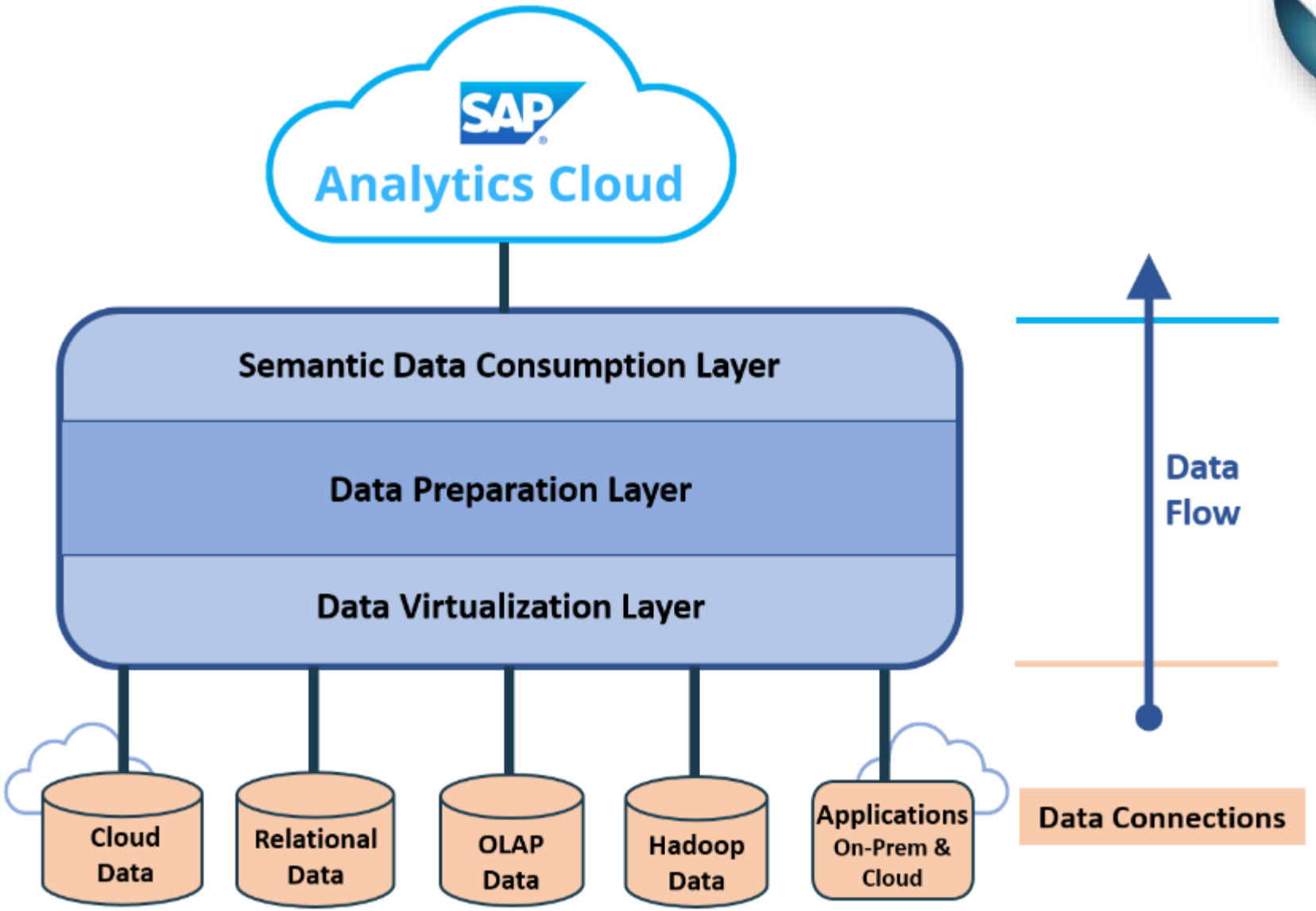
Available on SAP Store

Alan Golding
Solution Consulting Manager
APOS

APOS Live Data Gateway



APOS Live Data Gateway

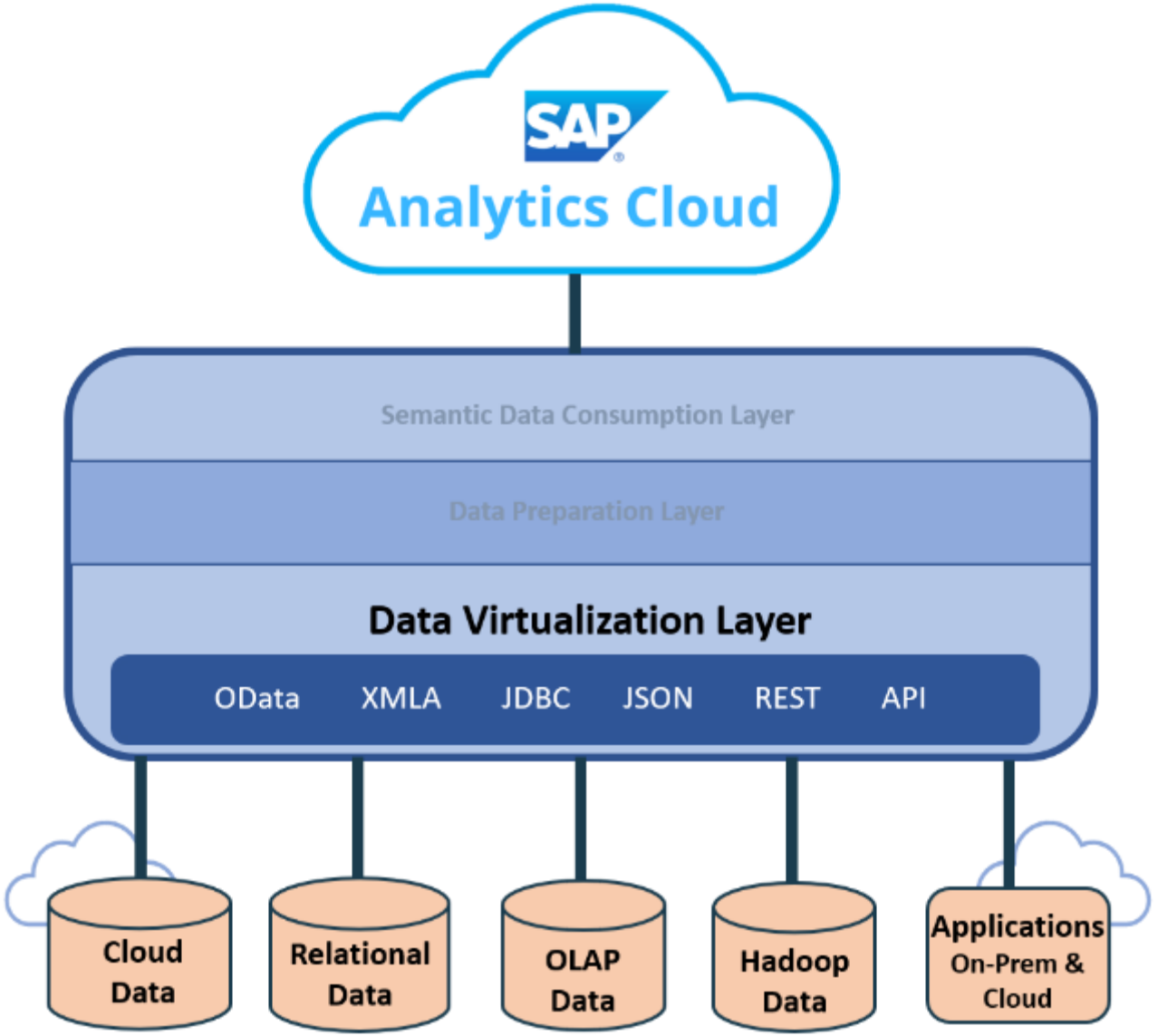


Live Data Gateway

Data Virtualization Layer

- Server level connectivity
  - Single point of connection to data sources
- Connect to wide range of sources + unique sources
- Data security
  - Respecting database security
  - Integrated SSO

Data Virtualization Layer



Live Data Gateway

Data Preparation Layer

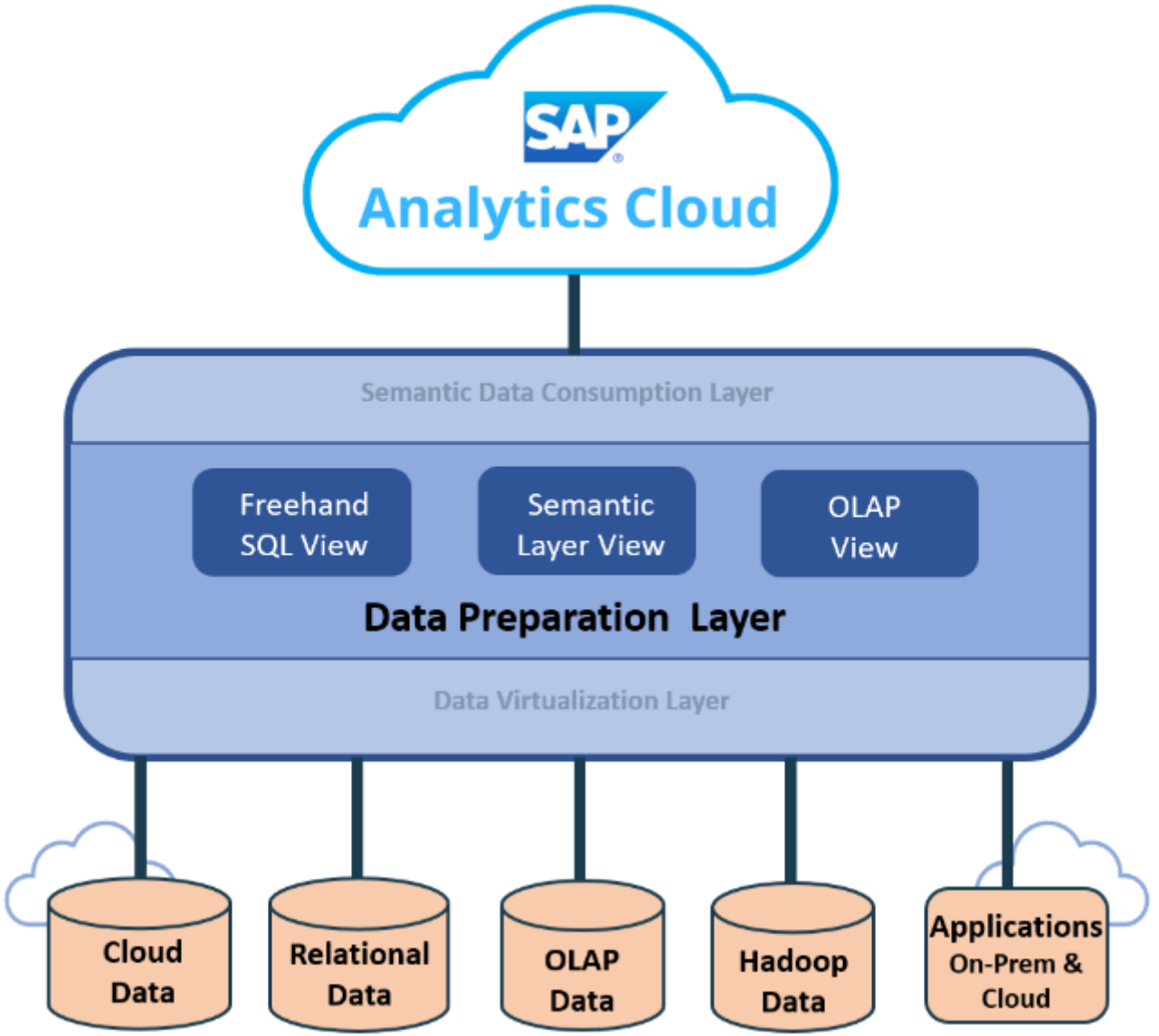
- Business layer / semantic layer
- Simplify data access for report builders
  - Self-service
- Control and govern access to data

Data Preparation Layer

Data Preparation Layer

Key Functions

- Define Measures and Dimensions
- Define what data fields are exposed
- Manage table links and joins
- Set meaningful field names

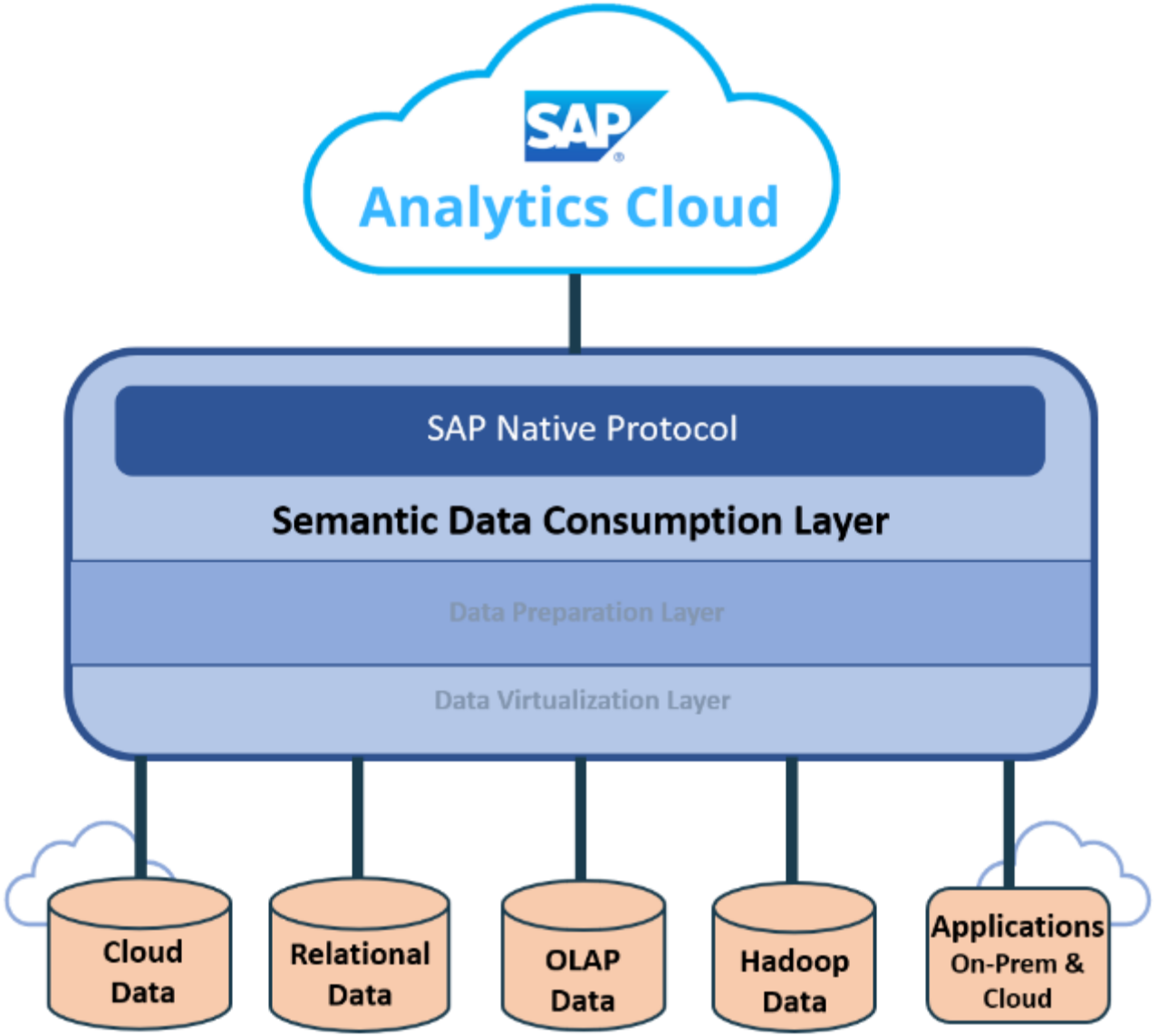


Live Data Gateway

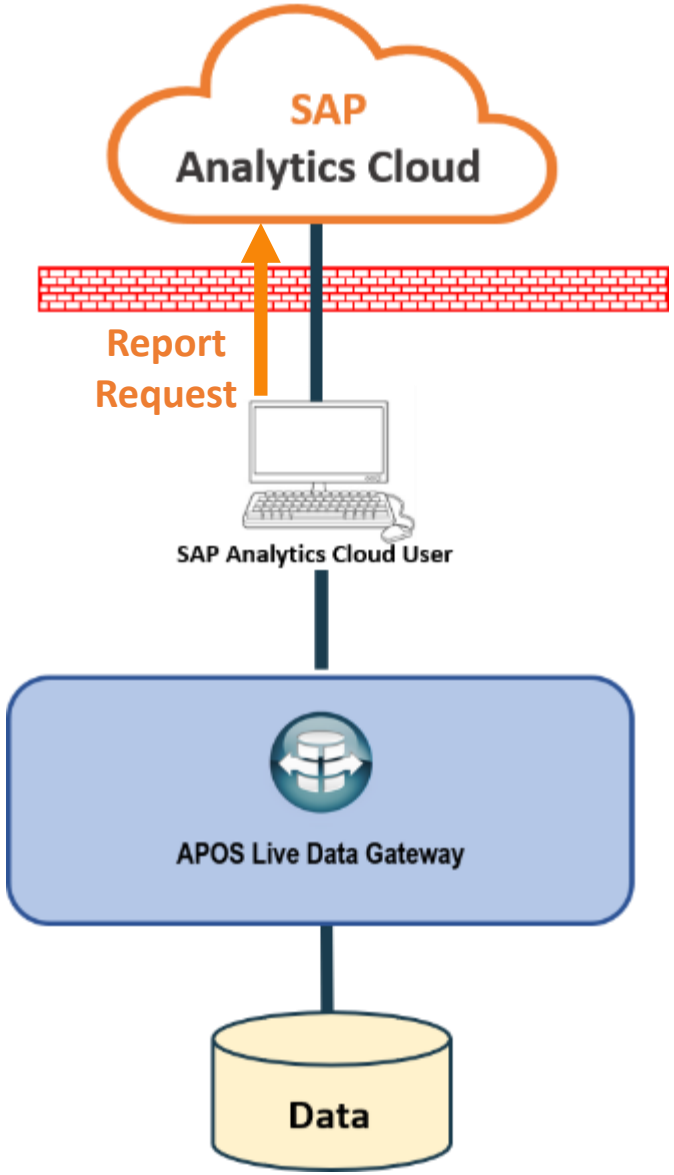
Data Consumption Layer

- Serve data to analytics consumer
  - Make needed translations for SAC consumption
  - Unified consumption layer for other consumers
- Secure communications

Data Consumption Layer



Data Consumption Flow



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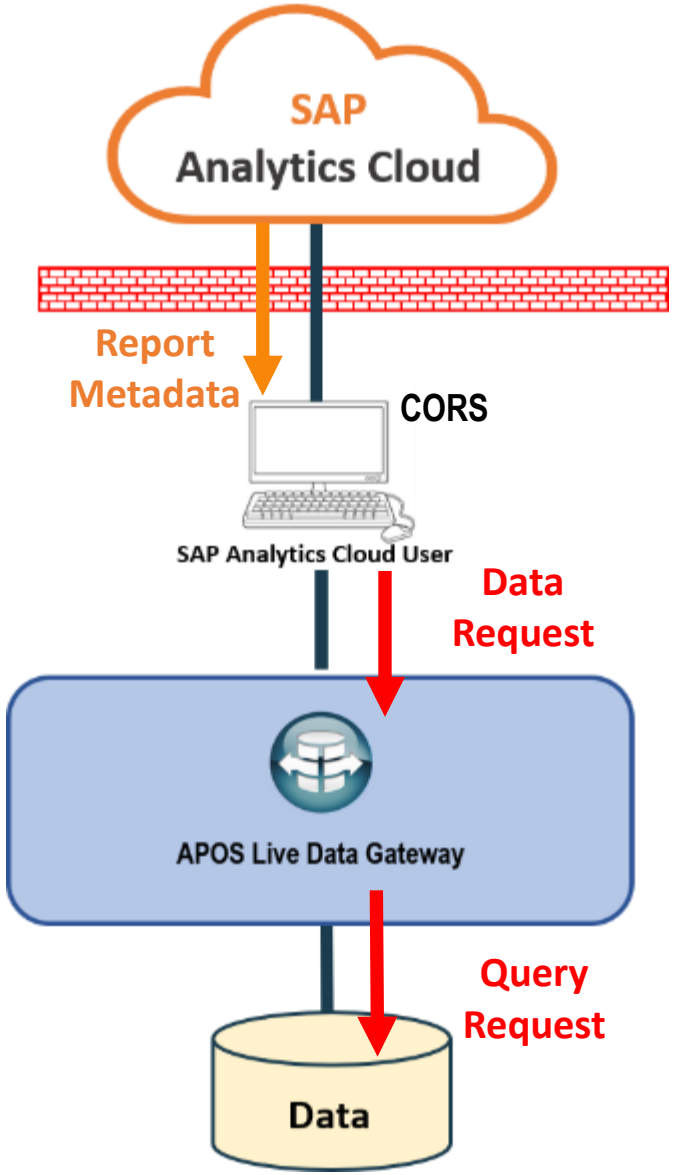

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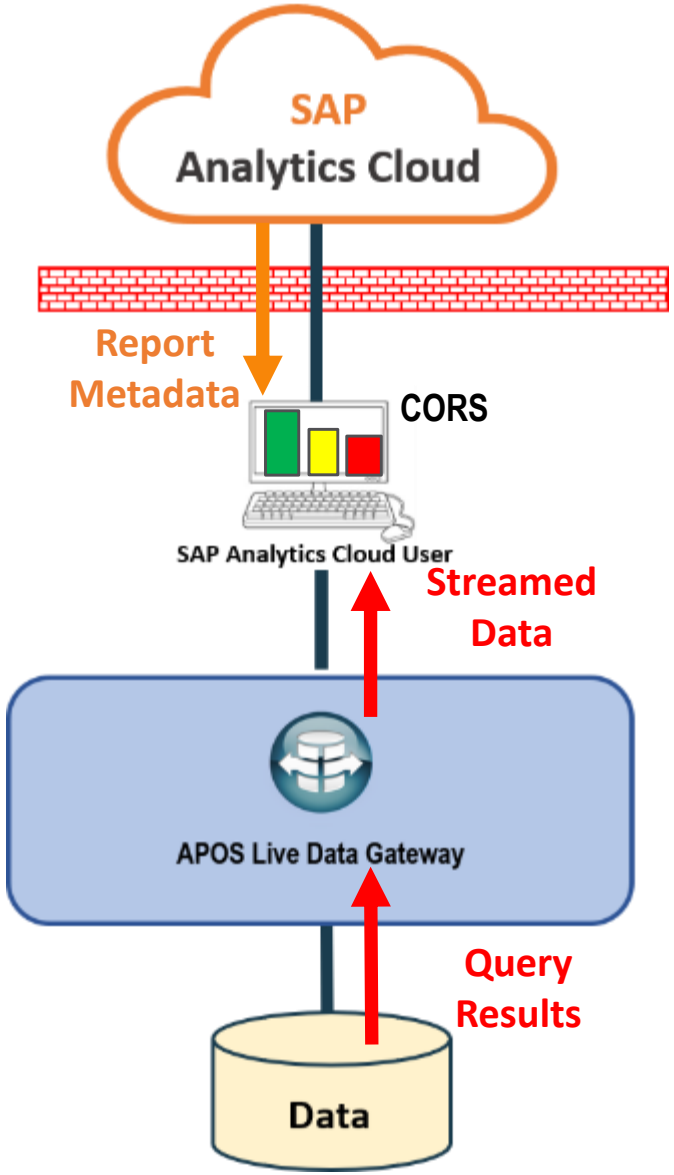
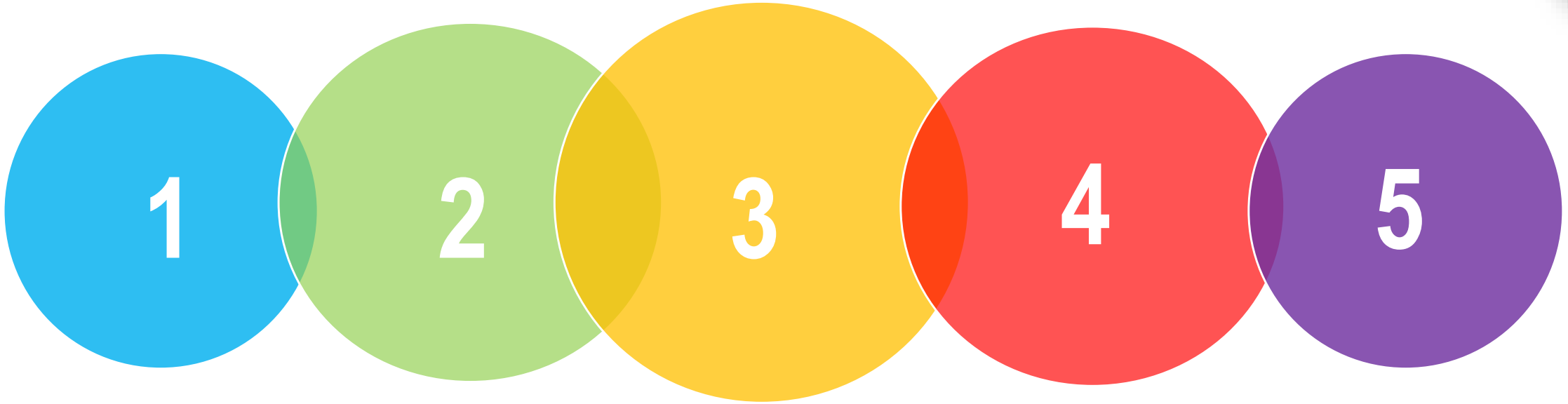


DEMO

5 Simple Steps to Live Connectivity



1. Create connection to Data Source
2. Create view in Data Preparation Layer
3. Create connection
4. Create Model / Data Set
5. Create Report

Customer Success

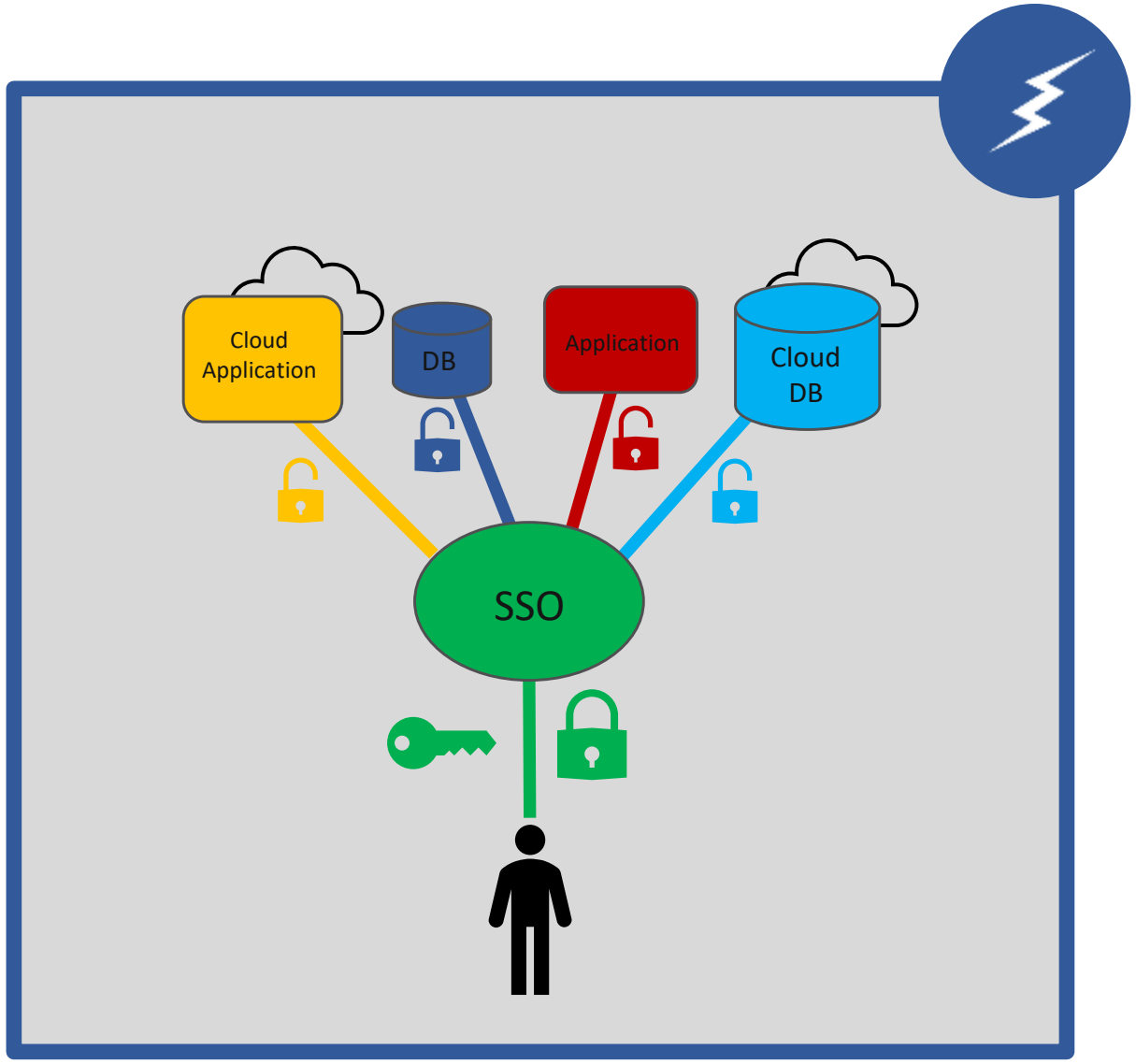
Top-ranked global reinsurance organization utilizes Live Data Gateway to access Microsoft Analysis Services data and PostgreSQL data assets. Deployed as part of a finance transformation initiative, and complementing their S/4HANA system analytics.

Large equipment manufacturer utilizes Live Data Gateway to enable reporting via live connectivity to Salesforce data and Google Analytics data.

European-based mining corporation utilizes Live Data Gateway for live connectivity to their AWS Redshift data assets.

International soft drink manufacturer utilizes Live Data Gateway to leverage data from their Snowflake deployment, alongside their SAP BW instance.

APOS Live Data Gateway – Solution Update



Expanded Functionality:

Single Sign On

- Unified security authentication
- Integrated to enforce data base security
- Simplified User experience

- Various SSO options supported
- SSO Technologies we work with:

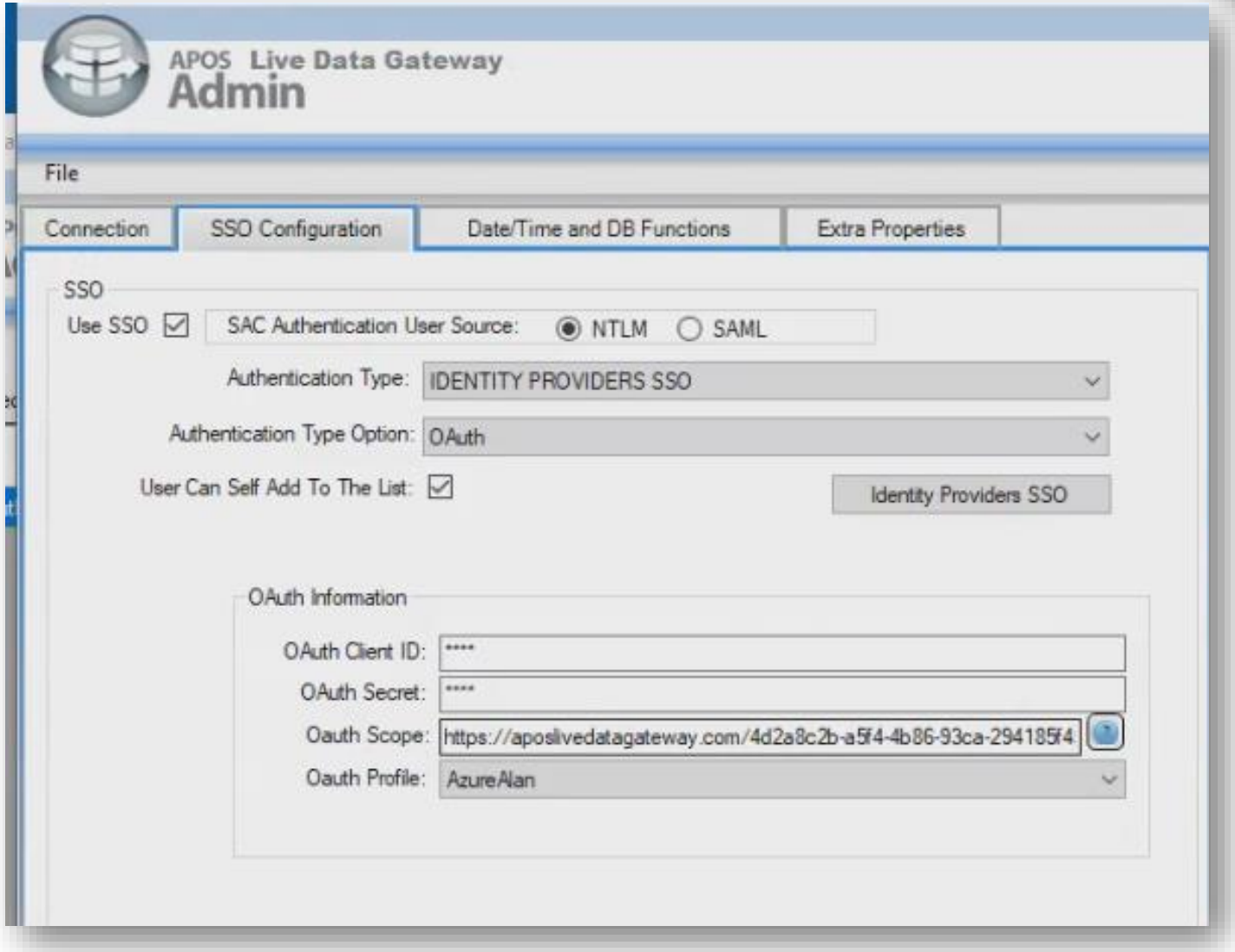
- SAML
- Azure AD
- OKTA
- Google Cloud IDP
- OAuth
- Kerberos with WinAD
- Keypair Authentication
- User Impersonation
- Pre-Defined Cached User

APOS Live Data Gateway – Solution Update

Expanded Functionality: **Single Sign On**

Example

- End to End SSO with SAC and Snowflake
- Integrating SAML with oAuth and Azure AD



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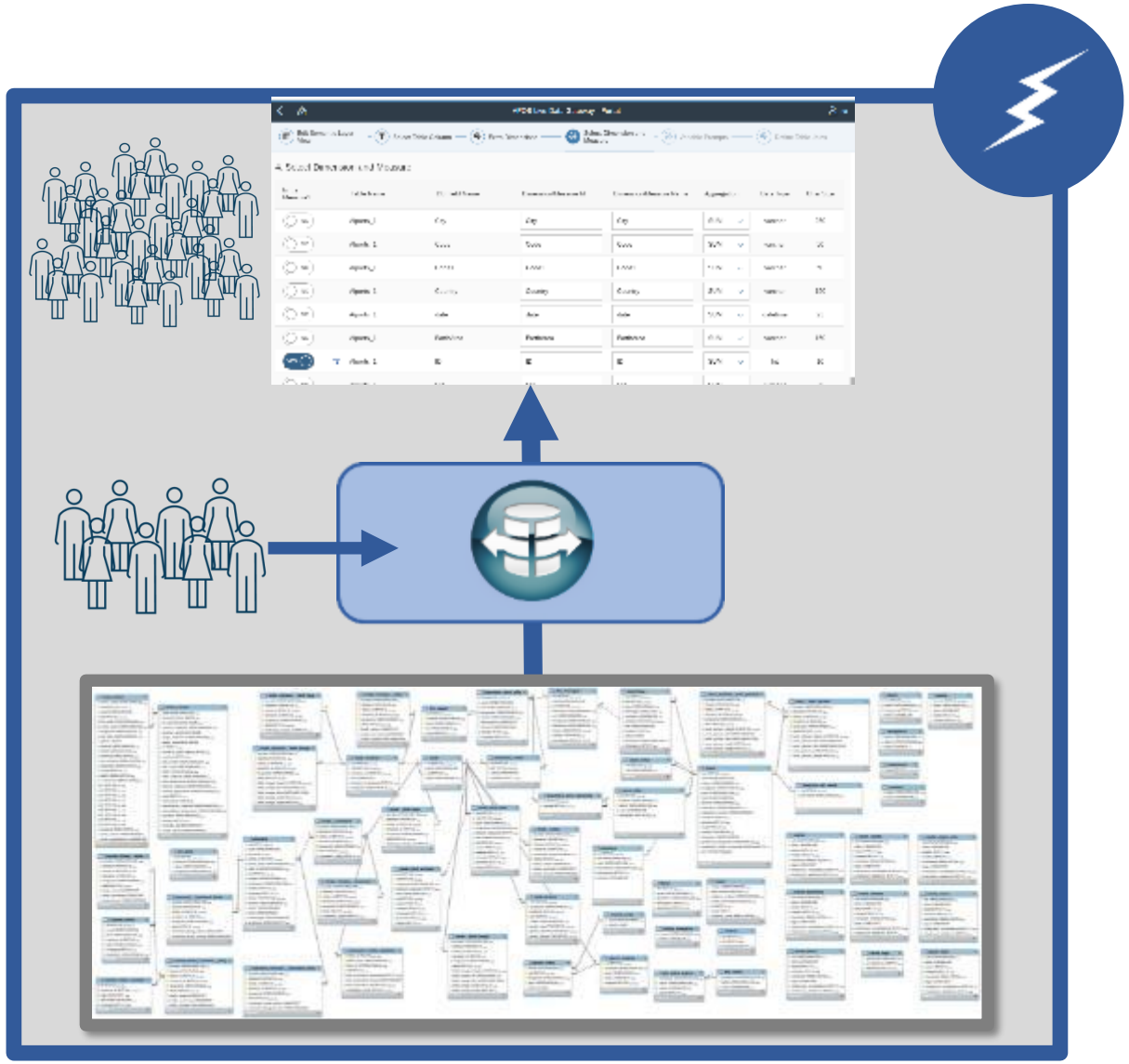


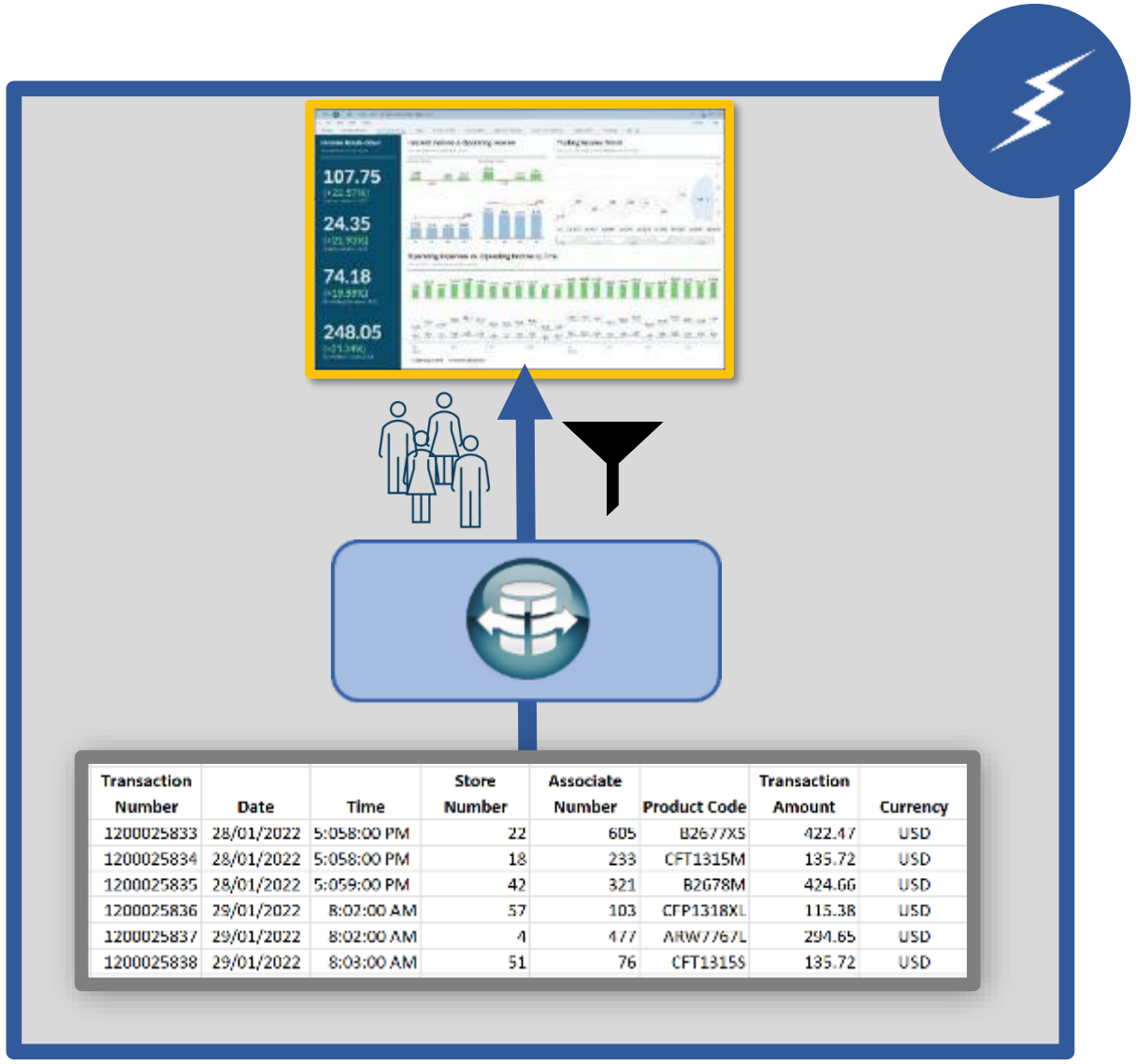
New Functionality:

Self-Service Data Modelling

- Self Service creation of data modelling assets
- Expand from self-service analytics to self-service modelling
- Strengthen independence of Analytics team
- Reduce IT dependence

- Web-based modelling interface
- Controlled user access to modelling
- SSO enabled
- Multiple options for building views

APOS Live Data Gateway – Solution Update



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1200025834	28/01/2022	5:058:00 PM	18	233	CFT1315M	135.72	USD
1200025835	28/01/2022	5:059:00 PM	42	321	B2G78M	424.66	USD
1200025836	29/01/2022	8:02:00 AM	57	103	CFP1318XL	115.38	USD
1200025837	29/01/2022	8:02:00 AM	4	477	ARW776/L	294.65	USD
1200025838	29/01/2022	8:03:00 AM	51	76	CFT1315S	135.72	USD

New Functionality:

Variables Support

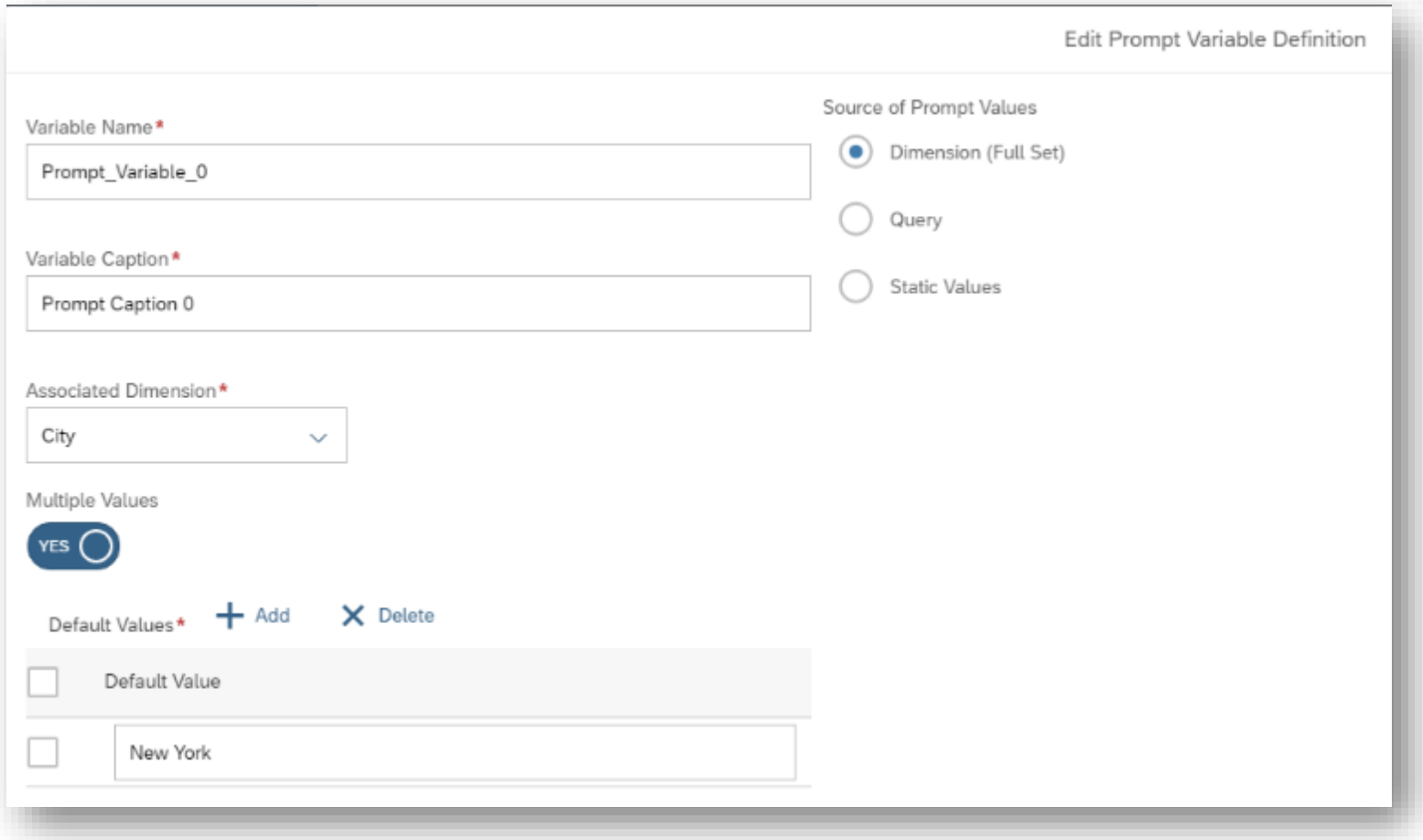
- Powerful data filtering
- Simplified User experience
- Improved analysis

- Create Custom Variables
- Supported in both Client Tool and Web UI
- Utilize formulas
- Utilize full set of values or custom set of values

APOS Live Data Gateway – Solution Update

New Functionality: **Variables Support**

- Choose dimension
- Allow Multiple Values
- Set Defaults
- Utilize formulas
- Set full set of values, or query, or static values



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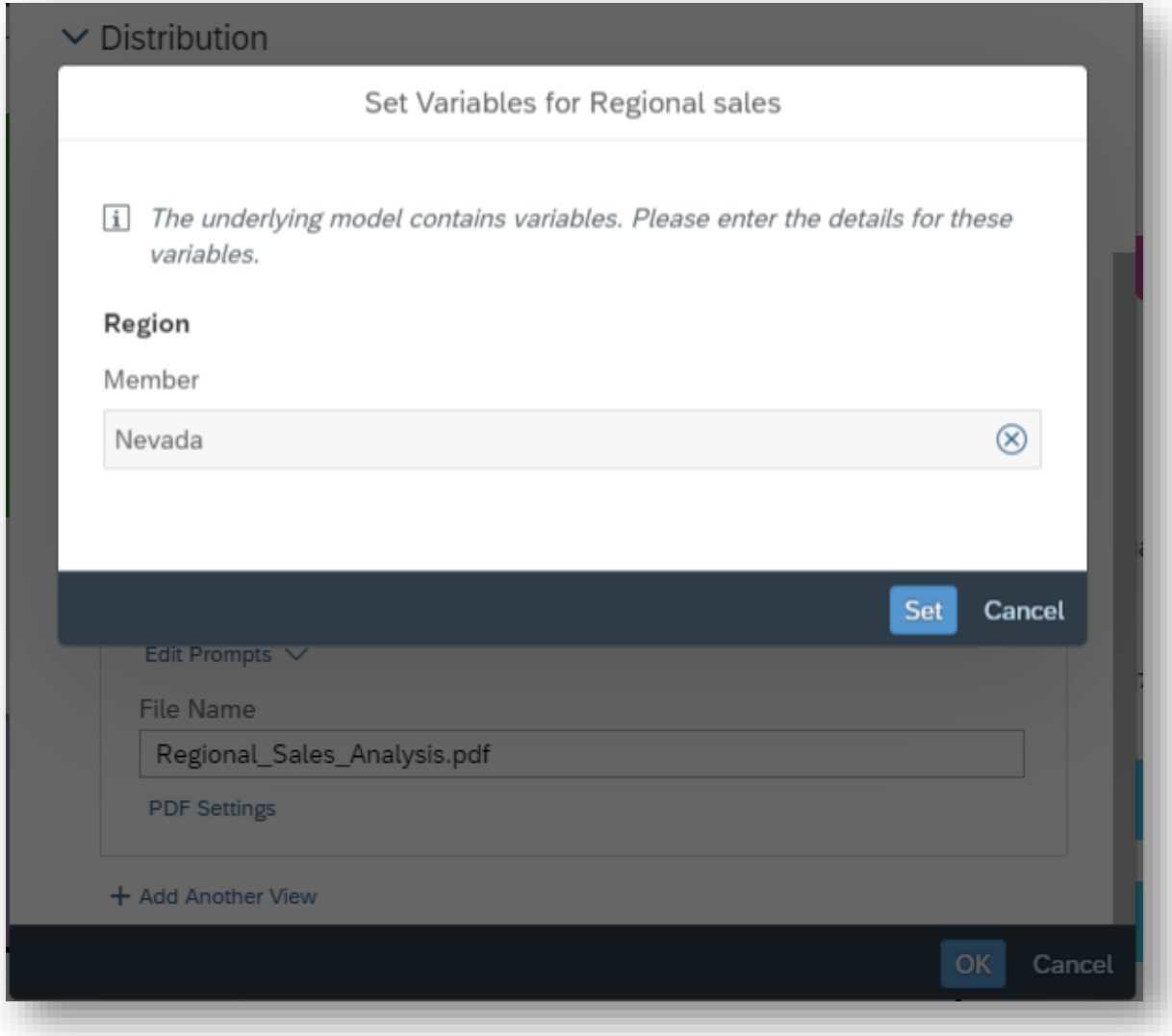

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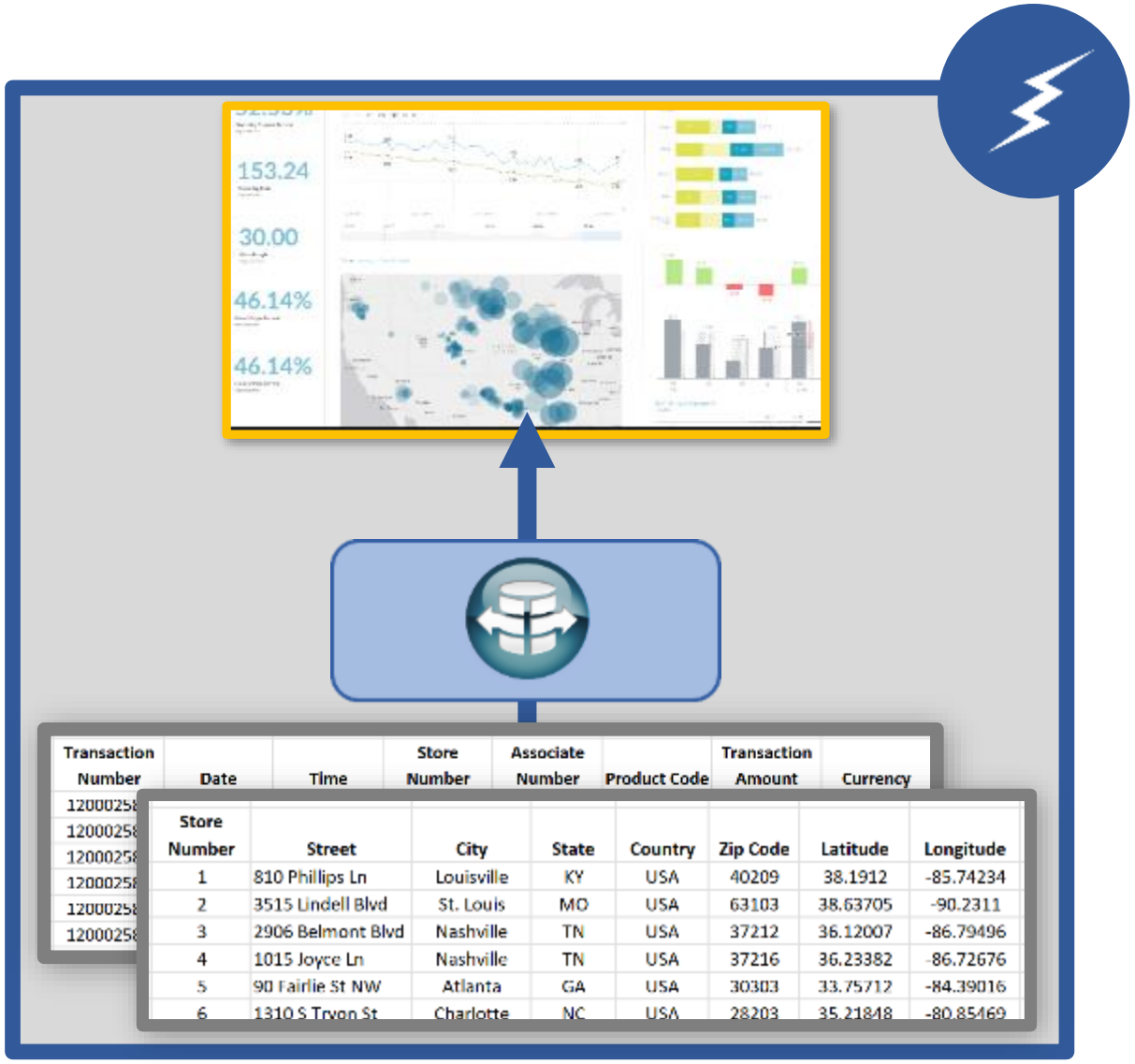


New Functionality:

Geospatial Data Support

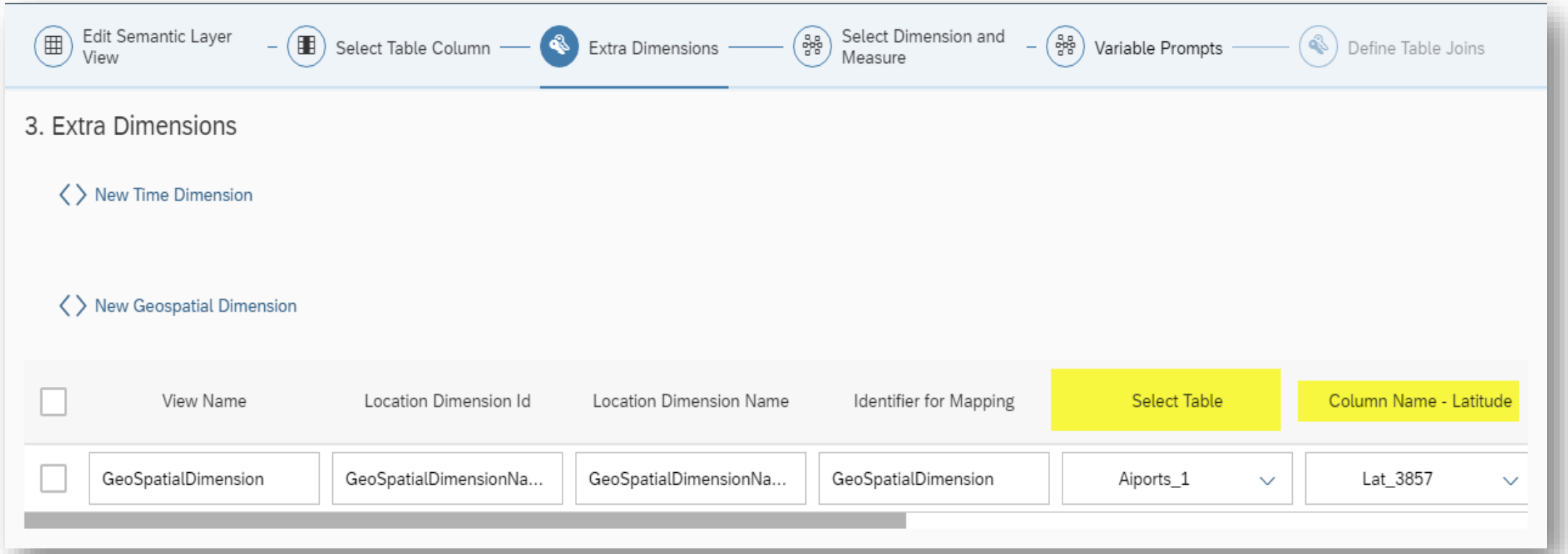
- Supply data for representation on a map
- Highly visual analytics
- Improved analysis

- Geo Spatial Dimensions Support
- Multiple Projections supported
- Multiple Datasource Types Supported
- Configure Multiple Geo Dimensions

APOS Live Data Gateway – Solution Update

New Functionality: **Geospatial Data Support**

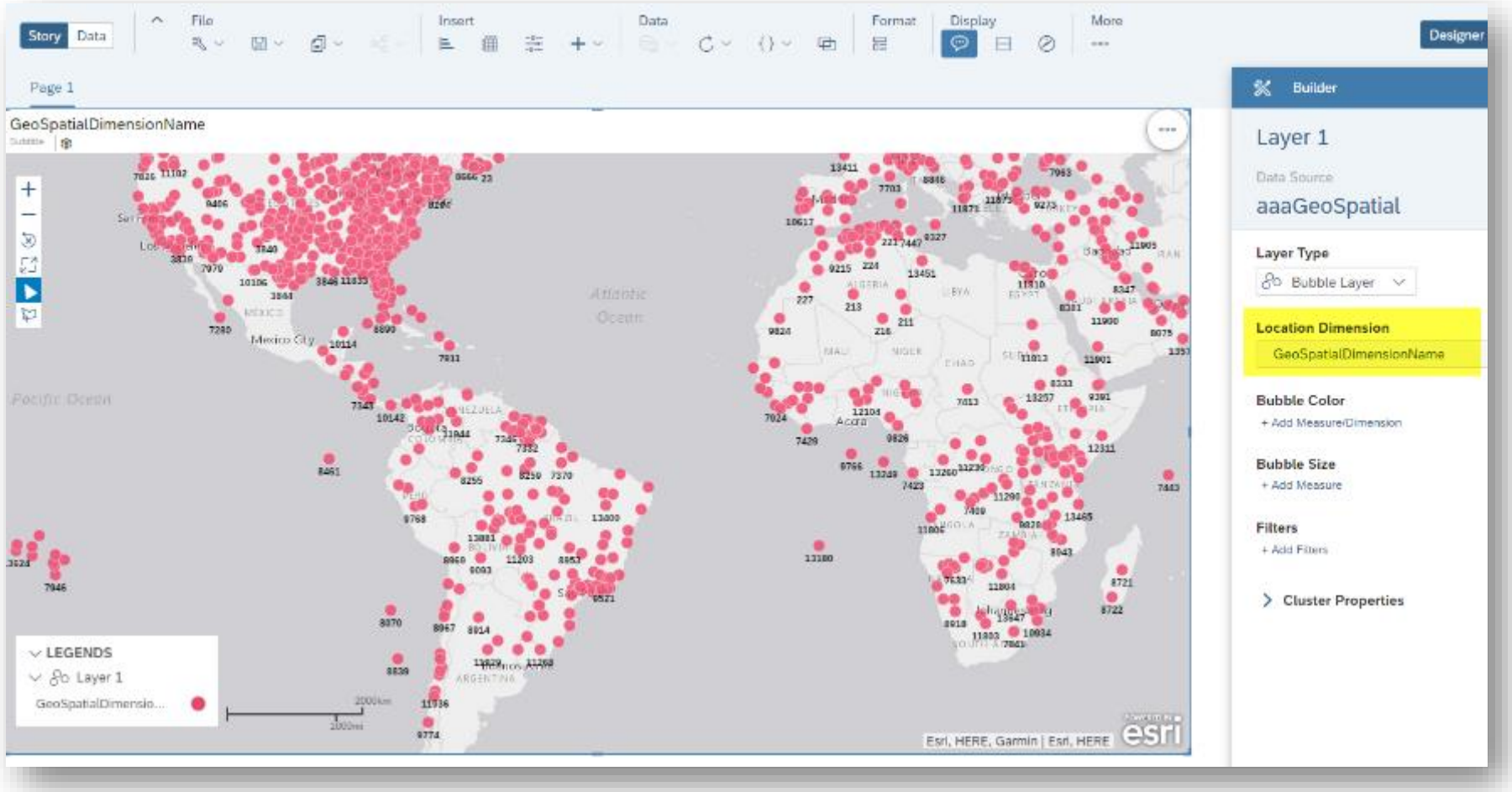
- Create GeoSpatial dimensions from WebUI with ease



APOS Live Data Gateway – Solution Update

New Functionality: **Geospatial Data Support**

- Create Geo Maps on your stories in SAC



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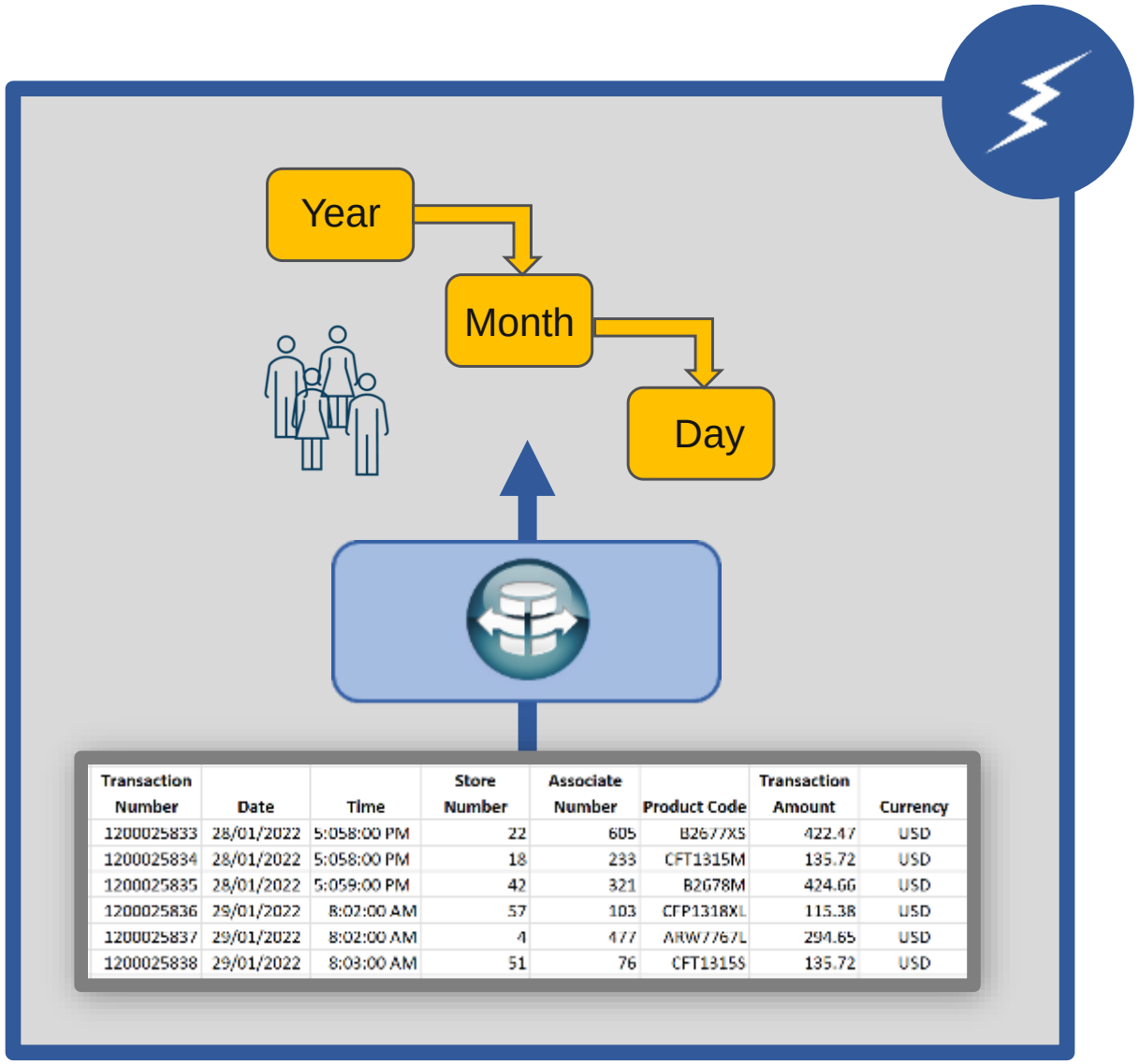

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New Functionality:

Date Dimension Support

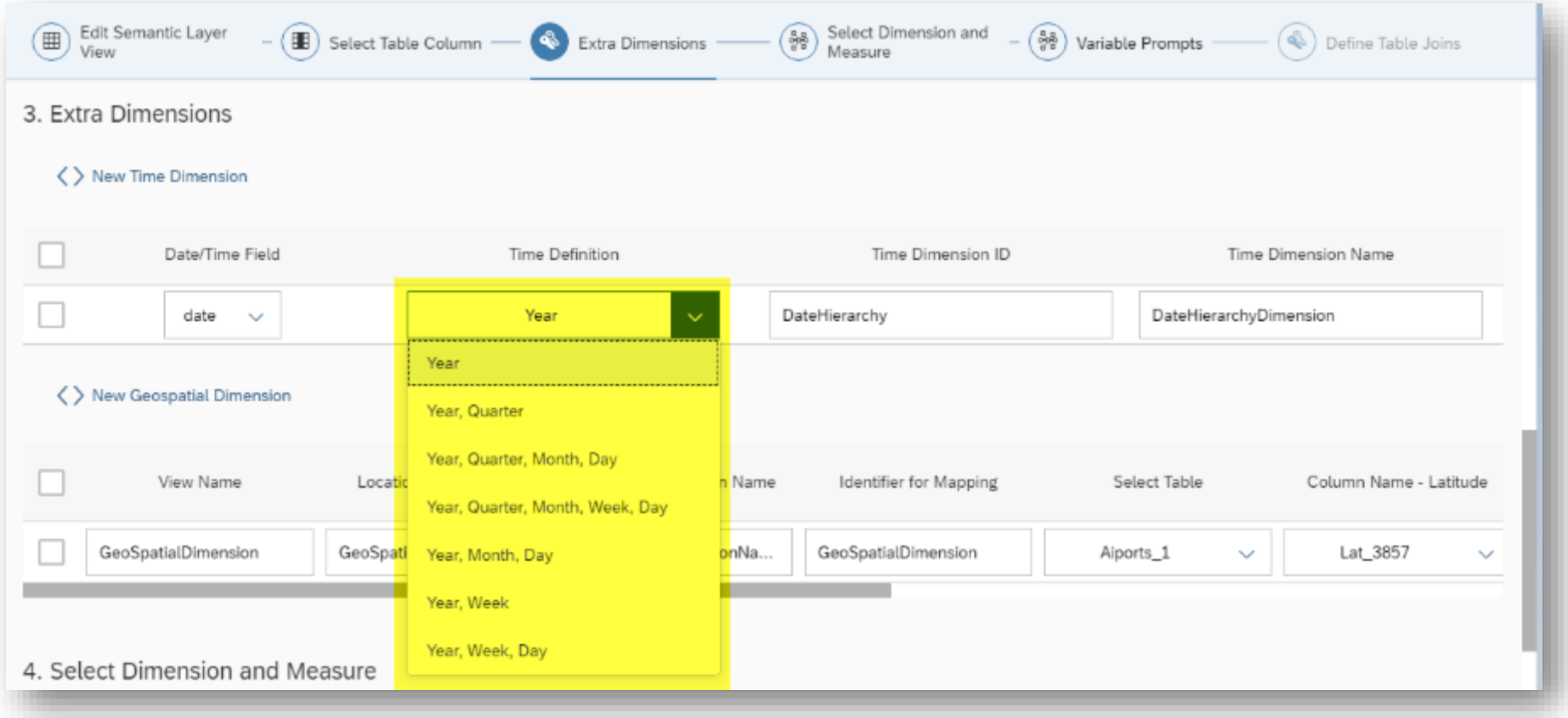
- Create date hierarchies on non-hierarchical data
- Simplified user navigation and experience
- Improved analysis

- Custom Date Dimensions Support
- Hierarchical Date Dimension Support
  - Drill Down
  - Time Series Charts
  - Variance Charts
- Hierarchies available as individual dimensions

APOS Live Data Gateway – Solution Update

New Functionality: **Date Dimension Support**

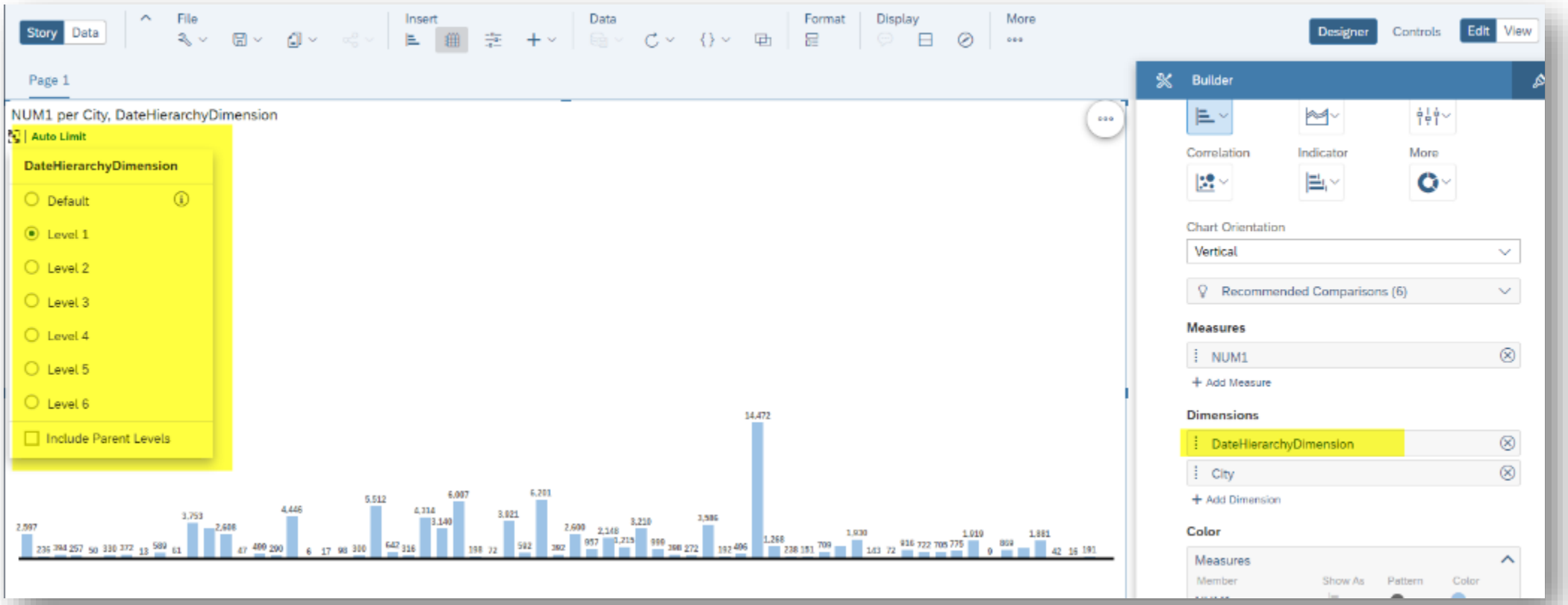
- Select custom level of hierarchy needed
- Each level available as individual dimension also



APOS Live Data Gateway – Solution Update

New Functionality: **Date Dimension Support**

- Drill Down
- Time Series Charts
- Variance Charts



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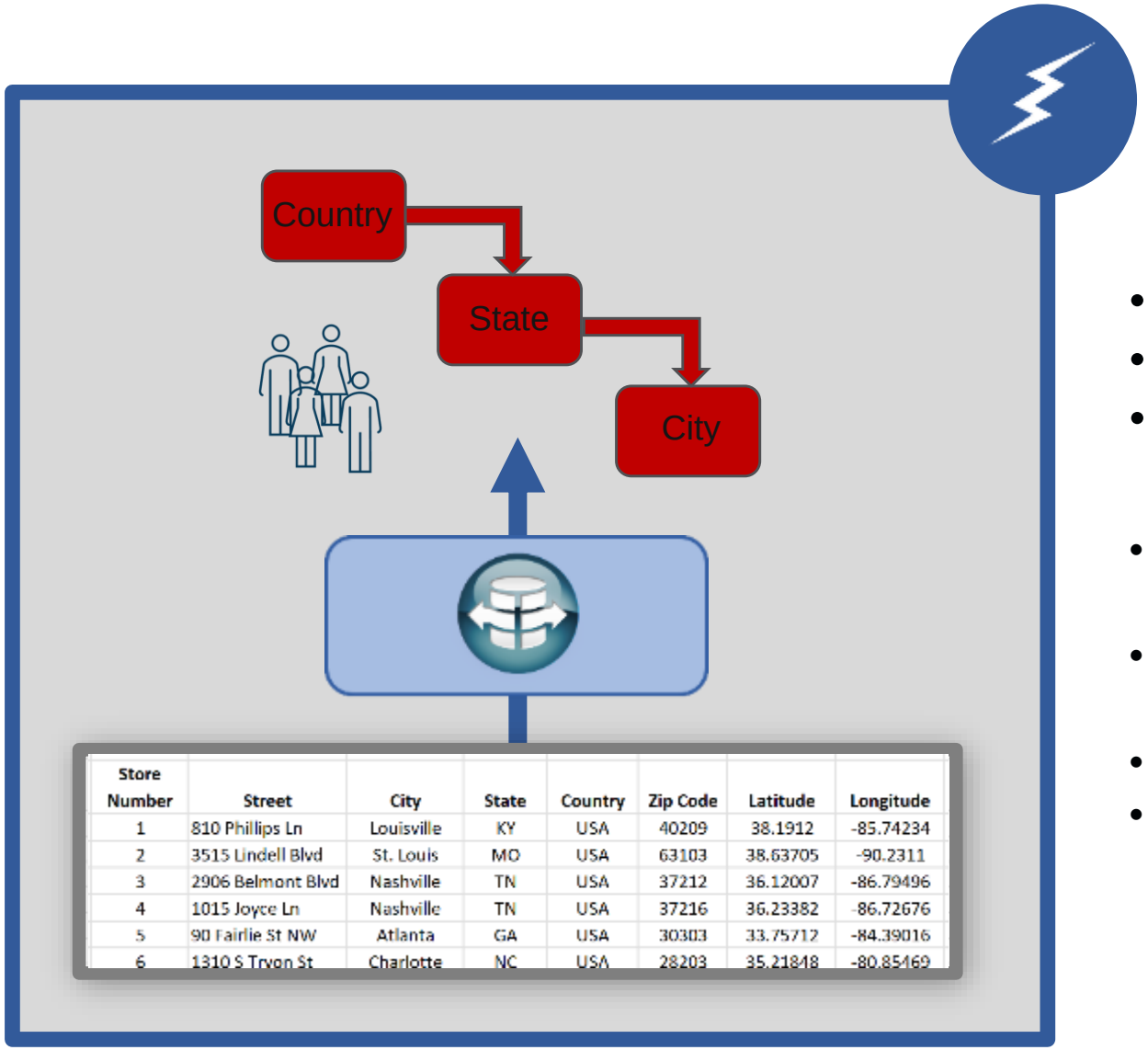

Store Number	Street	City	State	Country	Zip Code	Latitude	Longitude
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2	3515 Lindell Blvd	St. Louis	MO	USA	63103	38.63705	-90.2311
3	2906 Belmont Blvd	Nashville	TN	USA	37212	36.12007	-86.79496
4	1015 Joyce Ln	Nashville	TN	USA	37216	36.23382	-86.72676
5	90 Fairlie St NW	Atlanta	GA	USA	30303	33.75712	-84.39016
6	1310 S Tryon St	Charlotte	NC	USA	28203	35.21848	-80.85469

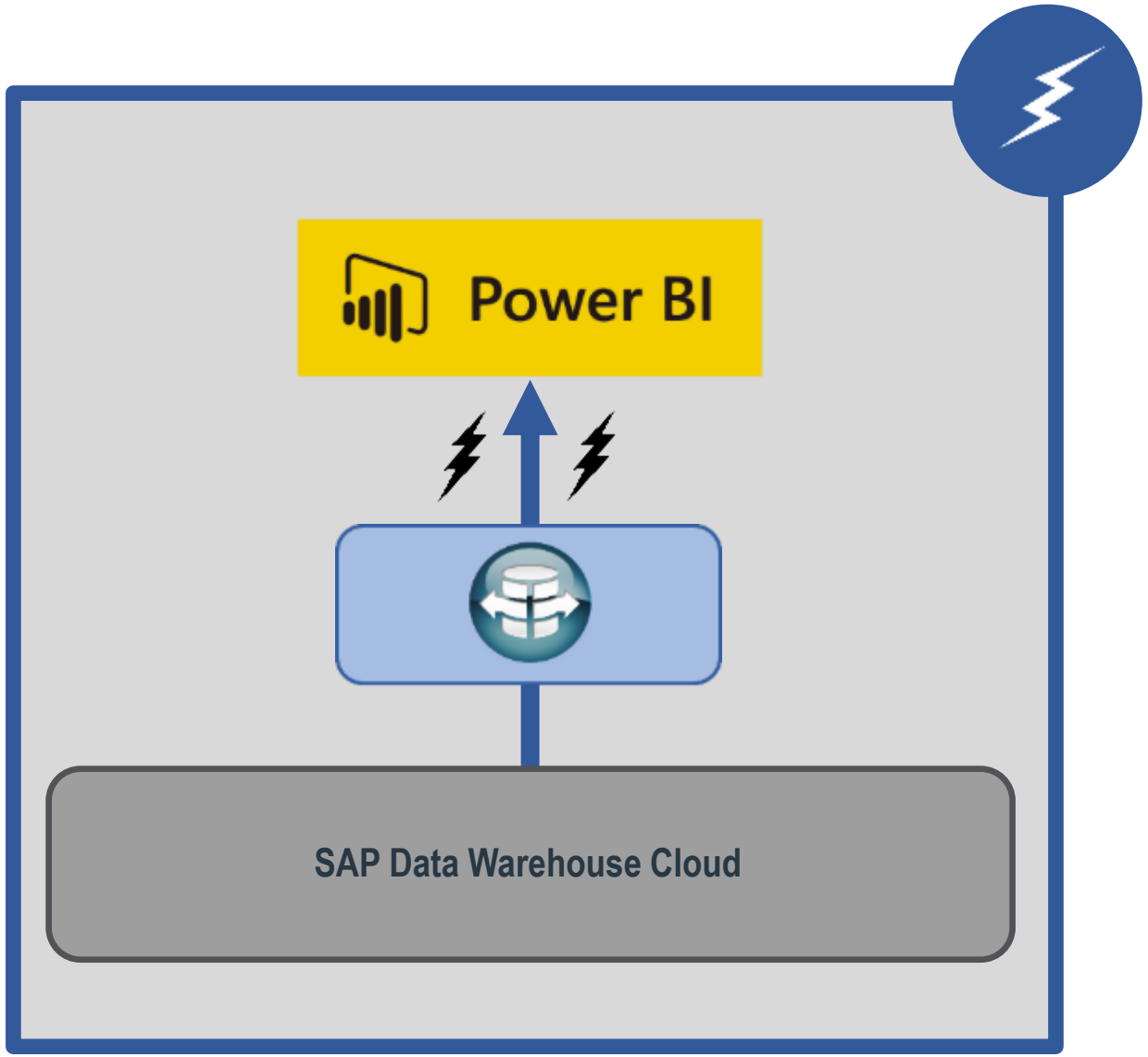
New Functionality: (coming soon)

Custom Dimension Support

- Create custom hierarchies on non-hierarchical data
- Simplified user navigation and experience
- Improved analysis

- Provide ability to create custom dimensions on non-hierarchical data
- Simplified User experience for building and consuming analytics
- Drill down functionality for non-date based dimensions
- Level Type Hierarchies will be supported

APOS Live Data Gateway – Solution Update



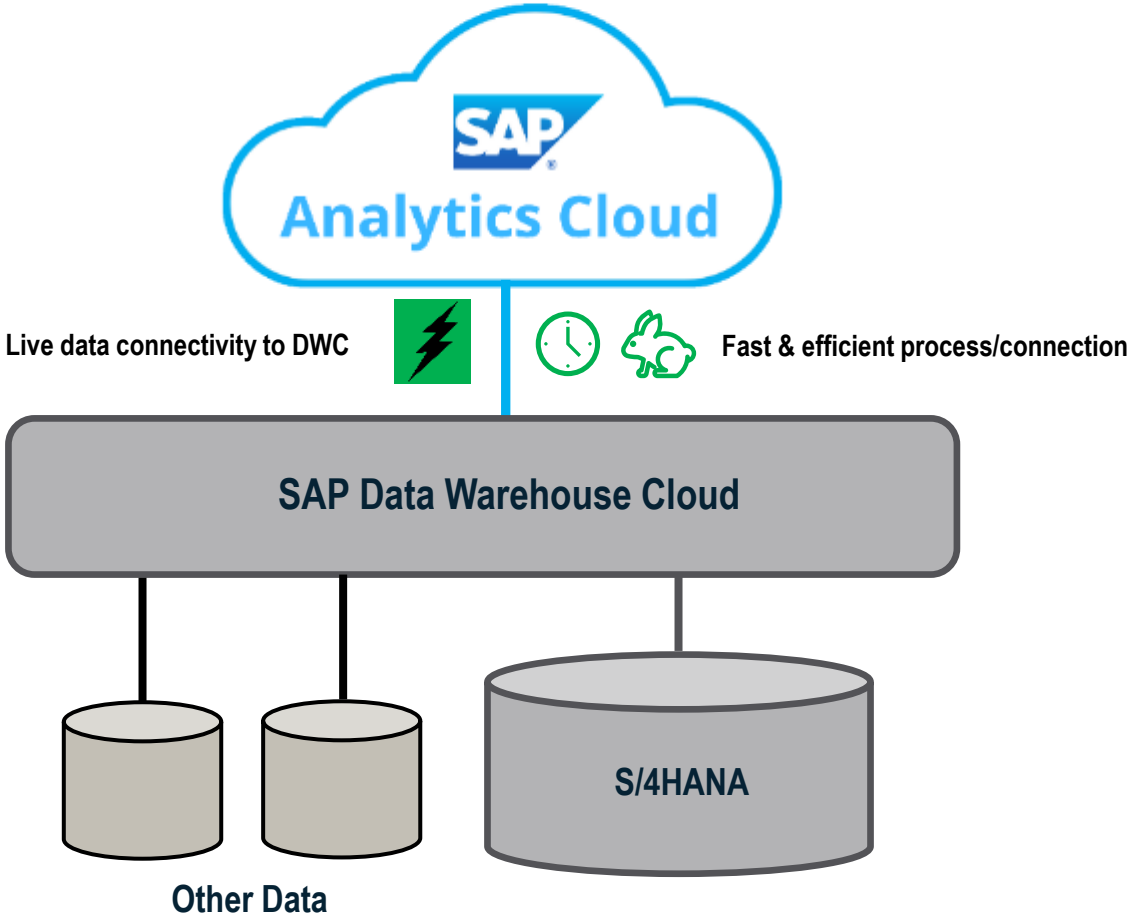
New Functionality:

Power BI to SAP DWC Support

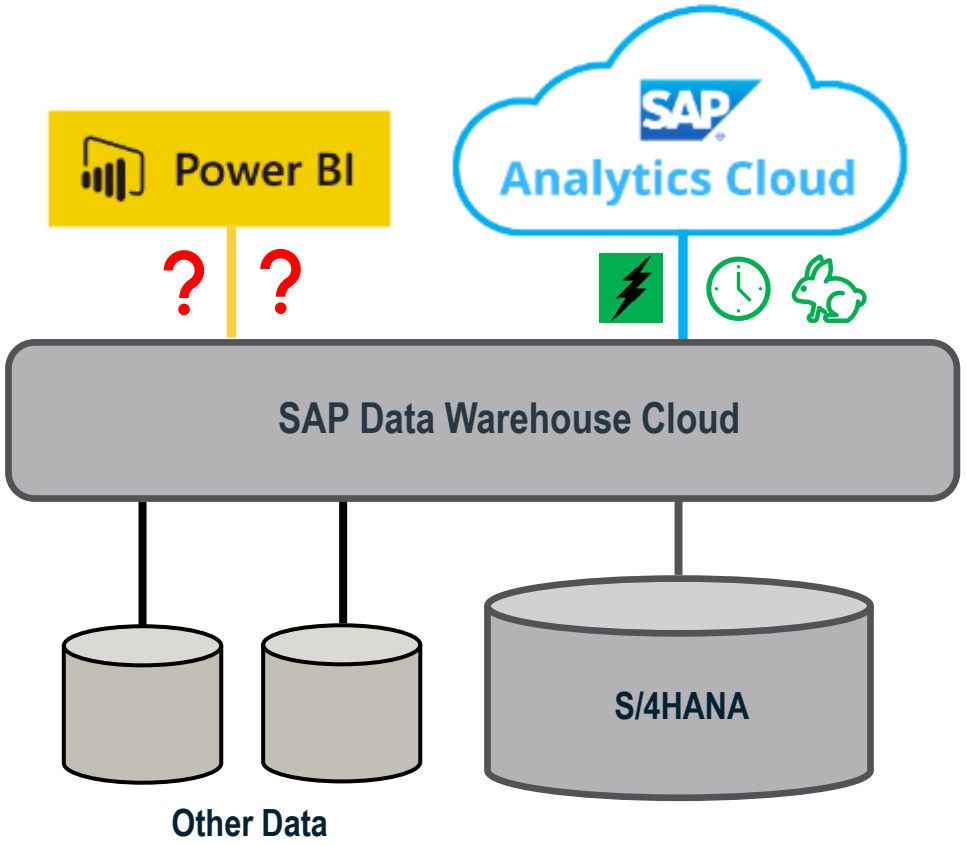
- Connect Live from Power BI to SAP DWC (Data Warehouse Cloud)
- Expand how SAP DWC data can be leveraged

- Power BI DirectQuery connection support
- Quick access to SAP DWC data in Power BI
- No data load wait times
- No movement of data from SAP DWC
- Effective connectivity for large data sets

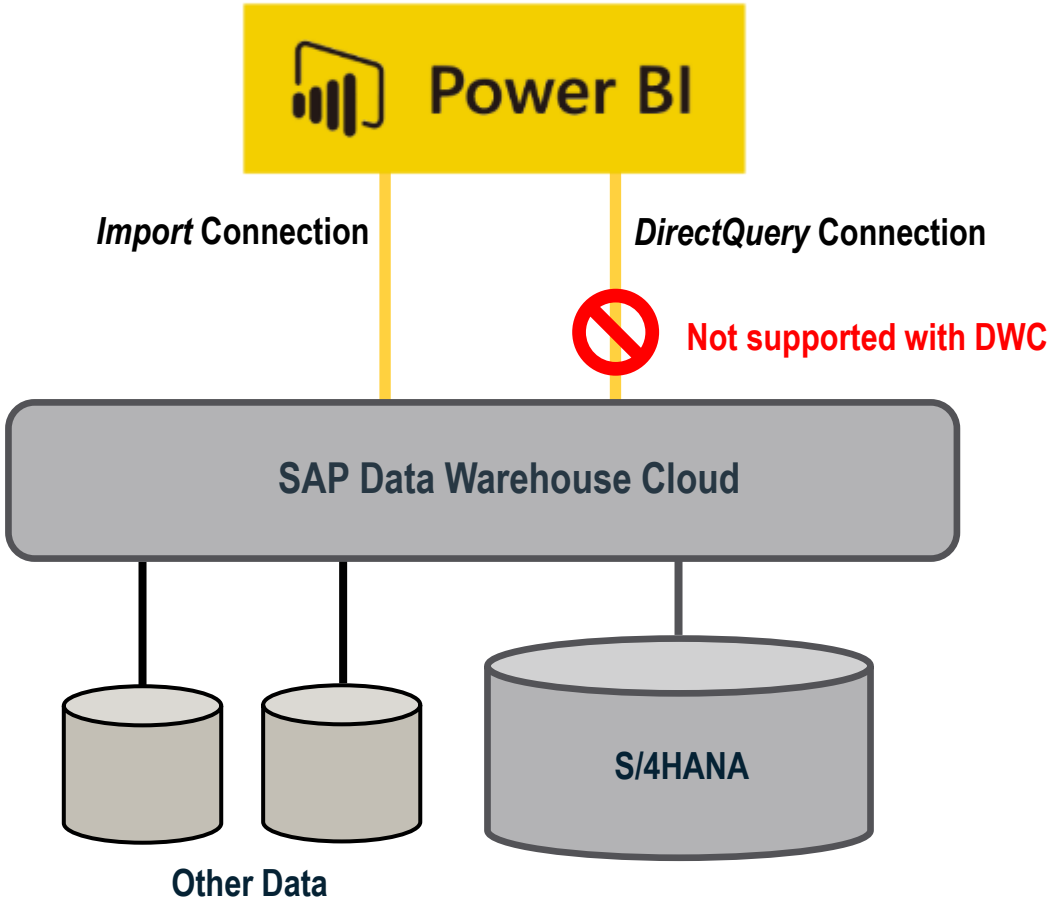
Built-in Live Connectivity from SAC to DWC



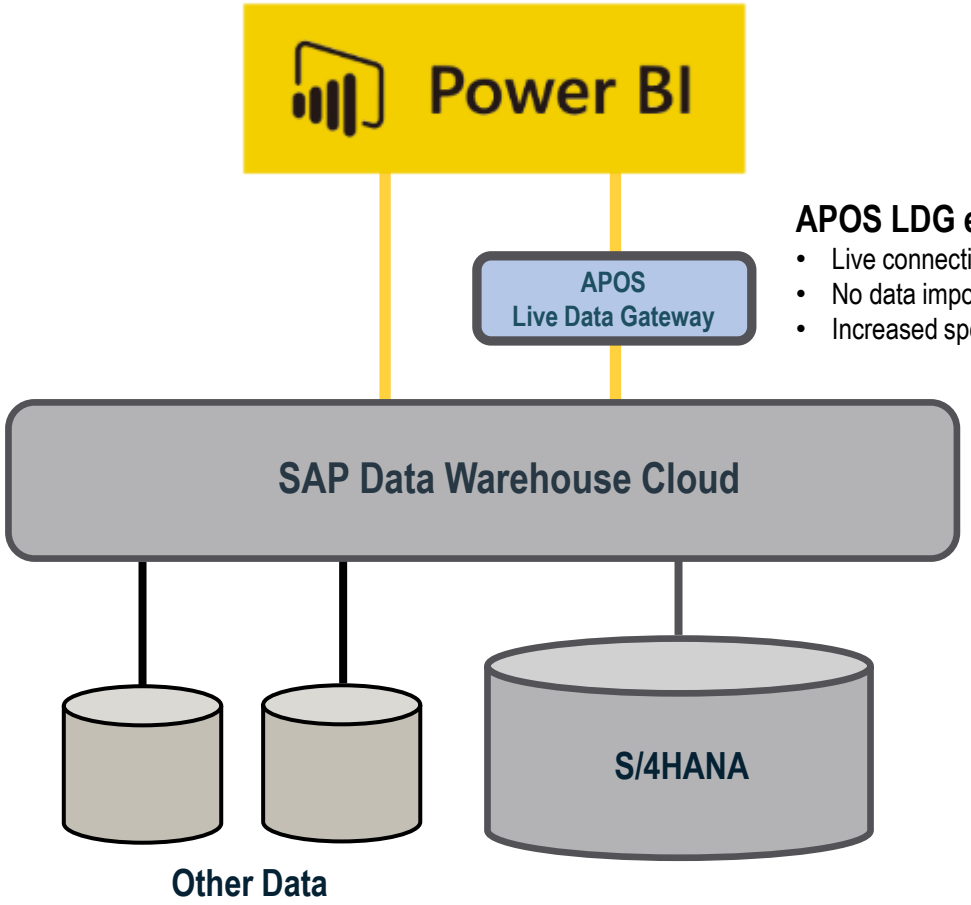
Power BI Connectivity to DWC



Power BI DirectQuery to DWC



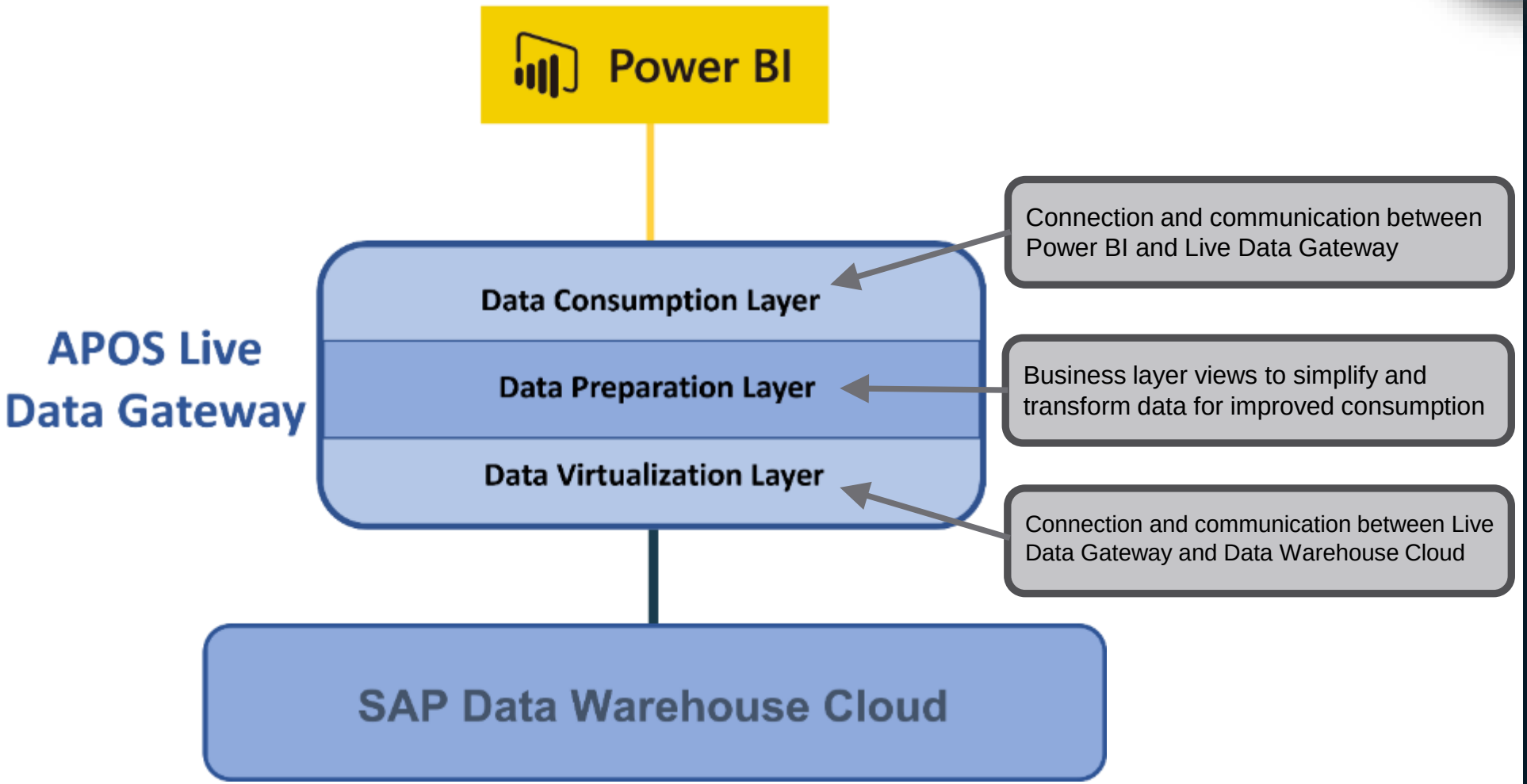
DirectQuery to DWC with Live Data Gateway



APOS LDG enables *DirectQuery* Connection

- Live connection to DWC with direct, targeted queries
- No data import into PBI = no data latency or analytics latency
- Increased speed & efficiency of data process

Direct Query Connectivity with Live Data Gateway



SAP Data Warehouse Cloud

demo-presalesnad.us10.hcs.cloud.sap/dwaas-ui/index.html#/databuilder&/db/BITEST/Employment_View

Login | Salesforce | Matches | Rugby W... | Hightail - Dashboard | SAP Analytics Cloud | SAP DWC DEMO | SAP DEMO REPO | SAP Data Warehous... | P4C HowTo | LDG HowTo | Mark Resource | SAP Partner Portal |... | 13. Troubleshooting...

SAP Data Builder | BI TEST | View - Employment View

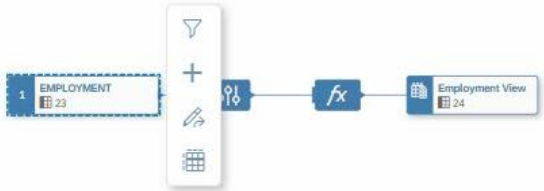
General | View | Edit

Details

Repository | Sources

Search

- Tables
- Views
- Intelligent Lookups



69%

Data Preview: EMPLOYMENT (1000) | Errors

AGYSUB	LOC	AGELVL	EDLVL	GSEGRD	LOSLVL	OCC
AF07	US	H	13	12	D	1801
AF07	US	I	13	12	D	1801
AF07	US	I	13	12	D	1801
AF07	US	G	13	12	D	1801
AF07	US	H	13	12	D	1801
AFGS	US	H	13	12	D	1801

Remote Table Properties

EMPLOYMENT

23

General

Business Name: EMPLOYMENT

Technical Name: EMPLOYMENT

Alias:

Connection: HANA_RI

Remote Table: "RI_CHRO"."EMPLOYMENT"

Data Access: Remote

Distinct Values: OFF

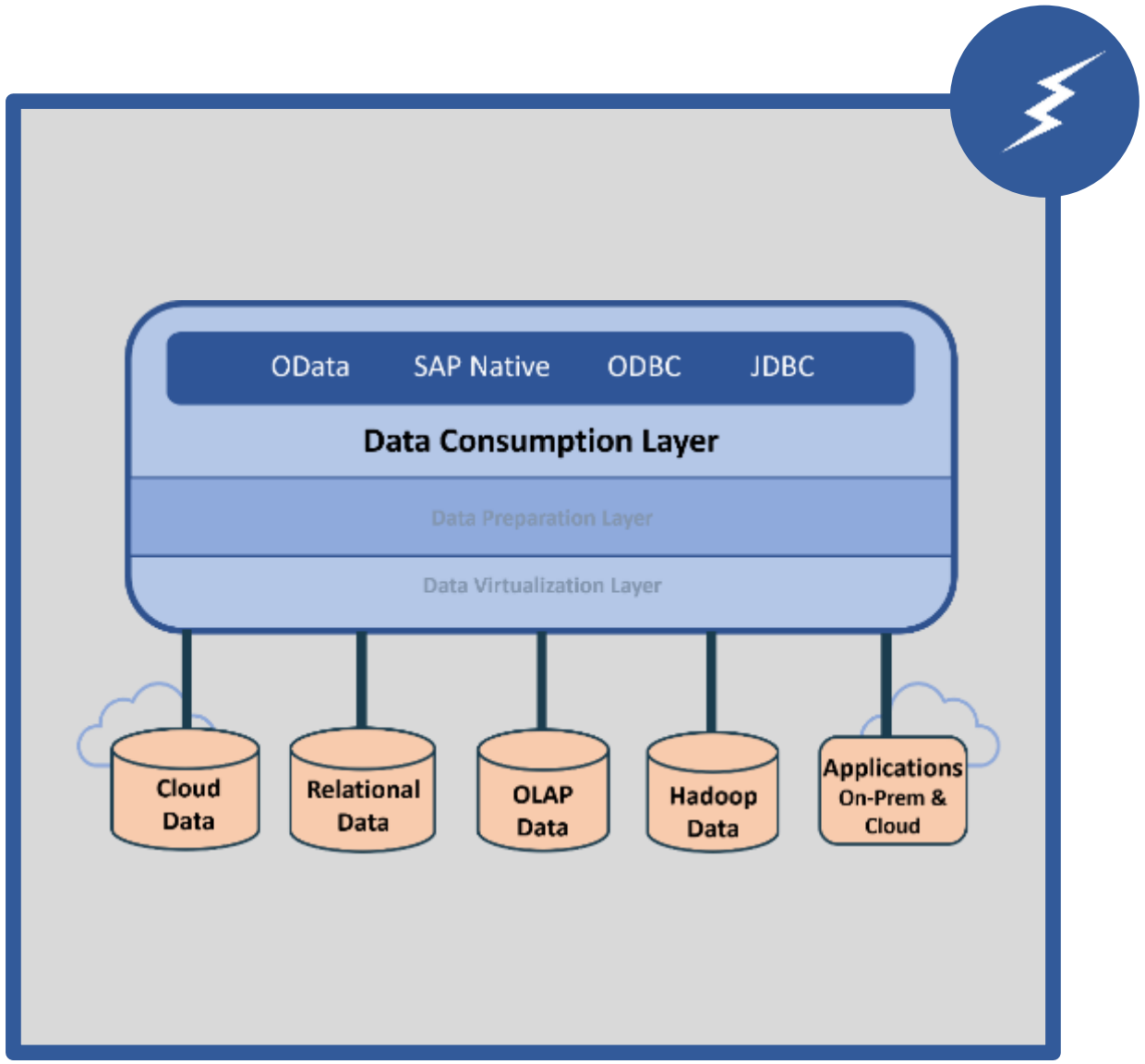
Status: Deployed

Columns

Search Columns

AGYSUB

APOS Live Data Gateway – Solution Update



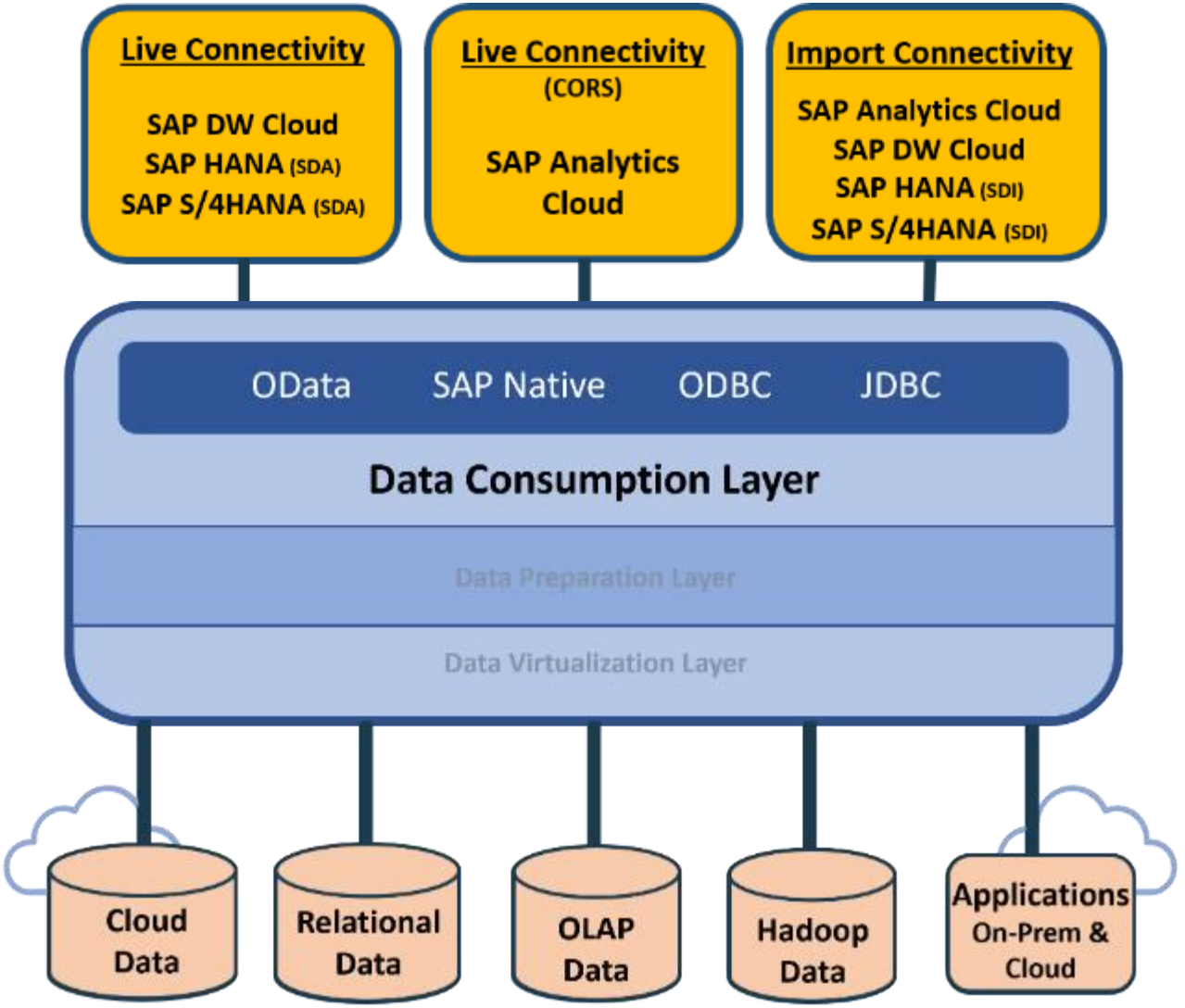
New Functionality:

Expanded Consumption Protocols

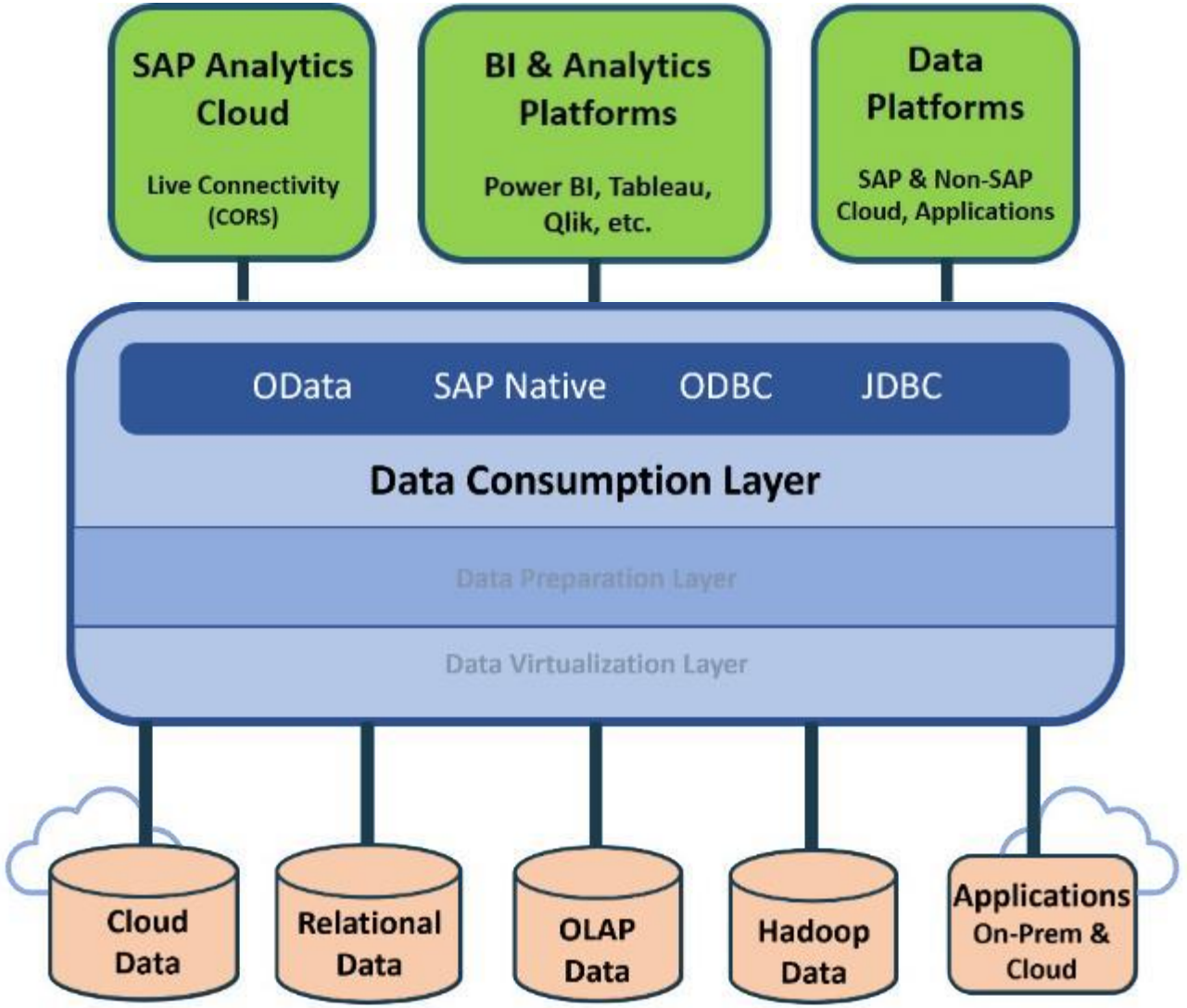
- Support for broader consumption of data from Live Data Gateway
- Additional data platforms and analytics platforms
- Unified semantic layer

- Support for consumption of data via:
  - OData
  - ODBC
  - JDBC
- Consistent data connection layer
- Consistent semantic layer

APOS Live Data Gateway – SAP Landscape



APOS Live Data Gateway – Unified Semantic Layer



APOS Live Data Gateway – Session Summary

Live Data Gateway Overview

- Live Data Connectivity from SAC to non-SAP Sources
  - Direct, Fast, Efficient
  - Data Virtualization Layer
  - Data Preparation Layer
  - Data Consumption Layer

Feature Update

- SSO Options Support
- Self-Service Modelling
- Variables Support
- Geospatial Data Support
- Data Dimension Support
- Custom Dimension Support
- Power BI to SAP DWC Support
- Expanded Consumption Protocols

APOS Solutions for SAP Analytics Cloud

APOS Live Data Gateway

- High-performance live data connectivity
- Virtualized, governed, self-service connectivity
- Connect to Relational databases
- Connect to OLAP data sources
- Connect to Cloud data environments
- Connect to SAP Application data

APOS Publisher for Cloud

- Automate secure information delivery
- Deliver timely information
- Create a flexible messaging environment
- Simplify administration
- Use multiple formats & destinations
- Burst stories with multiple filters
- Burst conditionally
- Collate stories
- Personalize PowerPoint bursting

APOS Insight for Cloud

Monitor – tracking & alerting for:

- SAC story performance
- System response measures

Validation automated comparisons across SAC versions of:

- SAC story data
- SAC story performance
- SAC story structure

Impact analysis – granular auditing of SAC story structure metadata

APOS Semantic Layer Migration

- Capture SAP BI Universe data connection and data modelling logic
- Project-based, wizard-driven interface
- Scan your SAP BI content for relevant data connections
- Harmonize SAP BI and HANA data modelling throughout Hybrid BI
- Translate SAP BusinessObjects modelling to SAP HANA Calculation Views
- Translate SAP BusinessObjects modelling to a unified semantic layer

APOS Solutions for SAP BusinessObjects

APOS Insight

BI System Auditing

- System Inventory
- Security Analysis
- System Usage Analysis
- Report Impact Analysis

BI Report Testing

- Automated Report Testing
- Regression Testing
- Validation of Report Data
- Report Performance Testing

BI System Monitoring

- Advanced System Monitoring
- Operating Environment Monitoring
- Database Monitoring
- Process Monitoring

BI Query Surveillance

- Real-time BI Query Monitoring
- Query Performance Alerting & Auditing
- Query Intervention; Remote Cancelling
- Sensitive Data Audit

APOS Administrator

Object Management

- Bulk Security Management
- Bulk Settings Management
- System Objects Promotion
- Connections Maintenance

Schedule Management

- High-volume schedule management
- Multiple schedule properties editing
- Grid scheduling interface
- Repeatable scheduling templates

Instance Management

- Manage entire instance inventory
- Granular instance search
- Stop, pause, release, reschedule
- Rapid recovery to failed schedules

Web Intelligence Migration

- Bulk conversion of Universes from UNV to UNX
- High-Volume Repoint Web Intelligence reports
- Success validation
- Controlled, project-based workflow

APOS Storage Center

- System Backup
- Content Archiving
- Content Versioning
- Selective Restoration
- Automated System Clean Up

APOS Publisher

- Systematic Content Delivery
- Advanced Document Bursting
- Enhanced Content Distribution
- Security and Encryption
- Statement Generation

Upcoming Events

Latest Updates and News on SAP Analysis for Office – Webinar

June 2nd, 2022 - 11am EDT

Featured Speaker: Jeanne Bigonnet, Product Manager, Analytics, SAP

SAP Analysis for Microsoft Office (Analysis Office) and its flexible analytical capabilities continues to be a very popular tool for self-service analytics with many organizations and users, but what's ahead for SAP Analysis Office users in this time of digital transformation? Many organizations are eager to address key questions to help them plan their analytics future. What are the latest SAP Analysis Office capabilities? What is the vision for SAP Analysis Office?

Join SAP's Jeanne Bigonnet and the APOS team to learn about:

- The latest SAP Analysis Office updates and the roadmap for its future
  - Assess the latest advancements for SAP Analysis Office
  - Understand SAP Analysis Office and its importance for you
  - Plan your next steps for SAP Analysis Office in your organization
- How APOS technology can help you expand your use of SAP Analysis Office with:
  - Scheduling and distribution
  - Expanded formats and destinations

…and more.

Register at www.apos.com

Upcoming Events

Impact Analysis for SAP BusinessObjects Flashes of Insight – Webinar

June 18th , 2022 - 11am EDT

Impact analysis is a critical need for BI teams as BI systems and system content evolve rapidly. As data structure changes are being planned or implemented, it is important to know what BI content will be or has been affected by those changes. This is a common concern that creates challenges whenever database or semantic layer changes are made. These may be internally driven changes, or may result from externally driven changes in a third-party application (healthcare EHR systems, for example). Such data source changes can also affect financial reporting internal controls.

Join us June 16 for a live webinar, focusing on measuring, analyzing and managing the impact on reports, universes, and dashboards.

You will learn how to:

- Foresee and measure the impact of any data source changes with detailed metadata to record system content changes
- Which reports and universes will be affected by database schema changes?
- Which reports will be affected by modification of objects in universes
- Foresee and measure the impact of environmental changes
- Use impact analysis to achieve regulatory/internal control compliance and to accelerate EHR upgrades

… and more

Register at www.apos.com

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QUESTIONS?
Please enter your questions in the Q&A panel.

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